North Pacific Fishery Management Council

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Certified By

MINUTES

NORTH PACIFIC FISHERY MANAGEMENT COUNCIL Scientific and Statistical Committee May 26-27, 1981 Anchorage, Alaska

The Scientific and Statistical Committee of the North Pacific Fishery Management Council met in Anchorage on May 26-27, 1981. Members present were:

Donald Rosenberg, Chairman
Richard Marasco
William Aron
Bud Burgner
John Clark
Larry Hreha
Steve Langdon
Jack Lechner
Al Millikan
Don Calkins (alternate for John Burns)

B-6 Non-Agenda Items

Subcommittees - The SSC review and updated its internal membership on subcommittees. An updated list of this membership has been provided to the Council staff (Attachment 2). Additionally, in order to effectively monitor and review Council contracts, the SSC has established subcommittees for each outstanding contract. A list of this membership has been provided to the Council staff (Attachment 3). It is expected that members of these committees will receive and review for the SSC all quarterly and final reports from contractors.

C-2 Recommendations for Plan Maintenance Teams

In accordance with the Council's direction at the last meeting, the SSC received and reviewed recommendations from the Alaska Department of Fish and Game and the National Marine Fisheries Service for membership on the Plan Maintenance Teams. The SSC, in addition, discussed other agency participation in PMT's. The SSC believes that each PMT should have identified a scientific support group who will be kept informed of PMT's needs and actions. The SSC recommendations for agency, and where available, individual membership on PMT's are provided in Attachment 1. The Council should note that the SSC is recommending that the Washington Department of Fisheries have membership on the High Seas Salmon PMT and that the International Pacific Halibut Commission have membership on both of the groundfish PMT's. The SSC will request that these agencies submit names of individuals for our review at our next meeting.

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The Council should note that the PMT's for Tanner Crab, High Seas Salmon and Gulf of Alaska Groundfish need to be established immediately. Teams for Bering Sea/Aleutian Islands Groundfish and Bering Sea Herring need not be confirmed until these plans are approved.

E-1 Salmon FMP

Washington Department of Fisheries Report dated March 12, 1981

At the March 24 meeting the SSC considered a report by the Washington Department of Fisheries staff dated March 12, 1981 entitled "Review of 1981 NPFMC Preferred Options and Refinements to the Analysis of Upper Columbia River "Bright" Fall Chinook Management Needs and Opportunities for 1981". A number of questions regarding the analysis were raised that were not resolved satisfactorily in the available time. In order to allow adequate consideration of the information in developing 1982 chinook regulatory amendments, the SSC recommended in part that the Salmon Subcommittee review the document by the May meeting and provide a list of specific questions to WDF regarding the analyses presented, the model used, and assumptions contained in the model. This list of questions was reviewed by the SSC and will be forwarded to the Washington Department of Fisheries for their consideration.

To evaluate the Washington Department of Fisheries' analysis, there is a need to understand the model which has been developed jointly by the Department and the National Bureau of Standards.

It is recommended that the Council sponsor a one-day workshop to be conducted in early fall by Fred Johnson (author of the model) and personnel of Washington Department of Fisheries. The purpose of the workshop would be to explain in detail the use of the model in the coastwide chinook fishery. Attendees would be those members of the North Pacific and Pacific SSC's, PMT's, Councils, and management agencies who desire a better understanding of the use of the model.

Salmon Limited Entry

The SSC reviewed the report by the Council staff containing data on the number of trollers who would qualify for an FCZ limited entry program under various eligibility criteria. The SSC has no recommendation on these data at this time.

Economic Impact Analysis of Different OY Reductions

This analysis has been reviewed and comments have been made to the NMFS, Regional Office.

E-3 King Crab FMP

The SSC reviewed the document entitled, "Alaska Board of Fisheries Decision Regarding Management of Domestic King Crab Fisheries in the Bering Sea/Aleutian Islands Area," dated March 1981. This statement summarizes decisions made by the Board of Fisheries that represent deviations from the status quo. A critical weakness of the report is its lack of adequate documentation of the factors that led to a particular decision. Future statements of this type should contain data which was used in the decision process.

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The following management issues are addressed in the document:

- 1. OY determination for the Bristol Bay, Bering Sea, Adak, and Dutch Harbor areas;
- 2. closure of an area extending approximately 15 miles offshore in the northern and eastern portion of Norton Sound to commercial fishing from July 15 through September 3 to enhance subsistence fishing;
- 3. modification of the opening season to coincide with the opening of the Bristol Bay fishery;
- 4. retention of red king crab 7-1/2" and larger in the Pribilof fishery after closure of the Bristol Bay fishery;
- 5. proposed modification of the pot storage area for the Bristol Bay fishery; and
- 6. proposed redesignation of the Bristol Bay fishery as a non-exclusive area.

The SSC specific comments on these items is as follows:

1. OY Determination

OY's contained in document were found to correspond with guidelines specified in the framework plan for all areas except Adak. Estimates of the exploitable number of males larger than 6-1/2" is unknown at present in the Adak area. Further, the stock in the area is considered to be in a depressed state. The OY was set at 0.5 to 3.0 million pounds to allow the fishery to operate so that data on the status of stocks in the area can be obtained.

2. Closure of an area 15 miles offshore in the northern and eastern portions of Norton Sound.

This action was taken to enhance subsistence fishing in the Norton Sound area. During 1980 the subsistence catch in this areas was small due mainly to the lack of inshore availability of crab. The commercial catch was 1.2 million lbs, with 17% of that catch coming from the area proposed for closure. This action represents the giving of preferential treatment to a group of domestic fishermen. Therefore, economic and social issues are involved. Data are unavailable to determine, for example, how the economic viability of the commercial fishery will be affected by this action. It is recommended that the Council support a study to determine the economic and social characteristics of the subsistence and commercial fisheries in this area.

3. Modification of the opening date of the Pribilof fishing season.

During the 1979-80 season, regulations opened the red crab fishery in the Pribilofs five days before the opening of the Pribilof blue king crab fishery and the Bristol Bay red crab fishery. The different opening dates caused confusion during vessel registration and tank inspection. The opening date of the Pribilof fishery was modified to coincide with that for the Bristol Bay fishery to alleviate the confusion.

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4. Retention of red king crab 7-1/2" and larger in the Pribilof fishery after closure of the Bristol Bay fishery.

Under current regulations, the Pribilof fishery remains open after Bristol Bay fishery is closed. The Pribilof fishery is mainly a blue crab fishery; however, red crab are taken as an incidental catch. In the past, retention of red crab was prohibited after closure of the Bristol Bay fishery. Catch data indicates an availability of large red crab in the area. Making it possible to retain these large red crab will result in an increase harvest of post recruits which suffer high levels of natural mortality.

5. Modification of the pot storage area for the Bristol Bay fishery.

The proposed area is located due north of Unimak pass and Southwest of the existing pot storage area. During 1980, approximately 50% of the Bristol Bay red crab harvest came from this area. Since the area is located on the fishing grounds, adoption of the proposed storage area would reduce storage costs. If the pots are illegally fished, there could be an increase in dead loss. This would result in waste and a reduction in aggregate gross revenues accruing to the fleet. Further, storage of a large number of pots in a productive area could have an adverse impact upon the status of the stock. There is an indication that the shift of the pot storage area could have a favorable impact upon the groundfish trawl fishery.

6. Redesignation of the Bristol Bay fishery as a non-exclusive area.

Classification of an area as an exlusive or non-exclusive area can have a significant impact on the economic and social features of a fishery. A thorough examination of this issue is required. An understanding of the economic and social features of the various elements of the crab fleet is needed before the impact of these actions can be evaluated.

E-4 Tanner Crab FMP

The SSC reviewed the status of the Tanner Crab FMP and the inconsistencies between the Council's current plan and the State of Alaska regulations which are being used to manage the fishery. The Tanner Crab FMP was adopted as a one year type plan which requires annual amendments to satisfy changes required by conservation and socioeconomic factors.

Our review indicates that the amendment procedures has failed to function in a timely manner. Changes necessary in all areas of the regulatory scheme, (OY, fishing seasons, pot limits, and pot storage) have not kept pace with the state regulations. These inconsistencies are far greater than would appear by the table provided by the Council staff. Many of the regulatory measures in the FMP are still in the process of being amended for the 1979-80 fishing year and are being re-amended for the 1980-81 fishing season. In these cases, the fishery has been regulated by emergency order, adopting the state regulations. The fishery has become history without actual federal regulations having been fully processed.

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If the current procedure continues, it may allow, through legal procedures, a risk to proper management of the resource. The current processes have resulted in certain state regulations not being enforced due to conflict with non-amended federal law. Although to date this has not created a conservation problem, it has been unjust to the fishery participants.

Under this current situation the SSC feels it is not able to effectively judge the scientific merits of the data being used to manage the fishery. Likewise, the failure to amend the plan is hindering the effective management of the fishery.

The SSC recommends the following:

- 1. that the FMP be fully updated to reflect the current regulatory changes;
- that the Council consider the development of a new plan or amending the existing plan to create a multi-year plan that does not require an annual full amendment process, and/or
- 3. that the Council consider developing a management scheme similar to that being considered for king crab resources.

E-6 Bering Sea/Aleutian Islands Groundfish FMP

The SSC reviewed the written testimony, the summaries of the public testimony, and the various reports which have been submitted regarding proposed Amendment #3 to the Bering Sea/Aleutian Islands Groundfish FMP. Additionally, the SSC received testimony from individuals or representatives of the various concerned groups.

The SSC considered the pros and cons of each of the proposed procedures to control the catch of prohibited species. These are:

Procedures

1. Set allowable incidental catches (AIC) coupled with imposition of incidental catch fees.

Pros

- o Incidental catch limits of prohibited species, can be set at biologically safe levels.
- o There is an incentive to develop and use most efficient harvesting methods to avoid prohibited species.
- o Permits the operation of foreign and domestic groundfish fisheries.
- o Allows incremental adjustment of fees to optimal levels. Incremental fee increases should reduce incidental catches.

Cons

o Taking of prohibited species will continue.

If the carrest procedure builtness it may allow, through local provideres, a risk to proper actual procedures as love resulte to proper actual processes love resulter to proper a state regulations are being enforced due to the total actual processes and founded founded low. Through to date this has all related a conservation problem, it has been unjust to the tiskery participants.

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- o If the goal is to protect prohibited species, the initial AIC's are indefensible. This is not the case if protection of prohibited species and allowance of a groundfish fishery are desired.
- o Fees collected will not be distributed to fishermen affected by the incidental catches.
- o If the AIC's are the binding constraints, fishermen that can avoid catching prohibited species are penalized along with those that cannot avoid them.
- o Expanded level of observer coverage would be required.
- 2. AIC's for prohibited species.

Pros

- o Incidental catch limits of prohibited species can be set a biologically safe levels.
- o There is an incentive to develop and use most efficient harvesting methods to avoid prohibited species.
- o Permits operation of foreign and domestic groundfish fisheries.

Cons

- o Taking of prohibited species will continue.
- o If the goal is to protect prohibited species, the initial AIC's are indefensible. This is not the case if protection of prohibited species and allowance of a groundfish fishery are desired.
- o Once AIC's are reached any closure will affect fishermen who are successful in avoiding prohibited species as well as those who are not.
- o If there is a desire to incrementally reduce the initial AIC's, specification of the magnitude of the annual reductions request careful review.
- 3. Impose incidental catch fees alone.

Pros

- o Annual determination of incidental catch levels is not necessary.
- o Enforcement requires adequate knowledge of fishing gear and techniques.

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 - 3. . impose implifoural catch fees alone.

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- o Enforcement requires alogueta thowledge of fining gent and touthidans.

5. Enact time/area closures.

Pros

o Ease of implementation and enforcement.

Cons

- o Large areas would have to be closed for long periods of time to protect all prohibited species, therefore there could create problems in achieving OY.
- o Uncertain about possible adverse impacts resulting from closure on species in other areas, as well as fisheries.
- o Removes incentives for gear experimentation and change.
- o Fishing units are not free to select most efficient harvesting methods.
- o Fishermen that can successfully avoid prohibited species are penalized along with those that cannot avoid them.
- 6. Reduction in the OY of groundfish species.

This option was not considered viable because it could severely affect the groundfish fishery without reducing the size of the prohibited species catch. It was felt that there are less restrictive and more effective means of achieving a reducing in incidental catch.

7. Impose gear restrictions coupled with a reduction in OY.

Same as 6.

8. Set fishery specific incidence rates as cut-off rates for short-term closures of the groundfish fishery.

This option could be extremely difficult to implement. There is no guarantee that prohibited species catches would be reduced.

Based upon extensive discussions of the various options and weighing the pros and cons of each option, the SSC recommends the following regarding the proposed procedure for reducing incidental catches of prohibited species:

That the Council adopt the Option 2 (AIC alone) with some modification in its application. The SSC recommends that the Council consider two possible modifications.

1. That the AIC option be implemented in the strictest sence, that when a nation reaches its AIC the Bering Sea/Aleutian Islands area closes to all of that nation's groundfish fisheries for the remainder of the fishing year.

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i. That the AIC option is implemented in the strictess sence, that when a mation reaches its MIC the Bering Seathlartian islands awar closes to all objects habine's groundish in them as for the resultden of the fishing year.

The SSC does not believe that any gear type should be exempt from this closure as no gear type is 100% successful in avoiding all prohibited species and therefore that nation's AIC could be exceeded. No specific areas of the Bering Sea/Aleutian Islands fisheries should be exempted from the closure because of the dynamic nature of these fishing resources.

2. That the AIC option be implemented in a manner that the Bering Sea/Aleutian Islands area closes to a nation before its final AIC is reached. Once an initial AIC (a percentage reduction of the final AIC) is reached, the area would close to that nation's groundfish fleets. The Regional Director would then be given the authority to re-open areas to specific gear types from that nation that have demonstrated an ability to avoid prohibited species. Once the final AIC is reached the total area closes to all of that nation's groundfish fishing fleets.

The Council should note that any unused TALFF resulting from an AIC closure should be reallocated to nations which have remaining AIC to facilitate the achievement of OY.

The SSC reviewed the proposed establishment of AIC and the proposed reduction schedule. The SSC concurs with using 1977-1979 average as a starting point for AIC determination and with the goal of a 75% reduction in all prohibited species in a five year time period. The SSC does note that there must be an annual review of that goal and any schedule reductions to insure that they are reasonable in light of stock conditions and harvesting technologies.

With regard to the application of AIC procedure to the domestic groundfish fishery and to the retention of prohibited species, the SSC recommends that the domestic groundfish fishery be included under the AIC concept from the start and that all prohibited species be returned to the sea with a minimum of injury. Failure to include the domestic groundfish fishery in the AIC concept or failure to return prohibited species to the sea, the SSC believes is inconsistent with the recently adopted management objective (amendment package 81-1). That objective reads: "minimize the impact of groundfish fisheries on prohibited species and continue the rebuilding of the Pacific halibut resources."

With regard to the allocation procedure of AIC to the domestic groundfish fishery the SSC believes that only Items A and B in the proposed amendment are relevant; Item C seems to be inconsistent with the FMP management objectives and the D is a duplication of A.

F-1 Contracts and RFP's

Contract 79-4, Analysis of Southeastern Alaska Troll Fishery Data.

The SSC completed its review of the final report by Alaska Department of Fish and Game on Contract 79-4 entitled "Analysis of Southeastern Alaska Troll Fishery Data". The SSC recommendation approval of the final report.

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The object of the research project was to investigate the feasibility of using the data on troll landings, micro-wire tag recoveries and troll logbook observations as the basis for time and area management of the Southeast Alaska troll fishery. The contractor effectively assembled, summarized and evaluated a voluminous data base to (a) examine the distribution and relative abundance of chinook and coho salmon stocks harvested by the fishery; (b) describe recent trends in power and hand troll catches, landings and fleet characteristics; and (c) develop methods of standardizing troll effort.

The tasks specified in the contract work statement have been accomplished. Catch-per unit effort (CPUE) indices are calculated, adjusting CPUE for the effects of targeting and relative gear efficiency. Trends in catch, landings and vessel characteristics over the period 1969-1979 are examined. Seasonal time-area differences are demonstrated for (a) troll CPUE; (b) distribution of micro-wire tagged stocks of different origin; and (c) distribution of undersized chinook salmon. The report concludes that if these differences remain consistent in succeeding years' data, time-area management could be utilized to control harvest ratios of stocks from different areas of origin and to increase yield per recruit from the fishery.

The SSC recommends that the Council note in particular the RECOMMENDATIONS sections of the report. Briefly those recommendations are:

- <u>1 and 2</u>. Modify ADF&G fish tickets to improve information on troll effort and area of catch.
- 3. Seek means of obtaining maturity data on tagged chinook recovered in the troll fishery.
- 4. Improve allocation of port sampling effort to assure useable catch rate information.
- 5, 6 and 7. Conduct analyses of at least one more year of data (1980) to examine consistency of catch rates, and of time-area distribution of tagged chinook and coho stocks before utilizing the results in time-area closure decisions to control stock interception rates by area of origin.
- 8, 9 and 10. Examine further the potential of using time and area closures and size limit changes to increase yield per recruit of chinook salmon.
- $\underline{11}$. Conduct scale pattern analyses and/or expand tagging of chinooks in the troll fishery to obtain better stock identification than feasible from coded-wire tag analyses.

The SSC endorses in general the recommendations of the report, and recommends in particular that means be sought to conduct the additional analyses and the proposed stock identification study of chinook in the troll fishery.

Marine Mammal RFP

The SSC reviewed the four proposals that the Council has received in response to the Council's RFP. The SSC also reviewed the recommendation of the Council's scientific/agency subcommittee which reviewed these proposals. The

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SSC concurs with the subcommittee's recommendation that the contract be awarded to the Alaska Department of Fish and Game. The SSC requests that our subcommittee review the final proposed contract before execution.

F-3 Programmatic Research Funding

The SSC discussed the research needs for the next year. A preliminary list was developed for consideration by the Council during the development of the 1982 programmatic budget request. This list will be evaluated by the SSC to interest parties for comment and recommended additions. This list will be finalized for submission to the Council at our next meetings.

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Attachment 1

Plan Maintenance Teams

Tanner Crab FMP

Agency Individual

ADF&G Fred Gaffney

NMFS Ray Baglin

NPFMC Staff Steve Davis

Scientific Support Leader Jerry Reeves

High Seas Salmon FMP

Agency Individual
ADF&G George Utermohle

NMFS Bill Robinson

Wash. Dept. of Fisheries

NPFMC Staff Jim Glock Scientific Support Leader Mel Seibel

Gulf of Alaska Groundfish FMP

Agency Individual
ADF&G Mark Miller
NMFS Phil Chitwood

IPHC

NPFMC Staff Jeff Povolny Scientific Support Leader Jim Balsiger

Bering Sea/Aleutian Islands Groundfish FMP

Agency Individual

ADF&G

NMFS Phil Chitwood

IPHC

NPFMC Staff Jeff Povolny Scientific Support Leader Loh-Lee Low

Bering Sea Herring FMP

Agency Individual

ADF&G

NMFS Dick Marshall
NPFMC Staff Jim Glock
Scientific Support Leader Steve Fried

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Attachment 2

SCIENTIFIC AND STATISTICAL COMMITTEE Subcommittees May 1981

GOA Groundfish FMP

Rich Marasco (chairman) Ed Miles Larry Hreha Bill Aron John Burns

BS Groundfish FMP

John Burns (chairman) Rich Marasco Ed Miles Larry Hreha Bill Aron

Tanner Crab FMP

Jack Lechner (chairman) Don Rosenberg Bud Burgner

King Crab FMP

Rich Marasco (chairman) Bud Burgner Jack Lechner

High Seas Salmon FMP

Bud Burgner (chairman) Al Millikan Don Rosenberg Steve Langdon John Clark

Herring FMP

Al Millikan (chairman) Bud Burgner Steve Langdon John Clark

Clam FMP

Don Rosenberg (chairman) Larry Hreha Bill Aron

Halibut FMP

Ed Miles (chairman) Don Rosenberg Steve Langdon

Attament 2

SCIENTIFIC AND STATISTICAL COMMITTEES Sabschmantices May 1981

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Tagger Cras SHP

Jack Lechner (chairman) Den Krannburg Bad Burgber

King Cran PMF

Rich Marsago (chairman) Rud Burgner Jack Lechage

High Seas Salmon FMP

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Ab Millitan (chairman) Sul Burgner Aleve Langdon John Clark

Clain PMS

Boc Rosenberg (chaigman) Larry Hosta Rill Alon

Halling EME

Ed Files (chairman) Don Rosonberg Steve Largen

Attachment 3

Subcommittees on Contracts

79-4 Analysis of Southeastern Alaska Troll Fisheries Data

Bud Burgner Don Rosenberg Al Millikan

80-3 Seasonal Use and Feeding Habits of Walruses in the Proposed Bristol Bay Clam Fishery Area

Larry Hreha William Aron Don Rosenberg

80-4 To Expand and Enhance the Domestic Commercial Fisheries Catch Data Reporting System Off Alaska

> Larry Hreha Rich Marasco

81-2 Processing of Fisheries Data

Rich Marasco Ed Miles

Study of Data on Feeding Habits and Food Requirements of Marine Mammals in the Bering Sea

William Aron Don Rosenberg Larry Hreha