### MEMORANDUM

TO:

Council, AP and SSC Members

FROM:

Clarence G. Pautzke

**Executive Director** 

DATE:

January 5, 1990

SUBJECT:

Salmon Fishery Management Plan

### ACTION REQUIRED

Receive report on status of Amendment 3, annual cycle, and proposal review (postponed from December 1989 Council meeting).

### BACKGROUND

At the September meeting, the Council approved Amendment 3 to the Fishery Management Plan for the High Seas Salmon Fisheries off the Coast of Alaska East of 175° East Longitude. There were two main provisions of that amendment: (1) the Council deferred salmon regulations to the State of Alaska while retaining federal oversight, and (2) the Council recommended the FMP be extended to cover the entire EEZ west of 175° East longitude should a dissolution of the International North Pacific Fisheries Commission occur. In approving the amended plan, the Council also reaffirmed its support for provisions of the Magnuson Act that give the U.S. jurisdiction over anadromous fish wherever they range except within another nation's EEZ or territorial seas.

The Salmon Plan Team met October 16, 1989 to consider the recommendations of the Council, the SSC, and the AP, and to prepare a schedule for completion of the revised plan and its submittal to the Secretary for review and approval. The team also reviewed several proposals to amend the Salmon FMP which were received after the Council's September meeting.

### A. Status of Amendment 3.

Amendment 3, which requires a major revision to the FMP, is in the final stages of preparation for Secretarial review. The revised FMP will be sent to the Secretary in late January 1990 with approval expected by June, prior to the beginning of the 1990 troll fishery.

### B. Salmon management cycle.

The team notes that the Council intends to have minimal direct involvement in salmon management but wishes to maintain federal oversight. It is anticipated that in the future, occasional management proposals, Board recommendations, or other issues may be brought to the Council for discussion and resolution. The team recommends that the Council adopt a management cycle for salmon so that these actions can be considered in an orderly manner. The proposed cycle is under item D-2(a).

The proposed salmon cycle includes the management cycles of the Alaska Board of Fisheries and the Pacific Salmon Commission for reference. The cycle recognizes that the Council can take up salmon issues at any time but prefers to review public proposals only during its April meeting. No call for proposals would be issued, but if proposals are submitted to the Council they would be reviewed in April. The cycle also provides for annual reports to the Council on salmon fisheries in the EEZ.

### C. <u>Proposals received since the September meeting.</u>

The team also briefly reviewed three proposals received from the public during late September. These proposals are included under item D-2(b). The team requests Council direction for their disposition. If a salmon cycle is approved, the proposals could be deferred to that cycle, i.e., they would not be considered by the Council until April 1990.

### NORTH PACIFIC FISHERY MANAGEMENT COUNCIL

### Salmon Management Cycle

Month	Council	Salmon Plan Team	Alaska Board of Fisheries	Pacific Salmon Commission
JAN	Receives postseason report from ADF&G or Plan Team.	Presents postseason report.	Continues considering N, W, & C AK salmon issues.	
FEB		Prepares Status Report.	More of the same.	Annual Meeting: sets quotas, etc.
MAR		Reviews Board proposals for consistency problems and prepares recommendations for the Council.	Considers SE AK salmon issues: sets harvest guidelines, etc.	
APR	Reviews Status Report and any Board or public proposals.	Presents Status Report and comments on Board proposals. Prepares analysis of public proposals.	Continues considerations.	
SEP	Reviews EA/RIR as needed.	Finalizes EA/RIR.		
OCT	EA/RIR to public review.			U.S. Section & Northern Panel meet.
NOV			Starts considering N, W, and C AK salmon issues.	Postseason review and clarifica-tion of issues.
DEC	Approves EA/RIR for SOC review.		Considera- tions continue.	

See the notes on the next page for details.

### NOTES ON SALMON MANAGEMENT CYCLE

The public should submit proposals to change salmon fishing regulation in the EEZ off Alaska to the Alaska Board of Fisheries. If the public has exhausted all Board procedures to change a regulation, they should submit a proposal to the Council for amending its Fishery Management Plan.

### Amendments of the Salmon Plan

Proposals for amending the Council's plan should be either for an emergency amendment or a regular amendment.

### A. Emergency Amendment

As needed: Public submits proposals for emergency amendments of the salmon FMP.

Salmon Plan Team will review the emergency recommendations (by teleconference if necessary) before the next Council meeting and prepares recommendations for the Council.

The Council will review the public proposals for emergency changes and the Salmon Plan Team's comments and decide whether an emergency amendment is warranted. If so, it will task the Salmon Team to prepare an amendment. If not, it will place the proposal on the schedule for regular amendments for Council consideration in April.

### B. Regular Amendments

Members of the public may submit proposals for amending the salmon plan at any time, but the Council will not formally consider those proposals until its April meeting. At that time, the Council will consider the proposals, the Salmon Team's analysis and recommendations, and take public testimony. If it decides the plan should be amended, the Council will task the Team to prepare the amendment for review at the September meeting, public review between September and December, and approval for Secretarial review and implementation in December.

### Schedule of the Alaska Board of Fisheries

Specific salmon fisheries considered by the Alaska Board of Fisheries will vary from year to year and from meeting to meeting. The schedule given here reflects the Board's schedule in recent years.

### Pacific Salmon Commission

The Chinook, Coho, and other technical committees of the Pacific Salmon Commission meet at various times throughout the year.

Negotiations between the United States and Canada on Yukon River salmon and salmon fisheries are ongoing. Delegations meet once or twice a year. In addition, the Yukon Joint Technical Committee meets once or twice year to compile and analyze data and prepare reports.

## GROUNDFISH FISHERY MANAGEMENT PLAN AMENDMENT PROPOSAL North Pacific Fisheries Management Council

Name of Proposer: Yukon-Kuskokwim Fisheries Task Force

Date: 10/2/89

Address: Box 267, Bethel, Alaska 99559

Telephone: 907-543-3409

Fishery Management Plan: Salmon Fisheries Management Plan

Brief Statement of Proposal: The MFCMA definition of "fishing" includes both harvesting and processing within the EEZ of the United States. This proposal requests the NPFMC to deny joint venture processing permits at sea and to begin to develop the administrative record to determine if the the NPFMC has authority to limit participation in shore based processing of companies which operate American subsidiaries, or have transferred capitol to American joint venture partners to engage in fish trade of resources from countries whose Nationals violate U.S. conservation laws by operating fleets that take salmon of North American origin in the North Pacific Ocean in violation of MFCMA Section 102(2).

Objectives of Proposal: (What is the problem?)

Continued interception and at-sea mortality of salmon of North American origin by fleets employing gear at a time and in the area where salmon of North American origin are known to occur by scientific research and enforcement actions contributes to the conservation problems experienced by discrete populations of salmon in their North American terminal streams. In addition to the Lacey Act and Pelly Amendment, the NPFMC may have the administrative authority to further limit commerce conducted within the area of the NPFMC authority by these Flag states.

Need and Justification for Council Action: Continued interception and at-sea mortality of salmon of North American origin by fleets employing gear at a time and in the area where salmon of North American origin are known to occur by scientific research and enforcement actions contributes to the conservation problems experienced by discrete populations of salmon in their North American terminal streams. Government so foreign nationals claims their take of this species is a high seas fishing freedom. These Nations and the Executive of the U.S. have chosen to disregard MFCMA Section 102(2) in which the Congress declares these salmon the sole property of the United States. Once declared fully utilized by the NPFMC, salmon of North American origin become a prohibited species, and subject to Section 311(a) enforcement action in their ocean range.

Foreseeable Impacts of Proposal: To eliminate claims that the take of salmon of U.S. origin on the high seas beyond the EEZ is a high seas fishing freedom, and to have the Executive Branch of the U.S. Government enforce Section 102(2) and Section 311(a) of the MFCMA, by State practice on the high seas beyond the EEZ through enforcement actions, and by applicable trade sanction provisions of the Lacey Act and Pelly Amendment.

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The United States Government has entered into driftnet monitoring agreements that allow foreign driftnet fleets to operate at a time, and in areas where salmon of North American origin are known to range as demonstrated by U.S. scientific research and enforcement actions in violation of Section 102 (2) and 311(a) of the MFCMA. Passage of this amendment by the NPFMC will coincide with the actions of Congress to direct the Executive Branch to seek a ban on the use of this geartype, being supported by the "Tarawa Declaration", and the efforts of the United N a t i o n 's General Assembly and world environmental movements.

Supporting Date and Other Information: What data are available and where can they be found?

The public record since passage of the Driftnet Monitoring Impact, Assessment, and Enforcement Act of 1987 of government, the fishing industry, and National environment groups is replete with reference to the scientific data base, and results of enforcement actions that describe the magnitude of the interception of salmon of North American origin by of foreign driftnet fleets fishing beyond the EEZ of salmon States of Origin.

Signature: Harold Sparck

## GROUNDFISH FISHERY MANAGEMENT PLAN AMENDMENT PROPOSAL North Pacific Fisheries Management Council

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Name of Proposer: Yukon-Kuskokwim Fisheries Task Force

Date: 10/2/89

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Address: Box 267, Bethel, AK 99559

Telephone: 907-543-3409

Pishery Management Plan: Salmon Management Plan

- Brief Statement of Proposal: to prohibit the use of drift gillnets greater then 1.5nm in length as a legal fishing gear within the migratory range of salmon of North American origin that are within the jurisdiction of the North Pacific Fisheries Management Council.
- Objectives of Proposal: (What is the problem?) To end the interception of salmon of North American origin in the North Pacific Ocean by drift gillnet fleets that fish at time and in areas that salmon of North American origin are known to frequent in violation of Section 102(2) of the Magnusson Fisheries Conservation and Management Act, PL. 94-265, 16 U.S.C. 1801-1882.
- Need and Justification for Council Action: Continued interception and at-sea mortality of salmon of North American origin by fleets employing gear at a time and in the area where salmon of North American origin are known to occur by scientific research and enforcement actions contributes to the conservation problems experienced by discrete populations of salmon in their North American terminal streams
- the U.S. Government enforce Section 102(2) and Section 311(a) of the MFCMA, by State practice on the high seas beyond the EES through enforcement actions, and by applicable trade sanction provisions of the Lacey Act and Pelly Amendment
- Are there Alternative Solution? If so, what are they and why do you consider your proposal the best way of solving the problem?

  The United States Government has entered into driftnet monitoring agreements that allow foreign driftnet fleets to operate at a time, and in areas where salmon of North American origin are known to range as demonstrated by U.S. scientific research and enforcement actions in violation of Section 102 (2) and 311(a) of the MFCMA. Passage of this amendment by the NPFMC will coincide with the actions of Congress to direct the Executive Branch to seek a ban on the use of this geartype, being supported by the "Tarawa Declaration", and the efforts of the United N a t i o n 's General Assembly and world environmental movements.

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Signature: Harold Sparck

## GROUNDFISH FISHERY MANAGEMENT PLAN AMENDMENT PROPOSAL North Pacific Fisheries Management Council

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Name of Proposer: Yukon-Kuskokwim Fisheries Task Force

Date: 10/2/89

Address: Box 267, Bethel, Alaska 99559

Telephone: 907-543-3409

Fishery Management Plan: Salmon Fisheries Management Plan

Brief Statement of Proposal: to publish an annual ABC and TAC for salmon spawned in the State of Alaska equal to the Alaska Department of Fish and Game's projection of run size, harvest forecasts and escapement objectives for the subsequent season that would account for reproduction, and forms of harvest including subsistence, commercial sports fishing, and personal use harvest necessary for conservation and complete utilization of the stock.

Continued interception and at-sea mortality of salmon of North American origin by fleets employing gear at a time and in the area where salmon of North American origin are known to occur by scientific research and enforcement actions contributes to the conservation problems experienced by discrete populations of salmon in their North American terminal streams. When the Council publishes an ABC and TAC that identifies domestic use of the entire population of salmon spawned in Alaskan waters, this fish species is publicly noticed as being fully-utilized, and thereby qualifies for protection under the authority of the MFCMA, and cannot be taken legally by foreign nationals.

Need and Justification for Council Action: Continued interception and at-sea mortality of salmon of North American origin by fleets employing gear at a time and in the area where salmon of North American origin are known to occur by scientific research and enforcement actions contributes to the conservation problems experienced by discrete populations of salmon in their North American terminal streams. Government so foreign nationals claims their take of this species is a high seas fishing freedom. These Nations and the Executive of the U.S. have chosen to disregard MFCMA Section 102(2) in which the Congress declares these salmon the sole property of the United States. Once declared fully utilized by the NPFMC, salmon of North American origin become a prohibited species, and subject to Section 311(a) enforcement action in their ocean range.

Foreseeable Impacts of Proposal: To eliminate claims that the take of salmon of U.S. origin on the high seas beyond the EEZ is a high seas fishing freedom, and to have the Executive Branch of the U.S. Government enforce Section 102(2) and Section 311(a) of the MFCMA, by State practice on the high seas beyond the EEZ through enforcement actions, and by applicable trade sanction provisions of the Lacey Act and Pelly Amendment.

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Signature: Harold Sparck

AGENDA D-2 JANUARY 1990

UNITED STATES DEPART SUPPLEMENTAL National Oceanic and Atmospheric Administration

National Marine Fisheries Service P.O. Box 21668 Juneau, Alaska 99802-1668

DATE:

10 January 1990

TO:

Members of the North Pacific Council's Salmon Team

FROM:

Aven M. Andersen, Chairman

SUBJECT:

A Definition of Overfishing for the Third Amendment of

the Salmon Plan.

### Summary

I have been advised by the NMFS Washington, D.C., office that the third amendment of the salmon plan had better contain a definition of overfishing when it is submitted for Secretarial review or it will likely be rejected. Here is some background and a definition I drafted. Please review the definition and jot down your concerns. I'll call in a few days. I would like us to agree on a definition by the 20th of January so the Council can submit the plan and assorted documents to D.C. for Secretarial review before the end of January. (The definition, of course, will always be subject to further refinement by a future plan amendment.)

### Introduction

Under NOAA Guidelines for Fishery Management Plans, published on 24 July 1989 (54 FR 30826), any fishery management plan or amendment of a fishery management plan being developed and not yet adopted as final by a Council on 23 August 1989 "should contain a definition of overfishing when submitted for approval by the Secretary" (50 CFR 602.11(c)(9)(i)). The third amendment of the salmon plan was being developed and had not yet been adopted by the Council on 23 August 1989. Therefore, according to NOAA, the third amendment needs to contain a definition of overfishing.

NOAA prepared its quidelines in response to a provision in the Magnuson Fishery Conservation and Management Act that says "The Secretary shall establish advisory guidelines (which shall not have the force and effect of law), based on the national standards, to assist in the development of fishery management plans" (16 USC 1851(b)). The requirement to define overfishing is based on National Standard 1 of the Magnuson Act, which states: "Conservation and management measures shall prevent overfishing while achieving, on a continuing basis, the optimum yield from each fishery . . . " (16 USC 1851(a)(1)).



## The Definition of Cverfishing must be Objective and Measurable.

The guidelines state that each fishery management plan (FMP) "must specify, to the maximum extent possible, an objective and measurable definition of overfishing for each stock or stock complex covered by that FMP, and provide an analysis of how the definition was determined and how it relates to reproductive potential" (50 CFR 602.11(c)(1)).

Specifically, the guidelines state that, "overfishing is a level or rate of fishing mortality that jecpardizes the long-term capacity of a stock or stock complex to produce MSY on a continuing basis" (50 CFR 602.11(c)(1)). The guidelines do, however, allow a plan to permit short-term overfishing ("pulse overfishing"), harvesting fish before they have attained the maximum weight or yield ("growth overfishing"), and overfishing minor stock components ("localized overfishing") as long as this localized overfishing does not cause any stock to require protection under the Endangered Species Act (50 CFR 602.11(c)(3),(6)(v), and (8)).

The guidelines state further that ovefishing must be defined in a way to enable the Council and the Secretary to monitor and evaluate the condition of the stock or stock complex relative to the definition (50 CFR 602.11(c)(2)).

Finally, the guidelines state the definition must be based on the best scientific information available (50 CFR 602.11(c)(4)).

## Stocks Subject to This Salmon Plan are in Two groups.

The salmon stocks covered by this fishery management plan are the anadromous salmon stocks that originate primarily in Alaska, but include some from British Columbia, and a few chinook salmon stocks from Washington, Oregon, and Idaho (and perhaps northern California). The number of separate stocks is unknown but is well into the thousands. For purposes of defining overfishing, these stocks can be separated into two groups on the basis of which of two organizations has primary jurisdiction over those stocks: the Pacific Salmon Commission (see §5.4) or the Alaska Board of Fisheries (§5.3).

The Pacific Salmon Commission (founded by a treaty between the United States and Canada) has jurisdiction over all salmon stocks that originate in one country and are intercepted by fisheries of the other country. Salmon stocks originating in Washington, Oregon, Idaho, or California and caught off or within Alaska are under the jurisdiction of the Pacific Salmon Commission because those stocks are, undoubtedly, also intercepted by Canadian fishermen. Salmon stocks originating in

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British Columbia and intercepted off or within Alaska by U.S. fishermen are also under the jurisdiction of the Pacific Salmon Commission.

Chinook, chum, and coho salmon stocks originating in Canadian parts of the Yukon River are currently the subject of negotiations between the U.S. and Canada and will likely soon fall under the jurisdiction of the proposed Yukon Panel of the Pacific Salmon Commission. Until then, they remain primarily under the jurisdiction of the Alaska Board of Fisheries.

The Alaska Board of Fisheries has primary jurisdiction over most of the salmon stocks originating in Alaska that are harvested off or within Alaska. The exceptions are those stocks under the primary jurisdiction of the Pacific Salmon Commission and, perhaps, those stocks originating on the Annette Islands Reservation.

## The Salmon Fisheries are Managed to Prevent Overfishing.

The Pacific Salmon Commission operates under the Pacific Salmon Treaty, of which one principle is to "prevent overfishing." The salmon treaty and commission attempt to prevent overfishing by limiting levels of harvest (setting harvest quotas) for certain salmon fisheries, having spawning escapement goals for some indicator salmon stocks, and monitoring stock rebuilding plans, stocks, and harvests.

The Alaska Board Board of Fisheries sets policies and regulations to ensure the long-term productivity of the stocks under its jurisdiction and, accordingly, acts to prevent everfishing. Among the means it uses to prevent overfishing are the setting of harvest guidelines and spawning escapement goals.

In summary, the fisheries on both groups of stocks are managed to prevent overfishing.

# The Overfishing Criteria Are Scientifically Based and are Related to Reproductive Potential.

A large number of factors determine how productive a salmon stock can be; refer to the Habitat Section in the Appendix for more discussion and references. In a particular environment, the main factor determining how many adult salmon a stock will produce is the effective number of fertilized eggs deposited by the parent generation. In general, few spawners produce few adults; more spawners produce more adults; too many spawners produce fewer adults (see Ricker, 1975 and Larkin, 1977 for details). Theoretically, there is some optimum number of spawners for a stock in a given environment. In real life, this

optimum number is a fairly broad range in the number of spawners and is never precisely known by man.

For the most part, salmon fishery managers work on the basis of groups of salmon stocks (e.g., a complex of hundreds of Southern Southeast Alaska pink salmon stocks, or the group of several Naknek River system sockeye salmon stocks), rather than on the basis of individual stocks. They try to control the harvests so that the number of salmon reaching the spawning grounds for the group of stocks will, over the long run, sustain or increase the number of salmon in the group of stocks, i.e., be near the optimum. They do so, generally, in two ways.

The usual way is to establish harvest levels based on historical harvest levels and their resulting spawning escapements. Under this approach, managers control the fishery to achieve what they believe are adequate number of spawners by using an estimated status of the stock (or group of stocks), inseason assessments of the fisheries and stocks, and harvest levels that appear to be appropriate for the stock in that status. After the fishery is over and the remaining salmon have reached the spawning grounds, the managers examine the results and, if necessary, refine the next year's management program.

The alternative way is to forecast the number of adults returning toward the spawning grounds and control the harvests on the basis of the forecasts and inseason assessments of stock abundance so that the optimum number of spawners reach the spawning grounds. This approach requires solid information on the relationship between the number of spawners in the parent generation and the resulting number of adults returning towards the spawning grounds (harvest plus spawners). Among the information needed are the actual number of spawners (or a reliable index) and the number harvested from the stock. Also, because the relationship is nonlinear, this information is needed for at least three broods of the stock. Thus, for a salmon stock producing adults that spawn when they are 4, 5, and 6 years old, information will be needed on the numbers of spawners for 3 years and on the resulting harvests and spawning escapement for 5 more years, a minimum of 9 consecutive years. Because the required data are difficult and expensive to obtain, this method is used for only a few salmon fisheries in Alaska.

A definition of overfishing for salmon fisheries must take into account the differences in the life cycles of the various species and origin of the salmon stock. Of prime importance is the fact that most species spawn at several ages, whereas some spawn only at one or two ages. Thus, if a pink salmon stock (which, universaly, spawns only at the end of its second and last year of life) was overfished in any year, the long-term capacity of that stock to produce MSY would have been jeopardized because most of the spawners for the stock, which would have spawned that

year would have been harvested. In a species that spawns at several ages, an excessive harvest of the returning adults in 1 year would not constitute overfishing because the stock would have spawners return over 2 or more consecutive years and would probably not be reduced in its long-term capacity to produce MSY. For example, a Yukon River chinook salmon stock (which spawns for the most part at ages 4, 5, and 6) would have to be excessively harvested 3 years in a row to jeopardize one brood of the stock and 7 years in a row to jeopardize the whole stock.

The following definition has been crafted to be objective and measurable, account for differences in the life histories of the different salmon species, and be directly related to the reproductive potential of the stocks. In being specified on groups of stocks and particular fisheries, rather than on individual stocks, this definition allows for "short-term overfishing," "growth overfishing," and "localized overfishing," as described in 50 CFR Part 602, Appendix A to Subpart B. Moreover, this definition enables the Council and the Secretary to monitor and evaluate the condition of the salmon stocks relative to the definition. Finally, because the managers annually evaluate the harvest levels and spawning escapement goals and revise them on the basis of the newest scientific information, this definition is based on the best available scientific information.

### THE DEFINITION OF OVERFISHING.

Overfishing, as the term applies to the salmon fisheries covered by this fishery management plan, means reaching one or more of the following conditions for the species-specific period of years given in the table:

- (A) Exceeding a quota (and upper bound of any management range) or approved level of kill (harvest plus any accountable incidental kills) established by the Pacific Salmon Commission for the salmon fisheries of Southeast Alaska (Dixon Entrance, 54°50' North latitude, to Cape Suckling, 143°53' West longitude), or
- (B) Exceeding the upper bound of a harvest guideline set for a particular salmon fishery by the Alaska Board of Fisheries, or
- (C) Failing to achieve a spawning escapement goal set by the Pacific Salmon Commission, the Alaska Board of Fisheries, the Alaska Department of Fish and Game, or any other official policy-setting body (e.g., the proposed Yukon River Panel of the Pacific Salmon Commission).

## Table of Species-specific Time Periods

- (1) 6 consecutive years for chinook salmon;
- (2) 5 consecutive years for sockeye salmon;
- (3) 4 consecutive years for coho or chum salmon;
- (4) 3 consecutive years for pink salmon.

NOTE 1: When making a determination whether overfishing exists according to these definitions, in any situation where there are conflicting quotas, goals, guidelines, or levels, those established by an international body takes precedence over those set by a U.S. Federal body, and the Federal ones take precedence over those set by a State body.

NOTE 2: This definition of overfishing is independent from any allocation considerations; it deals with the number of salmon harvested or killed by all fishing activities or how many salmon reached the spawning grounds, not with who caught the salmon or whether any group exceeded (or failed to harvest) its allocation.

### References Cited

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