NPFC/SSC - Preliminary Draft Jan. 27, 1977

Report of the Scientific and Statistical Committee on Working Definitions for Use in Management Plans

A. Determinants of Catch Levels

1. Maximum sustainable Yield (MSY) is an average over a reasonable length of time of the largest catch which can be taken continuously from a stock under current environmental conditions. It should normally be presented with a range of values around its point estimate.

   Where sufficient scientific data as to the biological characteristics of the stock do not exist or the period of exploitation or investigation has not been long enough for adequate understanding of stock dynamics, the MSY will be estimated from the best information available.

2. Equilibrium Yield (EY) The annual or seasonal harvest which at a given fishing intensity maintains the resource at approximately the same level of abundance (apart from the effects of environmental variation) in succeeding seasons or years.

3. Acceptable biological catch (ABC) is a seasonally determined catch that may differ from MSY for biological reasons. It may be lower or higher than MSY in some years for species with fluctuating recruitment. It may be set lower than MSY

in order to rebuild overfished stocks.

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

OY may be set higher than ABC in order to produce higher yields from other more desirable species in a multi-species fishery. It might be set lower than ABC in order to provide larger sized individuals or a higher average catch per unit effort.

The few public comments to the SSC during this session were on the subject of size limits on tanner crab.

Charles Meachum - Asked if the Tanner Crab Preliminary Fishery Management Plan included a legal size limit.

Nick Szabo - Stated that a common, standard size limit on C bairdi should apply to both foreign and domestic fishermen.

Oscar Dyson - Stated that if the fleets are geographically separated a size limit on foreign caught crab is not important. But, however, it would be intolerable to force an American fisherman to throw away a 5 inch crab only to have it picked up by a foreign fisherman.

Sig Jaeger - Stated that Council actions must be defensible down the track if there is any transferance of crab size limits onto the Japanese fishery.

Bill Donaldson - (Alaska Department of Fish & Game, Kodiak) explained his draft report to SSC (working paper #5) entitled "Biological Justification of the 140mm Carapace Width Legal Size Limit for Male C. bairdi."

NPFC/SSC DOCUMENT INDEX

INFORMATION DOCUMENTS

NPFC/SSC/INFO 1 - January 24, 1977
"International Council for the Scientific Investigation of the North Pacific" and transmittal letter: Alverson to Rasmusson

NPFC/SSC/INFO 2 - January 10, 1977
Memorandum from Franklin L. Orth, University of Alaska, commenting on Alverson memo of December 29, 1976, and submitting views on definition of key fishery concepts under discussion by the SSC

NPFC/SSC/INFO 3 - January 12, 1977
"Report of the Scientific and Statistical Committee on Working Definitions for Use in Management Plans"

NPFC/SSC/INFO 4 - January 6, 1977
"Environmental Impact State/Fishery Management Plan for Commercial Troll and Recreational Salmon Fisheries Off the Coasts of Washington, Oregon, and California"

NPFC/SSC/INFO 5 - January 10, 1977
"Department of Commerce Charter of Advisory Panel for the North Pacific Fishery Management Council" and transmittal letter: Branson to McKernan

NPFC/SSC/INFO 6 - January 19, 1977
"Possibilities for Organization of the Advisory Panel to the North Pacific Fishery Management Council"

NPFC/SSC/INFO 7 - January 24, 1977
"Statement of Organization, Practices, and Procedures of the North Pacific Fishery Management Council"

NPFC/SSC/INFO 8 - Submitted January 27, 1977
King Crab Management Plan Comments

NPFC/SSC/INFO 9
"Market Structure of Alaska Seafood Processing Industries," University of Alaska Project Proposal

NPFC/SSC DOCUMENT INDEX

WORKING PAPERS

NPFC/SSC/WP 1 - January 20, 1977
"Bering Sea Tanner Crab: An Analysis of Minimum Size Limitation," David Somerton, University of Washington

NPFC/SSC/WP 2 - January 1977
"Procedures and Socioeconomic Data Needs for Determination of Optimum Yields in Fishery Management Plans," prepared by E. Miles, G. Rogers, and D. Collingsworth

NPFC/SSC/WP 3 - January 25, 1977
Proposed Outline for Fishery Management Plans

NPFC/SSC/WP 4 - Submitted January 25, 1977
Table of Contents from King Crab Draft Management Plan

NPFC/SSC/WP 5 - Submitted January 26, 1977
"Report to the Scientific and Statistical Committee of the North Pacific Fisheries Management Council" (ADF&G)

NPFC/SSC/WP 6

Draft #1: December 5, 1976 - Report of the Scientific and Statistical Committee on Working Definition for Use in Management Plans

Draft #2: January 27, 1977 - Report of the Scientific and Statistical Committee on Working Definitions for Use in Management Plans

NPFC/SSC/WP 7 - January 27, 1977
Organization of Management Plan Development Teams

NPFC/SSC/WP 8 -

Draft #1: January 27, 1977 - Proposed Outline for Fishery Management Plans

Draft #2: January 28, 1977 - NPFMC/SSC Outline for Fishery Management Plans

NPFC/SSC DOCUMENT INDEX

ACTION PAPERS

NPFC/SSC/AP 1 - January 26, 1977
NPFC/SSC Report to Council

NPFC/SSC/AP 2 - January 27, 1977
Ocean Salmon Management Plan Development Team

NPFC/SSC/AP 3 - January 27, 1977
Report of Chairman to Council

NPFC/SSC/AP 4

Draft #1: Need for Tagging Funds
Draft #2: January 27, 1977 - Support for Coded Wire Tag Studies

LIST OF DOCUMENTS OF THE NPFC/SSC

Action Papers:

Action Paper #1 - NPFC/SSC Report to Council Jan. 26, 1977

Action Paper #2 - NPFC/SSC Ocean Salmon Management Plan Development Team Jan. 27, 1977

Action Paper #3 - Report of Chairman to Council Jan. 27, 1977

Action Paper #4 - Support for Coded Wire Tag Studies Jan. 27, 1977

Working Papers:

Working Paper #1 - Bering Sea Tanner Crab: An Analysis of Minimum Size Limitation

Working Paper #2 - Draft Procedures and Socio-Economic Data Needs for Determination of Optimum Yields in Fishery Management Plans

Working Paper #3 - Proposed Outline for Fishery Management Plans
From: Dayton L. Alverson, Center Director, NWAFC

Working Paper #4 - Proposed Table of Contents for Management Plans--ADF&G

Working Paper #5 - Report to the Scientific and Statistical Committee of the North Pacific Fishery Management Council (Biological Justification of the 140 mm Carapace Width Legal Size Limit for Male *C. bairdi*)
From ADF&G

Working Paper #6 - Preliminary Draft - Report of the Scientific and Statistical Committee on Working Definitions for Use in Management Plans

Working Paper #7 - Organization of Management Plan Development Teams

Working Paper #8 - Proposed Outline for Fishery Management Plans - Draft 2

Information Papers:

Information Paper #1 - Letter to Mr. Elmer Rasmuson from Dayton L. Alverson with enclosure of paper form Dr. Warren Wooster re International Council for the Scientific Investigation of the North Pacific

Information Paper #2 - Memorandum from Franklin L. Orth, re Memorandum from Dr. Alverson December 29, 1976 (Key fishery concepts under discussion)

Information Paper #3 - Report of the Scientific and Statistical Committee on Working Definitions for use in Management Plans

Information Paper #4 - Draft No. 2 dated January 6, 1977, Environmental Impact Statement/Fishery Management Plan

Information Paper #5 - Letter from Jim Branson to Prof. Donald L. McKernan including material prepared be Admiral Hayes on Advisory Panel responsibilities and management plan/DEIS flow

Information Paper #6 - Possibilities for Organization of the Advisory Panel to the North Pacific Fishery Management Council

Information Paper #7 - Revised Statement of Organization, Practices, and Procedures of the North Pacific Fishery Management Council

Information Paper #8 - King Crab Management Plan Comments

Information Paper #9 - Research Proposal on the "Market Structure of Alaska Seafood Processing Industries."

January 19, 1977

Possibilities for Organization of the Advisory Panel to the NORTH PACIFIC FISHERY MANAGEMENT COUNCIL

The exact relationship of the Advisory Panel to the Council has not been established. It is still in a formative stage and input is needed from Council members, Advisory Panel members and the Scientific and Statistical Committee. Admiral Hayes and his staff have made some proposals in the form of revisions to the Charter of the Advisory Panel and a flow chart showing the development of Council management plans.

This suggests formation of working groups along management unit or plan lines, which appears to be both feasible and desirable. It may also be desirable to form sub-panels cutting across management units, based on categories as suggested in the first working draft of the agenda for the third Council meeting.

Perhaps the most pressing problem facing the North Pacific Council, after the working structure of the Council and its advisory bodies is formulated, is the definition and application of OSY - optimum sustained yield. The members of the Advisory Panel are particularly well qualified in the socio-economic area to give advice and direction to the Council and are probably in the best position of anyone in the Council structure to determine if a management plan is practical or not. All of these areas are

undoubtedly going to be pertinent to OSY, and therefore it seems apparent that the Advisory Panel is best fitted to take the lead role in advising the Council on both the general definition of optimum sustained yield and those specific parameters that will govern OSY in each management plan.

With OSY as the first and immediate goal of the Advisory Panel, it might be possible to work toward that goal by developing a number of sub-panels that would work on separate facets of OSY. As an example:

1. A ground fish development sub-committee to determine the interest and capability of the U.S. fishing fleet to harvest ground fish off Alaska. What areas are likely to be developed first and what elements of the existing fleet would be involved? Will ground fish development be based on existing fishing capacity or can new units be expected in the fishery?

2. Determine U.S. tanner crab catch capacity based on the U.S. fisherman's ability to catch the resource, the processor's current capability for processing tanner crab, both as sections and meat, and on an assessment of U.S. ability to market large quantities of tanner crab. Are all three components of this fishery - catching, processing and marketing - equal and currently in synchronization?

3. A sub-panel to assess the processing capability and problems involved in new fisheries, particularly those for ground fish and tanner crab. What capability is now available? What can be expected to be available in the immediate future? Where does the processing industry need help in technology, financing, et cetera, in order to get these fisheries started in Alaska?

4. Marketing capability. A working group to assess the current and future marketing capability for finfish in all of the various forms in which it can be processed.

5. A sub-panel to define the importance of fisheries that may be influenced by Council management plans. How can they best be protected? Are there alternatives?

6. A working sub-panel on limited entry to study its merits, demerits, pitfalls, and problem areas.

The Advisory Panel Charter can be revised to reflect whatever working method is decided on. The only problem is putting our heads together to work out an efficient system.