BACKGROUND

The Alaska Board of Fisheries took action on the South Unimak and Shumagin Islands June Fisheries (combined known as the South Peninsula June fishery) at a special meeting held on April 13, 14, & 15, 1996 in Anchorage. The special meeting was preceded by a meeting in Anchorage which started on March 10, 1996. On March 16, 1996, the Board took staff reports and Advisory Committee oral reports which continued through March 19, 1996. In addition, written comments from the public were received through April 14, 1996.

The Alaska Department of Fish and Game (ADF&G) staff presented a series of written area management reports, technical reports, and scientific analyses as well as a number of oral reports. These provided the Board with comprehensive information relating to the historical and current commercial and subsistence fisheries, stock composition of the respective fisheries, the status of salmon stocks not only in the Alaska Peninsula/Aleutian Islands area, but also in Bristol Bay, the Kuskokwim, Yukon, Norton Sound and Kotzebue areas and, finally, the most recent scientific information and analysis of that information by the staff. After receiving, reviewing and questioning this wealth of information, deliberations began on this matter on April 13, 1996.

These meetings were publicly noticed as required by AS 44.62.190-210. This meeting, as other recent and historic meetings on the same topic, drew considerable public attendance and written and oral testimony. Because of the volume of previous information, oral testimony was taken from the Advisory Committee representatives and written comments were received from the public. Nevertheless, the volume of materials presented to the Board was very considerable.

The Board's deliberations were delayed from the initial meeting, not only to conform to the notice requirements of the Administrative Procedures Act, but also to permit members of the public to provide additional written materials to the Board, to permit the two (2) new Board members to review and digest the
volumes of information relative to this matter and to permit the staff of the Department to respond in a comprehensive manner to requests by various Board members for information on this matter.

ADOPTION OF GUIDING PRINCIPLES

Initially, in an effort to develop a consistent set of guiding principles, the Board reviewed and discussed the adoption of the Guiding Principles from the Upper Cook Inlet Salmon Management Plan. These principles were modified for application to this fishery and were unanimously adopted by the Board as part of the Management Plan. The Board was cautioned that these principles cannot be applied at this meeting as if they were already in regulation, but that individual Board members may use these principles to guide their decision-making process. The principles are stated as follows:

The Board will, to the extent practicable, consider the following guiding principles when taking actions associated with the adoption of regulations regarding the South Unimak and Shumagin Islands June Salmon Management Plan:

1. The conservation and sustained yield of healthy salmon resources and maintenance of the habitat and ecosystem which salmon and allied species depend for survival throughout their life-cycle.

2. The maintenance of viable and diverse fish species and stocks.

3. The maintenance of the genetic diversity of fish species and stocks.

4. The best available information presented to the Board.

5. The capability of being implemented and evaluated, including factors such as flexible and adaptive management, conflict with other law, and mixed stock management.

6. The capability of providing tangible benefits to user groups, or conservation, with the least risk to existing fishers and to conservation.

7. The stability and viability of subsistence, recreational, commercial and personal use fisheries.
ORDER OF ASPECTS OF REVIEW

The Board next discussed how it would review this fishery. Judge Erlich's decision was examined and discussed. The Board then established seven (7) critical aspects of his decision to be used to guide its deliberations as follows:

1. The history of the South Peninsula and the Norton Sound fisheries.
2. The scientific/rational data available for the concerned fisheries.
5. Subsistence.
6. Sockeye to Chum Salmon Ratios.
7. The Allocative Issues.

HISTORY

Following establishment of this format, the Board began its deliberations with a discussion of the history of each fishery. Both fisheries have been the subject of state regulatory actions commencing in 1962 and continuing through the present day. These actions were taken to regulate both the commercial and subsistence harvest as well as to address conservation issues (see RC 19, colored tab 2 and colored tab 6).

The Aleut and Eskimo people of both areas have a cultural and traditional history of utilization of chum salmon which predates recorded history. The commercial exploitation of chum salmon in the June fishery is at least as old as 1908 when the first recorded catches were made. The commercial fishery for export in Norton Sound, is of much more recent development, beginning in the 1960's (see RC 27), although the Nome commercial fishery for barter and trade existed at least as early as the 1890's.

This historical data demonstrates that the greater the abundance of the chum salmon, the greater the number of salmon which are harvested in both fisheries. In the commercial fishery, this abundance/harvest factor is also affected by market demand for the salmon. In the subsistence fishery, the abundance/harvest factor is also affected by subsistence needs.
SCIENTIFIC AND FACTUAL DATA

The Board next reviewed and discussed the scientific and factual data. This data consisted of the 1987 tagging studies as revised and analyzed by staff (RC 19, colored tab 3), the Genetic Stock Identification studies (RC 19, colored tab 3 and white tab 7), the reported commercial and subsistence harvest data, the spawning escapement surveys and the subsistence harvest assessment in Norton Sound (RC 2). Run timing data was also presented and considered by the Board. Because of staff concerns about total return estimates and measurements of accuracy and precision of the Harvest Rate Analysis Report previously provided to the Board, the Department advised that it was not prepared to present the Harvest Rate Analysis Report to the Board (RC 19, colored tab 5).

The GSI study clearly demonstrated that approximately 60% of the chum salmon harvest in the South Unimak June fishery in Area M in 1993 and 1994 originated from spawning streams in an area called "Northwest Alaska" which includes Norton Sound, the Yukon River (summer chum), the Kuskokwim area, Bristol Bay and populations of the North Peninsula extending as far west as the Meshik River. Thus, the GSI study was not, by itself, sufficiently area or origin specific enough to enable the Board to decide issues relative to Norton Sound and the June fishery. This GSI study, while helpful in the aggregate, does not permit the Board to discriminate as to individual stocks or as to stocks which have been identified as having a conservation concern.

The tagging study is helpful to the Board's decision-making process because it provides evidence relative to the stock composition of chum salmon in the June Area M fishery, a mixed stock fishery. This study provided the earliest data to the staff and the Board. The tagging study assumed that, in a mixed stock fishery, the relative rate of harvest in the fishery is directly related to the size of the stock in the fishery. The data, the number of tags recovered from various areas, supported this assumption. With the subsequent review and analysis by the staff and the Board, this data has been refined and qualified to the point where it can, when coupled with the other data available to the Board, be reasonably relied upon to make rational decisions relative to these fisheries. The 1987 tagging study demonstrated that some chum salmon are caught in Area M which are bound for spawning streams in Norton Sound.

From all of the scientific data and related data, the Board concludes that the composition of chum salmon in the Area M June fishery contains a relatively small number of Norton Sound chum salmon.
SUSTAINED YIELD

The Sustained Yield discussion by the Board began with a discussion of the Alaska Constitution. Reference was made to the proceedings of the Constitutional Convention and the glossary of terms found in the Convention Papers, folder 210. This definition is as follows:

When so used it [sustained yield] denotes conscious application insofar as practicable of principles of management intended to sustain the yield of the resource being managed. That broad meaning is the meaning of the term as used in the Article.

It was also noted by the Board that in the Convention proceedings that, as to fisheries, the term sustained yield principle was not intended to apply in the strict sense in which it is applied to forestry practices. The drafters realized, full well, that it would be impossible to determine the exact sustained yield in the fisheries and that sustained yield would be left to the state legislature and probably, by the legislature, to the fisheries agency.

The general conclusion reached by the Board is that the Constitution contemplates very wide discretion in the Board of Fisheries in making sustained yield determinations.

With regard to the Norton Sound area, there are some rivers in Nome and Moses Point subdistricts (RC 19, colored tab 6, page 98) for which the department has conservation concerns. The Fish River was removed from this classification after the 1995 season. The escapements for four (4) of the remaining rivers have been met in the last two (2) years. The escapements for the other four (4) rivers have not been met based upon the aerial surveys; however, the escapements, even as measured by the aerial surveys, have improved each of the last two years.

The other staff reports and data demonstrate that all other Norton Sound chum salmon stocks are in good abundance. Based on these improvements and its prior conclusions as to the Norton Sound component of the June area M fishery, the Board concludes that further reductions in the June Area M fishery would not alleviate the remaining conservation concerns for these rivers.

MIXED STOCK POLICY

The Board next discussed the Mixed Stock Policy. The Board recognized that the Area M June fishery has, under the existing Management Plan, already shouldered a substantial burden
related to the conservation concerns for Western Alaska Chum salmon stock. These measures include a delayed opening date, the chum cap, the reduction in gear size, the pre-season closures of various areas, the in-season closures of "hot spots," the sockeye to chum salmon ratios and the July 1 to July 19th closure of the South Peninsula fishery (5 AAC 09.366). These measures have all resulted in substantial burdens of conservation being imposed on the Area M fishery by removing the opportunity of these fishers to harvest hundreds of thousands of sockeye salmon. Further, the way in which the Department has implemented the Management Plan has resulted in an additional savings of chum salmon substantially below the cap (see RC 19, colored tab 1 and white tab 1).

The Board recognized that a burden of conservation has also been imposed on the Nome and Moses Point/Elim subdistricts. The commercial chum salmon fisheries in the Nome and Moses Point/Elim subdistricts has been closed for a number of years. The subsistence chum salmon fishery in the Moses Point/Elim subdistrict was closed for one year (1994). The chum salmon subsistence fishery has been reduced, restricted, or closed in the Nome subdistrict for over a decade.

Based on the foregoing and its prior conclusions based upon the information set forth above, the Board concludes that both areas have had a burden of conservation imposed upon them which is fair and proportional to their respective harvest of the chum salmon stock.

**SUBSISTENCE**

Dealing with subsistence, the Board assumed, for the purpose of this special meeting and this actions on the June M fishery, that the Norton Sound chum salmon is a separate fish stock under the subsistence law. In its earlier finding of "customary and traditional" uses of salmon in Norton Sound, the Board determined that a total of 85,300 salmon (all species) were necessary to provide a reasonable opportunity for subsistence uses of salmon in Norton Sound. The chum salmon component of the 85,300 determination was 22,491 chum salmon. At this meeting, the Board discussed and found that 22,491 chum salmon would be necessary to provide a reasonable opportunity for subsistence use of chum salmon in Norton Sound.

Information presented to the Board demonstrated that in 1994, 24,776 chum salmon were harvested in Norton Sound subsistence fisheries. For 1995, the data showed that 43,015 chum salmon were harvested in the Norton Sound subsistence fisheries. The harvest in both years exceeded the 22,491 level necessary to provide a reasonable opportunity for subsistence use (RC 2).
Testimony from the staff relative to the 1996 anticipated return was that an average return for Norton Sound chum salmon was expected with abundance levels similar to 1995. There was no testimony before the Board that the 1996 run would not provide at least 22,491 chum salmon for subsistence harvest. While certain restrictions, including restrictions which change the fishery practices from the traditional in-river fishery, have been imposed on the subsistence fishery in the Nome subdistrict of Norton Sound, it appears that, in recent years and for 1996, a reasonable opportunity for chum salmon has been and will be provided under the existing regulatory scheme. In this regard, it should be noted that a subsistence fishery was allowed for chum salmon in the Nome subdistrict on three of the rivers for which the department has expressed conservation concerns (Eldorado, Flambeau and Bonanza).

In accordance with the Superior Court's summary judgment order, the Board will, after proper legal notice, address the status of chum salmon as a separate subsistence stock at a future meeting.

**RATIOS**

The Board next considered the question of the ratios. The department gave an extensive explanation of its use of sockeye to chum ratios in opening the fishery, managing the fishery and closure of the fishery. The department has regularly and consistently delayed the start of the June fishery beyond June 10 to achieve a satisfactory sockeye to chum ratio that would best meet the twin goals of the Management Plan. Those goals are to catch sockeye salmon to the guideline harvest level while, at the same time, minimizing the incidental catch of chum salmon.

The opening ratio is determined annually by the department based upon the projected Bristol Bay forecast and the 8.3% harvest allocation. The department stated that fixing a set ratio or a definite, inflexible opening date which would always apply to the fishery would interfere with its ability to best meet the plan's two goals.

The Department explained that the June 24th 2:1 sockeye to chum ratio is based on the run timing considerations of both sockeye and chum, historic ratios of chum and sockeye during late June, concern for chum salmon conservation in locations outside of Area M and to prevent an accelerated "catch up" action in the later part of the season to harvest up to the full amount of the chum cap.
ALLOCATION ISSUES

The Board then reviewed and discussed the allocation criteria found in 5 AAC 39.205. Each of the seven (7) criteria was considered. The history of both fisheries was reviewed and discussed in great detail early in the deliberations as were the characteristic and the participants in the fisheries. The Board acknowledged that personal and family consumption of fish was more important to the subsistence fishers in Norton Sound than to the commercial fishers in Area M. From a commercial fishery point of view, the alternative fisheries resources available to both fishers are limited. From a subsistence point of view, the reduction in opportunity relative to chum salmon can be substituted with other salmon species. The Board found that both fisheries are important to the economy of their respective regions, but that, due to its size and composition, the dollar value of the Area M fishery is more important to the economy of the state. The issue of recreational for residents and non-residents was not viewed as a relevant consideration.

BOARD ACTIONS

Next, the Board considered amendments to the existing Management Plan 5 AAC 09.365. Board Member Umphenour moved to reduce gear size. After discussion, this motion failed, two in favor and four opposed.

Board Member White then moved to reduce the chum cap from 700,000 to 500,000 with a float of 50,000 depending upon the conservation concerns or the lack thereof relative to river systems in Western Alaska including Bristol Bay. The intent of the motion was to reduce the cap by ten percent if more than 15 AYK-Bristol Bay summer chum stocks had conservation concerns (as delineated by the Department of Fish and Game in its Run Outlook definitions). Likewise, if AYK-Bristol Bay summer chum stocks experience a two-year 20 percent increase in run abundances, the cap would be adjusted upwards by ten percent to 550,000 fish. After discussion, this motion failed, two in favor and four opposed.

Board Member Umphenour moved to require the retention and recording on fish tickets of all salmon caught in the June fishery. After discussion, the motion passed, seven in favor and none opposed. It should be noted that Board Member Angansan was declared not to have a conflict relative to this issue and participated in the vote.

Finally, White moved to adopt the sustained yield principles contained in RC 9 and RC 12 into the June Management Plan. After discussion, the motion failed, one in favor and six
opposed. Again, Board Member Angansan was declared to have no conflict and participated in the vote.

This and other issues best described as principles to be applied to mixed stock fishery decisions were then scheduled for the October work session by unanimous vote.

Upon the adoption of these findings, the Board incorporates by reference all prior findings relative to the Area M June fishery, to the extent that these prior findings are unmodified by this Finding.

Approved: Carried (5/11) (Yes/No/Abstain)
Date: April 15, 1996
Location: Anchorage, Alaska