

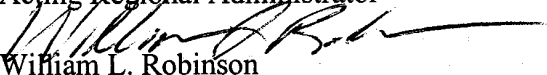


UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Northwest Region
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BIN C15700
Seattle, Washington 98115-0070

APR 27 2001

1514-04-020-b

MEMORANDUM FOR: Donna Darm
Acting Regional Administrator

FROM: 
William L. Robinson
Assistant Regional Administrator
Sustainable Fisheries Division

SUBJECT: A Joint State Tribal Resource Management Plan Provided by the Washington Department of Fish and Wildlife and the Point-No-Point Treaty Tribes For Salmon Fisheries Affecting Hood Canal Summer Chum Salmon Under Limit 6 of the Endangered Species Act 4(d) Rule (July 10, 2000; 65FRN42422) - DETERMINATION MEMORANDUM.

NMFS Tracking Number: NWR/4d/06/2001/001

ISSUE

The Washington Department of Fish and Wildlife (WDFW) and Point-No-Point Treaty Tribes [hereafter referred to as "Co-managers"], pursuant to their authorities under U.S. v Washington, provided a joint Resource Management Plan (RMP) for salmon fisheries that will affect listed Hood Canal summer chum salmon. The harvest component of a document titled "Summer Chum Salmon Conservation Initiative - An Implementation Plan to Recover Summer Chum Salmon in the Hood Canal and Strait of Juan de Fuca" (SCSCI) is considered the RMP. The National Marine Fisheries Service (NMFS) has reviewed the RMP and determined that it adequately addresses the requirements of Limit 6 of the Endangered Species Act (ESA) 4(d) rule, (65 FR 42422, July 10, 2000; 50 CFR 223.203(b)(6)).

RECOMMENDATION

NMFS' Sustainable Fisheries Division (NMFS-SFD) evaluated the RMP provided by WDFW and the Point-No-Point Treaty Tribes and finds that it adequately addresses all of the requirements specified under Limit 6 of the ESA 4(d) Rule, including the criteria for Fishery Management and Evaluation Plans (FMEP) in Limit 4 of that rule. NMFS-SFD recommends that the Regional Administrator make a determination that Limit 6 of the ESA 4(d) Rule apply to the Hood Canal summer chum salmon RMP provided that it is implemented in accordance with the section on implementation terms at the end of this memo.



BACKGROUND

On July 10, 2000, NMFS issued a final ESA 4(d) Rule adopting regulations necessary and advisable to conserve Hood Canal summer chum salmon (65FRN42422). This ESA 4(d) Rule applies the take prohibitions of section 9(a)(1) of the ESA, and also prescribes specific circumstances when the prohibitions will not apply, which are known as 4(d) limits. The Co-managers, pursuant to their authority under U.S. v Washington, have provided a RMP for Canadian, U.S. pre-terminal, and terminal salmon fisheries which will affect listed Hood Canal summer chum salmon. NMFS is evaluating the RMP for application of take limits under Limit 6 of the ESA 4(d) Rule.

The RMP's action area encompasses the entire Hood Canal Summer-Run Chum Salmon ESU. The ESU includes all naturally spawned populations of summer chum salmon in Hood Canal and its tributaries as well as populations in Olympic Peninsula rivers between Hood Canal and Dungeness Bay, Washington. All U.S. and Canadian salmon fisheries affecting Hood Canal summer chum salmon are included in the SCSCI.

The proposed RMP provides the framework through which the state and tribal jurisdiction can jointly manage salmon fisheries while meeting requirements specified under the ESA. The stated goal of the RMP is to “.....protect, restore and enhance the productivity, production and diversity of Hood Canal summer chum salmon and their ecosystem to provide surplus production sufficient to allow future directed and incidental harvest of summer chum salmon.”

The RMP establishes a harvest regime referred to as the Base Conservation Regime (BCR). Under the BCR, summer chum salmon are caught incidentally in fisheries targeting other, more abundant and healthy populations. Most of these fisheries require the non-retention of summer chum salmon. The proposed RMP management actions affect all salmon fisheries which impact listed Hood Canal summer chum salmon, including Canadian salmon fisheries.

The BCR is comprised of the following elements:

- (1) A base set of fishery-specific management actions for fisheries in U.S. and Canadian pre-terminal, Washington terminal and Washington extreme terminal areas (section 3.5.6.1 and Tables 3.29 to 3.34 of the RMP);
- (2) Management unit and population abundance and escapement critical thresholds that trigger review of and possible adjustment of the management actions;
- (3) Expected fishery specific exploitation rate targets and ranges based on the application of the BCR on the Hood Canal and Strait of Juan de Fuca summer chum salmon management units; and

(4) Overall management performance standards based on natural production against which to assess success of the SCSCI and the harvest strategy, and make necessary adjustments (RMP section 3.5.6.3). The actions required depend both on the status of the management unit and the populations within them, with the most conservative controls prevailing.

In any given year, the results of these management actions are designed to produce exploitation rates within the range of 3.3 to 15.3% on summer chum salmon bound for the Hood Canal and 2.8 to 11.8% on the Strait of Juan de Fuca populations. Although in any one year, fisheries may be managed for exploitation rates lower than this range, the upper end of the exploitation rate ranges may not be exceeded. If post-season analysis indicates that the range has been exceeded, the Co-managers will take the necessary actions to identify the reasons for exceeding the ranges and to prevent this from occurring the following year. At the time of the five-year plan review, the annual exploitation rates for the previous five-year period are not to be clustered towards either extreme of the range. The expected average annual exploitation rate should be 10.9% on summer chum salmon bound for the Hood Canal and 8.8% on the Strait of Juan de Fuca populations.

The BCR will remain in place until such time as the Co-managers incorporate the population recovery goals into the management structure. At that time, the Co-managers will discuss with NMFS what terms of the existing plan will continue.

The RMP includes a monitoring and evaluation plan to assess fishing-related impacts to summer chum salmon, the abundance of naturally spawning fish for each of the identified management units, the effectiveness of the fishing regimes and general approach, and regulatory compliance. The RMP also requires a progress report be completed annually, with a more comprehensive plan review every five years. As outlined in section 3.6.2 of the RMP, an Annual Plan Progress Report will be completed by May 31 of each year. This information will be used (by NMFS and the Co-managers) annually to assess whether impacts to listed fish are as expected, and to revise the RMP as necessary.

DISCUSSION

Controversial Issues

The RMP calls for specific and integrated monitoring programs to maintain and improve population assessment methodologies as well as evaluating the effectiveness of harvest management actions and objectives (RMP section 3.5.10). Escapement and harvest monitoring form the core elements of the monitoring program. These core elements are stable and Co-managers have committed to continuing these programs at or above current levels. However, information on Hood Canal summer chum salmon productivity is extremely limited and little population specific information exists. Available data is currently insufficient to develop viable thresholds. The Co-managers recognize the need for additional monitoring and assessment

programs for Hood Canal summer chum salmon and are seeking funds to support them. The Co-managers are committed to finalizing the recovery goals by the first five-year RMP review, to be completed in February 2005. The viable thresholds will be identified during the process of developing the recovery goal. Information provided by the Puget Sound and Olympic Peninsula Technical Recovery Team (TRT) will be considered in the development of these goals. In the meantime, the conservatism of the proposed regime is expected to result in a positive trend toward recovery, even if the viable thresholds have not yet been established.

Another possible controversial issue is the RMP's proposed Hood Canal summer chum salmon exploitation rates for Canadian salmon fisheries. The Co-manager's authority to implement management actions is limited for fisheries outside the jurisdiction of the State of Washington and tribal managers. Therefore, successful implementation of the RMP requires the U.S. government to actively pursue the RMP recommendations for Canadian salmon fisheries. To date, the Canadian managers have been receptive to Hood Canal summer chum salmon stock concern. In 1999, Canada agreed to include most of the RMP recommended actions for Canada in the 1999 chum salmon Pacific Salmon Treaty agreement, which is in effect through 2008. So this is not a concern for the immediate future.

Public Review and Comment

NMFS published notice of its proposed evaluation and recommended determination of the RMP on March 13, 2001 (66FRN14551). The public comment period closed on March 30, 2001. NMFS received comments from one organization, a representative of Washington Council of Trout Unlimited concerning this notice. NMFS has reviewed comments received by the closing date and no issues were raised which required modifying the proposed evaluation and recommended determination.

The Federal Register Notice (FRN) requested comments concerning NMFS' proposed evaluation and recommended determination of the RMP (the harvest component of the SCSCI). Issues raised by the commenter that related directly to the RMP or addressed other components (habitat and hatchery) of the SCSCI require no response. The comments received were organized into five general categories; Critical Thresholds; Abundance and Escapement; Monitoring; Supplementation; and Population Growth Rate. NMFS' response to comments followed this same structure.

(1) Critical Thresholds:

The commenter suggested that the critical thresholds established by the RMP are too low. The commenter argued that increasing the critical thresholds would increase straying to areas where stocks are now extinct, introduce more salmon carcasses (nutrients) into the systems and compensate for catastrophic events.

The RMP established critical thresholds for the five management units. The critical thresholds are based on the lowest abundance observed from 1974 to 1998 which produced a positive observed recruitment (number of recruitments was greater than the number of parents), plus a buffer of 25% of the difference between the highest and lowest observed abundances. The buffer was added to take into account management and forecast uncertainties, and environmental variation. NMFS' (2000a) Viable Salmonid Populations (VSP) document describes four key parameters for evaluating the status of salmonid populations. These parameters are: (1) population size (abundance); (2) population growth rate (productivity); (3) spatial structure; and (4) diversity. These parameters include the issues raised by the commenter. Section 4(I)(B) of the proposed determination document adequately addressed each of the VSP parameters for the Hood Canal summer chum salmon population. The critical thresholds were derived prior to the availability of the paper on VSP, but meet or exceed the guidelines, and are generally conservative when compared to the size of the populations historically (NMFS 2000b).

(2) Abundance and Escapement:

NMFS received three comments under this category. One addressed the RMP directly (the level of terminal versus pre-terminal harvest) and required no response. One comment addressed the need for increased abundance and escapement to encourage natural straying into adjacent streams. Supplementation and reintroduction approach are covered in section 3.2.2 of the SCSCI and was not part of the review of this RMP (the harvest component of the SCSCI). This issue was also adequately addressed in the critical threshold discussion in the previous category and in the proposed evaluation and recommended determination document (dated March 13, 2001) during the VSP parameters analysis. The last comment under this category was the commenter's comment that the criteria for "renewing" harvest should be that the average abundance must be higher than the critical threshold for at least three life cycles (the commenter suggested nine years).

The RMP establishes an annual harvest regime (called the Base Conservation Regime) for Hood Canal and Strait of Juan de Fuca terminal and Washington pre-terminal salmon fisheries. The harvest management strategy during this regime is designed to minimize incidental take of listed Hood Canal summer chum salmon, while providing opportunity for fisheries directed at other species. Very specific fishing restrictions are outlined in the RMP. These restrictions include closure of all summer chum salmon directed fisheries, delayed or truncated fishery openings for other salmonid species, chum salmon non-retention in fisheries directed at other species, and area closures around freshwater spawning tributaries. All state and tribal fisheries will operate in compliance with the Base Conservation Regime (BCR), and with any modifications made in response to the critical status for one or more management units or populations. The BCR will remain in place until such time as the Co-managers (Washington Department of Fish and Wildlife and the Point-No-Point Treaty Tribes) incorporate the population recovery goals into the management structure. It is anticipated that the BCR will be in place for the foreseeable future. However, as an implementation term, Co-managers will provide NMFS with an assessment

report on the anticipated impacts associated with any new harvest regime (including direct take) on the Hood Canal Summer-Run Chum Salmon ESU. The Co-managers and NMFS will meet and discuss the results of the anticipated impacts of any new harvest regime prior to implementation. At that time, NMFS will determine if the new harvest regime is consistent with Limit 6 of the ESA 4(d) Rule.

(3) Monitoring:

Four comments were received under this category.

The commenter suggested that the use of exploitation rate is not an adequate method to assess the “run health.” The RMP uses several population-specific, performance indicators to assess the effectiveness of the RMP. The performance indicators include: abundance; productivity; escapement, and management actions. The combined status of all these indicators are used to determine “run health”. These indicators are explained in more detail in the RMP and in the proposed evaluation and recommended determination document. Performance indicators also include indicators for monitoring the fisheries. The primary monitoring indicator is the estimates of exploitation rates obtained from the fisheries. Secondary fishery indicators include catch and catch rate, fishing effort, non-landed fishing-related mortality, and catch and escapement composition (size, age, mark rates, etc.).

The commenter suggested that the abundance numbers used in the RMP cannot be validated. NMFS recognizes that there are data gaps in the summer chum salmon escapement and harvest information. However, the RMP and the corresponding proposed evaluation and recommended determination document used the best available information. Over 90% of the spawning grounds are currently surveyed. Additionally, a proportion of the catch sampled is designed to give an estimate of the total catch. More importantly, an exploitation rate approach is more resilient to data uncertainty and environmental variability than a fixed goal approach.

The commenter’s suggested the elimination of gill nets as a gear type. This comment is directed at the RMP and not NMFS’s proposed evaluation and recommended determination. No response is necessary.

The final comment in this category addressed the commenter’s concern over the commitment of the Co-managers to conduct the required monitoring. The Co-managers have designed the BCR management actions to provide sufficient protection for summer chum populations at the current levels of monitoring. The Co-managers have committed to maintaining the core elements of the monitoring programs, while recognizing that additional monitoring activities are important and are actively seeking funds to support them. However, as an implementation term, NMFS will require all sampling, monitoring, assessment, evaluation, enforcement and reporting tasks or assignments related to harvest management in the RMP will be conducted by the Co-managers as required in the RMP. The RMP requires the Co-managers to maintain fishery sampling at 1998

levels or above (RMP section 3.5.10). The RMP also calls for specific and integrated monitoring programs to maintain and improve population assessment methodologies as well as evaluating the effectiveness of harvest management actions and objectives.

(4) Supplementation:

All comments received under this category addressed hatchery operations (supplementation) and fall outside the harvest component of the SCSCI (the RMP). No response is necessary.

(5) Population Growth Rate:

Two of the three comments received under this category addressed the RMP directly or concern hatchery operations and not NMFS's proposed evaluation and recommended determination of the harvest component of the SCSCI (the RMP). No response is necessary. The commenter also suggested that the proposed average exploitation rates could be reduced further by selective fishing methods. Below is the response to this comment.

It is noted that selective fishing already occur. During the BCR, no direct take of Hood Canal summer chum salmon is allowed. Summer chum salmon are caught incidentally in fisheries targeting other more abundant and health populations. Most of these fisheries require the non-retention of summer chum salmon. The proposed RMP management actions affect all salmon fisheries which impact listed Hood Canal summer chum salmon, including Canadian salmon fisheries. In any given year, the results of these management actions are designed to produce exploitation rates within the range of 3.3 to 15.3% on summer chum salmon bound for the Hood Canal and 2.8 to 11.8% on the Strait of Juan de Fuca populations. Although in any one year, fisheries may be managed for exploitation rates lower than this range, the upper end of the exploitation rate ranges may not be exceeded. At the time of the five-year plan review, the annual exploitation rates for the previous five-year period are not to be clustered towards either extreme of the range. The expected average annual exploitation rate should be 10.9% on summer chum salmon bound for the Hood Canal and 8.8% on the Strait of Juan de Fuca populations.

Analysis indicate that the proposed fishing regime (BCR) would not result in escapement significantly less than if fishing had not occurred at all. These exploitation rates were evaluated by NMFS and found to meet the requirements of Limit 6 of the ESA 4(d) Rule. This included the NMFS's recommended determination that the RMP will not appreciably reduce the likelihood of survival and recovery of the ESU in the wild. Based on this analysis, excluding populations that are below the critical thresholds (which require Co-managers to investigate additional harvest management measures), a further reduction in the BCR average exploitation rate is not needed to meet the Limit 6, ESA 4(d) Rule requirements.

Evaluation of RMP under the ESA 4(d) Rule

Attached is NMFS' evaluation of whether the RMP meets all of the requirements specified under Limit 6 of the ESA 4(d) Rule, including the criteria for FMEPs under Limit 4 of that rule. NMFS-SFD determined that the RMP for Hood Canal summer chum salmon provided by WDFW and the Point-No-Point Treaty Tribes adequately addresses all of the requirements in Limit 6 of the ESA 4(d) Rule.

Implementation Terms

The Puget Sound and Olympic Peninsula TRT has been tasked with various assignments related to developing a recovery plan for the Hood Canal Summer-Run Chum Salmon ESU. These include population delineation, recommendations on the roles of various populations in recovery, identification of early recovery actions, and establishment of de-listing criteria. The Co-managers shall consider such information from the TRT as it becomes available and incorporate appropriate items into the RMP. The Co-managers must also comply with the following to implement the RMP under Limit 6 of the ESA 4(d) Rule:

- (1) In the context of the SCSCI, "compliance" is intended to mean adherence, by each of the Co-managers to the guidelines, mandates and performance standards of the RMP, including adoption of any necessary rules to implement their responsibilities under the plan. All sampling, monitoring, assessment, evaluation, enforcement and reporting tasks or assignments related to harvest management in the RMP shall be conducted by the Co-managers as required in the RMP.
- (2) The RMP clearly identifies that Co-managers will coordinate and communicate with NMFS during pre-season activities associated with this RMP. Co-managers will also communicate with NMFS during in-season activities related to management, fisheries and escapement monitoring, regulatory actions and enforcement.
- (3) Co-managers shall provide NMFS an assessment report on the anticipated impacts associated with any new harvest regime on the Hood Canal Summer-Run Chum Salmon ESU. The Co-managers and NMFS will meet and discuss the results of the anticipated impacts of any new harvest regime prior to implementation.
- (4) The SCSCI states that "Recovery goals for each management unit will be developed in 2000, and the parties will subsequently determine how to incorporate the recovery goals into the management structure" (see section 3.5.11 of the RMP). Although this goal was not realized in 2000, the Co-managers are actively working on this task. As an implementation term, Co-managers shall develop recovery goals with NMFS for the Hood Canal Summer-Run Chum Salmon ESU by the first five-year plan review (to cover the period 1999 to 2003).
- (5) The collection of appropriate age data for deriving survival rates is a stated high priority of the RMP and is imperative to measure progress toward recovery. As an implementation term,

Co-managers shall initiate programs to determine age data sufficient for deriving survival rates, by the first five-year plan review.

(6) Releasing summer chum salmon in several fisheries targeting other species is required by the RMP. However, little is known concerning possible delayed mortality associated with the release of Hood Canal and Strait of Juan de Fuca summer chum salmon. Co-managers will seek funding to support research into non-retention mortality of listed Hood Canal and Strait of Juan de Fuca summer chum salmon. Research activities shall be coordinated with NMFS.

(7) There are currently no systematic escapement surveys for summer chum salmon in the Dungeness River. However, summer chum salmon presence is routinely noted during escapement surveys for other species. The status of the summer chum salmon population in the Dungeness River is therefore unknown at this time. As an implementation term, Co-managers shall initiate escapement surveys sufficient to determine and to monitor the status of Dungeness River summer chum salmon population by the first five-year plan review.

(8) As required in section 3.6.2 of the RMP, the Co-managers will compile all of the annual assessments required in section 3 of the RMP into an Annual Plan Progress Report. The Annual Plan Progress Report shall be provided to NMFS by May 31 of the following year.

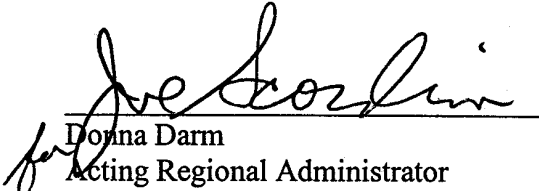
(9) As required by the RMP, the Co-managers with NMFS will conduct the first five-year plan review in 2004 to cover the period from 1999 to 2003, following the steps outlined in section 3.6.3 of the plan in compiling the report. Co-managers shall coordinate and communicate with NMFS during the development of the report. The first five-year plan review report shall be completed and made available to NMFS by February 2005.

SUMMARY

NMFS-SFD concludes that the RMP for Hood Canal summer chum salmon provided by WDFW and the Point-No-Point Treaty Tribes adequately addresses all of the requirements for a RMP under Limit 6 of the ESA 4(d) Rule and will not appreciably reduce the likelihood of survival and recovery of the Hood Canal Summer-Run Chum Salmon ESU. NMFS-SFD recommends that Limit 6 of the ESA 4(d) Rule apply to the implementation of the RMP provided that it is applied in accordance with the section on Implementation Terms described above.

NMFS Tracking Number: NWR/4d/06/2001/001

1. I have determined that the Hood Canal summer chum salmon RMP will not appreciably reduce the likelihood of survival and recovery of the Hood Canal Summer-Run Chum Salmon ESU provided that it is implemented in accordance with the section on Implementation Terms described above.


Donna Darm
Acting Regional Administrator

4/27/01
Date

2. I have determined that the Hood Canal summer chum salmon RMP will appreciably reduce the likelihood of survival and recovery of the Hood Canal Summer-Run Chum Salmon ESU.

Donna Darm
Acting Regional Administrator

Date

Attachment 1: Evaluation and Recommended Determination Document

Literature Cited:

NMFS. 2000a. Effects of Pacific Coast Ocean and Puget Sound Salmon Fisheries During the 2000-2001 Annual Regulatory Cycle, Biological Opinion. U.S. Dept. Commer. Nat. Marine Fish. Serv., Seattle, WA. 96 p.

NMFS. 2000b. Viable salmon populations and the recovery of evolutionarily significant units. NOAA Technical Memorandum NMFS-NWFSC-42.