



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Klamath River Fishery Resource Office
P.O. Box 1006
Yreka, CA 96097-1006

December 5, 1990

Memorandum

TO: Klamath Fishery Management Council

FROM: Ron Iverson *Ron Iverson*

SUBJECT: Minutes of the Management Council meeting held
November 1-2, 1990.

Attached for your record are minutes of the subject meeting held in Eureka, California. I have followed each motion passed, assignment made, or other decision point with a line of asterisks.

Your review comments have been incorporated and are indicated by a vertical line to the right of the changed paragraph or line.

Attachments

cc: Interested parties

DRAFT PROCEEDINGS

KLAMATH FISHERY MANAGEMENT COUNCIL

EUREKA, CA, 1-2 NOVEMBER 1990

November 1, 1990.

The meeting was convened at 9:45 am by chairman Fullerton, with a quorum present (see roster, Attachment 1). Don McIsaac served as the alternate for Jim Martin and Karole Overberg served as the alternate for Lisle Reed.

Review and approval of minutes and agenda.

The public comment period was confirmed to be at 11:00 for both days. There were no changes in the agenda (Attachment 2).

Bingham asked to defer approval of minutes of the last Council meeting to allow time for further review. Minutes were later approved.

Long-range planning (Fullerton).

Fullerton asked the council to review decisions made at last meeting and make any changes, corrections or additions to the long-range plan.

Marshall asked to defer his comments on the long-range plan until the legal representative for the Hoopa tribe arrives at the meeting and comments during the public comment period. Marshall is concerned with option #18 under the category Allocation Strategies.

Iverson concerned that option #31 had been adopted by the council, although it did not appear in the final options field graphic. Discussion on this option clarified that the entire category of Effort Management Strategy was dropped, including dropping option #31. Consensus.

Karole Overberg asked if the background of the plan would be included with the plan that goes out to the public. A: yes.

Next steps in completing the Council's harvest plan.

Fullerton would like to find out if the council agrees on the plan, then have Mackett put it into a public review draft plan. Mackett would provide this in a format that would be understandable to the public. Fullerton clarified that operationalizing the plan will take a lot of time, and will not be done at this time.

(Bingham): We need a public review process for this plan. After the public review, we may make more adjustments.

(McIsaac): The plan needs work before it goes out to the public. The writing needs to be consistent. Suggests utilizing the services of a professional writer to polish up the writing, then having it reviewed by the council.

Fullerton wants the council to decide on the schedule for public review.

Discussion of the public review process/schedule:

Bingham wants at least enough hearings for all affected parties to attend, without the need for excessive travel. Suggests having at least 3 hearings (ports, inland, Eureka).

Staff and council will need to decide if these hearings will include the entire council (Warrens, Fullerton).

Funds available for Klamath Council operations in FY91 are about the same as in recent years. If the public review process adds significant expense, that could be a problem (Iverson).

Comments from the public could be considered at regularly scheduled meetings (Marshall). There could be a tradeoff between including the hearing process at our regular meetings, and stretching out the time needed for the public review process (Bingham). The Eureka public meeting can be included with the annual KFMC meeting that looks at salmon allocations (Fullerton).

Location possibilities discussed include: Ft Bragg, Coos Bay, Yreka, Weaverville, Redding, and an inland Oregon location.

Fullerton concluded that public meetings will be held in Eureka, Ft. Bragg, Coos Bay, and Weaverville.

Discussion on time frame for the public comment period.

The public comment portion should be completed by May 1 (Wilkinson, Bingham, Fullerton).

Iverson commented that he does not know the time requirements for public review through DOI.

Marshall voiced his concern that parts of the plan include amending legislation. Would the time required for the amendments be included in the schedule?

Pat Higgins feels it would serve the council better if a public meeting was held in Yreka. The current lack of communication on habitat problems could possibly be alleviated if a meeting was held in Yreka.

(Naylor): PFMC meetings will be involving many people during the time period prior to May 1.

The council decided that the comment deadline will end May 15, 1991.

Task Force Restoration Program plan.

Status.

(Wilkinson): The Task Force is currently undergoing long-term planning. The process will include various subcommittees reviewing public comments on the major sections of the plan.

(Higgins): The Task Force draft plan has been reviewed by the public (comment deadline was Sept 15, 1990). Since then, copies of the public comments have gone out to Task Force members for review. The subcommittees will meet to review these comments November 5-8. The subcommittee chairs will report back to the full Task Force at the December meeting in Yreka. The Task Force will then provide direction for final drafting of the Restoration Plan to Kier Associates.

(Iverson): The final product from Kier Associates, a draft long-range plan, will be forthcoming in early January. The Task Force will then have to decide whether to use the plan as drafted, or to modify it.

Discussion on how to relate, meld, synergize the two plans.

The plans of both the Task Force and Management Council need to be coordinated. Perhaps there should be a formal subcommittee looking at both plans.

Marshall feels that we already have a subcommittee consisting of the two people who serve on both the TF and MC. He suggests having an annual joint meeting to layout strategies and goals and coordinate between the two groups.

Bingham reports that he sits on the TF habitat subcommittee and that Wilkinson sits on the TF fish stock protection subcommittee. Council concerns are being reflected in TF process.

Inconsistencies between the two plans will be reviewed (example: habitat protection). The TF subcommittee meetings will try to integrate TF and MC plans (Bingham).

Council should have received and reviewed the Task Force's draft plan.

Fullerton concerned that TF has been planning for MC, especially regarding escapement goals. Since the TF plan will be open for revision, why don't we review the final plan when it comes out in January.

Wilkinson clarifies that the feedback has already occurred because of the representation of agencies on the TF.

Higgins feels that the Task Force restoration plan is consistent with concerns from both sides.

The planners for each workgroup -- Kier and Mackett -- will probably not be meeting and directly coordinating the two plans.

(Fullerton): Doesn't want to see the two plans coming into conflict. MC plan could pressure the TF to be stronger in some areas.

(Naylor): CDFG is willing to share their written comments on the Task Force restoration plan with the council.

(Warrens): There is a wide range of flexibility in bringing together these plans, the TF should really keep in mind that they have not taken a strong enough stand on habitat protection. If the Endangered Species Act is invoked, then the TF may really face drastic measures.

Fullerton wants to send final MC plan to TF before final adoption.

Final Task Force plan should be reviewed by the Council before going out to the public. Consensus.

Public comment on long-range planning.

Marshall introduces Steve Suagee, the in-house attorney for the Hoopa tribe:

Suagee explained that his purpose here today is to clarify the basic principles of Indian rights that the tribes feel have not been adequately considered. He then distributed a packet of information (Attachment 4a/4b) to the council containing:

- 1) Revised option #18 (Attachment 4a).
- 2) Position Statement of the Hoopa Valley Tribe in Opposition to Proposed Amendment Ten (Attachment 4b).

And several attachments:

- a) Secretarial decision on Trinity River Fishery Mitigation.
- b) Letter of support from the Trinity River Task Force, dated Sept 10, 1990, re: seeking stream flow reform.
- c) Letter from Secretary Lujan responding to the chairman of the Committee on Indian Affairs.
- d) Newsclipping 8/28/90 re: Hoopa tribe seeking higher flows on Trinity River.
- e) Judge Beezer's opinion (all agencies of US have stewardship of fish) in the Indian Law Reporter.

Suagee stated that he understands from talking with Lyle Marshall that misunderstanding of indian rights is common at council meetings. He has therefore provided excerpts from a secretarial issue document addressing: tribal rights, Department of Interior's obligation to improve stream flows in the Trinity river (made Trinity River go to "fish first" in case of drought), and dry and critically dry year policies.

These materials show that the tribe has been very active in protecting fisheries resources. The tribes have federal fishing rights, and all federal agencies have trust duties to tribes.

Q: What are the reserve fishing rights? (Fullerton).

A: Right to take fish.

Q: Does the Hoopa tribe have some data on minimum streamflow standards? (Wilkinson).

A: 340,000 acre feet is the minimum necessary to maintain and restore the fishery.

Wilkinson sees an opportunity for us to join together throughout the basin to establish minimum stream flow standards.

Suagee is grateful for the letters that have been written by the KFMC supporting the need for streamflow minimums. The twelve-year study is halfway through, hopefully the study will help the Secretary establish a permanent flow regime for the Trinity.

Marshall offered revised language on Option #18 (Attachment 4a). He clarified that the tribe has certain federally reserved rights that need to be recognized. The plan is good, but it can't ignore federally reserved rights.

Discussion on proposed revision of option #18: (See Attachment 3 for the original language of Option #18).

Fullerton clarifies that the council would consider the tribal rights first, then allocate between the other users.

Masten stated that she abstained from voting on the original option #18, she cannot support it in its original form.

(Bingham): The Congressional intent establishing this council, made it clear that we are on a basis of equality. Bingham will not support this proposed language.

Q: (Warrens): How would your proposal affect '90 harvest?

A: (Marshall): We believe that we are the last consideration by PFMC, we get what's left over. We feel our rights should be considered first.

(Suagee): The proposed language in #18 would form a commercial fishery that would meet tribal needs.

(Warrens): Concerned about having a commercial fishery that is pre-determined, this is separate from having a tribal right to fish.

(Suagee): The current tribal right to commercial fish is not different from subsistence and ceremonial rights.

(Fullerton): This proposed language would consider ceremonial and subsistence fishing as being automatic. Commercial fishing would be considered secondarily.

Q: Is the intent of the original language consistent with the proposed language? (Warrens).

A: There should be an allocation of fish for the tribes. How we divide the fishery is up to us. The basic needs for indian tribes extend beyond subsistence and ceremonial needs.

Q: If we were in a low run situation, would the indian right precede any other fishery? (Fullerton).

A: (Suagee): Theoretically, that is a possibility. I don't see it happening, but it could happen. What we have seen on the stream flow side is that the Trinity River has been short-changed in times of shortage.

(Bingham): The troll industry has been supportive of the tribes standpoint on streamflows. Does the public need to view this proposed language before we make a decision on this?

(Marshall): This revised option will go out for public comment -- then be decided upon. This revision is a basic framework, negotiations can still occur.

(Suagee): Federal agencies will need to review this option.

Q: If federal agencies establish the Indian share, then will the council divide up the rest? (Bingham)

Q: Earlier you said that the tribes have superior rights. Does the council need to consider the Indian right to fish as superior? (Naylor)

A: Superior rights have been decided by the courts. (Marshall).

Fullerton wanted this draft plan to go out for public review, but now with this new proposed version option #18, how do we proceed?

Discussion:

Public scoping comments have been accepted all along during this planning process. Now, we need to send this draft out for public comment (per NEPA requirements).

We did not vote in La Jolla that the "Strategic Plan, Draft of October 3, 1990" and the "Final Options Field/Options Profile for Designing a Long-term Strategy for Meeting KFMC Goals, Oct. 5, 1990" (see attachments 9 and 10 of the Oct 2-3, 1990 minutes) would form the package for public review (Masten).

We could replace the language in the original draft plan with this new language for #18. Since the rest of the options were developed with the consensus of the entire group, this option would also need that consensus before being considered part of the draft plan.

This revised option is key to the plan. Fullerton suggests not modifying the package, but including this revised option as an appendix so it can be reviewed prior to the public hearings.

The package (Attachments 9 and 10 of the Oct 2-3, 1990 minutes) was approved by consensus. The proposed language has not been okayed by consensus, therefore it should not go out (Wilkinson).

The tribes will re-work and re-write option #18 sooner or later anyway (Masten). Masten restated that she abstained from voting on option #18 because she does not support it as currently written.

This package needs to get out to the public, including the addendum with the proposed language (Fullerton).

Motion: In order to let the public have access to the proposed language for option #18, it will go out with the previously approved package (as an addendum) to allow the public to review both at once. (The revised language will contain a note clarifying that it was not an option reached by consensus). Seconded: Wilkinson. Vote: Consensus

The draft plan (including Attachments 9 and 10 from the October minutes) will be rewritten and cleaned up so that it will be understandable to people who haven't been involved in the planning process. The draft plan (with addendum) will be mailed to all MC members for final approval before it goes out to the public.

Public comment on long-range planning (continued).

Paula Yoon (part of the commercial fishing industry in Humboldt County) had the following comments on Attachments 9 and 10 to last meeting's minutes:

Category: Escapement Policy

Option #32: This option does not protect natural stocks (gillnets target larger fish).

Category: Resource Assessment and Monitoring

Option #33: Natural fish would be selected out to allow to spawn.

Category: Escapement Policy

Option #49: Was this option drafted because you don't want to protect natural spawners? Putting more fish into the system does not automatically increase runs, the reality of carrying capacity has to be dealt with.

Category: Habitat

Options #9 & 16: One of the points that should reach the public is the true cost of environmental degradation.

Category: Allocation Strategies

Option #38: Due to the Klamath contribution in the Klamath Management Zone (KMZ), it is unrealistic to trade fish within zone for those outside zone. Yoon proposes encouraging synchronized rebuilding of stocks in other rivers. This council needs to be making recommendations for other rivers.

Category: Escapement Policy

Option #7: This option eludes protection of the Klamath fall natural spawner. What about addressing the overfishing definition that the PFMC is considering in draft Amendment 10. Environmental conditions need to be factored into stock status.

(Fullerton): The term "overfishing" can lead to misunderstanding. This option is to control the fishing so that overfishing doesn't occur.

Discussion on this graphic (Attachment 10 to the Oct 2-3 notes) being in the public's hands before being finalized by the MC. Some council members questioned the appropriateness of this graphic going out to the public prior to being finalized, others stated that they understood that the constituents needed to see this draft graphic to get comments back to their representatives.

Dave Bitts (with PCFFA).

Appreciates the work Marshall and Suagee are doing to reform water flows in the Trinity.

Feels that there have been few opportunities for public comment in this planning process, primarily because the meetings were held in LaJolla. What can he base his comments on? It is hard to follow what the council is doing, the meeting agenda isn't enough.

Fullerton realizes that discussion of these draft documents can easily be confusing to people who haven't been involved all through the process. In order to make it more understandable you need to have all three components: minutes, final options graphic, and writeups. If you have specific questions, you should ask council members individually. We will soon be having 4 full public hearings with the full documents.

Harleigh Calame, from the Klamath Field Office, clarified that the draft documents being referred to were included as attachments to the last

meeting minutes. The minutes and attachments were mailed out late due to scheduling with the printer. All persons on the Management Council interested parties list should have their copies this week.

Masten feels minutes need to be reviewed by council members before they go out to public.

Bill Duncan (President of the Shelter Cove Fishermen's Association):

Feels that he needs clarification on the minutes he received in last night's mail. Asked if the council is working towards a plan for the '91 or '92 fishing season? If the plan will be for '92, then he feels it will be too late to help him personally. He feels that he'll be out of business by '92.

(Fullerton): The next meeting will be addressing the '91 allocation.

Jim Johnson (representing Oregon trollers):

Read both drafts and attended public meetings on the Task Force plan. Thinks the plan needs to be redone, because you can't manage for wild fish. Hatchery production of fall and spring chinook needs to be in place. The only way out of this mess is to cooperate on enhancement and restoration.

Bill Levitt (representing PCFFA):

Feels frustrated after traveling to this meeting, and then finding out that comments on the plan may not be appropriate right now. Concerned that the option 18, that Marshall has proposed as being critical to passage of plan, is not the only concern that may be critical. The consensus process may be holding us back from making critical decisions. This council or a sub-council needs to first look at carrying capacity.

Feels that the proposed option 18 will denote the right of one group of people over another. Feels that the Indians are asking for an open ticket for salmon allocations, as opposed to being regulated by the Magnuson Act. This council will need to make that determination. The draft plan mentions management to MSY (Maximum Sustainable Yield): he understood that OSY (Optimum Sustainable Yield) was going to be the determiner. Enhancement and allocation needs to be determined. It is not fair for trollers to work on enhancement projects, then not be able to share in the increased harvest.

Discussion on carrying capacity:

(Fullerton): This council looks at allocation, not carrying capacity.

(Bingham): The TAT (Technical Advisory Team) has looked at carrying capacity historically.

(Marshall): Doesn't the 12 year study look at how much water is necessary to restore the fishery?

(Fullerton): Yes. But we don't determine in-stream carrying capacity. We determine the amount of escapement needed to meet that carrying capacity.

Lunch Break

Annual harvest management process.

Review of 1990 fisheries and harvest management issues (Technical Advisory Team (TAT) chair).

Introductions: Jerry Barnes will serve as the new chair. The new secretary is Jim Waldvogel. Rich Dixon will be gradually phased in to replace Alan Baracco. (Baracco will still be coordinating between TAT and salmon team).

Barnes distributed a memo from the TAT to the KFMC, dated Nov 1, 1990 (Attachment 6):

Comment on Memo Attachment A: In 1990, the ocean troll fishery from Falcon to Sisters Rocks has come down considerably, the KMZ catch is extremely low, and the ocean sport fishing has dropped to almost half of what it was last year. This reflects overall lower abundance of stocks, possibly due to warmer water temperatures. South of Ft. Bragg the catch is estimated to be approximately 80,000, last year it was 120,000, in 1988 it was 420,000. Oregon sport catch stayed about the same south of Horse Mt. (These numbers were rounded to the nearest thousand). Estuary sport catch was very low. Upper river sport estimates are generated from spaghetti tag returns, which have not been processed yet this year. Preliminary returns to the hatcheries showed Iron Gate hatchery with 6200 and Trinity hatchery with 2200. The hatchery numbers are probably higher now. In-river weir data is approximately one-third of last year's numbers. Overall, escapement is very low for the Klamath.

Council discussion of 1990 harvest management.

Baracco reported that stock projections for 1990 were projected to be down coastwide. The projections have been proven. The chinook troll catch was 8,000, which is way below the allocation. The river catch was also down. It is premature to give any information for other species, such as coho, since they are just now entering the river. The river fisheries were projected at 31,000 fall chinook. The actual catch was significantly below that.

Discussion:

(Bingham): Larger than usual numbers of sub-legal fish were hooked late in the season by trollers.

(Wilkinson): The late preponderance of juvenile fish was really abnormal. For some reason, there is a significant number of juvenile fish.

Q: Could the steelhead harvest information be used to estimate the species status? (Hayden)

A: Currently, there is no program to estimate steelhead run size underway (Odemar).

Begin planning for 1991 harvest management.

Establishing the appropriate role of the Council in reviewing harvest management plans and related harvest proposals.

Naylor asked Odemar to report on this issue.

(Odemar):

- 1) CDFG would like to see the council have a procedure for reviewing harvest management plans in 1991. (At least for in-river fisheries). In this way, everyone would understand ahead of time what the conditions are.
- 2) California Fish and Game Commission needs a letter from KFMC, stating recommendations in sport fishery recommendations.

Council Discussion on harvest management plans:

Q: Does this council need to review harvest management plans before they go out to the agencies? (Masten)

A: No, not in all circumstances. What we really need is a specified schedule, specified format and a standard procedure so that we are prepared if deviations from the harvest plan have to happen. In this way, if deviations happen, then they can occur within guidelines.

(Fullerton): We should review harvest plans for each year from each entity that makes plans, and see if these plans fit into what the council sees as what should be happening.

(Bostwick): If there are going to be changes in harvest plans then we should be able to find out what they'll be and when they'll happen. The 1990 net fishery denied anglers access to fish. If the in-river groups had sat down together, then we might have been able to have a try at making things work out better.

(Masten): We were not able to access our fish either. If we are going to look at management plans then we need to manage our fishery to meet our needs, and also your needs. The fact is the fish were not there. We didn't have an opportunity to catch them.

(Fullerton): We are required by the Act to review the fishery management plan of every agency, then give recommendations back to each agency. These recommendations that the council gives the agency may not be taken, but we need to have a system to let the public have a chance to make comments. The council needs to give comments back to each

agency in time for the agencies to make recommendations based on these comments.

Q: Do we attempt to max out the allocation when it's a depressed year?
A: (Marshall): Yes. The full allocation needs to be aggressively attempted.

Odemar: Its obvious that there is not good understanding between user groups. Although what happened this past year does not necessarily show that we don't need future modifications.

(Fullerton): When these emergencies come up, we won't have time for a meeting. We need to have decisions/understanding before critical changes happen. We don't have power to stop anything from happening. If the regulations are in need of changing within 24 hours, our recommendation probably won't have much affect anyhow.

(Masten): The KFMC makes recommendations on harvest plans, it does not get into specifics on management of each fishery. Other agencies are not obligated to enforce any recommendation that we make. It is frustrating that the Yurok fishery is the only fishery managed by this council. Masten feels that it is the state's responsibility to keep its people informed of regulation changes.

(Fullerton): Agencies may adopt our recommendations. If they do, then we can get the published regulations. Later, if changes to the regulations are imminent, we could request that the MC have a chance to make another recommendation.

(Marshall): The discussion on management of the Indian fishery should be between states and tribes.

(Fullerton): There is no provision that says we can make in-season adjustments.

(Odemar): Last year, the state sent their regulations to the council and no comments were received back.

(Hayden): There seem to be 2 concerns: 1) management plans, 2) emergency changes. Maybe if we look at them individually, it would make more sense.

(Overberg): This council needs to have a process for preseason review. We don't need to have an inseason review process because it is done by the agency.

(Bostwick): Let's try to have courtesy between what the agencies decide and when user groups find out.

(Overberg): In the past, we had tried to keep users informed.

(Bostwick): The fact is, I was not kept informed of changes in the 1990 estuary net fishery regulations.

(Fullerton): Let's identify a time frame for review of 1991 harvest plans. We need to see these plans in time for us to get our comments in, to have an effect on the final regulations. Mel Odemar, when does your agency and your Commission need our comments?

(Odemar): Ocean sport fishing regulations are usually drafted in about January. The Klamath Council's comments to PFMC on ocean harvest management could also be sent to our Fish and Game Commission. Inriver sport angling regulations are normally drafted in the fall. The process of revising regulations takes three Commission meetings. Note that river regulations have been unchanged for about the last three years.

(Hayden): Would it be satisfactory if the Klamath Council formulated recommendations on sport angling in the spring, for consideration by the Commission at their fall meeting? A: Yes.

(Fullerton): We will prepare our sport angling comments at the March meeting.

(Fullerton): BIA, tell us when you need our recommendations.

(Overberg): We begin our review draft of gillnetting regulations in February. Your comments could be submitted in March.

(Fullerton): So be it.

(Fullerton): Hoopa Tribe?

(Marshall): We have not changed our fishing regulations for some time.

(Fullerton): What about your harvest management plan?

(Odemar): Last year, we received a harvest plan from the Hoopa Tribe, for review.

(Marshall): That was for review of a major change in the plan -- for operation of a fish weir.

(Hayden): I am confused. Are we speaking of reviewing harvest management plans, or proposed harvest regulations?

(Odemar): Last year, California submitted a general plan for all anadromous fisheries to the Council for review (see Attachment 9 to the proceedings of the 31 March-1 April 1990 Council meeting). We got no response.

(Hayden): Refresh my memory.

(Odemar): It was patterned after the format for harvest plans suggested by Craig Tuss: a description of biological and technical rationale, time/area limits, other methods to control harvest, monitoring procedures... a format similar to that of the Yurok plan.

(Masten): Will you submit a new proposed plan for 1991? Will it include hatchery practices?

(Odemar): I expect we will just submit an amendment, as we expect few changes. The plan covers only harvest management, not hatchery operation.

(Fullerton): When would those changes be submitted to us for review?

(Odemar): We have already informed the Council of closure of South Fork Trinity fishing, in response to a petition for listing of spring chinook and summer steelhead. Note that this Council asked for more protection of natural spring chinook stocks, and we have responded to that with the South Fork regulations. We don't contemplate any further changes for 1991.

(Fullerton): Again, when will you submit your 1991 harvest plan for our review? We could make the changes for South Fork closures, then submit as early as January.

(Fullerton): Karole Overberg, could BIA give us a draft plan in January?
(Overberg): We need to see the PFMC stock projections before preparing a plan. Give us until March.

(Baracco): Do you mean you must wait until PFMC sets ocean regulations?
A: (Masten): No.

(Odemar): Note that the gillnet harvest plan is built around an expected allocation of numbers of fish, while ours is driven by a projection of angling effort.

(Masten): 1991 amendments to our net harvest plan for last year will be minor.

(Baracco): I recommend all managers use the harvest management plan format prepared by Tuss (Attachment 7).

(Warrens): Regarding inseason changes in harvest plans, let's treat separately those changes that are the internal business of the group doing the harvesting contrasted with those changes that may impact weak stocks, and so are of concern to all. Those impacts should be treated formally, in writing in the harvest plan.

(Masten): We are already managing to protect weak stocks, and fully informing you of how our fishery impacts weak stocks. Any changes in our plan could be provided to you on one sheet of paper this spring.

(Warrens): Sue, why so sensitive? Didn't you express a concern earlier about the KMZ quota rollover from the early to the late season?

(Masten): On the contrary, I regard that as a concern of the ocean fishery.

(Warrens): Suppose, though, that such an inseason change might affect inriver fisheries, or weak stocks. Seems like a procedure for making the inseason adjustment ought to be spelled out in the harvest plan,

with impacts laid out for review. That would be better than a last-minute change with little notice provided.

(Masten): Speaking of which, when will we see the ocean harvest management plan?

(Fullerton): The final plan will be produced by PFMC in April.

(Fullerton): Hoopa Tribe, I ask again, when will you submit your plan to us for comment?

(Marshall): We can provide our regulations, and the harvest plan we provided to California last year. We can identify our monitoring procedures and that sort of thing. Our main harvest objective is subsistence. Once our allocation is identified, we aggressively seek to harvest it. We don't especially want Council comments on the proportions of our catch going to subsistence and commercial use, as we consider that our business.

(Fullerton): Again, let's try to set a target for submittal of harvest plans to the Council.

(Odemar): The time frame for recommendations to PFMC would be March.

(Fullerton): Agreed, but is it realistic to review harvest plans, seek public comment on them -- a requirement of the Klamath Act -- and arrive at recommendations for ocean harvest, all in the March meeting? That may be too much work for one session.

(Hayden): I am confused. Which comes first, the harvest plans, or the harvest allocations?

(Fullerton): The plans don't have to contain firm harvest numbers.

(Hayden): Will our yearly review be of the harvest plan, or just the annual changes to that plan.

(Fullerton): The Act calls for Council review and public hearings on the plans.

(Bostwick): By "public hearing", are we speaking of a separate, special public meeting, or just the public comment periods during our regular meetings?

(Fullerton): That is up to the Council, but let's be reasonable about the amount of additional work we are taking on. In the past, negotiation over fall chinook alone has taken a great deal of time.

(Hayden): If the plans don't need firm numbers, why couldn't they be reviewed anytime?

(Fullerton): This is up to the Council. What do you wish to do?

(Warrens): For 1991, I suggest we try to bracket a range of acceptable allocations for submittal to PFMC, instead of trying to identify a specific split.

(McIsaac): Must our harvest plan review proceed in step with the PFMC process?

(Fullerton): No.

(McIsaac): Perhaps we could wait until after April, then.

(Fullerton): That would leave us out of the process for setting regulations for the upcoming fishing year.

(Warrens): I suggest our January meeting.

(Marshall): Tell me more about what is required in the harvest plan.

(Odemar): I would think the plan you submitted to California last year would be satisfactory.

(Warrens): I move we review harvest management plans at the earliest possible date prior to the March PFMC meeting.

Seconded.

(Hayden): I propose to amend the motion to specify January.

(Warrens): That is acceptable.

Discussion: None.

Warrens' motion was approved unanimously.

PFMC Tenth Amendment process.

Statement of the Issue: (John Coon, PFMC) Final action on Amendment 10 will be taken Nov 15.

Issue 2: Two alternatives both look at harvest rates. The second alternative looks at the condition that would occur if the spawning escapement is over 70,000. In this case, the amount over 70,000 would be split between harvest and spawning. The TAT will look at the impacts of these two alternatives. Page 9 of Draft Amendment 10 (Attachment 5) explains that long-term harvest would increase slightly with alternative 2, but there would be increased variability year to year.

Public hearings have been held. Responses from the public were light, but showed that most public comment was in favor of alternative 2.

TAT response (Jerry Barnes):

TAT critiqued PFMC's analysis based on a model by Robert Kope (this will be provided), ran model with and without escapement ceiling. The long-term yield for alternative 2 would be slightly higher (2% higher landings). The model had to use decreased landings of 10%. The cumulative total (Attachment 6, Table 1) is the algebraic sum. Therefore, using the change that is expected to occur under alternative 2, 15,000 fish would be gained for ocean harvest, while 83,000 would be

lost from natural escapement. The low risk alternative is #1. Both alternatives have floors and are based on natural spawners only.

Discussion:

(McIsaac): Why is there such a big difference between alternative 1 and alternative 2 for the catch year 1987 (Table 1)?

(Baracco): Because of what happened the previous year. The fish went to harvest in '86.

(Coon): Alternative 2 is identical to the current spawning escapement except:

- 1) Extra harvest plays a part because it has an affect on 3 year olds.
- 2) This table only shows Klamath fish, more effects occur in the ocean because harvest of non-Klamath chinook would also increase.

(Baracco): Table 1 displays results for a selected harvest allocation. If you were to take the fish available over 70,000 and allocate them to river you would get a very different picture.

(Bingham): Table 1 is based on the premise that you backcasted predictions accurately. In the team's opinion, would alternative 2 cause an overfishing problem?

(Baracco): No, because Alternative 2 retains the 35,000 natural spawning escapement floor. The effects of Alternative 2 would be:

- a) A slight long term increase in harvest (2%).
- b) In the first year, the harvest would raise, resulting in a lower harvest in later years.
- c) The magnitude of the effect is determined by the ocean/in-river allocation.

(Marshall): Is the implication that we decrease escapement rather than work on habitat problems?

(Coon): The perception from the users is that escapement is not providing the high level of production that is needed.

(Baracco): The alpha stays the same for Alternative 1 and Alternative 2.

(Bingham): The alternatives modeled in Table 1 yield different total numbers of fish. Where did all the fish go?

(Baracco): During years of high abundance, more 3 year olds will be caught, so fewer 4 year olds return in following years.

(McIsaac): The bottom of page 7 (Attachment 6) explains the portion of the fishery available to harvest. How much goes to which type of harvest?

(Baracco): Refer to Table 1: It assumes the 1989 council harvest allocation (0.375 ocean/0.49 river).

(Marshall): Will the technical people explain why habitat and water problems are not meshing with amendment 10?

(Suagee): The congressional mandate for the flow study and the Final Environmental Impact Statement (FEIS, Nov. 1980, Management of River Flows to Mitigate the Loss of the Anadromous Fishery of the Trinity River, CA), both identified 50,000 as the minimum escapement for a fully restored fishery.

(McIsaac): What's the basis for the 50,000? What does this mean?

(Suagee): Based on the '80 EA 50,000 fish/yr are needed. The '83 Final Environmental Impact Statement (FEIS, Oct 1983, Trinity River Basin Fish and Wildlife Management Program) raises the number higher. These numbers apply only to the main stem Trinity River.

(McIsaac): Is 50,000 a historic average?

(Suagee): Yes, it seems to be.

(McIsaac): Would the 50,000 include the number of spawners above the current dam site?

(Chuck Lane): The Trinity hatchery mitigates for losses above the dam. The mitigation goal is 9,000 fall chinook spawners returning to the hatchery. 62,000 should spawn naturally below dam. This is the best estimate based on actual data and collective data.

(McIsaac): Is this the number of spawners needed to achieve carrying capacity?

(Barnes): Lack of information about habitat capacity was one of the factors that led to using harvest rate management in the first place. In the past, there was a numerical escapement goal. The Technical Team examined the numerical escapement goal and found that it was not supportable. They didn't know the carrying capacity.

(Bitts): (Argument for Alternative 2) One assumption with using harvest rate management was that it would take a long time to get high escapement. Instead we have had 3 years of large escapement, with bad conditions (poor rainfall and poor habitat).

(Marshall): (Argument against Alternative 2) True, but that's not a reason to put a cap, its a reason to get more water and see what the basin can produce. Leaving out the critical habitat factor, the same year we had high escapement, the trollers had high catch. This didn't hurt the trollers. We need to find out what MSY is!

(Masten): Did the technical team recommend alternative 2 of draft Amendment 10?

(Baracco): We did not recommend one or the other. We gave you our analysis of the data.

(Masten): Until the tech team provides me with adequate data to support a change from status quo, I am not prepared to make a change. Alternative 2 could lead to a harvest reduction in following years. For now, there is no reason to change away from status quo.

(Bingham): If we assume that the predictive methodology is accurate, then Alternative 2 would lead to slightly more fish in the long term. High levels of escapement do not necessarily mean that the yield will be higher.

(Masten): We do not know yet if there is biological data that supports changing from the current harvest management process.

(Marshall): We interpret figures differently than do the trollers. We say that years with adequate water and habitat will have more fish. You are arguing to place a ceiling on escapement. We are saying to give us more water to see what we can produce from high escapements. We can't do both. Let's see what a healthy river can produce. When a high number of escapement is reached that could possibly reach the true MSY for a river system with adequate flows.

(Bingham): Historical data shows the catch back to the 60's, which hasn't changed much since the dam was built.

(Bits): Does not see the correlation between number of spawners and amount of water.

Q: Is there flexibility in who gets the amount over the 70,000 escapement? (McIsaac)

A: Yes, the PFMC could change who this goes to (Coon).

Q: Would the recommendation on what to do with surplus be made to the council on an annual basis? (Naylor)

A: Yes (Coon).

Q: If the overfishing definition of "missing the escapement goal" is accepted, and if alternative 2 is in place, does the preseason escapement goal stay in place? (McIsaac)

A: The pre-season escapement goal is a rate, not an actual number. If you predict a high abundance year and utilize Alternative 2, you could have a lower escapement rate than it would be under Alternative 1. (Coon).

Hearing no public comment, day one of the meeting was adjourned at 5:30 pm.

November 2, 1990.

The Council reconvened at 8 a.m.

Technical Advisory Team report (Baracco).

Alan referred to the current roster of the Tech Team (Attachment 6, last page). Scott Boley has resigned as Oregon troller representative, on account of PFMC assignments.

Alan then summarized status of assignments given the Team last spring:

Marking hatchery fish. (See Part A, Attachment 6)

Discussion:

Q: What is the basis of cost estimates?

A: These estimates were provided by CDFG.

Q: In your final report on this subject, will you consider physical effects of fin removal?

A: Yes. We would probably recommend a ventral fin clip, if any. It is known that marking causes fish mortality, so there could be some significant fish losses if 10-12 million were marked. Most data on fin clipping mortality are from the 1970s.

(Wilkinson): I recall a Japanese publication identifying a mortality rate of 3% for marked fish.

(Marshall): The options in our draft strategic plan indicate that the Council is interested in more marking of hatchery fish because we think it may provide useful information -- to target harvest on hatchery stocks, for example. Is the Tech Team saying marking is too costly to consider further?

A: (Baracco): No, we have just provided an indication of what it may cost to finclip the present level of hatchery production in Klamath basin. To recommend for or against extensive marking, the Team must analyze the benefits marking could provide for fish management. Note that, in order to harvest differentially, we need a nonlethal method to sort marked and unmarked fish.

Discussion then turned to planning and budgeting for extensive marking of Klamath hatchery fish. Comments included:

If the Tech Team makes a favorable report on marking (report expected by end-of-year), the Council should proceed quickly to seek funds.

(Chuck Lane, Trinity Field Office): The Trinity Restoration Program may have funds for this purpose, if a competitive proposal is submitted.

Startup costs would include marking sheds or trailers, and equipment.

Klamath basin hatcheries will have relatively light fish loads in 1991, so this might be an inexpensive year for 100% marking.

If our strategic plan calls for selective harvest targeting hatchery fish, we had best get started marking now, for 1993-94 harvests.

This would be a good activity to implement the Klamath Act language about hiring local people impacted by fishery declines.

(Baracco): Our cost estimates assume local hires, not much travel or per diem. Marking requires a labor-intensive effort over about two months.

Could marking and release be stretched out over more time, to provide more employment.

(Baracco): In our cost estimates, we assume the present hatchery mode of operation.

Fish can't be marked when too small, nor after they have smolted. There is a rather brief time period when marking is feasible.

Discussion of the practical utility of 100% marking:

(Baracco): Our present harvest rate targets for Klamath fall chinook are set to protect natural stocks, and they assume relatively low levels of stock productivity. Marking of hatchery fish might allow hatchery and natural stocks to be harvested at different rates, taking advantage of the higher productivity of hatchery stocks.

How would this work in the ocean fishery? Would unmarked fish be thrown back?

(Baracco): In the Fort Bragg fishery, we would expect about 10% of hooked fish to have Klamath marks, so it would be more practical to throw back the marked fish, to make those available for river fisheries. This kind of sorting would not change the ocean harvest rate for natural stocks, since there is no change in the rate at which they are contacted by the fishery.

Where does the opportunity come to spare natural fish?

(Baracco): A nonlethal catching/sorting method in the river would provide this.

Can the Yurok fishery adopt such a method?

(Masten): No. All we can practically do is adjust our time of harvest to concentrate on hatchery runs.

(Pat Higgins): The Klamath Natural Stocks Assessment project attempts to identify outmigration timing of natural stocks. This is being confounded by early release of unmarked subsmolt chinook from hatcheries. These releases have greatly increased in recent years. Marking would allow these fish to be identified. Note that Columbia hatcheries are moving toward universal marking.

Discussion of marking spring chinook

(Odemar): Given the possibility of Trinity Restoration funds for marking, and given that spring chinook are a stock of special concern, how about considering 100% marking of spring chinook being reared at Trinity Hatchery?

(Marshall): This gets my attention. What would be the objective of marking springs? Whose fishery would be affected?

(Odemar): Seems like springs offer more opportunity, and more need, for selective harvest of hatchery fish. Natural stocks are depressed and the bulk of fish are produced at Trinity Hatchery, so most of the returning springs would likely be marked.

(Marshall): We considered a weir fishery for spring chinook. Bob Franklin cautioned that green sturgeon could be impacted, so we dropped the idea.

(Franklin): Sturgeon are migrating in the spring so could be captured. At the same time, I recognize the benefits of nonlethal harvest of spring chinook, considering they may be candidates for threatened/endangered listing. Marking springs would also yield some needed information on ocean harvest of that stock.

(Marshall): Chuck Lane, would the Trinity Restoration Program fund the marking of all spring chinook at Trinity Hatchery?

(Lane): Marking becomes a long-term expense over many years. It is more likely we could contribute to startup capital costs, rather than operating costs.

(Fullerton): What would marking spring chinook cost?

(Odemar): About the same as the cost of steelhead marking at Trinity (cost estimate not available).

Q: How could year classes be distinguished by fin clipping?

A: (Baracco): Clipping left or right ventral fins would distinguish the two dominant age groups, and scale analysis would assist.

(Marshall): We would like to see some evidence that marking would get us more catch. A commitment to universal marking would make the Hoopa Tribe more interested in developing alternative harvest methods.

Discussion of alternatives to 100% marking:

(Odemar): For an objective like estimating the run timing of hatchery stocks, something less than 100% marking would suffice. A sample could be marked, or scale patterns could be used to identify hatchery fish.

Catch per unit of effort (CPUE). See Part B., Attachment 6.

Discussion:

Q: Could there be a correlation between abundance of Sacramento fall chinook and Fort Bragg CPUE that causes the apparent correlation of Klamath stock abundance and CPUE?

A: (Baracco): Klamath stocks have made up as little as 7% of the Fort Bragg May/June chinook catch, so the observed strong correlation is puzzling. It is true that chinook stocks along the coast tend to rise and fall synchronously, but we don't have information to answer your question.

Q: If we had universal marking of hatchery fish, would this assist in inseason monitoring and adjustment of ocean harvest rate of Klamath chinook?

(Baracco): We can already identify Klamath fish in the harvest, through recovery of coded wire tags... but we can't track harvest rate because we don't know the size of the population from which these harvested fish are being drawn. Our hope for CPUE is that it would give us an inseason check on our preseason estimate of ocean stock size of 3-year-olds. We don't have a precise estimate of how many Klamath 3-year-olds should be caught in each time-area cell in order to meet our harvest rate goal, because our preseason estimate of abundance of 3's is so imprecise.

Q: Would \$100,000 invested in fish marking help you do this?

A: I don't know. Remember that marking would only provide information on the hatchery component of the run, and the hatchery/natural ratio varies greatly year-to-year.

Gillnet vulnerability factor for age 3 fall chinook. (Part C, Attachment 6).

Change "as" to "if" in line 13 of Attachment 6, part C.

The long-term vulnerability factor of 0.57 means that age 3 chinook, over the 1983-1989 period of record, have been 57% as vulnerable to net capture as 4-year-olds.

Discussion:

Q: Any shift in net mesh size over those years?

A: (Del Robinson, Joe Polos, Baracco): The 1990 fall fishery used a 7 1/4" mesh, and this has not changed significantly over the years. The most important contributors to the vulnerability factor are time and area of fishing, and mesh size. There has been some year-to-year variation in vulnerability factor.

Q: Can the gillnet selectivity reduce stock productivity by selectively harvesting older fish?

A: Both ocean and river fisheries select against older fish, and this may be a problem.

Assessment of spring chinook and coho population and exploitation. (Part D, Attachment 6).

Discussion:

Q: What is the current status of funding for stock assessment of Klamath spring chinook and coho?

A: (Overberg): BIA will probably be able to fund a proposal from USFWS to monitor net harvest of spring chinook in 1991. This would not include any more work on population assessment.

Minimum size regulation changes.

No report.

Direction to the Tech Team on marking hatchery fish:

(McIsaac): I suggest the Tech Team continue developing estimates of marking mortality and analysis of potential benefits of universal marking, and incorporate the results in their final report. The Council should take no action to seek funds for universal marking until that report is completed.

(Baracco): That is the direction we are proceeding in.

(Hayden): We have talked about universal marking for three years. Let's review the Team report in January, then make a decision.

(Masten): I would like the report to discuss beneficial uses of marking, in both ocean and river fisheries. We shouldn't give up on selective harvest in the ocean.

(Fullerton): We won't decide until we hear from the public later this morning.

Public comment:

(John Coon, PFMC): I submit our PFMC schedule of meetings for 1990-91 (Attachment 8). Note the March 4-8 time period we have identified for KFMC to adopt recommendations for 1991 harvests.

(Del Robinson): I encourage the Tech Team to review the constant fractional marking of Klamath basin hatchery fish done in the early 1980's, based on recommendations of Dave Hankin. That project ended for lack of funds, but it might be worthy of a new start.

(Mike Morford): I have been promoting use of CPUE, because I think it has merit for verifying stock size estimates, and detecting anomalies in ocean survival, like the apparent 1990 loss of fish. It doesn't have to be used every year. Second, some of us biologists feel natural stocks are in trouble... and we see marking hatchery fish as a tool to target

them for harvest. Let's consider marking all California hatchery stocks.

(Pat Higgins): I agree with Morford that the value of marking is limited if marking is done only in the Klamath. How about asking PFMC to consider marking all hatchery fish coastwide? This is being considered for Columbia stocks. I don't know how else to get out of the threatened/endangered quandary for natural stocks faced with mixed-stock fisheries. At a recent Berkeley meeting, biologists asked for targeting of natural fish stocks for recovery. I ask you to elevate this to PFMC.

(Jim Johnson, Oregon Independent Trollers): We favor alternative 2 of Amendment 10, Issue 2 (See Attachment 5). Our arguments include:

- o A ceiling of 70,000 natural spawners counterbalances the floor of 35,000 that is now part of the Salmon Plan, Amendment 9.
- o The present management procedures -- Amendment 9 -- allow excessive escapements. Ocean fisheries have been harmed by big Klamath chinook years.
- o 70,000 is well above the old rebuilding schedule objective of 45,000.
- o There is no direct correlation between spawning escapement and resulting recruitment in Klamath and Oregon coastal chinook stocks.
- o An escapement ceiling is consistent with the Optimum Yield goal of the Magnuson Act.

Dave Bitts, Humboldt Fishermen's Marketing Association:

- o From yesterday's discussion, it appears we will be asked again, in 1991, to forego harvest in order to provide high escapements that will support an argument for high Trinity flows. I hope for success in getting more flow, but point out we have not gotten the water in the past.

Council action on 1991 harvest management.

Decision on recommendations to PFMC on Amendment 10

(Bingham): I move to endorse Alternative 2 of Issue 2.

Seconded.

Motion was defeated, with several no votes.

(Fullerton): We have no consensus on Amendment 10, and no recommendation to PFMC.

Direction to Tech Team (continued).

Q: Alan, compare marking with other methods of estimating abundance, like carcass counts.

A: (Baracco): Any method will require expansion to an estimated total abundance. To estimate total number of spawners, the best method to increase confidence in the estimate is to increase the proportion of fish that are observed. To estimate the ratio of hatchery and natural fish in a run or harvest, the best method is to increase the proportion of hatchery fish that are marked.

Q: (Wilkinson): Does this mean that estimates of spawning escapement could be improved by increasing the amount of field observation? Presently, the proportion of spawning areas observed must be something like one percent.

A: (Baracco): Most spawner estimates involve a mark/recapture expansion, with marks applied at weirs and recovered from carcasses. The sample size of observed fish is probably greater than one percent.

(McIsaac, Warrens): It would be premature to decide today on a specific marking proposal for funding. We need more analysis, including potential conflicts with other marking programs.

(Fullerton): Considering the time frame for proposals for Trinity Restoration funding, we can either act quickly to seek FY91 funding, or put off action and consider FY92 funding.

(Bingham): Spring chinook marking has the advantages of being fairly small scale, and contributing to a selective harvest using the Hoopa weir. I would like to try for FY91 funding by taking preliminary steps now. We can stop the process in January if the Tech Team report is not promising.

(Fullerton): McIsaac and Warrens, tell us what concerns you want addressed before we seek funding.

A: An estimate of marking mortality, and assurance there won't be confusion with ongoing finclipping programs in Oregon.

(Baracco): There wouldn't be any confusion in the ocean salmon data collection system, because fin clips other than adipose clips are ignored. The only data collected on ventral clips would be inriver.

(Masten): Again, I would like to see marking used to estimate ocean harvest impacts on spring chinook.

(Baracco): We have estimates of that impact, based on cwt tag returns -- see the report distributed to the KFMC last year by Arcata FAO (Attachment 12 to the notes of the February 5-6, 1990 Council meeting).

(Bingham): I move we proceed toward seeking funding for fin clipping spring chinook, on the assumption that objections and problems can be resolved by teleconference or other form of Klamath Council discussion.

(McIsaac): Nat's motion seems intended to send a message to the prospective funding agency. Let's defer voting until we hear about other actions needed for 1991 harvest management, some of which may have higher priority for funding than would finclipping.

(Masten): I agree. Maybe improved hatchery operations would be a better use of the funds.

(Lane): The Trinity Restoration Program will also review Trinity Hatchery operating procedures.

(Marshall): Here's an argument we have had for years:

- o The net fishery should take more of those surplus hatchery spring chinook.
- o Can't do that until we insure there are no adverse effects on depressed natural stocks.
- o Tribes, why don't you develop selective harvest methods to take hatchery spring chinook?

Fin clipping hatchery spring chinook will allow us to do just that -- so why are all these problems surfacing now, when we have a potential funding source and a chance to finally proceed?

(Bingham): That is the intent of my motion: to proceed, dealing with objections by telephone. If that doesn't suffice, we can revisit the subject in a January meeting.

(Masten): I am having trouble finding a reason to support marking -- Yuroks will not benefit.

(Marshall): Both tribes benefit from protecting natural spring stocks, and from making more fish available for harvest.

At this point, the Tech Team was asked when their report on marking could be made available, and whether straying to Rogue River might be a significant fate of Trinity Hatchery springs. Baracco responded the marking report can be available the first of next year, and that it would not be efficient to produce a separate, earlier report on marking springs.

Further discussion of marking springs:

Q: Tell us again how marking all hatchery spring chinook will benefit us.

A: (Baracco): We have some information on run size, and on size of the natural component. Marking in 1991 would, beginning in the mid-90's, provide us more information to distinguish the size and timing of hatchery and natural runs.

Q: What about marking mortality? Aren't there studies to estimate this?

(Baracco): Ventral fin clipping is an old, abandoned practice, and we can report to you on mortality data from past years.

(McIsaac): Oregon is in favor of making more selective harvest options available. We are concerned, though, as to whether 100% clipping is

worth the mortality. There are ventral clipping projects now, or recently, underway, and we would like the Tech Team to review fish mortality of those.

Q: Can you look at other kinds of marks, besides fin clips?

A: (Baracco): A lifelong, external mark is needed... I don't know of any other than fin clips.

(Baracco): About 10% of the spring chinook production at Trinity Hatchery is adipose-clipped and cwtagged every year -- about 100-200,000 fish. This provided much of the basis of the harvest and escapement estimates contained in the FWS report distributed to the Council last January. Estimates of the natural component, and the hatchery/natural proportions of the run, are based on field observations in spring chinook spawning areas. ←

Q: Can marking of hatchery fish be used to segregate a weir harvest, to select keepers? A: Yes.

(Baracco): If you wish, the Tech Team could review alternative selective harvest methods.

Fullerton then called on McIsaac to expand on his concern -- responding to Bingham's motion, which was still under discussion at this point -- that there may be other needs for information-gathering that are of higher priority than marking spring chinook.

(McIsaac): I request the Tech Team to provide the following reports:

- o Feasibility of upgrading age composition estimates of Klamath salmon runs, by increased scale collection and analysis beginning with the 1990 fall run.
- o Feasibility of genetic stock identification (GSI) of ocean catches, particularly in the KMZ, to improve estimates of Klamath contribution rates. This should include a cost estimate.
- o Evaluate the 50,000-fish escapement goal for natural-spawning fall chinook in the Trinity (goal identified by Chuck Lane). Identify the basis and rationale for that goal, and determine consistency with current harvest rate management goals, especially the 35,000-spawner floor for naturally-spawning fish.

Q: When can the Team respond to these requests?

A: (Baracco): In about a year.

Discussion of the proposal to sample more scales for improved age composition estimates:

(Wilkinson): Scale sampling is an opportunity for local participation. Anglers and netters could provide scales from the river catch.

(Fullerton): As long as a statistically valid sampling procedure is followed.

(McIsaac) I understand that biologists are getting their hands on many fish now, but scales not being taken...an opportunity being missed. Better age composition data would lead to better forecasting capability.

Q: Would scales allow natural and hatchery fish to be distinguished?

(Baracco): Yes, in some cases.

(Bingham): I see no conflict between McIsaac's proposals and my motion. All these things should get done. GSI, for example, is already underway. Don, what other means would you use to provide for a selective fishery in the river?

(McIsaac): Perhaps scales of fish captured in the weir would distinguish their origin.

(Masten): If scale analysis, or GSI tissue analysis, could identify run timing differences, that could help our fishery. I would need the recommendation of the Tech Team before concurring in large-scale fin clipping.

(Bingham): I don't think your idea is realistic. Identification of fish in a selective fishery must be instantaneous. Would you keep a microscope at the weir to examine scales?

(Warrens): How about speeding up the process by getting information from ODFW to the Tech Team as fast as possible? This would include clipping mortality estimates, and potential conflicts with ODFW clipping programs. Since this doesn't seem feasible, I propose to amend Bingham's motion to aim for FY92 funding, rather than FY91. (This proposed amendment died for lack of a second.)

(Pat Higgins): Is it feasible to fish a weir for spring chinook, which pass through the lower river when water flow is high?

(Fullerton): It appears we can't get the Tech Team report on marking before January. Is that too late for FY91 funding?

(Chuck Lane): Probably so, but a well-justified proposal submitted for next year's funding has a better chance than a hastily-prepared proposal for FY91.

(Ronnie Pierce): For the purpose of identifying timing of hatchery and natural runs, scale analysis should suffice.

Fullerton called for a Council vote on Bingham's motion (to proceed toward seeking funding for fin clipping spring chinook). Motion failed.

Other discussion of Tech Team assignments:

(Jerry Barnes): The Team could develop McIsaac's requests into detailed proposals, then give those back to you at the January meeting to see if those are what the Council wants.

(Fullerton): Regarding analysis of the 50,000-spawner goal for the Trinity, it seems like several different Trinity escapement goals have been tossed around in this meeting.

(Baracco) See the Team's 1986 report on escapement needs for analysis of all this.

(Warrens): I opposed Nat's motion because I think more time is needed to develop a marking proposal. I move we prepare such a proposal, as soon as feasible, seeking FY1992 funding, from the Trinity Restoration Program, for spring chinook marking at Trinity Hatchery. Later, Frank restated the motion as: Allow adequate time for analysis and a well-prepared proposal for submittal for FY92 funding.

Q: You would request the Tech Team to provide information for an FY92 proposal? A: Yes.

Motion seconded.

Discussion of Warrens motion:

(Marshall): I support the motion, but am still puzzled as to why we are so cautious about supporting marking of hatchery fish, when it is identified as an option in our draft strategic plan.

The motion passed, unanimously.

Other assignments to the Tech Team:

Bingham): The draft plan for the Klamath Fishery Restoration Program raises concerns about the effect of early chinook releases from Iron Gate Hatchery on stock abundance. I would like the Tech Team to investigate this question. Putting the assignment more positively, I ask the Team to examine the potential for improving hatchery performance by changing release schedules.

(Baracco): I suggest the assignment be limited to obtaining, from CDFG, a detailed description of their release schedules and practices. The Tech Team doesn't have the expertise to evaluate such information, or to make suggestions for changes.

(Hayden): What about marking falls?

(Fullerton): The only instruction to the Tech Team as of now is to prepare a justification for a spring chinook marking proposal.

(Hayden): After we get their report, why don't we consider marking some falls in the spring of 1991, in March?

(Baracco): Springs and falls are released about the same time, so marking would be about the same time.

Discussion of Tech Team work requested by McIsaac:

(Fullerton): Do we have a motion on McIsaac's requests?

(McIsaac): I withdraw my request for analysis of the Trinity escapement goal if that analysis is already available elsewhere.

(Barnes): The 1986 report examines escapement needs for current habitat capacity, but it doesn't speak to the 50,000 goal.

(McIsaac): In that case, I move we assign the Tech Team to prepare:

- o A proposal for more intense scale sampling.
- o A proposal/report on costs and other logistics for implementing GSI in the KMZ and adjacent areas... boundaries at the discretion of the Team.
- o A review of the quality or value of the 50,000-fish escapement goal alluded to yesterday.

(McIsaac): I move we ask the Team to prepare, by January 1991, proposals for the first two items, and a short analysis of the 50,000-fish goal.

The motion was seconded, and passed unanimously.

Discussion of KFMC funding needs (Iverson).

Funding available to the Klamath Field Office for FY1991 was not known at the time of the Council meeting. Subsequently, we learned that FY91 funding will be very close to the FY90 level. The budget for Klamath Field Office operation in FY91 (\$262,000) includes about \$71,000 in travel and staff labor for support of the Klamath Council, which is about the same as last fiscal year. We don't have funds budgeted for any major increase in Council activities, such as a stepped-up long-range planning effort.

Discussion:

(Fullerton): I envision about three special meetings for public comment on the harvest management plan.

(Naylor): There will be a production cost to get a fair number of plan copies published and distributed.

Report on the ocean-estuary symposium and coho/chinook workshop (Barnes).

Jerry reported favorably on these well-attended meetings (see Attachment 9). A highlight of the symposium was a panel discussion of Klamath fishery management from the perspectives of several user group representatives. The workshop, organized at the request of the Klamath Council, will yield a proceedings before the end of this year, and copies will be distributed to the Council. Proceedings of the symposium will be available for purchase at a later date.

Other new business:

(Masten): To reduce the chance of major errors getting out in the Council minutes, copies of draft minutes should go to Council members a week or so before general distribution, so they may call in any corrections to Klamath Field Office. Hearing no objections, Mr. Fullerton directed that this be done.

(Wilkinson): John Wilson is nominated as the Oregon troller representative to the Technical Advisory Team, replacing Scott Boley. Mr. Wilson is a fisherman and farmer, holds a degree in geography, and is active in volunteer fish restoration efforts on the southern Oregon coast. Hearing no objections, Mr. Fullerton approved the appointment.

Del Robinson introduced Brian Gates, acting project leader of the Coastal California Fishery Resources Office (formerly Arcata Fisheries Assistance Office). Brian transferred recently from Vancouver, Washington.

Discussion of the next meeting(s).

Fullerton explained the draft long-range plan would be edited by the National Marine Fisheries Service planning staff in La Jolla, then sent to the Klamath Council for review. When acceptable, the plan would be ready for public review, including public hearings. Other business for a January meeting could include:

- o Review of 1991 harvest management plans.
- o Reports on final estimates of 1990 harvests .
- o Report on Klamath fall chinook escapement estimates (the "megatable").
- o Review of the Tech Team report, discussed earlier today.

Agenda items for subsequent meetings would include review of the PFMC stock projections for 1991, which will be available about the end of January; and Council recommendations on 1991 harvest regulations, which should be provided to PFMC and other agencies by March.

It was decided that the edited long-range plan would be mailed to Council members in advance of a January meeting, for final approval prior to public review. Thus, the first public hearing on the plan would take place some time later.

Dates and location for the next Council meeting were identified as January 10-11, 1991, in Eureka.

At this point, the Council meeting was adjourned.

ATTACHMENT 1

KLAMATH FISHERY MANAGEMENT COUNCIL

Attendance Roster, November 1-2, 1990 in Eureka, Ca.

Management Council Members

Nat Bingham	California Commercial Salmon Fishing Industry
Virginia Bostwick	Klamath In-River Sport Fishery
E. C. Fullerton(Chair)	National Marine Fisheries Service
Robert Hayden	California Ocean Sport Fishery
C.L. Marshall	Hoop Valley Tribal Council
Donald McIsaac for James Martin	Oregon Department of Fish & Wildlife
Susan Masten	Non-Hoop Indians Residing in Klamath Area
A.E. Naylor	California Department of Fish & Game
Karole Overberg for Lisle Reed	U.S. Department of the Interior
Frank Warrens	Pacific Fishery Management Council
Keith Wilkinson	Oregon Commercial Salmon Fishing Industry

Others Attending

Alan Baracco
Jerry Barnes
Perge Birk
Dave Bitts
Yvonne Bones
Harleigh Calame
Brian Cates
John Coon
W.L. Duncan
Lloyd Gillham, III
Richard Haberman
Pat Higgins
Leaf Hillman
Ron Iverson
Jim Johnson
Chuck Lane
Bill Leavitt
Terry Lincoln
Michael Maahs
Mary McQuillen
Mike Morford
Ronnie Pierce
Gene Schnell
Steve Suagee
Del Robinson
Mollie Ruud
Jim Waldvogel
Tricia Whitehouse
David Wills
Paula Yoon

KLAMATH FISHERY MANAGEMENT COUNCIL
MEETING AGENDANovember 1, 1990

- 9:30 Convene. Review and approval of minutes and agenda.
- 9:45 Long-range planning (Chairman).
- o Next steps in completing the Council's harvest plan.
 - oo Further refinements:
 - Refinement of the options field.
 - Findings of fact, background information.
 - Operational planning.
 - Environmental assessment.
 - oo Procedure for public /agency review:
 - Publicity/public notice.
 - Length of review period.
 - Process for responding to comments.
 - o Task Force Restoration Program plan.
 - oo Report on status (Wilkinson).
 - oo Discussion of how to relate, meld, synergize the two plans.
 - o Public comment on long-range planning.
 - o Council decisions on how to proceed with planning.
- Noon Lunch
- 1:15 Reconvene. Annual harvest management process.
- o Review of 1990 fisheries and harvest management issues (Technical Advisory Team chair).
 - oo Ocean troll fishery.
 - oo KMZ sport fishery.
 - oo Spring and fall chinook net harvests.
 - oo River sport salmon fishery.
 - o Council discussion of 1990 harvest management (Council chairman).
- 3:00 Break
- 3:15 Reconvene. Begin planning for 1991 harvest management.
- o Establishing the appropriate role of the Council in reviewing harvest management plans and related harvest proposals.
 - oo Statement of the issue (Naylor).
 - oo Council discussion (Chair).
 - o PFMC Tenth Amendment process.
 - oo Statement of the issue (John Coon).
 - oo Tech Team analysis of alternatives for modifying the Klamath fall chinook escapement goal.
 - oo Council discussion.
- 5:00 Adjourn.

November 2, 1990

- 8:00 a.m. Convene. Begin planning for 1991 harvest management (continued).
- o Tech Team report on proposed new management tools or modeling assumptions, and their utility for the 1991 season.
 - oo Hatchery marking.
 - oo Changes in minimum size regulations.
 - oo CPUE in the Fort Bragg chinook fishery.
 - oo Age 3 vulnerability factor in net fishery.
 - oo Report on coho and spring chinook.
 - oo Other.
- 10:00 Break
- 10:15 Reconvene. Council discussion of Tech Team report.
- 11:00 Public comment on 1991 harvest management, or other topics.
- Noon Lunch
- 1:15 Reconvene. Council action on 1991 harvest management.
- o Decision on process for review of harvest management plans, and direction to agencies for submittal of plans.
 - o Decision on recommendations to PFMC on Amendment 10.
 - o Direction to Tech Team on additional information or analyses needed for 1991 management.
- 2:15 Discussion of KFMC funding needs, 1991 and beyond (Iverson)
- o Funding constraints.
 - o Funding needs for long-range plan development.
 - o Other funding needs.
- 2:30 Report on the ocean/estuary symposium and coho/chinook workshop (TAT chair).
- 2:45 Other new business.
- 3:00 Discussion of next meeting.
- 3:15 Adjourn.

7. Allocation Strategies

18. Establish a two-tiered allocation system: 1)
Determine minimum needs for each user group; 2)
Allocate the remaining harvestable surplus to optimize
the social and economic benefits in a fair and
equitable manner as determined by the KFMC
(Martin)

The intent of the allocation strategy would be to meet minimum needs for each user group first. These needs will be determined by the KFMC based on information and justifying rationale supplied by the user groups. A balance in meeting minimum needs will be ensured by a full public review of rationale with all parties and input from the public.

If additional harvestable surplus exists after meeting the minimum needs of all user groups, the surplus will be added to users' allocations based on a strategy to optimize social and economic benefits. The KFMC will determine the optimization strategy based on social and economic impacts analysis, input from the user group and agency/tribal representatives, input from the general public and will be consistent with the standards of the Magnuson Act, other applicable federal, state, and tribal laws. The allocation strategy must be deemed by the KFMC as fair and equitable.

HUT ALTERNATIVE TO #18
KFMC EUREKA MEETING
11/1/90

7. Allocation Strategies

18. Establish a two-tiered allocation system:

- (1) Pursuant to their trust responsibilities to Indian tribes, federal agencies on the KFMC, in coordination with tribal representatives, shall establish the harvest share allocable to tribal reserved fishing rights, based on an understanding of current and developing tribal requirements;
- (2) Allocate remaining allocable harvest among remaining user groups to optimize social and economic benefits in a fair and equitable manner as determined by the KFMC.

Indian tribes are not simply user groups exercising a privilege to harvest anadromous fish, but are (1) holders of federally protected rights to fish within the Hoopa Valley and Yurok Reservations, and (2) independent sovereign governments with substantial regulatory authority over the fishery within their jurisdictions. All agencies of the United States owe a trust duty under federal law to manage fishery resources in a way that maximizes the benefits of reserved tribal rights to fish and to the instream flows necessary to make those rights meaningful. The first tier proposed above simply recognizes and implements these principles, and would provide a method to curtail the current fragmented approach to fishery and water management.

The allocable harvest share remaining after meeting federal obligations to protect tribal interests will be allocated equitably among all other user groups, with the goal of first meeting the minimum needs of those user groups, based on information and justifications presented by the user groups. Balance in meeting those needs will be insured by full public review of user group justifications.

POSITION STATEMENT OF THE
HOOPA VALLEY TRIBE
IN OPPOSITION TO PROPOSED AMENDMENT TEN

Amendment Ten proposes to allocate to harvest a portion of the stocks reserved to escapement under the Harvest Sharing Agreement. At the same time, the escapement goal of the Congressionally mandated Trinity Restoration Program, and of the FWS Trinity Flow Evaluation Study, which was mandated by the Secretary of the Interior in 1981 as an aspect of the federal trust duty to the Hoopa Valley and Yurok Tribes, is at least 50,000 natural spawners in the Trinity River. Amendment Ten would work at cross purposes with Trinity escapement goals and would jeopardize Trinity restoration and study efforts. It is another example of the fragmented fishery and water management that disproportionately impacts the Klamath-Trinity basin in general and tribal rights in particular. For these reasons, the Hoopa Valley Tribe opposes Amendment Ten and supports retention of the current escapement provisions of the Harvest Sharing Agreement.

Hoopa and Yurok fishing and instream water rights have been extensively addressed in a 1981 Secretarial Issue Document (SID), which established the Interior Department's current policy for management of Trinity streamflows by the Bureau of Reclamation's Trinity River Division dams. The 1981 SID recognizes these tribal rights and the overriding federal obligation to administer those rights exclusively for the benefit of the tribes. The strong statement in support of tribal rights and federal duties, found in the narrative portion of the 1981 SID, is the law of the agency.

The Hoopa Valley Tribe has, however, filed a formal administrative appeal with Secretary Lujan challenging the "dry" and "critically dry" year provisions of the 1981 SID, which purport to authorize substantial streamflow reductions in drought years, as inconsistent with the law and policy of the Interior Department as set forth in the narrative text of the 1981 SID. The KFMC, PFMC, and the Trinity River Task Force have all sent letters of concern to Secretary Lujan supporting reforms in Trinity streamflow policy along the lines advocated by the Tribe as a matter of its federally protected rights.

In the attached letters to the Hoopa Valley Tribe and to Senator Daniel Inouye, Secretary Lujan confirms that during the winter of 1990-91, the Assistant Secretary for Fish and Wildlife and Parks will be reviewing current Trinity streamflow policy to

determine whether drought year reductions in Trinity streamflows should be permitted to continue. The Tribe is advised that FWS will be recommending that the provisions for drought year Trinity streamflow reductions be deleted from the 1981 SID.

All fishery management agencies and user groups should welcome, and continue to advocate, these much needed reforms in Trinity streamflow policy. Adoption of Amendment Ten would work against the Trinity fishery restoration and study efforts that are dependent on streamflow policy reform.



United States Department of the Interior

OFFICE OF THE SECRETARY
WASHINGTON, D.C. 20240

January 15, 1981

WATER AND POWER
RESOURCES SERVICE
OFFICIAL FILE COPY
Rec'd JAN 16 1981

565,

Central Valley

MEMORANDUM

TO: Solicitor
Assistant Secretaries

FROM: Executive Secretary

SUBJECT: Trinity River Fishery Mitigation

TO	INIT	DATE
100	BT	1-20
115		
720	Qee	7/1
105	W	1-23
FILES		

Attached is a copy of the Secretarial Decision on the Trinity River Fishery Mitigation. In addition to deciding on modified Option 4c, the Secretary has approved the agreement between FWS and WPRS. Your attention is directed to the footnote prohibiting permanent allocation of the water for other purposes until the Secretary acts on the effectiveness report scheduled twelve years hence.

Attachment

- cc: Under Secretary
- S/Jankel
- S/Knuffke
- CL/Catron
- OPA/Kallman
- IG/Brown
- EIA/Krenzke
- FWS/Greenwalt
- ✓WPRS/Higginson

SECRETARIAL ISSUE DOCUMENT

TRINITY RIVER FISHERY MITIGATION

I. INTRODUCTION

II. BACKGROUND

- A. HUPA AND YUOK FISHING RIGHTS
- B. TRINITY RIVER DIVISION
- C. DECLINE OF THE FISHERY
- D. TRINITY RIVER BASIN FISH AND WILDLIFE TASK FORCE
- E. IMPACT ON THE CENTRAL VALLEY PROJECT

III. ALTERNATIVES FOR INCREASING RELEASES TO THE TRINITY

- 1. 120,500 acre-feet annual releases in all years (no action alternative)
- 2. 215,000 acre-feet annual releases in all years
- 3a. 287,000 acre-feet annual releases in all years
- 3b. 287,000 acre-feet annual releases in normal water years with reduction to 120,500 acre-feet in dry and critically dry years
- 4a. 340,000 acre-feet annual release in all years
- 4b. 340,000 acre-feet release in normal water years with reduction to 120,500 acre-feet in dry and critically dry years
- 4c. 340,000 acre-feet annual release in normal years; 120,000 acre-feet dry years; 140,000 acre-feet critically dry years (identified in the EIS as the proposed action)
- Modified 4c. Alternative 4c as modified by agreement between FWS and WPRS
- 4d. 340,000 acre-feet annual release in all years until "interim water" is exhausted; thereafter, same releases as Alternative 4c

ATTACHMENTS

Agreement Between FWS and WPRS for Implementing and Evaluating Increased Stream Flows for the Trinity Division, Central Valley Project, California

Final Environmental Impact Statement on the Management of River Flows to Mitigate the Loss of the Anadromous Fishery of the Trinity River, California (FES #80-52)

SECRETARIAL ISSUE DOCUMENT

TRINITY RIVER FISHERY MITIGATION

I. INTRODUCTION

This SID concerns the operation of the Trinity River Division of the Central Valley Project in California. Since completion of the Division, over 80% of the mean runoff of the Trinity watershed above Lewiston Dam has been diverted to the Sacramento watershed for agricultural, hydroelectric, and other uses. This diversion has been accompanied by a severe decline in anadromous fish runs in the Trinity and Klamath Rivers. At issue are the quantity of water to be diverted and the quantity to be allowed to flow through its natural course for preservation and enhancement of anadromous fish runs on the Trinity and Klamath Rivers. Lead Assistant Secretary for this SID is the Assistant Secretary - Indian Affairs because of the federal trust responsibility to protect the fishing rights of the Hupa and Yurok tribes of the Hoopa Valley Indian Reservation.

This SID is a revision of a draft SID on the same subject distributed for review on January 8, 1980. Review of the earlier SID resulted in a decision by the Secretary, recorded in a memorandum dated April 18, 1980 (See Appendix 10 in the EIS), to increase releases from Lewiston Dam into the Trinity River during the current year (through April 30, 1981) and to prepare an environmental impact statement (EIS) prior to a decision by the Secretary on a permanent commitment of water for Trinity River Flows. The Fish and Wildlife Service (FWS) was directed to be the lead agency for the EIS, with the Bureau of Indian Affairs (BIA) and the Water and Power Resources Services (WPRS) directed to act as cooperating agencies. The draft EIS was released to the public on August 29, the comment period closed on October 17, the final EIS was filed with the Environmental Protection Agency on December 5, and a notice of availability was published in the Federal Register on December 12. The final EIS is attached to this SID. This SID constitutes the record of decision for the EIS. Because most of the information contained in the previous draft SID has been incorporated into the EIS, the discussion in the present SID has been substantially condensed.

The final EIS discusses eight alternatives, including the "no action" alternative. One of these, Alternative 4c, is identified as the proposed action. Following distribution of this SID in draft form on December 19, 1980, FWS and WPRS entered into an agreement, through which both agencies express a preference for a modified version of Alternative 4c. A copy of the agreement is attached to this SID. The primary purpose of the agreement is to aid in the implementation of Alternative 4c, in the event that the Secretary selects that alternative. The agreement contemplates a twelve year study period during which, in order to complement increased stream flows, an overall fish and wildlife management plan would be implemented by the member agencies of the Trinity River Basin Fish and Wildlife Task Force. All of the alternatives, except no action, assume that such a plan to improve habitat would be implemented. However, only the modified 4c specifies that the decision made based on this SID will be reviewed at a future date, i.e., 12 years after implementation.

II. BACKGROUND

A. HUPA AND YUROK FISHING RIGHTS

For hundreds of years the Hupa, Karok, and Yurok Indian tribes have resided along the Trinity and Klamath Rivers and their tributaries and have utilized the fishery in the practice of their religion, in barter, and as a principal food source. The achievement of wealth and status and the pursuit of enterprise were vital aspects of the traditional cultures of these tribes, and these aspects of culture were largely based upon the abundance of salmon. To protect fundamental tribal rights, including utilization of the fishery, Federal reservations were created during the 1855-1891 period pursuant to Congressional authority. (See Sections C7.0 and D5.3 of the EIS.)

Secretarial responsibilities regarding tribal fishing rights and tribal entitlement to water to provide a viable fishery have been extensively outlined in a memorandum dated March 14, 1979, from the Associate Solicitor, Division of Indian Affairs to the Assistant Secretary - Indian Affairs. This memorandum states, in part:

"It has been clearly established in the courts that an important 'Indian purpose' for the creation of both the initial reservation and the subsequent extension was to reserve to the tribes occupying the reservation the right to take fish from the Klamath and Trinity Rivers. Mattz v. Arnett, 412 U.S. 481 (1973); Arnett v. 5 Gill Nets, 48 Cal. App.3d 459 (1975); Donahue v. Justice Court, 15 Cal. App.3d 557 (1971).

"It is also well established that when federal reservations are created pursuant to Congressional authority, the Federal Government reserves the use of such water as may be necessary for the purposes for which the reservation was created. Winters v. United States, 207 U.S. 564 (1908); Arizona v. California, 373 U.S. 546 (1963); Cappaert v. United States, 426 U.S. 128 (1976); United States v. New Mexico, 98 S. Ct. 3012 (1978).

"Both the tribal rights to fish and to the water needed to make the fishing right meaningful are tribal assets, which the Secretary has an obligation as trustee to manage for the benefit of the tribes. trustee has a duty to exercise such care and skill as a person of ordinary prudence would exercise in dealing with his or her own property. Restatement (Second) of Trusts (1959) (hereinafter Trusts) Sec. 174. This obligation includes both the duty to preserve the trust assets and to make them productive. Trusts Sec. 181. The most fundamental duty of the trustee, however, is loyalty to the beneficiary. The trustee must administer trust assets solely in the interests of the beneficiary. Trusts Sec. 170.

"These basic principles of trust law have been applied in recent years in the context of federal Indian law by the United States Supreme Court, United States v. Mason, 412 U.S. 392 (1973), by the federal trial court that has the Hoopa Valley Indian Reservation within its

district, Manchester Band of Pomo Indians v. United States, 363 F. Supp. 1238 (N.D. Cal. 1973), by the Court of Claims in a case involving Indians living on that reservation, Coast Indian Community v. United States, 550 F.2d 639 (Ct. Cl. 1977), and by the federal district court for the District of Columbia with respect to Interior Department operating criteria for a dam that diverts water away from the Indian reservation where it is needed to preserve fish stocks for Indian use, Pyramid Lake Paiute Tribe of Indians v. Morton, 354 F. Supp. 252 (D. D.C. 1973)."

To summarize, the Hupa and Yurok Indians have rights to fish from the Trinity and Klamath Rivers and to adequate water to make their fishing rights meaningful. These rights are tribal assets which the Secretary, as trustee, has an obligation to manage for the benefit of the tribes. The Secretary may not abrogate these rights even if the benefit to a portion of the public from such an abrogation would be greater than the loss to the Indians.

Since 1977 the Department has been regulating Indian fishing on the Hoopa Valley Reservation in order to conserve the fish resources. In 1976, the United States Supreme Court declined to review the decision of a California appellate court in Arnett v. 5 Gill Nets that the State of California could not regulate Indian fishing on the Hoopa Valley Indian Reservation. Because the Yurok Tribe, which shares the reservation with the Hoopa Valley Tribe, has no organized tribal government, tribal regulation of the fishery was not possible. Since neither state nor tribal regulation was possible, the Interior Department used its regulatory authority to assure the preservation of the fishery on which the Indians of that reservation depend. In 1978, efforts to enforce these regulations met with bitter and sometimes violent resistance.

Prosecutions in the Court of Indian Offenses were vigorously defended by lawyers for the Indian fishers. Attorneys challenged the validity of the regulations, citing language in the preamble stating that a major problem affecting the fishery results from the substantial diversions of water from the Trinity River and that "regulation of the Indian fishery will provide only a small degree of protection for this resource." Defense attorneys argued that the Department has a trust obligation to halt other threats to the fishery rather than placing the entire conservation burden on the Indians. The Department decided that immediate action had to be taken with respect to such threats because of their potential to totally destroy the resource in a short time. The Indians were told that regulation of their fishing was needed to give the Department the time it needed to deal with the other problems.

The regulations currently in effect, which were promulgated in March 1979, permit the taking of fish for subsistence and ceremonial purposes, but, because of the decline in the state of the resource, do not permit the taking of fish for commercial purposes. If restoration of the fish habitat results in such increases in fish populations that the ban on commercial fishing can be lifted, then important economic and cultural benefits could be realized by the Hupa and Yurok Tribes (see Section D.5.3 of the EIS). To illustrate the potential economic benefit, the EIS predicts that the

proposed action would allow Indians to catch an additional 10,260 salmon per year. Approximately 5,700 to 8,700 would be required to restore the tribes to the level of fish of North Fork Trinity River origin that were historically harvested for subsistence needs. Approximately 1,560 to 4,560 would then be available for commercial purposes. The economic benefits would depend on how the fish were marketed.

Any substantial economic benefits would help to improve the quality of life on the reservation, where unemployment is between 37 and 45 percent and the per capita income is less than half the national average (see Section C.7.4 of the EIS). Perhaps more important than economic benefits would be cultural benefits to the tribes if the fishery is restored. Regardless of whether the ban on commercial fishing is lifted, the fishery could provide for more of the subsistence needs of tribal members. For tribal members faced with the choice of leaving the reservation to gain employment or remaining on the reservation where employment opportunities are few but family and cultural ties are strong, the restoration of the fishery would likely result in more tribal members choosing to stay on the reservation, in effect, practicing "nature banking" as described in the EIS (EIS, p. C7-8). If the natural resource base of the reservation substantially contributes to the subsistence needs of tribal members, and if providing for subsistence needs is done in ways which are part of the tribes' cultural traditions, such as harvesting salmon, then the cultures of the tribes will be more resilient in reacting to outside forces of cultural change.

B. TRINITY RIVER DIVISION

As early as 1931 the water development potential of the upper Trinity River was recognized. Plans for diversions to the Central Valley were formulated as part of the California State Water Plan. With the strong urging of the State of California, the U.S. Bureau of Reclamation (now WPRS) released preliminary plans for development of the river as part of the Central Valley Project (CVP), and in 1955 the Trinity River Division of the CVP was Congressionally authorized (Trinity River Act, P.L. 84-386).

The Secretary has authority under the Trinity River Act to mitigate losses of fish resources and habitat and provide for certain downstream water uses. The mandate that the operation of the Division be integrated with other CVP features to achieve the fullest, most beneficial, and most economic use of the developed water is qualified by Section 2, which states:

"Provided, that the Secretary is authorized and directed to adopt appropriate measures to insure the preservation and propagation of fish and wildlife, including, but not limited to the maintenance of the flow of the Trinity River below the diversion point at not less than one hundred and fifty cubic feet per second for the months of July through November"

Recent opinions of DOI's Regional Solicitor in Sacramento and earlier reports of the Commissioner of Reclamation acknowledge the mandatory requirement of this proviso. The Secretary has acknowledged this responsibility in the April 18, 1980, memorandum noted earlier.

colder Trinity River water flowing down the Sacramento River in spring could be a benefit since Sacramento River water temperatures tend to be below optimal for salmon at that time. Some additional minor benefit could accrue to reduced pumping in the Sacramento-San Joaquin Delta, where pumping operations of the CVP and the State Water Project have had massive adverse impacts on both fish and wildlife.

It is to be noted that for the purpose of judging the economic merit of the proposed course of action, application of the traditional benefit/cost analysis to the resource problem addressed in this EIS is not appropriate. Providing greater flows to the Trinity River below Lewiston Dam would be a loss-compensation measure, which is a feature of the Trinity River Division, not subject to a separate benefit/cost analysis. Moreover, as observed at the outset, there are responsibilities arising from congressional enactments, which are augmented by the federal trust responsibility to the Hupa and Yurok tribes, that compel restoration of the river's salmon and steelhead resources to pre-project levels.

SECRETARIAL DECISION

ALTERNATIVES FOR INCREASING RELEASES TO THE TRINITY

- _____ 1. 120,500 acre-feet annual releases in all years (no action alternative)
- _____ 2. 215,000 acre-feet annual releases in all years
- _____ 3a. 287,000 acre-feet annual releases in all years
- _____ 3b. 287,000 acre-feet annual releases in normal water years with reduction to 120,500 acre-feet in dry and critically dry years
- _____ 4a. 340,000 acre-feet annual release in all years
- _____ 4b. 340,000 acre-feet release in normal water years with reduction to 120,500 acre-feet in dry and critically dry years
- _____ 4c. 340,000 acre-feet annual release in normal years; 220,000 acre-feet dry years; 140,000 acre-feet critically dry years



Modified
4c. *

WPRS will allocate CVP yield so that releases can be maintained at 340,000 acre-feet annually in normal years. FWS will prepare a detailed study plan to assess the results of habitat and watershed restoration. Prior to completion of the plan, releases will be 287,000 acre-feet. Releases will be incrementally increased to 340,000 acre-feet as habitat and watershed restoration measures are implemented. In dry years, releases will be 220,000 acre-feet; 140,000 acre-feet in critically dry years.

* (It is understood that no water allocated to the fishery under this agreement may be permanently allocated for any other purpose until the report provided for in paragraph (3) of the 12/30/80 Memorandum of Agreement has been acted on by the Secretary.

- _____ 4d. 340,000 acre-feet annual release in all years until "interim water" is exhausted; thereafter, same releases as Alternative 4c.



Agreement Between the
U.S. Fish and Wildlife Service
and the
Water and Power Resources Service
for
Implementing and Evaluating Increased Stream flows
for the Trinity Division,
Central Valley Project, California

This agreement is intended to affirm the commitment of the Fish and Wildlife Service (FWS) and the Water and Power Resources Service (WPRS) to work cooperatively to halt further fishery declines and to begin effective restoration in the Trinity River. It is consistent with the congressional intent in authorizing the Trinity River Division, Central Valley Project (CVP), California.

This agreement together with the Environmental Impact Statement (EIS) on the management of Trinity River flows is available for consideration by the Secretary in reaching a decision on Trinity River flows. This agreement is developed in recognition and support of the Trinity River Basin Fish and Wildlife Task Force (Task Force) and its goals and objectives of restoration of salmon and steelhead resources in the Trinity River Basin. It reflects a recognition that although it would be desirable to sustain environmental values through high releases to the Trinity River in all years, there are compelling needs and uses outside of the basin for water and power which require a reasonable compromise between water export and instream releases--especially in water-short years. It is suspected that the flows to be released in dry and critically dry years may be insufficient to support desirable levels of salmon and steelhead habitat. However, the flows to be allocated for dry and critically dry years will help to allow habitat below Lewiston Dam to be maintained at levels at least comparable to those which would have existed during dry and critically dry years in the absence of the project. FWS will carefully assess the flows provided under this agreement to determine their effectiveness in maintaining favorable instream habitat conditions, and will also determine what management options are available for compensating for temporary reductions in fishery habitat during dry and critically dry years.

Therefore, it is mutually agreed as follows:

- (1) WPRS will allocate CVP yield so the releases below Lewiston Dam for fishery preservation and propagation can be maintained at 340,000 acre-feet annually in all but dry and critically dry water years when the release shall be 220,000 and 140,000 acre-feet, respectively. Dry and critically dry years will be based on Shasta Lake inflow.

Critically dry years shall mean any year in which either of the following conditions exists:

- (a) The forecasted natural inflow to Shasta Lake for the current year is equal to or less than three million two hundred thousand (3,200,000).

acre-feet as such forecast is made by WPRS on or before February 15 and reviewed as frequently thereafter as conditions and information warrant; or

- (b) The total accumulated actual deficiencies below four million (4,000,000) acre-feet in the prior water year or series of successive prior water years each of which has inflows of less than four million (4,000,000) acre-feet, together with the forecasted deficiency for the current water year, exceed eight hundred thousand (800,000) acre-feet.

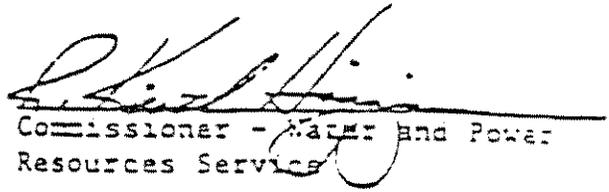
Dry years shall mean any year that the forecasted natural inflow to Shasta Lake is less than four million (4,000,000) acre-feet and neither of the above conditions exists.

These definitions are consistent with the definitions used in the CVP power contract with Pacific Gas and Electric Company and many of the CVP water service contracts. Applying these definitions to the past 69 years of record would result in 12 percent of the years being defined dry and 9 percent being defined as critically dry years.

- (2) During the first 12 years of these revised flow releases, the schedule of flows within any year shall be provided to WPRS by FWS in consultation with the California Department of Fish and Game (Fish and Game). FWS will evaluate the releases to determine how well they affect the propagation of fish consistent with fishery restoration objectives.
- (3) At the end of 12 years following adoption and implementation of this agreement, FWS, after consultation with WPRS and Fish and Game, will submit a report to the Secretary, summarizing the effectiveness of restoration of flows and other measures including intensive stream and watershed management programs in rebuilding Trinity River salmon and steelhead stocks. The report will specifically address the adequacy of habitat at 140,000, 220,000, and 287,000 acre-feet annual release levels for all water year types and the need to maintain, increase or decrease the full 340,000 acre-feet CVP yield allocation. Recommendations concerning what measures should be continued, eliminated, or implemented to maintain compensation for fishery impacts attributable to the Trinity River Division will also be included. The report may also address the possible rescheduling of the allocated CVP yield by water year type and other measures necessary to better maintain favorable instream habitat conditions.
- (4) The completion of a Fish and Wildlife Management Plan by the Task Force and its implementation is integral to successful restoration of the anadromous resources of the Trinity River Basin. FWS and WPRS will continue to work with the Task Force in completing the plan and assuring its successful implementation.

(3) FWS in consultation with WPRS and the Task Force will prepare, during the first year after adoption and implementation of this agreement, a detailed study plan to assess the results of the habitat and watershed restoration efforts as required in (3) above. Until the study plan is completed and approved by the Director, FWS, and the FWS is in a position to implement the study, fishery releases to the Trinity shall not exceed 287,000 acre-feet in any normal year. As instream and watershed management measures are put in place, flows will be incrementally increased up to a maximum of 340,000 acre-feet, both to sustain those measures and to facilitate the evaluation.


Director, Fish and Wildlife Service


Commissioner - Water and Power Resources Service

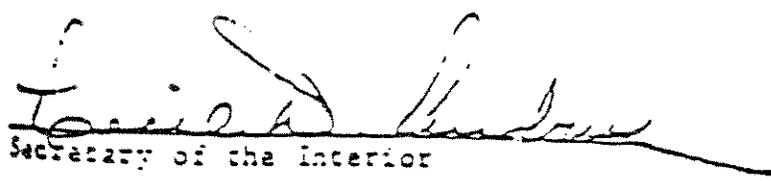
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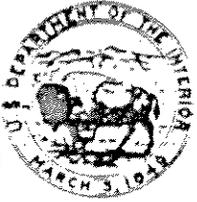
Date _____

Date _____

Approved:


Secretary of the Interior

1-14-81
Date _____



United States Department of the Interior



BUREAU OF RECLAMATION
MID-PACIFIC REGIONAL OFFICE
2800 COTTAGE WAY
SACRAMENTO, CALIFORNIA 95825-1898

IN REPLY
REFER TO:

MP-100

September 10, 1990

RECEIVED
SEP 14 1990

The Honorable Manuel Lujan, Jr.
Secretary of the Interior
U.S. Department of the Interior
18th and C Streets, N.W.
Washington DC 20240

Hoop Valley Business Council

Subject: Trinity River Task Force Support for Review Process to
Amend Streamflow Policy Under the 1981 Secretarial
Issue Document

Dear Secretary Lujan:

The Trinity River Task Force (Task Force) believes that there are deficiencies in current Departmental policy governing fishery streamflows released into the Trinity River by the Central Valley Project's Trinity River Division. As you know, the current policy is set forth in a Secretarial Issue Document (SID) dated January 14, 1981. The SID provides for an annual flow volume of 340,000 acre-feet (AF) in wet and normal years, 220,000 AF in dry years, and 140,000 AF in critically dry years. Water year type and associated flow volume are determined annually based on the volume of precipitation runoff forecasted to flow into Shasta Reservoir on the Upper Sacramento River. The Task Force believes that the flow volumes and criteria prescribed for dry and critically dry years may be inadequate to promote and maintain a restored anadromous fishery in the Trinity River below Lewiston Dam. We are also concerned that the frequency of reduced flows and other factors has adversely impacted the efforts of the Trinity Restoration Program and the 12-year Fish and Wildlife Service (FWS) Trinity Flow Evaluation.

The Hoopa Valley Tribe has presented us a copy of your July 13, 1990, letter to Tribal Attorney Steve Suagee, wherein you respond to an administrative appeal by the Tribe regarding the inadequacy of the dry and critically dry year flow volumes and criteria set forth in the SID. In that letter you indicate that you have directed the Assistant Secretary for Fish and Wildlife and Parks "to initiate and complete as soon as practicable, a review of the Trinity River flow releases in light of the hydrologic conditions experienced since 1984, and the need for supplemental documentation if flows are altered." The Task Force supports this approach. The FWS Flow Evaluation Team has determined that flows of 340,000 AF are needed in 1991 to properly accomplish the goals stated in its 1983 Plan of Study, and to protect fish habitat. We believe that existing documentation justifies a decision that 340,000 AF are needed in water year 1991.

Trinity River water year 1991 begins April 1, 1991, and the Task Force urges you to take formal action to provide a 340,000 AF streamflow in 1991

sufficiently in advance of April 1 to enable the Central Valley Project to incorporate this direction into its operational planning for the year.

The SID recites that, based on historical data, dry or critically dry years should occur in roughly 21 percent of all years. Since the inception of the 12-year Flow Study in 1985, there have been 4 dry years on the Trinity (in 1985, 1987, 1988 and 1990). The Flow Study must evaluate high springtime releases before the conclusion of the Study; such releases will be possible only if the annual flow volume is 340,000 AF. Natural spawner escapement to the Trinity in 1989 declined from previous years, and falls short of restoration goals even under an expansive definition of the term "natural fish." For these reasons, it is imperative that the Trinity streamflow for 1991 be set at 340,000 AF, if at all possible.

Your July letter to the Hoopa Valley Tribe also indicates you have requested the Assistant Secretary for Fish and Wildlife and Parks to evaluate the status of the FWS Trinity Flow Evaluation. In addition, your letter references your concerns regarding impacts of California's protracted drought upon restoration efforts in the Trinity Basin. The Task Force also supports this kind of review, but we believe that such review requires a slightly longer timeframe than that necessary to justify a decision to commit 340,000 AF to Trinity streamflows in 1991. Matters that should be addressed in such a review include: flow requirements for the work of the Restoration Program and its relationship to the Flow Evaluation; development of test volumes for channel maintenance flows and the associated need to authorize releases in excess of 340,000 AF in some years; flow requirements for the duration of the Flow Evaluation.

As the Interior Department's Congressionally chartered advisory committee on Trinity River restoration, the Task Force offers its services as a participant in this review process. We recommend a timeframe that would enable the Assistant Secretary to begin developing recommendations in the spring of 1991. Policy changes adopted pursuant to this review should be applicable for the duration of the Flow Evaluation.

In summary, the Task Forces supports a two-phase approach to review of existing Trinity streamflow policy. The first phase involves compilation of existing FWS documentation to support a streamflow of 340,000 AF in 1991. A potential qualification to this recommendation would be a severe drought situation based on Shasta inflow criteria, which could be addressed next winter if such conditions should develop. The second phase would involve review of the flow requirements and other needs of the Restoration Program, with policy recommendations to be developed next spring. There is precedent for such a two-phase approach: In April, 1980, the Secretary recognized that existing information was sufficient to require direction of an immediate 100,000 AF increase in Trinity streamflows, and 9 months later, after more extensive review, he adopted the current policy.

We will forward a copy of this letter to the Assistant Secretary for Fish and Wildlife and Parks, along with a brief cover letter offering the services of the Task Force in the second phase of the review process. Thank you for your consideration of this matter. The Task Forces believe you have taken an

important step toward policy changes that will benefit the fishery and permit achievement of Restoration and Flow Evaluation obligations.

Sincerely,

Lawrence F. Hancock

Lawrence F. Hancock, Chairman
Trinity River Task Force

cc: Assistant Interior Secretary for Fish and Wildlife and Parks
Trinity River Task Force Members
Commissioner, Attention: W-1000 (7654-MIB)
Deputy Commissioner, Attention: D-1000

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United States Senate

SELECT COMMITTEE ON INDIAN AFFAIRS

WASHINGTON, DC 20510-6450

September 5, 1990

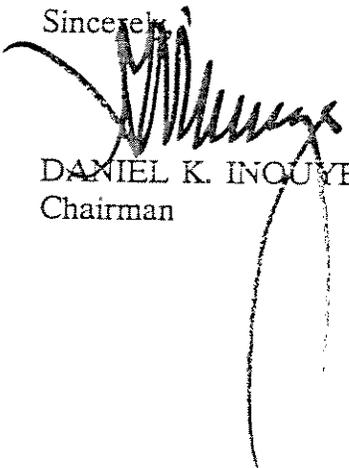
Mr. Steve Suagee
Staff Attorney
Hoopa Valley Business Council
P.O. Box 1348
Hoopa, California 95546

Dear Mr. Suagee:

Enclosed is a letter from Secretary Manuel Lujan, Jr., in response to my inquiry last March on behalf of the Hoopa Valley Indian Tribe's appeal with respect to dry year flow releases to the Trinity River.

I also have a copy of his letter to you dated July 13, 1990. I trust that this response addresses the concerns of the tribe but if I can be of further assistance, please let me know as soon as possible.

Sincerely,



DANIEL K. INOUE
Chairman



THE SECRETARY OF THE INTERIOR
WASHINGTON

August 15, 1990

Honorable Daniel K. Inouye
Chairman, Select Committee
on Indian Affairs
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

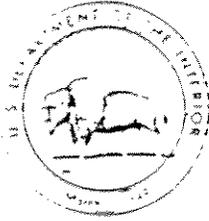
This is a followup to my March 7, 1990, response to you concerning the Hoopa Valley Tribe's (Tribe) appeal to modify our policy relative to fishery streamflows in the Trinity River. Enclosed for your information is a copy of my July 13, 1990, response to the Tribe relative to this matter.

Although I did not formally refer the Tribe's appeal to the Water Policy Council, the Assistant Secretaries for Water and Science, Fish and Wildlife and Parks, and Indian Affairs all provided recommendations to me. Additionally, I have asked the Assistant Secretary for Fish and Wildlife and Parks to take the lead in reviewing the Trinity River situation and to provide a recommendation concerning (1) whether the flow schedule should be altered and (2) what, if any, additional documentation may be required. A decision on this matter will not affect the 220,000 acre-feet release planned for water year 1990, but could impact releases in subsequent years.

I appreciate your interest in this important and sensitive issue.

Sincerely,

Enclosure



THE SECRETARY OF THE INTERIOR

WASHINGTON

July 13, 1990

Mr. Steve Suagee
Staff Attorney
Hoopa Valley Business Council
P.O. Box 1348
Hoopa, California 95546

Dear Mr. Suagee:

This is in response to your letter dated January 15, 1990, which appeals a 1988 Decision by the Bureau of Reclamation's Mid-Pacific Regional Director concerning dry and critically dry year flow releases to the Trinity River.

I asked the Assistant Secretaries for Indian Affairs, Fish and Wildlife and Parks, and Water and Science to look into this matter and report to me their recommendations to insure that the Department's trust responsibilities and commitment to the restoration of the Trinity River fishery are met.

Releases to the Trinity River for fishery purposes are governed by a 1981 Secretarial Issue Document (SID). The SID also established a 12-year Fish and Wildlife Flow Evaluation Study to determine the proper flows to reinstitute pre-project levels of salmon and steelhead in the river. Supported by an Environmental Impact Statement completed in November 1980, the SID established annual flows of 340,000 acre-feet (a.f.) in wet and normal years, 220,000 a.f. in dry years, and 140,000 a.f. in critically dry years. Substantial changes in these flows may require the preparation of appropriate supplemental documentation. Flow releases for water year 1990 are planned at 220,000 acre-feet.

Drought conditions in California over the last few years raise concerns regarding fishery and restoration efforts in the Trinity River Basin. Accordingly, I have directed the Assistant Secretary for Fish and Wildlife and Parks to initiate and complete as soon as practicable, a review of the Trinity River flow releases in light of the hydrologic conditions experienced since 1984, and the need for supplemental documentation if flows are altered. I will analyze this review before alteration of the flow schedule as governed by the 1981 SID. I have also requested the Assistant Secretary to evaluate the status of the flow study by the Fish and Wildlife Service to determine if the study can be completed on schedule and fully meet the study objectives.

Thank you for your continued interest in this matter. I will be in further contact with you as new information is developed.

Sincerely,

A handwritten signature in cursive script, reading "Manuel Lujan Jr.".

The grand champion steer raised and sold by Myndy Fornaciari of Junction City weighed 1,165 pounds and was sold to J and K Logging of Quincy and Hayfork for \$1.90 per pound. Myndy's brother Tony sold the reserve champion steer for \$1.60 per pound to Bailey Timber Falling of Hayfork. His steer weighed 1,183 pounds.

A total of eight steers were sold for a total of \$12,270 with an average price per pound of \$1.36.

CENTRAL VALLEY BARK OF WEAVERVILLE.

Timbre Beck of Hayfork had the reserve champion lamb which weighed 110 pounds and was auctioned off for \$5 per pound to Jerry DeFoer's Farmers Insurance Agency of Hayfork and Weaverville.

A total of 16 lambs were sold \$5,087 in gross sales with an average price of \$2.86 per pound.

The grand champion pen of three fryer rabbits was raised by Erin Morris-

Hayfork and sold for \$20 per pound to Jerry DeFoer's Farmers Insurance.

Gary Whitaker of Weaverville sold the reserve champion turkey weighing 22.25 pounds for \$10 per pound to Tops Sentry Market.

April Fulton was awarded the Martinez Perpetual Trophy for large animal Round Robin Showmanship and the Maddalena Perpetual Trophy for small animal Round Robin Showmanship went to Tawnya Rourke of Hayfork.

Hoopa Tribe seeking higher flows on Trinity River

By REBECCA LLOYD

Through exhaustive efforts of the Hoopa Indian Tribe over the last two years, Trinity County and the U.S. Fish and Wildlife Service may be getting long awaited flows in the Trinity River next year.

In a letter to the tribe's staff attorney Stephen Suagee, U.S. Secretary of Interior Manuel Lujan said he will be reviewing the possibility of altering a 1981 flow schedule for the river which has allowed for the Bureau of Reclamation to divert thousands of acre feet of water from the river in past years for use in the Central Valley Project.

Lujan's decision to conduct such a review is the result of a two-year administrative appeal filed by Suagee on behalf of the tribe asking that the Department of Interior honor its trustee obligations to the tribe.

When the Hoopa Reservation was created in 1864 by the federal government, the Secretary of Interior was deemed trustee of the reservation and was obligated to certain responsibilities.

A 1979 memo from the associate solicitor for the Division of Indian Affairs to the assistant secretary of Indian Affairs stated, "It has been clearly established in the courts that an important 'Indian purpose' for the creation of both the initial reservation and the subsequent extensions was to reserve to the tribes occupying the reservation the right to take fish from the Klamath and Trinity rivers."

In addition, the memo stated that "both tribal rights to fish and to the water needed to make the fishing right meaningful are tribal assets, which the Secretary has an obligation as trustee to manage for the benefit of the tribes."

In 1988, Suagee filed an administrative appeal with the Bureau's Mid-Pacific Region objecting to "dry year" reduc-

tions in fishery flows released into the Trinity River by the Bureau's Trinity River Division dams which are part of the CVP.

The Bureau had contended in the past that it was bound by the 1981 Secretarial Issue Document (SID) which bases instream flows on the forecasted inflow to the Shasta Reservoir which determines if a water year will be normal, dry or critically dry. Releases from the division dams are scheduled on that criteria which provides 340,000 acre feet in a normal year, 220,000 acre feet in a dry year and 140,000 acre feet in a critically dry year for the Trinity River.

Trinity Lake holds a maximum of 2.5 million acre feet, which has not been seen for several years due to the drought. In 1980, environmental documents from the Department of Interior stated that over one million acre feet of water was exported annually from the Trinity Basin which made up about 14 percent of the CVP's "firm yield" water supply of 8.1 million acre feet.

In recent years, the CVP has exported considerably less water from the basin with total project delivery in 1989 only being about 7 million acre feet.

The SID was an attempt to provide necessary flows in the river that would restore populations of salmon and steelhead which had declined up to 90 percent since the CVP dams were built in the early 1960s.

In a 1980 memo, then-Secretary of Interior Cecil Andrus stated that Congress had given him, under the 1955 Trinity River Act, "not only the authority, but the responsibility to mitigate the damage to the Trinity fishery" and a requirement to protect the fishery.

Andrus went on to say that the "requirement is underscored by the trust responsibility owed to the Hoopa and Yurok Indian Tribes, whose right to

fish is affected by the releases downstream in the Trinity."

He also requested an Environmental Impact Statement be done by the USF&W, Bureau of Indian Affairs and Water and Power Resources Service jointly to discuss the various operating regimes for the river.

Tribal rights were discussed in that EIS and it was stated in the document that "the Secretary may not abrogate these rights even if the benefit to a portion of the public from such an abrogation would be greater than the loss to the Indians."

A summary of the EIS stated that the Indian tribes have depended upon the salmon and steelhead fisheries for subsistence, ceremonial and economic needs and those fisheries had provided the mainstay of the Indian economy in the area.

"The decline of the fisheries has preempted opportunities to achieve status and wealth, and greatly reduced opportunities for employment and dollar value," it was written in the summary.

Andrus chose the alternative in the EIS which then created the SID, commonly known as the Andrus Decision, which based released flows according to the forecasted Shasta Reservoir inflow.

According to a 1980 agreement between the USF&W and the Water and Power Resources Service, the definitions of normal, dry and critically dry years were consistent with those used in many CVP power and water service contracts.

In a March 1989 letter to Secretary Lujan, Suagee pointed out that the Trinity River flows through the Hoopa Valley Reservation and "reduced flows violate tribal instream water rights." He went on to say that "grossly inadequate departmental appeal procedures" had

continued on page 3

Hoopa Tribe water rights...

continued from page 1

resulted in no "meaningful or timely" response from the Bureau's Mid-Region office regarding an appeal of 1988 flows and hence he had decided to file the appeal directly with the Secretary of Interior.

As part of the on-going appeal, Suagee wrote to Lujan in January 1990 urging him to seriously look into the matter of a violation of tribal water rights through instream flow reductions. He pressed the issue that Department of Interior documentation used to establish the 1981 SID "acknowledges that 340,000 acre feet is the minimum annual Trinity River flow volume for restoration of the natural fishery in accordance with trust standards, and that flow reductions in dry and crucial years will harm the fishery."

Suagee went on to say that the Bureau was mismanaging the river's cold water resource because the delivery system is "wasteful and inefficient, and the CVP's operational regime improperly favors the CVP and the Sacramento Basin ...

"The integrated operation of the CVP/ State Water Project system effectively commingles Trinity waters with all other CVP waters without first providing adequate protections for Trinity instream flows," he stated in the letter.

"It therefore necessarily follows that virtually any major CVP action has the potential to impact Trinity streamflows, either by increasing the demand to export more Trinity water or by further constraining operational alternatives in ways that favor hydro-power production or irrigated agriculture in the Central Valley."

This past May, Suagee again appealed to the Secretary that then-predicted "critically dry" year flows of 140,000 acre feet would again be in violation of tribal rights.

Heavy rains later that month resulted in an increase of flows to 220,000 acre feet, which was still short of the 340,000 acre feet requested by the USF&W as necessary to prevent long-term "hardships" and "potentially devastat-

ing" impacts on the Trinity River fishery due to low flows.

Complaints were heard at the time from the Hoopa Tribe and Trinity County officials that the Bureau was giving the water needs of its CVP contractors a higher priority than the needs of the Trinity River Basin.

Local Bureau representatives said the agency was bound by the contracts to irrigators in the south to provide 100 percent delivery under the dry-year criteria in the SID.

In arguing his appeal, Suagee has disagreed with the Bureau's stand that any change in the SID, even from the Secretary of Interior, would need some type of National Environmental Policy Act (NEPA) review. According to Suagee, under a mandatory trust obligation, such as the Secretary has to the Hoopa Tribe, there is an exemption under NEPA as long as there is sufficient existing documentation to support a change in the SID.

He said the SID was based on an EIS that addressed impacts of increased flows on both the Trinity River and the CVP, which along with data collected over the last 10 years, is more than enough information for Lujan to make a decision without a NEPA review.

Suagee said the Bureau's argument that a NEPA review is necessary is just a "stalling tactic" by the Mid Pacific Region to do any reform on water policy regarding CVP deliveries.

The change Suagee is seeking would call for a base volume of not less than 340,000 acre feet annually into the Trinity River and the elimination of any dry or critically dry year reductions in the base flow volume.

Among many other items the Hoopa Tribe is seeking in variations to how the Trinity River is presently managed are compliance with meaningful fishery temperature standards and the identification of a minimum carry-over storage in Trinity Lake to attain those standards.

In the January 1990 letter to Lujan, Suagee said, "Until trust responsibilities are fulfilled, Trinity River water may not be marketed nor may existing CVP contracts be renewed."

Suagee has always argued that the Hoopa Tribe has the most ancient water rights in California, being a fishing tribe that has lived in its aboriginal territory for more than 10,000 years. Therefore he believes the tribe should have first consideration for water rights on the Trinity River.

He said the Trinity River water should be used "first and foremost" for the needs in the Trinity Basin such as fisheries, drinking water, irrigation, etc. Those needs, he said, should be protected "off the top before any water is shipped out of the basin."

Suagee sees the most recent letter from Lujan to the tribe as a step in the right direction toward restoring flows in the river and due to the recent developments he provided the Trinity River

Task Force, of which the Hoopa Tribe is a member, with ammunition to lobby the Secretary with.

He said the letter from Lujan was the result of the coordinated efforts of three under secretaries from Indian Affairs: Fish, Wildlife and Parks; and Water and Science. The "working group" will also be involved in providing recommendations to Lujan for his action and consideration on altering the SID, according to USF&W officials.

At last week's meeting of the Task Force's Technical Coordinating Committee meeting, a draft letter was approved for submission to the Task Force for approval and signature asking Lujan to provide 340,000 acre feet of water in the river regardless of any determination that the 1991 water year will be normal, dry or critically dry.

A water years runs from April 1 to March 31.

Mike Acienino, project manager for the USF&W Trinity River Flow Evaluation Study, gave abundant support to the draft letter, originally written by Suagee. He said 340,000 acre feet flows will be necessary for two consecutive years and the last year of the 12-year study, which began in 1985, to realistically complete the study with the necessary data requested by the Secretary of Interior.

TCC member Chuck Lane of the USF&W also lent his support saying the Task Force now has the opportunity to live up to its purpose regarding what's good for restoration.

Ed Solbos from the Bureau's Trinity River Field Office said he would not recommend that Larry Hancock, Regional director of the Bureau and chairman of the Task force, sign the letter.

Solbos, a non-voting member of the

TCC, added however, he did not feel comfortable saying what Hancock would indeed do.

Suagee argued that the TCC and the Task Force now have the opportunity to finally say there has never been more than 25 percent of the Trinity River flowing down the river since 1963 and in order for restoration to occur, that has to change.

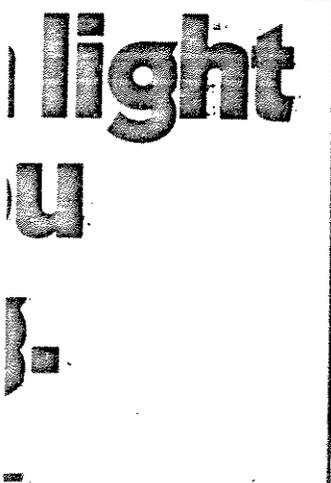
He said year after year the needs of the restoration program and its relationship with the flow evaluation study are subject to an annual crisis of normal dry or critically dry year determinations by the Bureau.

With a few changes to the initial draft, the letter was approved by the TCC with Bureau representative Bob Shaffer voting against it.

The letter states that deficiencies exist in the current departmental policy governing fishery stream flows released in the Trinity River by the CVP and that "flow volumes and criteria prescribed for dry and critically dry years are inadequate to promote and maintain a restored anadromous fishery in the Trinity River below Lewiston Dam."

If approved by the Task Force at its September 7 meeting, the letter will be forwarded to Lujan asking for the 340,000 acre feet for next year based on existing USF&W documentation and a review of the flow requirements and other needs of the Trinity River Restoration Program with policy recommendations to be developed by next spring.

Regardless of action taken by the Task Force, the Hoopa Tribe will keep up its fight to retain tribal water rights having given the issue top priority. For the past several years, Suagee has taken the tribe's arguments to local, state and federal officials and legislators, an effort that appears to now be paying off



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TRINITY ALPS RESORT

672. Therefore, we hold that Interior has authority under 25 U.S.C. §§ 2, 9, to regulate Indian fishing on the Hoopa Valley Reservation consistent with its obligations to manage and conserve Indian resources.

IV.

We next consider the proper standard of review of regulations promulgated by Interior in the exercise of its trust responsibilities. We need not consider regulations purporting to implement statutorily mandated abrogation of previous rights because this case does not involve a congressional statute modifying Indian rights. But the validity of these regulations need not be reviewed under standards applicable to state conservation measures either, because this case does not involve the exercise of a state's police power to regulate tribal rights. The challenge to these fishing regulations should be considered under standards generally applicable to an attack on agency rule-making.

Only Congress can modify or abrogate Indian tribal rights; it will be held to have done so only when its intention to do so has been made absolutely clear. *United States v. Washington*, 641 F.2d 1368, 1371 [8 Indian L. Rep. 2126] (9th Cir. 1981), cert. denied, 454 U.S. 1143 (1982); *Menominee Tribe v. United States*, 391 U.S. 404, 412-13 (1968); *Lone Wolf v. Hitchcock*, 187 U.S. 553, 566 (1903). But congressional intent to abrogate tribal rights may be found in the express provisions of an act or in its surrounding circumstances and legislative history. *Washington State Charterboat Association v. Baldrige*, 702 F.2d 820, 823 [10 Indian L. Rep. 2099] (9th Cir. 1983), cert. denied, 104 S. Ct. 736 (1984).

In *United States v. Fryberg*, we found that in enacting the Eagle Protection Act, 16 U.S.C. §§ 668-668d (1982), Congress intended to permanently modify Indian tribal rights by prohibiting the taking of bald eagles without a permit.¹⁰ 622 F.2d at 1016. Given the broad purpose of the Act to protect the bald eagle and prevent its extinction, we held that Congress could prohibit all threats to the species without regard to the existence of treaty hunting rights. *Id.* In this case, Interior's regulations are designed to manage the fishery for the benefit of the Indians, not to extinguish any reserved tribal fishing rights. Interior makes clear the temporary nature of the ban and that commercial fishing will be allowed to resume when the fishery can withstand the increased harvest. Thus, the district court erred in analogizing this case to the ban on taking bald eagles in *Fryberg* and thereby finding these regulations invalid in the absence of demonstrated congressional intent to work an abrogation of the Indians' fishing rights.

Unlike Congress, states may not qualify Indian fishing rights. *Puyallup Tribe v. Department of Game (Puyallup I)*, 391 U.S. 392, 398 (1968); *Sohappy*, 770 F.2d at 823; *Fryberg*, 622 F.2d at 1014-15. However, states may regulate Indian rights in the interest of conservation by an appropriate exercise of their police power. State regulation for conservation purposes is based on the state's interest in protecting fish and wildlife resources for the benefit of its citizens. See *Puyallup Tribe v. Department of Game (Puyallup III)*, 433 U.S. 165, 175-76 (1977); see also *United States v. Michigan*, 653 F.2d 277, 279 (6th Cir.), cert. denied, 454 U.S. 1124 (1981). The violation of state conservation laws is a federal offense. 16

U.S.C. § 3372(a)(2) (1982); see *Sohappy*, 770 F.2d at 823-24.

A state must show that any regulation of Indian fishing rights is both reasonable and necessary for conservation purposes. *Antoine v. Washington*, 420 U.S. 194, 207 (1975); *Sohappy*, 770 F.2d at 823. State regulations meeting these standards may extend to the manner of fishing, the size of the take, and the restriction of commercial fishing. *Puyallup I*, 391 U.S. at 398. In the context of state regulation of Indian fishing rights, we have rejected the endangered species approach to conservation, finding that fishing limitations may be proper even though extinction is not imminent. *United States v. Oregon*, 718 F.2d 299, 305 [10 Indian L. Rep. 2218] (9th Cir. 1983).

This case involves regulations promulgated by Interior acting as trustee for the tribes occupying the Hoopa Valley Reservation, rather than state regulation designed to protect the interests of non-Indians. The type of showing of conservation necessity required to justify state regulation of Indian fishing has not been precisely defined. *Id.* at 303. However, as appellees recognize, Interior has a broader scope of authority to regulate Indian fishing than do the states. Therefore, it is clear that the district court erred in requiring Interior to justify the ban on commercial fishing by showing that the fish resources of the Hoopa Valley Reservation were facing imminent extinction.

Interior promulgated the Indian fishing regulations, including the commercial fishing moratorium, pursuant to the rule making provisions of the Administrative Procedure Act, 5 U.S.C. § 553 (1982). The scope of judicial review of challenges to agency action, including administrative rule making, is set forth in 5 U.S.C. § 706 (1982). See *Citizens to Preserve Overton Park v. Volpe*, 401 U.S. 402, 413-14 (1971). These standards apply to appellees' challenge to the regulations at issue in this case.

The Indian fishing regulations may be set aside if they are arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with the law. See 5 U.S.C. § 706(2)(A) (1982); *Citizens to Preserve Overton Park*, 401 U.S. at 413-14; *American Tunaboat Association v. Baldrige*, 738 F.2d 1013, 1016 (9th Cir. 1984). Moreover, Interior must have observed the procedures required by law in promulgating the regulations. See 5 U.S.C. § 706(2)(D) (1982); *Citizens to Preserve Overton Park*, 401 U.S. at 414. However, absent a finding that Interior improperly exercised its rule-making authority, there is no basis to invalidate these regulations despite their impact in managing the fishing rights of Hoopa Valley Reservation Indians.

V.

The district court found that the regulations under which the appellees were prosecuted invalid as an unauthorized modification of reserved tribal rights and did not consider whether the regulations are arbitrary and capricious or discriminatory. We decline to reach these issues here. Because we hold that Interior did not exceed its statutory authority in promulgating fishing regulations for the Hoopa Valley Reservation, we reverse the district court orders which dismissed the informations and indictment in these cases on the ground that the regulations are unauthorized. We order the prosecutions reinstated and remand for further proceedings consistent with this opinion.

BEEZER, Circuit Judge, concurring:

I concur in the opinion of the court. I write separately to express deep concerns about the disjointed management of the Klamath River basin anadromous fishery resource. This fishery is managed separately by the Department of Commerce

¹⁰But cf. *United States v. Dion*, 752 F.2d 1261 [12 Indian L. Rep. 2036] (8th Cir. 1985) (en banc) (Eagle Protection Act does not reflect congressional intent to abrogate Indian treaty right to hunt eagles on reservation for noncommercial purpose), on remand, 762 F.2d 674 [12 Indian L. Rep. 2095] (8th Cir.), cert. granted, 106 S. Ct. 270 (1985).

and the Department of the Interior with an apparent lack of any coordination. The primary victims of this mismanagement have been the Indians on the Hoopa Valley Indian Reservation, who are being deprived of any commercial access to this valuable resource.

Anadromous fish hatch in freshwater streams and rivers, migrate to the ocean where they mature, and return to the freshwater places of their birth to spawn and die. The preservation of the species depends on an adequate level of escapement, *i.e.*, sufficient numbers of fish avoiding capture and returning upriver from the ocean to spawn. Thus, any effort to conserve this dwindling resource demands coordinated regulation of harvests at every stage of migration.

The Department of the Interior, exercising its general authority over Indian affairs under 25 U.S.C. §§ 2 and 9, has imposed a ban on commercial fishing by Indians on the reservation as a necessary measure to conserve the severely depressed anadromous fishery resource.

The ocean fishery is managed by the Pacific Fishery Management Council (PFMC), established by the Fishery Conservation and Management Act of 1976, 16 U.S.C. § 1852(a)(6), which recommends ocean fishing regulations to the Department of Commerce. *See generally Hoh Indian Tribe v. Baldrige*, 522 F. Supp. 683, 685 (W.D. Wash. 1981).

The Indian defendants in this case quite properly claim that, since the Department of Commerce fails to provide for adequate escapement from the coastal waters, the Indians on the Hoopa Valley Reservation must bear most of the burden of conservation measures. While the Department of the Interior has imposed a moratorium on commercial fishing by Indians, offshore domestic and foreign commercial fisheries continue to harvest the same fish that spawn in the Klamah River basin.

It is apparent that overharvesting by the ocean fisheries, resulting in too few anadromous fish returning to the Klam-

ath River to meet spawning escapement goals, has been the primary cause for depletion of this natural resource.¹ The ocean fisheries have not been required to bear their full share of the conservation burden.

In recent years, the Department of Commerce has taken some initial steps in the right direction. However, while there has been some shortening of the commercial fishing season in coastal waters, it appears that shortened seasons result only in more intense fishing during that period. In 1985, the Department closed the coastal waters between Point Delgada, California, and Cape Blanco, Oregon to commercial fishing. It remains to be seen whether this will prove successful. The anadromous fish that spawn in the Klamath River basin range far and wide in the ocean, and it may be that only catch limits will meet conservation goals.

It must be remembered that the trust duty to reservation Indians is owed, not just by the Department of the Interior, but by the entire federal government. Until both the Department of the Interior and the Department of Commerce coordinate fishery management, the Indians will be denied their fair share, or any commercial share for that matter, of the available resource. The right to take fish from the Klamath River was reserved to the Indians when the Hoopa Valley Reservation was created. Cooperation among all agencies of the government is essential to preserve those Indian fishing rights to the greatest extent possible. Any sacrifice necessary to conserve the fishery resource should be fairly shared among all fish harvesters.

Counsel for appellant: Blake A. Watson, Dept. of Justice, Washington, D.C.

Counsel for appellee: Geoffrey Hansen, Laurence J. Litcher, both of San Francisco, California; Michael Pfeffer, Oakland, California

¹Between 1976 and 1984, 67 percent of the fish taken were harvested by commercial fisheries and only 8 percent by Indian gill net fishers. Bureau of Indian Affairs, Environmental Impact Statement, *Indian Fishing Regulations* 29 (1985). In 1983, the year for which defendants are charged with selling salmon, 79 percent of the Klamath River anadromous fish taken were harvested by ocean fisheries, and only 13.6 percent by reservation Indians. Certified record 33, exhibit B.

----- EXTRACT FROM -----

DRAFT
AMENDMENT 10

TO THE FISHERY MANAGEMENT PLAN FOR
COMMERCIAL AND RECREATIONAL SALMON FISHERIES
OFF THE COASTS OF WASHINGTON, OREGON, AND CALIFORNIA
COMMENCING IN 1978

Incorporating the Environmental Assessment,
Regulatory Impact Review/Initial Regulatory Flexibility Analysis
and
Requirements of Other Applicable Law

Pacific Fishery Management Council
Metro Center, Suite 420
2000 SW First Avenue
Portland, Oregon 97201

October 1990

A summary of each amendment issue is provided below.

Issue 1 - Achievement of Recreational Season Duration Goals
Between Cape Falcon and Humbug Mountain Following
Inseason Reallocation to the Commercial Fishery

Issue 1 is primarily a technical issue that examines two alternatives to the current salmon fishery management plan (FMP) which clarify the timing, objectives and procedures for reallocating coho from the recreational to the commercial fishery. Alternatives 2 and 3 reduce the risk of: (1) reallocating too many coho to the commercial fishery and thereby preempting the recreational season before its scheduled closing date or (2) reallocating too few coho to the commercial fishery and thereby limiting harvest more than necessary. These alternatives do not have any quantifiable biological, social or economic impacts that are different from the present FMP (Alternative 1).

Alternative 2 simply changes the current FMP reallocation timing statement from "near the first of August" to "near August 15". This change more closely reflects the management practice and reality since the reallocation process was instituted in 1987. Alternative 3 clarifies, but does not change, the objectives of the reallocation procedure in the current FMP and specifies a general time frame rather than a specific date for the reallocation. This management approach acknowledges that the timing and procedures of the reallocation may need to vary in some years to best achieve the FMP objectives.

Issue 2 - Modification of the Klamath River
Fall Chinook Salmon Spawning Escapement Goal

Issue 2 concerns the current FMP spawning escapement goal for Klamath River fall chinook salmon and achievement of optimum yield from the ocean and inriver fisheries which impact the Klamath River stock. This issue examines one alternative (Alternative 2) to the current Klamath River fall chinook spawning escapement goal.

Alternative 2 of this issue is identical to the current harvest rate spawning escapement goal (Alternative 1) except for one modification. It sets a partial ceiling on the escapement of naturally spawning fish in any year at 70,000 adults. Of the salmon in excess to the 70,000 escapement level, one-half of the fish would be allowed to spawn and one-half would be available for harvest. Under this alternative, the cohort escapement rate is 33 to 34 percent (present Council determination), but can be lower if the returning adults would be part of a spawning escapement exceeding 70,000 naturally spawning adults.

If the maximum sustained yield (MSY) spawning escapement level for naturally produced Klamath River fall chinook salmon is near or below 70,000 adults, the long-term fishery yield from Alternative 2 could be slightly higher than the yield under Alternative 1. An analysis of the partial spawning escapement ceiling of 70,000 from Alternative 2, utilizing a model designed to maximize the long-term yield of the fisheries, estimated an overall increase in landings of 2 percent over that achieved under the present escapement rate goal. However, the model instituted reductions in landings of about 10 percent in years of normal abundance to achieve the 2 percent increase. This harvest reduction in years of normal abundance is not part of Alternative 2.

Alternative 2 achieves increases in landings in years of high abundance but could decrease landings in the subsequent year. These wide swings in landings for the comparatively small overall landings increase that might accrue could be detrimental to the stability of fisheries, especially in low abundance years.

Issue 3 – Modification of Criteria Guiding the Nontreaty Catch
Allocation North of Cape Falcon

Issue 3 concerns modification of the criteria which guide the allocation of harvest for the nontreaty troll and recreational fisheries north of Cape Falcon, including inseason and geographic deviations from the overall nontreaty catch allocation schedule. This issue consists of three parts which seek to improve upon the 1989 amendment of the north of Cape Falcon harvest allocation. The first part seeks to clarify that the total allowable catch (TAC) need not be reallocated between the two gear groups (recreational and troll) when inseason management changes result in adjustment of fishery impacts which change the TAC of one gear group. The second part applies to the commercial fishery and proposes a simpler standard for guiding geographic deviations from the overall preseason harvest allocation for the purpose of protecting weak stocks. The third part proposes specific criteria to guide geographic distribution of the overall recreational TAC. These changes to the present plan are incorporated in Alternative 2.

Alternative 2 would retain all of the language of the present FMP (ninth amendment) except for the last of four criteria (Criterion 4) which guide deviations from the initial preseason allocation. In place of the present Criterion 4, Alternative 2 would add three new criteria (4, 5, and 6) to clarify deviations from the overall harvest allocation.

First, Alternative 2 clarifies that any increase or decrease in the recreational or commercial TAC, resulting from an inseason restructuring of a fishery or other inseason management action, does not require reallocation of the overall north of Cape Falcon nontreaty TAC. Second, a new Criterion 5 would specify the allowable geographic deviation in the harvest distribution of the commercial TAC. The criterion requires a coastwide opening of any May–June chinook season and requires a minimum of 60 percent of the all–salmon season coho quota for the area north of Leadbetter Point and a minimum of 25 percent for the area south of Leadbetter Point, unless 75 percent or more of the overall commercial coho TAC is used for a coastwide season.

Finally, Alternative 2 provides Criterion 6 which specifies the recreational distribution of coho and chinook among the three major recreation subareas. Criterion 6 requires the north of Cape Falcon preseason recreational TAC of coho be distributed to provide 50 percent to the area north of Leadbetter Point and 50 percent to the area south of Leadbetter Point. In years with no Area 4B fishery, the distribution of coho north of Leadbetter Point will be divided to provide 74 percent to the subarea between Leadbetter Point and the Queets River (Westport) and 26 percent to the subarea north of the Queets River (Neah Bay/La Push). In years when there is an Area 4B fishery, 25 percent of the numerical value of that fishery shall be added to the recreational TAC north of Leadbetter Point prior to applying the sharing percentages. That same value would then be subtracted from the Neah Bay/La Push share in order to maintain the same total distribution north of Leadbetter Point. The chinook will be distributed with the primary objective of achieving the subarea all–species fisheries without imposing chinook catch restrictions. The subarea distributions of chinook will be managed as guidelines, rather than quotas.

Issue 4 - Definition of Overfishing

Under the National Oceanic and Atmospheric Administration's most recently published final rule of "Guidelines for Fishery Management Plans," all FMPs are required to contain a definition of overfishing for each managed stock or stock complex covered by the FMP. This requirement is based on the need to meet National Standard 1 of the Magnuson Fishery Conservation and Management Act which states: "Conservation and management measures shall prevent overfishing while achieving, on a continuing basis, the optimum yield from each fishery."

The Council's definition of overfishing is based on the spawning escapement goals for chinook and coho salmon stocks specified in the salmon FMP. Because spawning escapement goals tend to reflect estimates of MSY for a stock, they provide a much greater level of harvest restraint than any alternative definition based on a minimum threshold below which a stock might not recover.

The Council proposes to define overfishing as an overall harvest level or pattern that results in a failure to meet annual spawning escapement goals, as specified in Section 3.5 of the salmon FMP, for three consecutive years for coho stocks and four consecutive years for chinook stocks.

If overfishing, as defined above, is detected for a specific stock or stock grouping, the Council shall appoint a joint work group which includes members of the Salmon Technical Team and Scientific and Statistical Committee to investigate the apparent causes of overfishing (e.g., consistent overestimation of preseason abundance, adverse marine or freshwater environmental conditions, etc.). The work group will report its conclusions and recommendations to the Council. Possible Council actions include changes in preseason prediction methodology, recommendations for habitat improvements, revision of the spawning escapement goal, a reduction in ocean harvest impacts when shown to be effective in achieving the spawning escapement goal, etc.

Thank you for your interest in improving our salmon FMP.

Sincerely,

Lawrence D. Six
Executive Director

JCC:mmp
Attachments

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FMP

Council. 1984. Final framework amendment for managing the ocean salmon fisheries off the coasts of Washington, Oregon, and California commencing in 1985.

Council. 1986. Seventh amendment to the fishery management plan for commercial and recreational salmon fisheries off the coasts of Washington, Oregon, and California commencing in 1978.

Regulations

50 CFR Part 661, Appendix Section II.B.2.(b)(iii)

ISSUE 2 - MODIFICATION OF THE KLAMATH RIVER FALL CHINOOK SALMON SPAWNING ESCAPEMENT GOAL

This issue concerns the current FMP spawning escapement goal for Klamath River fall chinook salmon and achievement of OY from the ocean and inriver fisheries which impact the Klamath River stock. Concern with this issue arose primarily in the initial implementation of the ninth amendment to the salmon FMP during the 1989 preseason regulatory process.

Purpose and Need for Action

Background

The ninth amendment (implemented in 1989) included a new spawning escapement goal for Klamath River fall chinook salmon which was expressed as a spawning escapement rate for natural adult spawners (based on estimates of the productivity of the stock). The Council adopted an escapement rate, rather than a fixed escapement goal, because there is significant uncertainty over the specific spawning escapement needed to achieve MSY. A comparison of the fixed escapement goal versus a harvest rate goal was developed by the KRTT of the KRSMG. Given uncertainty over the MSY spawning escapement level, the KRTT analysis indicated greater long-term yield and more annual harvest stability could be achieved with the escapement rate plan (KRTT 1986).

In addition to the achievement of higher long-term yield and harvest stability, an important aspect of the escapement rate goal is that it should produce a valuable data base. Over many years, by allowing the spawning escapement to vary with stock abundance, data can be obtained to reduce uncertainty over the spawning escapement level needed to achieve MSY under equilibrium conditions. If spawning escapements are not allowed to range in proportion to stock abundance, determination of MSY will be delayed and the Council's ability to manage the resource for OY will be diminished.

The initial Klamath River fall chinook natural spawning escapement rate was set at 35 percent of the potential adults from each brood of natural spawners, but no fewer than 35,000 naturally spawning adults in any one year. Over time, natural spawning escapements at the goal rate should begin to stabilize around the level needed to achieve MSY. As with all escapement goals, the Klamath River fall chinook spawning escapement rate is subject to technical review and modification without FMP amendment upon approval of the STT and Council. This

was done in 1989 when the spawning escapement rate goal was modified from 35 percent to a range of 33 to 34 percent. This change was based on reassessment by the KRTAT and STT of the biological parameters used to determine the escapement rate most likely to achieve MSY. This same rate was used in 1990.

Achievement of OY

Spawning escapement goals are fixed elements of the FMP which establish the TAC in both the ocean and inside fisheries which is available to meet OY in any given year. The actual OY is determined by the allocation of the TAC among the various ocean and inside fisheries and annual management measures to achieve social and economic objectives of the FMP. The OY is defined at Section 3 (18) of the MFCMA and Section 3.3 of the framework amendment.

During hearings on the ninth amendment and in the 1989 preseason salmon management process, some managers and fishermen contended that the FMP should allow more annual flexibility in the choice of the spawning escapement rate for Klamath River fall chinook, especially when abundance is high, to avoid over escapement of spawners and to respond to social and economic needs of the fishing industry. In the preseason process, these parties contended that this flexibility was necessary to the Council's determination of OY as required by the MFCMA. Further, some contended drought conditions in the Klamath River Basin would not support nearly as many spawners as the FMP required.

At issue in 1989 was whether the Council should request an emergency regulation to reduce the Klamath River fall chinook natural spawning escapement level below the FMP goal, or maintain the goal and significantly reduce commercial ocean salmon fisheries in the areas which impact Klamath River fall chinook. Some fishermen and managers contended that the adopted spawning escapement level of approximately 80,000 naturally spawning fall chinook was over twice the escapement floor (35,000) and well above any possible MSY escapement level. In addition, the spawning escapement for the past three years has been at the highest levels ever recorded since records began in 1978. A reduction in the goal would allow more liberal fisheries rather than exacting a heavy toll on salmon fishermen and local communities which depended on their welfare.

In its final decision for the 1989 ocean salmon seasons, the Council upheld the need to meet the newly implemented Klamath River fall chinook spawning escapement goal which had been developed over several years and had KFMC concurrence. In rejecting the request to deviate from the goal, the Council cited a lack of substantive socio-economic data to indicate that an emergency regulation was necessary when viewed in terms of the harvest impacts on all commercial fisheries south of Cape Falcon. The Council's action also conformed with the stated goal of allowing the spawning escapement to vary in proportion to stock strength and thereby provide data from which to eventually determine MSY. Without a more precise estimate of MSY, achievement of OY is extremely uncertain.

Again in 1990, the ocean commercial salmon fishing industry representatives and representatives of the business communities within the Klamath management zone recommended the Klamath River fall chinook spawning escapement goal be reduced to provide more reasonable ocean and inriver commercial (tribal) fisheries. Expected drought conditions were also raised as another reason for reducing the escapement. However, in 1990 the expected escapement of natural spawners (about 50,000) was far less than that expected in 1989. The Council did not recommend an emergency spawning escapement reduction.

The procedures by which OY is determined and its relationship to the Klamath River fall chinook spawning escapement goal should be clear to the Council members and public. The two alternatives proposed below provide different ways in which the Council could determine the annual spawning escapement for Klamath River fall chinook which is pivotal in determining the final allowable ocean catch.

Proposed Alternatives

Alternative 1 - Total Allowable Harvest for OY is Best Achieved by Meeting the Present Spawning Escapement Goal (Status Quo)

Under this alternative, the present language of the ninth amendment defines the spawning escapement goal for Klamath River fall chinook as a percentage of each brood year of natural spawners which, within the limits of current knowledge, best approximates the MSY level of production. This escapement percentage establishes the subsequent overall ocean and inriver harvest rate available to obtain OY and is designed to allow spawning escapements to vary over time with stock abundance to provide data with which to eventually develop an estimate of the MSY spawning escapement level. Over time, the natural escapements under the harvest rate plan should begin to stabilize around MSY.

Each year, the STT may review the current spawning escapement rate goal (33 to 34 percent in 1989 and 1990) to determine if it is the most appropriate rate to achieve MSY. If the STT believes or concurs with evidence that the current rate is not the best assessment of the rate to achieve MSY, it must provide its determination of the appropriate rate to the Council. Without FMP amendment or an emergency rule, the rate can be modified only upon approval of the STT and Council, or upon action by a federal court. The spawning escapement rate goal must also be modified to assure a minimum of 35,000 naturally spawning adults in those years in which the goal rate would not meet this minimum. This minimum floor can only be changed by FMP amendment.

Alternative 2 - Total Allowable Harvest for OY Requires Deviation from the Present Spawning Escapement Goal at High Abundance Levels

The objective of Klamath River fall chinook management under this alternative is to allow a fixed percentage of the potential adults from each brood of natural spawners to escape the fisheries and spawn, subject to a minimum escapement level and to a reduction in the escapement rate for broods which are part of a natural spawning escapement projected to exceed 70,000 adults. Except for the reduction in natural spawning escapement rate at levels above 70,000, the present language adopted in the ninth amendment would define the spawning escapement goal for Klamath River fall chinook (same as Alternative 1, above). The reduction in the spawning escapement rate to meet total harvest needs for OY when the spawning escapement was projected to exceed 70,000 naturally spawning Klamath River fall chinook salmon adults would be stated as follows.

When the natural spawning escapement of adult Klamath River fall chinook salmon is projected to be greater than 70,000, a reduction is allowed in the brood spawning escapement rate whereby the projected escapement in excess of 70,000 shall be allocated one-half to spawning escapement and one-half to harvest. That portion of the harvest which is allocated to the ocean fishery will be available only in the current biological year (prior to September 1).

Impacts of the Alternatives

Administrative Impacts

Implementation of the present Klamath River fall chinook spawning escapement rate goal (Alternative 1) requires extensive data analysis and computer modeling. Such complexity makes public comprehension of the basis for management decisions difficult. Alternative 2 would add a small amount of additional complexity to implementation of the escapement rate goal in years of high total stock abundance.

Biological Impacts

Alternative 1

This alternative, the harvest rate escapement plan, was developed by the KRIT (1986), a technical advisory entity to the KRSMG. It requires the establishment of harvest rate combinations in the ocean and inriver fisheries that will achieve MSY under equilibrium conditions. This plan also includes a 35,000 floor for natural spawning levels to prevent extended periods of low juvenile production. Over time, the natural escapements under the harvest rate plan should begin to stabilize around MSY.

The KRSMG defined MSY in terms of landed catch in numbers of naturally produced Klamath River fall chinook by the ocean and inriver fisheries operating under then current fishery selectivities (e.g., mesh size restrictions in the inriver gill net fishery and minimum size limits in the ocean fisheries). The harvest rate plan is based on the estimated productivity of the stock and was recommended by the KRSMG and KFMC because of uncertainty in the capacity of the Klamath-Trinity basin for naturally spawning adults.

In 1985, CDFG biologists made an assessment of the capacity for the Klamath-Trinity basin for naturally spawning fall-run chinook salmon. They estimated the range of chinook spawners at basin capacity to be 41,000 to 106,000 (Hubbell and Boydston 1985). This rather broad range reflected the uncertainty in their opinions on the number of naturally spawning adults that would fully seed the available spawning areas. An important feature of the harvest rate plan is that the spawning escapement levels will be allowed to fluctuate, thereby providing needed data on the capacity of the Klamath-Trinity basin. Such data could eventually lead to the setting of a single number natural spawning escapement goal for the Klamath-Trinity basin. A more precise estimate of the MSY spawning level would allow the Council to manage the spawning escapement to achieve greater harvest of the resource over the long term and to better define OY.

Alternative 2

This alternative is a modification of the harvest rate plan (Alternative 1). It sets a partial ceiling on the escapement of naturally spawning fish in any year at 70,000 adults. Above the 70,000 escapement level, one-half the fish would be allowed to spawn and one-half would be available for harvest. Under this alternative, the cohort escapement rate is 33 to 34 percent (present Council determination), but can be lower if the returning adults would be part of a spawning escapement exceeding 70,000 naturally spawning adults.

If the MSY spawning escapement level for naturally produced Klamath River fall chinook salmon is very near or below 70,000 adults, the long-term fishery yield under Alternative 2 could be slightly higher than the yield under Alternative 1. The KRTAT analysis of Alternative 2 (KRTAT 1990), based on a model which attempted to maximize long-term yield of the fisheries, estimated an overall increase in landings of two percent. However, the analysis used reductions in landings of about 10 percent in years of normal abundance to achieve the 2 percent increase. This reduction in harvest rate in years of normal abundance is not part of the management process under Alternative 2.

Alternative 2 achieves increased landings in years of high abundance but would decrease landings in the subsequent year. This would be particularly important if a very low abundance year followed a year where increased catch was allowed. This situation occurred from 1982 to 1983 and under Alternative 2 would have further reduced the already low allowable level of catches in 1983 (Table 1). These wide swings in landings for the comparatively small overall landings increase would be detrimental to the stability of fisheries, especially in low abundance years.

The magnitude of the harvest reduction determined by the analysis summarized in Table 1 is dependent on how the additional harvest is allocated between the ocean and inside fisheries. As the proportion of additional harvest allocated to the river fisheries is increased, the reduction in the following year would decrease. This results from the way in which the ocean abundance of Klamath River fall chinook is calculated.

Socio-Economic Impacts

Alternative 2, while increasing the average and maximum harvests, may decrease the escapement, harvest and subsequent recruitment for years which follow a year in which the 70,000 spawner ceiling is exceeded and the escapement rate is reduced below .33 to .34. These effects imply increased average benefits, but also imply an increase in variability in the salmon fishing and coastal economy. Additionally, if a year of low recruitment follows a year of high recruitment, the low recruitment situation may be intensified and result in particularly severe economic conditions for the salmon fishery. The increase in average harvest might be gained without the adverse effects of reduced harvest subsequent to a year in which the 70,000 spawner ceiling is exceeded, if all the additional harvest is taken in the river rather than in the ocean fisheries. Data from years of high recruitment may provide the Council with information which better enables it to achieve OY. However, the ability of this data to provide the Council with a more accurate estimate of MSY escapement levels needs to be carefully evaluated.

See Appendix B for more detail.

Interaction With Other Amendment Issues

There is interaction between Issues 2 and 4 (Overfishing) of this amendment. Issue 2 compares two alternative spawning escapement goals. The selected goal will form a primary part of the basis for the Council's determination of overfishing on Klamath River fall chinook. Alternative 1 is clearly an attempt to reach an MSY spawning escapement level and protects against overfishing. Alternative 2 acts to increase harvest rates only in years in which the natural spawning escapements exceed 70,000 adults. Since the escapement floor to protect

Table 1. Comparison of spawning escapement alternatives under 1980-1989 ocean abundance levels (thousands of fish) for ages-3 and -4 Klamath River fall chinook and the 1989 Council harvest allocation (0.375 ocean/0.49 river).^a

Season	Alternative 1				Alternative 2				Change Under Alternative 2			
	Ocean Harvest ^b	Inriver Harvest	Natural Escapement ^c	Ocean Harvest ^b	Inriver Harvest	Natural Escapement ^c	Ocean Harvest ^b	Inriver Harvest	Natural Escapement ^c	Ocean Harvest ^b	Inriver Harvest	Natural Escapement ^c
1980	53.7 ^d	28.8 ^d	35.0	53.7 ^d	28.8 ^d	35.0	0.0	0.0	0.0	0.0	0.0	
1981	82.2	31.4	59.8	82.2	31.4	59.8	0.0	0.0	0.0	0.0	0.0	
1982	129.4	54.4	79.3	132.6	55.8	74.6	3.2	1.4	-4.7			
1983	56.6 ^d	28.8 ^d	35.0	50.7 ^d	26.4 ^d	35.0	-5.9	-2.4	0.0			
1984	27.3 ^d	11.2 ^d	35.0	27.3 ^d	11.2 ^d	35.0	0.0	0.0	0.0			
1985	44.7 ^d	18.9 ^d	35.0	44.7 ^d	18.9 ^d	35.0	0.0	0.0	0.0			
1986	177.4	62.0	115.3	194.2	67.9	92.6	16.8	5.9	-22.7			
1987	173.2	79.3	109.2	169.1	75.0	85.8	-4.1	-4.3	-23.4			
1988	194.0	73.9	112.2	212.2	81.2	85.6	18.2	7.3	-26.6			
1989	88.8	52.5	46.9	73.1	41.9	39.4	-15.7	-10.6	-7.5			
TOTAL	1,028.3	442.2	663.7	1,041.8	440.5	579.8	14.5	-0.7	-82.9			

^a See Table II-5 in 1990 pre-season report I for population estimates (STT 1990). Fishery impacts calculated by harvest rate model with river net vulnerability set at 0.57 for age-3 fish. The decrease in the allowable harvest, under Alternative 2, in the year following an increase is dependent on the ocean and inside allocation of the harvest increase. As the inside share of the additional harvest is increased, the reduction in overall harvest the following year is decreased. This is due to the catch of immature salmon in the ocean fishery, while the river fishery catches only mature fish.

^b Includes only allowable harvest of Klamath River fall chinook.

^c Based on actual natural/hatchery escapement proportion.

^d Adjusted downward to clear escapement floor (35,000); scaled in proportion to impacts on maturing fish under 1989 allocation.

the productivity of the stock is established at 35,000 natural adults. Alternative 2 should also provide ample protection against overfishing.

Council Recommendation

The Council will make its final recommendation to the Secretary of Commerce from among the alternatives in this issue at the November 1990 Council meeting following review of the testimony presented at the public hearings.

References

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FMP

- Council. 1984. Final framework amendment for managing the ocean salmon fisheries off the coasts of Washington, Oregon and California commencing in 1985. p.3-9 through 3-20.
- _____. 1988. Ninth amendment to the fishery management plan for commercial and recreational salmon fisheries off the coasts of Washington, Oregon and California commencing in 1978.

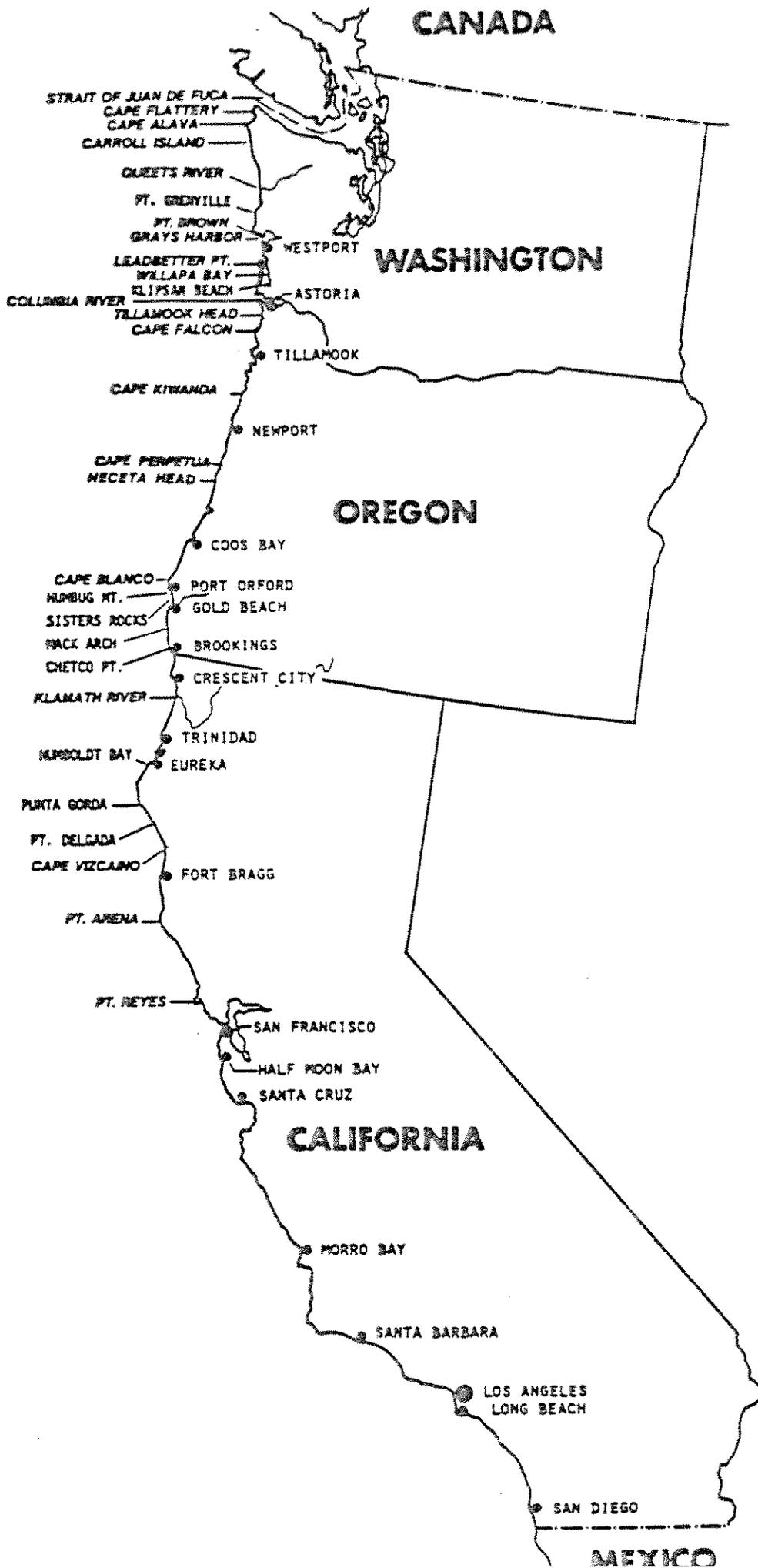
Regulations

50 CFR Section 661.22 and Appendix Section IV.

ISSUE 3 - MODIFICATION OF CRITERIA GUIDING THE NONTREATY CATCH ALLOCATION NORTH OF CAPE FALCON

Purpose and Need for Action

This issue concerns modification of the criteria which guide the allocation of harvest for the nontreaty troll and recreational fisheries north of Cape Falcon, including inseason and geographic deviations from the overall nontreaty catch allocation schedule. It consists of three parts which seek to improve upon the 1989 amendment of the north of Cape Falcon harvest allocation. The first part seeks to clarify that the TAC does not need to be reallocated between the two gear groups (recreational and troll) when inseason management changes result in adjustment of fishery impacts which change the TAC of one gear group. The second part applies to the commercial fishery and proposes a simpler standard for



M E M O R A N D U M

To: Klamath Fishery Management Council Date: November 1, 1990

From: Klamath River Technical Advisory Team

Subject: 1990 Fishery Estimates and Team Assignments

Chinook catch levels in 1990 fisheries available to date, with comparisons to the previous two years, are summarized in Attachment A. A current Team Roster is included as Attachment B.

The KRTAT met September 17-18, in Arcata to work on various items assigned to the Team last spring and reports as follows:

- A. Marking hatchery fish and harvest strategies to increase utilization of hatchery production.

At the request of the KRTAT, California Department of Fish and Game staff compiled information relating to the manpower and monetary costs of marking fish at Iron Gate Hatchery (IGH) and Trinity River Hatchery (TRH) with a single fin clip. At TRH, it would require approximately \$26,000 for initial equipment with annual costs of \$155,000. It would require about 80 personnel-months of time, mainly seasonal employees. At IGH, start-up costs were estimated at \$17,000, with an annual cost of \$260,000. About 135 personnel-months would be expended.

Due to the marking requirements for fall chinook there would be about 40 people at IGH in March and April, a situation that may impact fish rearing operations.

The KRTAT is currently developing a tool to assess the application of a marking program within the ocean and river management structure. A more complete report will be completed by the end of 1990. Initial assessment of management methods needed to increase overall chinook harvest, however, have led the Team to question a marking program's value for this purpose. First, there may not always be significant "excess" hatchery fish available for harvest due to low hatchery production or poor survival. Second, harvest methods to differentially harvest hatchery and natural fish would need to be developed. Hook and line fisheries would incur hooking mortality losses that would offset to some degree the gains in harvest that could occur by a differential harvest plan. Inriver nonlethal methods of

harvest would be an essential part of such a strategy. Further work is needed to quantify the potential gains in harvest that may be possible.

The Team's final report will also address other uses of a marking program, such as: 1) the distribution of adult hatchery fish in natural spawning areas, 2) verification of production multiplier method currently used in cohort reconstruction, 3) hatchery/natural interactions during juvenile migration, 4) ocean harvest distribution, and 5) run timing and age composition in river harvest.

B. Assessment of inseason adjustment of stock size based on catch-per-unit-of-effort (CPUE) at Fort Bragg in May and June.

Klamath fall chinook ocean stock size for age 3 and 4 fish has been projected each spring since 1985 based on regression relationships of age 2 and 3 fish in the river run the previous year (KRTAT, 1990). While the preseason estimate for age 4 fish has been reasonably accurate compared to the postseason estimate, the age 3 projection has been highly variable (Table 1).

This has resulted in errors in allowable catch levels (quotas) in the Klamath Management Zone (KMZ) commercial troll fishery as well as in the river Indian net fishery. Other fisheries (ocean commercial fisheries to the north and south of the KMZ, ocean sport fisheries and river sport fisheries) are managed on a time/area basis, and are thus not affected by stock size errors. There may be a way to adjust the stock size projection in early July based on CPUE in the Fort Bragg port area in May and June.

CPUE, expressed as commercially landed chinook per day (or chinook per delivery) during the period 1981-1989 is positively correlated with Klamath fall chinook age 3 ocean stock size estimates (Figure 1), as well as for the stock size as a whole (Figure 2). Why this relationship occurs is difficult to understand, since Klamath fall chinook make up generally only 20 to 30 percent of the total chinook available in the Fort Bragg area during May and June. The dominant stock in the area (Central Valley chinook as measured by the Central Valley Index), while showing a positive relationship with CPUE, is not nearly as strongly correlated ($r^2 = 0.66$). Other measures of stock size and various periods within May and June are poorly correlated as well. Those investigated include age 4 Klamath ocean stock size, Klamath spring chinook run

Table 1. Comparisons of Pre- and Post-season Ocean Abundance Estimates for Ages 3 and 4 Klamath River Fall Chinook, 1985-1989 Seasons

Age	Season	Preseason estimate	Postseason estimate	Pre/post
3	1985	56,500	137,300	0.41
	1986	213,000a/	592,400	0.36
	1987	255,900	388,800	0.66
	1988	185,400	586,600b/	0.32
	1989	225,300	78,100b/	2.88
				Average
4	1985	45,500	45,100	1.01
	1986	53,000	55,900	0.95
	1987	164,900	188,200	0.88
	1988	149,100	104,500	1.43
	1989	172,400	181,700	0.95
				Average

a/ 75 percent jack count adjustment applied because most of jacks were in the Trinity River. Also, the basin jack count was outside the database.

This is a very preliminary estimate as the cohort has not nearly completed its life cycle.

Fort Bragg CPUE—Klamath Population

Fall Chinook— Age 3

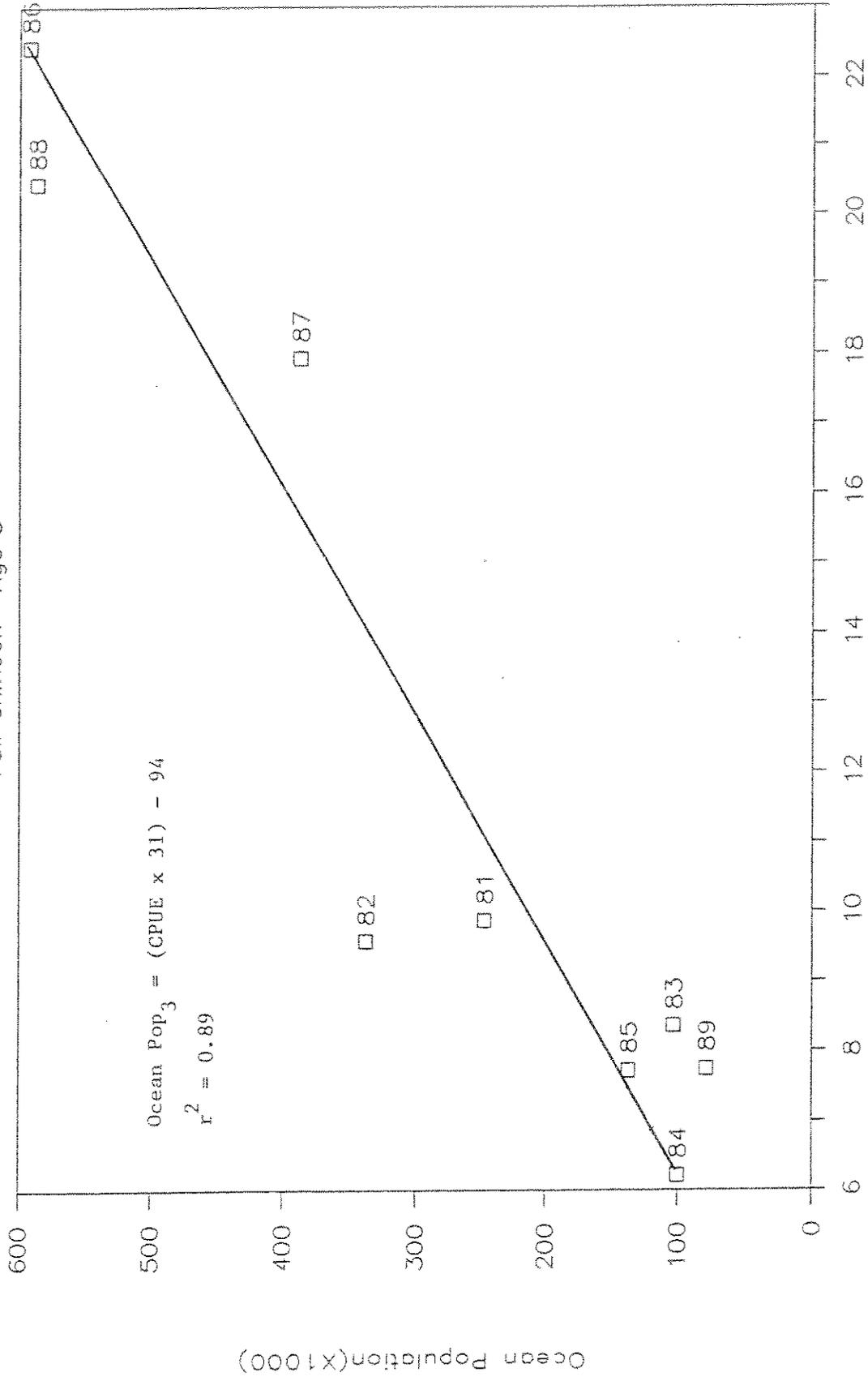
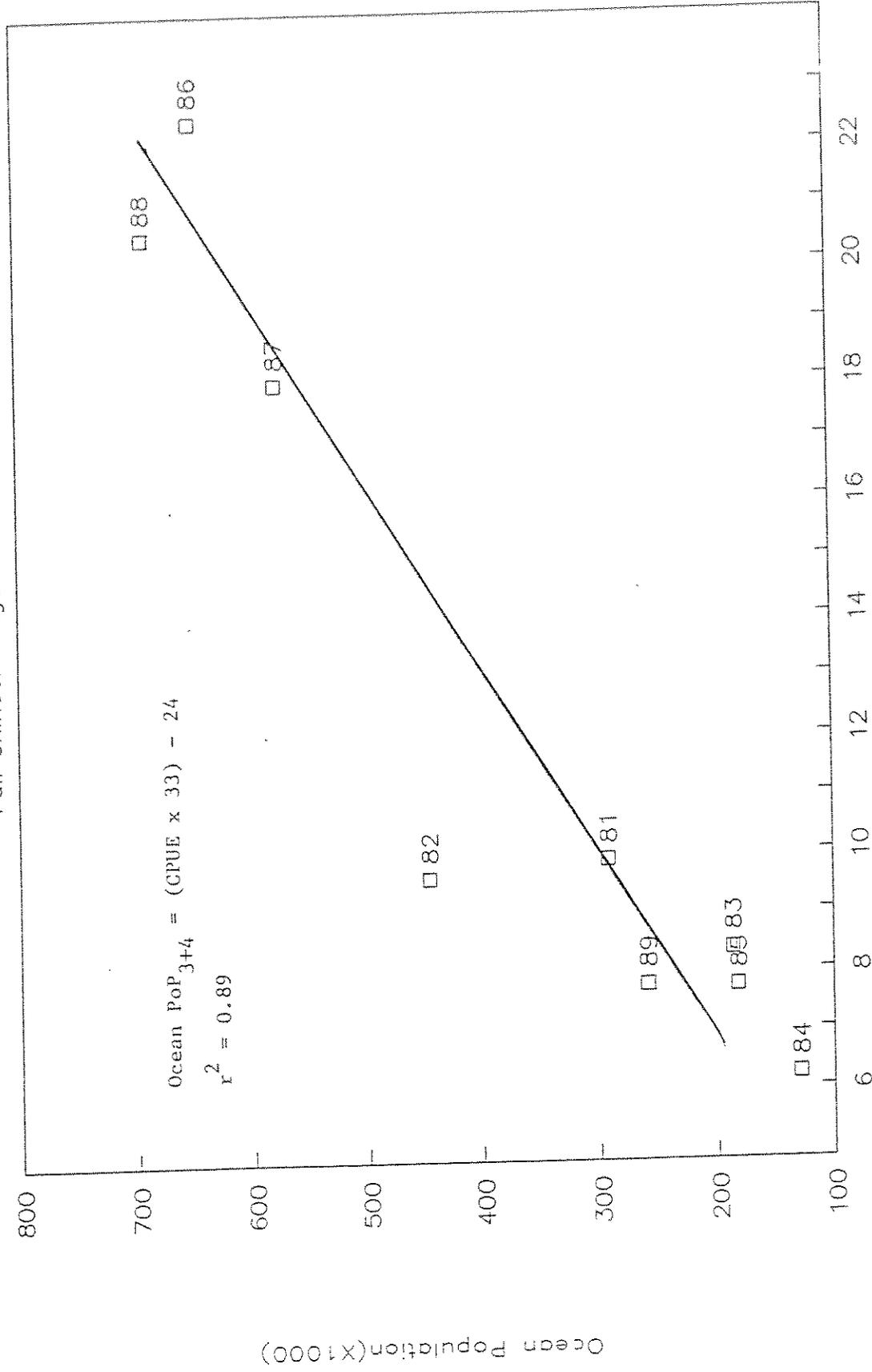


Figure 1. Chinook per day at Fort Bragg in May and June and Klamath fall chinook age 3 ocean population size, 1981-1989.

Fort Bragg CPUE—Klamath Population

Fall Chinook— Age 3 & 4



May-June chinook/day

Figure 2. Chinook per day at Fort Bragg in May and June and Klamath fall chinook age 3 and 4 ocean population size, 1981-1989.

size, and Central Valley fall chinook spawning escapement. Time periods investigated included all combinations of one-half month and full month periods during May and June.

The Team will continue to investigate the observed relationship, adding 1990 data when available. The main utility of the information, under harvest management practices used in recent years, is largely limited to adjustment in the river harvest allocation and most properly applied to age 3 fish only. Application in ocean fisheries would be limited to those occurring in late July and August managed under a harvest quota (KMZ commercial).

C. Gill net vulnerability factor for age 3 fall chinook.

The vulnerability of a fish is the probability of that fish being captured when it comes in contact with fishing gear. Due to the selectivity of the gear used in the Klamath River basin, 4- and 5-year-old chinook are considered fully vulnerable to the terminal fisheries (Indian and sport) while 3-year-old chinook are considered to be partially vulnerable to the Indian gill net fishery. When modeling the impacts of the gill net fishery the vulnerability factor is set based on data from fisheries in other years, taking into account the fishing pattern (time, area and mesh size) in the harvest plan. For 1990, a factor of 0.57 (the 1983-1989 average) was used. Generally speaking, as more net harvest occurs later in the season, with smaller mesh nets, or within the lower Trinity River, the factor would increase. The Team considers the net vulnerability factor subject to annual review and will adjust the Harvest Rate Model as appropriate based upon the 1991 harvest plan.

D. Assessment of spring chinook and coho population and exploitation.

The KRTAT reviewed work produced earlier this year by USFWS on spring chinook run size and harvest and reported to the Council prior to the 1990 fishery. An analysis of coho abundance and exploitation was initiated by USFWS but has not been completed. These analyses are being neglected due to funding constraints, with no expectation that progress will be made in the near future. The KRTAT is available for review of these issues upon further development by USFWS but does not have the manpower within the Team to do extensive analysis.

REFERENCES

KRTAT. 1990. Ocean stock size estimates and allowable harvest levels for Klamath River fall chinook, 1990 season. January 1990.

Attachment A. Chinook Catch Levels for 1990, with a Comparison to 1989 and 1988. 1/

Fishery - Area	Number of chinook		
	1990	1989	1988
Ocean Troll			
C. Falcon-Sisters Rocks 2/	223,000	315,000	392,000
KMZ	8,000	44,000	89,000
Horse Mountain-Mexico	440,000	499,000	1,235,000
Ocean Sport			
C. Falcon-Sisters Rocks	10,000	9,000	16,000
KMZ	39,000	72,000	53,000
Horse Mountain-Mexico 3/	119,000	126,000	140,000
River Net			
Estuary	4,000	37,000	38,000
Mid-Klamath	3,000	5,000	10,000
Hoopa Reservation	1,000	4,000	5,000
River Sport			
Estuary	300	2,000	3,000

1/ Preliminary, subject to revision.

2/ Through October 7.

3/ Through October 15, season closes November 18.

Attachment B

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FRAMEWORK FOR FISHERY HARVEST PLANS REQUIRED BY NMFS.

KEY POINTS TO HAVE IN HARVEST PLANS

Spring chinook, Coho, Lamprey

1. Biological views of affected stock.
 - o Status of hatchery and natural component.
 - o Current harvest patterns, impacts.
 - o Concerns of sensitive stocks.
 - o Possible incidental impacts to other stocks, species, or fisheries.
2. Harvest plan.
 - o Time frame of fishery.
 - o Target of fishery.
 - o Gear allowed in fishery.
 - o Catch level expected.
 - o Expected impacts on other stocks.
 - o Regulations to reduce incidental impacts to other species, stocks.
3. How this plan addresses concerns stated in #1 above.
 - o Any information available on fish vulnerability.
 - o What the projected impacts will do to target stock.
4. Economic assessment for fishery.
 - o Potential value.
5. Monitoring efforts and reporting guidelines.
 - o How?
 - o What?
 - o When?

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November 1990

PROPOSED SCHEDULE OF
PACIFIC FISHERY MANAGEMENT COUNCIL (COUNCIL)
PROCESS FOR DEVELOPING 1991 OCEAN SALMON FISHERY MANAGEMENT MEASURES

- January 28-
February 1 The Salmon Technical Team (STT) and staff economist meet in Portland to draft "Review of 1990 Ocean Salmon Fisheries". This report reviews and summarizes the seasons, quotas, harvest, escapement, socio-economic statistics and achievement of management goals. It is due for printing February 14 and mailed to the Council and public on March 1.
- February 11-15 STT meets in Portland to complete "Preseason Report I, Stock Abundance Analysis for 1991 Ocean Salmon Fisheries". This report provides STT management concerns, estimates abundance for key salmon stocks, assesses abundance estimation precision in past years, evaluates impacts on harvest and escapement of recent regulatory regimes if used in 1991 and provides other pertinent information to help the Council develop specific management options. It is due for printing February 20 and mailed to the Council and public March 1.
- February 21 Salmon Advisory Subpanel (SAS), STT, and selected Scientific and Statistical Committee members meet with policy and technical staff from the state and federal fishery agencies and treaty Indian tribes to review preliminary stock abundance estimates prepared by the STT. The management entities and STT will identify any harvest management constraints given current stock abundance estimates. To the extent possible, managers will provide the SAS with a range of allowable ocean harvest levels. SAS members will return to their constituents to begin developing options.
- March 1 Council reports which summarize the 1990 salmon season and project the expected salmon stock abundance for 1991 are available to the public from the Council office.
- March 4-8 Anticipated time frame for the Klamath Fishery Management Council to meet and adopt its recommendations to the Council for ocean and inriver harvest sharing and ocean management options affecting Klamath River fall chinook.
- March 11-15 Council and advisory entities meet at the Clarion Hotel-San Francisco Airport to adopt 1991 regulatory options for public review. Prior to developing options, the Council anticipates the Pacific Salmon Commission to document and articulate any agreements reached in its forum which impact Council management. On March 11, with STT assistance, the SAS develops coordinated preliminary regulatory options for the 1991 season. On March 12, working from the SAS options and other advisory, tribal and public input, the Council formulates no more than three proposed coastwide management options for collation by the STT. The STT and staff prepare a draft of the proposed options for Council review and

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tentative adoption for STT analysis on March 13. On March 15, the Council reviews its advisor analyses and tribal and public comment on the tentative options before adopting two or three final 1991 regulatory options for public hearing. The options should meet the management objectives of the framework plan. Any need for emergency changes to the plan should be identified for public review. If an April 15 opening of the troll season off California is inappropriate, the Council must modify or rescind the opening date at this meeting.

- March 20 Newsletter with proposed management options and public hearing schedule is distributed (includes options, rationale, and condensed summary of biological and economic impacts).
- March 21-
April 5 Anticipated time frame for management agencies, tribes and public to meet and agree on allowable ocean harvest levels north of Cape Falcon and to refine option recommendations.
- March 29 The STT "Preseason Report II, Analysis of Proposed Regulatory Options for 1991 Ocean Salmon Fisheries" will be distributed with the Council briefing book.
- April 2-3 Public hearings are held to review the proposed regulatory options adopted by the Council. Tentative public hearing sites and dates are Sacramento (April 3), Eureka (April 2), Coos Bay (April 3), Astoria (April 2) and Olympia (April 3).
- April 8-12 Council and its advisory entities meet at the Red Lion-Columbia River Inn, Portland to adopt final 1991 regulatory measures. New options or analyses presented at the April meeting must be reviewed by the STT and public prior to any Council action. On April 8, with STT assistance, the SAS develops final regulatory recommendations. On April 9, working from the SAS recommendations and other advisory, tribal and public input, the Council tentatively adopts final regulatory measures for analysis by the STT and staff economist. If necessary for clarification, the STT will review the tentative measures with the Council on April 10. The STT returns before the Council on April 11, to present its final analysis. Following advisor, agency, tribal and public comment on April 12, the Council proceeds with final adoption of the 1991 regulatory measures.
- April 17 Newsletter describing adopted ocean salmon fishing management measures is mailed to the public.
- April 12-24 STT completes "Preseason Report III, Analysis of Council Adopted Regulatory Measures for 1991 Ocean Salmon Fisheries".
- May 1 Federal regulations implemented and preseason report III available for distribution.

**WDAFS
SALMON 1990 AGENDA**

Title: 1990 Northeast Pacific Chinook and Coho Salmon Symposium
Place: Humboldt State University, Van Duzer Theatre, Arcata, CA 95521
Time: September 18 to September 22, 1990
Hosts: Humboldt and Cal-Neva AFS Chapters
Contributors: Humboldt State University Fishery Unit
Six Rivers National Forest
California Department of Fish & Game

September 18th**Optional Field Trip**

Field trip to Six Rivers National Forest to view streamside chinook salmon spawning and rearing facility, and instream structures constructed for providing chinook salmon spawning and rearing. Leave Arcata 10:00 am and return between 4:00 and 5:00 pm. Must pre-register so that vehicles and lunches can be arranged. Field wading gear is required. The cost is \$15.00. Contact Mary Kay Buck at (916) 629-2118 or Annelise Carleton at (707) 442-1721 —Six Rivers National Forest.

General Session Agenda**September 19th**

8:30—9:00 am Introduction, etc.: Overton/Loudermilk

9:00—12:00 pm Salmon Fisheries Management Overview of Major Drainages: Session moderator, Pat Higgins

—Yukon Systems: Gene Saldone, Alaska Fish & Game, Anchorage

—Columbia System: Fred Olney, USF&WL, Vancouver, Washington

—Sacramento System: Forest Reynolds, CDF&G, Sacramento

—Georgia Straits: Brian Riddle, Dept. of Fisheries & Oceans, Nanaimo B.C.

1:30—5:20 pm Ocean and in-river management of fall chinook of the Klamath River System: Moderator, Jerry Barnes

1. Introduction and background: Jerry Barnes (20 min.)

2. Historical development of the Klamath River Harvest Rate Model: David Hankin, Humboldt State University (40 min.)
3. Current analytical concerns for harvest rate models: Robert Kope, National Marine Fisheries Service (40 min.)
4. Development and implementation of the Klamath Ocean Harvest Model: Alan Baracco, CDF&G (40 min.)
5. User-group panel: A discussion of the economic and cultural effects of the implementation of harvest rate management for the Klamath River
 - a. Commercial fishing industry: Scott Downie, Pacific Coast Federation of Fishermen's Associations (20 min.)
 - b. Native American fisheries: Sue Masten, Yurok Tribe Transition Team (20 min.)
 - c. Dick Sumner: In-river sports fisheries (20 min.)
 - d. Jim Waldvogel: Ocean sports fisheries (20 min.)

7:00—9:00 pm **Coho Management, HSU Corner Deli**

Coho Salmon Management and Research: an informal get-together of biologists involved in the management and research of Coho with a concurrent social. The objective is to identify current management strategies and research, and to develop a network for biologists/scientists involved with Coho.

September 20th

8:00—5:00 pm **Bill Loudermilk Cal-Neva Chapter to arrange**

—Smolt Quality and Emigration Cues

—Harvest Management

—Endangered Salmon

7:00 pm **Banquet—Arcata VFW Hall**

—Albacore and Chicken Barbeque: Humboldt Chapter AFS

September 21st

8:00—12:00 pm **Genetic & Hatchery Practices: Session chairman,
Eric Loudenslager**

8:00 am Genetic Variation in Chinook Salmon: Devin Bartley

- 8:40 Genetic Stock Identification of Mixed Fisheries: Jon Brodziak
- 9:20 Break!
- 9:50 Reproductive Changes in Hatchery Chinook Salmon in Oregon: David Hankin
- 10:30 Aquacultural Genetics of Coho and Chinook Salmon: William Hershberger
- 11:10 TBA

September 22nd

Estuaries and Oceans

Sponsors: USF&WL Service
 Klamath River Restoration Program
 Humboldt State University
 Humboldt Chapter A.F.S.

- 9:30 am Introduction: Craig Tuss, USF&WL, Arcata
- 9:45 Role of Estuaries and Wetlands along the California Coast: Tom Taylor, CA Parks and Recreation
- 10:30 Hydraulic Forces that Affect Estuary Productivity: John Largier, Scripps Institute
- 11:15 Survival of Salmonids in the Estuary Environment: Terry Hofstra, Redwood National Park
- 12:00 pm Lunch
- 1:00 Factors Affecting Primary Ocean Productivity: George Crandell, Humboldt State University
- 1:45 Effects of the Ocean Environment on the Survival of Juvenile Salmonids: Bob Francis, University of Washington
- 2:30 Break
- 2:45 Food Consumption of Juvenile Salmon in Relation to Food Availability: Rick Brodeur, University of Washington
- 3:30 Coho Model and the environmental factors affecting Coho production: Peter Lawson, ODF&WL in Newport
- 4:15 Concluding Remarks: Craig Tuss
- 4:30 Questions and Feedback Session