

**Klamath Fishery Management Council**  
**March 5-7, 1996**  
**Red Lion Inn, Eureka, California**  
**Meeting #43**

Chair McIsaac called the meeting to order at noon with a quorum of members present (Attachment # 1).

The background materials were reviewed by Patricia Parker.

Parker: We also sent (as an assignment after the October 12 meeting) thank you letters to Dave Webb and Sari Sommarstrom for their tours around the Shasta and Scott River Valleys. Judy McDaniel, our new Program Assistant, is at the back table with handouts, a copy machine and Travel Manager to process your travel claim .

**Agenda Item #1: Review and approve the agenda:**

McIsaac: Are there any agenda recommendations?

McIsaac: Agenda items #25, #26, and #27 have been requested by California Department of Fish and Game (CDFG) to be moved up to today because of scheduling. The presenter is to be Mike Rode.

Bits: Maybe these items could be inserted between #6 & #7.

Wilkinson: If people arrive tomorrow intending to offer public comment on those agenda items that we are moving, I hope staff would be prepared to give them background information on the discussions.

Parker: That could be done.

**\*\* Motion.**

Wilkinson: I move to approve the agenda (Attachment # 2) as amended.

McCovey: Seconded.

**\*\*\* Consensus.**

**Agenda Item #2: Review and approve minutes of meeting held on October 12, 1995.**

McIsaac: Any Klamath Fishery Management Council (Council) discussion?

**\*\* Motion**

Bits: I move to approve those minutes as amended (Agendum #2), by staff.

Second.

Kirk: I support the motion. Agendum #2 includes the comments that I made during the meeting (regarding requests from the Oregon members of the Klamath Coalition) for a task to be submitted to the Technical Advisory Team (TAT) for review regarding subquotas.

**\*\*\* Consensus.**

**Agenda Item #3: Report from members on re-appointment status.**

McIsaac: This is a lingering issue particularly focused on the California delegations. Since LB is not here, would any of the other California representatives care to make a comment?

Bostwick: About mid-January, I received a call from a gentleman who was with the Governor's office regarding my reappointment. In early February, we did a phone interview. I have heard nothing since. He implied that the process was going to be speeded up.

Bitts: My story is identical to Virginia's.

Kirk: I call them every six months. I figured that was a reasonable interval. They said that they had just finished all the interviews and had all the information together. They were hopeful that they would be making the appropriate appointments and reappointments soon.

***Action:***

McIsaac: Perhaps, we could ask the staff to write a short additional gentle reminder to Sacramento. It is just one of those things that requires continuous urging.

**Agenda Item #4: Trinity Reauthorization Program (Mr. Jason Conger, Natural Resources Coordinator from Congressman Frank Riggs' office).**

Conger: I appreciate the opportunity to be here. I enjoy talking about this piece of legislation because we think it is a model of success. Today, I will talk about our broad policy goals, the process that we use to develop the legislation, and the status of the legislation. Then I'll explain where we see it going in the foreseeable future. In August, Mr. Riggs introduced H.R. 2243, the Trinity River Fish and Wildlife Restoration Act (coauthored by Congressman Wally Herger from the adjoining congressional district). The legislation is the result of a year of unprecedented and intensive negotiations between a variety of the interests on the Trinity River and based on our experience of the first 10 years of the program. Our Bill amends and extend the original law passed in '84 as follows:

- C It extends the program duration for three additional years (FY 96-98); accessing roughly \$13 million in existing funding authorization that would have expired last September, when the original bill expired. We also appropriated \$5 million this year for the program.
- C The bill eliminates waste in the program by establishing 20% as the maximum percentage of administrative overhead. The rest of the money should be applied in-the-field to restoration projects.
- C It stresses the policy of job creation through a new focus on reopening coastal ports. The benefits of recovered stocks will be shared by in-river tribes, commercial fishermen and in-river and ocean sport fishermen. We think this is a key point.
- C It expands the opportunities for public participation in the program by increasing local representation on the Trinity River Task Force. There were five additional seats that were allowed in the bill. One for the Karuk Tribe, one for the Yurok Tribe, one is to be appointed by the Secretary of Agriculture, (a timber interest representative), one is a commercial ocean fishery representative (who will be selected from the Pacific Coast Federated Fishermen's Association Board of Directors), and one representative of the sport fishing interests.
- C Our bill calls for annual audits of the financial status and periodic audits of in-river monitoring and enforcement activities associated with the program.

C One point which, through the legislative process, did not become a part of the bill, but will be a part of the report language attached to the bill establishes alternatives for enhancing harvest opportunities as goals for implementation of the program. Three possibilities are identified: supplementation of native stocks through hatchery releases, designing "time and/or area" specific ocean fisheries to access robust stocks, or, developing selective harvesting techniques to access robust stocks.

**Process:** At the end of '94, Congressman-elect Riggs met with a constituency group of Trinity River interests. This group arrived at a consensus after a lot of hard work. They developed a very constructive and productive piece of legislation.

**Status of the bill:** Many of you know that H.R. 2243 passed the House of Representatives unanimously (412 to zero). At this point, it will be considered in the Senate. We expect it will be signed into law. The Senate should be considering it in April. Are there any questions?

Bitts: Jason, I think you mentioned three ways the bill seeks to restore ocean fishing opportunity on the north coast. One of those was selective fishing. Do you mean a mass marking sort of program?

Conger: Yes.

Bitts: Where is the language regarding those things in the bill?

Conger: It is not in the bill, it will be included in the report language. It will actually be written after the Senate passes the bill. The authorizing committees then come together in conference to develop report language to be sent along with the bill to the President.

Bitts: So, does it exist?

Conger: It does. We have written it down, but it won't be officially attached to the bill until it passes the Senate and goes to conference. I can send you the supplementation language after it is developed.

Bitts: Okay. Can you explain a little bit more about how the supplementation strategy would work?

Conger: What we seek to do through the legislation is not define how a supplementation strategy would work, but to instruct the administration to explore supplementation as a possibility to further the goals that were established in the bill.

Bitts: I am still not clear on how this would work. Are we talking about increasing the output of fish from that basin into the ocean?

Conger: Yes, that is one of the possibilities that we envisioned when we put the language in there.

Bitts: What are the others?

Conger: Mass marking, accessing hatchery stocks, selecting times and dates in the Klamath Management Zone (KMZ) where the ocean fishery would be able to access a higher percentage of robust stocks.

McIsaac: Any further questions from the Council for Mr. Conger?

Q: McIsaac: Can you report a little bit more about the audits?

A: Conger: Let me read you the language out of the bill: In Section 5, Part 1, starting with paragraph F, it says *not later than December 31st of each year, the Secretary shall prepare reports documenting and detailing all expenditures incurred under this Act for the fiscal year ending on September 30th of that same year. Such reports shall contain information adequate for the public to determine how such funds were used to carry out the purposes of this Act. Copies of such report shall be submitted to the Committee on Resources and the House of Representatives and the Committee on Energy and Natural Resources of the Senate. Part 2, Paragraph G, The Secretary shall periodically conduct a programmatic audit of the in-river fishery monitoring and enforcement programs under this Act and submit a report concerning such audit to the Committee on Resources, the House and the Committee on Energy and Natural Resources, the Senate.* Those are the two audit programs. All of those documents would be made available to the public.

Q: McIsaac: So, for example, there has been discussion at this Council about utilizing some of the sport fishery catch estimates in uncensused areas and utilizing information from Tribal catches. Is this the kind of monitoring that is intended here?

A: Conger: Yes, we agree with everyone here that monitoring is critical.

Q: McCovey: Will the Karuk Tribe's fishing be audited and monitored, too?

A: Conger: No.

**Agenda Item #5: Identification of funding for Trinity monitoring program (Kautsky).**

Kautsky: Since the end of the '95 fiscal year when it appeared that the Trinity restoration program was winding down, the State, Tribe, U.S. Fish and Wildlife and a lot of other entities were concerned that we would be losing a lot of information with regards to harvest management. Since then, we've learned that the Trinity Program is most likely funded for a few years. However, looking forward beyond '98, or in the event that the legislation does not go through to extend the program, the Bureau of Reclamation (BOR) has been working specifically on the issue of bare bones monitoring programs in the Trinity Basin. Bureau of Reclamation would fund these out of the Trinity Division of the Central Valley Project operation and maintenance costs (for about \$450,000).

One thing that kind of falls through the cracks here is what happens in '97 if the legislation does not go through? I don't have an answer at this time. We have been working with many of the management entities and interested parties in the basin in developing a monitoring protocol for the Trinity Basin (Agendum #5). The Technical Coordinating Committee of the Trinity Program has developed a five page summary (draft document handed out at the meeting).

**Agenda Item #6: 1996 water status:**

Michael Belchik, Senior fish biologist for the Yurok Tribe: The Klamath Project Operational Plan (KPOP) is a process that was started by the BOR to delineate water allocations for different water type years (i.e. wet, normal, dry and critical). Bureau of Reclamation's goal in this process was to reduce the uncertainty of water allocations during given years, especially since the drought in the '90's caused the allocations to the river to get smaller. This caused downstream interests (including the Yurok Tribe) to instigate this KPOP process. Klamath Project Operational Plan is using a series of six technical memoranda to inform interested groups of their decisions: #1: "Runoff forecasting" how BOR determines and predicts how much runoff and water will be available, #2: "Key systems descriptions" which includes all the facilities included in the Klamath Project, #3: "Agricultural water use" which is a historical account of how much water agriculture has used in the Upper Basin and how much they expect to use in the future, #4: "Biological needs" which indicates how much water the biological needs are for the lake levels and the river levels, #5: "Water quality" which indicates how the Klamath Project will affect water quality of both Upper Klamath Lake and the Klamath River, and #6": "Operation scenarios" which is supposed to delineate different scenarios that may or may not occur under the different water

type years. Bureau of Reclamation has expressed a desire for everybody to participate in the KPOP process. Originally, they had set a March 15 comment deadline. It appears that date will be postponed. When they decided to undertake this KPOP process, they asked their solicitor to outline who has senior water rights in the basin and how they should be allocated. The priorities for the Klamath Basin were outlined as such: 1) the Endangered Species Act (ESA), 2) the tribal reserved water rights and the tribal trust, 3) the irrigators' water rights, and then, 4) the refugees water needs. From the Yurok Tribe's point of view, we have participated openly and honestly in the KPOP process from its inception. On November 27 at the KPOP meeting in Redding, Mike Ryan stated that he agreed that the tribes have senior water rights in the Klamath River, but that he did not have the slightest idea of how to quantify that right. So the Yurok Tribe undertook to quantify that right. Our report is in final form and will be distributed later this week (excerpts in Agendum #6).

C One of the things that we hear a lot is that the upper basin only contributes 10% or less to the flow of the Klamath. Our hydrologist has provided us information showing that in the summer months the upper basin contributes as much as 35% of the flow at the mouth of the river. During a dry period, the contribution may be much higher. This is due to the Klamath being primarily a snow melt system.

C We also looked at the existing flow release schedule. The flow releases out of Iron Gate Dam (IGD) are determined by the Federal Energy Regulatory Commission (FERC) schedule. In '60, when IGD was planned, they established a minimum flow release for the river based on records from 1911 through 1913. The table in the handout shows the record of FERC compliance from '62 through '95. Note that until about '90, they met FERC almost all the time. After '90, there was a fundamental change in the operation of the project. Part of that was due to drought, but one of the points that should be understood from this is that even while they met the FERC flows, the fishery continued to decline. So we set out to quantify the instream reserved right (described in report). Biologists familiar with the Klamath noticed that the FERC flows lacked the spring time increase needed to assist salmon outmigration. One of the pages in the handout shows the average annual hydrograph before the Klamath Project was put in. This is our instream flow recommendation. Another page shows the comparison with the FERC flows which illustrates the shortcoming of the FERC flows (i.e. a decrease in spring time when salmonids in the Klamath River have an increased need for flow for rearing, for outmigration, and for temperature control. Our reports describe what is needed to fulfill the instream reserve water right for the tribes. Everybody who has an interest in the Klamath River fishery will benefit if the fish benefit by tribal reserved water rights.

Q: Wilkinson: Is the Klamath Compact involved in this KPOP process?

A: Belchik: Yes, the Klamath Compact has been involved in the KPOP process.

Q: Wilkinson: In this process, has there been any investigations or considerations of further storage to increase flushing flows or summer flows?

A: Belchik: Yes, included in the report by our hydrologist is a section called "physical solutions" where we look into the possibility of additional storage, use of ground water, and other possible solutions.

Q: McCovey: We always tend to look at the quantity of water, but I know that quality of water from the upper basin is a problem also. Where is the KPOP on the water quality issue?

A: Belchik: Klamath Project Operational Plan produced a technical memo on water quality. Many people who are familiar with that field consider that memo to be somewhat lacking in its treatment of the effects of the Klamath Project on water quality. Our hydrologist has addressed that concern in the Balanced Hydrologic report. We feel that summer flows of 1,000 cfs minimum would go a long way to addressing some of those water quality

problems. I also see the need for further monitoring and looking at cold water refugia and things like that.

Q: Wilkinson: Would you care to comment on what KPOP's position might be on the proposed Upper Basin Amendment (UBA) that is under consideration by the Klamath Task Force (TF)?

A: Belchik: I really couldn't make any comments about BOR's position on that. There really has not been much mention of the Upper Basin Amendment in the KPOP process itself.

Q: McIsaac: If the dashes in the matrix (in your handout) mean that FERC minimums were met or exceeded, then is it true that there has been a greater rate of noncompliance associated with the drought?

A: Belchik: Yes. Note also that in '93 (a wet year), the upper Klamath area did not receive much precipitation, so again, FERC flows were not met.

Webster: If we overlay the natural hydroflow of the system before the Klamath Project with what we are recommending, then agriculture will still be able to access most of the water they need. They just need to readjust their schedule to make the hydrograph look like a natural flow instead of taking the water out when the fish need it. So we can all work together and live in the system and use it, but we all need to look out after each others interests. They need to look out after our interests for fish as we look out for their interests for water that they need for irrigation.

Q: How many acre feet are represented in the area between FERC minimums right now and your proposal?

A: About 300,000.

McCovey: I think that we are going to have to come up with some type of storage in that area to be able to solve those problems. Luckily, this water year is not a problem. The working relationship between the involved entities has improved.

Q: Grover: How does the Tenant method compare quantitatively with the Instream Flow Incremental Methodology (IFIM) approach used on the Trinity? Are the numbers similar?

A: Belchik: Yes. I haven't compared them specifically for every year type class for the Trinity, but I believe for normal and wet years, the methods compare very equally. The Yurok Tribe presents the Tenant method as a short term approach until a long-term, more detailed flow study can be made.

## **BREAK**

McIsaac: Does anyone else at the table here have comments on what the '96 forecast is for water?

Kirk: Humboldt County is at 120% of normal.

Iverson: The numbers we have seen on snow pack in the Yreka area are average.

Q: McIsaac: Would we be looking at a situation where FERC minimums would be achieved in '96? Is there a water plan out for the year that gets as specific as that?

A: Wilkinson: The BOR is working on a water plan, but it is not finished yet.

Q: McIsaac: What is the current speculation on when the KPOP would be done?

A: Belchik: BOR in Klamath Falls said that they would release their Environmental Assessment (EA) and their biological assessment on March 8. The EA would then have a 30 day mandatory public comment period.

Q: Webster: Would this Council be willing to back the Tribe's recommended water flows?

McIsaac: How would that potential recommendation fit into the process with group working on KPOP?

Webster: The Yurok Tribe's recommendation is the only other recommendation at this point.

Wilkinson: I would want to hear the Water Users' Association (WUA), Klamath County's position and Klamath Compact's position before I would be willing to venture out for an endorsement.

Boley: I don't know whether it would be appropriate for this Council to actually come on board with the Yurok's specific proposal for exact quantification of flows. I do think what the Yuroks proposed (in terms of the shape of the flow and particularly the increased flow regime during the spring time frame) makes a lot of sense. This proposed flow is similar to the natural cycle that helps move the juvenile fish downstream. I would be supportive of at least ratifying the shape of their hydrograph.

McIsaac: Any further comment on that? Dale, my impression is that the TF might be the better arena for this habitat oriented topic. I would suggest that the Yurok preferred alternative be presented to the TF. Later, after the TF considers and acts on it, then this Council could consider it.

Q: Boley: Would it be appropriate for this Council to identify the shape of the hydrograph as being favorable for fisheries production?

Q: Grover: Isn't the KPOP process eventually doing the same thing?

A: Webster: The KPOP process is primarily for irrigators, so the shape of the hydrograph could favor their priorities

Q: Grover: But wasn't there a technical memorandum dealing with water and fish?

A: Belchik: Yes, there was a Biological Needs technical memoranda. In it, the BOR comes forth with what they call a natural hydrograph based flow. The problem is this is based on FERC flows.

McIsaac: It is premature at this point for the Council to get too involved in this. I would suggest that the TF look at it very critically.

**Agenda Item #25: Hatchery surplus at Iron Gate and Trinity River Hatcheries (Mike Rode, CDFG).**

Mike Rode, Fishery Biologist, CDFG (representing Rich Elliot): At the present time, the CDFG is addressing some of these concerns that we have received on the hatchery surplus issue. The issue is somewhat summarized in the February 27 letter from Rich Elliot to Dr. Barnhart (Agendum #25c).

**Background**

In '93, we reviewed our operations at both Trinity River hatchery and Iron Gate Hatchery and prepared a report for this Council and for the TF. That report suggested some changes in our operational guidelines and constraints. The big difference between '93 and now was that in '93 we had very low escapement of natural and hatchery fish. I think a large part of this year's tremendous over-escapement to the hatchery is a result of the protective measures that were instituted to protect our weak stocks and our inability to efficiently harvest our hatchery product. At any rate, we understand the concern that the public and a lot of interest groups have regarding the

over-escapement at both hatcheries. We are presently undertaking a review of these situations. We are looking at both the physical conditions at the hatcheries, the efficiencies in our operations, and alternatives to the way we have been handling the excess returns. As you know, we try to take our eggs from the broad spectrum of the run, punching holes in the fins on the adults that we don't spawn and putting them back into the river (as per procedure outlined in our operational guidelines and constraints). One of the things we are looking at as a means of handling the excess fish is to have some sort of a commercial processor handling the excess returns.

We are also looking at making some improvements, changing the way we anesthetize fish at Iron Gate Hatchery and looking at what it would cost to employ additional workers to mark fish during the height of the run.

Q: Bitts: What would you expect to be made of those fish, if a commercial processor handled the excess fish?

Rode: There is a broad spectrum of uses, all the way from table fare for human consumption, on down to fertilizer, animal food, etc.

Bitts: I would be very concerned if surplus hatchery fish were to find their way into the commercial markets for sale to the public as table fare. If they were to be used in a charitable manner, that would be a different story.

Rode: Evidently, giving excess fish to charity is what happens in Washington and Oregon. These are the things that need to be considered, and right now, we don't have any specific Department policy on this. California Department of Fish and Game is in the investigative phase of all this right now. The logistics of how this process would be initiated are also under consideration right now (e.g. run size, timing, etc.). The final solution is not all worked out.

Boydston: I share the concerns with Dave and Scott with regard to possible competition of "excess" salmon with the fresh fish market. A couple of weeks ago, I met with Tim Farley, the Chief of the Inland Fisheries Division and a representative from Ocean Star Seafoods out of Bellingham, Washington and discussed some of the products that they produce. They had an agreement this past fall with Coleman National Fish Hatchery in which they process salmon into a product for correctional institutions. We are talking about the potential to use a processor at all of our hatcheries in the state. There is a potential of some additional revenues that could either help our department or go into some salmon stamp programs. These are all things that we want to communicate with the industry about.

Boley: In addition to the disposition of the food products that might result from "excess salmon", you also need to be aware of the disposition of the viable eggs. We need to think about and discuss this issue if those eggs are going to other countries to be used in aquaculture operations and therefore indirectly compete with our products.

Rode: We had an internal department meeting in Redding about three weeks ago to go over several current anadromous fishery issues. Our intent is to put together a statement and then call people together for a meeting to hear their comments sometime in the next couple of months. There is a lot of controversy and a lot of unknowns regarding the genetic issue and the introgression with natural stocks. If we can eliminate or minimize the problem of turning back fish, we reduce the potential for genetic risk. It is going to take a while to get the genetic information that we need.

Q: McIssac: Have you decided to bring all excess fish into the hatcheries, and are now figuring out how to handle them once they are inside?

A: That is the idea, but there are many problems - for example, insufficient water at Iron Gate Hatchery for holding more adults.

Q: McCovey: Will the issue of hatchery releases coinciding with natural outmigration be brought up in this meeting?

A: Rode: I thought that topic was pretty thoroughly covered back in '92-'93. We are once again doing a balancing act of trying to maximize the survival of our hatchery product and minimize the competition with the natural product. On the Klamath side, we try to release hatchery fish as large as possible and, as late in the year as possible (after most natural out-migrants have passed that area of the river).

### ***Announcement***

Barnhart: I have complimentary copies of the '94 Klamath River Symposium Proceedings for each Council member. The Co-op Unit here in Arcata has a lot of copies of these for sale for \$15.

### **Agenda Item #25a: Biological implication (Roger Barnhart, American Fisheries Society (AFS)).**

Roger Barnhart: I am a professional fishery biologist, just recently retired and current president of the Humboldt Chapter of AFS. Our Society is concerned about the excess chinook salmon returning to the hatchery at Iron Gate and the disposition of those fish by CDFG. Those fish that entered the hatchery that were "excess" were fin clipped and returned to the river. California Department of Fish and Game also closed the ladder during considerable times to not allow fish in because they simply were not able to handle all those "excess" fish. Thereby, those fish were forced to spawn elsewhere in the system below the dams. Iron Gate was built to mitigate for the loss of production above the dams. They have an operational goal that they have to meet in terms of numbers of smolts that they produce. They do not have a mitigation goal for the number of adults coming back. This needs to be addressed. Those fish that are put back downstream are not regarded as mitigation fish, but as "supplemental" fish. Studies show that continual large inputs of hatchery fish into a system over time do not really supplement, but eventually replace the naturally producing stocks. We are concerned about that. Our **major concern** is that these fish that are put back down into the river below the dam are competing with the wild stocks or naturally produced stocks for available spawning habitat. As an example, in '95 about 32,000 adults went up Bogus Creek (which is a rather small stream). This was in addition to the naturally producing population. The competition for spawning space in Bogus Creek must have been tremendous.

Our **second concern** is the increasing chance of losing genetic variability in natural stocks if they are swamped by large numbers of hatchery fish over time. We are concerned about the unique adaptive characteristics that certain stocks, such as on the Shasta River and some of the upper river tributaries, have acquired over time and the possible loss of those and their ability then to spawn and live in the wild. A **third concern** of ours is artificially inflating the estimated number of natural spawners in the basin by the diversion of large numbers of hatchery chinook to the adjacent mainstem and tributaries. Biologists are not able to distinguish the natural stocks from the hatchery fish primarily because most of the hatchery fish are not marked. This masks what the declining trend is in the wild stocks and could result in an over-harvest of the wild fish. The Fish and Wildlife Service (The Service) did a spawning survey from the hatchery down to Happy Camp in '93, '94 and '95. In '93, they counted 330 redds in the main river, 26% of those were above the Shasta River. In '94 when we had a large spawning escapement return, there were 1,651 total redds in the same area and about 50% of those were above the Shasta River. This last season in '95 they counted 3,241 redds and 60% of those were above the Shasta River. There is an indication that we are seeing a real influence by those large numbers of hatchery fish in the upper river. The biologists report that during these same time periods in the lower river tributaries, they are seeing about a three fold increase in the tributaries of the lower river. At the same time there is about a ten fold increase in the spawning in the upper river tributaries. Some biologists have reported that some fin clipped adult salmon (presumably Iron Gate fish which were released back down the ladder), have shown up in Red Cap Creek and Camp Creek. Trinity River probably has the same problem. They estimated about 95,000 mainstream spawners in the Trinity this year. A **fourth concern** of ours is the possibility of increasing transfer of disease from hatchery

stocks to wild stocks. Usually disease outbreaks occur when there is more crowding than is natural and of course, we are seeing more crowding up there now with these larger runs. **Lastly**, and this addresses the increasing number of smolts that are being released by Iron Gate Hatchery and Trinity Hatchery, is the concern we have about possible competition with wild juveniles for food and space resources. This is also documented in the literature. There is a density dependent mortality related to this. It gets back to the mitigation goals for that hatchery and whether or not they can be more flexible in relation to ocean and in-river conditions. California Department of Fish and Game does have a policy that they will operate their hatcheries to minimize the impacts on natural stocks, but right now, the way they are doing things, they are not really complying with their own policy. As Mike said, CDFG is looking into this. American Fisheries Society has been invited to this process and we hope to provide many comments. I think that any management entities, working with these anadromous stocks, ought to be erring on the conservative side.

Q: Bitts: Dr. Barnhart, I share your concern with density dependent mortality, but I am a little bit puzzled. You said that hatchery fish have a reduced fitness to compete in the wild and at the same time, you are concerned because in the lower river (that is presumably less affected by hatchery fish), there is a three fold increase. In the upper river, that is affected by hatchery fish, there is a ten fold increase. Can you reconcile those two statements?

A: Barnhart: Those are the number of returning adults. Those figures are combined numbers of natural fish and hatchery fish. We had very good ocean conditions and so everything survived and came back. The three fold increases were primarily wild fish in those tributaries below Happy Camp whereas the tributaries above were a combination of wild and hatchery fish. Some studies have been done that show that hatchery fish have a reduced fitness to compete in the wild. For example, there is a recent study from Vancouver Island on coho salmon where they showed that the hatchery fish, even though they are spawning in the wild, have smolts that may not survive as well as wild smolts and they do not come back as adults in the same proportion as the wild smolts. This implies that they don't have the same fitness to survive.

Q: Bitts: So this would be the second generation that has reduced fitness, not the first generation?

A: Barnhart: Yes.

Q: Boley: I share your concern about 32,000 fish entering Bogus Creek. It is a pretty small creek and there is obviously not room for all those fish to efficiently spawn. There is probably not very much carrying capacity for juveniles either. I am having trouble seeing a lot of your genetic arguments. Oregon's wild fish policy defines that 10% of a run of the returning adults can be hatchery fish. If it is a nonindigenous run, then up to 50% could be hatchery origin. The numbers that I see in the letter from the Yuroks are: 3% for the Shasta River and 20% for Bogus Creek. These figures wouldn't ring any alarm bells in Oregon. Why are you so concerned about these genetic implications?

Barnhart: We haven't adapted those standards here. We are concerned about protecting Shasta River fish. If Iron Gate Hatchery is putting thousands of fish back down the ladder, then the fish that stray into the Shasta River will give you a false percentage in terms of the relationship between numbers of hatchery fish and wild fish in the river. There may be more hatchery fish straying than actually shows.

Q: Wilkinson: Does AFS have a concern about the downsizing effect (lowered average size of returning adults) hatchery influence? Is there a correlation with reduced adult sizes?

A: Barnhart: We really haven't looked into that.

Q: Boley: Does AFS basically feel that hatchery fish are bad?

A: Barnhart: No, I think that we feel hatchery fish have their place. We feel that hatchery fish are very good for reintroducing in areas where we have lost stocks. We think that they need to be managed correctly so that there is a minimum of competition with the wild stocks.

Q: McIsaac: Do you see any situations whereby a mix of natural production and hatchery strays would not be a concern to AFS? I think you have made a lot of very credible points from a scientific perspective, but are there some instances where your recommendation might not be to take every fish into the hatchery?

A: Barnhart: I am not a geneticist, so I don't really understand all the possible genetic implications. I think the geneticists still haven't come to the state of the art either.

Q: McIsaac: Would you advocate that CDFG open the issue of juvenile release timing?

A: Barnhart: Yes, I would advocate it. I think that we would like to see more science melded into the hatchery operations on the Klamath.

**Agenda Item #25b: Allocation implications.**

Boydston: At the last Harvest Allocation Work Group (HAWG) meeting, we talked about the implications of accessing hatchery fish for harvest by many groups. One thought is that the current allocation process does not encourage targeting hatchery fish, nor does it spell out if the 50/50 tribal/non-tribal sharing issue comes from hatchery or natural fish. At the last meeting, I put on the table the idea of taking the harvest of excess hatchery fish out of the allocation process. In the sport fishing regulation booklet for the Klamath River, there is a trigger that upon attainment of 8,000 fish at Iron Gate Hatchery, that the river (if it happens to be closed due to quota constraints) reopens to sport fishing. This goes a long ways toward the idea of utilizing supplemental fish. If our choice is to either kill them in the hatchery or let somebody catch them in the river, wouldn't it be preferable to let them catch them in the river? I am going to offer this as an option. This would be at least a step in the direction of properly utilizing hatchery fish. You have got a mixed stock fishery in the mainstem Klamath (i.e. you are harvesting stocks from New River, North Fork, the mainstem, South Fork, etc.). These are stocks that you don't want to harvest at the same rate you can harvest the hatchery fish. The idea is that when the fish get up in the close vicinity of the hatchery then allow harvest.

McIsaac: Let's discuss this potential option of a hatchery surplus fishery (separate from the allocation) on Thursday.

Boley: This discussion needs to keep coming before this Council prior to any implementation of changes in escapement policy regarding hatchery fish. If we change the way we treat hatchery fish, it has a direct harvest implication for ocean fisheries as well as in-river fisheries.

Bits: A lot of the discussion here has focused on what to do with the surplus adults in years like the last few years. I am more concerned with what happens with surplus juveniles in years like this--especially with regards to hatchery production goals and methods, especially since it appeared in the abundant years of the mid '80s that large volumes of hatchery output may have contributed to the poor production of those brood years.

Q: McIsaac: What was the egg take at Iron Gate Hatchery this year and are the plans to hold juvenile releases to the six million level?

A: Rode: Our egg take goal is set at ten million. Our release number hasn't changed for any of the species that we produce at Iron Gate Hatchery.

McIsaac: I believe in one of those power brood years, there was a 17 million fish release from the hatchery. The

thrust of harvest rate management is to test the level of what natural escapement is proper. If there is a 17 million release from Iron Gate Hatchery then that would confuse any conclusions you would make about the level of natural spawning (i.e. was that too many on its own, or was that too many in concert with a particular hatchery release?).

Boley: None of these issues can be considered by themselves. We cannot consider what the mitigation goals of Iron Gate Hatchery are or what the natural spawning is without thinking about what the water requirements are and the habitat requirements.

Q: McIsaac: Could this Council review any potential policy changes at the hatcheries prior to the final CDFG decision?

A: Rode: Yes, we would welcome your review.

Q: Grover: Is it the CDFG's intent to have any new guidelines in place in time for the '96 brood year?

A: Rode: It's hard to say.

McIsaac: I applaud CDFG for their openness and their responsiveness to this question that has been raised. We look forward to hearing more about the process.

## **BREAK**

### **Agenda Item #7: Review of the ESA listings for salmon and steelhead.**

McInnis: Due to the budget process, the Service was precluded from spending any of their money on listing of endangered species. In the '96 conference committee mark-up, those instructions were extended to National Marine Fisheries Service (NMFS). This means that we have stopped any work on the listing of Klamath province steelhead (coast wide) and coho until we have authority. We are continuing the coast wide review of chinook stocks.

We are not in the business of proposing any additional listings at this time or completing the listings that have been proposed and making them final.

### **Agenda Item #8: Council discussion.**

Q: Kirk: In the Fish and Game News, February 24th, there was an article about new salmon regulations banning the retention of coho salmon. It states that NMFS reached their decision on the rule after consulting with CDFG, San Francisco Bay Sport fishing community and Pacific Fishery Management Council (PFMC). Could you comment?

A: McInnis: That was done as an amendment to the ocean salmon Fishery Management Plan (FMP) two years ago. In the recent past, the PFMC has made recommendations of targeting ocean incidental hooking mortality of coho to about 12%. The ceiling in the FMP is at 20%. When the regulations for '95 were put in place, there was a Federal Register notice that said that if the early season recreational fishery off of central California had a forecast that said that coho status was not substantially improved over what we had seen in '95, then the '96 early season fisheries would be prohibited from retaining coho. This was done under the authority of the Magnuson Act and under the authority of the Fishery Management Plan (FMP) for salmon, not under any Endangered Species Act (ESA) authority.

Wilkinson: We are having a problem getting the Northwest Region of NMFS to participate in the forest planning process and in the Governor of Oregon's new coho plan because of NMFS staffing problems. There are a lot of people on private land who are fearful about making some wrong moves because we lack prescriptions; therefore,

we are really pleading that NMFS participate in that process. We don't want to invest in restoration measures that won't contribute to coho restoration.

McInnis: I will carry that message back.

Q: Bitts: Can you give us any more specific information on the anticipated effect of winter run concerns on '96 ocean salmon management?

A: McInnis: The biological assessment (BA) is done for winter chinook. We expect the biological opinion (BO) to be out this week. We anticipate that ocean fisheries will need to reduce their impact on winter run. If we use the Snake River endangered species considerations as an example, then we could expect a 50% reduction in impacts in PFMC managed waters, or 30% overall.

Boley: I would point out that this has direct implications on the management of Klamath fall chinook. In the past, we have structured fisheries into southern or central California, but we may not be able to do this in '96 due to the concern for Sacramento River winter run.

McIsaac: Our recommendations need to fully reflect balanced consideration of all the issues including this one.

McInnis: There will be some type of allowable level of impact on the winter run. How we get to that is going to be the struggle because reductions mean reducing the total ocean harvest by 50% or 30%. There may be opportunities to selectively reduce the impact on winter run while still allowing a harvest of fall run. We will all be looking for those opportunities.

Q: McIsaac: How do you see the biological opinion process going this year on winter run?

A: McInnis: We consulted on the impact on the ocean fisheries (as they are managed under the Ocean Salmon Framework Plan). The idea is to establish an incidental take level that can be used for more than one year and a BO that can be used for more than one year. In the northwest, they have consulted annually on the impacts to the Snake River chinook and sockeye and that has always been a rush. What we are trying to do is to get the PFMC involved more up front, draw the side boards on it, and allow the PFMC to work its process within those side boards. We are looking for a longer range view of the operation and results.

Q: Bitts: What if you find that the ocean take of winter chinook is negligible, will we then be stuck with a longer range requirement for a reduction in the fishery?

A: McInnis: Dave, the bottom line in every one of these biological opinions is that there is a reinitiation trigger. The reinitiation trigger always includes the statement that if there is substantial new information, we will go through the routine again. This biological opinion includes the Snake River, as well as Sacramento River winter run.

Q: McIsaac: How was escapement counted for winter run?

A: McInnis: There weren't any coded wire tags recovered in the mainstem or at Keswick (where the traps are for the hatchery). The estimated number of coded wire tags in Battle Creek represented that total spawning population of coded wire tagged fish. It is true that it did not represent all of the fish. About 1,300 naturally spawned fish were up in the mainstem and were taken into consideration in the status of the population. Since these mainstem spawners yielded no tags, they aren't counted in calculating ocean impact.

Q: McIsaac: If you saw ten tags in the ocean fishery and ten tags in Battle Creek (or the hatchery) then did you

assume there was a 50% harvest rate?

A: McInnis: That is essentially it. The impact rate in the ocean is consistent with what was seen in the previous fin clipped studies.

Q: Bitts: Rod, can you explain again why the tag returns from the '91 and '93 brood years in the ocean fisheries were not included in the calculation for the biological assessment?

A: McInnis: It presented a problem in that we did not have any recoveries of coded wire tags in the spawning population. We had so few fish tagged that it was better to look at the strongest tag group that we had, the '92 group.

Bitts: I see a potential source of bias here.

McInnis: Yes.

Q: Boley: So, essentially, the one year when you did have an accounting process for the returning coded wire tagged winter run fish, also coincided with a year when ocean fisheries had larger fish (1.5-2 lbs) than average. So you had higher growth rates. If you get another year in the future where you have good accounting that shows substantially different impact rates with more normal ocean growth conditions, would you then take that into account, too?

A: McInnis: It would have to be done through reopening of the consultation.

Q: McIsaac: We are going to be considering fishery options up here in the areas that have been restricted for purposes of protecting Klamath fish; are winter chinook salmon caught in the KMZ?

A: McInnis: I don't have the information to answer that question.

A: Boydston: The general belief is that Klamath fish are fairly localized. They probably don't go far from San Francisco Bay. They don't stay in the ocean very long, thus they are small sized. This small size is also what distinguishes winter run from the others. At the Santa Rosa meeting, one of the Service's biologists commented that a large winter run is 31" long.

**Agenda Item #9: Public comment.**

Mike Orcutt, Hoopa Valley Tribe, Director of the Fisheries Department: May of last year, we learned that the spring chinook and the yearling fall chinook weren't going to be marked at Trinity River Hatchery because of the wind down of the Trinity Restoration Program. We contacted BOR and worked with them and CDFG to mark spring chinook, fall chinook and coho. My opinion is that even though the Hoopa Tribe provided comments to CDFG on their hatchery practices, the CDFG isn't acting on the comments that they received. We also want Trinity Hatchery to hold their fall chinook release until July, when wild juveniles have gone downstream. I support what Pliny said that the tribes being entitled to 50% of hatchery production as well as natural production. If there is a discounting of hatchery production in the harvest, then there are things that the tribes could also look at in terms of discounting those hatchery fish from the harvest. How will the biological assessment for coho be handled in '96?

McInnis: The coho are not listed under the ESA at this time, so the action that we took was based on the FMP itself, not the ESA. In January, there was a projection made by the Oregon Department of Fish and Wildlife (ODFW), Washington Department of Fish and Wildlife (WDFW) and NMFS that forecast what the coho populations were going to be like for '96. That forecast was roughly comparable to what we saw in '95. Based

on that forecast, we took the action to prohibit retention of coho in the fisheries before the May 1, cutoff in California. Before a species is listed, when it is called a "candidate", then the process is called conferencing instead of consulting. My understanding is that the conferencing on the '95 regulations covered this initial change that was made. We will have to conference again on the '96 regulations.

Q: Boley: Mike, in regards to holding the hatchery spring chinook juveniles for a longer period of time, I have two questions: 1) What would be the additional cost of holding those fish? 2) Once those fish are released, how long do they stay in the river system?

A: {Unanswered.}

Q: Boydston: Mike, did the Hoopa Tribe address this issue of hatchery surplus in letter form? I find the Yurok Tribe has presented a letter which they made a very important statement that the CDFG should be willing to prepare to deal with excess returning hatchery fish in a responsible manner. Would the Tribe agree to that?

A: Orcutt: We will discuss this with the CDFG tomorrow.

Q: McIsaac: Mike, did you want this Council to make a suggestion as to a different hatchery review process?

A: Orcutt: The hatchery on the Trinity side is mitigating for lost production. It is funded with Federal dollars so it is clear that it is the Federal responsibility to protect the trust resource.

**\*\* Action**

Q: McIsaac: What are the wishes of the Council regarding these agenda items we have seen today?

Boley: I don't think we are ready to take action regarding the hydrograph presentation on the Upper Klamath Basin flow schedule. Will that be on our agenda for our April meeting? Could we take action at that time?

Belchik: Right now, the BOR's deadline is March 15. It may be postponed.

Q: Grover: Isn't the BOR also about to make a forecast on the water year?

Belchik: Yes, that is true. After the water year forecast, they will come up with a permanent plan before they make any '96 allocations. Their intention is to come out with the KPOP (which is a long term plan) before they do a '96 plan. The BOR's intention is to have the KPOP process closed before fall.

Wilkinson: This Council should be paying close attention to KPOP because it is going to get intense and significantly affect things that we do. We need to keep informed.

Grover: This is a fairly rapid process. The Council, as a body, may not have the opportunity to comment on this process, but there may be forums for individuals to provide comments.

McInnis: National Marine Fisheries Service is also conferencing with BOR on the potential impacts on steelhead and coho for the KPOP. The conferencing is to take place before the EA is released.

Rode: California Department of Fish and Game is also involved with KPOP.

*3/25/96 UPDATE: Based on the numerous comments received on the KPOP, the comment period has been extended. Mike Ryan (BOR) will tell us about the new schedule at the April 8 meeting.*

Belchik: I can arrange to have copies of both the hydrology report and the fish report available for Council members on April 8.

McIsaac: Any further discussion on the KPOP issue? Let's look to have that on our agenda at the April meeting. Any further wishes of the Council? Before we adjourn for the day, we have got quite a volume of correspondence on the hatchery straying issue. Does the Council wish to offer any encouragement to that process at this time or just to wait and see how it evolves? Mike Rode indicated that it would be uncertain whether or not any long term changes to the operational plan would be finalized by this fall. L.B. or Mike, do you want to speculate on the length of the process?

Boydston: We have received the letters, we are reading them, and we are aware of the problem, but we cannot tell you when it is going to be resolved.

Rode: I'll get a message to you prior to your April meeting about our schedule for meeting and/or producing a document to address this issue.

Boley: This Council will need to see CDFG's draft recommendations before responding to any major change in policy.

McIsaac: Let's ask the staff to report CDFG's schedule for addressing the hatchery surplus issue during the April meeting.

**Agenda Item #11: Progress report on the analysis of the spawner/recruit relationship and the spawning escapement floor.**

Jerry Barnes: The TAT had an assignment at the October Council meeting to analyze the floor escapement based upon the data that we had to date (including the low brood years of '90 and '91). At the stock projection meeting in February, we looked at the data. Since then, Mike Prager, NMFS, took it as his responsibility to do a preliminary analysis. The first draft of that analysis was completed February 20th (Agendum #11). I intend to convene a meeting of the TAT in conjunction with the April Council meeting and PFMC meeting in San Francisco to further refine this analysis. The upper curve (see handout) shows recruitment at age three versus the spawning stock. We used age three because that was a data set that was complete with the '91 brood year. The original assignment from the Council was to use the age two recruitment rather than the age three recruitment. So based upon this data set if you fit a curve to the recruitment per brood year, then it comes out somewhat similar to a modeled Ricker curve. Based on this, we would have the escapement at maximum sustained yield (MSY) 29,500 and 83,200. The MSY was calculated at each point along the curve rather than just being one point. Do you want the age two recruitment as well as the age three? It would be early summer before you would see our completed report.

Q: Boydston: On these data sets, when you say spawning stock, is this the total escapement of hatchery and wild fish combined?

A: Barnes: It should say natural escapement.

Q: Boydston: In a previous analysis, you had a correction factor for environmental conditions, does this analysis include that factor?

A: Barnes: No, but it should have. This is the raw data, it does not yet include any analysis. Mike did a run simulation to look at the optimum stock. This is part of the analysis to look at the relationship to spawning versus the MSY.

Q: Bitts: What do the terms "bootstrap" and "nonparametric algorithm" mean?

A: Dixon: Bootstrap is a process of randomly sampling a data set thousands and thousands of times to get confidence intervals. Nonparametric statistics don't have any requirement of distribution. Most of the major statistics predicate themselves on a normal distribution.

Boley: The implication of this graph is that 75% of the time, a spawning escapement of 30,000 fish would result in a MSY level that was within that circle, right?

Dixon: That conclusion is not confirmed.

Q: McIsaac: Would one conclude from this data, that the spawning stock to produce MSY would not be 50,000 or greater?

A: Barnes: Yes, but that is going to take a lot more analysis.

Q: McIsaac: How does the factor of environmental conditions affect a Ricker assessment of spawner recruits?

A: Barnes: We had very high escapements in '86, '87 and '88 with poor water years in the river; this could easily have affected the total production from those high escapement years. The correction factor was applied based on hatchery fish survivals.

Q: McIsaac: At our October meeting, you mentioned an approach that Robert Kope used, what was that called?

A: Barnes: That was the famous Monte Carlo method.

Kautsky: Dr. Hankin's approach to evaluate coded wire tags included about five different models from which a person could select a method to examine coded wire tag recoveries, determine ocean survival, and determine maturation rates.

McIsaac: My understanding of a Ricker analysis is that the spread of the points is supposed to take into account fresh water environmental effects on yearlings, theoretical predator aggregation potentials and things like that.

Boley: We need to decide if we want to stay with three year old recruits or whether we wanted to drop back to two year olds.

Barnes: It expands your data base by going to the two year olds.

Boley: And with twos you would be able add in one more year of data, but do you lose precision in estimates of ocean stock size?

Barnes: We have the model that figures in an annual 50% survival from age two, so the relationship should be pretty constant.

Boley: So even though the actual survival or actual mortality isn't 50% from year to year, we are really no worse off than we are using the threes to get some sort of average one more year.

Barnes: We are not sure it is going to show much difference.

McIsaac: I would suggest that we do look at the age two recruits. Another reason for doing that was the '80

brood where there was a lot of jacks. Obviously recruits from that spawning year were something you could learn from.

**Agenda Item #10: Technical Derivation and Definition of the Spawning Escapement Floor.**

McIsaac: We need to look at a sequence of technical analyses that bring out every possible point regarding a potential new floor. My expectation for concluding this analysis is no earlier than the fall meeting. I think we are a long ways away from a full enough analysis to make many judgements. This is the place for LB to help people understand what the floor means (i.e. some people think 35,000 is a genetic floor, some people think it is a future production buffer and some people want to know how we came up with the number).

Boydston: Scott Boley and Jerry Barnes were also present at that particular meeting when we decided on the 35,000 fish floor (c1987). I recall that the floor concept came in at the very end of the discussion about harvest rate management. Harvest rate management itself was developed as a collaborative effort between the different fishing groups, governmental groups, and academic groups. The harvest rate approach seemed to be balanced in terms of providing for fishing at various stock levels and it provided for variable escapements which was something we all agreed we needed. In the final stages there was concern expressed that we needed to have a safeguard. We agreed in concept to the safeguard. We did some modeling and came up with two Ricker curves, the low production scenario and the high production scenario. These curves were based on what people working in the field said the river could support.

The low end stock recruitment had an MSY level of about 43,000, but the very apex of that lower curve was 70,000. At this point, it got political -- we said let's take half of that. That is where the 35,000 floor came from. We then went through some modeling exercises where we varied the recruitment. We did harvest rate management without a floor and subjected it to some low recruitment levels, then put the floor in place and did the same modeling again. We looked at the production and we found that (with the floor in place) after 20 years of low recruitment levels, we got more production overall than without the floor. We decided to keep the floor of 35,000.

Boley: I think LB's recollection is pretty accurate. My historical documents include a document from the Klamath River Salmon Management Group, dated March 6 '87, and titled "Escapement Floor Recommendation for Klamath River Fall Run Chinook." It discusses many of the points that LB just raised. Point #3, is that *"The 35,000 escapement floor recommendation was (prior to '86), a higher escapement level than for any year since '78, and was about 30% higher than the '79-'85 average. The TAT concurs that the capacity of the basin has not been nearly reached in recent years, but there is currently a wide range of opinion regarding the shortfall in natural escapement levels. While the TAT does not agree with placing the floor at 43,000 naturally spawning adults, it does agree that the floor should be re-evaluated as significant new information on stock productivity becomes available. At that time, the escapement floor could be adjusted upward, downward or even eliminated, if the data supported the adoption of a single number escapement goal for the stock."* Overall, the floor wasn't a precise derivation. It was a number that people felt gave reasonable protection for natural production that would give us more fish in the long run (based on the information we had at that time).

Boydston: There was concern that the productivities of some of the small stream populations (e.g. Indian Creek, Elk Creek) might be lower, so that was another reason for arguing for a floor.

**Agenda Item #13: Public comment.**

Ronnie Pierce: Mike Prager's report (Agendum #1) must be considered preliminary. It can illustrate techniques helpful in answering the question at hand, but it is not an answer to those questions.

McIsaac: We will consider this an internal TAT draft and not for distribution.

McIsaac: Is there any action the Council would like to take on this item? My expectation is that we would hear from the TAT on this at the fall meeting. At that time, we could address the broader question of whether or not we would recommend a different floor be used some time in the future.

Boley: This assignment ties in with how we manage the natural fish in the river and what we do with our hatchery surpluses.

Boydston: The PFMC needs to receive amendment proposals in October, so I think that we are looking at that as a deadline for any proposed changes in the FMP. We would have to have something pretty much ready to go by October.

McInnis: An alternative route for changing spawning escapements goals is a technical review by the Salmon Technical Team. This may fit into the time schedule better than going the route of a full amendment to the FMP.

Boley: If you were contemplating changing away from harvest rate management and strictly going to a fixed escapement goal, that would be a big topic. We would probably want to go through a plan amendment process. I think there are other policy issues that have to be considered along with the technical issues. It would probably be appropriate for amendment process either way.

McIsaac: ASSIGNMENT: We are not asking the TAT to answer the question, is 35,000 the right floor level or what is the floor level. We are asking for further refinements of the technical analysis. Then it would be open to discussion in the fall whether you want to take the huge step of recommending that we get rid of harvest rate management. If MSY lands at about the level of the floor, is the floor an appropriate level? If that question comes up, I don't know if the technicians or the policy people can answer just by looking at what the MSY point is, then what is the floor? This would require further consideration of things like: what are the weaker stock components in the system, broader policy issues, consideration of rebuilding levels, and a variety of other things.

## **Recessed**

**March 6, 1996**

**8:00 Convene**

### *Announcements*

Orcutt: Public hearings on the draft environmental assessment for the Trinity will start on March 26.

KPOP: Grover: It looks as if the BOR will be operating under a wet year scenario; very similar to last year.

Q: McIsaac: Do you know whether the recommendation in Federal draft on KPOP mirrors the Yurok proposal to add flow during the spring?

A: Grover: I have not seen that proposal.

### **Agenda Item #14; 1995 In-river run size -- CDFG's megatable.**

#### **Review of 1995 Management Season**

Barnes: The last page of the megatable (Agendum #14) shows the '95 run size. You have heard a lot about the perceived over-escapement at the hatcheries, but there was another notable and somewhat worrisome occurrence, too. Look at the jack counts at the two hatcheries: Out of a 29,000 population, we only had 368 jacks. Overall, we got only a little over 1% jacks at the hatchery compared with a little over 12% in the naturals. The figure for three year olds is also a pretty low number. We have adequate numbers of twos in the river to

predict the threes next year, but as I say, it is a little bit worrisome that we don't have the hatchery jacks.

Boley: So, the problem of excess fish at the hatchery may be resolved next year, if these numbers hold true.

Q: Bitts: Jerry, is this information of any use at all in predicting the ratio of natural to hatchery fish?

A: Barnes: The problems with that is the definition of what a natural fish is. Right now, we say any fish that spawns naturally, irrespective of parentage, is natural. Until we change that definition, it really doesn't matter what the parentage is. For management, we have always assumed that they are equally valuable in the population.

A: McIsaac: Is there any information about these 13,000 jacks spawning below the Trinity River Hatchery?

Mark Zuspan, CDFG: We did a carcass survey (from just below the dam to about 40 miles down stream). It looks like the two year old component for wild fish is just about the same as the hatchery fish. In the '90 brood year, fall chinook at Trinity River Hatchery had high mortality caused by infectious hematopoietic necrosis. Only 650,000 fish were released from the '90 brood. When these fish came back in '93 as adults, we had one of the lowest runs on record at the hatchery. That is the explanation for the Trinity side, I don't know what happened on the Klamath. The estimate by the two hatcheries was that at least ½ of the fish arriving at the two hatcheries were turned back to the river. Both managers felt that they could process twice as many fish--had they opened the ladders a little more.

**New Agenda Item: Review of excerpts from the 1995 postseason review (PFMC).**

Barnes: Note that the California sport chinook landings in '95 were 397,000 (Agendum #16a). That is twice as large as any previous year. California troll was about the 7th highest. The next page compares troll effort and landings (21,600 days fished and 629,000 chinook landed in California; 7,900 days fished and 215,000 fish landed in Oregon). In California, the recreational fishermen really responded to the abundance of the fish. The ocean sport harvest was 100,000 larger than any previous year. The landings were over 100,000 more also.

Q: McIsaac: I noticed that the salmon per angler trip was good, but not great. Do you know why?

A: Dixon: The recreational fisheries in the most southern area of Monterey (and south) had an exceptional season. We were amazed at how well they were able to expand their effort into the abundance.

Jim Waldvogel: There were a lot more fish, but the fishing success by individual fishermen really did not change that much.

McInnis: One fish per angler day may be close to what has been achieved off of northern and central California over the past few years, but in southern California, the catch rate had been more like one fish per angler decade.

Q: Orcutt: How much effect did the pricing of the fish have on the overall catch?

A: Bitts: The '88 landings occurred over a much bigger area of the coast. Price had a substantial effect in depressing the level of commercial catch in '95. We have not had this kind of production for quite a while and our markets were not ready to handle it. Had we not had price disputes and tie ups, the commercial catch probably would have been quite a bit higher than it was.

**Agenda Item #15: 1995 ocean fishery impacts on Klamath stocks and Agenda Item #16: Catch sharing.**

Dixon: You can see (Agendum #15) that we projected about 18,300 and it came in about 124,000 for the northern

Oregon cell. If you go down to southern Oregon cell there is a very dramatic difference between projected and total. Obviously this is a reflection of the difference between our projected stock size preseason and what actually showed up. Keep in mind that even the post season number is going to wobble around a little bit for a few years as we finish completing this cohort. Everything is preliminary. Next, if we go to Klamath landings, note that some pretty dramatic differences show up between projected and actual, one example is is the KMZ troll. Since these were very small fisheries the chance of encountering a tag is pretty low, too.

McIsaac: We did a GSI estimate of the KMZ troll fishery and we found that it was dominated by California CentralValley fish. So maybe there were less Klamath fish in the catch than expected because the fishery jumped on a pod of fish that were of different origin. The landings of Klamath fish should be bigger than projected because staying with the 9% harvest rate would have resulted in more Klamath fish to be caught in the ocean.

Q: Bitts: I understand that the harvest rate was 18% on four year old fish, but the age 4 group was small compared to the age 3 group. If you looked at the overall ocean harvest rate in '95, wouldn't it have been far closer to the 13% on 3's than to the 18% on 4's?

A: Dixon: I cannot answer that right now because I don't have the figures in front of me.

Q: Orcutt: Was Klamath impact a reflection of the overall abundance? Would you speculate on what happened with distribution in the northern Oregon cell?

Boley: Generally in Oregon, we harvest three year old fish. My theory is that when you have large Klamath stock sizes, they tend to spread out further up and down the coast then if you have small Klamath stock sizes. The data from 1995 is entirely consistent with that theory. Ken Henry doesn't agree with me, but I will let the data speak for itself.

Bitts: Part of that difference might be that the Central Valley fish aren't as dense in the Newport area as they are in the San Francisco area so that million fish harvested in California reflects that California is closer to the source of most of the fish, whereas the abundant Klamath fish were more relatively all alone in the Newport area then they were in the California area.

Q: McIsaac: Is the age composition of Klamath fish in northern Oregon cell mostly three year olds or were they mainly four year olds?

A: Dixon: In August, it is mostly three year olds (30,300). Some four year olds (1,100) were also present.

Dixon: This is one of the reasons we use that five year base period in the model because the fish are going to shift around in different years.

Bitts: I think this is the first year that we have had this strong of a showing of Klamath fish both in Oregon and in California.

McIsaac: Rich, was there a quota in the Fort Bragg fishery?

Dixon: No.

McIsaac: When the quotas for Coos Bay, KMZ troll and KMZ sport are aggregated the actual catch is less than the projected catch.

Q: McIsaac: Do you know if Klamath fish showed up as far south as Santa Barbara and Morro Bay?

A: Dixon: I know Klamath fish did show up as far down as Morro Bay.

Q: McInnis: Rich, you mentioned that we could expect to see these numbers for '95 jump around a little bit, are they any more likely to make large jumps because of the size of the three year old population?

A: Dixon: I don't anticipate any major fluctuations in the numbers. Those numbers are based strictly on the number of tags we saw of 3's and 4's and total catches. Maturation differences will slow up the cohort reconstruction.

**Agenda Item #17: Council discussion.**

Q: McIsaac: Does the recreational in-river catch at 1,800 projected, 4,600 actual include catches in this special area near Iron Gate Hatchery (referring to Agendum #15)?

A: Zusan: Yes, it does.

Bitts: It was unfortunate that in-river fisheries were unable to take advantage of the actual abundance. It seems to me we are artificially constrained by the quota.

Orcutt: There seems to be a continued perception that the tribal fishery is unmonitored, yet if we look at the numbers over the years, the tribes are the only ones that have adhered to the numbers.

**Agenda Item #18: Public Comment.**

Murry Wolfe, Northern California Association of River Guides: The in-river fishery in the lower part of the river is severely constrained. The average season lasts less than two weeks during the last five or six years. We would like to see some way for the fishing to be opened when it is apparent that the run is huge so we could access those fish while they are still in a good condition to eat. There was close to 20,000 people that left the day the quota closed. That is crippling the people that own property there. It hurts my business. When we have these huge returns and it is obvious that escapement is going to be met, I'd like to see some language in the regulations to reopen the season.

Carol Davis, Commercial troll fisher: I would just like to echo that we do need in-season planning for these over abundance years.

Von Lowfield, Eel River drainage system: I propose a new zone from the Klamath River to Horse Mountain to protect the Eel River fish.

**BREAK**

**1996 Management Season**

**Agenda Item #19: 1996 Ocean stock size projections.**

Barnes: (Referring to Agendum #19) The TAT met in February for the stock projection. This document will be revised with some corrections soon. The fourth page shows the regression for age three on two Klamath fall chinook. There were just under 27,000 age two fish. When this number is applied to the regression, you end up with 244,000 predicted age three fish swimming in the ocean on May 1. You will note the asterisks on '80, which was the El Nino year, and '85; in the past we have ignored these two points. The Salmon Technical Team (STT) projection for age three fish is not 244,000 as we predicted, but is 239,900. The reason for that is that the STT included all the historical data (i.e. '80 and '85). We continued our past practices because we do try to take the

variability out of the estimates (of excluding '80 and '85). The STT and the TAT both are currently following our long-term policy of running the regression line through zero and not having a calculated intercept on the Y-axis. On the age four on three, the STT didn't change our estimate of 214,800 age four fish. The embarrassing comparison of preseason estimates to the postseason estimates is on page five. The last lines on the first page of this document will be corrected to be "a spawning population of 94,800 adult fish, of which 65,689 would spawn in natural areas." Page eight shows the hatchery natural ratio. We will continue using a running average of the last five years. Note that '95 had the highest "natural stock size." We know that includes a lot of first generation hatchery fish that were in the river. The new harvest rate model run that reflects the STT as well as our TAT projections, is dated March 3, '96.

Bits: I don't understand how the terminal harvest rate can be .64 or .67 when that is basically the total allowable harvest rate on a brood.

Boydston: What you don't see here is that the in-river harvest rate on three year olds is something considerably less than that because of the selectivities of the fishery. You have to look at the harvest rate over the whole cohort of fish as three year olds, four year olds and five year olds, and then when you add them up at the end, you get the 33% to 34% escapement rate for the cohort.

Barnes: At the bottom of the page, the river impact rate is only .38 on the 3's and .64 on the 4's.

Boley: How does this relate to the letters that we sent to STT that identified the annual 50/50 sharing as a potential cause of deviation between 31% to 35% escapement rates? Are you telling me that we can identify annual sharing as .221 ocean and .638 in-river? Do those values still result in an escapement rate of 33.5%?

Dixon: When you start doing annual 50/50, you get away from MSY. The long term harvest rate of .20/.665 represents MSY. Then we basically have to tease that to end up with 50/50 sharing.

Bits: It looks like the range of final escapement from one extreme to the other of this matrix is 1.5%. I don't think we are ever really going to come anywhere close to being that fine tuned in real world results.

Boley: Do you have any ideas why we have basically over predicted age four stock size the last five years?

McIsaac: There is only one STT concern in the Preseason Report I that had to do with this very question. They maintained that in recent years, with a low ocean harvest rate, there is an artificially high number of threes coming back to the river. Has the TAT considered this concern?

Barnes: It is worthy of consideration. We will look into it at the April TAT meeting.

McIsaac: Has the TAT looked at regression of ocean threes to predict ocean fours as opposed to in-river threes to predict ocean fours so you can get out of this theoretical problem that whatever you count in the river as threes is just an artifact of whether you have got a 60% harvest rate in the ocean?

Boydston: No, the TAT hasn't considered it because we would be regressing cohorts on themselves and it wouldn't work. Over time, we could get a higher proportion of the three year olds coming back to the river simply because faster growing fish (which tend to mature earlier) are surviving to come back to the river.

Boley: If you wanted to remove the variability between the year to year fluctuations and harvest rate, you might be able to go back and back calculate what the three year old in-river size would have been under some standardized harvest rate. That would still allow you to use the in-river threes in any given year then predict the next year's fours.

Bits: The differences in ocean harvest rate are going to make a big difference in the fraction of the May 1 age three population that makes it to the river.

Dixon: One more point, the age four on three regression for '96 is outside the range of the high data. Statistically, this is not desirable.

Barnes: In '94 we went back and looked at all of our forecasts and that is where we analyzed the partitioned cohort method where we partitioned out the various runs in the river. Our conclusion at the time was that the zero intercept was the best predictor.

McIsaac: I want to try to get a feel on what the odds seem to be for the forecast being higher or lower. I am left with the feeling with a track record of four year olds being over predicted particularly in years of low ocean impact, that we might have numbers that have a better chance of coming in higher. My second question is on the hatchery natural ratio. I think that compensates the other way. Page #8 shows where recent year average of 66% but last year it was 84%. This leaves me with the feeling that, assuming that there is only going to be 66% natural in a year like '96 might compensate for the run predictions perhaps going the other way.

Boley: Given the fact that we are not driving this line through zero, the age four projection may be a little over optimistic. The percent natural may be actually greater than what we are projecting using the five year running average. Certainly the percent natural of the threes was pretty high this last year and I would tend to think that the fours will follow the same pattern. You need to pick what ever system you are going to use and stick with it and let it run for a long period of time, otherwise you start monkeying with different people's shares and you are going to cause more problems than is warranted. One aspect of the predictors is that some come in low, some come in high, but on average they probably balance each other out. There is always going to be variation because they are not very good predictors anyway.

McInnis: To get back to the percent natural forecast, if the percentage of the natural spawner contribution is under estimated and we are not managing for the 35,000 natural spawner floor, what impact does that have on the forecast for harvestable surpluses of chinook? The floor is all natural but the 33% to 34% spawners we are not separating natural from hatchery at this point. We are managing for the full harvest rates, full allocation, then the forecast of how much of that is going to be natural and how much of that is going to be hatchery is a moot point as long as you are above the floor. Now if you are right near the floor, then that would determine whether or not you would forecast that you had to manage for the floor.

McIsaac: Unless the projected spawner escapement changed to get us into floor management, this particular factor is not going to change allowable fishing rates either in the ocean or in the river.

## **Agenda Item #20: Calibration of Klamath Ocean Harvest Model (KOHM).**

### **Calibration Process**

Dixon: You all have the copy of my memo to the TAT on the calibration of the KOHM (Agendum #20). The calibration process is pretty much the same from year to year. We take the model, put in the expected stock strength, and the expected stock projections for the age three and four Klamath, Rogue, and Central Valley Index (CVI). We then bring in the exploitation rate tables for the '86 to '90, cohort reconstruction figures, and lock them in so they don't change. Then adjust for the years ('88, '89 and '90) that were not full fishing cells so that those tables will be comparable to the ones used for '86 and '87. Once that is all done, the exploitation rate factors are set giving the result you see in Attachment #2 to this handout. We would have a 58% harvest rate if full fishing occurred in '96. Note that we changed out methods a bit (per ODFW) because the contribution rates appeared to go down with increased fishing in the given cells. This had happened within the model because we calculate total chinook landings differently than the model predicts **Klamath landings**. With Klamath landings, we have a

starting age specific populations for age three and four and then based on estimation of effort, those landings will be subtracted from the amount of Klamath fish available at the beginning of a fishing period. So, for May we start with X number of Klamath fish, the model predicts certain age specific Klamath harvest landings and that is subtracted. In June, you would have a smaller and smaller population of Klamath fish. With the **total chinook landings**, it is not dealt with that way because we don't have specific information on Rogue and Central Valley fish as we do for the Klamath. We have indices. There is a Rogue index, it is age specific but the CVI is not age specific. Central Valley Index represents the total fish landed south of Point Arena combined with the adult Sacramento escapement that occurs. We take recorded landings from the Salmon Review for '86 through '90, put those in based on each fishery and time fishery area, then those are scaled based on the current stock strengths. We estimate the total chinook landings as the portion of effort compared to the base period that is expected in the current year. The important thing to remember is it doesn't take into account what happened prior to a given time period. If they had full fishing or no fishing, you are still going to end up with lower contribution rates. We do not use the KOHM to estimate total landings in either northern Oregon and Coos Bay cells or in the southern Oregon cell. These are done with different models based on the Klamath impacts produced by the KOHM. Anyway, the decision was made this year to freeze the contribution rates as shown in the calibrated model is (i.e. full fishing) which should be in the low range of the contribution rates. Then we use those contribution rates when we are projecting total chinook catches in the KMZ.

We then estimate the total landings by simply taking the age three and age four Klamath landings for a given time period and dividing that by the contribution rate. We predicted about 11, 500 fish quota in the KMZ sport; had we used this other method, it would have resulted in 12,300 fish quota.

C If you will look at the contribution rates for the age three and four combined, you will find them relatively high compared to prior years. This is in response to the situation when we have relatively high Klamath abundances predicted and compare it to relatively lower abundance estimates for both CVI and Rogue. When you merge the CVI and the Rogue indexes together the result is that Klamath fish are going to make up a greater part of the catch because they are predicted to be more abundant. So the good news is, there is a lot of Klamath fish, the bad news is there is a lot of Klamath fish relative to the other stocks.

Bits: Does this mean that you are going to continue to regard the southern Oregon cell as one unit in modeling Klamath impacts? The data shows that the number of Klamath fish landed per thousand varies greatly from Morro Bay to Bodega Bay. I hope that we can manage to model our seasons in a way that is consistent with what the data shows. This is a matter that vitally affects the future and the success of the troll fishery in that area.

Dixon: I would recommend that you bring those concerns up next week to the STT.

McInnis: No, action on this question should start with this Council.

McIsaac: Over lunch, please review the March 12, 1996, memorandum from Dixon, and Bits' data.

#### **Agenda Item #21: Possibilities for In-season Abundance Updating in the Ocean or In-River ocean.**

##### **Ocean, in-season management**

Bits: Last year, it became evident sometime during May that the overall abundance in the ocean had to be quite a bit higher than what had been predicted simply because of the rate of catch. After doing some research, we found that there is a fairly consistent percentage of the total troll catch that is landed in May.

Mike Morford: Several years ago, I looked at the catch per unit effort Catch Per Unit Effort (CPUE) in Fort Bragg in May and June in about a six week period and compared that to ocean populations in those years. The

STT estimates that it had an  $r^2$  value of .83-.94.

Mike Maahs: The STT reviewed a report on this May Fort Bragg CPUE. Some of the considerations were: If you are going to shift in midseason, how do you shift the fisheries? What happens to the north? How do you test the fishery in the south and make adjustments to the north and in the river for a fishery that has already occurred? You could be punishing the later fisheries for the catches of earlier fisheries.

Bits: I wasn't aware of those concerns. It would seem to me that in a year like this, the principle value of using this method (applied to quota fisheries) is that if it were determined that the abundance were substantially different than projected, adjustments could be made in all fisheries that had quotas. If the adjustments were upward, I would think folks in the river and folks in the KMZ would be pretty happy with the results.

Morford: The criticism is that if the predictions were lower (in reality) than they were preseason, it would be difficult to get people to constrain the fishery.

McIsaac: Let's ask the TAT to review your document.

Q: Orcutt: Would an ocean update of run size require an amendment to the FMP?

A: McInnis: I don't believe that in-season adjustment is one of those of tools that can be selected by the Council for the upcoming season. If this is true, you are right, it would take an amendment to the FMP to put that on the list of tools.

Boley: This Council would have to give a strong recommendation for an ocean update on run size to be seriously considered by the PFMC.

Bits: My goal is to see if it is possible to employ an in-season update Fort Bragg this year. I could investigate to find out if there are enough boats left to do a dry-run and determine if this has the potential to go somewhere.

Boydston: In my experience with the Council (back to '83), I don't recall ever making an in-season adjustment of abundance.

Bits: My impression last year, was that the tool was in the bag.

Boley: I think the Council did address the whole idea of in-season adjustment. We did not preclude it being used. We never chose to use it.

McInnis: The answer to this question is in writing. I don't think in-season adjustment is in the current PFMC bag of tools, and adding it would take a plan amendment. That wouldn't preclude a "dry run."

Orcutt: If the in-season adjustment told us to fish less, there may be problems. I think this is the policy question that we should be addressing here.

Bits: If this could be a valuable tool, it might require a plan amendment and that is a multi-year process.

Kirk: The recreational fisheries in the zone have been asking to look into the idea of season management versus a quota management. We don't present the marketability that we need to in our inland areas as well as our coastal areas because we are stuck with this quota fishery that takes us off the water constantly. So I would hope that would be addressed in a '96 structure as well as the years to come. This is one of the items that the Coalition wrote in their November 14 letter to the Chair.

**\*\*Action**

McIsaac: Let's consider this to be on the agenda for later in the meeting as an option for discussion and possible motion. In season management, is on the table for use in other years if it is not to be used for '96. There is a potential of a TAT assignment to look at a document. The Council and the TAT could also look at a previous STT one pager on this.

**In-river, In-season Management**

McIsaac: Elsewhere in-river abundance updates occur. For example, on the Columbia River we have an annual update of abundance. By September 10, the in-season forecasts are highly reliable, much more reliable than the preseason forecast. On the Klamath, we don't have the convenience of daily counts of fish passing a particular point. Below Bonneville Dam, they use the catch per unit of effort by the gill net fishery to update the late coho run. This has proven to be a much more reliable estimator of abundance than the preseason forecasts. What are the data parameters that the Team could look at to examine whether an in-season update could be investigated? For example, catch per net per day data, catch per day in the recreational fishery in the lower river, or any other data? We need to see if there is a relationship between any of this data and whether the run is big or small.

Polos: There is a substantial amount of information on tribal harvest level and sport fishing below Highway 101.

McIsaac: Does this data go back in time to encompass years when the run was big and years when the run was small?

Polos: Yes, back to '78.

Orcutt: On the Trinity side, data that is available to be analyzed includes: the gill net fishery, Willow Creek weir and the hatchery returns.

McIsaac: Jerry, how does analysis of in season management fit in with the TAT's schedule? Would we hear back from you in time to make any recommendations for '96?

Barnes: No, we don't have time to do a rigorous analysis.

**11:30 a.m.- 1:00 p.m. - LUNCH BREAK**

**Agenda Item #22: Report from the Harvest Allocation Work Group (HAWG) (Wilkinson).**

Wilkinson: The proposed addendum to long term plan (agendum #22) was developed by the HAWG and is presented to the Council today as an action item. We are willing to suspend our HAWG meeting schedule until we are directed by the Chair to address a specific issue.

**Discussion**

Kirk: Regarding the priority of future assignments by the Chair, we do have a list of different specific items. I hope we can still follow this list in the future. I also would hope that we could maintain a meeting schedule sometime in the late fall through the early spring because most of the participants are available during that time.

**Agenda Item #23: Update on the Status of the Salmon TAT Review of Consistency of Annual 50/50 Sharing with the Current FMP (Boley).**

Boley: The letter from Larry Six, dated March 1 (agendum #23), addresses this issue. Now, we need to think about what kind of response this Council might make, or what recommendation this Council might make, to the PFMC regarding this issue. It is not clear, if this is a major enough issue to prepare a plan amendment.

McIsaac: When we get around to considering a motion on Item #2 of the HAWG, we should consider how we would handle this change. Maybe at that point in time, we could discuss what we would tell PFMC or recommend PFMC do with their process.

Orcutt: What would the terms be of the sharing (e.g. fish for fish) between the user groups?

McIsaac: It just says whatever the sharing would be, will result in a greater range than 33% to 34%. I think it is neutral as to this question of how fish are counted.

**Agenda Item #24: Recommendations from the California Fish and Game Commission (Boydston).**

***Background***

At our February 21st meeting in Santa Rosa, I read a letter from the Fish and Game Commission (the Commission) that basically said that the Commission has received considerable input over the years with regard to the adequacy of the allocation of Klamath fall chinook to the in-river sport fishery. The Commission said that they did not view 6% of the total allocation of Klamath chinook (which equates to 12% of the nontribal share) as a fair allocation to the in-river sport fishery considering the size of the basin, numbers of anglers, etc. They will be considering managing for a higher percentage that has been allocated in the past. There was no specific recommendation in the letter. I have asked them if they want to pursue a higher percentage or a higher number than status quo, that they should let the Council know next week so that it can be in the option package that will go out to public review. The Commission is the sole regulatory authority over the in-river sport fishery. If they set a catch allowance different than what we assume here, it will not be consistent in terms of escapement of fish (particularly if they elected a higher number than we recommend). The Commission is independent in its action from the CDFG. The Commission has regulatory authority. The announcement of intent to amend the regulations for the river sport fishery will be this Friday at the Commission's meeting in Redding (Agendum #24).

McIsaac: If this Council wants to offer any advice on this topic, then today is the day to do it.

Kirk: Could you elaborate a little bit more on the ocean salmon fisheries portion of the Commission's recommendation?

Boydston: At the December 7 Commission meeting in Sacramento, I basically went through the process that has been established in terms of allocating Klamath River Fall chinook to give the Commission some background. I tried to be as neutral as possible with the presentation. I went through all the different organizations and some of the problems we get into: managing the ocean fisheries with different stock compositions, the spawning escapement goal of 35,000 minimum, 33%-34% spawning escapement, establishing allowable harvest levels, and the importance of the coded wire tag. I showed them a diagram of all the people sitting around here and who they represent. Then I went through some of the previous allocations. I showed them the way we are currently doing it (e.g. 6% to the river sport fishery, 8% to the KMZ sport fishery, and 50% to the Yurok and Hoopa Tribes. At the end of the meeting, they indicated that they were going to look very closely at recommending that a higher percentage be allocated to the river sport fishery.

Orcutt: What authority does the Commission have?

Boydston: All the coastal states in the area encompassed by the PFMC retain regulatory authority out to three miles (i.e. the exclusive economic zone (EEZ)) including the sport fishery off California. In the past, the Commission basically has conformed to what the PFMC has recommended and the Department of Commerce (DOC) has adopted for the EEZ. They did not discuss the ocean fisheries in this meeting; the focus was the river fishery.

McIsaac: When the Commission entertains this idea on Friday, is it expected that they will make a single recommendation (expecting that PFMC would conform) or would they expect to make a range of recommendations?

Boydston: The Commission is discussing allocation of fish in internal waters. This is an internal matter that does not come under the DOC purview under the Magnuson Act. We have tried to inform our Commission that they have to let their wishes be known upfront so that the Council and the DOC can proceed with developing ocean regulations. If they are contemplating a higher catch level, they need to let the PFMC know so we can get it into the option package to go out to public review.

Kirk: Is there a staff report for the Commission meeting on Friday?

Boydston: It has not been signed off on by our new director, so I don't know when it will be available. The history on this issue is: in October, the Commission asked me to tell them how Klamath fish are allocated. In December, I told them. In March, the Commission will consider changing the status quo.

Boydston: My intentions are to recommend we have a status quo option from this Council. Next week, when the PFMC gets together, they could receive a letter from the Commission saying that they are going to manage for so many fish in the river sport fishery. At that point, I will make the motion for an option that would conform to that recommendation. If I don't do it, I am sure NMFS is going to seriously consider making the motion.

McInnis: That is correct, because the NMFS will have to look at the internal fisheries. There will have to be at least one option in the March package that is based on taking into account that in-river harvest that would be different from the status quo allocations.

McIsaac: Do you see any situation whereby the DOC would ever overrule a decision by the the Commission to allocate more fish to the in-river sport fishery?

McInnis: The Magnuson Act gives us the authority to overrule what the state is going to do in the river for their recreational fishery.

Orcutt: How would this work with the potential in-season management methods?

Boydston: The in-river sport fishery comes totally under the purview of the Commission.

Boley: It would really be helpful if the Commission could provide some direction beyond "just take it out of commercial fishery."

Boydston: I told the Commission that if they are seriously considering this, do us all a favor by getting it to us as soon so we can get it in the option package. Then you have until April to decide what to do.

Bostwick: In '93, in Portland, we in-river sport fishing interests were asked by various entities to give up a portion of our fish. On that particular year, I think we had about 3,200 fish. In the spirit of cooperation (and a little pressure from State and PFMC), we gave up a portion of our fish. We stated, up front, that this was not a lifetime agreement. When I went to the Commission in October, we didn't ask for the world, we only asked for enough fish that would give us a somewhat reasonable season. I truly think the Commission was incorrect in saying they should take it out of the commercial allocations. I think they should have left it up to the PFMC to decide. We are trying to make a living and our portion of our fish has been given away and we are just asking for a portion of it to be given back.

McIsaac: Is 12% a long term average for in-river sport or was that something that was the result of a subtraction in '93?

Waldvogel: It seemed to vary between 14% and 17% for the in-river sport.

McInnis: If there is an increase in the river recreational fishery, we are going to have to take action in the ocean to ensure that it doesn't come out of spawning escapement. The spawning escapement is a level that is set in the FMP and that is what we have to live up to.

## **BREAK**

### **Agenda Item #27: Public Comment.**

Art Huschler, Oregon's Representative on the Klamath Coalition (Coalition): We, in Oregon, would like to propose that we get a subquota for the '96 season. We have analyzed the catch data from '74 to '90 and we found that recreational fishermen from California caught 54% of the fish while Oregon fishermen caught only 46%. A split quota between Oregon and California would help solve this discrepancy in the recreational fishery. In '95, we lost 16 or 17 days of fishing due to the set closure date in the '95 regulations.

Bob Jones, Brookings, Oregon; Chairman of the Coalition: This is something that the Coalition cannot endorse, nor is the Coalition prepared not to endorse it. The general idea is that the Coalition is looking to keep the same season length, but try to get more fish. We won't be able to prepare options until after ODFW completes their work on Klamath chinook impacts on angler effort. The Coalition is very interested in the possibility of going to seasonal management. The Coalition is willing to explore any and all uses of these tools to get a firm fixed season. You have no idea the aggravation and the anger that was expressed the Friday that our season was shut down. We need to have a season where we know when it starts and when it stops.

McIsaac: Have you had any thoughts on how a seasonal approach could be implemented while maintaining some security that what may have happened in some other years would not happen again?

Jones: From '86 to '93 the Klamath impact rate was very low within the zone, so perhaps seasonal management would kick in after looking at the abundance in other areas.

Kirk: Speaking for the California portion of the ocean recreational fishing zone, most of the California fishermen would be interested in some kind of a fixed season so that we have marketability. (e.g. structure a season during the Memorial to Labor Day period that would give us the best opportunity to market our ports, maintain opening times during the major holidays, the Memorial Day weekend, the Fourth of July period and the Labor Day weekend). If we stick with a quota, even though we have this abundance, there are absolutely no guarantees for our businesses. This year is the first opportunity that we have had to return to any normalcy as far as the coastal port fisheries are concerned. I am hoping with some conservation, we can take advantage of building on this year to be better, but the years to come, even better.

Carol Davis, commercial troll fisherman, from Brookings, Oregon: Once again, the troll fishery is coming under the knife. In the past 12 years that I have been commercial fishing, we haven't fished much out of the Port of Brookings. We hardly have a troll fishery left. The sport fishery is growing, but we can't seem to make a living commercially. The Natural Resources Council (NRC) did a study (funded through the Oregon Salmon Commission and the federal government: Hire a Fisherman Program) on chinook troll hooking mortality. The results showed mortality chinook troll hooking mortality between 26%-30%. I believe this study will soon be presented to the PFMC.

Wilkinson: Do you have any ideas on what the STT approach is going to be on this issue?

Boley: I haven't heard anything.

Ron Lowfield: The resource is at a minimum. We are here only to harvest surplus fisheries.

Richard Sargent, Quartz Valley Indian Reservation, in Scott Valley, California. I sit on the Provincial Advisory Committee (PAC) for the Forest Plan and we need to know your concerns. Please send me any action documents that you produce.

Blair Hart, Shasta River CRMP, March 6, '96, letter read by Parker (Agendum #27)

Boley: We should respond to this letter.

Wilkinson: Our response should have the consensus of the group.

**Action: Develop Options/Recommendations for the '96 Management Season**

***\*\*Motion.***

Wilkinson: The HAWG proposes an addendum to the long term plan (Agendum #22).

Boley: Second.

**Discussion**

Boley: If the motion passes, I will follow it with a recommendation for the STT to make a technical adjustment for Item #2.

McInnis: Referring to Item #2, we have heard in other discussions about a 31% to 34% or 35% bracket on the spawning escapement. Is there a reason that the HAWG wasn't more specific in Item #2 as to what the spawning escapement would be (e.g. 31%-35%)?

Boley: The discussions within the HAWG were that it was pretty difficult to manage for a 2% or 3% difference.

Bits: Given the annual variation in the amount of harvestable fish. We are probably a lot better off just going ahead and doing the allocation annually. The fluctuations in harvest rates and brood year escapement rates are far smaller than the margin of error that we achieve between our predictions and reality.

Boydston: Maybe we should direct this to the PFMC as our position and not make it a motion to the long range plan until we complete the discussion and the FMP implications.

Q: Wilkinson: Should we table this motion until after the Chair checks with the PFMC to get the proper steps?.

{Unanswered}

Q: Orcutt: What does "fixed percent shares" mean in Item #2?

A: McIsaac: The "fixed percent" wording was used in lieu of 50/50 out of respect to ongoing litigation. In this way, if the "fixed percent" comes back something different than 50/50, this language could then still stand.

Bits: It is my understanding that we are managing on a fish for fish basis as far as calculating the shares unless,

and until, some other agreement is reached. It is a separate issue from this addendum.

McIsaac: My understanding is that we are not managing on a fish for fish basis unless otherwise decided, but that question has not been agreed to for '96. It was agreed to for '95 and '94. This language for a long range plan addendum would allow it to remain an open question each year. If this Council wanted to agree on a definition to be used forever, then we could suggest such a motion be added into the long range plan.

Boley: Is your concern that under an adult equivalent method of sharing, that you might get a fluctuation in harvest rates and escapement rates greater than 31% to 35%?

Q: Orcutt: The old agreement called for an approximate 70/30 split based on some way of measuring percentages. How did we measure those percentages?

A: Boydstun: I thought we had agreed on this after all those HAWG meetings. The HAWG agreed to look at annual sharing and changing the escapement target from 33% to 34% to some broader range. That was a major accomplishment. It was the only thing we have been able to accomplish in the HAWG for quite a few meetings and now, and I hate to see us go backwards and not be able to get agreement.

McInnis: The DOC expects this 50/50 split to be on a fish by fish basis until there is some agreement to measure them otherwise. That agreement would be between the Department of Interior (DOI) and the DOC to meet the U.S. trust obligation. This Council advises the Secretary of Commerce and the Secretary of Interior so it would probably originate from this body. The fish-for-fish method of counting and a 50/50 tribal/nontribal share is what Commerce is going to be looking for out of the PFMC's ocean management recommendation.

Q: Orcutt: In Item #2, there is no reference to a natural spawner escapement floor. There is reference to the appropriate long term MSY in establishing the annual escapement goal. Does this imply a change from the natural spawner escapement floor philosophy?

Wilkinson: It is my opinion that we (the HAWG) was silent on that.

McIsaac: I certainly would not view this as threatening in any way to the potential of some long term agreement for fish for fish accounting. One of the things for consideration this year might be a recommendation from this Council on whether to manage on an adult equivalency basis or a fish for fish basis for '96. Absent a technical analysis coming forward, or absent a court case on the language and the Solicitor's opinion, the interpretation is most likely going to be the same as last year. I would sure hope that the adult equivalency or fish-for-fish accounting issue is not going to preclude passing this particular motion. The question about the escapement floor could conceivably be valid depending if the HAWG intended this to be inserted into the long range plan. It refers to Category 5.2, Page A-9 of the Long Term Plan.

Pierce: During all of our discussions, there was never any intent to change the language in the floor or any mandated escapement rates. We left the exact numbers out because we know that things can change and what we were trying to find was language that we could use that would remain fixed as long as we were doing harvest rate management. The second sentence of Item #2, says once the required escapement has been calculated, it will be set as the nearest escapement goal. My impression is that the term escapement meant the natural escapement. Once the required natural escapement has been calculated, that will be set for that year and then you can go back and monkey around with the harvest rates to get your 50/50 sharing.

McInnis: My understanding would be what Ronnie has put forward. I don't know if this replaces what is already in the Long Term Plan or if the floor is dealt with in a different paragraph or a different section.

McIsaac: I should correct my use of the word "inserted" because as we see at the top of agenda #22, the

following is a stand alone addendum. I recall our conversations that this would be an appendix like addendum to the plan.” So, if the plan in Category 5.2 talks about the escapement goal linked to a floor, perhaps we are okay.

Boley: The first two recommendations in this proposed addendum would be of great help to PFMC to provide some definitive guidance for this year's process. The suggestion by LB that we at least forward these to PFMC as a recommendation might be valid considering some the people's lack of comfort in how this stand alone page actually refers back to page A-9

McIsaac: Would it be useful if we adopt this for a technical adjustment?

Boley: Yes, I was going to address that in a follow up motion once we act upon this motion.

Orcutt: If the STT, or whoever looks at this compatibility with the FMP, say 31%-35% is incompatible, then how is that going to affect the second part of the harvest shares?

Boydston: We want to present this so that we can get it fixed. We are in agreement as a group that we have got a deviation from the FMP. We are in support of having a technical review or a plan amendment if that is necessary to correct the situation.

Polos: I agree with you that a modeling exercise is in order for '85 and '86.

McInnis: Based on a quick look at the Long Term Plan and Section 5.2, I see that 5.2 is silent on the spawning escapement goals. I don't see that we lose anything by the statement that is here.

Boydston: Is this a motion to the PFMC or are we working on the addendum?

Wilkinson: I had suggested tabling this as an addendum until the Chair could find out if it were to be a FMP amendment or a technical adjustment

McIsaac: Does the second to the motion feel that is acceptable?

Boley: Yes.

**\*\*Action**

McIsaac: Let's consider the original motion tabled. Now we will decide how to proceed with regard to advice to the PFMC.

Wilkinson: I think the whole package should be brought before the PFMC to ask their guidance to either a) make a technical adjustment or b) amend the FMP.

McIsaac: I am having some trouble with Item #3 in particular as its pertinence to PFMC advice.

Boley: My suggestion would be to just take and express Item #2 as a recommendation to the PFMC for '96 actions.

McIsaac: During the break, Scott and LB can put together some language that the rest of the Council can look at. We may be able to propose their language as a motion to be voted on after the break or tomorrow.

**BREAK**

McIsaac: Are there any other options?

**\*\* Motion**

McIsaac: For the '96 season, manage on the basis of fish for fish with no basis for future years and no prejudice for adult equivalency accounting in future years.

Bits: Second.

**Discussion**

Boydston: I am against this motion. NMFS has already told us how we will manage, so there is no need to put it into a motion.

Orcutt: I agree that there is no need for this motion.

*Motion fails.*

**\*\* Motion**

Bits: Recommend to the PFMC that ocean fisheries be managed on a .22 harvest rate for Klamath River four year old fall chinook. The division between fisheries would be similar to last year (i.e. 1,790 to zone sport, and a balance between California and Oregon troll).

Boley: Second.

**Discussion**

Dixon: This model run (March 5, '96, at 10:22 p.m.) uses the long term 50/50 sharing to give the harvest rate combination of .20/.665. Under that harvest rate combination, I determined what the total harvest was both in-river and ocean. That represents what would be maximum sustainable yield. Once that was fixed, I adjusted the harvest rate combinations to .221/.638. That tweaked it so we ended up with 50/50 sharing. That resulted in the 65,689 fish for natural spawning escapement. The table on the second page is the result of running the equilibrium model (i.e. 500 times to simulate 500 years). I used all this information to calculate escapement rate (defined as the escapement over the total harvest impacts plus escapement). The model is a little off, but I will fix it soon. As I understand it, I was to fix the escapement under the long term harvest rate combination and then vary the model to let the catch vary so it results in 50/50 sharing among the tribal/nontribal fishermen. We actually did do that, but it didn't fall within the 33%-34% long term escapement. It actually came out to about 32.9%. The directions we received were conflicting.

McIsaac: But you have been able to come up with a 50/50 numerical sharing and fall within 33%-34%?

Dixon: That is what this model shows because of the different age structures for the fish, it is very unlikely that we are going to be able to use .20/.665 and come out with 50/50 sharing.

Boydston: Rich, how are you computing the brood escapement rate of 33%-34%?

Dixon: We decided to use the equilibrium model to do that because long term escapement is relatively independent of the stock age structure.

Boydston: Are you figuring out how many of those fish would have come back to the river in the absence of

fishing or are you just taking the number of fish caught?

Dixon: The model's output is total landings. You can say I want the total landings for three to five year olds or you can do it by individual years. The equilibrium model only produces its information based on terminal fishery and off shore fishery. That has to be adjusted to break into tribal and nontribal fisheries.

McIsaac: Under the motion on the table, would a 22% ocean harvest rate allow for 50/50 sharing and escapement that is not in conflict with other things that we are bound by (i.e. our long range plan or the PFMC FMP)?

Dixon: That is correct. That escapement results in approximately 33.5% (across the brood) escapement rate.

McInnis: Dave, you said in your motion that there would be an equal 50/50 sharing between Oregon and California. Did you mean take care of the zone and then do equal sharing north and south of the zone? I'm concerned because the impacts to winter chinook would be different.

Bits: The past practice has been that the commercial share of the Klamath ocean share be evenly divided above and below the KMZ. The Klamath impacts in the recreational fisheries outside of the zone have been considered negligible. If that proves no longer to be the case, then the motion may not be appropriate because those impacts might have to be accounted for in the allocation formula. The recreational ocean fishery gets 17% of the ocean share. The KMZ fishery can then allocate that as they please.

Boydston: When we go through this again, we might want to clarify whether you mean 3's and 4's, or just 4's.

Boley: Last year was actually pretty unusual when we actually did achieve 50/50 sharing north and south of KMZ (i.e. 22% harvest rate in the ocean amongst just the ocean share, a 17% share to the KMZ sport and an 83% share to other fisheries).

Boydston: Inherent in the 22% is 6% for the river sport fishery, is that correct?

McIsaac: From the Oregon perspective, we are looking to limit coho impacts between 10% and 15%. I am wondering if I am voting for a motion (with these large Klamath runs) that will have a high impact on coho.

Bostwick: I cannot support anything until I know what the Commission is going to do as far as our share of the allocation.

**March 7, '96**

**8:00 a.m. Convene.**

**Action: Develop Options/Recommendations for the '96 Management Season (continued)**

Dixon: I reran the model yesterday using the long term harvest rate combination specified in the HAWG's text (.20/.665). Under that combination escapement would be 63,702 (see model March 6, '96, at 8:52 p.m.). I then readjusted the harvest rate combinations to provide 50/50 sharing between tribal/nontribal. Approximately 12% of the nontribal would be in-river sport. That provides a little higher harvest and it provides a little lower escapement than the model we had yesterday. I then attempted to evaluate how that harvest rate combination (.225/.652) translates into long term escapement across the brood. I used that matrix of numbers to look up the harvest rate combination and see what that translated into as far as the escapement rate across the brood. It translates out to 32.5%.

Bits: Is today's result more valid or is yesterday's result more valid?

Boley: Yesterday, you had basically used the long term harvest rate and determined what a total harvest would be as well as an escapement but then, instead of holding escapement steady (as the HAWG language specified), Rich just held the harvest steady and adjusted the harvest rate combination to get 50/50 sharing. Last night, he followed what we had in our HAWG language (hold escapement steady) and varied the harvest rate combinations so that we have 50/50 sharing. It is just a matter of the choice between holding harvest steady or holding escapement steady.

McIsaac: And when all of this is done, it is still an ocean harvest rate of 22% either way you do it, is that true?

Dixon: Yes.

McIsaac: This means that we do not need to revise the motion that is on the table.

Bits: It would be premature to take PFMC a proposal for '96 that falls outside the current framework plan for escapement (even though it is only by ½%). There are people who would make a big deal out of that ½%. My sense to stay within the current escapement rates of 33%-34%.

McIsaac: I am still going to ask the Council to consider the depth of this discussion if the harvest rate is still 22% either way.

Boley: George correctly identified that 321/2% isn't a brood escapement rate. We need to decide on what we are going to hold constant and then be consistent for the next (however many) years we do it.

McInnis: I am the one who is going to be picky about the 1/2% difference between whatever brood escapement is and in the 33%-34% target. If you are fixing the escapement, initially, then why wind up with this 321/2%; why not 33% or 331/2 % or 34%.

Boydston: If we went back to the way we used to do it where we had fixed long term harvest rate combinations, we would be managing at .20 ocean/.665 river. We'd do that every year but that doesn't give us 50/50. Now we are going to meet the natural escapement level under this combination, but we have to use different harvest rates to get 50/50 sharing. So in order to meet the NMFS requirement for 50/50 sharing, you cannot use the long term harvest sharing combination. We have to vary the combinations to get the 50/50 sharing. Is that correct?

Pierce: Under the fixed harvest rate management, the escapement each year does not fall between 33% and 34%. The escapement on the brood falls between 33% and 34%.

Kautsky: If we are going to try to go with the FMP of having 33% to 34% brood escapement rate, then we cannot change what we do year to year. We have to approach this problem exactly the way we did on this spread sheet each year over a brood.

**\*\*Action:**

Bits: Table the motion. Boley, seconder, concurs.

**\*\*Action:**

McIsaac: We will now bring back the motion relative to the entire recommendations of the HAWG (Agendum #22).

Wilkinson: As the Chairman of the HAWG, I offer my apologies to the full Council for misrepresenting this

proposal that I laid before you. The proposal was approved by consensus when it was drafted on March 5. It now apparently is not a consensus. We could words smith, or work on it item by item, but I prefer to let the motion stand as proposed yesterday.

Bits: Is the language in Item #2, first sentence and the first clause of the second sentence consistent with Amendment #9 of the framework plan?

Wilkinson: We can't decide that, it would have to go before the PFMC.

McInnis: The framework plan has in it numeric spawning escapement goals for the Klamath fall chinook (e.g. 33%-34% per brood) and the natural spawning escapement floor.

McIsaac: We identified an inconsistency; that is what started this entire discussion. We are now considering making an addendum to the Klamath Long-Term Plan to reconcile that inconsistency.

***\*\*Proposed Amendment to the motion.***

Boydston: This draft (dated March 5, '96) offers a slightly different wording to the motion that would be consistent with wording that has been provided to the Council dated March 6, (Handout #1). It really only addresses Item #2 of the motion.

Wilkinson: It might be better to withdraw the amendment and the original motion so we can start anew.

***\*\*Action***

Boydston: Proposed amendment withdrawn.

***\*\*Action***

Wilkinson: Original motion withdrawn.

***\*\* Motion***

Boydston: I offer this document, dated March 6, (Handout #1), as a motion for the Council.

Wilkinson: Second.

**Discussion**

Orcutt: I am concerned about the issue of long term vs. annual basis.

Boley: Do you want the harvest rate and escapement rate to fluctuate annually?

Orcutt: No, I want to fix the long term harvest rates. I agree with determining the escapement goal annually.

Pierce: Is the second step in the addendum correct?

Orcutt: Yes, but I have some reservations about the other items.

Boydston: The main thing is we are asking for a technical adjustment to the FMP to provide for annual 50/50 sharing consistent with the interpretation by the DOI and the DOC regarding the Solicitor's opinion. I think we all want a technical amendment without having to go through the full plan amendment process.

McIsaac: So the intent of this is to recommend that they consider a technical amendment. It is not to ask them a question?

McInnis: Is it a problem for any of the members of this Council to recommend that this be a technical adjustment to the FMP? Do we have people on this Council that think that the PFMC really should go through the full analysis and full burden of an amendment to the FMP in order to change this 33%-34% to a slightly wider range, 31%-35%.

Boley: If this Council were to bring this motion before PFMC as a recommendation, the PFMC would ask the STT to examine this issue and either concur or not concur that this is a minor technical adjustment. The PFMC itself cannot make a technical adjustment. If the STT says it is not a technical adjustment (if it has bigger ramifications), then it should be considered as an FMP amendment.

McInnis: We should ask the PFMC what to do.

McIsaac: The PFMC finished business by adopting regulations that were supposed to balance catches 50/50 for '95. Did they think that the escapement rate of 33%-34% was a problem or not, last year?

McInnis: The escapement rate of 33%-34% was not a question last year because they were managing for the 35,000 natural spawner escapement floor. Therefore, the driving force was the 50/50 allocation and the 35,000 spawning escapement; 33%-34% of the brood was not a consideration.

McIsaac: That's right.

Boley: The inconsistency derives from the legal definitions of the Solicitor's, NMFS, and DOI's arrangement to implement 50/50 harvest sharing. There is an inconsistency between the FMP and the Solicitor's opinion.

McInnis: I don't have a strong concern about the approach that is being used because I think the approach is consistent with the philosophy and the intent of what was put into the framework FMP through the amendment that dealt with the spawning escapement goal for the Klamath River.

Kirk: What would be your solution?

McInnis: My solution is to do exactly what we have on the table in front of us, but instead of telling the PFMC that we think it is a technical adjustment to the FMP, ask the PFMC. Have them look at what we have proposed to do, then have them ask their technical team if this would be a technical amendment.

## **RECESS**

McInnis: In this version (Handout #2), we have moved some sentences around.

## **\*\*Action**

Boydston: I am going to withdraw my motion with the approval of the second. This is being totally rewritten. The HAWG has been working on this for a long time and now we are starting over again.

Wilkinson: I concur.

***Motion withdrawn.***

**Discussion**

Kirk: It seems like people are changing their mind as to what they agreed to in each revision because we are facing similar concerns each time. I think it is very important that we have some language to move this item through the Chair of the PFMC to recommend it go to the STT. We are addressing the February 27 letter (Agendum #25c) and we are moving that forward to the STT. They are going to send that language back to us and then that goes back on the table for discussion. We have to come up with a product before we leave today or we just haven't done our job.

Boley: A lot of objections that we had worked out, using consensus (over quite a long period of time), are now back on the table creating problems and having to be rewritten. If we cannot make a decision, then why are we here?

**\*\* Motion**

Wilkinson: See the March 6, copy that we started with this morning: "The Council offers the following language to the PFMC for their consideration." The Council discussed possible wording changes and decided to substitute the word "should" for "will".

Bitts: Second.

**Discussion**

Kirk: It is my understanding that we were going to send this adjustment language to the PFMC for their review. By agreeing to send this proposed language to them, we have not concluded at this time that this is the final language.

Bitts: Aye	Bpgey: Aye
Bostwick: Absent	Boydston: Aye
McInnis: Aye	Grover: Aye
Kirk: Aye	Orcutt: No
Webster: Yes	Wilkinson: Yes
McIsaac: Chair also votes yes.	

**\*Motion fails.**

Orcutt: I want to see it in writing before I voted on it.

McIsaac: From a procedural perspective, I don't believe you can bring back an identical motion once it has been voted down. Let's bring back the tables motion that Dave made yesterday afternoon.

**\*\*Motion restated:**

Bitts: A 22% harvest rate on four year olds for ocean fisheries keeping the ocean apportionment the same as last year (17% to the KMZ sport and 83% outside the KMZ). There will be approximately 50/50 sharing between

Oregon and California based on four year olds. Refer to the harvest rate model sheet that was offered yesterday (dated March 5, '96, 10:22 p.m. rather than the one dated March 6, '96, 8:52 p.m. Yesterday's model run has a better chance of being acceptable because that escapement rate appears to fall within the goal that is currently in place.

Boydston: This procedure is not consistent with what we are proposing that the Council do in determining annual escapement goals. As for the issue of the perception that this new model run doesn't meet the escapement rate goal, this year we have probably already closely achieved the escapement rate for the '92 brood.

McInnis: If we pass this motion, then it will be carried into the PFMC discussion. Also if the PFMC does make a determination that this is a technical adjustment to the FMP, then I think we are in better shape because it will be true to our own procedures.

**\*\*Action**

Bits: I am swayed by these arguments and will switch my position to support the model run (dated March 6, 96, 8:52 p.m.).

**Discussion**

Orcutt: I would probably abstain from the vote. My major reason is that the in-river sport person is not here. My second reason is that we still don't know what the Commission is going to do.

Kirk: I can support the motion. The Commission's letter states if any increase in the in-river recreational fishery were to take place by their order, that the percent of increase would be taken from the commercial portion. If that happens, then this motion would be moot.

Boydston: If the Commission comes forward with a pronouncement of their intent, it can be addressed in another option. I am going to vote in favor of this with the understanding it is going to be used in crafting an option. There will be other options to come forward.

McIsaac: I don't like the idea of voting on this prior to seeing the result of the modeling.

Wilkinson: I am concerned about the OCN impacts and the in-river number.

Bits: Would it be helpful, if I were to amend the motion to say, "to the extent practicable in view of other constraints such as coho and winter run concerns and impending the Commission actions?"

Wilkinson (Seconder of the motion): This doesn't relieve my concern about not knowing the coho contact rate or the Commission's recommendations.

McInnis: Initially, I had intended to support this motion, but now this is a sticky situation. The Commission has authority to deal with setting the in-river recreational fishery quota and managing that fishery. If the Commission takes action, we will have quite a bit to talk about on Sunday.

Kirk: Is the purpose of the motion to begin a modeling process?

Bits: Yes.

Kirk: I am going to withdraw my support until we get the information on the Oregon number on coho impact and

the Commission's response.

**\*\*Action:**

Bits: It might be appropriate to table this motion until the Sunday meeting when (hopefully) we will have more information and be able to proceed in a more orderly and knowledgeable fashion.

McIsaac: I see that the Second concurs. For the second time, this motion is tabled. Does this Council want to make a recommendation on a percentage to CDFG for their consideration before they recommend something to PFMC?

Boydston: No, we couldn't get consensus on that.

Bits: In '93, in-river sports fishing interests offered a "piece of their pie" to the ocean fisheries. They have not gotten that "piece of pie" back. It was not intended to be a permanent offer. The problem that in-river fisheries had last year was due to the error in prediction and then the quota based on that error. I would like to ask this Council to endorse the concept of seeking a means of making an inseason adjustment based on information collected inseason about the real abundance. This would prevent a recurrence of the situation last year and in the big years of the '80s. We should forward this concept to the PFMC.

Bits: I would support urging PFMC to examine any and all technically sound means of making inseason adjustments (e.g. using the Willow Creek Weir, using CPUE, looking at levels of catch in the month of May and any other possibilities).

McIsaac: Let's take the ocean item separate from the in-river item because our advice to PFMC would only be marine oriented.

McInnis: Under amendment #11 to the framework FMP, there was the provision that inseason adjustments could be added if they were accepted before the season began. In other words, they would have to be on the table at the March meeting in order to be adopted by the PFMC in April for use this season.

Boley: The PFMC usually does not initiate these actions on their own, they wait for someone to bring forward proposals and then they analyze those proposals. If you really wanted to get something done and have an inseason adjustment mechanism, the best way to accomplish that is to develop a specific proposal for an adjustment based on some sort of ocean occurrence and then mesh that with a procedure in the river.

Bits: I have some documentation that the STT and PFMC could use as a foundation for the second assignment.

**\*\*Motion**

Bits: I move that this Council urge PFMC to investigate two methods for inseason adjustment based on actual abundance. The first being the CPUE method produced by Mike Morford (or possibly as modified to include the south of Point Arena area) and the second being an analysis of May catch rates as a percentage of total season predicted catch rates based on historic patterns of catch.

Kirk: Second.

**Discussion**

Wilkinson: Wouldn't a simpler approach be to address the areas that are operating under quotas and convert them

to time and area management?

Bits: Maybe, but the people who are participating, directing, and managing those fisheries should be the ones to initiate that approach.

Wilkinson: I would like to see some of these proposals assigned to our Tech Team for a snapshot of what they might mean before we venture out into the PFMC arena with them.

McIsaac: Based on the fact that our TAT won't be meeting until April and based on what Rod said about the implementation schedule, that means '97 would be the earliest opportunity for this. Any further discussion on the motion? None.

**Motion fails.** (Wilkinson voted no).

## **BREAK**

### **Assignments to the Technical Advisory Team**

McIsaac: Let's ask the TAT to analyze potential in-season harvest adjustment methods. First, they could look at the ocean area. Michael Morford has a paper that could also look at ocean harvest during May. This would need to be completed before our fall meeting.

Boley: The Klamath system seems to be totally out of sync with both the Sacramento and the Rogue system. To my knowledge this has never happened before. One potential for error might be in the CVI abundance indicator - they are not considering the four year old component of the '92 brood. Normally four year olds are not accounted for because they are not a very large part of the CVI. Most of those fish predominantly return as 3's. I am not sure that is the case when you are talking about a 1.2 million abundance. Also, why should the Rogue be out of sync with the Klamath system as far as escapements or survivals? I am wondering if the Rogue index has utilized new information or gone through any revisions? I think we really need to look at these comparisons because they directly effect contribution rates.

Orcutt: I would like to see the TAT look at Item #3. There is some utility towards exploring the other species.

McIsaac: The Rogue situation has raised a few eyebrows in other places as well. From an ODFW perspective we are going to look at that and see if there can be improvements made in the KOHM.

McIsaac: Are there any other motions before the Council?

### ***\*\*Motion***

Wilkinson: I offer this copy printed 11:30 a. m., dated March 7, 96. It is offered as a new motion.

Kirk: Second.

### **Discussion**

Orcutt: We had hoped to get ratification of the obvious way that fish have been cut up and distributed between tribal and nontribal fisheries. I would request that it is implicit that any allocation changes need to be agreed to by Commerce, Interior and the Tribes.

Call for the question.

Bits: Aye  
Bostwick: Absent  
McInnis: Aye  
Kirk: Aye  
Webster: Aye  
McIsaac: Yes

Bogey: Aye  
Boydston: Absent  
Grover: Aye  
Orcutt: Abstain  
Wilkinson: Aye

**\*\*\*Motion Passes.**

Bits: We just voted on the reworked items #1 and #2 of the proposed addendum. We are so far silent as to Item #3. Do we wish to consider and perhaps vote on Item #3 before we adjourn?

McIsaac: We haven't addressed anything for addendum to our plan. We have passed a motion that puts something forward to PFMC.

Boley: We will present this to the PFMC. If they agree it is a technical adjustment, we will bring it back, reinsert it in the proposed addendum and then vote on the proposed addendum as a unit.

McIsaac: That is correct, there are some items in issue #3 that actually need some technical work. Mike Orcutt has asked us to ask the TAT to look into what would be required, on a technical basis, to manage a commercial fishery for three species (spring chinook, coho, and steelhead). This long term assignment would give priority to spring chinook.

Grover: Just as a reminder, we have copies available of the report that was prepared by the Fish and Wildlife Service office in Red Bluff on the monitoring efforts for winter chinook in the Sacramento River and Battle Creek.

**ADJOURNED.**

**PARTICIPANTS**  
**Klamath River Fishery Management Council**  
**March 5-7, '96**  
**Eureka, California**

Klamath River Fishery Management Council members present:

Dave Bitts	California Commercial Salmon Fishing Industry
Scott Boley	Pacific Fishery Management Council
Virginia Bostwick	Klamath In-River Sport Fishery
Don McIsaac	Oregon Dept. of Fish and Wildlife
Pliny McCovey	Hoopa Valley Tribal Council
Jerry Grover	U.S. Department of Interior
Rod McInnis	National Marine Fisheries Service
Keith Wilkinson	Oregon Commercial Salmon Fishing Industry
Dale Webster	Non-Hoopa Indians Residing in the Klamath
Paul Kirk	California Offshore Recreational Fishing Industry
LB Boydston	California Department of Fish and Game

Attendees:

Steve Conger  
 Orion Dix  
 Jim Childs  
 Michael R. Belchik  
 Ronnie Pierce  
 Manja Argue-Hoggard  
 Carol Davis  
 Michael Iao  
 Desma Williams  
 Richard Sargent  
 Vaughn Oakfield  
 Jack Byland  
 Bob Jones  
 Mike Medford  
 Laura Ball  
 Michael Maahs  
 R. Cottingham  
 David Weunin  
 Duncan MacLean  
 Mark Wheatley  
 Jim Waldvogel  
 Larry Williams  
 Phil Prithing  
 Emil Pawlis  
 Jason Conger  
 Richard Myers  
 Dave Hillemeier  
 Mike Orcutt  
 George Kautsky  
 Art Huschler

Representing:

PFMC, California, Law Enforcement Consultant  
  
 United Anglers - KMZ  
 Yurok Tribe  
 Yurok Tribe  
  
 Commercial Fisher  
 California Department of Fish and Game  
 Yurok Tribe  
 Quartz Valley Reservation  
  
 Oregon South Coast Fishermen  
 KMZFC  
 Klamath Technical Advisory Team  
 HSU  
 Klamath Technical Advisory Team  
  
 Cal Coastal Conservancy - The Resources Agency  
 Klamath Technical Advisory Team  
 Fishing Guide  
 No. Cal. Association of River Guides  
 No. Cal. Association of River Guides  
 Congressman Riggs  
 Yurok Tribe  
  
 Hoopa Valley Tribe  
 Hoopa Valley Tribe  
 Klamath Coalition

Jim Swelter  
Mark Zuspan  
Bill Jong  
Roger Barnhart  
Ron Iverson  
Patricia Parker  
Judy McDaniel

Klamath Coalition and Port of Brookings  
California Department of Fish and Game  
California Department of Fish and Game  
AFS  
Klamath River Fish and Wildlife Office  
Klamath River Fish and Wildlife Office  
Klamath River Fish and Wildlife Office

**HANDOUTS**  
**Klamath River Fishery Management Council**  
**March 5-7, '96**  
**Eureka, California**

- Agendum #2                    Corrections to the minutes
- Agendum #5                    Summary of the February 16, '96, meeting and proposed agenda for the March 21, '96, meeting in Hoopa, California
- Agendum #6                    KPOP Instream flow presentation
- Agendum #11                   Excerpt from Prager
- Agendum #14                   Klamath River basin fall chinook salmon run-size, in-river harvest and spawner escapement, 1995 season, (CDFG's megatable)
- Agendum #15                   1995 sport and commercial harvest (excluding fall, 1995)
- Agendum #16a                   Excerpt from PFMC 1995 review
- Agendum #16b                   Tribal and nontribal harvest of adult Klamath River chinook, 1991-1995
- Agendum #16c                   Letter to LB Boydston, CDFG, to the Oregon Department of Fish and Wildlife regarding complete report of the TAT analysis of annual 50/50 sharing, November 20, 1995.
- Agendum #18a                   Excerpt on chinook troll hooking mortality from NRC
- Agendum #18b                   Letter from Phil Pritting from the Northern California Association of River Guides, to the California Fish and Game Commission with suggestions for the Klamath River fishery
- Agendum #19                   Ocean stock size projections and appropriate harvest levels for Klamath River fall chinook, '96
- Agendum #20a                   Memorandum from Rich Dixon, CDFG, to the Klamath River Technical Advisory Team regarding influence of other fisheries on Klamath contribution rates predicted for KMZ fisheries by KOHM, March 2
- Agendum #20b                   Memorandum from Rich Dixon, CDFG, to the Klamath River Technical Advisory Team regarding calibrated of the Klamath Ocean harvest model (KOHM), March 4
- Agendum #22                   Report from HAWG regarding draft proposed Agendum to long term plan, March 5, '96
- Agendum #23a                   Letter to Lawrence Six, Pacific Fishery Management Council, from Don McIsaac regarding incompatibility between fixed annual catch sharing and brood year harvest rate management of Klamath basin fall chinook salmon
- Agendum #23b                   Letter from Lawrence Six on March 1, '96, to the Klamath Fishery Management Council acknowledging receipt of letter dated January 29, '96, concerning the compatibility of the fixed annual catch sharing and brood year harvest rate management of Klamath basin fall

chinook salmon

- Agendum #24            Agenda from the State of California Fish and Game Commission, March 7, '96
- Agendum #25a        Packet of correspondence related to Iron Gate Hatchery straying issue
- Agendum #25b        Letter from the Yurok Tribe to Tim Farley, CDFG, regarding concerns with the policy which forces surplus hatchery fish returning to Iron Gate Hatchery and Trinity River Hatchery
- Agendum #25c        February 27 letter from Rich Elliot to Dr. Barnhart, AFS.
- Agendum #27         Letter from Blair Hart, Shasta River CRMP, regarding Klamath basin fishery harvest allocations
- Handout #1            Klamath Council report to PFMC at the March9-14 meeting (March 6, '96)
- Handout #2            Revised Klamath Council report to PFMC at the March9-14 meeting (March 6, '96)
- Handout #3            Revised Klamath Council report to PFMC at the March9-14 meeting (March 6, '96)
- Handout #4            Revised Klamath Council report to PFMC at the March9-14 meeting (March 6, '96)