

MINUTES
KLAMATH FISHERY MANAGEMENT COUNCIL
FEBRUARY 18, 1997
SONOMA COUNTY HILTON HOTEL, SANTA ROSA, CA
MEETING #47

9:00 am February 18, 1997

McIsaac: I convene the 47th meeting of the Klamath Fishery Management Council (KFMC).

Members present: Nat Bingham, Dave Bitts, Rob Collins (for L.B. Boydston), Hal Cribbs (for Virginia Bostwick), Troy Fletcher, Jerry Grover, Paul Kirk, Pliny McCovey, Donald McIsaac, Rod McInnis, Keith Wilkinson

Other speakers:

Jerry Barnes, US Forest Service, chair of TAT

Dave Hillemeier, Yurok Tribe, TAT

Ron Iverson, U.S. Fish and Wildlife Service (USFWS)

George Kautsky, Hoopa Valley Tribe, TAT

Duncan MacLean, SAS, California Troll

Bob McAllister, California Department of Fish and Game (CDFG)

Mike Orcutt, Hoopa Valley Tribe

Ronnie Pierce, Yurok Tribe

Jennifer Silveira, USFWS

Other attendees:

Darla Eastman, USFWS

Michael Maahs, Technical Advisory Team (TAT)

Dan Viele, National Marine Fisheries Service (NMFS)

1. Administrative support introduction

Iverson: I would like to introduce Dr. Jennifer Silveira, our new staff biologist. Rod, would you comment on the meeting taking place here later tonight?

McInnis: I took advantage of people coming to this and the California Department of Fish and Game (CDFG) informational meeting to schedule a scoping session for our environmental impact statement (EIS) on all National Marine Fisheries Service (NMFS) salmon harvest regulations for the entire coast. This EIS was driven by a court ruling that NMFS salmon harvest actions must be reviewed under National Environmental Policy Act (NEPA). There will be 5 or 6 scoping sessions in all.

Barnes: Is this just for proposed species?

McInnis: No, for the entire stocks that we have managed. Alaska fisheries and those that take place on the Columbia River will be included. Fisheries managed under the Pacific Fishery Management Council (PFMC) fishery management plan are already covered by a full EIS. In a separate process they are currently reviewing their plan.

2. Review and approve agenda.

McIsaac: Are there modifications of the agenda?

Bits: Might we have a report from Wilkinson on the midterm review of the KFMC and Klamath River Basin Fisheries Restoration Task Force (KTF)?

Wilkinson: I will insert that under agendum 15, as there is no report from the Harvest Allocation Working Group (HAWG).

Bits: Will there be a follow-up report from the Technical Advisory Team (TAT) on the relationship of stock recruitment to the spawner floor?

Barnes: We will follow up on that report, but not until the April 6th KFMC meeting

Fletcher: I would like to add to the agenda an update on the EIS on the Trinity River, after item 15.

McIsaac: Let's insert it on the agenda

Barnes: Under technical reports: the TAT sent out an in-house report on age-4 ocean abundance predictors. We are prepared to discuss this under item 12.

McIsaac: I would like to move item 6 to the afternoon.

3. Review minutes of the meeting held September 25-26,1996

McIsaac: Does the copy we received titled Draft Meeting Summary constitute the minutes?

Iverson: Yes.

[Minutes approved.]***

4. Review of correspondence and handouts

Agendum 4: A. CDFG's final goals and constraints for the Iron Gate and Trinity River Hatcheries

B. Letter from Blair Hart, chair of the Shasta Coordinated Resource Management Plan group (CRMP), dated November 13, 1996, regarding harvest levels

C. Letter from Blair Hart to Dale Hall, KTF, dated November 19, 1996, regarding a seat on the KFMC representing landowners

Agendum 7: D. Inseason Adjustment of Inriver Fishery Harvest Controls Based on CPUE

Agendum 10: E. CDFG 1996 mega-table

Agendum 11: F. CDFG 1997 regulatory schedule and preliminary ocean landings

Agendum 12: G. 1997 preliminary stock predictions

H. Review of age-4 abundance predictors

Agendum 14: I. PFMC letter regarding ocean fishery plan review

[Additional handouts that appeared later:

Agendum 8: J. Progress Report: Spring Chinook Management

Agendum 11: K. 1996 Yurok Fishery Review

Agendum 12: L. 1996 Klamath River fall chinook age composition

M. Output, Klamath Quick Harvest Rate Model

Agendum 14: N. Proposed Rules, Magnuson Act Provisions; Essential Fish Habitat

Agendum 17: O. Letter from Bob Bostwick, president of the Klamath River Basin Task Force (affiliated with the American League of Anglers) to the California Fish and Game Commission]

Iverson: Regarding the second letter from Blair Hart [Handout C] : the KTF is drafting a response.

Bits: I asked staff that Mr. Hart be invited to every KFMC meeting, so that he can see what he's asking for.

Fletcher: I recommend we write a response to Mr. Hart's letter of November 13, [Handout B] and I think we should ask the CRMP some pointed questions regarding water management, etc. I am willing to help co-author such a letter.

McIsaac: At the last KFMC meeting there was an intent to meet with these folks. What has occurred?

Fletcher: I was unable to make it to that meeting. I have spoken with Jeffy Davis [chair of the Scott CRMP] and Blair Hart about rescheduling the meeting in March or April.

McCovey: I apologize for not attending that meeting, although one of our staff was there.

Bits: I'm sorry too I didn't make it. I told Jeffy Davis I would make every effort to be at a rescheduled meeting.

McIsaac: I made some notes after reading the letter. Troy, I can give those to you, and you can think about a draft, and we can put this on our March agenda. The letter should include a date when we can meet with them.

5. Report from Council members on meeting with CRMP group

Wilkinson: I did attend the meeting, put on by the Scott CRMP, but many Shasta CRMP members were there. I talked at length about coastal community and ocean fishery perceptions, social and economic dislocations. Several things came out of the meeting: they had an updated harvest report that they mistakenly thought was the megatable; there is a world of difference between the perceptions and policies of the Shasta and Scott groups; and they all have megaconcerns about harvest.

An issue of the Shasta CRMP group was compensation for rearing fish. In the KTF long range plan this issue was addressed. I was blind-sided by this. I pointed out there is a riparian incentive program, but they responded that it doesn't benefit land users much. The Shasta people feel they should get some compensation that actually benefits them. I said that fishers aren't pointing the finger at agribusiness and other water users, but would like to see State and Federal regulations complied with. I felt alone, but it was a very pleasant experience. Those folks were very generous with their time (about 70 were there).

Fletcher: Can you explain what they mean by incentives... I see adherence to existing Fish and Game regulations

and codes not as something that should require incentives. Do they want monetary compensation for adhering to existing regulations?

Wilkinson: Yes. I believe Chapter 2 of the long range plan says there will be incentives for private landowner cooperation, and their view of incentives is cash. I tried to explain that my reading of the plan did not indicate this. I think this issue won't go away.

McIsaac: Thank you Keith for attending. Thanks to administrative staff support for the advance handouts, and for these binders.

Ongoing Technical Advisory Team (TAT) assignments

7. Report on relationship of in-river net catch-per-unit-effort and in-river run size

Barnes: Dave Hillemeier, a biologist for the Yurok tribe, wrote this report [Handout D]. We reviewed it at the last TAT meeting in February, and Dave sent out the final report to the KFMC members. If you have questions, Dave is available here to answer them.

Hillemeier: I looked at catch-per-unit-effort (CPUE) from several fisheries and regressed them against in-river run size to see if this relationship could be used to make in-season adjustments to in-river harvests. This would not apply to ocean fisheries.

The TAT presented a report in September regarding ocean fisheries based upon CPUE from the San Francisco area. The relationship had an r^2 of about .61; not strong enough to use for in-season adjustments of ocean fisheries. This time I used ocean fisheries in conjunction with in-river fisheries. At the end of the report are several figures showing univariate relationships between CPUE in the Yurok's estuary set-net fishery versus in-river run size. The best relationship was between August 26th and September 8th-- rather late in the Yurok fishery. The r^2 value is .79, which is pretty decent. If you go earlier in the season, the r^2 value dropped to .62. The in-river run versus CPUE in the troll fishery off of San Francisco had an r^2 of .64.

Next I looked at a multivariate regression analysis. I actually used a stepwise regression, which is questionable with a data set this small. I tried different combinations of independent variables to predict in-river run size. The best combination was Yurok CPUE from August 26th to September 8th and the CPUE in the ocean off the Port of San Francisco. That comes up with an r^2 of .95. That is based on 8 data points -- a pretty limited data set.

I then did some hindcasting to see how this would have performed as a predictor using data that would have been available at the time, and using the regression equations that would have been available at the time (see Table 1). I wasn't able to do any hind casting for 1994 because the Yurok net fishery was closed. The hindcasting performed well back as far as 1992, when sample sizes were questionable (5 data points). The TAT's conclusion is that it may have some utility for the management of in-river fisheries.

There were some drawbacks to using this for in-season adjustment, one being that it can't be incorporated until after much of your potential harvest has already occurred. Applying it so late in is very inconvenient for the fisheries. Table 2 shows the multivariate regression of CPUE from July 29 up to September 1 in the Yurok fishery and the ocean catch/day off San Francisco. It has an r^2 of .87 in 1996 and performed pretty well in hindcasting. This could be utilized earlier in the season. We can't go much earlier, because the Klamath Basin stocks start entering the river during August and the Trinity Basin stocks start to enter during the first week of September. The CPUE would be based upon the harvest of Klamath fish but the in-season adjustment would be applied to Trinity stocks.

McCovey: I'm glad you mentioned it affecting Trinity stocks, because that is a concern of the Hoopas. Did you think about using data from the Willow Creek weir?

Hillemeier: No. I think it would be too late in the season.

Fletcher: We are looking at this as a potential management tool to avoid situations like 1995, but we also actively manage to equalize our impacts between Klamath and Trinity stocks. We have shut down various fisheries to accomplish this.

McIsaac: I wonder if you concentrated too much on the precision of the various dates. Comment on the utility of this as an alarm indicating we have a surprise on our hands, as in 1995.

Hillemeier: The TAT discussed how this could be used for policy decisions. For example, when there was some predetermined difference (such as 100%) between the preseason predictor and the run size estimate based on CPUE, we could reevaluate harvest.

McInnis: Have the Yurok managers looked at seasonal or effort management?

Fletcher: Right now we manage for a quota, but we've been looking at that. We haven't come to a decision.

McInnis: Troy, you've done some creative things with your time on the water to select different stocks. Has this complicated the analysis presented here?

Fletcher: To avoid that problem we only used data from years when we were open at least 3 days per week of the time period. That's why we have so few data points.

McCovey: I brought up the Willow Creek weir data because even though it may be too late for the Yurok fishery to catch these fish, our fishery runs a lot later than the Klamath side. In '95 we had to shut down, while we had an overabundance of fish.

Fletcher: We recognize this is an issue, because we shut down nearly every year. We would like to see protection given to certain stocks throughout the basin.

8. Report on potential for management of Klamath spring chinook

Barnes: Take some time to look at the handout memo you just received: Progress report- Spring chinook management [Handout J].

Bingham: Is the primary assumption to manage the Trinity side, because you only have coded wire tags (CWT's) from that side?

Barnes: Yes. We have no age composition data on natural runs. It would require a huge data base. This memo was based on a request from McCovey and the council at the Weaverville meeting [KFMC meeting #46]. TAT passed the responsibility to the Hoopa tribe. This memo by George Kautsky takes the process a step farther asking the council how to proceed. It presents some data needs and problems. We may decide that achieving management of spring chinook is years off. That's not even considering how you manage two different stocks out in the ocean at once.

Bingham: To give guidance, the council must have the data needs specifically identified.

Bits: One thing we would need is a stock abundance prediction. Our track record for predicting fall chinook isn't good.

Barnes: We do have a cohort reconstruction for the hatchery spring chinook. We have diving counts of the naturals, but we have no idea of what the age composition is. We could get scales for a scale analysis from the tribal net fisheries. We need to know from the council, do you want us to spend more time on this?

McIsaac: The first spring chinooks will be caught in the Klamath Basin in the next couple months. In the absence of any direction today, what will be the management of spring chinook in 1997?

Fletcher: We will look at indicators of abundance for spring chinook. We'll look at natural returns to the Salmon River and South Fork of the Trinity. Weighing that, we'll construct fishery seasons. In the past we've tried to give some protection during poor returns with a 3 or 4-day-a-week closure to protect the stock. This year we'll do a shoestring analysis of returns, then scope out issues with the fishermen, and then we'll set the season. We've had closures for the last 4 or 5 years to protect spring chinook.

McCovey: We're going to do a test commercial fishery in 1997, and we're going to try to minimize impacts to natural stocks, although in the Trinity you mainly have hatchery stocks. Our big concern is we need to share this fishery on a 50/50% basis.

McIsaac: What are expectations for Trinity hatchery this year?

Kautsky: We don't know yet.

Fletcher: If you don't have any abundance data, how can you project that you're going to have a commercial fishery? This worries me.

Kautsky: The spring fishery starts in May. We have time to scope a management plan including an abundance predictor, accounting for naturals, and protection for natural stocks. We have an age structure only for hatchery stocks so far, but we can use archived scales from the State to reconstruct an age structure for naturals.

Fletcher: What did the Hoopa have in mind when they brought this up?

Orcutt: We need to discuss the wind-down of the Trinity River Restoration Program. If we hadn't intervened a year ago and tagged fish with the Bureau of Reclamation (BOR), there wouldn't even be this data available. The monitoring/data collection side of the council is clearly disjunct. We're going to be looking at the State's scale data, and we are trying to distinguish time of entry for South Fork spring chinook. We proposed last year and this year that everyone needs to look at this. The stock needs to be managed, and the council needs to consider policy implications. It's a quality stock for the Hoopa tribe, and in the future we would like to take advantage of that economically. It needs to be addressed by both the KTF and Trinity River Restoration Task Force (TRRTF).

Fletcher: Can we recess before we finish this topic?

Ten minute recess

McIsaac: There seems to be some management of spring chinook already. Mr. Collins, is the spring chinook sport season already open on the Klamath River?

Collins: Yes.

McIsaac: So there is a de facto management scheme that the Hoopa Tribe would like to refine.

McCovey: We've discussed this at this table numerous times. We're trying to take the initiative to move it ahead, and do it with caution. The Hoopa Tribe still has to go through scoping with our members, so we're just proposing it now.

Fletcher: I propose the TAT take another crack at it and come up with specific types of information. I would like to see it made a priority.

Wilkinson: The last several years we've had budget concerns on getting data on fall chinook. I ask the TAT chairman to include an overview of costs, funding outlook, and recommendations the TAT might make to the KTF and its Technical Work Group (TWG).

Barnes: Hoopa has been taking the lead on a data needs list for the management of all stocks of coho, steelhead and chinook in the Trinity Basin. This long-term monitoring needs analysis is going to the TRRTF, which only has two more years of life. Probably the BOR would be the source of funds for long-term monitoring. On the Klamath side, there hasn't been the money in the program to do everything we need to do already. The CDFG has financed spawning surveys and so forth from other sources. The TRRTF's purview has been extended to the mouth of the Klamath. All the lower Klamath monitoring was funded by the Trinity side.

Pliny and Troy have been talking about in-river management; we need the council to tell us if we want to pursue ocean management of spring chinook, or can we do in-river management without ocean management.

Wilkinson: Can you come up with a budget for data acquisition?

Barnes: George, have you got one for the Trinity side?

Kautsky: It's a biologist's list of needs, not costs.

Barnes: George mentioned there's about \$2.5 million for monitoring in the Trinity alone this year. The KTF restoration budget is only \$1 million.

[Inaudible]: Maybe \$30,000 came down for monitoring on the Klamath side.

Bits: It's distressing that monitoring budgets are coming from restoration programs. Isn't that the responsibility of agencies?

Barnes: George is seeking to make the agencies responsible for long-term monitoring, so it outlives the restoration programs.

McIsaac: What I hear is: let's ask the TAT to be involved in coming up with a profile of the spring chinook resource, (ocean catch, river catch, natural hatchery), look at the old scales, and at least make an assessment of what it would cost to do such a thing. Then we'll look at the results of that before they go any further.

Wilkinson: My concern is that because we don't have a plan up front and an amount, we are going to end up short of funds. I would like to have a comprehensive plan in place, worked out between the TAT and the TWG, including who we are going to appeal to for funds.

Fletcher: There would be little or no cost in following up on some of this.

Barnes: Then, we aren't looking at an ocean harvest model at this time, but the data needs to develop scenarios of management. George, can we work with this direction?

Kautsky: We have escapement data without age structure, but if we get the scale data from the state, we can reconstruct that. We can add in the naturals then to the hatchery model that we already have, so it won't require a lot of funding.

McIsaac: Does your current run reconstruction exercise include the ocean connection on spring chinook?

Kautsky: Yes.

9. Modified method to balance harvest outputs of the Harvest Rate and Ocean Harvest models

Barnes: This issue was brought up last May after last year's allocation. Discrepancies came up between the outputs of the annual harvest rate model and the Klamath ocean harvest model (KOHM). Troy pointed this out in a letter to the PFMC, who sent direction on it to the TAT. Rich Dixon is taking the task, but he's busy today. We can do this, and we just need to do it. At the March 2 KFMC meeting we will show the difference between how we did it in the past, and how we will do it in the future with a correction.

Bingham: When would this document be ready?

Barnes: At the March 2 meeting. It will be timely for 1997 management.

10. Report on fall chinook returns to Klamath River

Collins: You have the megatable as a handout [Handout E]. Bob McAllister from our northern region will give a short summary.

McAllister: The 1996 adult fall run chinook size in the Klamath River system was estimated at 174,615. That is the 5th highest on record, and well above the 1978 to 1995 average of approximately 91,700 fish. The grilse run was estimated at 12,074, which is about 57% of the 1978 to 1995 average of 21,191. Surprisingly, from the projection of 229,800 adult fall chinook which would have returned to the Klamath, the projected in-river harvest of 129,100 including 9,300 unlanded mortalities leaves 100,700 adults to spawn naturally or in the hatcheries.

As far as harvest: preseason projection was 104,100 per Indian net harvest; postseason estimate was around 55,900 or about 54% of projection. The angler harvest was around 82% of the actual projection, so net and angler mortalities together were 51%, luckily about half of the postseason projection. Spawner escapement was estimated at approximately 100,700, and we came out at 101,046, real close at 100.3%.

I just got the aging breakdown from John Lange the other day. What was surprising to me was the two-year-olds, jack salmon, accounted for about 9% of the total number of fish that would spawn naturally. In-river sport anglers landed about 2,900 jacks and net fishers about 2,200. Jacks accounted for only 3.8% of the total returns to Iron Gate and Trinity Hatchery combined. There were no five-year-olds. I think four-year-olds account for about 78%, which you might have expected since three year olds accounted for 80% last year. Four-year-olds made up the majority of the catch, and this was the second time since 1989 that the 35,000 natural spawner floor was exceeded.

Wilkinson: No five-year-olds went back to the Iron Gate Hatchery?

McAllister: No.

Wilkinson: Did your spawner counts indicate any fives? I wonder if there was a difference between natural and

hatchery spawners?

McAllister: I don't have that now, but I remember there was a problem with mis-aging. They were mis-aging almost 40% of fours as threes. They had to go back and make some adjustments, but they ended up with no fives at all.

Wilkinson: Some of the other systems apparently had fives this year.

McAllister: We weren't doing any of the aging. I remember seeing some fish lengths that would have been in the five-year-old category, but I cannot say for sure.

McIsaac: When we were in Weaverville there was concern that the Trinity fish weren't showing. The megatable shows the Trinity River Basin did get 49,000 natural spawners. The tribal harvest did not quite come up to snuff not even to the level of the in-river anglers. What was the timing of these Trinity fish, and were the fisheries closed when they came through?

McAllister: I think the tribes could better answer that. I have heard that they were doing selective fishing throughout the week but that is a normal procedure. The run was there. Maybe it was a matter of timing. I know they were approximately two weeks late on the average. In fact some of the springs got readjusted based on that harvest.

McCovey: Some of the springs were way into the fall; they picked up tags in August and September. The other thing that failed the harvest were high waters that created a lot of debris in the nets. We had as many fishermen out there, but there were a lot of other factors in there besides a normal fishing year.

McIsaac: Were there block closures?

McCovey: No.

Fletcher: The Yurok fishery was closed in the estuary more than 50% of the time, however spring chinook ran late. Klamath fish ran late. Our commercial fishery stops September 30.

After October there is still some fishing effort, but we never hit the Trinity fish the way we planned. We harvested 70% of our quota. If you look at the run that actually returned to the river, our harvest was about on par percentage-wise.

McCovey: Our members didn't want a commercial fishery this year, so effort wasn't what it would have been if we did have one.

McIsaac: Bob, if the Trinity fall chinook were two weeks late, when was that in a calendar time frame?

McAllister: We make the division between spring and fall runs in early August more or less. In this case, as Pliny was saying, we found based on the tags that springs were actually getting into late August and even early September. The springs were coming in almost three weeks late and some of the late ones, up to a month late. But we usually get stragglers on the end. There was a significant group in the middle that was at least two weeks later than usual in mid-August.

McIsaac: My mental picture is of Trinity fall chinook moving through the estuary in September, so two weeks later would have pushed them into October. Will you correct my thinking on that?

McAllister: No, that sounds appropriate.

Bits: I think of the Klamath side fish as predominantly fours and Trinity's as predominantly threes. Is it fair to say the bulk of the 40,000-odd Trinity natural spawners were fours? Was the age composition of both sides consistent?

McAllister: Yes.

Bits: When would the peak of the Trinity run entering the river have occurred?

McAllister: I don't know. I would need to refer back.

Hillemeier: See appendix C of my catch-per-unit-effort report [Handout D].

Fletcher: We tracked it through our commercial fishery and there was no real large peak. Apparently those fish were there. Our commercial fishery stops September 30th, so I am under the impression that a few more fish came in after that.

McIsaac: When did you see tags of Trinity fall chinook?

McAllister: They were starting in mid-August again. We had a pretty good overlap with the springs this time, rather than a bimodal separation. There was a large group in the middle that caused a big problem in terms of allocation.

Hillemeier: We saw the CWT's in the beginning of September for fall chinook.

McIsaac: Why didn't the Shasta River Basin show as big a bump as some of the other natural spawning areas.

McAllister: I don't know.

Kautsky: In early winter, we talked about the anomaly of springers returning late. We thought we might need to adjust for this. Have the numbers in the megatable been adjusted for this?

McAllister: I'm not sure. Mark said he was going to.

McCovey: We need to remember we still have 50/50 sharing, between Indian/non-Indian catch. We need to continue to examine that, if there are adjustments.

McIsaac: Will we see tribal/non-tribal catch accounting somewhere on the agenda?

Barnes: Yes.

11. Reports on 1996 harvests, to supplement information provided at the September 1996 meeting

Fletcher: We've handed out a Yurok 1996 Fisheries Review [Handout K]. It explains what you have already heard. We harvested only about 70% of our quota during this time period, but if you look at the percentage of fish that actually returned rather than what was projected, we were on target with what we should have harvested. The total fall chinook harvested was around 53,471 fish. We also saw a significant number of spring chinook in our fishery during August, and we adjusted for that in our final quota. Just for your information, we put a little comparison to past commercial fisheries down at the bottom of the handout. We did not get the price that we had

in the past. That is reflected in the average income and our total income. Our fishermen let us know that loud and clear. That price was the best we could do, and judging from the market on the whole coast, that was a pretty decent price.

Bits: I think at the time you negotiated that price, it was comparable to the going rate for troll-caught ocean fish, but by the time you caught the fish, the price had gone up

Fletcher: I feel good about it. Things change, and that's the way the market goes. The last time we had a commercial fishery was in 1989, so instead of a gradual decrease in price we saw one big drop. The people weren't expecting that.

Mc Isaac: You said these were adjusted for spring chinook, and the middle bar graph shows fish that were actually fall chinook. I thought from our previous presentation that even though our tags said spring chinook, something that runs in late August or September obviously is a fall chinook and the adjustment was to call some of these CWT'ed fish fall chinook. What I get from this is the reverse, that you are removing those fish from the category of spring chinook. Do I have this right?

Fletcher: No, we did harvest spring chinook in our fall fishery so we removed those fish. We wanted to identify that this, just like other fisheries, doesn't account for spring chinook in total harvest. This points to the question that was brought up earlier by the Hoopas, which I hope the TAT will be looking at.

McIsaac: So on the megatable, none of those fish that ran in the fall time frame and were tagged as spring chinook are counted in the megatable? It looks like there might be 5,000 or so.

Fletcher: Yes, something like 4,800.

McIsaac: If you look at the megatable in its total, these fish presumably showed up other places up river and were taken out of the megatable up there as well.

Fletcher: That is why we convened a meeting on this very issue. From the information we discerned at the meeting, as you went further up the river, the timing of things such as arrival at the hatchery started to be more normal. The question I have is whether some of the weir information needs to be adjusted.

McIsaac: So when the sampling up near Trinity Hatchery presumably got some tags during the time frame of spring chinook, you've reduced the natural spawning population of fall chinook by an expansion of those tags?

Fletcher: No, there was no anomaly when spring chinook showed up to the hatchery comparable to when they showed up in-river. The lateness we saw in the river wasn't reflected at the hatchery.

Bits: Unless you have got a 100% harvest rate down, they had to show up somewhere.

Fletcher: Yes. That means somewhere between us and the hatchery, those fish started holding up and didn't enter the hatchery.

McIsaac: I want to make sure that we don't have a picture where spring chinook are taken away from the megatable in the catch, but they are included in the escapement. Is this handled the same way all through the basin? You didn't use CWT's to take out spring chinook down below, but then used timing to call them fall chinook up in the Trinity River natural spawning area. Can you comment on that?

Barnes: It was apparent that the Hoopas were getting very late spring chinook. I think all the way through

August, they had yet to see fall chinook tags. Later on, I talked to Jerry Ramsden, manager at Trinity Hatchery, and they take about a two week hiatus between when they stop taking springs and start taking falls. He said returns to the hatchery looked normal. I guess there is a possibility of an overlap of tagging as well as delays. The CDFG, as I understand it, just did their normal separation and after the fact looked at the CWT returns to the hatchery and adjusted the megatable numbers.

McIsaac: I am not so much worried about spring chinook tags at the hatchery because the jack returns were so poor, you wouldn't expect very many fall chinook to show there anyway. What I am concerned about is maybe the forecast wasn't that far off. This 44,000 spawning naturally below Trinity Hatchery has got some 20,000 spring chinook taken off. As Pliny said, how can they possibly be spring salmon if they are running this time of the year? Mistakes can happen in the tagging or in the egg incubation stage or who knows what. The proof of the pudding is, those really weren't spring chinook regardless of what the tag said. They are being taken off everywhere, so they shorted the accountability and probably shorted next year's forecast, and other worrisome things. Could somebody track this down and see how these tags were treated ?

Fletcher: Usually the Trinity River fish are running later in September. These fish were all running in August. Usually the Klamath River fish come in first and then the Trinity River fish. We saw this Trinity run throughout the early part of August, and in Hoopa all the way through August. If they were fall chinook mistagged as spring chinook, they should have been there around the second or third week of September and followed that traditional run time with the Trinity fish. They came in early August and throughout most of August, which leads me to believe there was a delay or a shift in spring chinook.

Wilkinson: Is there any comparative data from the Salmon river spring run this year that would show the same run timing?

Barnes: The Salmon River does their counts as late as possible.

Wilkinson: The U.S. Forest Service is doing that as part of their springer rebuilding.

Kautsky: Some spring CWT's showed up at the hatchery at the usual time, those codes were accurate.

McIsaac: So you are saying they came in very late but had jet burners on their fins? Can you find out whether or not the spring chinook tags were removed from the spawning population below the Trinity?

Barnes: I have information on that from the age composition [Handout L, Table 3]. This year the CDFG has a new policy that the gates are not closed at the hatchery, so everything that comes in stays. This year is a true natural spawning escapement. It still could have hatchery fish that don't enter the hatchery spawning in the river, but that meets the definition of naturally spawning. At the Trinity River Hatchery, the age composition between threes and fours last year was 13% threes and 83% fours. The Trinity naturals below the hatchery were 11% threes and 80% fours which is not a significant difference. On the Klamath side, the Salmon River was 30/59 threes to fours, the Shasta was 27/63, the Bogus was 31/57 and the Iron Gate Hatchery was 25/71. There is a significant difference between the age comp for the two basins. It probably wouldn't be a far stretch of logic to assume that the naturals did not include springers.

Bits: Regarding the weakness of the three year old returns: this is following a jack count in the river the previous year of almost 18,000, which is not bad. Something happened between the two's and the three's for that '93 brood year between. There should have been a lot more threes.

McCovey: Our fall harvest was down. We got approximately 2,700 salmon out of the 20,000 allocated. There were a lot of reasons why. Maybe Mike can give you a more in-depth update on the reasons.

Orcutt: There was the anomaly of the discrepancy in the springs and falls. Effort was consistent, but for some reason we didn't catch the numbers. The tribal members decided not to do the commercial fishery. Market conditions and free and open access were issues in the decision. But with high unemployment rates, we're looking at economic development opportunities.

Wilkinson: Did the Hoopa suffer a reduction in the numbers of fishery participants like the Yuroks?

Orcutt: We did have consistent overall effort with past years.

McIsaac: Do you have a rough guesstimate of how many spring chinook were caught in the fall fishery?

Orcutt: I think it was around 1,100 or 1,200 fish.

Kirk: Regarding ocean recreational fisheries: the issue that came up in last year's KFMC meeting was the quotas between the Oregon and California fisheries. As the final decisions were made for the season, it was determined to be season management. Speaking for California, it is felt that this was the most successful management of a recreational summer season we have had in four or five years. It gave opportunity to the fishermen to access fish seven days a week with the four fish per week quota. It gave them some balance. There were concerns early on about over-fishing, but that did not happen, because effort was not larger than the last four or five years. The communities along the coast are still in a depressed condition. The marketing availability, even of seven days a week, did not draw large quantities of people back to our fishery. There is still not enough information for inland communities to draw huge crowds, except on a few of the holidays: Memorial Day, Labor Day.

The catch was divided about 1/3 Oregon and 2/3 California, with the Eureka Port far out distancing the Crescent City Port. I believe the season management approach is absolutely the best way to go, and it gives the best opportunity to rebuild through marketing effort.

Wilkinson: I'm not a member of the coalition, but I attend their meetings. The coalition hasn't had the issue of separatism or the separate quotas come up this year, and I don't expect it to with seasonal management.

Pierce: Any word on what the ocean did?

Bits: The total commercial catch for ocean fisheries in the State of California was about 3 ½ million pounds. The Klamath Management Zone (KMZ) fishery (the first we've had there since 1991) came in close to the quota. In a personal communication with Rich Dixon, he presented a table showing ocean landings in the KMZ at 11,000, and the quota was 8,500. I asked him if that meant we went over the quota, and he said no, the difference reflects fish brought up by people from Fort Bragg. We were happy. Thirty fish per day was a good way to do a daily bag limit. Local boats were catching the fish, not boats from out of the area. As my running partner who fished all 14 days commented, it makes it so that if you get your fish for the day, you can go home and spend the rest of the afternoon with your family. Local markets were happy to get the fish.

McIsaac: Jerry, do we have a table showing expanded harvest of Klamath fish by various ocean fisheries?

Barnes: No. I would expect Rich Dixon to have that tomorrow.

Bits: We saw last week preliminary information that indicated that the overall ocean harvest rate on fours was about 15%, as opposed to the target of 20%. I assume from that, the rate on threes was probably closer to 10%.

12:00 Break for lunch

1:25 Reconvene

12. Report on fall chinook stock size projections

Barnes: We had some problems with the cohort table. Alan Baracco was the keeper of the cohort table, but he moved on. Rich Dixon got promoted to Alan's job, but he has to do his old job as well. That is why he's not here today. So the stock prediction was done by phone last Monday night. George and I worked with Rich.

You should be looking at the preliminary report dated February 13, 1997, handed out today [Handout G]. The reason it is preliminary is because it hasn't been reviewed by the entire team, but I don't expect the numbers to change significantly. In summary, on the first page: the prediction for next year is 112,300 age threes, and 43,100 age fours. The post-season estimates for 1996 were 113,600 age threes and 170,000 for the fours. If no fisheries were there at all this year, we'd get a little under 87,000 spawning adults. Using our five-year-average percentage of spawners that are natural, which is 69%, we get just under 60,000 to spawn in natural areas. If we took ocean and in-river harvest for the long-term 33-34%, you'd knock the total spawning population down to 32,500. Then taking the .69 hatchery natural ratio leaves 22,400 natural spawners. That would be significantly under the spawning floor of 35,000.

We will run through the details on the regressions this year for age threes on twos. For the last several years including last year, we deleted the outlier data point from the El Nino year (1980) and the outlier point from 1985 from the regression. The Salmon Technical Team (STT) saw fit to put those points back in, which reduced the age three prediction last year by about 6,000 fish. For this year, we did use the El Nino and outlier points again.

Incidentally, these regressions are all forced through zero, which means statistically we cannot get an r^2 (look on page 4). The STT puts one in every year, but I guess it is not kosher.

The age four prediction as you would expect is quite low.

Let's go to page 6 to compare pre-season and post-season estimates. Under age three pre/post ratio [1996], it is 234% higher than what actually happened. Conversely, for 1995 we were under by 300%. This is a complete reversal. The fours were considerably closer but still 25% off. If you look back to 1991-1995, comparing pre and post, the fours were overestimated by 200% for the last 5 years. That is why the STT looked at trying some other method. The bottom line is there is a lot of variability. As I said, when you apply full harvest rates to these [1997] projections, you only come out with 22,400 in the natural areas.

Bits: On page 9, ocean landings of Klamath River fall chinook: as far as I remember this is the biggest landings in the fall of potential five year old fish we've seen. I would like to look at what happened in the falls of '87 and '89 when other very large broods were at a comparable stage, and compare them, and see what happened the following years.

Barnes: What were the fall fisheries like in those years?

Bits: We had fall fisheries in both the KMZ and Oregon. The question is: are these really potential fives, or are they more likely to have been fours that just were late going in the river? This is pursuant to our earlier discussion on run timing. Perhaps if we knew where the tags had been recovered, it might help us get a better idea of which of these is the case. If it turns out that these fish were landed fairly remotely from the mouth of the Klamath, for example off of Newport, so that the probability is high that they are fives, then doesn't that say something about the predicted five year old abundance for 1997?

Barnes: Rich is the only one who could answer this, because he knows where the tags come from. He will be here tomorrow.

Bitts: I'm concerned because it seems that when landings are this scale, then you have actual evidence of what's there-- if you can sort out whether they are this year's or next year's spawners. In the worst case, all you have is assumptions such as natural mortality. The next best case is you have historical data and you apply an average. In this case it appears we have actual evidence of the strength of the five year class. If you have evidence that conflicts with your other methods, you should give some light to the evidence.

Barnes: This is a considerable number to deduce from a low allocation. This is like 10% of the ocean allocation, more probably like 11 to 12%.

Bitts: I would hate to see a situation where ocean fisheries got charged for these impacts in 1997, but the fish that these impacts represent aren't included in the prediction.

Barnes: If Rich can't do it, we can look at that and report on it for the March meeting.

Bitts: As best I can determine, the ocean harvest model assigns a 2.5% or less exploitation rate to all fall fisheries on Klamath stocks. If that were correct, and if we actually had caught them at that rate, and these were fives not fours, then we would be looking at 100,000 five year old fish next year in the ocean. I think you have already taken out the overwinter mortality when you went from the outset number to the summer equivalence.

McIsaac: If there really are 7,200 fives out there, and ocean fisheries took 2,500 last September, then you are looking at a one month harvest rate of 25%. This is curious.

Barnes: Look at Table 1: the in-river age composition. This reflects the reversal we saw in the pre/post predictions in Table 2, but if you look at the in-river age composition in '95 and '96, there's a total reversal between the age threes and fours. The last time we had that relationship was in 1989. We haven't had a chance to speculate on this yet.

Incidentally, we talked earlier about total harvest for the year. See Table 1: ocean harvest rate by age (I assume it is ocean impacts). You see there is a harvest rate of .10 for the threes. If you take that rate times the age three population, you will end up with about 11,400. Then if you take the harvest rate of .15 on fours, multiply it times the 170,000 age four ocean population, you get about 25,500. Add these and you end up with a total ocean harvest of about 37,000, and if you add in the in-river sport, (13,000), you come out with 50,000-- pretty equal tribal/nontribal.

Incidentally, in 1994 the TAT did an analysis of various methods we have used to predict both threes and fours. At the time, we were comparing our method with an analysis that came from the fertile brain of Robert Cope, called the partitioned cohort analysis. You have different run timings, and different maturity rates on the Klamath side and the Trinity side, and this is partitioned out so that you do estimates for the Klamath side and the Trinity side, with separate estimates for the hatchery fish and for the wild fish. The logic of the method is good, but it didn't work as well as the old method we had been using (putting the in-river cohort on the ocean). I propose that the TAT ought to revisit this partitioned cohort analysis, not for this year, but for the long term.

Fletcher: I agree, but I would also like the TAT to look at other ways to improve prediction methodology.

Barnes: There's another method that uses jacks.

Bitts: You mentioned that changes in maturity rate would affect this a bunch. Had you looked at differences in

jack size as a factor influencing the percentage that come in at that age?

Barnes: No.

McIsaac: I notice this is the largest error in over prediction of age threes so far on the table. We had a lot of jacks, particularly back to the Trinity and natural spawning areas, but very few three year olds last year. If the three year olds are small, then maybe there is a maturity factor working that way.

Barnes: That data is available.

McIsaac: Keith and I were in Vancouver, BC, and the Canadians had problems with their predicted and natural run sizes in the other direction. We saw more three year olds than the jacks would have indicated, and the jack size was such that they think there is some maturity shift going on there. Duncan, did you want to add to that?

Duncan MacLean: [Inaudible]

McIsaac: Jerry, on page seven: regarding the 7,200 five year olds, the short paragraph that describes how that was forecast does not allude to the fall catch, the September catch. Is that 7,200 what is expected to be out there on May 1, of the upcoming fishing year?

Barnes: When we get to harvest sharing, we can give you information from the annual run of harvest rate model.

McIsaac: Why don't you do that now.

Barnes: [Handout M]: The front page has the inputs, and on the back are the outputs of the harvest rate model (HRM). If you turn over the sheet, on the back you see that the total harvest is just under 43,000 and the ocean harvest is a little over 18,000. River harvest is 24,000. The balance of nontribal and tribal is over 21,000 each. A 12% overall harvest rate on four-year-olds. This was done with a projection that was 100 fish different than our latest, but we can run it again here at the meeting to show different alternatives if you want.

Bitts: Suppose predicted fives were increased by some amount based in the landings in fall 1996; what sort of effect would that have on all the harvests? Would it be reasonable to plug in another number and see what it does?

Barnes: You mean the 7200 figure? I cannot answer that...

Bitts: Let me rephrase it. If the TAT looks at this and decides to increase the predicted five year old abundance, would there be any difficulty in modifying the run of the harvest rate model to accommodate it?

Barnes: No.

Cribbs: Questions from Virginia: there is interest on the part of folks in the lower Klamath to keep more of the Klamath River fish in the zone for allocation, with 50% going to the Indians, and of the 50% of the harvest remaining for the three user groups, which would be ocean sport, ocean commercial and in-river...what would the figures be for an allocation of a 3-way split of the user groups?

Barnes: The TAT is a technical advisor, not policy.

Cribbs: I ask because I thought last year there was a 900 adult fish difference that would have been allocated to the river.

McIsaac: Jerry, it could be is a technical question. Instead of 15% of the non-Indian share for in-river sport, go to 33%?

Barnes: Actually 16.67% of the total harvest.

Cribbs: Split the available non-Indian share three ways between the user groups.

Bits: The more fish are taken in the river, the lower the total allowable harvest is, because of the age mix that is harvestable in the ocean. In general, the more fish are taken in the zone, the more the total catch outside the KMZ is diminished at an increasing rate. Not only would the total Klamath catch be diminished, but the total ocean catch would be diminished substantially. The number of other fish we can catch for each Klamath fish goes up dramatically as our Klamath share declines, and the cost to ocean fisheries of each Klamath fish that is saved for the zone goes up, so they get progressively more expensive in terms of the total statewide picture for fisheries.

Cribbs: I understand that. What the folks up there are stating is this: with the change in the allocation process where 50% is going to the Indians, it is time to look at the allocation process and an equal distribution of fish that are available. You reach a point where economic stability of resort owners and businesses is at stake. There are other ocean stocks available to ocean fisheries that are not available to in-river folks. They cannot go out to Russian River or Sacramento fish. This is all they have.

McIsaac: I think this is a technical question that could be a legitimate assignment to TAT. Putting more fish in the zone may close the distant areas with very rare Klamath impacts, like San Francisco and Newport.

Cribbs: I cannot carry on an intelligent discussion without Virginia, and I don't have any data on the impact of changing the in-river fisheries allocation a percent or two. We need to find out if there is a point where more fish could be kept in the zone without a tremendous adverse impact to the other fisheries.

Bingham: Since this is obviously an issue with implications for fisheries outside of the Klamath area, including San Francisco and points down south, this seems like this should be addressed and resolved by the PFMC. Certainly we can make recommendations to the PFMC. It would be useful for TAT to take this proposal and hindcast against past seasons using the KOHM to see what the implications would be. Then you could see what measures would have been necessary in years of high and low abundance. Would this have shut the entire coast down in 92? I think the present management would have to be pretty radically altered.

Bits: That's a useful exercise, but I think we get an idea for this year if we put the numbers into the harvest rate model.

Bingham: I think though it would be useful to look at areas down the coast.

Kirk: The F&G Commission was in consensus last year at 15%. Taking into consideration that there were more fish last year, the in-river folks I represent in Humboldt county, upriver, wanted to increase their share last year, but they were willing to take less in the future if runs were low. The process went along for six or eight weeks, with lots of unknowns. We didn't know what the season would be until the F&G Commission met in late April. There was consensus to support 15% at the March and April meetings last year. What in-river is asking for is fine to model, but in an abundant scenario. I'm surprised in-river people haven't called me, because last year it was settled on 15%, and now this request brings it up to 16.67%. Can L.B.'s designee fill us in on the F&G Commission's position-- are we going to go through last year's scenario over again?

McIsaac: Let me clarify that it's not 1.6% over last year. It's a considerable increase, almost a doubling.

Kirk: Thank you; I stand corrected.

Fletcher: Regarding the F&G Commission: our ability to plan harvest management is dependent on in-river shares. It would be good if the F&G Commission was on board right from the beginning, and met in Eureka, and L.B. gave a little talk on coordination with this group.

Collins: I believe there will be F&G Commission representatives here tomorrow.

MacLean: Projections for the Sacramento are like what we actually got on the Klamath last year [inaudible].

McIsaac: Maybe before we extend the discussion on harvest rate scenarios in the river or the ocean, Jerry can interject the consideration by the Klamath TAT of this proposal involving the STT and the scientific and statistical committee (SSC).

Barnes : See [Handout H]: Review of age-4 abundance predictors for the Klamath River fall run chinook salmon, February 7, 1997. This relates to a recommendation made last year by the STT after looking at age three ocean population and correlating it with a regression coefficient-- regressing ocean age threes on ocean age fours. We analyzed this in Rancho Cordova. I suggest that since this will be forwarded to the STT, rather than spending a half hour reviewing this, I can cut to the end and tell you what the difference was, and why the TAT is recommending we await further judgement of the SSC instead of using this.

It's not really autocorrelation, but I'll explain what it is. What we did was go back into the model biologically, and write the model in terms of what happens in ocean. The equation on page 2 is what happens realistically to get an age four population from age three.

Now skip down that same page to the STT model, which was strictly a regression coefficient times the age three population, and ignores ocean impacts and maturity. We rewrote the model putting those terms back in, it turned out it was dependent on ocean survival. Look at figure 1 on page 5. This is what happens with the relationship of ocean threes and ocean fours-- it turns out it is dependent on .8 survival, which makes a perfect fit. The STT model is shown on the right. There is a little scatter, that variability in ocean harvest, but you can see it is close to being driven by the .8 survival. It isn't called autocorrelation, but Dr. Prager could tell you the name for it.

If you look at page 3, equation 5, you could take .8 times the preliminary estimate of ocean abundance minus in-river run, minus ocean impacts, and you get an ocean population of about 51,000. We're not proposing to do that.

Bits: How is equation 5 on page 3 different from equation 2 on page 2, other than the constant S has a numerical harvest?

Barnes: It isn't. It just shows the simplistic relationship.

Bits: Is the TAT essentially saying the STT model engages in circular reasoning, while your model includes variability based on data?

Barnes: Yes, our model includes the separately counted in-river run as an independent variable.

McIsaac: Are you saying the team's forecast stands?

Barnes: I'm not looking for direction from the council, since this went from the STT to the PFMC to the TAT and

we will submit this back to them. This is just to inform you of our in-progress technical analysis.

13. Anticipated issues and constraints affecting 1997 harvests

McInnis: The anticipated constraints that NMFS will have something to say about: we're in the process of a Section 7 consultation of the ESA, and are conducting what is called a conference on proposed listings of coho. The three evolutionarily significant units (ESU's) of coho under consideration in the conference process are Coastal Oregon, Trans-Boundary, (which includes the Klamath), and Central California, which is already listed. The final listing decision for the first two units will be made the last week of April. That will be before the final decision on the management of the 1997 ocean salmon season by the NMFS. The anticipated constraints that may be caused by the outcome of listing will be given to the PFMC before their March meeting. Back in October at the PFMC meeting, I naively suggested that given our information on the impacts of chinook fisheries on these coho units, there wouldn't be additional constraints on the ocean fisheries for 1997 beyond the no-retention rule for the KMZ and south. I am fairly confident that is true for 1997. I wouldn't extend that to 1998.

Regarding winter-run chinook: I hope by tomorrow we have a signed-off addendum to our biological opinion for winter-run chinook that takes into account the increase in run size in 1996, and the lower impact rate seen in 1995. It won't make a big difference.

Bits: You expect changes in 1998 because of coho. What are they?

McInnis: For the Oregon coastal coho we have 1 1/2 decades of tag data. For the Trans-boundary ESU, we have CWT's from the Rogue and Trinity rivers for coho that hasn't yet been used for ocean coho management, but hopefully will be available for 1998 management. They should apply to the Trans-boundary coho unit better than the Oregon unit. For the central California unit, we have little data. We have some tag data from the Warm Springs hatchery on the Russian River. We'll look at all this, and it may have influence on the 1998 constraints.

Bits: I thought the Trans-boundary unit was considered Oregon Coast Naturals (OCN's).

McIsaac: It's a combination. To model this Trans-boundary group we used the CWT returns from Rogue and Klamath hatcheries for OCN management. When we looked at a 10-13% impact on OCN's, we have not used any Klamath tags; we have just used Nehalem down to the Rogue.

Bingham: I hope we don't get any surprises, Rod, like we did last year with winter-run. I urge giving time for people to come to grips. It's welcome that you'll be using data from further south. It's disturbing that there is still a lack of equity in dealing with the fishery, and the approach taken to land management and private landowners. I think it's important for the NMFS to get something out on the street before we go into our 1997 fisheries management process.

Fletcher: I concur with Nat. In light of the letter from Shasta CRMP, I hope those activities get scrutinized like our fishery harvest activities did.

McIsaac: So Rod, you are telling us that winter run impacts in the ocean are less than we thought. However the upward revision in the STT's estimates of hooking mortalities in these southern fisheries hasn't been fully implemented in estimating ocean harvest. It is severe for this mooching technique. Do you anticipate a change in how this hooking mortality is dealt with, or will it be the same as last year?

McInnis: At least three things have been done between last March & today; the CDFG did a follow-up study on hook & release mortality. Focusing on the mooching method by the recreational fishery, they considered hook location, and looked at the incidence of mortality from other studies, and inferred total hooking mortality for the

fishery. In June and July of 1996, CDFG collected some direct evidence by experiments at sea, using different types of hooks, and holding fish on board. This was presented to the PFMC in summary in October. The final report was delivered to the SSC a couple weeks ago. I anticipate this will change the hooking mortality rate used in 1997. I don't think 13% will be the hooking mortality used in 1997.

Another project was a study of coho contact rate using four spreads, last spring at Fort Bragg. We'll get a final report down the line (Rich Dixon has it). The final thing is the early commercial fishery in the Santa Barbara/Ventura area, a limited commercial fishery conducted before May 1: there will be genetic stock identification done on that by NMFS to see how clean that fishery is. As the messenger, I too would like this determined well before the PFMC meeting.

McCovey: Is there anything about steelhead?

McInnis: No. I don't know of an information on ocean fishery impacts on steelhead, and don't expect anything coming out of this conference that will impact ocean salmon fisheries.

Bits: I've only encountered a dozen steelhead in the ocean in my 20 years of fishing.

Mc Isaac: It looks like preparation for a no-jeopardy biological opinion is underway for the Columbia River fisheries impacting steelhead. That could be done by August 1, so fall freshwater fisheries could proceed. Would there be anything comparable for the Klamath? What would happen August 1 without a biological opinion on the Klamath, assuming there is listing in that basin?

McInnis: I don't know. Section 7 consultation applies only in those areas where there are federal regulations or federal permits or federal funding. In the case of a state-managed fishery, such as recreational fisheries in the Klamath and coastal stream, I don't know. I know it's handled in another way; probably the state would apply for a Section 10 permit for all citizens under their regulations. It's a longer process than the Section 7 process that won't likely be done before August 1.

McIsaac: On the Columbia, there is a 30 day grace period, from August 1 to September 1, then after that without a Section 10 or Section 7 incidental take permit, no fishing is allowed until a permit is obtained.

McInnis: In the case of winter-run on the Upper Sacramento, salmon fishing is prohibited. A resident fishery for trout is allowed during the winter chinook run. If fishermen catch a salmon, but they leave it in the water, no action is taken. If they lift it from the water and take their picture with it, that is a violation.

McCovey: We aren't marking steelhead presently. I urge the state to continue marking steelhead so we don't have data gaps.

Cribbs: Bob, (McAllister) are they continuing marking?

McAllister: Yes, steelhead and coho will be marked.

McIsaac: For OCN coho, the forecast for next year is still in the poor category. Oregon Department of Fish and Wildlife (ODFW) will argue for a target impact rate of 10-13%-- similar to last year.

Bingham: As mentioned earlier, the PFMC is in the process of amending its salmon management plan. I urge everyone to get involved in that.

Pursuant to the reauthorization of the Magnuson act, there is a whole new layer of direction relating to "essential

fish habitat". In the new language, there are a lot of actions required of the Secretary of Commerce and NMFS and the regional fishery management councils. I urge you to look at the draft of the proposed rules. Councils will be required to amend their plans to designate essential fish habitat, and provide information for consultation on actions taken that impact that habitat. Plans must be amended by November 11, 1998. That includes of course amending our salmon plan. Essential fish habitat is defined throughout all life stages of the fish and may include historic habitat as well as present habitat. It's a very significant step forward and a new responsibility for the councils, as we are now required to comment to federal or state agencies on activities affecting essential habitat of an anadromous fishery. It's a huge addition to the burden of responsibility of the NMFS.

Break

14. Report on 1997 process of the Pacific Fishery Management Council and Department of Commerce, including opportunities for the Klamath Council to participate (Bingham, McInnis)

McInnis: The PFMC process is set up to provide recommendations to the Secretary of Commerce for ocean fishery regulations. The 1997 process starts at the March 3-7 PFMC meetings in Portland. The KFMC will have an opportunity to present their recommendations to the PFMC. Possible management options put together by the PFMC will be put out for public review in March and April. The PFMC meetings in April will be in Millbrae at the Clarion hotel, and the PFMC will consider public comment on the options, and how the options will stand up against the ESA and other constraints, and then make their final recommendation. Again, the KFMC will have input at that time. Friday afternoon the NMFS will review the PFMC recommendations for compliance to applicable laws. They will determine if they should be made federal regulations. A rapid progression to the Department of Commerce will follow. Regulations are effective May 1.

15. Report of the Harvest Allocation Work Group (HAWG) on anticipated activities pertinent to the 1997 season; Report on Mid-program Review

Wilkinson: The HAWG hasn't met since our last meeting, and there has been no call for them. Regarding the mid-program review of the Klamath River Basin Fishery Restoration Program: the RFP for a reviewer was published, and two proposals were returned. The mid-program review sub-committee of the KTF met on February 6 to evaluate both proposals. Both proposals fell within the budget amount, and both met technical abilities, but fortunately there was a criterion for the evaluation of proposals written in the RFP, which the subcommittee used to make a decision. Although they've decided, I can't announce the decision until the next KTF meeting. I can go over the criteria: 1) expertise and experience of the proposer, 2) ability to finish the evaluation within the time frame, 3) evidence of knowledge of the Klamath River or other large river system, 4) evidence of knowledge of the relationships between federal, state, tribal, and private interest groups, 5) evidence of knowledge of restoration program components. A fiscal review of the program will be done internally within the U.S. Fish and Wildlife Service (USFWS). The mid-program review deadline is September 15, 1998. [Note: the KTF choice for program evaluator was William M. Kier Associates].

Grover: What is the product?

Wilkinson: There will be a detailed formal report on compliance with the long-range plan. Incidentally, to correct a mis-statement I made in the past, if the KTF approves this selection, it becomes final; this is not something that the USFWS would have final say on.

Fletcher: Part of the review covers this group and the performance of harvesting objectives. Will that information be sought from us by the reviewer?

Wilkinson: Yes, I see it here in the RFP. Task 9-1 is to review and make recommendations on the monitoring success of salmon harvest management, and Task 9-2 is to review and make recommendations regarding

enforcement of fishing regulations.

Fletcher: I didn't want that to be in there, and I expressed that at the last KTF meeting. The latest copy of the RFP I saw didn't include that.

Wilkinson: I remember the incident at the October KTF meeting in Brookings, and at that point it was on the street. All I can say, Troy, is that the criteria say the reviewer needs to show evidence they understand the relationships between agencies, tribes, and private interest groups. He can't make recommendations on harvest management without consulting you folks.

Fletcher: I had some serious concerns. Looks like we'll have a fun KTF meeting.

Inserted agenda: Report on the Trinity River EIS

Orcutt: I'll brief folks on the EIS in the Trinity Basin, that has been ongoing, involving the USFWS, U.S. Bureau of Reclamation (BOR), and the Hoopa Valley Tribe. Pursuant to the Central Valley Project Improvement Act, there was supposed to be a flow decision this past December 31, 1996. For a variety of reasons, relating to the USFWS 12-year flow study, that deadline wasn't met. We proposed that with a large escapement in the Trinity, and without the flow decision in place, that adequate water be available for fish. On December 2, we convened a meeting; a lot of power utility and agricultural interests were there at that meeting. We said we wanted adequate flows, and the result was that the Dept. of Interior, via USGS, is putting together an interim flow regime, reviewing what our scientists put together, and seeing how it could be implemented in the upcoming water year. We're looking at a flow regime with a large outmigration flow, temperature controls, minus the large channel-shaping flow. With this good water year, we're looking at about 70,000-90,000 over the 340,000 acre feet. We have a normal to wet water year this year; after another meeting we'll have another water projection.

A concern we have is that one of the EIS sub-groups-- I believe the fishery population/channel morphology subgroup-- agriculture, timber interests, the habitat component of restoration-- keeps asking whether goals could be met by cutting back on harvest. It is an alternative being scrutinized. We said we can't accept that alternative. The "purpose and needs" statement says the purpose is to identify flows needed to restore production of the fish population in the Trinity River to pre-project levels (natural production). The Hoopa Tribe discussed this with the co-leads and are putting together a rationale, scientific data, legal constraints, to show why we don't need further analysis of the harvest reduction alternative. We've committed to give this to Bernice Sullivan [BOR] by March 3.

Bits: Is the intent to include that alternative and the reasons for dismissing it in the final document?

Orcutt: Yes. The no-fishing alternative is now called the fishery harvest management alternative, but we're saying that part of the intent of Congress in reauthorizing the Trinity Act is that natural production includes harvest. A biological argument against this alternative is: we know the Trinity is a severely degraded habitat with 90% of the water diverted. What level of harvest can a healthy restored fishery sustain? That's where we're headed. Now it's severely degraded, and adding more fish won't help. And we're reserve right holders. You simply can't do that.

Fletcher: You guys are working on some numbers? I also think there should also be a no-dam alternative in there by the way. I would like to see your numbers on what that alternative can produce and do some comparisons?

Orcutt: The EIS team had looked at a no-dam alternative, and were told that that was beyond the legal and technical realm of possibility. It was written up as not worth further analysis. That is what we are looking for with the fishery harvest management alternative. In terms of a technical analysis, we had been assigned the

analysis of no-fishing, and how long would fishing have to be curtailed to hit the population goal. We said we didn't want to waste our time on that alternative. There would have to be no fishing in most years to make the fixed escapement goal of 63,000 natural spawners. In the past we put forth spawner deficit accounting as a management tool.

Fletcher: We also told Bernice that we didn't like that option, but since people are talking about it around us, we need to have the numbers in our back pocket.

Orcutt: We have reduced harvest rates at the expense of people up and down the coast, and I do think collectively everyone has tried to manage responsibly.

McCovey: We're up against formidable lobbies with a lot of congressmen back in Washington-- agriculture, water users, cities-- so it's important to have our act together, because they have the money and people make these arguments. No matter what this will be taken to court.

Grover: What is the time frame for completion of this document?

Orcutt: November, for the record of decision being made. An administrative draft will be out in the next couple months.

Fletcher: Is it appropriate for this group to make a recommendation to the leads saying we wouldn't support restoration through a harvest management alternative?

Orcutt: I want to say the adversarial interest groups here are similar to what you people have faced on the Sacramento. I want to thank people here for support at the interim flow meeting; we aren't always there at forums where arguments on the opposite side of the coin are represented, so whatever support we could put together collectively would be appreciated.

Bingham: This is true-- the water interests have hired fishery consultants to target fisheries as the problem, and they want us to be the sacrificial offering to maintain the status quo of water exports. There are proposals for buying out the fishing industry as a cheap way to solve the Sacramento Delta ecosystem problem. I would endorse this suggestion here on the table.

McIsaac: Is it appropriate for this advisory body to weigh in at this developmental stage in the EIS process, rather than the public comment stage?

Orcutt: In an advisory capacity, a letter to someone within the Department of Interior saying that the stock is being responsibly managed, something like that. That a healthy restored Trinity fishery will support escapement as well as what is needed by the entities the KFMC represents. And when there are opportunities to comment, you could comment.

McIsaac: If they're eliminating the no-dam option, it seems the no-fishing option should be similarly dismissed. First there are reserved tribal rights, and second, you can't get to zero on fishing mortality unless you shut down all fishing-- not only Klamath salmon fisheries but others as well.

Bits: The experience on the Klamath system shows that simply pouring more spawners in doesn't yield more production if the habitat is not there. I'm curious whether it is appropriate to suggest to the EIS team that these two sideboards be included in the final report with all the reasons for their dismissal. My thinking is that my people would want to know why the no-dam alternative was dismissed.

Fletcher: What's the window of opportunity and the EIS time line? Is there a chance to put in the no-dam alternative?

Orcutt: I don't know.

McIsaac: Maybe we can let our Federal friends here find out if it's appropriate to weigh in with an opinion from the outside at this stage. Maybe on March 2 we could draft a letter.

McInnis: The KTF meeting on Thursday and Friday of this week will give us more information.

Grover: Dale Hall has extensive experience, and he'll be there.

6. Election of vice chair

McIsaac: Let's combine the public comment period for this agendum with the comment period of agendum 17.

Bits: Motion: I nominate Keith Wilkinson.***

[Inaudible]: Second.***

Kirk: This agenda item has been postponed repeatedly; I don't know why. Is the agency representative the standing vice chair?

McIsaac: I think that's the default situation. Jerry?

Grover: Ron, what did we decide?

Iverson: The rule says that a federal representative has to be here apart from being an officer. The bylaws say the council can elect their own representative officers. In the past we had a chair and vice chair, neither of whom were Interior Department representatives, but there does have to be a federal representative present.

Fletcher: How long are the terms?

Iverson: It's basically up to you.

Fletcher: I would like to offer a nomination also.

Wilkinson: I would like to see that.

Bits: I think we can have multiple nominations and then vote.

McInnis: I don't think we need unanimous consensus for things apart from external recommendations. I think we can vote for officers.

Iverson: I agree with Rod.

McIsaac: Okay. Additional nominees?

Fletcher: I nominate Rod McInnis.***

Wilkinson: I second.***

McIsaac: Are there other names? [None heard].

McCovey: I would close the nominations.

Bitts: Before we vote, I'd like to hear campaign speeches.

Wilkinson: I am flattered by your support, but I would like to support Rod McInnis for his abilities, and ask you seriously consider him.

McInnis: Thank you for your support, but I was going to vote for you.

Wilkinson: I respectfully decline nomination.

McIsaac: All in favor of McInnis, say aye. It's unanimous.***

16. Public comment

McIsaac: Public comment period: are there comments? Seeing none, we close the public comment period.

17. Assignments to TAT, and other work assignments

McIsaac: Earlier we discussed a technical assignment for a different allocation formula to see what impact it had on other catches-- a 1/3, 1/3, 1/3 allocation within the non-Indian share. There was discussion about hind-casting such a thing for the years 1995 [high abundance] and 1992 [low abundance] in addition to showing what it would show for 1997 including the effect on ocean catch of Sacramento River stocks. Is an output around March second a possibility?

If I can speak for Nat for a moment, my assumption was that in hind casting these other years, there will be smaller fisheries in distant areas that will reduce the CVI and the harvest rate of Sacramento fish.

Bingham: I was hopeful that somebody somewhere in the technical world kept their old calibrations on disc so that it would be possible to just rerun the models for those years with just that one change in allocation.

Kirk: Hal, is this [proposal for 1/3, 1/3, 1/3 sharing] with consultation from both up river the folks in Weaverville and Willow Creek?

Cribbs: My understanding is Virginia has talked to a multitude of people about this issue, and that this is what she asked me to present.

Kirk: So the intent here is to go from the 15% in '96 to a 33 1/3% share for '97 or for some time in the future at your asking?

Cribbs: Of the available nontribal harvest.

Kirk: Is this in consultation with the CDFG and with the California Fish and Game Commission (F&G Commission)?

Cribbs: There have been discussions with the CDFG and the F&G Commission staff. You have a copy of the letter that was sent to the F&G Commission [Handout O].

McIsaac: In that regard, Hal, we have a letter from the CDFG [Jacqueline Schafer] to Robert Treanor [Handout F], and the first time I read the middle paragraph, I wondered whether or not there was something in the stew with regard to 15% allocation that occurred to last year. The letter speaks toward allocation, the inside sport fishery being determined after tomorrow's meeting and looking for input. Paul, has there already been some extensive discussions in the Department and between folks outside the department looking at some higher allocation?

Kirk: I think this came from what happened last year.

Wilkinson: I must comment to my meetings with the Klamath Zone Coalition, and I think I can speak for them. They are getting blind sided by this thing. They assumed that there would not be another raid on ocean share. Had they known that there was going to be an endeavor by the in-river folks to more than double their fishery, there would have been one of those ocean folks here to address the issue.

Cribbs: Can the TAT also look at other percentages: let's say a 10 or 15% increase in the KMZ share?

McInnis: Is this independent of the in-river allocation or would you anticipate the TAT would look at a 15% increase in the number of Klamath chinook impacts that are allowed in the zone with a 15% allocation of the non-Indian nontribal fisheries in the river? Or do you want to see the 33% allocation in the river, as well as an increase simultaneously in the KMZ?

Cribbs: One issue is retaining more fish and the other is how the pie is divided. I would like TAT to look at both, if possible: an increased KMZ share above the present allocation, and an increased KMZ share in the context of a 1/3 1/3 1/3 split.

McIsaac: I think the 1/3, 1/3, 1/3 does put more fish into the zone sport fishery. If my impression is right, last year out of the 15% harvest rate in the ocean, 2.5% was scheduled for the zone sport fishery so it was certainly less than 1/3 of the whole non-tribal pie. I don't know what it does for inside the zone commercial fisheries. The team might come back to us on March 2nd and say we didn't tell them if we wanted all of that in the zone or all of that in Oregon or all of that in San Francisco.

I think when you are hind casting in 1995 and 1992, you can distribute the commercial fisheries as they were then and downgrade all of them equally to the point necessary to reach 1/3. With regard to a '97 option, do you have any suggestions on how to model the commercial fishery for '97?

Barnes: In light of your earlier comments? I think taking a look at it with 1/3, 1/3, 1/3.

McIsaac: The question that the TAT would have to face is when you have 1/3 to put into the commercial fishery, do you want to put all of that 1/3 in Oregon, do you want to put all of that down near San Francisco, do you want to put all of it in the zone ports, or do you want to split it up?

Dave or Keith or Nat, do you have suggestions on where to put the commercial impacts in this '97 hypothetical modeling exercise?

Bits: We have consistently chosen to use our Klamath share to access as many non-Klamath fish as possible. I suggest the team use the ocean share available to the commercial fisheries in the scenario to maximize the ocean catch.

Wilkinson: We are doing the same thing.

McIsaac: Why don't we let the team have broad discretion. I understand Mr. Scott Boley is on the TAT now, and he may even have some opinions on how to spread this out.

Bingham: Just one further suggestion to the TAT-- if you get into an area of doubt as to which way you should be looking up and down the coast, I suggest you turn to the National Standards in the Magnuson Act, relative to maximum benefits and fair and equitable distribution of the harvest. It is law.

Barnes: The other assignment was the spring chinook. I will set up a subgroup to go forward with that to report.

McIsaac: We are just looking at a data set for future modifications of the spring chinook management picture.

Barnes: One thing we will develop is how Klamath fall chinook management [increased in-river harvest share] is affecting the population management of the springers.

Bits: I was hoping that the team would look at the age five anomaly and reconcile that.

Barnes: That is part of revising the stock prediction.

18. Planning of agenda for March and April meetings.

McIsaac: We received by mail from the Yreka office a draft agenda for the March 2nd meeting, which is scheduled at 1:00 at the Red Lion Hotel at the Lloyd Center in Portland, Oregon. Is there any discussion on the agenda?

Fletcher: For the March or April agenda, I think we should briefly discuss the Klamath watershed coordination working group: what that group is up to, and how it affects this group's activities.

Wilkinson: Troy do you mean the Hatfield Working Group?

Fletcher: No, the Secretary through the Hatfield and the Trinity River Authorization has been directed to coordinate activities in the basin, resulting in this coordination group.

Kirk: Were you going to consider the issue that was brought up by the in-river fisheries as a report from the TAT under item 9 of the proposed March 2 agenda? Anticipated issues and constraints?

McIsaac: Yes, that looks like the spot for the report from the TAT. Remember that the purpose of this March meeting is to produce two or three options for public review

Kirk: It will bring more opportunity for people who are driving up to make comments regarding proposals for any new split.

Wilkinson: I'm concerned that once again the PFMC process is going to be constrained by the official Canadian coho harvest on one end of our fishery and on the other end by the F&G Commission waiting for a final number on harvest sharing. We have a season setting process, but we cannot set the season because we don't know what our percentages are.

Cribbs: We have also urged the Commission to look at their process, because we think that it is out of synch. They ought to be dealing with this much earlier.

Wilkinson: It creates a lot of unnecessary hardship.

McIsaac: Last year, the F&G Commission paid some attention to the forum and the dialogue that occurred at this table, so I would encourage you all to talk to your representatives.

The March agenda has an evening meeting following Sunday. In the past, we have met Wednesday at noon. I wonder if meeting in the evening is better.

Bingham: We have some very contentious ground fish issues before us this year.

Kirk: I thought we had a Wednesday midday meeting so that if the Chair formulated comments, those comments could be given. I thought they were on Wednesday, but are they on Thursday morning?

McIsaac: Wednesday afternoon. Thursday is solely a ground fish day.

[members discuss advantages and disadvantages of meeting times]

McInnis: Back to the first day of this March meeting: item #5 and then action item #8. Is the TAT going to be ready to deliver that report on additional actions needed to provide adequate monitoring data for 1997 and 1998?

Barnes: No.

McInnis: If we don't have the TAT report to deal with, I think we are going to get through that Sunday agenda a lot faster than it looks here to the point we are talking about, the 1997 season.

Kirk: In that particular case, change it to 2 o'clock, to give more opportunity for people that may be driving up.

McInnis: The one issue Keith mentioned is going to be the hot issue. I would be in favor of starting at 3 o'clock to give the public that aren't here today all the time possible to get to the meeting.

[Inaudible]: I want to make sure the TAT report on getting the KOHM in line with harvest rate modeling is on the March 2 agenda also.

McIsaac: Let's have a very concise focused agenda starting at 2:00 and isolating it to just the most crucial issues. Let's have a Tuesday evening meeting, 1/2 hour after PFMC closes, so 5:30 or 6:00. Again with a fairly crisp agenda that won't go too long and for the public's notice, let's reserve the possibility of a Wednesday meeting. When we start on Sunday, let's spend some time on the agenda to make sure that we get to the most crucial items.

Barnes: I just want to clarify for the involvement of the TAT: would you expect that there may be TAT assignments from the Tuesday meeting or would it be just from the Sunday meeting?

McIsaac: I would hope it would be focused on the Sunday if there are some.

Barnes: Any technical report analysis could be done on Monday and reported back on Tuesday.

McIsaac: Yes. No further discussion? We stand adjourned.

Adjourned 5:06 pm