

MEMORANDUM

STATE OF ALASKA *Department of Law*

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File No.:
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Subject: **Comments on Specific
Proposals for December 2011
Board of Fisheries Meeting:
Prince William Sound, Upper
Copper River, and Upper
Susitna River Finfish Fisheries**

The Department of Law has the following comments on certain of the proposals to be considered by the Board of Fisheries at its December 2011 meeting on regulations for finfish fisheries in Prince William Sound, Upper Copper River, and Upper Susitna River.

Proposal 43. This proposes that the Board amend 5 AAC 28.230 (lawful gear for Prince William Sound area groundfish fisheries) to prohibit “commercial bottom gear” within 3 miles of any shoreline between May 15 and September 1. The issue is said to be that “the current bottom gear practices throughout the peak sport-fishing season have caused a depletion of fish resources for individual anglers” and “near shore depletion of the resource has forced anglers and subsistence fishermen to travel farther and farther to access fish resources.” The term “commercial bottom gear” is vague and would need to be defined if this proposal is adopted. If Proposal 43 is intended to regulate commercial halibut fishing, the proposed regulation may be preempted by federal law. We previously have advised that “state management of halibut, within both the territorial sea [within 3-miles of the baseline] and the internal waters of the state [inside the baseline], has been preempted by the Halibut Treaty and its implementing regulations.” 1996 Inf. Op. Att'y Gen. 15 (July 31, 1995). In that opinion, we concluded that the Halibut Treaty between the United States and Canada and the Northern Pacific Halibut Act which implements the treaty reflect congressional intent to occupy the field of halibut management, thus preempting state halibut management authority. *Id.* However, state fishing regulations that address all fishing activity in an area and not just halibut fishing may be more likely to be upheld if they are shown to be tailored to address a demonstrated fishery conservation or development issue broader than halibut concerns. *See, e.g., State v.*

Dupier, 118 P.3d 1039 (Alaska 1005) (requirement of CFEC permit for landing fish legally applied to halibut and not federally preempted).

Proposal 47. This proposes to amend 5 AAC 28.083 (general groundfish regulations, permit requirements for skates and rays) to specify that the skate and ray season shall open concurrently with the halibut season. As proposed, it would not specify a closing date and would delete the more general authorization that the permit “may ... specify season dates” in 5 AAC 28.083(a)(5); therefore, if this is adopted, there should be a provision for closing the season. Also, we note that as proposed it would delete general authority that a permit may “require other conditions determined by the commissioner to be necessary for conservation and management purposes.” 5 AAC 28.083(a)(7). Deleting this authority could be interpreted as removing this authority from the commissioner. If adopted, the provision should be made applicable only to Prince William Sound, since other fisheries elsewhere in the state are not within the scope of the notice for this meeting.

Proposal 50. This proposes that the Prince William Sound Herring Management Plan, 5 AAC 27.365, be amended to provide that, if the projected spawning biomass is projected to be less than the productivity threshold for a second year (presumably second consecutive year), the commissioner may take applications from permit holders “for the exclusive purpose of development, testing, and demonstration of new and restored higher-value, higher benefit uses of the resource.” This would appear to be within the Board’s authority under AS 16.05.251(a)(12). *See also* AS 16.05.050(a)(9) authorizing the commissioner to authorize a permit holder to “engage on an experimental basis in commercial taking ... with vessel, gear, and techniques not presently qualifying for licensing.” The proposal states that the “Commissioner needs the option of delegating to a community board,” without specifying what would be delegated. The Board and Commissioner cannot delegate their statutory functions to a community board.

Proposal 51. This proposes that the Board review the Copper River District salmon subsistence fishery in light of the Board’s new definition of “subsistence way of life” adopted in 2010. We do not think the new definition automatically requires a reexamination of this or other previous C&T determinations; however, there may be new information pertaining to the new definition that the Board could find warrants reconsideration of its previous determination. Our advice to the Board in addressing proposals to revisit previous C&T determinations has been that the Board should be careful in addressing the proposal and should first determine whether there was an error in its previous finding or whether significant new information is now available to support reconsideration of its earlier finding. While in most situations the Board has extremely broad discretion to change fishing regulations, its discretion to change C&T findings is more limited because of its affirmative (not just discretionary) statutory duty to identify C&T uses of fish and game through factual findings, and not just quasi-legislative findings as with most fishing regulations. The Board’s previous decision is presumed to

be valid and supported by a record that provided a reasonable basis for the factual finding. The adoption process included a certification by the Department of Law that the Board committed no legal errors in its process. Thus, we recommend that the Board identify an error in the previous C&T determination or significant new information previously unavailable before it reconsiders and reverses the earlier finding. Additional advice regarding subsistence proposals can be found in our October 2011 General Comments for Regulatory Meetings During 2011 – 2012 Cycle.

Proposals 54 and 55. These propose that the Board establish a positive C&T finding for the Chitina dipnet fishery, which last was considered in 2010. As discussed in more detail in our comments above on Proposal 51 regarding the Copper River District subsistence salmon fishery, our advice to the Board in addressing proposals to revisit previous C&T determinations has been that the Board should first determine whether there was an error in its previous finding or whether significant new information is available to support reconsideration of its earlier finding.

Proposal 56. This would amend the Copper River King Salmon Management Plan, 5 AAC 24.361, to specify that in the Chitina Subdistrict personal use fishery the annual limit for king salmon is one fish, and if the commissioner determines additional conservation measures are necessary to achieve the escapement goals the commissioner may, by emergency order, close the fishery to the retention of king salmon. It also would specify that in the Glenallen Subdistrict subsistence fishery, if the commissioner determines that additional conservation measures are necessary to achieve the escapement goals, she may by emergency order restrict the retention of king salmon or modify methods and means in order to reduce the king salmon harvest; we suggest this authority be made specific in regulation if the Board desires that the commissioner have emergency order authority to restrict the retention of king salmon or modify methods and means in the subsistence fishery. It is unclear what the proposer means in referring to “additional” conservation measures for subsistence fisheries, and whether the intent is that subsistence restrictions would be imposed only after other fisheries were closed.

Proposal 77. This would amend 5 AAC 24.331(b)(1) (gillnet specifications and operations in the Eshamby District) to provide that two setnet interim use or entry permit holders may operate together when both are in compliance with 5 AAC 39.107. The combined operation would still be subject to AS 16.43.140 and AS 16.43.150, which in effect require that each permit holder be present and actively engaged in the operation of the permitted gear, and would also be subject to AS 16.05.680 and 5 AAC 39.130(c)(2), which require the permit holder to be present at the time of delivery and sign the fish ticket for the sale of the fish harvested under the permit. Thus, it would not allow a permitholder to purchase a permit for a child or other family member and work the gear as if it were their own without the family member’s participation.

Proposal 109. This would amend the Wally Noerenberg (Esther Island) Hatchery Management Plan, 5 AAC 24.368, to stop the remote release of chum salmon at Port Chalmers and require their release at Wally Noerenberg Hatchery instead. This likely is beyond the Board's authority given the limitation on the Board's ability to regulate the operation of a hatchery under AS 16.05.251(f).

Generally, the Department has primary authority over hatchery permitting and associated issues relating to salmon production and cost recovery. *See* AS 16.10.400 – 16.10.430. Further, the legislature has specified that “[e]xcept as expressly provided in AS 16.40.120(e) [authorizing board regulations for the conservation, maintenance and management of species for which an acquisition permit is needed] and 16.40.130 [authorizing regulations for the importation of aquatic plants or shellfish for stock], the Board of Fisheries may not adopt regulations or take action regarding the issuance, denial, or conditioning of a permit under AS 16.40.100 or 16.40.120, the construction or operation of a farm or hatchery required to have a permit under AS 16.40.100, or a harvest with a permit issued under AS 16.40.120.” AS 16.05.251(f). We have advised that the Board is not authorized to take action that effectively revokes or prevents issuance of a permit. *See* 1997 Inf. Op. Att'y Gen. (Nov. 6; 661-98-0127). However, the legislature has specified in AS 16.10.440(b) that the Board may, after the commissioner issues a permit for a hatchery, “amend by regulation … the terms of the permit relating to the source and number of salmon eggs, the harvest of fish by hatchery operators, and the specific locations designated by the department for harvest.” The Board also has authority in AS 16.05.251(a)(9) to regulate the release of native or exotic fish.

A regulation prohibiting the release of a specific hatchery's release of a species at one location and requiring its release at another appears to amount to a regulation of the operation of a hatchery and/or a modification of the terms of its permit regarding release of hatchery fish.

Proposals 114 and 115. These would amend the Prince William Sound Management and Salmon Enhancement Allocation Plan, 5 AAC 24.370, to reduce hatchery production of chum salmon to 24% of the 2000 production, without defining production level. As proposed, this likely is beyond the Board's authority, which is limited by AS 16.05.251(f) and AS 16.10.400 – 16.10.430, as discussed in our comments on proposal 109 above. The Board does have authority to prohibit and regulate the capture, possession, transport or release of native or exotic fish or their eggs, AS 16.05.251(9), and to amend by regulation the terms of hatchery permits relating to the source and number of salmon eggs, harvest by hatchery operators, and locations for harvest, AS 16.10.440(b), which may indirectly affect hatchery production.

Proposal 117. This would establish an optimal escapement goal (OEG) for Copper River Chinook salmon of 30,000. The board's sustainable salmon fisheries policy regulation defines OEG as follows:

"optimal escapement goal" or "(OEG)" means a specific management objective for salmon escapement that considers biological and allocative factors and may differ from the SEG or BEG; an OEG will be sustainable and may be expressed as a range with the lower bound above the level of SET, and will be adopted as a regulation by the board; the department will seek to maintain evenly distributed escapements within the bounds of the OEG;

5 AAC 39.222(f)(25). The statewide salmon escapement goal policy regulation describes how the board will establish OEGs:

the board will ... during its regulatory process, review a BEG, SEG, or SET determined by the department and, with the assistance of the department, determine the appropriateness of establishing an optimal escapement goal (OEG); the board will provide an explanation of the reasons for establishing an OEG and provide, to the extent practicable, and with the assistance of the department, an estimate of expected differences in yield of any salmon stock, relative to maximum sustained yield, resulting from implementation of an OEG.

Proposal 116. This would prohibit "homepack" of Copper River salmon, or limit homepack to the sport bag limit for the species caught, in the area caught, and require a sport fish license for any salmon and a King salmon and harvest stamp card for kings retained as homepack. There are currently two regulations addressing the retention of fish taken in a commercial fishery, both found in 5 AAC 39. 5 AAC 39.010(a) states:

A person engaged in commercial fishing may retain finfish from lawfully taken commercial catch for that person's own use, including the use as bait in a commercial fishery. Finfish retained under this section may not be sold or bartered.

Under this regulation, homepacks for personal use are permitted but the sale of homepacks is banned. The amount of fish retained for a person's use must also be reported on fish tickets. 5 AAC 39.130(c) requires that fish tickets must include "the number of fish of any species retained by a commercial fisherman for that person's own use as specified in 5 AAC 39.010."

Proposal 128. This proposes to establish a limit and other restrictions on shipping fish out of state by nonresident sport fishermen. We have advised that the Board should carefully consider sport fishing regulations that would apply differently to users based on residency, especially where the regulation does not involve allocation of a scarce resource to Alaska residents. Before adopting a regulation that treats nonresidents

differently than residents, the Board should identify a conservation or development concern, and determine that the restriction is designed to address the concern without imposing unreasonable limitations on nonresidents. Discrimination against nonresidents should not be the sole purpose of a regulation.

**PARTIAL TRANSCRIPT OF MEETING OF ALASKA BOARD OF FISHERIES
ON MARCH 21, 2010 (RE PROPOSAL 201 FOR C&T DETERMINATION FOR
CHITINA DIPNET FISHERY)**

[9:33]

Webster: We're back on record. We're back on record. It's 9:33 this morning. Please take your conversations out in the hallway. When we took a break, we had just finished our committee as a whole. We're getting ready to deliberate on proposal 201. So, 201 for the record please.

Fleener: Yes, thank you Mr. Chair. Proposal 201 is 5 AAC 01.616, customary and traditional subsistence uses of fish stocks and the amounts necessary for subsistence uses. And we have Dr. Jim Fall.

[?]: Move to adopt.

[?]: Second.

Webster: Thank you. What we're going to do is get staff comments on addressing each of the criteria—we'll take one at a time, and why don't you give us your report on number 1. We'll get all the questions and comments on that portion of it and we'll just go, keep going down the list. And if it looks like we may have consensus on one of the steps as we go along we'll make note of that. So, Dr. Fall, staff comments please.

Fall: Mr. Chair, this proposal would establish a positive customary and traditional use finding for the salmon stocks of the Chitina subdistrict and would establish an amount reasonably necessary for subsistence of 100,000 to 150,000 salmon. I'll go into more of the background as we go through the eight criteria—I have a longer background to give it at that point, but I would just note that if this passes, the fishery in the Chitina subdistrict, the dipnet fishery would be managed as a subsistence fishery. The department is neutral on this proposal, but we do recommend the Board review and apply the information in our eight-criteria worksheet supplemented by other written information that's been provided during this meeting and by public testimony during this meeting, and we also recommend that the subject fish stocks for this determination be defined as the salmon stocks of the Chitina subdistrict. And finally, I would just note that in the subsistence regulation review section of our comments we do know that this stock is outside of the non-subsistence area, so these stocks—subsistence opportunities can be provided for these stocks and a portion of these stocks can be harvested consistent with sustained yield. And in terms of amount reasonably necessary and reasonable opportunity, regulations and any necessary restrictions on other fisheries, that's up to the Board and we'll get to those questions depending on how you act on this proposal. So those are my brief introductory comments, Mr. Chair, before we get into the actual report. So let's just stop there for a second.

Webster: What's the RC for your worksheet?

Fall: Mr. Chair, the worksheet itself is RC9. That's the C&T worksheet and the PowerPoint presentation pulling out sections of that report is RC11, that has copies of each of the slides that I'm going to show you.

Webster: Thank you. Board members? You got all those RCs? Okay, any questions so far for Dr. Fall? Seeing none, go ahead.

Fall: Okay, we've prepared a written report that's a customary traditional worksheet, the C&T worksheet and that is RC9; RC11 is the PowerPoint presentation. And I should note that

all the tables and figures that you see in the worksheet, they're numbered in the PowerPoint—their numbers match those that are in RC9. Some background: the C&T sheet that we prepared as RC9 is very similar to the one that the Board reviewed in 2003. We have tried to be clear about what information was presented to the Board when previous C&T findings were made. For example, in RC9 we include a summary of [9:38] information that was provided by the Board when the first C&T finding for this stock was made in 1984, and that was similar to the summary that we provided in '96 and '99 and in 2003. And the worksheet is modeled on those earlier worksheets but it does contain new information that I will identify when I present it. And I should note that the 2003 worksheet was provided to the Board in 2005 and 2008 without changes. So what new information has the Board been presented since 1999? Remember, in 1999 there was the positive C&T finding for this stock that changed the negative finding that had been in place since 1984. The primary new information in 2003 were the results of a study that the Division of Subsistence conducted, funded by the Office of Subsistence Management of the US Fish & Wildlife Service, assisted by the Copper River Native Association, the Chitina tribal council, the chief traditional council, and the Chitina Dipnetter's Association. And there were 509—the hard copy might say 510, but it's, the correct number is 509—face-to-face interviews with fishery participants in both subdistricts that were the basis of that study, and those interviews were done using a standard questionnaire. I should point out at this point that if you look at the transcript of the 2003 meeting, which was provided as RC105, you'll find that there was a fairly lengthy discussion about this study. Member Ingle especially really helped us clarify the methods, the objectives of the study on the record so that the information could be appropriately applied during Board deliberations. So, I do refer to that. But here I will mention that the purpose of that survey done in 2000 was to update information on the Upper Copper River fisheries collected in the early 1980s. And among other things, we were interested to know if the use patterns in both subdistricts had changed, or either subdistrict had changed. Now earlier research had documented that there—the pattern of fishing in the Glennallen subdistrict—the earlier research had documented a pattern of fishing in the Glennallen subdistrict that was most associated with Ahtna and other long-term residents of the Copper Basin. And you heard descriptions of that during this meeting too. But in 2000, we wanted to know if that pattern that we had first described to the Board in 1984 had changed with the opening up of the fishery to other Alaska residents. And therefore, when we did our survey, we overrepresented Ahtna and local residents in the Glennallen subdistrict sample. However, for Chitina, we did what was called a sample of opportunity—in other words, we spent considerable amount of time at the fishing grounds talking to people to get a sample that we believe is representative of the entire population of fishers in the Chitina subdistrict. So, again, when I give information about the survey results when we look at the eight criteria, I'll call it the Chitina subdistrict sample and the Glennallen subdistrict sample, and realize that the Chitina subdistrict sample is meant to be generally representative of all the fishers there, while we acknowledge that when we talk about the Glennallen subdistrict in our study the Ahtna and long-term users are overrepresented deliberately, because we wanted to know whether that pattern that the Board first identified in 1984 was still operating in 2000. Now page 5 of RC9 gives details, more details, on the study. And there we note that the sample included 127 local resident fishers—109 of them were Ahtna—and 382 other

fishers. And of the 509 interviews, 313 were conducted with participants in the Chitina fishery, and 196 with participants in the Glennallen fishery. And take a look at pages [9:43] 5 and 6 of RC9 if you need more detail, and there's also some additional results of that survey in Appendix C of RC9, and there was also a final report prepared for the Office of Subsistence Management with the final results. And I also should note that there were—there's part of the study ably assisted by Stan Bloom of the Chitina Dipnetter's Association. We located, at his recommendation, six long-term participants in the dipnet fishery living in Fairbanks and excerpts of those interviews appear in RC9 and in our final report, and I believe that almost the entire transcripts of those interviews are actually part of the record of this meeting. I'm not sure of the RC number. I'm spending some time on making sure the background on this is clear, because we spent a lot of time in 2003 on the study and again if it's not clear, the methods need clarification further, I can do that. But I wanted to get that up front to you. Okay, what have we added since 2003? Well, we're basically responding to the Superior Court decision in December of 2009, and so something that's new now is that we have a definition of the subsistence way of life that you adopted in proposal 200, so I intend, as we go through the eight criteria, to try to point out what information we had in the earlier worksheet as well as this one that can help the Board evaluate criterion eight, and the other criterion in light of that definition of the subsistence way of life. We've also updated the permit information that is collected by the Division of Sportfish to give you the latest harvest and participation numbers, and we added some additional comparative data for other subsistence and personal use fisheries throughout the state that we think might be helpful to the Board in looking at the question of whether the use pattern you're evaluating provides for the basic necessities of life and whether it provides for a pattern of long-term consistent reliance on the stocks. That comes up under number eight, but it might be relevant to some of the other criteria as well. This map, we saw it earlier, but just to orient everybody again, here's the Copper River, here's the mouth of the Copper River, the community of Cordova, and where the fisheries are we have the commercial fishery in the Copper River district at the mouth of the river, the Chitina subdistrict, which are the stocks under consideration here, south of the bridge over the Copper River at Chitina defined by regulation, the Chitina subdistrict. And then the Glennallen subdistrict stretches from that bridge up to Slana. There's also a subsistence fishery with somewhat different regulations that occurs around Batzulnetas. A couple of other procedural points that I think need to be made up front, this is similar to what we've done in '99 and 2003. The C&T sheet contains the statutory definition of a stock, a fish stock, and it means a species, subspecies, geographic groups, or other category of fish manageable as a unit. And I think we have pointed out that the Board has considerable latitude in defining stocks, and the definition is not based solely on biology or genetics. Okay, so that's an important point. Also recall that the Board of Fisheries identifies stock with customary and traditional uses, and we deliberately underline the word uses in this presentation because that's what we're talking about. We're talking about patterns of use that have been established over time by groups of users. So we're examining information about use patterns as established by groups of people, including uses in the past and uses in the present. And it is necessary to discuss how people, groups of people and communities and subcommunities, harvest and use the stock to describe the use pattern of the stock. Further [9:48] what I think is worth reminding everybody, is the Board—that this

meeting is making no determination about how may participate in subsistence fisheries, and that's—we just went over that a little bit earlier today. In other words, the Board is identifying customary and traditional uses. It is not identifying subsistence *users*. Additionally, the kinds of information that I'm providing to you today are largely the same as we've provided to the Board of Fisheries and the Board of Game since the 1980s, and that includes the history of the fishery, regulatory history, demography of the area, identification of social groups that establish and participate in the fishery, levels of participation, harvest levels, harvest methods, fishing locations, processing and preservation methods, sharing and the socio-economic and socio-cultural context of the fishery. That's information you've received in the past from us; it's relevant. It was relevant then, it's relevant now. Finally—actually, this isn't finally—it's important to note that the criteria are relative and they should be assessed in comparison with other use patterns of other fisheries including recreational, other subsistence, and other personal use fisheries. And, in 1984, the history is that the binder at that point would be up the Copper River district, which based upon comparisons between the Fishwheel fishery as it occurred in the Glennallen subdistrict and the dipnet fishery as it occurred in the Chitina subdistrict as illustrated in the C&T sheet. But as we've also pointed out, that pattern that the Board identified for the Glennallen subdistrict is not the standard that the Board uses in establishing whether a pattern that is—that it is examining now meets the eight criteria. It is simply there as reference, as information that the Board looks at, because again, these criteria are all relative. Whether a pattern of use for sharing meets the—meets what you think a subsistence fishery, customary and traditional pattern is, depends upon your comparisons with other fisheries, just as we've heard from testimony—most participants in most fisheries share some of their catch, but there's a wide degree of how much sharing occurs, what context it occurs in, what the history of those sharing patterns are, what the values that are expressed during sharing are, and so forth. So that's what you need to look at. That's what I mean by relative. What is long-term and consistent is relative, and so forth. I'll stop there because I think Mr. Nelson has a—additional information.

Webster: Thank you. Mr. Nelson?

Nelson: Mr. Chairman, along with what Dr. Fall is saying, there's some helpful language in the recent court decision by the Fairbanks Superior Court that addresses this issue. One of the flaws claimed in the 2003 Board action was that they improperly considered information from the Glennallen subdistrict fishers and that was inappropriate. The judge ruled that it was appropriate to consider the worksheet presented by the subsistence division and if I might, I'd just read what the judge said about that.

Webster: Go ahead.

Nelson: A few paragraphs here. It says "that worksheet and study included among other things a survey of users of both the Chitina subdistrict and the Glennallen subdistrict of the Copper River Basin. The worksheet and study compares the harvest patterns of the Chitina and Glennallen users based on a variety of characteristics, including residence, years of participation in the fishery, frequency of fishery use, methods of using salmon, how use of the fishery was learned, and other characteristics. The worksheet contains many charts and graphs purporting to compare the Chitina and Glennallen users based on percentages of users who answered the survey questions, in a particular way. This survey has significant flaws in its methodology if it were to be used for a direct comparison of

the Chitina and Glennallen users. The survey employed different sampling methods for Chitina users and Glenallen users. It surveyed a random selection of Chitina users, but by comparison it only surveyed longstanding Ahtna and Native users at Glennallen. As such, the worksheet cannot be used as a tool for direct comparison of the two groups. [9:53] The Board was made aware of the differences in the worksheet's methodology," and that's what Dr. Fall was talking about in the discussion that—Board member Larry Ingle, I think, helped bring out some—"the Board was specifically instructed not to use the survey's portrayal of the Glennallen group as a legal standard for customary and traditional subsistence use. There's nothing in the Board deliberations to suggest that the Board did not understand the limitations of the worksheet's methodologies, or to suggest that the Board used the Glennallen group as a legal standard for customary and traditional subsistence use." Then he goes on to talk about some other issues, but he then says "the Board can consider all evidence presented to it and give the weight to the evidence it believes the evidence deserves. There's nothing in the record to suggest that the Board adopted the worksheet wholesale without accounting for its methodology. The Board can properly consider what the survey has to say about the Chitina users and, as a separate matter, what the survey has to say about the longstanding Ahtna users at Glennallen. In doing so, the Board is learning information about the two groups, not necessarily comparing the two. Similarly, the Board can properly consider what the survey has to say about characteristics of the various Chitina users. In so doing, the Board is not necessarily focusing on proper evidence. This evidence is probative of the reliance of the user on the resource. Thus it is probative of whether the resources are being put to subsistence use. Accordingly, the plaintiff's contentions that the Board improperly compared the uses of Chitina and Glennallen subdistricts or improperly considered statistical evidence is not supported by the record." So, I think Dr. Fall's done a good job of explaining that the purposes for that survey that they did in 2000, the way it was presented to the Board in 2003 and the limitations as far as using a direct comparison or using it as the legal standard threshold that has to be achieved before you find a C&T identification on these stocks. If the Board—if you have any questions about it I can answer them, but I just wanted to make sure you understood that at this point.

Webster: Thank you. Yeah, I have some questions on that. We've heard from the public that some people felt that we shouldn't even hear that information, and I wanted to make it clear—and it sounds like you answered my question, my concerns on this—when we hear the department's report on comparing Glennallen to the two areas, all we're doing is using that information on—this is one example of what a past Board has determined as customary and traditional use. We're not comparing it—we're not comparing the information to say that it has to meet that criteria. Is that basically what you're saying?

Nelson: That is exactly what I'm saying. That's correct. That doesn't—and you may consider other uses in other fisheries that have been, besides the Glennallen subdistrict salmon fishery and look at any other determinations that the Board has made and the background for it, to help put things in context for you. As you serve on the Board for—you know, your years on the Board, service on the Board extends—you're individually going to gain a lot of insight about, you know—and to put each decision you make in context, and that's going to be helpful to you I think, and helps add consistency to the Board's determinations over the years. But it's important to remember—it's critical that you remember that just because you found C&T use in the Glennallen subdistrict and here's

the evidence that you had for it, that—and maybe the Chitina dipnet fishery doesn't meet that standard, that doesn't end your inquiry at all, it has to be considered on its own merits in light of things so that the gold standard—whether it's in Bristol Bay or somewhere else, in remote areas of the state—for C&T findings isn't the threshold that you look at. You make an individual determination based on that criterion, based on the facts before you for each situation.

Webster: Thank you. Mr. Johnstone?

Johnstone: Well, Mr. Nelson, may Board members utilize previous C&T findings that they're aware of, or are they part of [9:58] a record that we can utilize to make any determination on this decision?

Webster: Mr. Nelson?

Nelson: Mr. Chairman, to the extent you describe them and articulate that on the record, yeah. And if you have some comparisons from—that you're thinking about in making your decision, I hope you would bring that out on the record and explain how it affects your consideration here and how you weigh things.

Webster: As long as we treat it as, "this is what past Boards have considered as a positive C&T finding," not using it to compare our decision on whether this is a positive C&T finding.

Nelson: That's correct. And in fact, even in—even with the finding you're looking at right now you have several different ones, and so, yeah, you're not bound by any of those earlier ones, either way—which ever way they went. I mean, it's helpful to take those into consideration and it would be helpful, probably, to look at the analysis to the extent you have transcripts and stuff of those, but you're not bound by that at this time.

Webster: Mr. Delo.

Delo: Thank you, Mr. Chair. This question—in my mind, this question fits right about now, but to other folks it may not. Just quickly, for my own information if nothing else, are there any other subsistence fisheries on the Copper River stock—it sticks in my mind that there's a subsistence fishery near the mouth of the river where I think it's probably gillnets are the legal gear; I just want to make sure my memory is not in error. Can somebody address that quickly?

Webster: Dr. Fall.

Fall: Mr. Chair, Mr. Delo. You're correct. There is a positive finding for the salmon stocks of the Copper River district, which is basically the mouth of the river, and I believe the legal gear there is gillnets.

Delo: Okay. Thank you.

Webster: Actually, I had a question along the same issue. Dr. Fall touched on it in his briefing, and I just wondering where to bring it up, and this might be it, before we go further. We've heard concerns from the public that there's subsistence fisheries on this stock of fish, and is there determination—how's that fit in to—and their belief is, if subsistence is allowed on this stock of fish up below us and above us, why shouldn't we be considered automatically subsistence. Do you want to address that, make it clear in my mind, Dr. Fall?

Fall: Sure, Mr. Chairman, I'll just go back one to slide 7, we note again that the statutory definition of a stock means a species, subspecies, geographic groups, or other category of fish manageable as a unit. So the Board does have considerable discretion in how it defines stocks, and it isn't simply a biological classification, and what it does, it looks at the use patterns as established in geographic areas along the Copper River and applies the

eight criteria and determines whether the pattern of use is established by a particular fishery meets the C&T criteria. So, it is not anomalous or inconsistent with the statute or—either the definition of a stock or the subsistence statute—to have a finding such as you have on the Copper River.

Webster: Any other Board member? Thank you. Proceed.

Fall: I would just quickly mention that, as Mr. Nelson was reading the court's ruling on our information, it said that our survey surveyed a random selection of Chitina users, and it was a sample of opportunity, I wouldn't call it strictly random, but I believe it is representative—but by comparison, it only surveyed longstanding Ahtna Native users in Glennallen. That's technically not correct. The Glennallen sample that I will show you had 196 interviewees, 107 of them were Ahtna and the others were mostly non-local people who are allowed to fish in that [10:03] district. So again, it is—Ahtna are over-represented in that sample, but it's not just Ahtna people that we're describing when we look at the Glennallen subdistrict.

Webster: Thank you.

Fall: Okay, the next slide gives you some highlights of the management of the fishery, and you should—if you need more detail on that, that's table 1 on page 7 of RC9—but the first fishwheels did make their appearance along the Copper River about 1910. It's important to note that in 1960 when state management began, the entire upper Copper River area was open to subsistence fishing and a permit was then required for the first time. The tributaries to the Copper River have been closed to subsistence salmon fishing since 1964. The two subdistricts were differentiated in 1977. In 1979 was the first year that fishwheels were prohibited in the Chitina subdistrict and only dipnets were allowed, and at that point dipnets were prohibited in the Glennallen subdistrict as well. The first C&T finding was in '84, the negative finding. The positive finding in '99, the negative finding again in 2003. The Board determination that no significant new information was available to warrant review of the C&T finding in 2005 and 2008, and then the court order in December of 2009 bring us to today. I went over this yesterday, but just to remind you it's in there, and it just shows you when the fishery in Chitina operated under personal use regulation, which is the white, it's each a year—and the shaded ones show when the fishery operated as a subsistence fishery. Show on that slide too. So white is personal use regulations, shaded is subsistence regulations and the first finding was in 1984. It is useful to just take from your mind everyone that—the demographic context in which these fisheries take place. This is important background information for understanding the developments and the patterns in the fisheries. And this graph shows since 1960 there's been steady and notable growth in the population along Alaska's road system that's linked to the economic development in urban Alaska for the most part. And in contrast, population changes in the Copper Basin have been relatively minor. The present population in the Copper River Basin is about 3,200 people. You can hardly see it in this graph. And it's increased 5 percent since 2000. The road connected population—this does not include the Kenai Peninsula Borough, because there's very few people in the Kenai Peninsula Borough that actually participate in the dipnet fishery there, so I left it out. But almost half a million people in that, in those areas, and it's up 16 percent since 2000. With that, that concludes the general background that I intended to provide Mr. Chair, so I am going to start going through our information on each of the criteria in

order, unless there are any other background questions, which of course could come up later too.

Webster: Mr. Johnstone?

Johnstone: Thank you. Thank you, Dr. Fall. In going through the worksheet, C&T worksheet, and the other RCs that have been prepared to assist the Board in its task, it seems to me that they all utilize comparisons between the Chitina and the Glennallen subdistricts. Do you have any other documents or information on the characteristics of patterns of use, time, reliance, etc. for evidence of subsistence areas which we could use to compare, contrast, distinguish, from the Chitina fishery?

Fall: Mr. Chair, Mr. Johnstone. Yes, we do. The survey, of course, that is featured as new information from the 2003 worksheet was only done in the upper Copper River. And we don't have a lot [10:08] of that kind of information specific to those questions for most subsistence fisheries in the state, because we haven't—we have not administered a survey like that in most parts of the state. However, for every subsistence fishery and per—no, every subsistence fishery in the state where the Board has made a positive finding, the Division of Subsistence has prepared a worksheet, so there's that. In criterion eight, we have included harvest levels and participation levels and some estimate of food value for every subsistence and personal use fishery, salmon fishery, in the state. I think that among staff we have knowledge of other subsistence fisheries throughout the state. We can reference our annual reports on those fisheries for harvest levels, for participation rates, for particular communities that are associated with those fisheries, their locations, their gear types, their regulations. So a lot of information is available, especially on salmon fisheries throughout the state, and if there are particular questions, if it's not something I have in my head or at my fingertips I'm sure we can find out, or we can try to find out at least.

Johnstone: [?] Mr. Chairman.

Webster: Mr. Johnstone.

Johnstone: I think you may have answered my question in part, but my question is: do you have documents that we can utilize in this meeting to reflect the characteristics of these other subsistence fisheries? Many of us on the Board have not been here very long; we don't have as long a history as some other members, and—for example, I think I've been involved in one C&T finding, a negative finding, when we were in Petersburg. I've done some research, I've done some studying, but I'm wondering if there's—since it seems to me that if we just use the Glennallen subdistrict and its characteristics, and we compare, contrast, and distinguish between Chitina, the court said that would probably be improper, but if use general characteristics of other subsistence areas where C&T findings have been found and we contrast, distinguish, and compare in general the characteristics you would find in subsistence areas, that would be helpful and would be appropriate. I can't find in the documentation that I have that sets forth some of these characteristics for any other subsistence fisheries around the state—Yukon, Bristol Bay, southeast—am I missing some of these documents? Do you have them, and can you point them, me in the right direction?

Fall: Mr. Chair, Mr. Johnstone. Figures 60, 61, and 62 have information pertaining to every subsistence salmon fishery and personal use salmon fishery in the state. And they're specifically intended to show relative levels of harvest by participants as well as relative contribution of food value of those fisheries. I intended to go over that for criterion eight.

Johnstone: Okay, very good. I'll wait until you do that. Thank you, Mr. Chairman, thank you Dr. Fall.

Webster: It would be helpful though if you had any additional information for the—for a specific area. It would be, maybe at the next break, give the department a heads up. And I'm hearing Dr. Fall say that a lot of this information is readily available and you could have it made available to us today if need be. Is that correct?

Fall: Mr. Chair, it really depends upon what kind of information—

Webster: Right.

Fall: —you're interested in. I—there's a lot of information. The department annually issues thousands of permits, collect lots of information about harvest levels, and there's also a tremendous amount of information about the history of every subsistence fishery in the State of Alaska. Again, these—this is not, it's not an unknown topic and we can certainly do our best to provide what we know in terms of providing written information to this Board meeting. I don't know how high a pile of information that would be. There is an annual report that we do that describes each subsistence salmon fishery, and that could be available on the record. It's a 250-page report. But, nevertheless, that kind of documentation is [10:13] available.

Webster: Okay. Any other questions for Dr. Fall?

Johnstone: Excuse me.

Webster: Mr. Johnstone?

Johnstone: Dr. Fall, I've just looked at figures 60, 61, and 62, which I had looked at, and figure 60 says "average *harvest* of salmon per permit," Alaska subsistence and personal use fisheries, and then 61 says "average pounds harvested per capita, per permit" for those fisheries, and 62 says "percentage of U.S. average per capita consumption." That doesn't help me very much on evaluating patterns of use, patterns of time, some of the criteria in one through eight. Is that the only documentation we have right now in writing that we can refer to that answered my question, Dr. Fall?

Fall: Mr. Chair, Mr. Johnstone, I guess I would like to describe those figures and have an opportunity to explain why I included those. This—we were hoping that this would be helpful information for the Board. But it—if there—maybe I need more clarification about what information you would like on other subsistence fisheries in the state, and maybe we can try to pull something together on that.

Johnstone: Maybe we can do that during a break or something like that Dr. Fall. I thought I made my point, and that was a concern that what other information from other subsistence C&T positive findings do we have on the patterns of use, time, passing down information, harvest methods, preparation handling—what other information we have that we could use since we can't just use Glennallen by itself according to the court. What other information do we have that we can use to contrast with the Chitina dipnet fishery at this point?

Fall: Well, Mr. Chair, Mr. Johnstone, we could take each salmon fishery one at a time in Alaska, and I think with that annual report in front of me I could describe to you how long it's existed, I could tell you what communities in the state established those patterns, I could tell you something about the passing down of knowledge from generation to generation, or for fisheries where the fish board has made a positive C&T finding. And every subsistence fishery that's in figure 60 has passed the C&T test. We could describe when those harvests occur, we could describe whether fish camps were used, we could describe

whether dried fish, or smoked fish, or fermented fish are made, we could describe what percentage of the harvest that salmon provides to the overall diet of communities that are involved in those fisheries. I know about quite a few of them myself. For example, if you wanted to know about Bristol Bay, that information is readily available in reports, it's readily available from a lot of sources, but I will say that this is—I understand why this information is of interest. We normally don't provide that much information ahead of time, but again if—we try and be responsive to questions. We can give examples, for example.

Johnstone: Thank you Dr. Fall. Mr. Chairman.

Webster: Thank you. Any other questions, comments? Go ahead Dr. Fall. I might add, you may want to get that annual report available to you before we totally get finished here, so.

Fall: Mr. Chair, we'll try to—we have it online, and probably after—it'll take a while; it is a long report. If we do need to get it on the record with 25 record copies, it will take a while to produce that, especially on a Sunday.

Webster: Right now we don't have any questions to raise, but there may be some questions later on that can be answered from that.

Fall: A point of clarification, Mr. Chair: would you like that on the record right now [10:18] or just wait.

Webster: I'll refer to Mr. Johnstone. Would you like to see it—record a copy, or your questions being answered from publication?

Johnstone: Well, either way would be appropriate, as long as we could establish a record. I—for example, Dr. Fall, I don't know what level of potlatches they have in the Yukon subsistence fisheries. I don't know the means that they catch fish throughout the Yukon, I don't know whether or not they feed their fish to their sled dogs up there, I don't know a lot of things about what uses they have in the other areas. I know a lot about what they have in Glennallen, we've been very clear on that, and I know what uses are being made with the Chitina fish, but I don't know any except—from what I've learned being on the Board for a while, through other Board meetings, but I do not have very much information in order to come up to a way of comparing what a subsistence lifestyle would be like and what the uses, the patterns have been in the other subsistence areas based on the record I have before me. And I'm just trying to get additional information so I can make those comparisons.

Webster: Mr. Fleener.

Fleener: Yes, thank you, Mr. Chair. Just to help with that a little bit, most of the information that it sounds like Mr. Johnstone is requesting would not be in the annual report as is—as that report is generally harvest numbers. What would have to happen, is we would have to pull up the C&T worksheets, which there are dozens, if not hundreds. We can try to pull together some information but that would take a lot of time and as Dr. Fall said, we usually don't bring the entire library of C&T worksheets with us on past decisions. But we can pull up a few, to give a few examples if that would be helpful. The annual report, though, doesn't sound like it would be useful for what you want, unless you just want to focus on harvest numbers. But C&T worksheets would get to the customary and traditional uses of those resources over time.

Johnstone: Mr. Chairman?

Webster: Yes, I was going to ask you, Mr. Johnstone, is there a couple of areas, a couple of additional areas, rather than Glennallen that you would like them to try and pull up for your purposes?

Johnstone: No, not any particular areas, but it seems to me we have a kind of a new game based on this decision by the Superior Court that said we cannot just use what we find in Glennallen and compare it to Chitina as a standard. But it seems to me we would be able to use information from other C&T findings collectively and come up with our own standard then comparing those characteristics with Chitina. And we don't have much else, and I know this is—maybe this is something that's going to be burdensome, and maybe it's not necessary—I'd like to hear from Mr. Nelson—but it seems to me it would be helpful, and since the court has indicated its preference here, maybe it would be necessary. Could we explain that from Mr. Nelson?

Webster: Yes. Mr. Nelson.

Nelson: Mr. Chairman, I wouldn't classify it as necessary; I wouldn't classify the Glennallen data as necessary, but it's not—of course, if it wasn't harmful, if the court kept—or if the Board kept in mind it's not the legal standard that had to be achieved in the Chitina C&T determination. There's certainly nothing wrong with having more information to put things in context. I don't know that you'd be able at this venue to formulate, you know, clear standards from the collective, aggregated information from other areas. So I think you're up against more of a logistical challenge than a legal one in a way here, or a policy preference on how much information you'd like to have here. If you get all the C&T worksheets from every other salmon fishery, for example, in the state, I think it's going to be pretty burdensome for you to try and analyze that and reach some conclusions about it in one day, or half a day. So—there isn't anything in the subsistence statute or regulations that require you to look at any other fishery, but I did suggest it might be helpful to get—and it probably would, but I don't think it's legally required.

Webster: Thank you. Mr. Johnstone?

Johnstone: Well, I don't want to create an unnecessary burden if it's not a [10:23] thing that's legally required, yeah, I'll work with what I have without having to create any burden. If you believe we have enough based on what we have seen in the RCs and the record that's being developed here, Mr. Nelson, then I'll proceed.

Webster: Thank you. I—me personally, I don't need the—I don't even need to compare Glennallen to this area. When I make my decision on whether this is a positive C&T finding as I've done in other parts of the state on—in other areas and other species—I never compare different areas to come up with my findings. And when I do look at the Glennallen comparison, as it's presented to us from the department, it'll just be on this is one area that is—that a past Board has found a positive C&T finding, but in no way is it going to tie my hands on me determining what a positive C&T finding is, me personally. Mr. Delo?

Delo: Thank you, Mr. Chair. Yeah, I don't want to create a problem either, and I would hope that maybe Dr. Fall would just have the information available, he could discuss with us, but—and I agree with you, we can't face a finding from one area in a direct comparison with something else. But I am a little curious about what some of the use patterns are in the Copper River district's subsistence fishery, since that subsistence fishery occurs on basically the same stocks of fish on which we currently have a personal use fishery, and then we have another subsistence fishery. I'd just be kind of curious to—if Dr. Fall had

information similar to what's currently in existence and made available to us for Glennallen and the Chitina for the Copper River. I'd be curious to see that. But I'm not going to demand it. Thank you, Mr. Chair.

Webster: Mr. Fleener?

Fleener: Thank you, Mr. Chair. Just for clarification, we were starting the process to print our 202-page annual report and make 25 copies—should we stop that process before we overburden the staff?

Webster: If it's—other Board members: if it just contains harvest levels, would that be helpful to any of the Board members? So—

Brown: I have a comment.

Webster: Mr. Brown?

Brown: I'm looking at the reg book, and there are over six pages of listings of C&T findings in here. I am worried that if we looked at just a couple of them we would get not the full story, and it may be worse to look at a couple of them and think we should base our findings on those two rather than the other two next to them and stuff. So I would say, unless we have a comprehensive survey of all past C&T findings, I'm not sure we should, you know—let's be careful about that. So, I'm—I haven't been on the Board as long as many of my colleagues have, but it is any issue I've dealt with a number of times now, some I've read about, I think I understand the criteria, and with the able assistance of Dr. Fall I think I can apply the eight criteria and come to a conclusion. Now, as far as the 202-page annual report, if we're to print it out, I'm going to feel obligated to spend some time reading it and we're going to spend some extra time in Anchorage and I don't think the benefits outweigh the costs. I think if it was that valuable, when Mr. Johnstone brought it up, I think we would hear from the—Mr. Fleener, Mr. Fall, "yes, there is some information there, I'd like you to read it," as opposed to "gosh, if you want it, you can have it." And I think, really and truly, we've got eight criteria, we've got five able minds making these decisions and one feeble mind that's sitting over here making a decision—I think we can make a decision with the information we have, Mr. Chair.

Webster: Thank you, Mr. Jensen?

Jensen: I concur. You have to bear in mind that each one of these areas is unique, both stock-wise and population-wise. It's good to have that—it would probably be good to have the knowledge behind it, but I feel prepared to go through the criterion, and I've made comparisons in my mind to some of the other places we've worked [10:28] in, as well as Glennallen, but I don't think it's as relevant as the specific item we're dealing with. Mr. Chair.

Webster: Thank you, Mr. Delo?

Delo: Thank you, Mr. Chair. I'm not going to mandate that a 150-page report be printed off and distributed as Mr. Brown made the very apt comment, would require review time by the Board. But what I would be curious about, and maybe Dr. Fall could do it, or they could pull the pieces real quickly, is we have been presented data on percent of permits that actually fish, what the average catch per permit is, that type of information from Glennallen and Chitina—I'd be just curious to see that type of information on the Copper River. Not the end of the world if it's not available, but I'd just be curious to see how the different fisheries in that area would compare to each other. Thank you, Mr. Chair.

Webster: Thank you, Mr. Morris?

Morris: Thank you, Mr. Chairman. I agree with Mr. Brown. I think we can overburden ourselves with trying to absorb too much information. I think the thing—perhaps I misunderstood, but I think the thing is we have to deal with is the Chitina dipnet fishery, and how it does or does not provide us with a positive C&T finding. We know that we've got some other fisheries in the area, and to a certain extent there might be some comparisons, but I think that was one of the issues that the judge dealt with, and quite well I think, and that is we should focus on the C&T findings for the Chitina and if there are some comparisons to be made I think we have to do them on an individual basis, Mr. Chair.

Webster: Thank you. To answer your question, Mr. Fleener, I wouldn't print it out, I don't think. There may be some questions that you could get that information with; we don't need a copy of it. I think you—the few questions that might reflect in that document, you can just answer from that document.

Fleener: Thank you, Mr. Chair.

Webster: Mr. Delo, did I see your hand up?

Delo: Yeah, I was just going to say—I was going to say, based on what I'm curious about—I would ask Dr. Fall or perhaps Director Fleener if that sort of information is available where they could just answer it, or if it's going to require some time to develop?

Webster: Dr. Fall?

Fall: Mr. Chair, Mr. Delo, in the annual report the chapter on the Prince William Sound management area, there is a table that describes historical harvest information for the Copper River district from 1965 through 2007. We haven't finished our 2008 or 2009 annual reports yet, but I suspect that information is available. And that table gives the number of permits issued, number of permits returned, estimated harvests of salmon by species, total harvest, and there's a companion table that tells you which communities participate in that fishery, at least in the study year of 2007. So there are those two tables that provide some comparative information, and those would be easy to make available, because there's only two pages. So if that's the kind of thing that you're interested in having on the record, I suspect we could handle that.

Webster: Mr. Delo?

Delo: Thank you, Mr. Chair. Yeah, that's getting at basically what I'm kind of curious about, and if it's adequate for purposes of building a record during this discussion, I wouldn't require a written record as long as you're able to reference where the data came from and answer the questions. That's fine with me.

Webster: Is that good enough Dr. Fall?

Fall: Mr. Chair, Mr. Delo, we want to be responsive to the information that you—that you're asking for, and certainly I have the report, I have the table in front of me, so however you want to go. We can try to answer the questions.

Webster: Do you want to see the table or just ask the questions?

Delo: If they—I'll ask a question, if they can answer it that's good enough for me.

Webster: Thank you. Okay, so we don't need a copy of the full report. Any other questions from Board members? Mr. Johnstone?

Johnstone: I want to emphasize that, [10:33] relying on the Department of Law's comments that we have enough of a record before us, we don't need to get that additional information that I was concerned about. Thank you, Mr. Chairman.

Webster: Thank you. Dr. Fall?

Fall: Mr. Chair, I will read criterion one, and then give you information that we have in the worksheet on criterion one, and this—continue to ask me questions as I go through this, whenever one pops up. There's no reason to hold questions until the end. Criterion one is a long-term consistent pattern of non-commercial use and reliance on the fish stock or game population that has been established over a reasonable period of time of not less than one generation , excluding interruption by circumstances beyond the user's control, such as unavailability of the fish or game caused by migratory patterns. At this point a question usually comes up, "what do we mean by a generation?" And there has been discussion on the record about this before, and we've advised the Board that the minimum amount of time for a generation is probably about 25-30 years. And we base that upon when families start to have children and when those children start to learn traditions and, particular in this case, fishing traditions. So assuming that the average family starts having children about 20, 21, 22 years of age, and those oldest children start learning something about fishing when they're 5-10 years old, we would say for purposes here a generation is a minimum of 25-30 years. Now the Board, of course, can look for a longer time frame to meet a long-term consistent pattern of use, and what a reasonable period of time might be. But we would, again, suggest that not less one than one generation means at least 25-30 years of a tradition. Okay. We know that Ahtna Athabascan people established subsistence salmon fisheries throughout the Copper River Basin and as we've heard through public testimony at this and previous meetings, they continue those traditional uses until today. The Ahtna fished for salmon along the Copper River, including at Chitina with dipnets that they operated from wood platforms built out into the river. The fishing areas were controlled or managed by particular leaders, families, and clans. And the Ahtna also used weirs, traps, and spears, especially in tributaries and the clear waters of the Copper River drainage. It was about 1910 that the Ahtna began to replace their dipnet technology with the more efficient fishwheel technology. This replacement was virtually total and very, very quick. And my understanding from oral traditions is that the Ahtna recognized the fishwheel technology as being more efficient for their harvest of large quantities of salmon for subsistence purposes. As I mentioned before, we did interviews with some long-term dipnetters, and in two of those interviews the information was that by the late 1940s some residents of Fairbanks has started to travel down to the Chitina area and began dipnetting salmon for home use. The rapid growth of that fishery with dipnets—I should mention that the first official note, by that I mean in a government document, of the developing dipnet fishery at Chitina was in [?] report from 1958, and you can read that in its entirety in appendix C on page 143 in RC9. But with the rapid growth of the fishery with the development of access into the Chitina area, most of the Ahtna use in the Chitina subdistrict itself, below the bridge there, was displaced to the north by the mid-1970s. **[10:38]** And there's a series of maps in the report that show where Ahtna Athabascan people lived and fished in the Chitina area, and where fishwheels were used in the general Chitina area from the 1950s until the late 1970s. And to the extent that data allowed us, we tried to determine whether the wheels were used by local people or people travelling to that area from somewhere else in Alaska. And in part this is one tool to assess the potential impacts of regulations on the use patterns at Chitina, and the question of continuity between use patterns over time. And this figure, which is figure 9 from the worksheet, documents Ahtna presence in the present day Chitina subdistrict and former use to that area by

pointing out the Ahtna place names for many of the—this is just a small selection of the names that are available, but these are some that are—they’re associated with fishing, subsistence salmon fishing in this area by Ahtna communities. And this is probably a good a time as any to point out that the—it’s right in here where the current boundary of the Chitina subdistrict is, and this area up here called Five Mile, in public testimony at least one person, maybe two, Ahtna people mentioned having fish camps and fishwheel sites up here. And this continues to be an active fishwheel site for Copper Basin and other people too, but it’s one of the first that is north of the boundary, upriver of the boundary between the subdistricts. So that’s an important place. This map, which is figure 7, is a map of the known fishwheel locations in the Chitina area from the late 1950s to 1974. And we know that Ahtna people had one of two wheels at O’Brien Creek, which is down here, and—what else—there are another cluster of fishwheels at the airport or Five Mile, which becomes more and more important for Ahtna people over time. But anyway, each of these little black squares here shows the location of a fishwheel and the year that we know that that fishwheel was in operation. The records are somewhat incomplete, but it gives you some—this is documenting that level of use in this area. Now this next one, which is map figure 10, shows where fishwheels were being fished the last year that they were allowed in the Chitina subdistrict. So there were four down at O’Brien Creek, and there were about seven others, and we’re not sure where they were fished with the Chitina subdistrict. Now what—right above the bridge are a number of fishwheel sites. Now that is now the Glennallen subdistrict, and is still one of the major places where fishwheels operate within the Glennallen subdistrict. So you might say that’s at Chitina, but it’s in the Glennallen subdistrict. So that’s the presence of fishwheels at the last year they were legal under state rules in the Chitina subdistrict. And, as far as we know, all of the fishwheels being used in the Chitina subdistrict were used for—were owned by people who did not live in the Copper River Basin, as far as we know. Okay, a few slides than on trends in participation. And I should mention that one of the reasons that I do show these maps and talk about where Ahtna people were, were fishing over time and their movement to the north out of the area where the dipnet fishery was developing, is that the question of continuity over time of established traditions and other traditions comes up in this context, and our analysis is that, although there are some oral tradition that some of the early dipnetters did talk to Ahtna people and learn about good fishing sites, at least one person, who is actually not Ahtna but a Native person from that area, that the Ahtna pattern pretty much moved out of the Chitina area and a new fishery started to develop in the ‘50s and ‘60s and especially in the ‘70s, and [10:43] we don’t see a whole lot of evidence of overlap with the patterns of these two. And we’re not saying that that means that one is a subsistence fishery and another isn’t, but we are saying that the analysis of customary and traditional use at Chitina as it has developed over the last three or four decades probably shouldn’t rest on whether it is based upon an established Ahtna pattern; it established its own pattern that should be evaluated. So we went over these yesterday, both Mark Summerville, and I and you can just see the trend in participation as measured by number of permits issued, small numbers back in the 60s. This indicated the development of the road into Chitina. The slowdown in growth in the ‘70s has to do with poor returns. But then, with publicity and better returns—or rather rapid growth in participation in the late ‘70s and early ‘80s, and then steady growth in the ‘80s, peak in the late ‘90s, and I think we said somewhere around 8,300 permits issued in

the last 10 years or so. So, that level of participation has been pretty steady for quite a while. And in terms of the harvest, the pattern for the Chitina subdistrict follows participation levels—or rather, rapid and steady growth, peaking in the late ‘90s and then, I believe we’ve said about 115-120,000 has been the average 10-year harvest, a lower harvest in the last 2 years. The allocation for the fishery, I believe, is about 100-150,000 salmon. And I showed this one yesterday as well. The average catch per—the average harvest, I should say, per permit issued in the Chitina fishery has been very, very steady over the years, the average being about 14 or 15 salmon. As Mr. Summerville pointed out yesterday, there is a slightly higher average if you just look at those who fish in a particular year or—especially more recently, I picked the most recent averages, about 18 or so fish. And as I mentioned yesterday, some of the differences between average harvests in Chitina compared to Glennallen might be attributed to different seasonal limits for the fishery. We do have a description of the regulations in the report, I’m not sure what page that is, but the seasonal limit for the dipnet fishery is 15 per 1-person household, 30 per household of 2 or more, and then there is the possibility of 10 additional salmon depending upon run strength. In the Glennallen subdistrict, the comparable limits are 30 per household of 1, 60 per 2, 10 for each additional household member; upon request a multi-person household can obtain a permit for up to 500 salmon. I’ll have more to say about these harvests limits and regulations later. And we saw this one yesterday too, but just to note the very consistent pattern of who is participating in the fishery over time in terms of what communities are associated with the fishery. In the last 5 years, about 45 percent of the permits issued to Fairbanks residents, about 28 percent to Anchorage Municipality, 17 percent to Mat-Su Borough residents, 10 percent to other Alaska, mostly Delta, Valdez, mostly. And then only about half a percent for Copper Basin people. And those percentages have been pretty steady. If you look at it in terms of back to 1988, you will see the percentage of permits issued to Fairbanks resident, to Anchorage residents—and it is interesting for Anchorage that you would expect with the rapid increase in the population of Anchorage that maybe you would see this actually going up, and I think this was mentioned yesterday that one of the reasons why we don’t see that [10:48] participation by Anchorage, and perhaps to some extent Mat-Su, is because of the development and the opportunity of dipnetting in the Kasilof and Kenai rivers, and the Kenai Peninsula has developed over the last couple decades. So there is that opportunity for people from here. Okay, now we’re moving into some of the findings from the survey that I described earlier that pertain to criterion one. And this is the new information presented in 2003. And remember again we’re talking about a sample of fishers from Glennallen that is weighted towards long-term users and Ahtna users but does include non-local residents as well. And then the Chitina sample, which is, we believe, representative of the people who are fishing there. And if you are interested in how Ahtna themselves responded to this survey, those records are broken out by Ahtna and everybody else, and that’s in Appendix B in the worksheet. But here I’m focusing on patterns within the district, which I think is more appropriate for the Board’s deliberations. And so this figure, which is 34 in the report, shows the number of years interviewees had participated in the fishery, and the red bars are the responses for the Chitina fishers. And so for 14 percent of the Chitina fishers 2,000 was their first year, and an additional 67 percent had fished in the fishery for 20 or less than that, and 17 percent for 21-40 years, and 1 percent more than 40 years. So—and we also asked “how

often do you fish in the Copper River," and for that one 44 percent of the Chitina respondents said that they fish every year and 32 percent said most years. And that's the information that I wanted to highlight, Mr. Chair, on criterion number one. So I'll stop there and just see if there are questions or points of discussion.

Webster: Good. Thank you. We're going to take a 10-minute break and come back and—for questions. [10:51:07; recording continues but only background noise until 11:02]

Webster: We're back on record. 11:02. It was brought to my attention by public—from the public that the Board members may have been congregating in the bathroom to do some behind the doors deliberation—I assure you, that was not happening. If we're gonna do that, it would not be in the bathroom. But it is—I just want to remind the Board we are in deliberations, don't—no more than two Board members in a private place should congregate. In a public place, if you're not talking about fishing issues that is okay.

Brown: Excuse me.

Webster: Mr. Brown?

Brown: Yes, excuse me, Mr. Chair. I was aware there were a number of Board members there but we had a long run and several of us are elderly now, and our prostates say it's time to go, we had to go.

Webster: Thank you. Mr. Nelson?

Nelson: Mr. Chairman, and for the information of the other Board members, I asked for an opportunity to, as you started discussion of the first criterion, to just give you a little bit more perspective maybe as background on the law and that—what your role here, remember, is you're identifying customary and traditional uses. You're deciding whether this stock has been—is customarily and traditionally used for subsistence. And I thought it might be helpful to just review the definition of customary and traditional in statute, which you then use the regulation to help you make that determination and see whether it fits the statutory definition. But it's found in AS 16.05.940(7) and says "customary and traditional means the non-commercial, long-term and consistent taking of, use of, and reliance upon fish or game in a specific area, and the use patterns of that fish or game that have been established over a reasonable period of time, taking into consideration availability of the fish or game." So that's—that sounds, a lot of that sounds an awful lot criterion one, doesn't it? So that's why we've kind of stressed the importance of criterion one—it is sort of the minimum legal standard I think that you would need to make a positive finding on to—in order to find customary and traditional uses in the area because of the similarity to that statutory language. And as a reminder though, that you don't—each Board member doesn't necessarily have to feel strongly about it, the positive nature of any of these criteria in 5 AAC 91.010(b). And it says that each Board will identify fish stocks or game populations, or portions of stocks or populations, that are customarily and traditionally taken and used by Alaska residents for subsistence uses by considering the following criteria. So it requires consideration of those criteria, but not necessarily a clear, positive finding for each one.

Webster: Thank you. Mr. Delo?

Delo: Thank you, Mr. Chair. Just a quick follow-up with Mr. Nelson. I understand what you just said, and I guess that the highlight I would like to make is that you used the phrase "by Alaska residents." You did not highlight any particular regional, geographic, or ethnic user group, it's by Alaska residents, is that correct?

Nelson: That's correct.

Delo: Thank you.

Webster: Mr. Brown?

Brown: Yes, I have a—I hate to make it sound like I'm stretching things out, but I have a process question. Dr. Fall has finished his discussion of criterion one, is my understanding. And is it your idea that the Board will now discuss criterion one, as far as it relates to proposal 201, or should we wait for Dr. Fall to finish all his eight criteria and then begin our discussion of 2001?

Webster: No, it's my intention to ask all the questions on criteria one and have it totally clear in your mind, and I'll take a straw poll on whether we, the Board, thinks that criteria one meets the—positive C&T finding. And from what I've just heard from the Department of Law, because this is then basically the statute, if we don't find that a positive—that number one meets the criteria, then basically we don't need to go any further. Is that—
[11:07]

Nelson: Mr. Chairman, I wouldn't say that. Thank you for an opportunity to clarify it. And the reason I wouldn't is, you may all feel that way after the discussion of criterion one, but by the time you get through all the criterion you may feel differently or have different perspective about the weight you give, or the concern you have about that. The court said to apply all the criteria, and I would always recommend that, whether the court has said that or not, that you look at all the criteria and discuss it. You may end up, because the majority of you don't think number one is satisfied, you may end up not making a positive finding, but I think consideration of all those criteria is important, even those that's one of the most critical ones, I think.

Webster: Thank you. We are going to take each and every criterion separate. So if you have a question on number one, now's the time to ask. Mr. Brown?

Brown: Well, most of the questions I had on number one have been answered. I was concerned about what we meant by long-term pattern, and that was a generation, and from the data we've got the dipnetters in the Chitina region have, at least for two generations, have been doing that. It's non-commercial—my understanding is hiring a water [?][?] you a spot, that's non-commercial, the fish are not being sold. So by my early assessment, and still waiting to hear more from my colleagues, I would say criterion one is satisfied, Mr. Chair.

Webster: Thank you. Other Board members? Mr. Morris?

Morris: Thank you, Mr. Chairman. Because not any one single criterion sink or float the C&T finding, my preference would be to ask questions, develop some thoughts in my mind, go through all eight of them and then as an individual Board member be able to speak to the—to explain why I do or don't support the findings. But I know I can just keep my mouth shut and do that, but if we do a lot of deliberating and discussion point other than finding out the facts I think we'll be taking a lot of time.

Webster: Thank you. Any other questions on criteria one? Mr. Johnstone?

Johnstone: I just want to make sure of the process also—so we're going to give you a straw vote before we go into criterion two and—with Dr. Fall. Is that what you're looking for now?

Webster: Not necessarily. I'm actually hearing from different Board members now that we may not want to do a straw poll on each one, and we might just want to just ask questions, get all of our questions and concerns answered and then move on. So if it's the wishes of the Board to just—because even if we took a straw vote, it wouldn't even be in concrete. I mean, we may hear information later on in another criteria that could change our mind.

So it may not—I'm leaning now towards not taking a straw vote, but just taking each criteria separate, getting every answer—every question answered and then moving on. Mr. Jensen?

Jensen: Thank you, Mr. Chair. I'm sort of along with you there. I—if I was to make a determination on criterion one now, saying yes or no on it, and then get down and go through some of the other criterion and say “well that's going to change my mind on that,” so I'm along with you. I'd just as soon—or Mr. Morris—and go through them all and then go back. I do understand criterion one and I'm ready to make a decision on it, but I'd just as soon wait and go through all of them at one time and listen to Dr. Fall's presentation, Mr. Chair.

Webster: Thank you. Mr. Johnstone?

Johnstone: Yeah, I'm in agreement with you, Mr. Chairman. I think Dr. Fall may come up with additional information that might be germane to number one, and I wouldn't want to miss that by making an early vote.

Webster: Thank you. So that's what we'll do. We won't—I won't even take a straw vote. We'll just keep talking about number one until all of our questions are answered. So at this time, I mean, later on we may have additional questions we want because of what comes out in another point later on down in our discussion, we may have other questions. But at this point, is criterion one clear [11:12] in everyone's mind, and is there any more questions for Dr. Fall on criteria one? Mr. Jensen?

Jensen: Yeah, I have one more jotted down here. You said generation is not less than 20 years—[?]: 25.

Jensen: —25 years for a generation?

Fall: Mr. Chair, Mr. Jensen. Yes, we suggested that the minimum for one generation is about 25-30 years based upon when families start to have children and when kids start to learn traditions.

Jensen: Okay. With that, as a follow-up, what's the maximum? I mean, that's anything then after that, right?

Fall: Mr. Chair, Mr. Jensen, you mean maximum for one generation?

Jensen: For a generation, yeah.

Fall: Why is—I don't, I don't know—

Jensen: Let's just go—the bottom line is 20, 25, 30; there's no—

Fall: That's right. And then the criterion says of not less than one generation. It's a—to meet the criterion there needs to be a consistent pattern of use that has been established over a reasonable period of time and not less than one generation. I don't think that limits the Board to saying that a reasonable period of time is two generations. The Board could very well look at a pattern of traditions and say, well, for a tradition to really be established given what we've heard, we want to see more than two generations. But that's the minimum for this criteria.

Jensen: Okay, thank you. That answers my question.

Webster: Yeah, I mean, when I read this you got a couple of definitions here. “Over a reasonable period of time,” so we've got a definition that's subjective on reasonable period. And then it says “of not less than one generation.” So we got another subjective definition of one generation. And what I'm hearing is the Department is saying we shouldn't consider one generation—you're recommending the definition “one generation” as being 25 years. A reasonable period of time is not less than that. So you're

saying anything less than 25 years isn't reasonable in your eyes, but we can make a decision—we could say 100 years might be a reasonable period of time if we wanted. Mr. Nelson?

Nelson: Mr. Chairman, that term reasonable was often used in law, it gives you quite a bit of leeway. I think the criterion that the court approved of and makes sense, it makes sense to me, criterion one that at least one generation—more than one generation, basically, in order to have a custom and a tradition it's hard to do it, establish it, in one generation. My friends and I can go bowling every Wednesday night—is it customary until I start taking my kids and passing that down, and lore and things like that, so I think that's why it's in there, to make—to distinguish between just a pattern that pops up that a current group of people are using, versus—and remember, family isn't required here, but at least transmission of information and knowledge and practices between generations, not necessarily familiar, familial connections. That's the way I look at it. Now, in a particular fishery can you say well, we've got one generation, but that's not very long in the context of what we're seeing here, patterns—we're not seeing patterns established and stuff like that. So we're going to look for longer-term use and that before we can start to see those other things.

Webster: Thank you. Other—Mr. Delo?

Delo: Thank you, Mr. Chair. Yeah, the way I would look at this is if this was a brand new fishery, and the first person who ever dipnetted a salmon out of the Copper River in the Chitina subdistrict and that happened 20 years ago, it would not meet the criteria as it is laid out. But there is more history than that. So that's kinda how I'm looking at it. There is a longer history, but if this was brand new and the first fish was taken 20 years ago, it wouldn't qualify. Thank you.

Webster: Other Board members? Mr. Johnstone?

Johnstone: I'm looking in the dictionary here, Webster's dictionary, and one of the definitions under "generation" is "the average time interval between the birth of parents and the birth of their offspring." I have no idea what that is, but I would think probably around 25 years is about right for that. Thank you, Mr. Chairman. [11:17]

Webster: Thank you. Just for the record, even though that book bears my name, I didn't write it. Other Board members? It seems like all questions have been answered for criteria one. Go on to number two, please.

Fall: Thank you, Mr. Chair. Just before I do that, I would offer that I think the Board is exactly right in observing that there is information that comes out in the presentation on some of the other criteria that does bear on number one that—the information crosses criteria, so keep that in mind. For example, as I went through criterion one, which addresses taking, use, and a reliance over a period of time, there's information about harvest levels, which certainly relates to reliance. That also comes up in number eight. There's information about length of the fishery, which has to do also with the criterion on cross-generational teaching of traditions. There's information—and so forth. So I think that that is a good observation and something to keep in mind, and that criterion one, some of the information that we presented bears directly on your evaluation for number eight, about whether the basic necessities of life are supported by the fishery, because we did provide here some information about average harvests over time, as well as continuity of patterns over time, which get at economic, nutritional, and social values. And cultural values, too. So just moving ahead to number two, then. Number two is a pattern of taking and use

recurring in specific seasons of each year. And the—well, first of all we of course have information from the Division of Commercial Fisheries and the Division of Sportfish about when salmon of various species are available in the district. That's readily available. There's also information about when regulations allow fishing, either in terms of the open and closed season, as well as period that are open that certainly affect the patterns that we see. We did ask in the survey what months do you fish in the Copper River. And of course they could give multiple months. And for the Chitina subdistrict sample, the—by far the most popular month the fish was July, but over half of the participants also fished in June, with participation dropping off quite a bit after that. And that's—that's what I have for number two, Mr. Chair.

Webster: Thank you. Questions? Board members? Mr. Nelson?

Nelson: Mr. Chairman, at first glance, this criteria might seem kind of obvious and not very helpful, but I think the reason it's in there is because with other species part of customary and traditional use is expecting, predicting when hunting or fishing will take place and establishing a pattern that way. And it doesn't seem as obvious with salmon, when they're going to be there or they're not going to be there, and that's when you're going to fish or not, but I think that's the value. It's—it probably has a broader value, a more helpful value, in other situations.

Webster: Thank you. Board members? Questions? Mr. Delo.

Delo: Thank you, Mr. Chair. Yes, I would agree with what Mr. Nelson just said. It's kind of hard to catch the fish if they're not there. And the fish themselves follow a pretty regular pattern of when they're available and when they're not. Thank you, Mr. Chair.

Webster: Thank you. Other Board members? Number three.

Fall: Mr. Chair, just to follow up on Mr. Nelson's observation—I think on this criteria there was testimony during public testimony about when people start to fish and how long that they fish, and the prolonged pattern of fishing over multiple months as part of a traditional pattern . And indeed, the results from the survey did show that people who were fishing in the Glennallen subdistrict, for example, tend to almost all of them start [11:22] in June, in fact, even in May. I think I believe the federal season for the Copper River actually opens in May reflecting the traditional goal to catch fish early because of drying conditions and the presence of insects later in the year. But you—the prolonged effort, even into August and September that we see in the Glennallen subdistrict, also can be informative about traditional patterns. It reflects harvest goals, for example, that the longer you can fish the more you'd catch, and if you are trying to reach higher harvest goals for whatever purpose, more months are going to be mentioned in this survey—as well as trying to catch cohos later in the year. So I should have mentioned that sooner. So it is more than simply the presence of the fish that this criterion gets at. It's also at when people are focusing that effort and how long they are there to achieve what they're trying to do.

Webster: Thank you. Mr. Delo?

Delo: Thank you, Mr. Chair. Yeah, building on what Dr. Fall just said, there's also the aspect of the legal method of how people can catch fish in that district, or subdistrict. And, as Dr. Fall said also, what they're interested in. I know people that have gone in June because they're interested in trying to get a king out of the group, July in when people typically go when they're looking for reds, and then some of the folks want to go back to catch some sockeye, or excuse me, coho, if they've saved that number of fish available on their

permit. And so they'll be back in August or maybe early September to try for that. So what Dr. Fall said is correct. It depends on how the—what the users are looking for in the way of species of fish. And as far as the number, they are limited with the dipnet permit as to how many they can take. Thank you, Mr. Chair.

Webster: Other—Mr. Johnstone?

Johnstone: I'd like to note that this data appears to be from 1999, and that insofar as the economy and efficiency of participating in the fishery, it would appear to me that the cost has gone up, the price has gone up to participate if you travel large distances. Would that be a fair assessment, Dr. Fall?

Webster: Dr. Fall?

Fall: Mr. Chair, Mr. Johnstone, yes, I think when we get to my presentation on number three, I will—I'll definitely point that out—

Johnstone: Oh, I thought you were on number three, I'm sorry.

Webster: Other questions for number two? Seeing none, Dr. Fall, Number three.

Fall: Mr. Chair—criterion three, Mr. Chair, a pattern of taking or use consisting of methods and means of harvest that are characterized by efficiency and economy of effort and cost. And let me just—okay. First of all, I think there's quite a bit of information on the record at this meeting as well as at past meetings that has to do with discussion of the relative efficiency of the dipnet and the fishwheel. And there's lots of opinions on that, that the Board has heard and the Board will deliberate on. I did note that early in the 20th century there was a very rapid shift from dipnetting to the use of fishwheels by the Ahtna people, because in their assessment, the way they fished and their investment in sites and harvesting large amounts of salmon it made sense to fish with fishwheels rather than dipnets. But we've also heard some opinions about the costs, initial costs, in building and maintaining a fishwheel. So that's part of the assessment of criterion three. Another part of the assessment of criterion three that you can consider is just how far people need to travel to harvest those fish, especially in relation to how many fish they are harvesting. And that is one way to measure efficiency and economy of effort and cost. And we did add some, just some road mile data for your consideration in—we did—we do know where people come from to fish at Chitina. And table 13 in the report gives that—so a round-trip from Fairbanks to Chitina is about 600 miles, from Anchorage about 500, from Palmer or Wasilla about 400. [11:27] From Glennallen it's a—a round trip is about 130 miles. And if you assume—this is probably not correct—but if you assume that every permit holder is travelling there on their own, that about a mean of 550 miles travelled over the last 10 years. Now, certainly people carpool, and people also make multiple trips, so I can't factor that in, but that's just one way to look at what kind of investment in time and—which translates into money—is needed. Now, Mr. Johnstone was referring to table 14 in RC9, and we made an attempt, perhaps a bit crude, attempt to figure out what a cost-per-pound of salmon is, by travelling from Anchorage or Fairbanks to Chitina in 1999, and I believe we used about 6-8 pound as the cost of purchasing generic salmon in the store in Anchorage here or Fairbanks. And others said that really the fairer comparison would be what is the cost to buy a fresh Copper River sockeye in Fairbanks. The record shows that that price was about \$14 per pound back in, I think it was '99 or 2003. I haven't updated that table. Mr. Johnstone is absolutely correct in saying that costs have probably increased since we did that 10 years ago, and it is certainly something that the Board should consider when it looks at what people need to invest to participate in

this fishery in comparison to their harvest that they are able to achieve. And I think that's what I have on number three. That is it, Mr. Chair.

Webster: Thank you. Mr. Brown?

Brown: Dr. Fall, do you know what—we heard earlier testimony saying it's about 100 bucks to get a water taxi to find, get a dipnetting spot—do you know what fraction of the people that dipnet do use a water taxi or a similar commercial conveyance?

Fall: I do not know, but perhaps the Division of Sportfish has that information.

Webster: Mr. Swanton?

Swanton: I believe that the information has been presented in some context with the materials that you have, but I don't have that sitting in front of me right now. You know, again, it's as area manager Mark Summerville presented yesterday with some of the access issues that have occurred over the course of the last 8-10 years. The proportions of folks down there using that service has probably increased appreciably. Mr. Chairman.

Webster: Thank you. Do you have any additional comment?

[?]: Mr. Chair, just, I guess, more specifically, we collect whether people fish from a boat or from shore on the permit data, but we specifically don't ask whether that's—the boat is through a charter, so any estimate of charter use would be speculative on our part.

Webster: Thank you. Does that answer your question, Mr. Brown?

Brown: As much as it can be. I appreciate it, thank you.

Webster: Thank you. Mr. Delo?

Delo: Thank you, Mr. Chair. As Dr. Fall said, we have seen some information on the efficiency of a fishwheel versus a dipnet, and now we're looking at the transportation aspects and probably that would raise some question in a lot of people's minds. So just to put in context, again as I stated in my ethics statement, I have dipnetted out in this area for about 8 or 9 years. When I would go out, typically three of us—three separate household permits—we would pool together and go out, and while we did not do it at the time, the potential existed that each one of us could have also held a proxy. So that's three times—a possible 60 fish, with the proxy, for a total of 180 fish with that one trip. And maybe I shouldn't say this too loud 'cause there's probably people that would be mad at me, but I only remember one time where we went out and didn't limit out on one trip. So we had pretty good success that way. So efficiency of effort is in the eye of the beholder. But this thing, even with these distances and miles, can be considered to [11:32] be reasonably efficient. Thank you, Mr. Chair.

Webster: Thank you. Other Board—Mr. Johnstone?

Johnstone: Dr. Fall, do you know of any other areas in the state, subsistence areas, where a person who wants to participate in the area would have to drive as far as they would from Fairbanks to Chitina or from Anchorage to Chitina? Or I can drive that far?

Fall: Mr. Chair, Mr. Johnstone. Well, there are the personal use fisheries in the Kenai Peninsula and there are participants from Anchorage and the Mat-Su, that's certainly not an average of 500 miles or even 300 miles. More generally, most subsistence fisheries in the state are off the road system. There are a few exceptions. And people do travel along the rivers to fish, they do travel to fish camps or to fishing sites, so it's not all fishing from their home communities. I think it would be unusual to find an average of hundreds of miles to participate in a subsistence salmon fishery. The pattern would be, for example, in the Yukon or Kuskokwim or Bristol Bay for that matter, for people who establish camps if they are travelling any sort of considerable distance to fish for—exactly to achieve an

economy of effort and cost. So these are particularly high-travelled distances for a fishery, whether personal use or subsistence.

Johnstone: Thank you, Dr. Fall.

Webster: Thank you. Other Board members? Okay, next?

Fall: Criterion four, Mr. Chair, is the area in which the non-commercial long-term and consistent pattern of taking, use and reliance upon the fish stock or game populations has been established. And we did see maps earlier of the subdistrict, so that's the area that we are talking about. And for this one in the survey we did ask a question about whether the fishing site that was being used belongs to your family. And the reason we ask this question is that in many subsistence fisheries, the fishing does occur at camps or fishing sites that are associated with particular families or extended families. Sometimes they are actually owned, either in a formal manner or by local recognition that this is where so-and-so's site is, we've heard testimony about that. And we were particularly interested for the people who fish in the Glennallen subdistrict, as to whether that kind of pattern was still in place. And in fact for people who were fishing in the Glennallen subdistrict with fishwheels, which is the far right here, 42 percent said "yeah, we do operate our fishwheel from a site that belongs to our family." But not surprisingly for people fishing there at Chitina, because of the land status and so forth, nobody said yes to this question, and that is of course what we would expect. [?]

Webster: Board members? Mr. Nelson?

Nelson: Mr. Chairman, I think it's appropriate for me to mention the *Peyton* case decided by the Supreme Court to urge some caution in regard to this information that familial relationships are not required to be found in the handing down of lore or customs as a requirement, the threshold requirement for a positive C&T finding.

Webster: Thank you.

Nelson: So multi-generational are, but it doesn't necessarily need to be families.

Webster: Mr. Delo?

Delo: Thank you, Mr. Chair. I would ask the question—is says the area in which the non-commercial long-term—there's the concern about the ownership of the site, but in my mind it also suggests the idea that is this area in general—people want to go dipnet fish out of the Copper River, they don't drive—I don't have the maps, so I'm not that—they go to this specific area, they don't go up north of the McCarthy bridge, they—if—they can't, but [11:37] theoretically if they could, they don't drive south of Hailey Creek, they go to this area. So I think that's another aspect. And I'm sure this criteria is there perhaps more for game considerations than fish, since fish tend to stay in the water and animals wander all over, so do birds, but I just wanted to get that point out. Thank you, Mr. Chair.

Webster: Thank you. Other Board members? Next criteria, Dr. Fall.

Fall: Criterion number five, Mr. Chair, is a means of handling, preparing, preserving, and storing fish or game that has been traditionally used by past generations but not excluding recent technological advances where appropriate. And the question that we asked in the survey in 2000 is "how do you prepare your salmon?" And this could be multiple answers. And for the Chitina subdistrict sample, there were two predominant responses: 95 percent "yes" to freezing and 74 percent say "yes" to smoking, and a considerable portion of the sample said that they also canned some of their salmon. Very few said they dried any, or salted any, or kippered any. So there were those methods that people reported using. And that's what I have on that one, Mr. Chair.

Webster: Thank you. Mr. Johnstone?

Johnstone: Dr. Fall, when we talk about drying, are we talking about the racks you see along the riverbanks with fish draped over them, is that the type of drying you're talking about?

Fall: Mr. Chair, Mr. Johnstone, yes, that is.

Johnstone: And I've seen them on other rivers, Yukon, and on the Naknek and, I mean on the Kwechek. Is that a fairly common means of preserving fish in subsistence areas, areas that have been designated with C&T findings?

Fall: Mr. Chair, Mr. Johnstone, absolutely, yes.

Johnstone: Thank you, Dr. Fall.

Webster: Other Board members? Mr. Delo?

Delo: Thank you, Mr. Chair. Question for either Mr. Mitchell or Mr. Nelson: is there any minimum number of techniques specified that would have to be complied with for a positive finding on this particular criteria? Or the fact that there folks use even one of these would qualify?

Webster: Mr. Nelson?

Nelson: Mr. Chairman, that's a judgment call probably within your discretion. It's—the key—you're looking, the whole situation here, you're looking as the statutory definitions, that's for patterns of use that take place, and so that is within your judgment. In some cases it's possible I guess that only one method might be used and that's all it's ever been used for. So it depends on the facts on the situation you're looking at.

Delo: Okay, thank you.

Webster: Other Board members? Thank you. Next criteria, Dr. Fall.

Fall: Number six is a pattern of taking or use that includes the handing down of knowledge of fishing or hunting skills, values, and lore from generation to generation, and this is where I was going to do my *Peyton* case reminder, but Mr. Nelson has already done that. So in looking at evidence here, you can't insist that this—that these traditions are passed on through family lines, but you are looking for evidence of people sharing information across generation, whether they're related or not. And so we did ask a question, "who taught you how to fish on the Copper River?" And for the Glennallen—I'm sorry, for the Chitina fishers, most were self-taught, 43 percent, or had learned from a friend. Now this is asked in the year 2000, I don't know how extensive Internet learning was back in 2000, I can't remember to tell you the truth, but—so we didn't have a category "Did you learn on the Internet," somebody told me we should have asked that. You know, hindsight is 20/20. So this is what we asked. Another thing that we perhaps should have asked is "is your friend of a generation above you or below you in learning this?" We didn't ask that, so we can't say how many of the friend category consists of an older generation teaching a younger generation. Certainly, some are, I do understand the patterns in this fishery do involve [11:42] friends of the same generation teaching each other, whether they're related or work-buddies, or whatever. But some of that certainly is multi-generation, I can't say how much. What we also learned is that few of the participants in the Chitina fishery learned from parents, 6 percent, or a brother or sister, 1 percent, or other relative, 2 percent, which would be an aunt, or an uncle, or a cousin, or a grandparent. Now, again, that isn't definitive evidence of not meeting this criteria, but we do see in the Glennallen subdistrict, that most people did learn from a parent or other relative, which would be an uncle, or aunt, or grandparent in most of those cases. So I think that's what we—yeah, that is indeed what we have on that one, Mr. Chair.

Webster: Thank you. Mr. Johnstone?

Johnstone: For the record, from your book, Chairman Webster, lore is defined as “accumulated tradition, fact, or belief about a subject.” I don’t think it’s defined otherwise in regulation. I thought I would just point that out. And, Dr. Fall, under the table 18 it looks like, I’m not sure if it’s 73 percent, but is the amount of information that is passed down within extended families in Glennallen, is that representative of what you might find in other subsistence districts that you’re aware of, that high percentage of information being passed down?

Fall: Mr. Chair, Mr. Johnstone, yes, I think that when we have done ethnographic studies of subsistence fisheries, we just finished one up in the Bristol Bay area at Nondalton and Newhalen, Iliamna, and also New Stuyahok. We find that a very high percentage of learning about traditions, how to fish, where to fish, how to put them up, occurs within families and across generation. And it would be rare to find people living in these communities to learn about these things on their own. It would be very, very hard in fact to do that. The way you do that is talk to an elder, talk to somebody who has those, who has that knowledge in order to be able to do it yourself. And those are just two examples, I would say, that every salmon fishery that I know about, that’s pretty much the pattern.

Johnstone: Thank you, Dr. Fall. Mr. Chairman.

Webster: Mr. Brown?

Brown: Yeah, I’m trying to put my own assessment on the data we’re presented here, and I’m bothered by this, and I think there’s a statistical answer to it but—if you look at the people fishing in the Glennallen, I mean we’re talking about a very small community. And it could be that your mother or father doesn’t teach you how to do the fishing, but your next door neighbor is your uncle, and he would teach you how to do the fishing. Whereas people that come down from Anchorage or Fairbanks or something come from large communities, and mother and father didn’t dipnet, but a neighbor down the street did, and he’s not your relative, so we’ve got just the nature of the places they live, their home is going to have—build a bias into the data. Okay, so I’m just trying to come to grips with that. There actually would be a way to test for that, but I don’t know if we have enough data to do it.

Webster: Dr. Fall?

Fall: Mr. Chair, Mr. Brown. Perhaps that pattern is biased in the data, but it also could be the pattern for the fishery. That indeed, where people are coming from and how they live, and how they’re relate or not related to other people, and who they interact with is indeed reflected in how they learned about fisheries.

Webster: Mr. Delo?

Delo: Thank you, Mr. Chair. Here’s where my questions on Copper River may start. Would you have similar information to how folks learned how to fish, subsistence fish for the Copper River district?

Fall: Mr. Chair, Mr.—Mr. Webster, Mr. Delo, I don’t think we have asked this question for the Copper River district in Cordova. [11:47] Earlier in the—today there was some portion of our worksheet that we prepared when the Board did the C&T for the Copper River subdistrict. And actually the—I believe the language that was quoted from our worksheet was actually not something that we wrote, but something that we were quoting from a Park Service study by Steven McNeary. I believe the publication date was 1970, and those quotes did address how people in Cordova used wild resources including salmon.

And in our worksheet, we also pointed out that Cordova, of course, has a significant Native population, the Eyak people, Chugach people, some Tlingit people there, and they are a significant portion of that population and certainly the traditions of fishing and other subsistence traditions are passed down across generations in Cordova. So knowledge about fishing in the Copper River district, to a large extent, I can't say what percentage, but to a significant extent is knowledge that's passed down across generations. I can say that without reservations.

Webster: Mr. Delo?

Delo: Thank you, Mr. Chair. Would you, in your opinion, would you say that the percentages of the familial transmission of knowledge are greater in the Copper River subdistrict than they are in the Chitina subdistrict?

Fall: Mr. Chair, Mr. Delo, I'd be speculating. If we administered this survey in Cordova, I don't know what the percentages would come out to, but I—okay, I will speculate: I'd be surprised if only 6 percent of the people participating in the Copper River district subsistence salmon fishery had only 6 percent had learned from their parents. I would expect that percentage to be higher.

Delo: To make you feel better, I would expect that too. But then the follow up question: how do you see, again we're speculating, how do you see this transmission of knowledge in the Copper River district comparing to the Glennallen subdistrict, do you think it would be higher, or equivalent to, or probably a little bit lower than what you would expect to see in the Glennallen district?

Fall: Mr. Chair, Mr. Delo, that is a harder question to answer. What I do know is that the Glennallen subdistrict sample, even though it was biased toward Ahtna also included 74 people who were non-local people, they could have been Ahtna too for all I know, but they didn't live there, and this is the results that we get from a, maybe a 60 percent local sample. A lot of those people are learning from their parents or grandparents, 'cause that's where they've always lived. But some are not. Cordova, the fishery there—let me see, I'm going to reference the annual report—of the 469 permits issued for that fishery in 2007, 386 were issued to Cordova residents. So that is a pretty much single community fishery, it's a Cordova-based fishery. And although Cordova people move in and move out, the population of that community has not changed substantially for decades, and there are many, many long-term, multi-family—multi-generation families living in Cordova. So I would expect to see a fairly high percentage of people answering this question saying "yeah, I learned from my dad, I learned from my uncle, I learned from my grandparents," but I don't know what that would be, and I don't know how that would compare to what we learned in, for Glennallen.

Webster: Mr. Delo?

Delo: Thank you, Mr. Chair. One last quick question: Would it be fair to say than, that there's very probably the potential for a wide range of percentages in subsistence fisheries as to how the customary and traditional methods and where's and how's are passed from one generation to the other? There's the potential for a wide range.

Fall: Mr. Chair, Mr. Delo, again as I said before—I think that the simple answer is: sure, there's going to be a range. And no matter where we administer this question, whether it's the Yukon, or Tyonek, [11:52] or Akutan, or wherever, we probably will find a few people that say "hey, you know, I figured out how to do that on my own." But I think for

subsistence fisheries in general, salmon fisheries in general in the state, we will get a large percentage that say they learned from an elder.

Delo: Okay, thank you.

Webster: Other Board members? Thanks, Dr. Fall. Next?

Fall: Criterion number seven is a pattern of taking, use, and reliance where the harvest effort or products of that harvest are distributed or shared, including customary trade, barter, and gift-giving. And for this one, we did ask in the survey “whether you shared any of your catch or not.” And 80 percent of the participants in the Chitina fishery said “yes” to that. And 72 percent overall shared with relatives, 71 percent shared with friends, and 3 percent shared with others. In the other category, we know this from the responses for Glennallen, includes elders, people in need in the community, we heard a fair amount of testimony about sharing at potlatches of harvests. So that relatively high percentage for Glennallen subdistrict reflect those kinds of sharing patterns. And we also asked “how much of your catch do you share?” And of those that did share in the Chitina subdistrict, 74 percent said less than half, and 20 percent said about half of it, and 6 percent said more than half. And if you look at the transcript from 2003, the Board did talk about these percentages in light of average harvests in the Chitina subdistrict and in light of seasonal limits in the Chitina subdistrict and acknowledge that the average catch of 14 or 15 salmon, certainly people are going to—most people do share some of that harvest, but how likely is it that they would give away more than half of that harvest, and they didn’t think that was particularly likely given the harvest levels that people were achieving. So there is that context to consider in responses to this question. And, Mr. Chair, I’ve been negligent in pointing out how some of the information for these criterion that you’ve gone over connects to the—your definition of subsistence way of life and basic necessities, which include nutritional, economic, cultural, and social elements. But, of course, the evidence of sharing gets directly at social and cultural elements of the subsistence way of life, and especially as it connects to widespread sharing, community patterns of sharing, sharing at potlatches, and also the values of sharing with neighbors and friends. So this is one that I think you could refer back to when you’re evaluating criterion eight for example, and whether there is evidence of providing for those kinds of necessities, which I think we all agree that those elements are all part of the basic necessities of life to live in a community and be connected to your neighbors and relatives and friends. But when you get to eight, I’ll try to remember to refer back to some of the data for some of the other criterion too, because they are—they all, many of them will inform your deliberations on eight.

Webster: Thank you. Board members? Mr. Johnstone?

Johnstone: Thank you. Dr. Fall, just can you give us the briefest of definitions of a potlatch?

Fall: A potlatch in the Alaska context is a traditional religious ceremony that usually is done in honor of a person who has died. And the most common potlatches are funeral potlatches, which are conducted within a few days to a week of the death of a person. There’s also a memorial potlatch that occurs at some later period of time to both honor the deceased and to thank the people that helped the grieving family basically recover from [11:57] that death, and a potlatch usually involves feasting as well as sharing of gifts. So—and there are other occasion for a potlatch too, but those are the two primary ones.

Johnstone: Thank you, Dr. Fall. And would it be common to find potlatches being conducted in areas that have been given positive C&T findings in the state?

Fall: In some, but not all, Mr. Johnstone. Potlatching is a tradition of Tlingit people, Eyak people, Haida people, Athabascan people predominately. In the forms that Athna people would describe to you, you'd find very similar practices throughout Athabascans in Alaska and Tlingits too. There sometimes are—there's something called a 40-day feast in the Russian Orthodox tradition that is sometimes also called a potlatch, and you'll find that done in the Russian Orthodox communities of the Kuskokwim and Yukon area, and Bristol Bay too, that are primarily Yupik. So it is widespread, not universal for all subsistence fisheries, but very, very common.

Johnstone: Thank you. And one last thing: if you could rate the importance of a potlatch to the communities that have them, from a scale of 0 being not important, 10 being critically important, how would you rate the importance of a potlatch?

Fall: Mr. Webster, Mr. Johnstone, it's a 10 without any doubt.

Johnstone: Thank you, Mr.—Dr. Fall.

Webster: Thank you, Mr. Delo?

Delo: Thank you, Mr. Chair. Just as a follow up to Mr. Johnstone's comments, by way of information to the other Board members, one of the recent controversies that's been occurring in the Mat-Su valley is the number of potlatch permits for moose that had been issued to residents of the city of Anchorage. And they've been coming up into the valley to get their potlatch moose for potlatch ceremonies that are being held in Anchorage. Now both of those areas are designated non-subsistence areas, so the practice of potlatch is not only limited to subsistence areas. Thank you, Mr. Chair.

Webster: Thank you. Other Board members? Seeing no further questions on criteria seven, criteria eight, please.

Fall: Mr. Chair, criterion eight, a pattern that includes taking, use, and reliance for subsistence purposes upon a wide diversity of the fish and game resources and that provides substantial, economic, cultural, social, and nutritional elements of the subsistence way of life. Now—

Webster: Dr. Fall, it just was pointed out to me that it's noon, so if you don't mind I think we'll take a lunch break and be back at 1:30.

[13:30]

Webster: We're back on record. It's 1:30. There's six of seven Board members present. When we broke for lunch we were just getting ready to, for the Department to give their report on criteria eight. Mr. Fall—Dr. Fall.

Fall: Thank you, Mr. Chair. Criteria number eight is a pattern that includes taking, use, and reliance for subsistence purposes upon a wide diversity of the fish and game resources and that provides substantial, economic, cultural, social, and nutritional elements of the subsistence way of life. And of course your action on proposal 200 yesterday has now also added a definition of the subsistence way of life that I would suggest you keep in front of you as you consider criterion eight, and the other criterion as well. First of all, I will provide some information relevant to this criterion from the survey that we conducted in the year 2000. And one question was "how important is salmon in your diet?" Before I get to that, I should have mentioned that past Board members have noted that information from other criteria that are applicable to criterion eight—oh, I'm sorry. Yeah. Past Board members have noted that information from other criteria, one through seven, are applicable here regarding the element of a subsistence way of life, such as sharing, transmission of knowledge, preparation of valued traditional foods, association

with traditional locations and other elements. So I—when you're considering number eight, definitely think back of how the information you've already seen for the other ones. But one question that we asked was “how important is salmon in your diet?” And 63 percent of the Chitina fishers that we interviewed said that salmon is very important to their diet, and 31 percent more said it was moderately important, and very few, only 6 percent, said that salmon was not very important in their diet. And, of course, this is a subjective response, but nevertheless I include—I think Boards have found this to be informative. Now criterion eight of course, going back to that for a second, is addressing a pattern that includes the taking, use, and reliance for subsistence purposes upon a wide diversity of the fish and game resources. So it isn't focusing just on salmon or just on the stock that's under review. So we asked the question “how important are wild foods in your diet?” And these are responses from people who had travelled to Chitina to harvest salmon for home use. And 60 percent of those people said that salmon, that resources overall are very important in their diet, and 23 percent said moderately important, and 17 percent said not very important. And of course, this is a relative, subjective response. Now number eight, and your new definition of a subsistence way of life, certainly asks the Board to evaluate the use pattern in an economic, social, and cultural context. So when we prepare worksheets for C&T review, we always include information about the cash aspect of the economy of the participants in that fishery. And so we asked in this survey whether the fisher had a cash job, had cash or wage employment in the previous year. And for the Chitina district, subdistrict sample, 87 percent of the respondents said “yes”, 11 percent were retired, which leaves 2 percent that were basically not working over the last year. And we then asked, well “what kind of job do you have? Do you work full-time, do you work part-time, or do you work seasonally?” And of those in the Chitina subdistrict sample that had a job, 93 percent had a cash job that was full-time, year-round. [13:35] And I included this one, which basically organizes the responses to the survey, not by location fished, but by whether they lived in a local area or not. And the goal here was to try to understand the responses to the high percentage of employed people in year-round employment. And it was true that most of the people who had travelled to the Copper Basis, whether they worked in the—whether they fished in the Glennallen or Chitina subdistrict, were employed. Another question that I think past Boards have found interesting in the survey was “did you take time off from work to fish?” And that's slide 46. And 51 percent of the fishers in the Glennallen subdistrict said “yes” to this question. Now that reflects a couple of things. It reflects that most of them of course had full-time year-round jobs, and for most of them, in order to participate in the fishery, they needed to take some time off to invest that time travelling to Chitina to fish. And we did have a different response from people who were fishing in the Glennallen subdistrict, and remember again that has a large percentage of people living in the area, and Ahtna people that's not totally representative of all the fishers in the Glennallen subdistrict. But only 30 percent said they took time off from work. And you remember that most people who were fishing in the Glennallen subdistrict did have jobs, so why is this different? Well, one reason for that is that with a lot of locally based, locally living people fishing in the Glennallen subdistrict they don't have to take time off from work even if they are working, because their fishing location is nearby, they can check the fishwheel or go dipnet fishing in the evenings and weekends, and accomplish their fishing goals that way, while if you're travelling much further you might have to

take time off to do that. So that's one interpretation that I would offer for the results there. I'm going to skip that one. Now, this criterion again addresses reliance on a wide variety of fish and game in support of the various elements of the subsistence way of life. And certainly one of those elements is an economic and nutritional element. Now I mentioned before under criterion one, that the average harvest per permit in the Chitina dipnet fishery is about 14, 15, 16 salmon per year. And that level of harvest has been very consistent over decades, and that a question than arises as to "is that level of harvest a function solely of seasonal limits?" There is a 15 for one-person household and 30 salmon per multi-person household seasonal limit in the fishery that's been there for many years. And so we asked participants in this fishery "how many salmon would you like to be able to harvest?" In other words, if you didn't have any limits, what would you like to do? And so for the Chitina respondents, and this is in black-and-white now, but this dark—the dark bars are the respondents for Chitina, and 49 percent of the respondents said 30 or less is what their goal was. So that's that bar, that bar, and whatever that bar is. And an additional 32 percent said that they'd like to get 30-40, which kind of reflects the seasonal limits plus the added fishing opportunity that's provided when escapements reach a certain level in a given period of time. So most of the respondents were providing answers to this question that are basically [13:40] within the opportunity that the harvest, seasonal harvest regulation provide. And you will note that participants who were fishing with either dipnets or fishwheels in the Glennallen subdistrict generally had much higher harvest goals. In fact, 70 percent of the fishwheel users said that they wanted to harvest 100 salmon or more. So again this probably reflects in part that people fish in the Glennallen subdistrict because they have higher harvest goals for a variety of reasons. Okay, this is new information for this meeting that we put together specifically to try to inform the Board's discussion of criterion eight, and to inform the Board's evaluation of your new definition of subsistence way of life. And I want to explain what—how we did this. This figure, figure 60, shows the average harvest of salmon, pounds dressed weight per permit, in all Alaska subsistence and personal use salmon fisheries—I'm sorry it doesn't say salmon up there—from 1998 through 2007. So this is an annual average over a 10-year period. And this is data that comes out of our annual report for 2007, which is Division of Subsistence technical paper 346, which itself is based upon the database of all subsistence salmon harvest data that the Division of Subsistence maintains and which the Divisions of Subsistence, Commercial Fisheries and Sportfish contribute to, because we all have responsibilities for collecting this information. This figure includes every subsistence and personal use salmon fishery in the state. It included all permit holders, it's not based upon place of residence, and it is the annual harvest per permit from 1998 through 2007. And in order to control for species differences in the different fisheries and regional size differences in the salmon, what we do is we convert the number of fish into pounds dressed weight, which is gutted, head off, and use conversion factors based upon our recoveries in commercial fisheries throughout the state. And the blue bars are fisheries that are classified as subsistence fisheries that have passed the C&T test as administered by the Board of Fisheries. The black line right there, black bar, is the average of all the blue, and the red bars are the personal use salmon fisheries in Alaska. So what this says is that in the Chitina dipnet fishery, which is right there, the average harvest over that 10-year period per permit issued was about 68 pounds dressed weight. And dressed weight can be a surrogate for

food value. That's the amount of food that the person fishing with that permit is producing in that year. Now that range is much like PU fisheries on the Upper Cook Inlet, Kasilof, Kenai dipnet fishery, Kasilof setnet fishery. Those are lumped because the department issues one permit for all three, so we can't break out the data the way I did here without lumping them all. Kachemak Bay, which is this one, 65 pounds, and the Tanana River setnet, which is that one right there. So the food being produced per permit in those fisheries is all about the same. For the subsistence fisheries, overall throughout the state, it's 332 pounds per-person food value over the last 10 years. And there is a range in there, from Bristol Bay, and Chignik, and Yukon, and Kuskokwim, the [13:45] fisheries to the north and the west have the highest production. The Glennallen subdistrict is pretty close to the statewide average for a subsistence fishery. And there are some subsistence fisheries that have lower average harvests. So one exercise than, that the Board can look at when evaluating criterion eight and subsistence way of life contributions, is to look at that food production value compared to other fisheries and ask, well why would the average for this fishery be about the same as a subsistence fishery, or lower than the average subsistence fishery, or for that matter higher than the subsistence fishery. And I'll give you three examples from this graphic as to how you might go about that. Now, it is interesting, since we talked about it this morning, that the fishery that's classified as subsistence salmon fishery that came up with the lowest value in this exercise was indeed the Copper River Flats subsistence salmon fishery, which came out, after crunching all of these numbers almost exactly the same as the Chitina dipnet fishery. So, why might that be? Does that suggest that the fisheries are about the same, that they provide the same kind of contribution to the subsistence way of life and its various elements? Maybe so. Maybe not. For those of you who were members of the Board when the Board acted on the C&T for the Copper River Flats and the ANS finding for that fishery, you know that there were some special conditions there, and there might be special conditions for other fisheries too, but there were some interesting special conditions for that fishery that the Board weighed when it made the C&T finding and the ANS. One was that the openings for that subsistence fishery largely, historically coincide with openings in the commercial fishery and occur in the same area. So for those people in Cordova who make up about 80-90 percent of the participants in the subsistence fishery, they basically need to make a choice. If they're going to go subsistence fishing with a permit, they can't commercial fish during that opening. So what have people done for decades? They've removed salmon from the commercial harvest for home use rather than not commercial fish. And over the years, however, especially over the last 10-12 years, we've seen more and more permits be issued for that subsistence fishery itself, as there are people in Cordova who aren't participating in the commercial fishery. Another historic piece of information was the relatively low seasonal limits that were in the regulations for this fishery, as low as 10 salmon I believe in some years. Now the Board made the positive finding and then had to decide on an ANS for this fishery. And it could have decided to use the subsistence harvest information from the permits, which equates to this, for the ANS. It didn't do that. What it did was adopt a two-stage ANS, which you'll find in regulations. It said "we recognize that the role of salmon, the role of these salmon stocks in this community that dominates the subsistence fishery here, is significant," and it's not fully demonstrated in the subsistence permit data because most people get most of their fish for home use from the commercial fishery. So in years when

the commercial fishery operates, we can measure performance in the subsistence salmon fishery by looking at the permit data, but in years of poor returns where we need to restrict significantly that commercial fishery, we will be eliminating the source of salmon for many, many people in Cordova from this stock. So in those years the Board established a higher ANS amount in recognition of, again, the role of that stock in the local economy and way of life that had developed because of the way this fishery was managed [13:50] and the way the economy of the community operated. So if you're looking at that C&T again, that ANS again, these are the kinds of things that I would tell you to consider using this definition. Another interesting one, the next one up on the—in blue—is the, I separated out the permits issued by the National Parks Service for the Chitina subdistrict, which have much higher seasonal limits and you can use either dipnets or fishwheels. And since 1982 the average food production by local rural residents who choose to fish down in that Chitina area is not that much different from what the dipnet fishery under state regulations has produced, which suggests that people who choose to fish in that area have harvest goals that are much alike. I'll mention just one more really briefly, and that's southeast Alaska, which is the next one, and we gave a rather detailed report to the fish board a year ago in Sitka on southeast salmon fisheries and issues regarding ANS amounts and documented harvest levels. And we noted that this is the only area of the state where subsistence fisheries are subject to daily bags in many cases, because of the need to manage the fisheries at a very, very specific level, down to streams and so forth. We also learned from public testimony there that perhaps, more so than just about any other fishery in this group, that harvest reports are probably underestimating what people actually take, that what we're learning from the reports are that people achieve the limits on the permits when in fact public testimony suggested that it was more than that. We also know that rod-and-reel fishing, classified as sport in many of these communities, provides quite a bit of local harvest, in part because of how the subsistence fisheries have to be managed. So, again, when the—oh, and one other thing, is that the Board has distinguished in some areas subsistence from personal use in southeast for salmon, but there's one permit that's issued for both and I couldn't separate out those fisheries. So for the southeast, it probably should have been a hatched blue-and-red bar there. So what I'm suggesting is that there's a story behind every one of these bars, and when the Board looks at the C&T finding and it's evaluating what contribution that stock makes to the subsistence way of life, these things are relevant. And the last point on this one before I get to the other two, is—it is interesting that the four fisheries that are classified as personal use fisheries, after crunching all those data, came out about the same and are producing about the same average pounds per permit. Okay, taking the same information, what we did is we figured out what that is in pounds, useable weight per person. So this is the same data, it's the same pattern, the same everything, except for it's dividing by average household size. So this is basically a step to the next one. But we—in order to evaluate nutritional, and to some extent economic contribution, we need to look at it at a per-capita level, so that's why this was done. Okay, now this is the same data, this is figure 62, and it's that at a per-person level, but we ask "what contribution is this fishery making to the food supply" of the participants in the fishery. And we can try to answer that by looking at information that is collected—I want to get the name of this right—by the U.S. Department of Agriculture Economic Research Service. And this is information that's available on their website as well as from the statistical handbook that

the U.S. Census Bureau [13:55] produces, and on average, in the year that I had this information, which was 2006—there's some updates now, but when I did this the most recent data were 2006, the—about 200 pounds of meat, fish, and poultry are produced in the United States per person, per year, about 200 pounds. That's out of a total food production of about 1,100 pounds of food. So if we're looking at what people in the United States consume and the U.S Department of Agriculture suggests that these production values are a good surrogate for consumption, we can ask, well, what do subsistence harvests contribute to that total consumption of meat, fish, and poultry? And here's the answer, that the production of salmon in the Chitina subdistrict, and the other fisheries that are personal use classifications, provide about 12 percent of the national average of meat, fish, and poultry consumption. Now on average salmon fisheries classified as subsistence provide about 60 percent of that consum—of that production. And the large fisheries in western and northern Alaska provide 80-90 percent or more of that food production, and the Glennallen subdistrict was 55 percent. And I can go into more detail on why we thought this might be of interest, but you were reminded earlier that the court wanted to try to—for the Board, with the Department's assistance in measuring number eight, and the other criteria in some objective way. And so this is one benchmark that I think the depar—the Board can use. We've used similar data at joint Board meetings to look at the production of food for assessing whether areas of the state are non-subsistence areas or not. So this data source is not new for us, but I've never actually put it together in this way before, and this is the results that we got. And with that, Mr. Chair, I think I'm done with criterion eight.

Webster: Thank you. Mr. Nelson, did you have some comments on how we use the criteria?

Nelson: Mr. Chairman, I would urge one note of caution, in that the Superior Court's ruling instructed the Department and the Board to exclude community per capita harvest data that was in the report used by the Board in 2003. We've done that. In one of the RCs we blacked out the portion that seemed to be the target for the court's concern, and so we've done that. But there may be other references that you might be able to draw some conclusions from in some of the information that's either been presented in oral reports or by members of the public as they've come here. I just caution you not to—the focus here is the participants' harvest data, not the average community harvest data. These graphs that were shown here recently are consistent with the court's decision I think, in that they only focus on how much was harvested per permit, per person under the permit, but it's all to do with participants' rate of harvest and not some community-based date or rate of harvest. And so just keep that in mind, that the ruling of the court is that it's inappropriate to judge on the basis of community per capita harvest and consumption of wild foods rather than participants.

Webster: Thank you. Board members, any questions on criteria eight? Seeing none, we're ready to discuss the proposal as a whole. Board members? Dr. Brown?

Brown: Thank you, Mr. Webster. I'm—I've learned a lot. I think RC9 was outstanding, it's in more detail than Dr. Fall's analysis, and I actually read it. And I learned a lot, and in the future, as I go through C&T worksheets, I will fall back on what I learned here. And I've had, for the last seems like [14:00] four or five hours, it was probably the last two hours, I've had my regulations book open up to page 1050 and 1051. And so I'm looking through the discussion in there and I've got a couple of general comments that I want to go through, and I can make some specific comments on the eight criteria. My general

comments are, there's a reason for the Board here, because we have to use our wisdom and wit, I suppose, to interpret these. I don't think it would be possible to write eight criteria for subsistence with numerical estimates saying you need a 22 percent, or less than 14 percent, or exactly 11 generations—I don't think you could do that. What we do have, however, is eight criteria that are a great framework for us to form our opinions on, and to think about, and to come to conclusions. And, while there will always be some disagreement on this Board, we rarely vote unanimously on anything, I suspect the Board will be split vote on how this goes. And then there will be people after we vote who disagree and people afterward who like it, we do have a framework, so we can be sure that we've thought through everything carefully. Now, that said, just a couple of comments on each of the eight points. I've already commented on number one. I was concerned about the definition of long-term, and in my mind we've settled that. Very clearly the Ahtna people have had this kind of fisheries for hundreds or thousands of years, but the issue with the Chitina dipnet is a couple generations as well, so I think it meets that criteria. While there's concern about water taxis, that in my mind is not commercial fishing, it's a boat to get from point A to point B. On point two, I think there's less of a debate here. We do have specific seasons in each year, they're not exactly the same for the Ahtna people and the people who're trying to now dipnet, because of the way the fish are processed. You want them earlier in the summer if you're going to dry them. Point number three is what I, as my economics tells me I need to concentrate on, and here, while it is—while we've had some data, a couple RCs and some data from 1999 provided by Dr. Fall, showing that it might be economical to drive down from Fairbanks and spend a couple of days under a blue tarp and fish and stuff, efficiency is always a relative thing. And there's, in my mind, a fundamental difference between going down the river a little bit and catching fish, or driving 4-500 miles and catching fish. It's not just distance, it's time, it's effort. That's a significant issue in this situation. Number four, therein where non-commercial long-term has been established, that's not an issue, we know what we're talking about here, we know the area there. The means of handling, preparing, preserving—the groups that we're concerned about don't handle and prepare and preserve the fish identically, but in the wisdom of previous Boards, this point number five includes "but not excluding recent technological advances where appropriate." Freezers and vacuum packs are very common for people to use to process their fish. That wasn't done a hundred years ago, or even 50 years ago, but we're allowed to use the methods necessary. Handing down knowledge between generations—I'm confident that happens. It does it in different ways. The Ahtna people, we had very good testimony about how grandfather and grandmother and great-grandfather and great-grand—grandsons and whatever. But I'm sure that happens, from testimony we've had from people from Fairbanks and other regions the same thing happens. It's often the neighbor, it may not be the father or brother, but they do hand down the knowledge. All of these groups distribute and share gifts. There was some discussion about—there are people who believe, and there's a rumor that's gone around for a long time, that PU or sport-caught fish cannot be shared outside of the immediate family. I've heard that before. And that may explain why there's relatively sharing that went on in the data provided by Dr. Fall. In fact, it's [14:05] not illegal to share sport-caught fish, but if people thought that when they answered a survey they may have responded that way. And then number eight, subsistence way of life, I think our new definition is better than it

had been, but I'm still left with this: subsistence way of life—now, don't comment until I finish it because it's going to sound bad for a minute—it's like pornography, in that I can't define pornography but I know it when I see it. And I'd say the same thing about subsistence. Mr. Chair.

Webster: Other Board members? Mr. Delo?

Delo: Thank you, Mr. Chair. Dr. Brown did an excellent job of working through the eight points, giving us his take on how it all fits together, sort of. But a point that I wanted to bring up that has caused me to kind of stop and think a bit—and this is going to take a little bit of a history lesson, not much—the first regulatory meeting that I participated in as a Board member was a joint Board meeting, and one of the topics on that agenda was the discussion of including a part of the area we're talking about affecting the Chitina subdistrict—actually I think at one point the whole thing was in it, but over time with various compromises it got cut down further and further—to declare that area a non-subsistence area. At the time the Board of Game was looking for some kind of a solution to deal with the Nelchina caribou, and one of the thoughts was if this thing could be declared a non-subsistence area that would open some doors for them to be able to deal with their situation. And when the vote was done, it was the Board of Fish that decided to keep this area as a subsistence area. Now we're sitting here debating whether we want to take a particular type of fishery and declare it either a subsistence or a personal use fishery in a subsistence area. I understand it's not black-and-white, it's not cut-and-dried, but generally speaking the idea of a personal use fishery is to allow a subsistence-like fishery to occur in what are now classified as non-subsistence areas. A perfect example is the dipnet fishery on the Kenai river. That area is non-subsistence, that fishery is personal use. It allows people to do something, take a bag limit of fish that is different than and quite a bit greater than what they could do with a rod and reel to address the personal needs. That to me creates a little bit of a thought process concern, 'cause we're arguing about how to classify a fishery in an area that is clearly been held to be a subsistence area. And one of the differences between subsistence and non-subsistence areas has to do with a lot of the stuff that's been discussed here regarding the area's economics, the area's cultural and social points of view, etc. etc. So I just kind of wanted to get that out for consideration, that the area the fishery occurs in I think has some bearing at least on what the fishery maybe should be declared as. Having said that, I think I'm going to stop for now and hear what other Board members have to say. Thank you, Mr. Chair.

Webster: Thank you. Other Board members? Mr. Jensen?

Jensen: I didn't really want to go yet, but I will.

Webster: Did I see you hand up Mr. Nelson?

Nelson: No, but if you have a question I'd be happy to answer it.

Webster: No, you'll get some but...

Nelson: I assumed you might ask about Mr. Delo's comments. I can address that now if you'd like me to while it's fresh.

Webster: Sure, go ahead.

Nelson: Mr. Delo correctly pointed out that personal use is—one reason for personal use, or one opportunity it allows is [14:10] subsistence-like fishing in non-subsistence areas. The other part of it was specifically to allow food fisheries in areas—in non-subsistence areas or rural areas where C&T hadn't been demonstrated. And so it was meant to apply to both areas as it has for quite a few years, since 1986 at least. So—and I would urge a

little bit of caution on what conclusions you draw from whether or not the users are from a non-subsistence area or a subsistence area. I think it's pretty clear that we can't disregard the uses of those who live in non-subsistence areas just because that's where they live. I think it's pretty clear from court decisions. On the other hand, I think you have a responsibility not just to assume an area, or a C&T use is going on, because the people live in a non-subs—in subsist—or, outside of non-subsistence areas, excuse me. So be careful about how you apply those rules.

Webster: Thank you. I agree with your summary there, and I think all Board members understand that. Mr. Jensen?

Jensen: Thank you, Mr. Chair. I feel I've got a really good understanding of this criteria now, after eight and a half years, and dealing with it many times. And, I mean, Dr. Fall helped us through it, it's becoming clearer every time that it's just a personal—it's my personal feelings on each one of these criteria. It's nothing that I have to make, or there's no rules saying I have to make something up, so as I go through this bear in mind that these are my personal opinions and, from what I've learned over the years and how to deal with these different types of criteria we have to deal with. The long-term consistent pattern of non-commercial taking, it's—well, I'll go on, use and reliance on the fish stock. Long-term patterns are, if you're going to compare the two different user groups we're talking about, I guess it's okay to compare user groups, one user group definitely has an advantage of long-term as far as time over the other groups. And the reliance, each different group's reliance on this fish stock, from my personal experience—

Webster: Mr. Jensen, just a clarification: what are you comparing—who are you comparing when you say user groups?

Jensen: Non-local versus local, pretty much. Is that acceptable, Mr. Nelson?

Nelson: As long as you clarify that you're not using local use necessarily as a standard for the threshold that has to be met. The court said it was, you shouldn't do a direct comparison to set the standard, you know. To make it clear, the Glennallen use levels that have been identified previously by the Boards aren't the legal threshold that this, the Chitina fishery, has to meet to be subsistence. There—it can provide some context, it could provide some perspective for you, but just as long as you understand that that's not what has to be met.

Jensen: Yeah, I'm just trying to make a point that I believe the long-term consistent pattern of non-commercial use has been more prevalent from the—for the folks that have grown up relying on it, or it's—to me, it's a need to/want to situation. The folks that have been here all their lives need to harvest these certain species in order to make a go of it, and the folks that don't live in the immediate area have to make a decision if it's worth, to them, going down there that year or not to harvest some fish to help supplement their diets. The folks that live [14:15] there just do it. They've been doing it ever since time immemorial. Anyway, going on with the—so that's where I come in with the long-term consistent pattern of non-commercial taking, these folks have been doing it, not because they want to, but because they need to do it to live. A pattern of taking—the pattern is probably similar between the two different—all the different user groups, because of the run timing of the runs of the fish, I'm talking about salmon. A pattern of taking or use consisting of methods of means of harvest that are characterized by efficiency, economy of effort and cost. This brings to the—the little discussion we had earlier when Mr. Brown asked the question "are you going to drive down if you're only going to be able to get 5 fish," and the answer was "probably not." Well, the folks that live there are going to fish whether

they're going to get 5 fish or 10 fish or a 100 fish, because that's what they do. The area with the—in which the non-commercial, long-term, and consistent pattern of taking, use, and reliance based on fish stock or game populations has been established. I don't have really anything to add to that one. The means of handling and preparing and preserving, the storing of fish and game that has been traditionally used by past generations gets me into the point—I'm going to go back to the generation thing. In my mind, a generation needs to be—I know it can't be less than one generation but I think, in my mind, a generation is much longer than just me and my kids. I think it—in my, the way I'd describe it is maybe up to 100 years, Mr. Chair. And handling and preparing both—all the user groups probably use similar patterns of handling, except for the folks that have been here for since time began. They have all sorts of different ways of handling the fish, because they have all sorts of different uses and they had to do it at certain times of the year so the preparation worked right, as in drying, etc. The pattern of taking, that's probably changed over the years, that for sure has changed over the years, and that's just the way things go. There's more efficient ways to do it, and quicker ways to catch your fish. The pattern of taking, use and reliance—reliance is the key word in here for me. I believe there is several different types of reliance. I subsistence fish and I rely on it to supplement my diet, but I can live without it. I don't believe it—it'd be harder for a local person that's—to live without it. And, number eight, the new wording I think is what we did yesterday and changed and added the subsistence, the definition of subsistence way of life. I thought that was a good use of words and it has that reliance upon fish and game resources for the basic necessities of life, and I believe some people are more reliant on these fish than others. And the ones that are more reliant are the people that have—are the local people, Mr. Chair.

Webster: Thank you. Mr. Johnstone?

Johnstone: Thank you, Mr. Chairman. I'd like to thank Dr. Fall for filling in the gaps for me. I was interested what other subsistence characteristics might be like around the state, and he gave me some information about that. I have read about as much as I can that's been given to us, and I've used my own common knowledge of, based on the history of, my short history on the Board, review of some of the C&T findings I'm aware of. I appreciate my fellow Board members' comments. I know we have a couple of senior members here who had the advantage of participating in these C&T proceedings in the past, and I give considerable weight to their opinions because they've been through it. I understand that, [14:20] for me I'm not going to focus as much on the users and the geographical locations as I will the uses of the fish resource. I've gone through the eight criterion and, for me, I'm not going to give any particular weight to any one. I will evaluate them in light of each other. And also I don't believe that it would be necessary of me to have a positive finding on each of them before I could make a decision. I do believe that in order to make the determination we're called upon, we should compare and contrast and distinguish characteristic of use, taking, and reliance of the resource in the Chitina subdistrict with some of the characteristics you might expect to find in other subsistence areas where positive C&T findings have been made. We should follow the law, which gives us some guidance as well. And when it comes down to determining basic necessities of life, it might be appropriate to look at the user in the light of the terms of reliance. One criteria number one, it appears to me that, given the information we had, there's been fishing for literally centuries there by various people in the area. They've

been using the resource for food. They have taken it, used it, and relied upon it. The degree of that reliance is not as important as the fact that, on number one, they have definitely relied upon it in the Chitina subdistrict. I think, in my opinion, that criteria one has been established. The Chitina subdistrict fishery, salmon fishery, like many salmon fisheries, takes place regularly and consistently during the summer months during the various runs of salmon, and the taking and the use, and the reliance on the salmon resource is a result of taking it during consistent, regular times during the run. Which is pretty common in salmon fisheries, both subsistence and non-subsistence. The—number three—and I find then number two, criteria number two, is a positive finding there for the Chitina subdistrict. On number three, this Chitina subdistrict fishery is used by persons who live primarily long-distance from the fishery. Large majority of use is by persons who drive from Anchorage and Fairbanks, and travelling these distances is—comes at a cost can be costly, and increasingly costly, more costly. Use of the fishery has been by dipnets and because of the nature of the river—if anybody's been there, and I have been there—it's somewhat difficult to fish. If fishwheels were permitted, it might be difficult to put fishwheels in. There were a few in historically, but they're difficult to put in; you have to find the right spots in the river to do it. Many fishers stay in motor homes, campers, tents, other locations including motels. They stay from, anywhere from one day to several days, and many come back if they haven't limited out. They get to the fishery in some cases—because of how difficult it otherwise is to get to—by jet boat. That's becoming a much more common way to get to the location to put your net in. That increases the cost. So as far as the economy of it, is quite a bit more expensive for them to acquire their fish than what would be characteristically found in subsistence areas where people generally live close to the sites. Many of the subsistence areas use fishwheels, nets, gillnets, and seine nets. Those in my opinion are more [14:25] efficient than dipnets. And so, from the efficiency point of view, historically and traditionally subsistence areas had more efficient methods of catching fish than a dipnet, although dipnets are used in them as well. In the Chitina subdistrict, fishing has taken place—I might also add the access to the dipnet fishery has become quite difficult. There's been landslides, there's been erosion of the road, the road used to be able to take you in there and you could get into it quite easily, and that's one of the reasons people are using the jet boats now to be taken up there, it's really hard to access that fishery. The Chitina subdistrict fishing is taking place downstream from—for a fairly limited distance, mostly because of the train. There are a few subsistence areas that have limited area like that, but most of them have a larger area, where there's use of fish camps, more permanent structures. Permanent sites are often found on, in subsistence areas where permanent structures, permanent drying racks, people who use the resource there and take it, they generally stay longer periods of time, sometimes all summer long. It's been found to be the case in traditional subsistence areas around the state. Chitina fishers generally either clean their fish on-site or take the fish home to Anchorage or Fairbanks, or wherever they're from, where they further process it. The fish are most likely to be frozen, a lot are smoked. There are some other ways they preserve it. Whereas characteristics of handling, preparing, processing, and storing of the fish found in traditional subsistence areas, including Glennallen, but not limited to or substantially different, fish are often dried on rack, which are permanent. They're smoked by a large number of people who take the fish. They're kippered, they're salted, with many being frozen. And even though

electricity has made it able—given people the ability to preserve their fish, the numbers of fish caught in traditional subsistence areas—at least for the average, 300 and some odd pounds per permit—is of sufficient size that might be very difficult to freeze all that and it might be more appropriate to dry it and preserve it that way. That's not done in, by—from what I've heard—by Chitina dipnet fishers. Chitina dipnetting has been going on for a long time, and the uses and the patterns have changed a little bit as time has gone by. And now people are bringing their children, their children are learning how to dipnet. It's not easy, it's not necessarily a sport, I agree with that. I think it's that method of fishing is passed down between family members and friends. There is some training involved, particularly on safety. I don't believe there's much fishing lore taking place, nor other values are being transmitted among the Chitina fishers such as they might be in a traditional subsistence area. In my opinion it seems, whether evident that in traditional subsistence areas that I know about, and from what I've been reading around the state—including, but not limited to, Glennallen—fishing skills using a dipnet in some cases, fishwheels, different types of nets, are taught within families, and taught by elders to younger persons not in the family, sometimes in the family [14:30] who live in the area, and now the training is going both ways. I'm sure some of the youth of today are reversing that trend and teaching some of the other people in the area who depend on this resource how to do it. They're taught to respect the resource, not to play with it. As fishing lore and history is passed down over years as a cultural presentation, methods and means are passed down over the years. I don't think that that type of lore or that type of respect for the fish is participating by those who participate in the Chitina fisheries. Give me a minute here, Mr. Chairman. We've heard how—we know that Chitina fishers, they take the fish home and I'm sure that they share it with their friends and their family; they have get-togethers, dinner parties. It depends on how many they get, of course. If they get very few, they probably reserve them for their own use, but the more they get, the more they're sharing. The average amount in pounds is less than what is obtained by traditional subsistence users in other areas, including Glennallen, on the average at least—although there are some subsistence areas that, because of anomalies such as the Copper River, not as many are harvested. Traditional subsistence areas, including but not limited to Glennallen, from what I've seen reflects a great deal of sharing among families. The sharing and potlatches reflects a greater willingness to share. In some cases there is bartering and trading, which is likely not done by Chitina fishers. We know how important potlatches are. Many persons who live in Anchorage and Fairbanks have jobs. We know that, based on the information we have, that the income levels of the subsistence areas nearby, and I believe that to be true from what we've heard in other meetings up in the Yukon and other areas, income levels are quite low. Their cash income is quite low, and so they're more highly dependent on the fish resource, either to barter it, to use it for other purposes. People who live in Anchorage and Fairbanks have jobs they return to, they have the highest standard of living in the state, approximately or close to it. Income from their employment allows them to pay for some of the basic necessities of life we all take for granted, those of us who are employed, such as power, heat, medical care, nutrition, transportation. The fish resource is certainly a source of nutrition for Chitina people, but when they run out of food they can more readily purchase food for their basic necessity. Taking of the fish provides for some economic, culture, and traditional benefits for some of their lifestyle, that they probably take about

the trip they've had, they have a party over the trip they've had, they figure out different ways to serve the fish. And so there's a certain social, cultural element to it, but I can't conclude that it rises to the basic necessities of life. On the other hand, the subsistence way of life involves a long-term reliance, which is like a dependence, on the resource for the basic necessities of life. Characteristics of traditional subsistence fisheries, what we are aware of, including Glennallen, show that not only do users of the fish and game provide—use of it provides substantial nutritional benefits, but with reliance directly and indirectly provides other basic necessities. Potlatch gatherings, according to Dr. Fall, are 10—highest on the importance scale. And I believe that's a basic necessity of life, to participate in those. It's a cultural and social necessity for many of the people [14:35] who live in subsistence areas. That certainly is not done in—by the Chitina fishers. I think that the ability to pass down skills and history and lore depends on the use of the fish and game resource, without which it would not occur, and I think that that social and cultural event that takes place in so many subsistence areas is one of the basic necessities of life, to educate the younger people and pass down their values and skills. There's an example, for—if you don't have—if you have enough fish, and it look like the average is 300-some-odd pounds per permit, you don't have to buy that protein, you don't have to buy that food source and you use your financial resources to provide for other basic necessities, which otherwise you couldn't do. And since you don't have much money coming in, and most of these subsistence areas, including but not limited to Glennallen, power can be purchased that might not otherwise be able to be purchased if you had to buy all that food. Many subsistence area, including but not limited to Glennallen, use the fish in its entirety; that's probably not done by the Chitina fishers. I'm sure they don't feed their dogs with the bones or the carcass, and we know that in subsistence areas the dogs are fed with the bones, put in into meal, fish food—I mean, dog food. And we know that in some areas the carcass is used. And we know these dogs form a method of, means of transportation for some of the people in these areas that they wouldn't perhaps otherwise have. They're able to pay for heat and power and maybe medical items, drug, because they would have the money to do that, without which—but they would not it probably, or likely, if they didn't have the fish resource. They'd have to pay for their food. So those are my comments at this time, Mr. Chairman. I think I've covered most of the criteria. Thank you, Mr. Chairman.

Webster: Thank you. Mr. Morris?

Morris: Thank you. Thank you, Mr. Chairman. First, I want to commend my fellow Board members in their ability to hash through these issues. It's as good a job as I've seen in my eight years on the Board with breaking these issues out and getting to the bottom line. And with that, it will certainly make my testimony perhaps a lot less than it would have been. First of all, I would discuss the long-term pattern, the consistent pattern. I have a little different take on it than perhaps the others do, but it says "over a reasonable period of time of not less than one generation." We heard that one interpretation of that is 25 years is a generation. Yet over 80 percent of the users in the Chitina district have less than 20—20 years or less. So I don't know how we could say that there's been a generation of participation when 80 percent, over 80 percent, are not—haven't participated before the previous 20 years. I'll just bounce on down to number eight, I think the others have been covered very well, and help and point out that it provides for substantial economic and I'll discuss the economics. First of all, we've seen that it's,

even back in 2003, that the cost to go to Chitina was in the hundreds of dollars. Since then, the gas prices have more than doubled, probably tripled, and the cost to go down there is considerably more. The cost once you're there is going to be more, because as you pointed, or as Carl pointed out, the accessibility to the fishing areas is such that a good many people are using the water taxis, \$100 a day, or a trip, and \$175 a day for fishing. So there's nothing economic that I can see [14:40] about it, given that the average harvest is like 14 fish. And while Dr. Fall used 79 percent I think as the recovery factor, having processed many, many fish in my life, 75 is very high, and that's still a headed and gutted product—filets, there's probably more like 40 percent. So you're looking at a very small amount of fish, in my opinion, for many hundreds of dollars. And so I find it hard to go to accept the substantial economic benefits. We did hear that it's possible to carpool, and I agree that it could be. I think in the event that carpools or some other form of economic benefit could be realized, I think we're probably in the process of doing that here, giving up the pattern of—includes the handing down of knowledge of fishing or hunting skills, values, and lore from generation to generation, and this most likely would be the adult permit holder that would be carpools and the kids probably wouldn't get to go along. And so there would be not the opportunity that there would be if you were willing to spend the money to take the family down there. And very briefly I'll just explain my take on the subsistence way of life. I think it's critical that we all pitch in on that one. As most of you know, I grew up in Alaska and come to Kodiak in the '40s, mid-'40s. And we participated—my dad was a game warden, a government trapper and a guide in Idaho, and my mother was a cook on a ranch, so we knew how to—they grew up in the depression, we knew what it meant to be able to have game and fish for subsistence. We participated fully, at least as far as I know, most of the opportunities that Alaska provides with a bounty of riches that we all know are here for us to share. And we hunted, we fished, we trapped, picked berries, dug clams, set pots, crab pots, had our little 14-foot skiff with a 5-horse Johnson, run out and do all these things. It was a wonderful way to be raised in a family. It was a good experience, it was—and I certainly will recognize that I kind of see the Chitina dipnet fishery as being the same thing, a wonderful experience for families, for people to participate in and share in the resources—we never felt that we had to have those things to survive, but we took all of them, our opportunities, and we shot deer when they opened the season in '54, took a couple of elk. But at no point in time did I ever assume that if these things were taken away from me, that there'd be—my reliance—be in jeopardy, because there was no long-term reliance. And I visualize the dipnet fishery as being the same. With that, Mr. Chairman, I'll stop and let other Board members get in.

Webster: Thank you. Other Board members? I guess, if nobody else want to talk, I'll speak a little bit. When I look at the court ruling, the—it states that both subsistence and personal use rely on a taking of salmon food by most efficient harvest means. Both involve sharing the harvest, both have been carried on for generations. And the means, and locations, and methods of both activities have been passed on by word of mouth and traditions in district families and social groups for generations. But subsistence, I think this is very important in the court ruling, subsistence [14:45] requires something more than personal use. And I think that's extremely important, and number eight, criteria eight, is a way to apply that to—I think all the criteria, or not all of them, but a lot of the criteria depends on us determining the difference between personal use and subsistence, because that is,

they're real even—the ruling says they both do it. So he goes on to say that cultural, social, spiritual, nutritional values, it requires a taking and use to be tied to the need to engage in fishing in order to provide for the basic necessities of life. Not only is that permissible, it says it is essential in order to distinguish between subsistence and personal use. So, to me, what I get out of this is although personal use and subsistence are mirrored in their uses, I use a sliding scale in determining the reliance on the information that we got. So I don't disagree with any of the users that—all the users said that they used the harvest for all different purposes. I agree with that. But when I look at their uses, how does that relate back on the basic necessities of life? So when I look at all these criteria, that's what I'll be looking at and that's how I'll be basing each one on a sliding scale whether—and I don't know exactly—I'm not saying that it, does it have to be a certain percentage, but I'll be looking at subsistence at a higher point on that scale than I would personal use. So that's what I got to say for right now. Other Board members? Mr. Delo?

Delo: Excuse me. Thank you, Mr. Chair. I didn't hold my hand up earlier because I have spoken twice already and I was really hoping to hear some of your thoughts before I chimed in, so I appreciate that. I agree with Mr. Morris in his congratulations to our, my fellow Board members. I think we have heard some very excellent discussion, some very excellent summarization of viewpoints on these eight criteria. I think I'm the only one on the Board that has actually gotten Chitina dipnet experience, so I can relate to the guys up in Fairbanks that are making this request. I too live in a designated non-subsistence area. I grew up as Mr. Morris, different circumstances, but the—as I used the term yesterday, the outdoorsman lifestyle. When I came to Alaska, I saw it as a golden opportunity to not only continue but even enhance that type of lifestyle. When we first started going out to Chitina, we went out to get fish to use for our personal use, our family consumption. And yes, it is a lot of work. But we went out as much for the companionship and the—I'll use the term recreational aspects—we had a lot of fun when we went out there. We worked hard, and we played hard, and we had a lot of fun when we went on those trips. I felt it was my obligation to provide as much of a point of view as I felt comfortable doing from the perspective of somebody who has done this, and that's what I tried to do on some of the different points as we worked our way through it. But the bottom line is I never [14:50] considered myself a subsistence user when I was out at Chitina doing my dipnet fishery. I know that's probably going to upset some people in the audience who maybe thought that I was avidly fighting for their side. I was trying to present a point of view and some counters, but when it gets right down to the bottom line, when I did this I didn't think I was a subsistence user because I lived in an area where I had alternate resources. Quite frankly, we got to a point where one year we decided not to go dipnetting because we—all of us that went, in the group I went—we all still had fish left from the year before. So I think that speaks to some level of the necessity of life. We used them, we relied on them, but we didn't have a life-and-death dependence on them. And—or if you want, a very deep and direct dependence if you want to avoid the life-and-death terminology. Nobody's going to starve to death in the state of Alaska as long as they've got access to a radio or a cell phone or satellite phone. So that's—without going through each criteria point, I just wanted to express how I felt about this. Thank you, Mr. Chair.

Webster: Other Board members? We're—

Brown: Do we have a break or a question?

Webster: We've been going at it for a while, did I hear somebody request a break?

Brown: I said either break or a question.

Webster: We're going to take a break for 10 minutes.

[15:04]

Webster: We're back on record at 3:05. We was in—when we took a break, we was deliberating on proposal 201. Any other comments? Mr. Brown?

Brown: Thank you, Mr. Chair. I just wanted to say, in my deliberation moments ago when I went through the eight criteria I was actually trying a bit of levity—it was misinterpreted. I try to refer to pornography as often as possible, and it's probably more than I should have this time. The point I'm trying to make is, we now have a set of criteria that does allow us, give us a good framework to study a fishery and determine whether it is or isn't in fact a subsistence fishery. It gives us a framework we can use, especially with our new addition in criteria eight, to determine if we have a subsistence way of life and whether we should or should not find a positive C&T finding. Mr. Chair.

Webster: Thank you. Other Board members? Mr. Delo?

Delo: Thank you, Mr. Chair. I hope we don't need to confiscate Mr. Brown's computer. I know it's not required, but I think it doesn't hurt to have on the record the fact that I think the discussion as we heard it, I think everybody on board, in the back of their mind was thinking about the sustainable salmon fisheries policy. I don't think it—while it may not be required that we even mention this, it's my opinion that it wouldn't apply because I don't—nothing in the way of the management of the fishery under normal circumstances is going to change. So I don't think we need to be concerned about dealing with various aspects of the sustainable salmon fisheries policy. Thank you, Mr. Chair.

Webster: Thank you. Mr. Jensen?

Jensen: Thank you, Mr. Chair. I just, when we were going through the court thing yesterday I came across a little piece, that when taken out of context I thought was very interesting, talking about differing between subsistence and personal use. The legislature contemplated that in most areas of the state subsistence fisheries would be identified and preferred without an overly burdensome intrusion on other consumptive uses of fish, and intended that a subsistence law not result in a significant reallocation of fish. I just wanted to read that in there because I thought it was pertinent to what we're discussing. It's not one of the eight criterions, I just thought it was something to think about when you're making your decisions, we move toward the vote. I believe if this proposal is adopted it wouldn't create an additional cost for a private person to participate, Mr. Chair.

Webster: Thank you. Other Board members?

Brown: Question.

Webster: Question's been called. Errors or emissions? Enforcement's not here, so Mr. Nelson?

Nelson: I'll speak on behalf of Mr. Kane[?] too, but we don't have any errors or emissions.

Thank you.

Webster: I do want to clarify what we're voting on here. If you look at, under 201, is A. And if we find a positive finding, then we'll continue to discuss B. But if we don't find a positive finding there will be no reason to bring up B. Is that a legitimate way of dealing with this, Mr. Nelson?

Nelson: Yes, Mr. Chair, as long as your intention is clear, and I think that's a reasonable way to avoid unnecessary discussion.

Webster: Thank you. Everybody understand that? Mr. Jensen?

Jensen: Yup, thank you, Mr. Chair. I understand that part, I just wanted clarification of what a yes or no vote meant when we get through the—get ready to vote.

Webster: Okay, and errors or emissions, Dr. Fall?

Fall: No, Mr. Chair.

Webster: Mr. Marcotte, what exactly does a yes and no vote do here?

Marcotte: Mr. Chairman, a yes vote would put the—would be a positive finding for the Chitina subdistrict.

Webster: Is that—Everybody understand that? With that, we'll call a vote please.

Marcotte: Proposal 201: Johnstone?

Johnstone: No.

Marcotte: Webster?

Webster: No.

Marcotte: Delo?

Delo: No.

Marcotte: Jensen?

Jensen: No.

Marcotte: Morris?

Morris: No.

Marcotte: Brown?

Brown: No.

Marcotte: The motion fails, 0-6. Mr. Chairman.

Webster: Thank you. [15:09] With that, Mr. Marcotte, is there any other business we need to address?

Marcotte: No, Mr. Chair.

Webster: Mr. Nelson?

Nelson: Mr. Chairman, just to explain on the record and for the public's benefit, with your vote here today, I think you've followed through on the remand from the Superior Court, and the result of that will be that the Chitina salmon fishery will stay on the books as it is as a personal use fishery, and no further action, I don't think, is required by the Board other than the vote and determination you just made.

Webster: So the fishery that's been in recent years will continue as is.

Nelson: Yes, it will stay as a personal use fishery in the regulation book, and be implemented that way.

Webster: Thank you. I want to take this time to thank the Department. I mean, we couldn't have done it without all the information, the tireless hours of collecting data and being here to give us information to make an informed decision. And likewise for the public. The public was—we had some real contentious issues at this meeting, and the public was very polite to other peoples', user groups' opinion, and by being that way we was able to get a lot of good information from the public, so we could make informed decisions on all the decisions we made. So I really want to thank the public for your participation, and if anything I would—we had complaints on the length of public testimony. If you want to do anything on that, I'd suggest you get ahold of your legislature and ask for more funding so we could have a little more time, because I agree with you—you know, three minutes isn't a lot of time for public testimony. But we have a monetary restraint and it's my job to determine where we—how to divvy up that time. And so I would encourage

you to get ahold of your legislature and ask for a few more dollars for—so you could participate even more in these meetings. So with that—did I hear a motion?

[?]: So moved.

Webster: Did we need a vote on that?

[?]: No we didn't.

[ENDING GAVEL]