

**Cooper Lake Project Relicensing
Meeting Summary:
Official Dispute Resolution Meeting — Cooper Creek issues
December 14, 2004 — 9:00 A.M. to 12:00 P.M.
Chugach Headquarters, Training Room, Anchorage, AK**

Meeting Attendance:

Name	Affiliation
Margaret Beilharz (phone)	USDA Forest Service (USFS)
Dave Blanchet	USFS
Phil Brna	U.S. Fish and Wildlife Service (USFWS)
Karen Demsey	Long View Associates (LVA)
Jim Ferguson	Alaska Department of Fish and Game (ADFG)
Suzanne Fisler	Alaska Department of Natural Resources, Parks division (ADNR-Parks)
Ricky Gease (phone)	Kenai River Sport Fishing Association (KRSFA)
Bill Hauser	Alaska Flyfishers
Jan Konigsberg	Natural Heritage Institute
Sue Magee	ADNR
Mike Massin	Chugach
Gary Mitchell	Cooper Landing resident
Duane Ohnemus	Cooper Landing resident
Steve Padula	LVA
Larry Peltz	NOAA Fisheries
Gary Prokosch	ADNR, Water Resources division (ADNR-Water)
Jim Topolski	Chugach Electric Association (Chugach)
Brenda Trefon	Kenaitze Indian Tribe
Cassie Thomas	National Park Service Rivers and Trails Program (NPS)
Burke Wick	Chugach

Opening

Following a welcome to the meeting attendees, Steve Padula (LVA), the moderator, began the meeting with an explanation that the purpose of this meeting was to fulfill the FERC regulatory requirement that the license applicant hold a meeting with agencies 30–60 days after the close of the comment period on the draft license application (DLA) to discuss substantive disputes. He reminded the meeting attendees that this particular meeting was focused only on issues related to Cooper Creek; the reason this meeting lagged a month behind the official dispute resolution meeting covering the other topics was because the comment period for Cooper Creek-related aspects of the DLA had been extended to accommodate reviews of the draft Cooper Creek Instream Flow Study report. Steve added that the goal for this meeting was for the parties to make sure the bases for the remaining disputes are understood and to confirm that the disputes are all being handled within the context of the settlement negotiations.

Steve Padula noted that Chugach is still hopeful that the parties will reach an agreement in principle (AIP) on the relicensing in time for the AIP to be filed with the final license application (FLA); however, if there is no AIP by then, Chugach will put forth a proposal and address any outstanding disputes in the FLA.

Aquatic Resources

Nature of project effects on salmonid use of Cooper Creek

Steve Padula summarized that commenters took issue with the fact that the DLA did not address the effect of ongoing loss of nutrient supply from Cooper Lake as a significant limiting factor to fish habitat on Cooper Creek; these commenters recommended that nutrient availability be considered in evaluating operational alternatives for the Project. Steve stated that Chugach was not aware of information that would substantiate the inference that outflow of the lake water would have directly provided a significant source of nutrients to the creek, and that existing data appeared to indicate Cooper Lake is a relatively low productivity lake. He noted that Chugach does not view this as a major dispute, given that there seems to be general agreement of the parties that temperature is the primary limiting factor on salmonid use of the creek, and while the potential influence of nutrient outflow may be noted in the FLA, no further data collection or analysis is planned.

Dave Blanchet (USFS) noted that this comment was based on assessment by the USFS's contractor on the instream flow study (R2 Resource Consultants), and that the USFS does believe nutrient outflow from the lake would be significant if flows from the lake were introduced to Cooper Creek (given, for example, that there is a healthy population of macroinvertebrates in the lake). Dave added, however, that since the mitigation alternatives under investigation for warming Cooper Creek all rely on lake releases, the nutrient aspect is not a central issue.

Instream Flow Study

Comparative stream analysis

Steve Padula stated that one area of remaining disagreement was with Chugach's decision not to conduct a comparative stream analysis as a means to evaluate potential conditions on Cooper Creek. He noted that this was an early study request from the agencies and had generated much discussion; in the end, however, Chugach had decided that conducting an instream flow study (which was also among the agency study requests) would be a better use of limited resources for the study program. Steve noted that John Morsell (Northern Ecological Services) had looked at existing data from other nearby streams to evaluate potential numbers of fish that could be expected to use Cooper Creek under the various mitigation scenarios being investigated, but comment letters on the DLA indicated the agencies continued to believe that a comparative stream analysis would have provided better information for this purpose. Steve stated that Chugach acknowledges this as a continuing dispute but has no intent to pursue additional studies. He asked if there were any further comments or clarifications on this issue, and the meeting attendees offered none.

Modeling scenarios

Another identified area of disagreement related to the instream flow study was the range of modeling scenarios included in the study. Steve Padula explained that commenters indicated displeasure that only five modeling runs were presented in the study report. He explained that Chugach is not opposed to conducting additional modeling runs, just that it did not intend to expand the number of scenarios for the study report itself (in the interest of being able to finalize the report). He noted that in Chugach's view, one of the important outcomes of the instream flow study was having a set of agreed-upon models, and that the models were now ready to use for additional modeling as desired by the Instream Flow Review Team; therefore, Chugach does not view this as a substantive dispute.

A discussion ensued about additional modeling scenarios of interest to the agencies. Phil Brna (USFWS) asked what level of effort would be required to complete additional modeling runs involving releases from the lake only, with no diversion from Stetson Creek. John Morsell responded that it would not be difficult, and would take only a few days to complete. Burke Wick (Chugach) confirmed that Chugach was open to the idea of having the instream flow study contractor conduct additional modeling, adding that the Instream Flow Review Team just needed to come to agreement on which additional scenarios they would like to see run. Burke noted that the modeling output would be provided but that there would not be another large report.

Jim Ferguson (ADFG) clarified that ADFG's original point in its DLA comments was that a number of potential engineering alternatives were evaluated in the DLA, whereas the scenarios modeled for the instream flow study covered only a relatively narrow subset of these. Jim added that at this point, Joe Klein (ADFG) has indicated he feels he has enough information to make an instream flow recommendation; nevertheless, ADFG would find additional modeling runs very useful.

Steve Padula asked how many additional modeling runs were being considered. Phil Brna stated there was interest in evaluating two lake-release-only scenarios, with releases of 10 cfs and 30 cfs, respectively. Dave Blanchet suggested it would also be useful to model scenarios that divert a greater amount of Stetson Creek flow into Cooper Lake. After further discussion, the meeting attendees agreed that this would be an appropriate topic for discussion at the afternoon's Fish Habitat Working Group meeting.

Species of interest

Steve Padula explained that there currently appeared to be a difference of opinion as to which species should have been evaluated in the modeling conducted for the instream flow study report, and that interest in sockeye was sparked by the fact that the fall 2004 fish survey in the creek documented over 200 sockeye in the creek (a marked departure from past observations). Steve noted that the Instream Flow Review Team had agreed on the species and lifestyles of interest that would be evaluated in this study, and spent a considerable amount of time developing corresponding habitat suitability criteria to use in the modeling, but that these had not included sockeye. He explained that Chugach felt at this point that it was not necessary to delay completion of the final report to add analysis of another species; however, Chugach was not opposed to some additional analysis as a follow-on to the study, if the Instream Flow Review Team agreed this would be worth pursuing.

Dave Blanchet stated that given the abundant presence of the sockeye in the creek this fall, it seemed very important to evaluate potential habitat for sockeye in the creek. Larry Peltz (NOAA) suggested that the only additional analysis needed would be to calculate cumulative temperature units to make sure that sockeye fry would emerge at the proper time of year; he noted that sockeye would not rear in the creek in any case. Dave Blanchet asked whether sockeye spawning habitat was already accounted for, and John Morsell replied that habitat suitability for sockeye spawning was almost identical to that for coho, which was evaluated in the study. John noted that a discussion on the potential habitat benefits for sockeye had been added to the report, but he explained that at the time the report was being prepared, he had deemed it would not be in keeping with the collaborative nature of the study to unilaterally add sockeye to the list of species evaluated in the habitat modeling for the study report. John added that all the necessary information is available to do the modeling for sockeye that appears to be of interest. Steve Padula reiterated that this type of additional analysis would be presented in brief technical memoranda, not included in the study report.

2003 in hydrologic context

Steve Padula explained that the recent set of DLA comments had indicated that there was a continuing need to place 2003 flows in a better hydrologic context of interannual range of flows that can occur on Cooper Creek. Steve noted that this comment was initially raised during review of the revised draft report (October 2004), when it was pointed out that the 2003 hydrologic data upon which the instream flow modeling is based were collected during a year that was drier and warmer than average; for some reviewers, this called into question the representativeness of the modeling results. Steve noted that the final review draft of the report incorporated an analysis of regional and historical climatologic and hydrologic information to help put the 2003 data (and the modeling results) into context. He added that Chugach believes this additional analysis is sufficient for this purpose, and that any further refinement would not affect interpretation of the modeling results. Steve stated that Chugach did not necessarily consider this to be a major dispute, and that Chugach was not inclined to have the HDR study contractor spend any time or effort on further climatologic analysis.

Phil Brna commented that he thought the additional climatologic analysis in the report looked fine. Dave Blanchet, however, noted that the USFS felt the streams used in this analysis were very inappropriate for the comparison, given that unlike Cooper Creek there was a significant glacial component to their hydrology. Dave also noted that the USFS felt it was inadequate to evaluate the climatologic context of the 2003 results on a yearly basis, as had been done in the report; rather, the analysis should have been on a monthly basis. Dave summarized that overall, the USFS took issue with the report's statement that 2003 was a low – but not extraordinarily low – water year.

Phil Brna asked how the results of the climatologic analysis would change the interpretation of the modeling results. John Morsell replied that it would affect the model's calibration, but noted that he thought R2 Resource Consultants, in their collaboration with the HDR study lead, had found a way to work around this issue. Margaret Beilharz (USFS) suggested that this topic be discussed at the afternoon's Fish Habitat Working Group meeting.

Socioeconomics of Cooper Landing

Steve Padula explained that comments on the DLA indicated commenters felt it was important for the mitigation analysis to include evaluation of potential socioeconomic impacts of a Cooper Creek sport fishery on the Cooper Landing community and Kenai Peninsula Borough; the comments also reflected interest in having these socioeconomic impacts addressed both from a perspective of past economic impact (i.e., the socioeconomic impact of not having Cooper Creek as a sport fishery) and for the future economic impact of either having or of not having Cooper Creek mitigation in the future. Steve stated that Chugach agreed that the socioeconomic aspects of the Project effects and potential mitigation alternatives were important to consider, but disagreed with some of the suggested approaches — particularly those involving an in-depth resource economics analysis, which would likely be very involved, costly, and time consuming, and not provide information that would substantively change the direction or outcome of the relicensing analysis or settlement negotiations. Instead, Chugach preferred to rely on existing information on the economic value of the sport fishery, as was being discussed in the context of settlement negotiations.

Steve Padula also noted that Chugach did not see the need for or benefit of analysis of past economic impact, which it felt was not relevant to the decision of relicensing the Project. In terms of future economic impact, Chugach's view was that the relevant comparison was of different mitigation scenarios (e.g., mitigation on Cooper Creek, off-site mitigation) versus the current condition. Steve noted, however, that Chugach questioned whether a meaningful economic analysis could be conducted given the small numbers of fish that would be expected to result from the Cooper Creek mitigation relative to the Kenai River populations as a whole.

Ricky Gease (KRSFA) noted that his organization had just completed a detailed economic analysis (draft report was in review) that would be made available to the Settlement Working Group and provide information to help address this issue. There was no further discussion on this topic.

Existing effects and potential mitigation effects on Dolly Varden

Steve Padula explained that some DLA comments expressed disagreement with statements made about effects of potential mitigation measures on Dolly Varden in Cooper Creek; the commenters did not believe there was sufficient evidence to support the statements to the effect that mitigation scenarios that attracted greater use of the creek by salmon and trout could result in increased competition and thus decreased numbers of Dolly Varden in the creek. Steve noted that this assessment in the DLA had been based on John Morsell's professional judgment and experience, and that as far as he was aware, John's opinion on this matter had not changed. John Morsell added that the revised draft of the instream flow report contained a substantially enhanced discussion on this topic. Dave Blanchet responded that these revisions to the report addressed the USFS's concerns; the report reflects the uncertainty involved and the existence of potentially competing interests. Jim Ferguson noted that ADFG biologists agreed that the report revisions were sufficient to address this issue, but added that ADFG would not agree to emphasize the potential for Dolly Varden decline in the mitigation analysis.

John Morsell recommended that the agencies review a recent report by Doug Palmer (USFWS) on the upper Kenai River Dolly Varden, which identifies discrete populations defined by

spawning location. Phil Brna mentioned that Doug Palmer had written the USFWS's DLA comments regarding Dolly Varden.

Desirability of offsite mitigation

Steve Padula noted that comments on the DLA and in settlement discussions have made it clear that offsite measures are a less desirable option than onsite mitigation for Cooper Creek impacts. Steve also noted that comments have indicated the current view among agencies that early-run chinook salmon are the fish that are viewed as gaining the greatest potential benefit from mitigation in Cooper Creek, whereas there is the feeling no offsite measures have been identified that would provide an equivalent benefit for these fish. Steve stated that Chugach appreciates the clarification offered by these recent comments, but added that Chugach remains interested in continuing to explore potential options for offsite mitigation. Steve stated that it appears all parties involved in the settlement negotiations agree it is appropriate at this point to continue developing information for both mitigation paths (offsite as well as onsite). Dave Blanchet stated that he did not think there were any concerns with continuing to look at a full array of options.

Terrestrial Resources

Project effect on terrestrial habitat and wildlife

Steve Padula explained that disputes on this topic revolved around comments from agencies that statements made in the DLA regarding Project effects on terrestrial wildlife (including some neutral and some beneficial effects) could not be substantiated by the existing data. In terms of Harlequin ducks in Cooper Creek, these comments were directed at statements in the DLA that any potential alternative flow regime that would be compatible with continued operation of the Project would not substantially change Harlequin duck use of Cooper Creek, and that the reach of Cooper Creek above the Stetson Creek confluence currently provides marginal habitat for Harlequin ducks and probably would under any flow regime. Similar comments also took issue with statements in the DLA that increasing flows in Cooper Creek would likely reduce habitat for moose and other browsing animals in the upper reaches of the creek. Steve explained that these statements came directly from the technical reports and were based on the researchers' professional opinion. He noted that Chugach plans to have the researchers revisit these statements to make sure they feel they have not overstated anything; modifications will be made for the FLA if needed, but no changes will be made if the authors do not feel changes are warranted. Jim Ferguson noted that ADFG was not inclined to put these types of potential effects on wildlife into the list of potential drawbacks of Cooper Creek mitigation alternatives.

Gary Mitchell (Cooper Landing resident) raised the issue of the potential effects of flow releases if they cause reservoir drawdowns in Cooper Lake. He explained that the concern was with regard to the seagulls that nest on the islands; these areas would no longer be islands at lower reservoir levels, and thus would be accessible to predators. Steve Padula responded that as stream flow alternatives not involving a Stetson Creek diversion are evaluated, these types of potential effects on other resources will be included in the analysis.

Brown bears

Steve Padula described this issue as based on comments by the USFWS expressing concern that any benefits to brown bears would be far outweighed by the potential increases in mortality associated with increased human-bear contact stemming from mitigation that resulted in increased fish numbers in Cooper Creek. Steve noted that Chugach does not have a substantive disagreement with these comments but acknowledges that these types of potential resource tradeoffs will need to be tracked during the course of the mitigation analysis.

Steve Padula asked whether there were any additional issues with regard to terrestrial resources related to Cooper Creek. None were identified by the meeting participants.

Cultural Resources

Steve Padula noted that some comments on the DLA expressed that the potential mitigation measure described in the DLA that involved placement of an interpretive sign in the Cooper Creek Campground was not necessary (if no cultural resources in Cooper Creek are being impacted by Project), and could have a negative, indirect impact to cultural resources in the creek by drawing attention to the area. Steve noted that Chugach does not view this as a dispute because it sought and appreciates feedback on the potential mitigation alternatives presented in the DLA. He stated that barring any additional discussion of this alternative in the context of settlement, Chugach does not plan to include this as a mitigation proposal in the FLA.

Steve Padula noted that other comments on the DLA also expressed concern that any mitigation that increases human traffic in Cooper Creek would present an increased risk to cultural resource sites near the creek. He noted that this was another area of resource tradeoffs that would be tracked in the mitigation analysis.

Steve Padula asked whether there were any additional disputes related to cultural resources on Cooper Creek. The meeting participants offered no additional comments.

Recreation and Visual Resources

Whitewater boating

Steve Padula explained that comments on the DLA took issue with how the Project's effect on whitewater boating was represented in the DLA; specifically, the comments reflected the view that the DLA overstated the findings of the whitewater boating feasibility analysis in statements to the effect that the Project appears to have minimal impact on whitewater boating opportunity in Cooper Creek. Steve reiterated that there was no intent on Chugach's part to misrepresent any of the findings of the technical studies. He added that the text of this section of the application will be revisited along with the other sections during preparation of the FLA.

Another disagreement raised with the DLA's discussion of whitewater boating opportunity related to the opinion that the DLA should have acknowledged impacts of the reduced streamflow regime on non-boating recreational experiences along Cooper Creek. Steve Padula explained that Chugach could not offer any resolution for this disagreement, because this evaluation was not included in the recreation or whitewater boating study plans. Cassie Thomas (NPS) suggested that the appropriate step would be for Chugach to simply acknowledge in the

FLA that possible effects of the Cooper Creek diversions on non-boating recreation were not studied.

Other

Steve Padula asked whether there were any disputes that had not yet been discussed. Gary Mitchell raised a concern with the potential impacts of increased summertime flows in the Cooper Creek on those people with active mining claims in the creek (including himself and David Rhode [also of Cooper Landing]). Gary explained that access upstream through the steep portions of the canyon was difficult enough under the existing flow regime, and expressed doubt that the upstream areas could be safely accessed if flows were much higher. Gary asked whether miners and fishermen would receive advance warning of increased flows and expressed concern that his business would be washed down the creek by the higher flows. Gary noted that his mining permit from ADNR currently allows him to work his claim from May 15 to July 15 each year, but that he is trying to get the permitted window extended to November. In response to Gary's concerns, Steve noted that this would be included among the list of potential tradeoffs considered in the mitigation analysis.

Closing

There were no further comments by the meeting attendees. The meeting adjourned at 11:15 A.M.