Sweetheart Lake Hydroelectric Project

2014 Wildlife Studies Work Group Meeting Summary

Friday, January 3, 2014 9:00 AM

Members Attending, Agency

Dianne Rodman, FERC
Dennis Chester, USFS
Ryan Scott, ADFG
Shawn Johnson, ADFG
Stephanie Sell, ADFG
Duff Mitchell, JHI
Jim Holeman, Holeman Consulting on behalf of JHI

Members invited but not attending:

Richard Enriquez, USFWS Sadie Wright, NMFS Barb Stanley, USFS John Matkowski, FERC Barb Adams, USFS Monte Miller, ADFG

Meeting Objectives and Agenda Items:

1. Review Wildlife Analysis

The following minutes are transcribed from the meeting.

Juneau Hydropower

Wildlife Working Group Meeting

January 03, 2014 09:00 A.M.

Mr. Duff Mitchell: I have Jim on the line, who's pretty much going to run the meeting. I just want to get some ground stuff done.

As with all of our working group meetings, this is being recorded. And what I'll do is I'll pay to have a transcript produced, and then I'll get that out to everybody.

But, what we have is, as everyone knows, we've turned in our draft license application and our preliminary draft environmental assessment.

And a lot of that with regards to the wildlife areas was--specifically came from the discussions and what not that we've had with our working group meetings.

But, the focus of this particular working group meeting is on the wildlife analysis or the draft project effects analysis that was coordinated with the Forest Service and initially with Kai with Cathy Needham.

And then Jim--Cathy had other contracts and other limited availability. So, we brought in Jim, who had been involved.

And Jim's a wildlife biologist by background and has had extensive work with the FERC processes for 30, 35 years.

So, Jim stepped in and helped out, coordinated and worked with Cathy. So, it was good teamwork. She was available to help out and get things squared away.

But, the conclusions and what not are Jim's analysis from the data more so than--I mean, that's where he took over was on the analytical side of it, where Cathy I would say was more on the data gathering side.

So, at this point, we can--I'll turn it over to Jim. I think he's had a couple conversations between Dennis and Jim. You guys have chatted a little bit.

So, what I'd like to do for the productivity of this meeting is to dive into the issues or the areas on the draft analysis. And then we can go from there.

I also sent out the draft wildlife monitoring plan that was in the PDEA documents.

I'm not really prepared to cover that today. I just wanted to make sure that everybody had it because there's so many thousands of pages in that entire document. I just wanted to kind of bring that to your attention if you hadn't seen that.

I'd be looking for whatever comments you could have on that, maybe not at this forum here today, but just wanted to

bring it to your attention so that we could improve that or any changes that you'd like to see on that. So, that's the reason why I included it in this morning's e-mail.

With that, I'll turn it over to Jim.

Mr. Jim Holeman: Thanks, Duff. Well, good morning, everybody. Hope everybody's starting off the New Year well and had a good safe holiday season.

Yeah, as we jump into this, this report really was prepared at the request of the Forest Service to meet their requirements to address project effects on wildlife.

So, I'd like to kind of start with when we get into comments talking--getting input from Dennis. But, really, we need to get comments from everybody because this report was almost verbatim cut-and-pasted into the draft--preliminary draft environmental assessment. So, all comments are welcome and desired here.

For ease, I think it'd be best if we kind of went through this by sections. I don't want to have to read everything.

But, if you have comments, if we go to a section, if you have comments, if you go ahead and state your comment, then we can have whatever discussion's necessary at that point about it.

And if it's not too disturbing, I'm going to be typing notes here. But, if you hear the clicking of my keys and it's

distracting, I'll go to the old-fashioned method of pencil and paper.

And I believe this call is being recorded, Duff. So, I can go back and check the transcript and make sure that we got the comments correct.

Mr. Duff Mitchell: Yeah, we'll have an audio, and then it's going to take a few days for me to get a transcript I quess. So, you'll have that if you need to. So, go ahead.

Mr. Jim Holeman: Okay. As a suggestion, we've heard Duff describe the project many times. So, I recommend we skip over project description, the introduction to this draft report, and the project description, and go straight into then the proposed mitigation protection measures and continue on down through the document that way.

Does that seem to work for everyone? No comment, so I assume that that does work.

Did I start to hear a comment there? Hard to tell sometimes on a conference call.

Anyway, so, first section is Section 2.1, the proposed mitigation protection measures. And again, I'd like to start this off by going to Dennis to see if he has any comments in this section, but really open it up to everybody at that point.

So, Dennis, what's your thoughts on this section?

Mr. Dennis Chester: I guess, I did turn some comments in through our channels. Have you not received those?

Mr. Duff Mitchell: No, Dennis, we haven't received those, Dennis. They're probably with Barbara trying to consolidate yours and everybody else from the Forest Service's comments into the official Forest Service, instead of having multiple departments or divisions of an agency. I think she's consolidating and putting them all together. But, no, I have not seen those, and neither has Jim.

Mr. Dennis Chester: Okay. Because I had kind of assumed that you had seen those. So, I haven't recently read back through my comments, stuff like that. So, it might take a little bit to get it all together here. But, you're wondering right now if there's comments on the mitigation measures?

Mr. Jim Holeman: Yeah, proposed mitigation and protection measures is the section we're on right at the moment.

Mr. Dennis Chester: Yeah, I'm just trying to follow along on the document here where I've got my comments. So--.

Mr. Jim Holeman: --While you're doing that, does anyone
else have any comment on this section, suggestions, whatever?

Mr. Shawn Johnson: This is Shawn Johnson with Fish and Game. I guess we're still in the process of reviewing and commenting on the [unintelligible] license application in the PDEA.

So, I don't know as far as today goes, I'm not sure we're really prepared to provide comments on this document. We will be providing comments when we submit our comments in a couple weeks on the PDEA.

Mr. Jim Holeman: Okay. So, back to you, Dennis. You have anything there or that you can share?

Mr. Dennis Chester: Well, I don't--doesn't look like I've got any--I'm having to go back and forth between two documents here because I didn't actually review the--I reviewed the PDEA first. And when I realized it was just cut and paste, I didn't go back through the wildlife document and make comments. So, all my comments are actually in the PDEA, which of course is slightly differently organized.

But, I don't see that I had any particular comments on the mitigation and protection measures right here. But, I think they come later. I think there are some more specific comments later in the document.

So, maybe we could just move on, and we'll get to them as I come across them.

Mr. Jim Holeman: Okay. The next section here is analysis of project effects and description of the analysis area.

And basically, what this is, is a description of the Sweetheart Lake basins, Sweetheart Lake, Sweetheart Creek

Basin, the habitats, the area of each habitat type that's present in the study area, and so forth here.

It's basically--it's establishing, what are the existing conditions within the basin?

So, again, I open it up at this point I guess for comments from anyone if they have any comments on this section.

Again, the primary purposes of our discussion today is to get your comments on this report so we can basically put some polish on it. And actually, we'd be putting the polish on the PDEA at the same time.

But, like I say, this report was prepared specifically for the Forest Service to meet their needs and assist them in preparing their 4E conditions.

Mr. Dennis Chester: Yeah, I guess the only comment I have, and it's not really something that needs to be changed or anything, is for a lot of projects like this, I see the--kind of some pretty arbitrary boundaries a certain distance from a ground-disturbing activity.

And I think that's pretty arbitrary from a wildlife standpoint. They don't really respect those boundary, don't--it doesn't have a lot of meaning from a wildlife standpoint.

But, any boundary you choose is somewhat arbitrary anyway.

I mean, I typically use watershed boundaries. But, that's

still somewhat arbitrary, so just a general comment.

Mr. Jim Holeman: Okay. Other comments on then the section that's providing the background or the kind of the baseline condition?

Okay. Moving onto the project effects analysis. This is broken down into separate sections, beginning with threatened, endangered, and candidate species.

The species that are mainly considered here are humpback whale, stellar sea lion, and the candidate is the Pacific herring. It was added in here because that was a species that was a candidate in--or is a candidate and wasn't really discussed itself [sp]. So, it was added in here.

This report was prepared--National Marine Fishery Service--excuse me. My other phone started ringing there.

What was I--where was I? Okay. Stellar sea lion has been delisted but is still protected under the Marine Mammals

Protection Act. So, really anything that we say about mitigation measures still apply.

Mr. Dennis Chester: Yeah, actually, they have not been delisted yet. They're in the process of looking at that. But, they have not come out with that as a final ruling.

Mr. Jim Holeman: I have an article here. Actually, it's a press release from National Marine Fishery Service that said it was delisted October 23rd.

NOAA removes stellar sea lion from endangered species list --act list. This is a publication or a press release from NOAA.

Mr. Dennis Chester: Okay.

Mr. Duff Mitchell: There may be a time--sometimes, when they do those delistings, Dennis, maybe kind of correct, but they don't do it that day, but it's, like, within 120 days or whatever it is.

It's not a--usually, it's--from what I understand, there's a period of lag time from when it's issued to when it's affected. Does that make sense, or maybe that's the reason why.

Mr. Dennis Chester: Well, usually, they publish a notice in the Federal Register. And it says they're--and as far as I know, this is what they published is that they're considering doing this, and they'd like folks to comment on it. And then they'll publish a final rule.

Mr. Jim Holeman: Yeah, well, in the interest of this project, it's probably irrelevant whether it's delisted or not because it still receives the same type of protection under the Marine Mammals Protection Act.

Mr. Dennis Chester: Well, it would make a difference as far as consultation with NMFS.

Mr. Jim Holeman: Yeah, that's true. That's--.

Mr. Duff Mitchell: --Hey, Dennis, just--I just pulled up the National Marine Fishery's Website. And it says the final rule to delist the Eastern DPS of the stellar sea lion. And Federal Register citation is 78FR66139 dated 11/4/2013.

I haven't opened up the--to see what that says on the Federal Register. But, it looks like the final rule has in fact come out.

Mr. Dennis Chester: Okay. Great. Yeah, I guess I missed that, something more I'll have to add to my own.

Mr. Duff Mitchell: I'll send you the link.

Mr. Dennis Chester: Oh, I've got it. I'm actually looking at the site. I'm not seeing that one yet. But--.

Mr. Duff Mitchell: --But, I think from Juneau

Hydropower's point of view and from all intents and purposes
with regards to wildlife, even if it's delisted, it's still
protected.

And we're still going to take the measures that we have---we're not backing down on any of the measures or any of the agreements that we have already set in place.

And I think, for our purposes, it doesn't have an effect, except for maybe, like what you mentioned, as far as the consultation.

But, it's our--what do you call--desire or whatever to keep--we'll keep consulting with National Marine Fisheries as

long as they'll keep consulting with us because we want to do the right thing for the species.

Mr. Dennis Chester: Okay. Yeah, that sounds great. No, I hadn't seen that the final rule was out. And I'm glad you guys pointed that out to me. That's helpful.

Mr. Jim Holeman: Okay. There's a table in here that's the threatened and major candidate species [unintelligible] Fish and Wildlife Service.

There are no species the [unintelligible] Fish and Wildlife Service that are likely to occur in the project vicinity.

And then I already mentioned those that are administered by National Marine Fisheries.

Are there any other comments there as we get down into the specific species, beginning with the humpback whale?

Mr. Dennis Chester: Yeah, could you--I'm having trouble going back and forth between documents. Do you--could you give me some page numbers?

Mr. Jim Holeman: Okay. Page 17 of the wildlife report. Hopefully, our page number are the same.

Mr. Dennis Chester: Well, yeah, and actually, like I said, my comments are in the other document. So, I'm trying to figure out where that is in the PDEA.

Mr. Duff Mitchell: Yeah, and, Dennis, there is a lot of cut and paste. I've tried--we've tried to--we use technical editors. But, we tried to--one of the first round of comments that we got was that maybe we synthesized information and didn't use exact information that came out of the wild--not just the wildlife, but any report.

And so, we tried to use the author's language wherever we could just because then it would have no discrepancy in interpretation and/or how it was presented.

That's what we tried to do. It wasn't perfect. But, you're right. You're going to find in the PDEA, a lot of this language was exactly the same as what came out in the--not just in this report, but in other reports.

Mr. Dennis Chester: Yeah, and I guess the first comment I would have is that—is probably—it's not incorrect, but it's not necessary to cut and paste the whole biological evaluation into the PDEA.

The EA is--and I certainly welcome Dianne's comments on this, too. And I'm not sure what their process is.

But, we require a biological evaluation to make sure that we look at the effects for these species. But, not all of them are going to have effects or substantial effects that would make it an issue under NEPA.

So, what we typically do is I've got my biological evaluation that shows that we looked--we took that hard look at these species.

But, if it's not really pertinent to the environmental analysis document, then it doesn't need to be included in there.

So, it allows you to make your EA a more concise document if you just kind of summarize or bring in the important points or--and then you can refer to the biological evaluation and your--it helps keep your EA concise.

I don't know what FERC is looking for in this respect.

But, that's kind of how the Forest Service does it.

Ms. Dianne Rodman: Well, I'd like to have all the information analysis and conclusions in the filed license application.

If you would like to just refer to the appendices, that would be okay. But, especially, with things like mitigative—excuse me—for things like mitigative measures, we want to be very, very clear that we understand what JHI is proposing.

Mr. Jim Holeman: Okay.

Ms. Dianne Rodman: And actually, I don't mind a little verbosity in a license application. Our EA, of course, is going to be something else.

But, it's--I'm kind of a belt-and-suspenders sort of person sometimes.

Mr. Jim Holeman: Yeah. Okay.

Mr. Duff Mitchell: Jim, you're laughing because you
always wear belts and suspenders.

Mr. Jim Holeman: Well, I wore belts. Then I went to suspenders. And now, I'm back to belts.

No, that's because I gained weight, and now, I've lost weight. So--.

Mr. Duff Mitchell: --Yeah, no, good for you. You looked
really good when we saw you in January.

Mr. Jim Holeman: Thanks.

Mr. Duff Mitchell: Or, was it December? I'm sorry,
December. I'm off a month.

Anyhow, so, what I'm hearing is a couple different theories of thought. Dennis would like to see a more concise and less--and more specific on the species that have more impact or--and I'm hearing that Dianne isn't opposed to having more than less. Am I summarizing it correctly?

Ms. Dianne Rodman: I think so, especially since there are some species that—like, for instance, management indicator species that—or, if you go down to Pacific Northwest, some of the survey and management—managed species that the commission

might not normally get excited about, like an aquatic lichen or something.

But, if the Forest Service has to worry about those and it might affect your 4E conditions, then we worry about them, too.

Mr. Dennis Chester: Okay. Yeah, like I said, I don't think it's incorrect to include it all in there. So, it's probably okay as it is from what I'm hearing. That's what FERC's fine with.

So, it's just--from my standpoint and from the Forest

Service, general operating standards I guess or whatever, it's

kind of in--it's in the BE. So, it doesn't necessarily have to

be in the EA as well.

And it--certainly, if it's important in the EA, then it should be there. But, not everything is.

But, it's not incorrect to include it. So, I'm not going to--it's not a major issue.

Mr. Duff Mitchell: Okay. Well, I appreciate the perspectives from both of you because Jim and I have to rewrite this. So, we'll keep that in the mind as--we'll try to be salient. But, then if it needs to be, we'll reference it and also lean toward including more than less, as Dianne's kind of guided.

Ms. Dianne Rodman: Also, I think you started to say something about you had a call from NMFS a few weeks ago, and then you got sidetracked.

Mr. Duff Mitchell: You talking about me? No, I haven't got a call from Sadie from NMFS. I got an e-mail, wasn't available for this meeting. It was an automatic reply.

I haven't talked to Sadie since we filed the documents.

And she did not show up at our--.

Ms. Dianne Rodman: -- The December meeting, yeah.

Mr. Duff Mitchell: Yeah, yeah.

Ms. Dianne Rodman: Well, that's a pity.

Mr. Duff Mitchell: Well, I will try to redouble after she gets back the 6th, just to see if she has any comments.

And if she has an e-mail that needs to be for the good of the order, I'll ask her if she can--I'll try to share that with everybody. I'll try, though.

Ms. Dianne Rodman: She might hold off until her formal comment letter.

Mr. Duff Mitchell: And that very well may be. She's probably, like everyone else, going to get it in at the--you know what I mean.

I think the Forest Service--I was going to say, and the Forest Service is trying to get their documents in a little bit

early only because I think Barbara's retirement date is prior to the deadline date.

So, go ahead, Jim.

Mr. Jim Holeman: Okay. Anyways, as we scroll down through this section, you'll see that the issues related to each of the species are addressed here, for example, construction noise, the effects on humpback whales and stellar sea lions.

And then there's a conclusion there that we've included as well.

If there's any comment on that section, I'd appreciate it.

Mr. Dennis Chester: Yeah, I guess, Jim, just I think there's a number of comments. And I'm going--I found it in my document here. And there's a number of comments I think are just probably more editorial in scope.

And so, I'm not going to bring those up. I'm going to try and focus more just on the bigger conceptual kind of things, at least for this meeting.

But, one thing I'll point out is--because it's--because I was confused about this, too, is the mist haul out for the sea lions.

I believe--and I was guilty of this, too. I believe it's just the mist, and it's not Mist Island, because my

understanding is the haul out is actually not on Mist Island.

It's further to the east.

So, there's some wording there that probably should correct.

Mr. Jim Holeman: Yeah, I--that's my understanding as well, Dennis, is that Mist Island is a little bit--quite a ways away actually from the haul-out area. And so, your comment's very good.

Mr. Duff Mitchell: Yeah, unfortunately, we got--whoever first identified these sea lions back whenever, I think Mist Island's the closest geographical--what do you call--item that's of a reference point. Otherwise, it's the Port Snettisham haul out.

But, it's actually--needs to be better defined so people can visualize it when they're looking on the map because, you're right, Dennis. It's much further to the east from Mist Island.

And yeah, I think even maybe a map insert circling it may be helpful. It's a good point.

Mr. Dennis Chester: Well, I actually have some data from NMFS or that NMFS provided to me for another project that shows the dot on Mist Island. But, Cathy discerned that it's actually in a different location.

So, anyway, yeah, I don't want to belabor that point.

But, that--.

Mr. Jim Holeman: --Yeah, the--.

Mr. Dennis Chester: --Moving down into the noise, I guess that the question I had here, it's a pretty good discussion on the noise and the isoplasts and that kind of stuff.

I just--the main question I kind of came out with is you have identified a safety zone of 50 yards. But, that doesn't seem to match the isoplast information.

And so, I'm kind of wondering where that 50 yards came from. And is NMFS onboard with that 50 yards?

Mr. Duff Mitchell: Yeah, let me give you the background on that. There was a huge piling--pounding, piling project in Kodiak that had gone through--they're not laying cable, but they're running machinery and boats.

And what I did was, because that had already been agreed with by NMFS, Army Corps, and all the agencies in there, I basically took that agreement and used it because it was a good reference source of a similar-like noisy project. And that's where that came from.

Now, if someone says, "Hey, in this particular project, we want 65 yards," or whatever, what I feel that probably occurred, Dennis, is, like you said, whether you use an arbitrary zone of X or watershed or 100 yards--you know what

I'm saying? I think that was maybe a reasonable point that was picked.

Where I got that information from was from Western Marine and Construction, who does quite a bit of construction in the marine environment in Alaska.

And they're the ones that supplied me with this Kodiak document, which was very recent. I think it was a 2012 document of what they used and what has been bought off on in the past. So, I think that's where that came from.

I also want to let you know that -- go ahead.

Mr. Dennis Chester: I guess I would just recommend bringing that into the discussion here because it doesn't--the analysis doesn't--or that 50 yards doesn't necessarily follow from the discussion that's in there now.

So, a better explanation of where that 50 yards came from would be beneficial.

Mr. Duff Mitchell: That's a good point.

The other thing I just want to mention is that the Mist Island issue was heavily researched. We also got the dot on the map from National Marine Fisheries.

I started talking to fishermen, Gillnetters and others, and they basically were saying, "That's crazy," that the sea lions never are here.

So, I had a lot of conflicting information that—and Cathy had to weed it out. We actually interviewed fishermen. We actually tracked down people who had sightings there 15 to 20 years ago.

And it was only through that investigative analysis that we were able to more closely identify where those sea lions actually haul out.

But, again, I think the misnomer came from--or people just use the word Mist Island in the reference of the original reportings as a reference point. And then that reference point became the point.

And so, I'm just going through the -- we spent a lot of hours and a lot of research to try to ascertain the correct location.

So, we feel comfortable with where it is now, where we feel the haul out or the haul-out area is.

But, your point's well taken. I think what we could do is do a better either background on that or a better description of why it's at where it's at.

Mr. Jim Holeman: Yeah, to add on to what you're saying there, Duff, it's--with regard to the stellar sea lion, in conversation I had with one of the local fishermen up there, and I can't remember his name off the top of my head. I've got it in my notes.

But, anyway, in also looking at the numbers that are cited in the report, it seems that the sea lions tend to winter in the area.

But, by the time summer comes around, they're pretty much out of the area. Beginning about June, they're pretty much out of the area.

Does that seem to ring true for you, Duff?

Mr. Duff Mitchell: Yeah, in fact, I had one fisherman that said he's been fishing the Snettisham Fishery for--he's older than me--for his entire adult life and has never seen a sea lion, which was really counter to some of the reports.

And then, you're right. Through the investigation analysis, what we found is, of course, he's not seeing them because they're not around in the summer.

They're there in the winter, which then leads us to, well, if we're going to install the cable, we may have to do it more in--to completely avoid stellar sea lions, it would be better to maybe do it in more of a period of time prior to when we have all the fishermen out there that may just get in their way.

But, also, there may be a window where it has less or absolutely zero impact on the stellar sea lions.

That's the draw, the conclusion I got from the investigation and the interviews that we had with folks.

Mr. Jim Holeman: So, perhaps we could beef up that into the analysis as well then.

Mr. Duff Mitchell: Would that be helpful, Dennis, if they go into more of that elaboration in those interviews and stuff?

Mr. Dennis Chester: Well, I think--yeah, I think the timing of when they're there is good. I don't--I know part of what Fish and Game's sea lion biologist was concerned about was that there hadn't been many official surveys.

Now, of course, the fishermen are usually pretty knowledgeable about what a sea lion is. They're great friends with sea lions.

But, so, yeah, I think that would be good information to include and use in planning as far as when operations could be done that would be least impacting that haul out.

I think it's probably--I don't know what your guys' schedule is, but is something that might be fairly easy to kind of keep an eye on as you go back and forth as well during the course of this project.

I don't know that it--as far as counting actual numbers, it might--it can be a little challenging if there's a bunch there. But, just a presence/absence kind of observation could be done fairly quickly and without too much disturbance I would think.

Mr. Duff Mitchell: Yeah, I agree. But, the end state is that, once we lay the cable in, it's over with.

And so, what I'm leaning to do is not do it in the winter, which is not a good time to lay cable anyways. The weather's bad for trying to get exact GPS lay of a cable. You want to try to do it in better weather.

And so, hopefully, once the cable's laid, other than electromagnetic fields, there should be no impact on any of these species.

And then even electromagnetic fields we feel are minimal at best. I don't think it's going to impact them significantly or at all.

Mr. Dennis Chester: Yeah, I was primarily thinking of the timing of laying the cable.

Mr. Duff Mitchell: Yeah, now, there is going to be additional—we are going to—the other impact—and Cathy wanted it as the other impact is service and support logistics and moving a person down or pulling them out every two weeks or hauling in material and supplies during the operations of the—what do you call—after we're in operational mode.

And there will be an increase, although it's not very much, boat traffic. And those are the concerns that I think, during the construction, we're going to have more boat traffic in there in the winter than what is normal.

And--but, after we're in operations, it should--it's not going to be very much boat traffic in the winter. We'll probably--due to the crappy weather, you may just pick a day that it's good to fly down there and send supplies down type of deal.

So, anyhow, that's part of the analysis we've conducted with Cathy's understanding of the boat traffic as well.

Mr. Dennis Chester: Yeah, I think--based on my conversations with NMFS is I think it might be helpful to think about a 3,000-foot buffer on the haul out for boat and aircraft traffic.

Mr. Duff Mitchell: We can look at that. I think it's much easier for boats to stay on the--what do you call the southern shore of Port Snettisham, where the sea lions are not so much seen. They're more on the northern shore.

Mr. Dennis Chester: Right.

Mr. Duff Mitchell: Eastern-northern shore. On planes, we could do that requirement. The only thing that I always have with planes is I hate to always try to tell a pilot to do something that's unsafe due to either wind or weather conditions.

But, yes, I think even they could be advised for, "Don't do this, unless you absolutely have to for safety reasons.

Stay out of that area."

Mr. Dennis Chester: Yeah, I totally agree. And when we talk about some of the things for, like, goats, it's always safety first. But, then maintain this kind of separation.

Mr. Duff Mitchell: And I think that would be easy to implement, as long as the pilot--the safety, and we wouldn't get in trouble because the wind was wind shear or just being blown into the mountain type of thing.

Yep, sounds good to me. I mean, I think that's doable. I don't know whether it would be--I mean, I don't know what 3,000 feet does as far as the boat traffic. I can't remember how wide Port Snettisham is.

But, it's 3,000 feet or whether it's 2,500, so, do they have enough room to maneuver in Port Snettisham? I think we could live with that.

Mr. Dennis Chester: It's about a mile and a half to two
miles across there.

Mr. Duff Mitchell: Okay. Yeah, that's fine. I just can't remember—I couldn't remember off the top of my head how wide that was, pretty wide.

Mr. Jim Holeman: So, Duff, the way I understand this then is that you'll take a look at this as this buffer zone, look at the feasibility of doing that. And we can come up with language if it's feasible to incorporate that as a measure. Is that correct?

Mr. Duff Mitchell: Yeah. And I don't know, Dennis. Is that something that came out in your comments that are percolating up in the PDEA? Do you know?

Mr. Dennis Chester: I don't know that I specifically recommended that in my comments. It's kind of come--I've been--obviously, I work on more than one project.

And so, I've got another project that I'm working on down there that is directly across the Port Snettisham. You probably know what I'm talking about.

And that's why I was talking to NMFS about that specific haul out.

Mr. Duff Mitchell: Well, and I appreciate the insight because I don't have anything to do with those folks down there and don't even know what they're planning and try to--and I actually try to keep my distance from them.

But, the point's well taken. And I think I will talk to Sadie about that after she returns on January 6th. And I may even try to get her to--if Dianne is available, maybe even get Dianne to patch in with her. And we'll bring that issue up.

Ms. Dianne Rodman: The 6th? Not going to be in the-yeah, after that, yeah, I've got--just FYI, I've got Monday and
Tuesday, the 6th and the 7th, tied up in the afternoon.

Mr. Duff Mitchell: Okay. Well, she comes back the 6th, Dianne. So, I'll try to make it later on that week.

Ms. Dianne Rodman: That'll work. Okay.

Mr. Duff Mitchell: And so, I appreciate you bringing that up, Dennis. I think maybe we can--with a phone call or so, we might be able to get that locked in.

Mr. Jim Holeman: Okay. Another issue that was talked about or analyzed in here is—that was addressed in the scoping document I believe is potential for entanglement with the laying of a transmission line.

And we didn't go into a lot here because, basically, that transmission line is going to be a fairly large-diameter cable bundle and really stiff.

So, it's--the chances of entanglement are pretty nil. Is that your sense there as well, Duff?

Mr. Duff Mitchell: Yeah, there's two form of cable laying that—like in Taku, they laid three separate cables. They're individually phased. And we're bundling our three phases.

So, it's one entire bundle. And it's a thick diameter.

And so, the--when you have multiple cables, like three going up simultaneously, it could tangle in a fluke of a whale or whatnot, where the single cable, there's no chance of tangling because, if it does hit a species, a whale, a sea lion, or whatnot, if they bump into it, it's only one. It's not three that they could get their flippers or flukes tangled into.

So, the chances of entanglement are--I wouldn't say zero, but are pretty close to it.

Mr. Jim Holeman: Okay. And then you already touched on electromagnetic field, the effects of electromagnetic field.

Again, bundling the cable, there helps mitigate any potential effect there of EMF.

And once the cable is down laying on the bottom, it will become covered with sediment over a period of time. And so, the effects will be even further reduced.

So, really the conclusion we came to there is that there really isn't much of an effect of EMF on marine mammals.

Pacific herring was brought up in this document mainly because it's something that was of interest to the Forest Service. And it's a candidate species. And so, we went ahead and addressed this here.

In the application, I believe it's addressed, the Fishery section. But, basically, the kind of conclusion we came to here is that there really aren't any mass spawning activities of Pacific herring in Gilbert Bay area.

They may occasionally be present and may occasionally spawn, but no large numbers spawning [unintelligible] areas.

So, any comment on that section? Anything you want to add

Mr. Dennis Chester: Yeah, this is Dennis. I'm not sure FERC does theirs. We don't address candidate species under ESA because they are not listed. We address them as a sensitive species.

So, that's just a simple put-it-in-a-different-section kind of thing.

The only other comment there I had was that there's--I guess in the cut-and-paste process, there was a lot of duplication, lot of deleting need to be done there, at least in the PDEA. I'm not sure right off hand if that's in the analysis as well.

Mr. Jim Holeman: [Unintelligible] there's a lot of redundancies there from cut and paste that we could probably reduce that.

Mr. Duff Mitchell: I'm sorry. I missed the point. Say that again, Dennis, the identification of the--I'm trying to under--I'm just trying to understand.

Mr. Dennis Chester: Well, in the section under Pacific herring in the PDEA, there's a lot of duplicated paragraphs. I guess it's just a function of the cutting and pasting or something that—just go through and delete a lot of duplicated information there.

Mr. Duff Mitchell: Okay.

Mr. Jim Holeman: Okay. Then moving on down into sensitive species, the sensitive species for the Tongass National Forest are Aleutian turn, black oyster catcher, dusky Canada goose, and Queen Charlotte northern goshawk.

None of these have Fish and Wildlife Service or NMFS status. Aleutian tern probably is not present. Black oyster catcher is potentially present, potentially nesting in the area. Canada goose, fall/spring migrants. And Queen Charlotte northern goshawk, potential presence, potential nesting.

So, no effect on the dusky Canada goose is the conclusion we came to. May affect but not likely to adversely affect on the black oyster catcher and goshawk.

Are there any comments on that section? Okay.

Mr. Dennis Chester: Well, I guess--yeah, I guess I was getting kind of confused. Maybe it was just by the organization because I've got that you--I've got a no effect on goshawks here statement, which wouldn't be accurate.

Mr. Jim Holeman: Yeah, in this report, we're saying that, on goshawk, there may be an effect but not likely to adversely affect goshawk.

Are you saying that that is not accurate?

Mr. Dennis Chester: No, there's a statement here. Like, it's on page 30. It says, "Therefore, it is anticipated that

the project will have no effect on goshawks and would comply with forest plan standards and guidelines."

Mr. Jim Holeman: Okay.

Mr. Dennis Chester: So, bottom of the third paragraph under analysis of project effects.

Mr. Jim Holeman: Yeah, that's kind of an inconsistency
with the last paragraph.

Mr. Dennis Chester: So, I guess you just need to clean
that up.

Mr. Jim Holeman: Yeah, I think that just needs clarifying. Okay. I've made that note.

Anything else then on those sensitive species?

If not, moving on then to management indicator species.

And there we've got wolf, martins, bald eagle, black bear,

brown bear, ground creepers, hairy woodpeckers, red-vested sap

suckers, mountain goat, red squirrel, river otter, a lot of

them there, black tail deer, Vancouver Canada goose.

Any comment on any of those species I guess?

Mr. Dennis Chester: Under bald eagle analysis, there's a statement I think we--that probably just need to clarify a little bit. It says, "If active nests exist within the 2,000-foot shoreline buffer zone, a permit from Fish and Wildlife would be required."

That's not entirely correct. It kind of depends on how close it is in relation to the various activities under the management plan.

So, I think you just might want to look at that statement and kind of clarify it a little bit because I think, right now, we still need to do the surveys to know where the active nests are.

But, it's not a true statement that just because it would be within the 2,000-foot shore buffer zone that we'd need a permit.

Mr. Jim Holeman: Okay.

Ms. Dianne Rodman: Dennis, what page is that on?

Mr. Dennis Chester: Well, I'm looking--all my notes are in the PDEA. So, that's on page 281 of the PDEA.

Ms. Dianne Rodman: Okay.

Mr. Dennis Chester: I'm not sure if the other document—
it's the bottom of the second paragraph under analysis project
effects.

Ms. Dianne Rodman: Okay. Because I'm not seeing it in the project effects analysis.

Oh, wait a minute, "For purposes of the impact analysis, a shoreline buffer zone of 1,000 feet inland was used." So, I'm not seeing 2,000 anywhere here.

Mr. Dennis Chester: Oh, it's probably 1,000. Yeah, it's when the impact is within 1,000 shoreline buffer. I'm sorry.

I had something covering up the number. So--.

Ms. Dianne Rodman: --Okay--.

Mr. Dennis Chester: --Yeah, it's 1,000. I'm sorry.

Ms. Dianne Rodman: Okay. All right.

Mr. Dennis Chester: Because really that—I believe what you're using is the 1,000-foot buffer that the Forest Service—from the Forest Service—forest plan, excuse me.

And while bald eagles were a part of the reason for that 1,000-foot buffer, it's not--it's really not related to the bald eagle management plan and really has nothing to do with the need for a permit there.

So, just--yeah, just a statement that needs a little correction is all.

Mr. Jim Holeman: I'm not sure I understand what you're saying there, Dennis, so I could clarify this language. I'm missing--.

Mr. Dennis Chester: --Well, I guess, just the statement is, "If an active nest exists within the 1,000-foot shoreline buffer, you need to get a permit." And that's not necessarily true.

Permits are based on distances in the National Bald Eagle
Management Plan. And that--and the distance depends on the

activity and the visibility. And it's not a simple one-size-fits-all kind of thing is what I'm saying. So, that's an inaccurate statement.

Mr. Jim Holeman: Okay. Well, this was specifically for nesting. When you talk about activity, you're talking about foraging.

Mr. Dennis Chester: No, I'm talking about, like,
construction activities, human activities.

Mr. Jim Holeman: Okay. So, I believe that there's-without referring back up to the top of this document, there is
a statement in there. And, Duff, you could correct if I'm
wrong that there'd be preconstruction surveys for bald eagle
nesting activity.

And see, I think that's what we say here, too. So--.

Mr. Duff Mitchell: --Yeah, and Richard Enriquez isn't online. But, he said that these--their surveys are periodically updated. And they have to be within such a period of time. And so, it'd be a natural likelihood that, either within coordination with them or on our own, that we would need to update that prior to construction if the construction was taking place during a known eagle nest area.

Mr. Dennis Chester: Yeah, my recommendation is certainly to keep in touch with those guys and because they're the lead folks on that.

But, I was--I guess my point was just that that's an inaccurate statement and should be corrected.

Mr. Duff Mitchell: Okay.

Mr. Jim Holeman: Okay. Anything else then on the management indicator species, Dennis?

Mr. Dennis Chester: Let me scroll down here a minute and-yeah, I'm not finding anything major here. I mean, there's some minor stuff that you should see shortly I hope.

Oh, I guess, on the mountain goats, you talk about, "Goats are expected to be more closely associated with alpine areas during the construction seasons."

My understanding is you're planning to start the construction season at least in April. And the goats, they'll very definitely still be on winter ground in April.

So, I think that's an inaccurate statement that they will be in alpine during construction, at least totally; part of the season maybe.

I'm also still concerned that there will be a desire to work on the dam during low water, which is basically now based on past experience.

So, I guess I have concerns with that statement and basing a level of effect on that assumption.

Mr. Jim Holeman: Okay. So, what you're--go ahead.

Mr. Duff Mitchell: This was just Duff. I was just saying that our construction schedule is that we really, for the stability of the dam and whatnot, do not want to be working on the dam at this time of the year.

And that's why that Coffer Dam and the diversion and all that stuff is sped up so that we don't have the water effects while they're trying to construct it.

You are correct that there may be some activities in April, especially around the diversion tunnel and the tunnel itself up at the northern--or, I say northern, but higher elevation.

But, most of the construction is designed to take place during more of the warmer months.

But, you're correct that there could be some activities out there in April, especially getting ready and for the big push as weather gets better.

But, we're not going to be doing any dam work in the winter.

There may be tunneling work in the winter months, but not dam work because of the--oh, you just have to play around too much with the setup of the concrete and the stability and whatnot with temperatures.

So, it's more of a--needs a warmer period of time.

Mr. Jim Holeman: So, I'm hearing you, Dennis and Duff, is that there may be some overlap with the construction and the wintering goats and that we need to clarify that statement and make that analysis more accurate.

Mr. Dennis Chester: Yeah, exactly. If it's going to be tunnel work in April and the goats are not going to be hearing it, then just clarify that, or if there is going to be some activity.

But, right now, the way I kind of read it is, "We're not going to be working until the goats are in alpine." And that's not going to happen until at least mid-June.

Mid-June or so here around town, they're still right at tree line. I mean, they're following that snow up. But, that's how long it takes for that snow to disappear.

And, Ryan, jump in if you're feeling something different.
But--.

Mr. Ryan Scott: --No, I think you're on track, Dennis.

I'm just kind of waiting for you guys to finish up for some comments on goats and bears and things like that.

Mr. Dennis Chester: Well, I would say, go ahead and jump
in there.

Mr. Ryan Scott: Okay. All right. I just didn't want to interrupt. Sorry. Yeah, so, I think that there is some concern. Duff, I appreciate your comments about not wanting to work on it this time of year. That's great.

I do think that, as that construction schedule gets solidified, do articulate that well, especially with the mountain goat perspective.

And we'll be putting in written comments as Shawn mentioned earlier.

Something else that I thought about, both with mountain goats and bears, will be blasting and noise disturbance and things like that.

And there's no easy answers to those questions, but something I think we need to get out in the open and talk about and see if we can work around those things.

And that will--those are winter time activities. So, to hear you say, "Our plan is to do these things when soils are better," and stuff like that, that's good news. But, just articulate that.

And when I see--I can put that in my comments as well.

So, that's what I had mainly for--well, to continue a little

bit with the mountain goat stuff, I also appreciate some of the

earlier conversation about aircraft avoiding kidding areas,

mountain goats in general, things like that. That's good to

know.

That kidding thing keeps popping up. And I just want to emphasize that we've--you've all looked at it now. We've put out probability maps, habitat selection maps, where we think goats would probably use the terrain and the landscape around the lake.

For things like the kidding areas, though, we're going to have to go find those, or we have to make a decision.

Do we just assume that those are going to be kidding areas and act accordingly? And then--or, do we go out and look for them?

And as Duff and I have talked over the last several months, there is a plan to continue to fly mountain goats and to do surveys into the future. But, that's a little bit different than doing surveys, say, in April, May, and June timeframe.

So, that is something that we'll just have to--we'll have to figure out as we go.

Mr. Duff Mitchell: Yeah, and let me chime in here because
I'm thinking of perhaps solution oriented.

These kidding areas—and I appreciate, Ryan, after we got done with our meeting, I was confusing wintering areas with kidding areas. And they're two separate—from what I understand, they're two separate things.

But, is there a possibility that, at our expense of inserting cameras in that high-probability kidding area just to kind of determine if we're--what I don't want to do is I don't want to artificially impede construction capabilities.

But, by the same token, I've got to respect the environment. And so--.

Mr. Ryan Scott: --Sure--.

Mr. Duff Mitchell: --I guess my point is, where do we get some more definitive or more defined whether or not we are having an impact or not and what kind of measures we could take to come up with more of that--what do you want to call--defined --more clarity if we are having impact?

And I do understand that, just because maybe they kid this year, even though you've explained that mountain goats have some fidelity to their areas, they like certain areas, just because we go out there this year and put out cameras doesn't necessarily mean that we couldn't find them smack dab in the middle of construction.

Mr. Ryan Scott: Right. Yeah.

Mr. Duff Mitchell: So, I understand that possibility is out there. But, I'm just trying to, in my mind, rationally figure out, where can we come up with--I mean, if I can completely avoid kidding areas and flights, that would be ideal.

Like with the stellar sea lions, I think that's really easy for us to just buy off and say, "No problem." But--.

Mr. Ryan Scott: --Yeah, no, I agree with that--.

Mr. Duff Mitchell: --For the goat kidding area, not only does that impact construction it looks like, but it could also impact future fish hauling operations with helicopters.

Mr. Ryan Scott: Sure.

Mr. Duff Mitchell: And I think, for all of us, we need to find a workable solution or at least a pathway for a workable solution.

Mr. Ryan Scott: I agree totally. And I think that we're already—my comments are mainly I think we should just—we need to make it clear that, while we've mapped out the drainage in the basin for probably goat activity, we don't know specifics, like I think kidding areas are on kind of a different level. We don't know that scale of information.

Having the cameras out on the lake is a great idea, just similar to what we did last summer for bears and things like that.

And I think that's a good way to do it in addition because we don't have to be there all the time. We don't have people going up and down those cliffs and the hills and stuff like that.

I also think that we should consider, when we get into the April and the May timeframe, going down and looking.

And we're--we can do that. We're prepared to do that.

And I think it's just something we need to--it's a statement that--yeah, it's just something that we need to work through as far as if we can figure out if they--one of the big questions stuff keeps coming up is, how many goats actually stay in there if they stay in there at all?

We know they're there during the summer. We know they're there in the fall, at least at the high alpine areas. But, this would be another attempt. And I think we can work through that.

My comments are mainly focused on that we really don't know-we don't know where those area--the kidding areas are, if they exist in the basin. But, I think your approach to it is fine. It's just we need to say we don't know where those places are. And this is something that we will be working on.

The avoiding the areas with helicopters and overflights, that's great and pretty standard stuff. And with the recognition from everybody involved in this, if the weather's bad, safety is always primary, period.

So, it's just one of those things I think we need to identify as a data gap. We don't know where those kidding places are going to be. But, I think we're already focused on

avenues to figure them out and then work around them as best we can.

Mr. Dennis Chester: And I--excuse me. I guess for the purposes of this document, I'm going to recommend we make some assumptions since we won't have that data.

And that is that--.

Mr. Ryan Scott: --Sure--.

Mr. Dennis Chester: --We have the Fish and Game's map that says, "This is good winter habitat." And based on my knowledge of goats, if we have goats that are wintering there, nannies in particular, they're not going to go around the other side of the hill to have their kids. They're going to do it right basically climbing up the hill.

So, my assumption is that we would--or my recommendation is that we assume that, where that wintering habitat is, that I guess band of area, subalpine band between the tree line and the alpine where they kind of tend to kid would be our best estimate at this point of where kidding habitat is.

And I'm all for surveys to figure that out better. But, like I said, we won't have that in time for this analysis process. So, I think we need to assume that those goats are there and using that habitat for impact analysis at this time.

My--I guess the concern I have about surveys--and I don't want to discourage them at all, but I thought, Ryan, you and

Cathy had had some discussions and attempted to kind of try and figure out how to do that with limited success.

So, maybe you could update me on what your thoughts are or plans are there.

Mr. Jim Holeman: Yeah, let me jump in here. It seems to me like the most productive thing to do at this point in time and my recommendation would be to focus the discussion on protection measures for the wintering and kidding areas that are defined by the habitat mapping and the modeling that has been done.

It's very difficult to prove absence. Proving presence is much easier. It's next to impossible to prove absence.

So, by focusing discussions on what's needed to protect those areas is going to be more beneficial to the project and to the analysis at this point in time.

Mr. Ryan Scott: This is Ryan. I don't disagree with you, Jim. And I think that's what I heard Dennis say as well and what I'm adding as well.

I think that the steps and the measures that are laid out are a good way to move forward with that.

And then if we have an opportunity to try to nail down some of these areas where we can stay away from them, increase our sensitivity to those areas, that's great.

But, I think that actually Duff and you and Dennis's take on this, looking--using the habitat selection map and the important wintering areas and then what's already laid out as far as avoiding those areas is a good place to be.

Mr. Duff Mitchell: Yeah, and unfortunately, Ryan, I'm trying to look up that actual map itself to see where in fact we have any issue--issues.

I mean, further down the lake, maybe with enough feet distance, we're out of the area.

But, the sensitive area for construction is obviously at the dam site location and where that tunnel pops out and where we have to install the diversion. It's in the same immediate area.

So, I don't have the map pulled up. I've been trying to pull it up. But, off the top of your head, how much of an impact area do we have on seasonality of construction?

Mr. Ryan Scott: As long as you--if we stick with the not operating in wintertime, I think we'll be okay. The rub is going to come in those transition periods when we're coming out of winter into early and mid-spring I would say.

Some of the highest probability scores for the mountain goat habitat is right there at the outlet of the lake.

And one way to look at it is I suspect you're going to know if you're--once you really get moving on construction.

And then we're going to have to--I mean, we need to have-obviously have some thoughts in place before you get to that
point. But, that's--Jim's right. It's hard to prove absence.
But, I suspect that'll be a case in point.

But, that would be the primary area that I think we will run into potential—I don't want to say problems because I don't think it's going to be a problem. I think that that's just where we potentially will see the actual overlap of construction with goats down low near the lake.

That north side of the lake is kind of lit up all along the shoreline. But, as far as high probability of use during the winter months, and then it increases dramatically down by the outlet stream.

Keep in mind, however, that this map is developed using different kinds of variables and has not been [unintelligible] with marked goats or even conclusive goat sign.

So, it's a little bit of a mathematic exercise at this point.

Ms. Dianne Rodman: Ryan, you're talking about Figure 8 on page 41?

Mr. Ryan Scott: Yes, ma'am, I am.

Ms. Dianne Rodman: Okay. Yeah, where you have all that moderately high and maybe a little bit of high--I'm not sure.

It looks like moderately high on my screen. Well, no--anyway, yeah, I'm seeing it right down at the outlet.

Mr. Ryan Scott: Yeah, yeah.

Mr. Dennis Chester: I think Duff made a good point that it's not just construction. It's the fish hauling, too, which we need to make sure we get in the analysis for goats.

I'm not sure if I--I don't remember seeing that. But, it's been a little while since I read it. But, we need to address that aspect in the goat analysis as well or make sure it's in there. It might be.

But, so, yeah, it's helicopters in the wintering and--because I'm thinking that the fish hauling is going to happen in--prior to June.

Mr. Duff Mitchell: Oh, yeah, no, it's breakup. It's--it could be anywhere from May 15th to the first week of June, which is right when that potential kidding could occur.

Now, because we have no way for the fish to leave, maybe they could be artificially stalled. But, then we run into fisheries issues, where the timing and their typical getting out to the sea at the right time for feed and other lifecycle—in other words, we could be creating second—and third—order effects by delaying those sockeye from getting to where they need to be at their biological clock period of time so to say.

Mr. Dennis Chester: Absolutely.

Mr. Duff Mitchell: So, it's an enigma that I'm going to—
I want to either take some assumptions so that we have a
working solution now, and then we can adjust fire if we find a
huge problem, or secondly, I need to have some clarity, and I
think FERC needs to have some clarity for construction and for
operations to some regard at this point.

But, otherwise, we won't--I mean, we need to have--just from what I understand with the licensing conditions and from things underneath it, you have to have--has to be measurable and enforceable.

So, I'm just trying to get some clarity I guess on it.

Mr. Jim Holeman: Yeah, I can--I'll throw a suggestion out here for the fish transporting is that JHI would consult with the Alaskan Department of Fish and Game and Forest Service prior to transporting the fish to determine any potential effects on goats at that time or to avoid any potential effects on goats at that time.

That basically takes into consideration then the conditions that exist on that particular year. That's--again, that's just a suggestion. I don't want to--I'm not making a commitment on the part of JHI here.

Mr. Dennis Chester: Yeah, I don't know that we would know much different unless they're actually going out and doing surveys that—and I know the Forest Service won't be doing

them, but that we would know on May 15th on any given year sitting here in the office in Juneau or wherever.

I mean, I don't know what that would buy us I guess is what I'm saying.

Ryan, what--?

Ms. Dianne Rodman: --And what if the goats weren't cooperative and you had to miss an entire year because the goats weren't moving?

Mr. Ryan Scott: Yeah, I--this is Ryan. I don't think that it's going to be--I don't think it's that big of an issue.

I think that Jim's suggestion is a good one, mainly because it--correct me if I'm wrong. It sounds like there' obviously going to be people up in that area. They're going to put the fish barge in.

They're going to be collecting fish beginning, if I recall with the construction schedule, Duff, you're going to have people in and out of the area for us to run down and look to make that—to provide you something with—that says, "Did you see any?" No. And then we have to use the information we have at hand.

The other thing I would suggest is—and I don't know how difficult it would be. But, it doesn't seem like it would add a lot to what's the plan here.

Say we did see some goats in a certain area during that period of moving fish back and forth or moving fish down to the mouth.

Why not have the helicopter fly--weather permitting, of course--fly to the east and get some altitude and hug the south shore?

And those kinds of things can be written out as options to avoid goat presence on top of the 1,500-foot vertical and horizontal separation when applicable.

I mean, again, safety--I don't think that that's going to be a--I'm not overly concerned about it. I think that, if you guys have a plan to move these fish to the lower end, we're going to have people in and out of that area on a fairly regular basis.

If that means we jump in a cub and run down there and look, great. No problem. And then I can give you something that says I didn't see any, think you should go forward based on that, and information your staff will be providing.

Lo and behold, if they're there, then we try to come up with a route that the helicopters can take to accomplish moving the fish to the lower end on time and avoiding those goats as much as possible.

Mr. Dennis Chester: I guess, maybe for Jim, the first step might be to see--I don't have the GIS layer of the goat

thing that Fish and Game did. But, it might be worth throwing a 1,500-foot buffer on the level five and fours or something like that and seeing where that comes out.

I'm looking at the map, and it looks pretty narrow. Is 1,500 foot going to leave them anything--anywhere to fly I guess would be the first question I would have.

The 1,500 feet comes from a forest plan. So, I guess I don't think it's a hard and fast--in other words, I don't think it's a standard. It's probably more of a guideline.

So, there's probably some flexibility there. But, as thein the analysis, it should be at least addressed that we can't
fly the--we can or we can't fly the fish out of there and meet
the 1,500-foot buffer, for example.

Something like that should probably be at least mentioned in the analysis and let the decision maker decide whether that's suitable or not.

Mr. Jim Holeman: Okay. What I'd suggest at this point--.

Mr. Dennis Chester: --Habitat can be there. And that change [sp]. I can respect what Ryan's saying about going down and checking them out. But, A, I've got this forest plan that says 1,500 feet. And B, he's kind of making a long-term commitment there that I would be a little hesitant to make myself. But, I'm sure it would be fun to do.

Mr. Duff Mitchell: And the only problem I have--this is Duff. My only problem with the 1,500 feet is that, if you look at the map, and it's on page 41 of this--of the draft project analysis. It's Figure 8, page 41.

Where the fish-hauling barge is, is right smack in a red zone where it's high. And there's no way that the fish operations and, for that matter, the construction of the dam-if we had to wait to June 15th, it would cause both problems in construction possibly, and also, it would seriously impact the fish hauling operations.

Now, it's easy to pick up and fly south, and like Ryan said, get some elevation and have a flight path that minimizes, or the interaction over the red areas. You'd still be flying over moderate areas perhaps.

But, if you look at the distance of the red and yellow bandwidth on the lowest lobe of the lake, the outlet, that area in there is rough, but it's not impossible to put game cameras.

In other words, it's not sheer cliffs. It's more very steep sloped areas.

It would--it's not that--if you look at the distance of the lake across, and then it's about the same distance going up that northern shore, it would not be very difficult to put and install cameras in there just to monitor the situation as feedback.

I'm not saying that that's a mitigation measure. I'm just saying it's a feedback.

But, Dennis, I do respect the long-term analysis or the long-term commitment issues.

But, it would be difficult, 1,500 feet stay away from because then we--if 1,500 feet was the call, I don't know if we could actually construct and do fish hauling at all based on the distances and the predicted relative use on this map.

Mr. Dennis Chester: Yeah, and like I said, that's a forest plan number. It's a guideline, not a standard. So, I guess I respect what you're saying. You can't do it. You can't do what you're proposing to do without encroaching on that 1,500 feet.

So, I guess what I'm kind of getting at is, for the sake of this analysis, it's an effect that needs to be addressed.

And it to me is the--as a would-be analyst, I look at something like a construction of a dam, which is going to happen for a couple of years, and then it's done. That's a relatively short-term impact.

When you're going in there every year during kidding season with helicopters on a daily basis in perpetuity, that's kind of a whole different ballgame as far as the effects to that population.

At the very least, it needs to be discussed in the document as an effect.

I don't know what to recommend beyond that at this point as far as the effects to the project overall.

What--it's not really my decision to make other than to display the effects and let the decision makers decide.

Mr. Jim Holeman: Yeah, I--.

Mr. Dennis Chester: --Acceptable effect.

Mr. Jim Holeman: I think, Duff, you and I can talk about this and come up with an approach on how to address this project effect and incorporate some language there and maybe run it by Ryan and Dennis at that point in time.

But, we can end up discussing this over and over again here. Without having something to work on, it's going to be--we're not going to get anywhere.

Mr. Duff Mitchell: Well, I agree. But, I've listened to Dennis, and I've explained where the 1,500-foot buffer would critically impact construction and the fish hauling.

I've heard Ryan suggest that perhaps a flight path or a preferred flight path, even though it's not ideal--it's not perfect. There's a better flight path, and there's a worse--there's alternatives I guess.

And so, the best alternative flight path that--Ryan, you have--before we move on, do you have any other suggestions that

could help mitigate and/or monitor, or what could we do that you see as an action here that could help solve this?

Mr. Ryan Scott: Yeah, so, I think--I'm kind of coming back to trying to get to this to a place where JHI can move forward with the wildlife stuff.

And I fall back on the--we are making some assumptions there. We assume that this--the map that we provided will--is a--it's our best estimate on where mountain goats are going to occur different times a year.

I think we just have to potentially recognize in the--as

Dennis said, I would support his statement that we just need to
recognize that it is a potential impact.

Now, to monitor that impact, things that—and you and I can work on it, or you and I and Dennis, however we want to go forward.

Again, I don't--I'm not a decision maker on this. So, I don't know how it'll be evaluated.

But, the cameras are an idea. But, we also know that, early spring, putting cameras in that area are difficult.

Going down and looking to see, again, I think you're going to have eyes down there. You're going to have personnel down there.

Is it a long-term commitment on our part? It might be.

But, we do mountain goat surveys every year all over Southeast

Alaska, and moose, and those are pretty long-term commitments.

So, I'm pretty comfortable saying that we could go down and take the hour that it takes to get there and back and look.

It--so, I think those steps should be articulated in the document, Duff. That way, you get some traction moving forward.

Another option, as I mentioned, is flying the fish crate or whatever bucket or system you're going to have to move the fish down, again, if weather permits, flying to the east, getting some altitude.

It certainly is not the direct pick up the bucket and go over the edge and drop them down at the mouth. But, I don't see it as a--in my mind, it's not going to be a huge financial burden to have them fly an extra five minutes to the north and east to gain altitude to get away.

And then recognize that you just may not be able to accomplish the 1,500 foot. But, these are the steps that we'll take to avoid goats if we can and watch what happens, try to monitor what happens.

I think those are the--and those are the only options at this point, to give you the ability to move forward to address the Forest Service concerns, Fish and Game's concerns and then-

-and we can--I think we can articulate that well for this document.

Mr. Shawn Johnson: Hey, Duff? This is Shawn here. I haven't looked at the barge or the fish collection system in detail. And so, I don't know if this is a stupid suggestion.

But, would it be possible, once you collect the fish at the site there, just to move them to the east a ways if there are--if that is an important kidding area?

I mean, I don't know how that's set up, if it would be impossible to do, but if you can collect all your smolts and then you just move them a couple thousand feet up the lake and then pick them up with the helicopter.

Mr. Duff Mitchell: It's not in the current plan. And I don't know of the mortality of moving them in the water and the holding of them, how--Monty's told me before that sockeye are pretty skittish as far as handling.

And I don't know if you--if we could like take them in a holding tank, pump them into another tank, and then move them maybe on a boat or a vessel up 1,000 feet.

I don't know the answer to that, Shawn. I do know that they're not as hardy as pink salmon and others. And it would have to be well thought out so we don't have mortality by the extra handling. That would be the first concern that might arise. But, I don't know.

Currently, the barge is not set—currently, the barge is set up so that the tank is an integral part of the whole so that, as those fish are collected and captured, they're actually crowded into the tank.

The tank is then sealed and then lifted from the barge location so that they don't--.

Mr. Shawn Johnson: --Okay.

Mr. Duff Mitchell: And so, right now, it would be counter
to the design--.

Mr. Shawn Johnson: --Okay--.

Mr. Duff Mitchell: --That's tried and proven. But, yeah,
so, that's about what I can give you, answer, is it may be
difficult.

Mr. Shawn Johnson: Okay.

Mr. Duff Mitchell: One thing is that, and I don't--one think I did want to throw out there, the timing of these helicopters is not so much dependent on every day, every three hours. It's more like, are the fish ready to go?

So, what I was then visualizing is that, on maybe the bell-shaped curve of the run, so to say, the migration period, you would have less helicopter flights on the edge of the bell-shaped curve.

And then you would have multiple flights or whatever those tanks could hold.

From my talking with Eric Prestegard, those fish come and go within three or four days. It's not like they're--there is some bell-shaped curve where it spreads out. But, once they decide to go, they go.

Mr. Ryan Scott: I think that's important information to go into this. So, I would encourage you to do that.

Ms. Dianne Rodman: Yeah, I was envisioning, like, maybe one flight a day. And it sounds like it could be more or less.

Mr. Duff Mitchell: And it would also depend on how many fish we could get into the tank as well. And that's part of the design aspects that I don't have on the top of my head of how many fish are ideal for the tank.

Ideally, maybe even though they're in the middle of the run, maybe it is four flights a day because the tanks are designed to hold so many thousand fish per--they're pretty small fish. But, I just don't have that--I don't have that mathematical figured out at this point.

Mr. Dennis Chester: Duff, yeah, I don't think not meeting the 1,500 feet is a killer, a project killer kind of thing. It just does need to be addressed fully as an effect because it is a guideline in our forest plan.

And since we basically are not meeting it, we really need to address what we expect that effect to be.

So, and it just needs to be fully displayed. My suspicion is the decision maker will say, "Okay. That's what we have to do to do this project," which isn't to say we can't do like Ryan said and try whatever we can do to mitigate that effect.

But, there's just no way--I mean, looking at the map, there's no way you can go in with--and stay more than--1,500 feet or more from that habitat. And just display it. That's what the EA is for, displaying effects.

Mr. Jim Holeman: Yeah. Okay. I think that sounded like a pretty good summary right there, Dennis, of what we need to do in terms of our next steps here.

Unless there's any additional comments here with regard to goats, I think I heard Ryan say something that he had some comments regarding bear.

Mr. Ryan Scott: Yeah, in the interest of time, my comments aren't earth shattering by any stretch of the imagination. So, I'll just include them in the written comments that we'll be submitting through Shawn.

Mr. Jim Holeman: Okay. Anybody else have any comments with regard to bears or any of the other species here, the management indicator species?

I'm going to throw in migratory birds in here, too, as well since that's kind of the last section of this.

Okay. Not hearing anything, subsistence from the subsistence section?

Mr. Duff Mitchell: Yeah, I just want to jump back to the--Jim, can I just jump back to the migratory birds? I don't want to belabor it.

But, I do want to make sure everyone's clear that we're burying that transmission line from the powerhouse to the dock for removal of any avian hazard.

When we went out there in the spring, we did not see geese and whatnot. But, there was geese residue all over the beach. So, we felt it was pretty important from Juneau Hydropower's point of view to bury that.

And so, we considered that. And I think that's listed as a mitigation measure for migratory waterfall of burying that transmission line just be there's not going to be--something scares them, we don't want them crowded into or--we want to have their freedom of being able to flight without being entangled and/or electrocuted or whatnot.

So, I just throw that out. So, it's one of our--that's a protective measure or whatever you want to call--mitigation measure that we've--it's not cheap, but we feel it's the right thing to do.

It also helps the scenery. So, anyhow, drive it on, Jim.

Mr. Dennis Chester: This is--Jim, this is Dennis. I had one other comment on migratory birds. I guess the very last sentence talks about further mitigation measures need to be established.

And I guess the burying and the following APLIC--was there something else--that should pretty much address electrocution.

I mean, that's what they're designed for.

Was there some other issue that I'm not aware of, or it really wasn't fully explained there that's driving that concern or that statement?

Mr. Jim Holeman: Actually, that was--that's the sentence that came from the original draft prepared by Cathy.

I don't know what her thoughts were on that. I don't know if Duff has any background on that.

In terms of electrocution, a 138-kV transmission line, the risk of electrocution is pretty darn small.

If you look at the Avian Power Line Interaction

Committee's recommendations, basically, anything over 70 kV is
-the spacing of the conductors eliminates electrocution as a

risk. Collision is the big risk.

Mr. Duff Mitchell: Collision is a big risk. And it's whether you post your--whether you post the lines horizontally or vertically depends on the terrain so that you're not creating a net effect.

When I say net effect, I'm talking about, like, it captures, or it blocks or impedes, or it somehow disturbs the natural lift of the waterfall of the bird coming up off of the water.

And then sometimes, you route the poles--or not the poles.

You route the lines vertically versus horizontal. And it's

more terrain driven than anything else. And it also takes into

effect where they would be lifting off from.

So, obviously, waterfall is lifting off from Gilbert Bay heading north or south. And so, that's the primary routing. It's not east to west, but it's north to south.

And so, you take that into consideration when you're laying the formatting of your lines on the poles. That's one of the APPLIC considerations.

Mr. Dennis Chester: Okay. I guess, yeah, just that statement at the end just kind of hangs there and kind of leaves things open. I guess it might be good to clarify or provide further details there.

Mr. Duff Mitchell: I'm trying to look for that, Dennis.

Do you know what page that is by chance? I know you're

bouncing between documents. I just--.

Mr. Dennis Chester: --On that document, it's at the top of page 49 in the wildlife analysis document.

Mr. Duff Mitchell: Right. Okay. So, it's on 49. Okay.
Got it.

Yeah, and APPLIC is not--it's kind of like what you were saying before. It's more of a guideline than a standard because it's species and terrain dependent.

And what we planned on doing is—and we've already talked to the folks that are installing the construction of that line as to they have professional standards in which they need to benchmark that they followed those guidelines.

So, I think you're right, though. We can beef up this language here on page 49.

Mr. Jim Holeman: Yeah, I think that --.

Mr. Dennis Chester: --Yeah, just kind of a wide-open
sentence.

Mr. Jim Holeman: Yeah. Okay. Anything on subsistence?

Okay. I'm not hearing anything. Anything else you want to add, Duff, at this point? If not, I think we can probably adjourn.

Mr. Duff Mitchell: Yeah, no, I think this has been productive. We have some clarity where we need to beef up this and turn it around.

I just want to reemphasize to folks I'm under the gun to turnaround and file a final license. And so, I will be moving

as quickly as I can to resolve any and all issues and do my job, what I'm assigned to do.

I appreciate everybody's review of this. I look forward to the comments. And I can tell you that we're going to study them, work on them, and integrate them into the final document so that we can develop this project to do it in, quote, the right way.

So, our goal is to not ignore anything but try to address everything. So, that's our commitment.

Ms. Dianne Rodman: Duff, you said you were going to try to set up a call with Sadie next week?

Mr. Duff Mitchell: Yes, I will send her an e-mail and ask her--she's on leave right now. But, I will send her an e-mail prior to her coming back and asking her her availability toward the latter end of that week.

Ms. Dianne Rodman: Okay. Great. I sent John an e-mail also asking what his availability would be, in case he had any times that he was just absolutely unavailable.

Mr. Duff Mitchell: Well, why don't I wait until you get that back? And then I will send Sadie an e-mail message and then CC you and John on that same message.

Ms. Dianne Rodman: Okay. Great. I don't know if anybody else would like to be in on that call.

Mr. Dennis Chester: Yes and no. If you wouldn't mind at least letting me know when it's going to happen so I can-because I--yeah, I have an interest in that sea lion haul out for various reasons. So, it might be interesting to listen in at least.

Mr. Duff Mitchell: Sure. Ryan, did you want to be involved, or Shawn?

Mr. Ryan Scott: Just let us know when it is. And we'll
see if it works out.

Mr. Duff Mitchell: Okay. Fair enough.

Mr. Jim Holeman: Okay. I want to thank everybody for their comments and participation. I agree with Duff. This has been a pretty productive discussion.

And we'll do our best to address these comments. Looking forward to seeing comments on the PDEA.

Mr. Dennis Chester: Yeah, sorry I didn't have that already. I'll get them soon, at least before Barb leaves.

Mr. Jim Holeman: Yeah, yeah.

Mr. Duff Mitchell: I did talk to her. And she says—Barbara did say that the amount of comments—well, not the amount of—well, the amount of comments that she got were substantially less than the last go around.

And she said that she thought that this last one was a very large improvement. And she can--she was giving me the thoughts that it's a lot better document, and it's a good job.

But, obviously, there's small things that we're going to have to deal with in there.

So, I'm looking forward to them, too. But, I'm also pleased that at least it's--we're moving in the right direction.

Mr. Jim Holeman: Good.

Ms. Dianne Rodman: Great.

Mr. Jim Holeman: Okay. With that, I guess we're adjourned. Thank you, everybody.

Mr. Duff Mitchell: All right, guys. Happy New Year.

Ms. Dianne Rodman: Happy New Year. Bye.

Mr. Jim Holeman: Happy New Year. Bye.

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