Meeting Minutes

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Prepared for: Midas Gold Idaho, Inc. (Midas Gold)
Project Title: Stibnite Gold Project
Meeting Title: ESA Informal Consultation Meeting, Fish

Date: July 10, 2019
Time: 10 a.m.

Attendees:

Clayton Nalder, USFS	Dan Kline, Midas Gold
Piper Goessel, USFS	Gene Bosley, Midas Gold
Maria Shepherd, AECOM	Paul Leonard, BC
Johnna Sandow, NOAA	Aylin Lewallen, BC
Aaron Beavers, NOAA	Aditya Jani, BC
Jim Morrow, NOAA	Mark Miller, BioAnalysts
Erin Kennison, USFWS	Marde Mensinger, OEMR
Ally Turner, USFWS	Lance Hebdon, IDFG
Kathleen, USFWS	George Lynch, OEMR
Robin Armstrong, Nez Perce Tribe	Jinwon Seo, Shoshone Paiute Tribe

Discussion

Kline: [Introduction and summary of agenda items (Slide 3)]. We will have to shorten the suggested timeframes because several folks on the call must leave early; we will likely have to table Item 5 (Review revisions to the Effects Analysis Approach and PBFs/WCI Crosswalk Matrix) for another time. Before we start, Jinwon Seo to read a letter from the Shoshone Paiute tribe chairman.

Seo: [Reads letter from tribes regarding their concerns; a copy of the letter is available in the record. The tribes are looking forward to working with the Federal Agencies and Midas Gold on this project moving forward].

Fishway Operations and Management Plan (FOMP) Review and Discussion

Intent: To provide an overview of the FOMP and discuss preliminary comments with the group.

Kline: [Summary of consultation meeting goals and 5 objectives; see meeting agenda for details].

Nalder: Early on, to better facilitate organization of all the resources (especially for new folks or those not as familiar with the project) there was an ESA SharePoint site set up. My expectation is that for the next meeting, all the relevant information (meeting minutes, agendas, etc.) will be updated and everyone will have access to this. Ideally, each meeting would have its own subfolder with all relevant documents.

> **Leonard:** Okay, we will add that as an **action item**: update SharePoint protocols and contents.
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> **Nalder:** We should add a contact list as well.
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> **Leonard:** Yes, that is another **action item**: access for identified contacts. We will plan to do a final "refresh" so that latest updated information is available.

[Kathleen from USFWS joins call and Lance Hebdon (IDFG) arrives].

[Discussion of FOMP begins, Slide 4]

Leonard: A draft of the FOMP was sent out sometime last week (7/2 or 7/3), and with the refresh, will become easily accessible on the SharePoint site. We were not asking for formal comments by today; we will go through an overview. We would like you all to identify sections in the document that need further clarification and provide input on management measures. We will also finalize the date by which to provide the formal, written comments.

Leonard: [Slide 6, FOMP – Background]. From the beginning, in the Plan of Restoration and Operations (PRO), Midas Gold has proposed a tunnel to divert water around Yellow Pine Pit (YPP) during construction and operations and a fishway, to enable fish access to currently inaccessible habitats upstream. For more details on this, see the East Fork South Fork (EFSF) Tunnel and Fishway Design Report (cited in McMillen Jacobs (2018). That piece and the design document together would be the 30% design package which can be reviewed by the Agencies. Aaron Beavers is an engineer with the National Marine Fisheries Service (NMFS) (on the phone) who specializes in fishway design and evaluation and has been providing us with guidance. There is uncertainty associated with establishment of new fishway – questions such as how many fish will show up, how they will adapt, etc. An important component of the adaptive management plan will be a trap-and-haul option. This is a critical portion of the Biological Assessment (BA). Any comments?

Leonard: [Slide 7, FOMP – Related Submittals].

> **Nalder:** Paul, when you say 'SharePoint site' - there is a separate site that folks on the call do not have access to. Will have to find another way to get this information to them.
>
> **Leonard:** Will try and avoid duplication but still make sure everyone has access. I believe most of the Agencies present have access to the other SharePoint site, correct? Action Item previously mentioned will address this.
>
> **Leonard:** At the least all the documents on this slide should be made available to everyone on the call.

Leonard: Some additional modeling and analysis (McMillen Jacobs 2019; TM #11] was done to answer participant comments regarding hydraulic conditions experienced by the fish during passage; this information was sent out recently (7/9 or 7/8). Hydraulic factors were requested by NOAA at 4 different flows. [Discussion of other two documents on slide 7].

Miller: [Discussion of slides 8 and 9]

Miller: Re: last bullet on slide 9 – design of the adaptive management component, we will incorporate further material into the FOMP.

Leonard: We are separating out the engineering and the FOMP and adaptive management components; it is cleaner this way.

Miller: [Discussion of slides 10 – 12]. On slide 12 – in this diagram, water is flowing from left to right. The right portion is the entrance into the fishway for the adult population and is also the exit point for the juvenile fish.

> **Leonard:** To orient everyone some more, north is to the right. Note there is a temporary diversion and a permanent diversion embankment (to be discussed later).
>
> **Lewallen:** Worth mentioning that Midnight and Hennessy creeks will be re-routed so that their flow goes through the tunnel.
>
> [Question asked about length of tunnel and slopes]
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> **Bosley:** It is 9/10th of a mile. The overall gradient is 3.8%; however, this is not continuous. Most is at 4.5%, and there is a portion (less than 20% of the total length) which is at 1.5% gradient. All upstream approach and transition channels (headworks) are at a very-low 0.1% gradient.

Leonard: Other comments?

> **Beavers:** Earlier, when discussing Hennessy Creek, I had asked whether it was hydraulically connected to tunnel. At the time the decision was no. Is that option back in the mix?
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> **Bosley:** Paul is referring to the surface diversion going to the south, so that it enters the East Fork above the tunnel, vs. going north which would put the water downgradient of the tunnel.
>
> **Bosley:** The surface water would not enter the tunnel. First, it would enter Fiddle Creek itself (a short distance), and into the East Fork (above the tunnel). Around year 2 (possibly earlier), the water would flow into the northern diversion of the Fiddle DRSF. All the surface flow into Hennessy would enter the East Fork in a surface conveyance upgradient of the tunnel; this would be a slight benefit to supporting baseflow. Presently Hennessey creek enters downstream of stream flow confluence… There is water that escapes Hennessey via diffuse pathways. We are disconnecting that portion, which should have a water quality benefit. That is all for surface diversions. We do not plan to have a borehole presently but a surface to the south is definitely in the plan. We might want to borehole. That would only happen for pit dewatering. We also have the option of drilling radially into shear zone (this is all TBD).
>
> **Kline:** Alternative 1 is in the PRO, which has Hennessey Creek coming into the diversion via borehole. Midas Gold has put together an upgrade of that which is our modified Proposed Action (Mod PRO), and this routes Hennessy Creek to the south where it goes into Fiddle creek and eventually upstream.
>
> **Beavers:** What was the rationale behind that change?
>
> **Bosley:** There are many reasons, which we have explained in one of the NEPA RFAIs. It came down to a combination of not wanting to manage vertical inflow containing sediment into the tunnel and problems with management of the muck base. With the muck base left side of the tunnel, the access way is on the same side, leading to continuous wetting of the access way. This is not a good idea. If we are only talking about half an acre (or something small) of drainage not caught by the surface diversion plus a small amount of ground water (GW) in the Hennessey shear zone, this is more easily manageable. Discussion of cost and expense related to boreholes.
>
> **Beavers:** To summarize, currently there is no plan to hydraulically connect Hennessy Creek to the tunnel but that is an option to consider down the road?

Bosley: There is no plan (and will not be in the future) where the full flow from Hennessy creek goes into the tunnel. The only option we retain is to collect GW from the shear zone that underlies the drainage. Additionally, we would collect fault zone water plus a small pocket of SW that you cannot collect in the Hennessy surface diversion. If it goes to the pit, it becomes contact water which raises questions about water quality. We will not know all these details with certainty until sometime in the future.

Beavers: In other fish passage projects, sometimes stormwater runoff is part of a fishway project is the reason that I mention this. In that scenario, I look at how storm water components interact; they are mostly benign. Just want to make sure this is addressed in the FOMP.

Bosley: Are you referring to water quality and turbidity or something else?

Beavers: I am just making sure all the bases are covered; sometimes third-party reviewers will point out those aspects, i.e., was stormwater considered?

Kline: Aaron, can you define what you mean by stormwater? As it stands, there is an apex point where the East Fork, and Meadow, Fiddle and Hennessey creeks all come into the tunnel. I am not understanding what you mean by stormwater.

Beavers: I was using it as an analogy. What I mean broadly is anywhere there is a hydraulic connection with another water source.

Sandow: All of it can be diverted upstream? There could be GW infiltration coming into tunnel.

Bosley: GW generally moves into the Hennessy shear zone. The tunnel is not expected to receive much GW directly

Leonard: This is good discussion, all highly technical. Clearly there is a lot of interest on this. We should take this an **action item**.

Kline: Paul, what is the action item?

Leonard: Clarify the options for connecting Hennessy creek and addressing the GW we expect in the tunnel.

Kline: Does that help clarify things Aaron, and can you include that comment in your edits?

Beavers: Yes.

OEMR Question: To get a clearer picture, how far below the surface are we going? Can you give more information about tunnel depth?

Bosley: The depth of the tunnel is 470 ft; the implied shaft height at Hennessy creek is 270 ft.

Leonard: The technical reports contain all this information in detail. We have nearly 8 years of streamflow monitoring, with information contained in the Aquatics Baseline Report.

Kline: Let us get back on track to operations.

Miller: [Slide 13 – Fishway Design – Portals and Tunnel]

OEMR Question: The adult holding pool has upstream and downstream access, right?

Miller: Yes. We have a lot more information available, if folks need that.

Leonard: This slide is meant to provide a general overview, hence the isometric view. We have detailed engineering drawings available as well.

Miller: What would be the criteria for starting trap-and-haul?

Leonard: That is firmly within the purview of the adaptive management plan. We have a framework proposal for this.

QUESTION: What is the plan to track of number of fish going in and out?

Leonard: Via extensive monitoring; we will address this shortly.

Miller: [Slide 14 – EFSFSR Tunnel and Fishway Construction and Operation Timeline] Emphasis on the following: we are using a proactive approach. We essentially have a 12-year head start for the fish eventually going to the upper EF volitionally after restoration. Once the stream restoration occurs, we proactively use the tunnel to divert the high flow, so that we avoid potential damage to growing riparian vegetation during establishment of the restored stream channel. All the design information was provided by RioASE.

Leonard: The purview of the FOMP is critical here as we go from initial construction, design, and begin monitoring (we will learn how best to operate based on fish response).

Miller: Important to add: there are adults being planted above the current location of the tunnel, and they are spawning there. This is affected by availability of excess stock in the South Fork (just for Chinook).

Leonard: We have submitted records on how many Chinook were monitored each year.

Miller: [Slide 15 – Migration Periods and Stream flows] Emphasis on the following: we observed general periodicity for Chinook and Steelhead. We did not stagger the PIT tagged steelhead; shift only for the Chinook.

Hebdon: The shift in the Chinook shown here may be more pronounced than actuality.

Miller: [Slide 16 – Migration Periods]

Leonard: [Slide 17 – Adaptive Management]

Nalder: Aaron, based on what you have seen so far, are you comfortable with the design at the 30% level?

Beavers: This comes back to the reason we go down the adaptive management path. There are enough pieces that make this project out-of-the-box; I have approached this one differently than the typical project. If we can nail down the adaptive management piece, that will give us a clear signal regarding our approach. If not, then we switch to trap-and-haul. Overall, I am comfortable with the project approach, the adaptive management component is the reason why.

Leonard: Important to note: we do have diversion capability and have built in flexibility with engineering adjustments that can be made. But it would be very difficult to make fundamental changes to the fishway later, there is only one opportunity to construct the tunnel and fishway in the dry; before mining.

Bosley: I am hoping Technical Memo 11 will provide more information. I agree. The presence of a tunnel is impossible to change after construction. We can change a lot from a headworks perspective; a lot can be done in the adaptive management regime.

Leonard: The design of the fishway proper is according to NMFS standards. We have 3D modeling to show how hydraulic conditions should meet all the standards.

Kline: We will be sure to put together meeting notes from the past as well, that will provide adequate background and lead us into the operations component onto the SharePoint site (**action item?**)

Leonard: [Slides 18 and 19 re: types of monitoring and inspection mechanisms via PIT Tag Arrays and Video Systems]

Hebdon: How do we know when fish are coming in and going out? They may utilize that habitat.

Leonard: The untagged fish dropping down is harder to measure, but that is why we use video systems (2 cameras).

Miller: We will also have aerials and underwater cameras. We know that juveniles that go out of the upper EF are not PIT tagged.

Hebdon: How many are expected to be tagged? Downstream on the Columbia River up to the EFSFSR only about 10% of the migrating population are PIT tagged.

Sandow: There are currently no tagging efforts other than in Johnson Creek, is that correct?

Miller: That is right.

Nalder: Will there be PIT tagging of juvenile fish?

Miller: I do not believe there is a good reason to tag those fish. What would be the outcome of that other than just to document that they are passing through? If you had a question regarding survival through the tunnel, that would make sense.

Hebdon: I do not see value in tagging downstream juveniles.

Nalder: From 2008 to present, there has only been one year that we have not stopped adult fish upstream. From a population standpoint, what is happening to those fish?

Miller: I do not know if anyone has ever looked at that.

[Discussion about movement to Sugar or Johnson Creek]

Leonard: The purpose of the PIT tagging is to ensure that they are passing through the tunnel safely. It is not to investigate what is happening later in their lifecycle.

Leonard: [Slides 20, 21]. Would like to highlight one of the concerns with having a performance standard. Something like a 95% passage success rate may theoretically be an acceptable metric. However, if we only observe 6 fish in total attempting passage and 1 makes it through, we would be in violation of that standard. Having low numbers of fish makes things very challenging.

Miller: Are there going to be different standards from the services?

Leonard: A high passage efficiency and consistency in migration time would be the most important.

Sandow: We are aware of the potentially difficult conditions when these fish reach the EFSFSR the end of their migration and in poor condition. I am pleased to see that trap-and-haul is being proposed as an option.

Leonard: We have put together a plan just for that.

Miller: [Slide 22 – Adaptive Management, Implementation and Reporting]

Seo: Is there a presence of biofilm or algae along the 0.9-mile length of the tunnel? A biological dead zone? Or any other ecology happening in there?

Leonard: We expect to maintain the same water quality but obviously not the same full habitat complexity. It will have biofilms. I want to point out that this design is for passage. We do not want fish to spend an extended time in there. It is something we can address as part of the adaptive management plan. The bigger concern is: would bull trout hang out and live there and predate on other fish?

Kennison: I have a question regarding monitoring in the tunnel – do you have plans for video monitoring of conditions inside the tunnel?

Miller: I am not sure if video is the best option there. The better alternative would be drone flights (they are in very common use already).

[Gene talks about PIT tag detection arrays, arranging the antennas in both directions?].

Leonard: [Continue with slide 22] – we are designing to meet the meeting objectives for a safe, timely passage. If not, what adjustments need to be made? This is where the adaptive management framework is key.

Nalder: With the fishway inspection, are there key areas you would want an inspection to occur from a fishway and access way perspective? We are not talking about a typical way here.

Leonard: Aaron, can you give us suggestions? I can think of headwater, tailwater levels, flows through, different hydraulic conditions we can monitor to see if they match predictions.

Beavers: I am fine with the general monitoring methods we have discussed today.

Seo: Is there information I can share with the tribe? There should be a rationale for why federal agencies would allow a certain standard to be used or not.

Sandow: Mark you had mentioned we were looking for specific feedback about XYZ. For example, you inquired about the criteria for trap-and-haul, do FWS want bull trout tagged. Is it possible to put together specific questions you want NMFS and USFWS to provide a response to? We plan on providing comments on the various tunnel-related documents; however, if there are specific items you are looking for feedback on, please point those out.

Leonard: We are very much interested in specific comments. Our question is regarding the approach. Do we discuss first and then arrive at a general agreement or throw something out there for you all to comment on. We have looked at what happens at other fish passage facilities; our constraint (as mentioned before), we do not have that many fish.

[5-minute break]

2. Fish Protection Measures for EFSFSR Tunnel Diversion and YPP Pit Dewatering.

Intent: To review and discuss the draft TM and seek input for finalizing it as an element to be added to the FMP and considered in the BA

[Discussion resumes]

Kline: What is the timeline to get comments back?

Sandow: For us, it would be mid-to-late August. Mid-August would be the earliest (number of other projects we are working on)

Leonard: Can we get input from others who can get comments in sooner, say, next 2 weeks?

COMMENT: General agreement.

Leonard: How about July 31st? We should have these be on an ongoing basis. If something comes up during that time, you can give us a heads-up rather than waiting until the end to submit all comments. It will be more efficient that way.

Sandow: I agree with that approach. We can send the quick, internal comments your way as they come up; the more technical will take more time to prepare.

Nalder: An earlier slide said a TM was submitted on June 8th?

Leonard: It was released the same as time as the FOMP. A TM on Fish Protection Measures for EFSFSR Tunnel Diversion and YPP Pit Dewatering (BC 2019), June 2019

Lewallen: It was either on 7/8 or 7/9.

Leonard: [Discussion of slides 26 – 30]. Broad overview of project components (temporary diversion structures, embankment, fish barrier; graphic showing EFSFSR tunnel and fishway layout, timeline of diversion, salvage and the dewatering sequence.

Sandow: I have a question about the location of the exclusion zone. There is sometimes opportunistic spawning in the lower portion of the EFSFSR, in the stretch of river that would be dewatered below the YPP. I would think the exclusion point should be lower that what is proposed here, right?

Leonard: We agree and we would like to discuss exactly where that should be. What is the best structure and best placement point? There are several considerations. Good question.

Leonard: [Slides 31 and 32] Important point here: we would like agency inputs on the types of fish barriers – there are pros and cons to both picket weir and drop-barrier.

Leonard: Let us assume there is a population of bull trout that drop out, go upstream, spawn and return. We will have 2 years of monitoring to better understand this. If we put the barrier up during the Fall (after incidental spawning), how does that change things?

[Discussion between Paul, Mark, Clayton regarding rock weir without a pool, observing fish upstream of the weir, potentially suggesting constructing a barrier as part of the tunnel.].

Miller: We have to consider the construction schedule as well as the biological schedule.

Sandow: The construction schedule should match the biological schedule.

Bosely: Mark has the understanding to provide best time to do this to ensure construction lines up.

Leonard: Action item – In consideration of the life history, spawning times, what are the pros/cons and is there an obvious choice for when and where to put this in? What I am hearing from you all is the rock weir is the best option. We can have a short write up and email it to everyone.

Agency comment about low-drop siphon being more extensive than the rock weir? Example will be provided; **action item**.

Sandow: Using information you have already pulled together, have you considered the construction phase? Year of, year before? Not just when the calendar year but when relative to construction?

Leonard: Yes, we will place it along the timeline.

Leonard: [Slides 33 and 34] There are a number of fish salvage methods and protocols – removal, what kind of gear to use, various documentation by NMFS. We do not want to re-invent the wheel. If one of fish salvage protocols these is suitable, we can include it as an appendix. Comments on that?

Sandow: We have seen issues in the past with project implementation by reference. We would need everything to be clearly laid out but can be in an appendix.

Leonard: That would be our preference as well.

Nalder: How confident are you at capturing the smaller, juvenile fish? For Chinook, we know when they migrate with some amount of certainty… perhaps stock fish downstream vs upstream? Concerns about water turbidity and ability to salvage fish.

Leonard: That is a good point, but you are talking about the logistical elements of when this should be implemented.

Sandow: [There was a discussion about alternative adult Chinook outplanting locations] My understanding from the South Fork Hatchery Genetic Management Plan is that there is limited flexibility for outplanting fish in the EFSFSR drainage below the YPP. Is there flexibility to put fish in Tamarack creek?

Miller: There are a number of fish that can be released into the SF main in addition to fish in the EFSFSR.

Leonard: [Slide 35] What kind of feedback should you give us on how to propose the right kind of fish relocation program and what constraints exist within regulatory and management purview that may direct us to have more detail?

QUESTION: You have population density estimates. How can you arrive at magnitude, density of fish?

Leonard: We can do calculations to figure out how many species there are; fish density estimates are readily available from the Aquatics Baseline report… there are some assumptions that need to be made.

Sandow: With relocation, I'd prefer not to see large predators (e.g., bull trout) being released in the same location as juvenile Chinook/steelhead.

Hebdon: As part of the permit that will come through the state, all fish species (maybe with some exceptions) will have a relocation plan. We have done relocations for reestablishing populations; there are a variety of scenarios. The question is what is the overall purpose? We do not see too many cases where we dewater an entire lake.

Discussion of maximum load density and permit limits based on NEPA document followed.

Shepherd: Regarding effects analysis and the NEPA document – are we going to talk about impacts of putting all these salvaged and fish populations put together? What about effect on other fish?

Leonard: We want to keep that somewhat general in the NEPA document (do not want a material difference between NEPA document and the Biological Assessment (BA)) and the BA is the correct place for the more detailed analysis.

Shepherd: What about a general description of what impacts could occur? Loss of resources, increased competition?

Leonard: General impacts description is fine; there will be more detailed analysis in the BA and I would point to that.

Kline: I have some concern about timing and ESA process that can feed information to the NEPA process. We have tabled that as a bit of concern. Especially given the time frame for preliminary impacts.

Nalder: Expressed concerns over consultation and NEPA at the same time without having all available information.

Kline: We are working on the finer details now. They would certainly be added into a future revision of mitigation plan.

Hebdon: The State will comment on fish salvage of non-ESA species that we will need to handle during the YPP diversion.

Comments and Discussion on Fish Passage Barriers TM (60 min.)

Intent: To discuss the barriers presented in the TM and address questions or comments on the TM

Miller: [Discussion of slides 37-41].

Turner (on slide 41, table 3): Re: Fiddle creek, is the barrier otherwise suitable for bull trout (as a possible relocation?)

Miller: Fiddle creek may not be a good relocation as an adult.

Miller: After checking, we did find information that Chinook salmon had been stocked in the EFSFSR upstream of Meadow Creek.

Sandow: What is the source of information for?

Miller or Leonard: Personal communication with the hatchery manager.

Sandow: I would like to have the data for the year, adult outplants, and redd counts that is available EFSF, upstream of the Meadow Creek confluence.

Nalder: question re: potential barriers in the upper EF and whether the stream design report addresses those?

Kline: There are barriers just above the confluence…discussion ensued about fish passage conditions in the EFSFSR just upstream of Meadow Creek

Bosley: It should be in the stream design report and the ledger as well (should still be in).

Leonard: This is important information for doing the effects analysis in the BA, understanding whether and what fish can and cannot access that, important for mitigation enhancement measures. Also, some consideration regarding construction of resting pools in the same area as part of the stream design.

Miller: Part of this is related to the Stream Functional Analysis (SFA)**Leonard**: Midas Gold is building a Stream Functional Analysis tool in support of environmental analysis and mitigation credits under the USACE's wetland mitigation requirements. The entire stream is divided into basins; rating their current functional values and analyzing how they would change… assessing how much stream functional value is there currently; how it changes during mining, post, etc. also tool used in various ways by various agencies for their purposes.

Sandow: If treating partial barriers is built into the proposed action, then we will need to be sure there is adequate supporting documentation… I have some reservation about doing work in a natural channel and possible unintended consequences. Just having some supporting documentation would be helpful, where we could say that we have looked at potential effects that could have manifested downstream as a result.

> **Leonard**: We have looked at the potential barriers in the EFSFSR just upstream of Meadow Creek before. Historical activity with berms, road crossings… It is pre-existing… it may have been created all or in part by historic earth moving or mining activities.

Kline: Other comments on passage barriers?

> **Nalder:** Comment about native species and the effectiveness of potential barriers.
>
> **Leonard:** Perhaps if this is going to be a point of continuing discussion, we should do a site visit. There is great value in us seeing that these areas.
>
> **Leonard:** We have fish baseline data. Extreme upper ones higher into basin, are not the ones in question. There is no activity happening that would improve those passages. We are talking about the ones that open up significant amounts to Chinook; if that is a partial barrier, that could be preventing access by some barriers to some species.
>
> **Miller:** Streams can change a lot year to year. Slight hydraulic change and it looks different from year-to-year.
>
> **Johnna:** I second that it would be good to get out on-site.

Kline: Any other comments, do we need a review of the dates?

> **Leonard:** If folks do have comments, when can we get those back? Does end-of-the-month sound reasonable? I do not want to wait until the SharePoint site has been refreshed; how do we get the information to the tribes right away?
>
> **Comment:** Get the information to Bosworth and he will share with IDFG folks(?)
>
> **Lewallen:** Just to confirm, I am sending this to two people : Robin (NPT) and Bosworth (IDFG) and they will send to their folks, correct?
>
> **Kline:** Yes.

Final Review and Comment on BA Annotated Outline (60 min)

Intent: To discuss comments provided on the draft annotated outline so that a final working version can be finalized

Leonard: Aylin, who all have we received comments from?

> **Lewallen:** At this point we have comments from NOAA, USFWS, USFS and AECOM. We have consolidated all of them into one document and most are pretty straightforward and easy to address. The plan was to provide response to comments on those and send out a revised, final version back to the group.
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> **Sandow:** Do we have a copy of the revised BA and final RTC?

Lewallen: At this point, no. We got final comments back on June 20th and we have compiled those and had a few questions we wanted to address in this meeting. After we address those, we can send the revised RTC and revised BA outline to the group.

Lewallen: (Slide 44) We went over this with the terrestrial group yesterday. Most comments are straightforward to accept… there are some slight contradictions between commenters or things what we wanted to bring forward to the group with additional questions. They are: (i) outline organization specific to species; (ii) another was: do we include westslope cutthroat trout in this BA or not?; (iii) request for monitoring section related to adaptive management.

Lewallen: The westslope cutthroat trout is not an ESA listed or candidate species and there has been a suggestion to exclude it completely from the BA. What are all your thoughts on that?

Nalder: My recommendation is that it be removed; the BA is complicated enough as it is.

Lewallen: Okay we remove the cutthroat trout.

Lewallen: Re: the monitoring section, in Chapter 1, there was a section on proposed mitigation measures as part of the Federal action, and it was suggested we integrate that into the Federal Action section. We will move that and integrate. Question/request to add a monitoring section. Is the intent to have this be part of the adaptive management approach for addressing unknowns or things that could impact species are part of the Federal action? We would like to have a better understanding of the expectations from the monitoring sections.

Nalder: If monitoring is included as part of the Federal action, it needs to be described in the BA. In this case, there is an adaptive management strategy that has been developed… we need to incorporate (in the BA) what monitoring is required for this project…

Leonard: It will be included in the proposed action and the BA.

Sandow: I was confused about mitigation measures being included in the proposed action

Lewallen: That was based on comments that additional sections be removed and incorporated as part of description of the Federal action.

Sandow: Was it a separate chapter?

Lewallen: Not a separate chapter, it was a separate section after the Federal action description of additional mitigation measures.

Leonard: That is confusing, so I think we should take it out. It should be either part of the proposed action or will be developed with the NEPA document.

Sandow: Additional measures from NEPA should be a part of the proposed action.

Nalder: I fully expect that the final BA will have additional mitigation measures.

Lewallen: There were a lot of comments on organization and most of them are easy to address. Some comments were contradictory though about content and order of the sections. Details on slide 45 of the suggestion organization change that is reflected in the separate document from Clayton Nadler. Those folks that did not request the organization change, do you have any additional comments here?

Robin (with NPT): I am confused about Chapter 3… the Southern Pacific whale is not a real species… can you say "southern resident killer whales" or "orcas"?

Leonard: Yes, that was an oversight on our part on the slide; that is not how it is in the outline.

Nalder: Aylin, you sent out a new map of the action area which does not include the southern pacific whale. Perhaps the map should be asterisked?

Leonard: We were going to put an asterisk and in the actual BA and address with either a description and/or separate map

The rest of the discussion was regarding how agencies should prioritize what to review and finalizing various components of the 11 action items.

Next meeting dates: September 5th and October 8th (Aylin to reach out to FWS and confirm that both dates work.

Action Items:

- Update SharePoint site protocol and content
- Update Contacts List
- Clarify hydraulic connection of Fishway Tunnel and Hennessey and Midnight Creeks
- MGII/BC/BA put together list of needed performance items needing criteria level feedback from USFWS and NOAA
- FOMP and protective measures comments back from group by July 31 with USFWS and NOAA comments by Mid to Late August
- BC/BA to put together a short description of fish migration periodicity that support recommendations for when exclusion should start
- Mike E. to send example of fish exclusion weir
- BC/BA to develop fish density estimates to predict probable fish numbers to be salvage in the two EFSFSR reaches to be affected by ESFSR diversion through Tunnel
- IDFG (Lance H.) to provide Chinook salmon stocking records for EFSFSR to BC for dissemination to group
- Send Barriers TM to Robin (NPT) and Bill (IDFG)

Items for Future Meetings:

- Review SharePoint site location and organization
- PBF/WCI crosswalk
- Modeling results presentation
    - Mod PRO
    - Changes from PRO
- Updated discussion of Fish Salvage/Exclusion
- How NEPA is analyzing WCI and how can apply to BA
- Rio – Stream design performance criteria
- SFA results for Mod PRO
- Schedule for BA preparation