

IDT Meeting Notes

10 OCT 2018

Attending in person: Mike Dixon (TRRP), Ken Lindke (CDFW), Eric Peterson (TRRP), Nick Hetrick (USFWS), Robert Franklin (HVT), Kyle De Juilio (YT), Seth Naman (NMFS), Todd Buxton (TRRP), Nick Som (USFWS), Damon Goodman (USFWS), Caryn Huntt DeCarlo (TRRP), Wes Smith (Ocean Assoc./NMFS)

Attending via WebEx: James Lee (TRRP), Seth Lawrence (DWR), George Kautsky (HVT)

Action items are in bold

The meeting opened with introductions and a request for agenda changes; while the agenda certainly changed, there were no requests to do so at the outset.

We moved immediately into the metrics lexicon and process discussion. Much of the substance of the conversation ended up incorporated into a definitions page. **Ken will circulate the definitions page and an updated metrics table to the group by 24 OCT.** Ken approached the metrics task based on the outcome of a metrics workshop that followed the completion of the IAP; the Fish WG immediately got going on their metrics at that time and that gave them a solid place to start. Ken recognized that there are differences in what the terms metrics and objectives mean to people and that there is not always a common approach or understanding of how things are measured.

It was asked early on “are we revisiting objectives”? Seth N. noted that some objectives are in the ROD, others aren’t, and some have changed, which is part of adaptive management. Mike also observed that some objectives are actually derived from law, not just the ROD.

Kyle observed that there had also been the insertion of terms like “targets” into the exercise by some workgroups

We discussed how a non-uniform understanding of the goals and definitions of the metrics exercise was driving different approaches across work groups.

Nick S. stated that adding additional terms increases confusion.

Wes talked about how targets came into the conversation. They had always been told to keep objectives easy to understand and non-technical; adding targets adds the detail needed to make objectives meaningful.

Robert offered that a specific example to work through hierarchically might be useful, prompting the initiation of an example/definition page being drafted in real time.

Nick H. talked about the plan being developed by ESSA for the Klamath River ([Klamath River Basin Integrated Fisheries Restoration and Monitoring Plan](#)) and how they would be uncomfortable with the level of detail of objectives, sub-objectives, targets, etc based upon their lessons learned in developing that plan.

George brought us back to the development of an example by suggesting that we should have a paragraph that uses the terms in context.

Ken brought the Fish WG's metrics table up on the screen to use to display how the hierarchy nests together, with an overarching goal, two fundamental objectives, and then many means objectives with metrics.

Ken said that the example is incomplete, in that it doesn't define how we measure where we are relative to the metric.

Eric observed that the metrics read as objectives themselves.

Robert thinks that the metric needs to be reflective of how it is measured; e.g. 68°F is a target, the metric should include that it is a 10 year running average at a given location and so on.

The group decided that, for the purpose of the example and the table, it would be more streamlined to combine the metric and target in to one statement. The when/where detail would be described in the means objective.

There was further discussion regarding the role of methods in the metrics table; ultimately the group seems to have decided not. There was further live editing and wordsmithing of the example/definitions page.

At 1130 because we were already well behind the agenda, we shifted to the two science projects that TMC had approved. Caryn introduced the topic by explaining that we had refined our cost estimates for channel rehabilitation projects for FY19 and believed that there was some additional funding available for science. In the absence of a science work plan, she reached out to two PIs who had been previously funded to do projects that inform specific management actions (channel rehabilitation and flow) to see if they could continue those projects with a capped funding amount based on what was available. With support from Caryn and Mike, TMC voted to approve \$350k for those two projects subject to "concurrence" of IDT.

Damon led a discussion of the habitat team proposal. The project was initially proposed at \$201k; they think they can get it down to the approved \$175k but he and the partners need to decide how to make that adjustment. He mentioned that they are currently working on a synthesis of the systemic habitat estimate and it also wasn't ranked as highly as the site-specific habitat assessments in the last science work plan, so they are focusing on the site-specific assessments with this proposal. They are shifting the protocol to reflect the modern design approach where projects are designed and modeled in 2D hydrodynamic models (i.e. shifting away from the mapping-based approach) so that pre-construction and post-construction estimates are created using the same methodology.

There were questions from a few people about what additional information this gives us, as we have design condition model runs and we already collect as-built topographic data which could be re-run in SRH-2D in a day. Further, we re-run the entire 40 mile SRH-2D model at NLT 5 year intervals. The response was that this will be finer detail data which included things like facies mapping, not done as part of the larger model. It remained unclear to some as to how this finer-scale data and resulting model would be compared to the 2D WUA output that was predicted in the design phase.

Wes asked, and Mike re-asked, what the additional, finer scale detail tells us about what we do.

Damon? Responded that there is an additional objective in this proposal to compare the 2016 SRH run to current conditions to see how sites have evolved.

Wes re-framed his question to ask how this additional detail, such as substrate composition, would feed back into the design process.

There was some additional conversation about whether measuring change from the as-built condition is informative as many (most) design features are not designed to be static.

To bring the conversation back to its primary objective, Robert, Mike, and Ken each articulated iteratively their confidence in the usefulness of data to be collected, but expressed individual lack of clarity on details of the project for which a full proposal has yet to be developed.

Nick H. reassured the group that there would be a full proposal that was peer reviewed IAW the DOI Science Integrity Policy and a new Secretarial Order regarding review; further, he said that all the methods proposed herein have already been through previous peer review.

Todd responded the proposed methods are not in question, but their application in the study. For instance, simply using different models (e.g., SRH2D v. FastMech) could produce differences in results between this study and the 40-mile hydraulic model.

Kyle described a need to look at whether the sort of data they are proposing to collect can be collected systematically.

There was a break at this point to allow agencies to internally discuss their perspective before making a recommendation to IDT.

Wes says NMFS would recommend that the project be funded if the Design Team will get feedback on how well the collected habitat data and models match what was predicted in the design condition WUA runs.

Nick S. stated that he gets the importance of such an analysis, but that the type of work that entails is a major undertaking, enough so that he has a postdoc working on something very similar.

Ken says that CA is not comfortable funding without additional description of the methods. There is no other avenue that he is aware of where so much money would be awarded to a research proposal in the absence of further detail. He believes that it will result in a good product for the program, but cannot recommend without further development of the methodology.

Caryn paraphrased the discussion to confirm that we had a common understanding: The proposal is well supported but we are not ready to fund it today. She asked if last year's proposal could be updated to reflect the new methods being proposed.

We then broke for lunch.

At 1345 we reconvened and moved to the Macroinvertebrate Drift Study proposal, with the discussion led by Kyle. He started with a statement that it is very uncomfortable for him to propose this project in

the absence of an iterative science work plan process [which would have mitigated some of the comments and conversation on the previous proposal]. Kyle gave an overview of the proposal and its changes from last year's methods, including moving one of the stations to below Canyon Creek to capture data regarding inundation duration effects, and the possibility of removing the diet component.

Wes asked how these data would tie into management actions beyond flows, such as design.

Kyle reemphasized the importance of variable flows, and said we lack empirical data to support them. He said that, anecdotally (as the analysis is not complete), sampling during the first flow pulse this past spring had very different flux than the second. He said that learning about the productivity impacts of inundation duration is also very important to the program and would directly inform design.

Seth asked about the removal of the diet sampling component because it is important to determine if a fish has fed to satiation.

Notes seem to not completely capture some of the substance of this conversation, but both Robert and Kyle discussed that increases in flows can also increase habitat, and that these data could inform the program in using something like NREI to characterize habitat in the future.

Todd asked about which of the two sampling sites would be moved; Kyle said that decision is still in play. The new site will be below Canyon Creek at a location with a similar substrate size.

Damon asked about longitudinal differences that would introduce noise and make it hard to compare the sites.

Robert and Kyle said they would certainly expect differences in the assemblages; Kyle elaborated that the downstream site is intended to look more at the effects of inundation length and less to be used as a comparison between upstream and downstream sites.

Robert brought us up to the bigger picture level, expressing his belief in the importance of studying the effects of flow on food in light of the less dramatic than hoped for response in fish numbers to physical habitat improvements.

Wes asked whether the data collected on forage availability could be informative to SSS.

Nick S. responded that, while he could code a variable for the model to include just about anything, there are some big steps missing; would need systematic data for forage availability at different flows.

Seth N. asked why this proposal couldn't wait for a follow-up call to discuss.

Mike mentioned his understanding that there was time sensitivity related to recruiting a grad student to do this work; Kyle confirmed.

Nick S. and Damon said that their understanding of their direction is that they need to see a full, updated proposal, and that it would have to have gone through peer review, before they could recommend it for funding.

Mike (riffing off of Kyle's opening statement regarding this way of proposing science projects being uncomfortable) stated that the detailed review of methods has not traditionally been the purview of IDT; historically we review types of projects and important research questions, which form the basis of a solicitation. The resulting proposals are later subjected to review prior to funding.

Caryn asked Robert F., as the elder statesman of the IDT, to share his thoughts.

Robert said he was too close to the proposal as an author, but when encouraged, described his thoughts on why it was important to the program.

Ken brought the conversation back to his fundamental question as a reviewer of "will the researcher be able to answer the question they propose to answer with this project?"; he does not have enough information to make that determination yet.

Nick S. reiterated that a study like this has value if it can be applied to places elsewhere in the river (beyond those sampled). He also reiterated that, for FWS it comes down to the DOI policy that requires it be peer reviewed.

Kyle is fine with the updated proposal being sent out for further review.

Mike emphasized that, for parity, both projects would need to have full proposals prepared and externally reviewed.

Ken elaborated on his previous perspective; the state doesn't have a strict requirement for external review, he just needs more information before he would be comfortable funding.

Kyle suggested having an SAB member coordinate the external review. Mike said that we still have 3 members under contract through December, including Chris Jordan.

Nick S. will contact Chris Jordan and request that he coordinate an external review of the two proposals.

We then moved back to the metrics topic.

Kyle brought up the split approaches being taken wherein some work groups were putting many targets under some means objectives, whereas others were just having voluminous lists of means objectives or sub-objectives. In the written meeting notes, it is not entirely clear what decision was made on this topic, though in the guidelines page it appears that the intent is to have WGs list multiple targets under one objective..

There was further discussion of whether objectives were in bounds. There was consensus that they are. New objectives that are within law and policy could be proposed by WGs with adequate description of why they are proposed. Seth said that adding new objectives that are outside of law or policy is possible, but would involve a request from the WG to TMC for guidance. Damon opined and the group agreed that, if we are making major changes to or dropping objectives, we need to make sure that we adequately document the science supporting the decision.

It was also asked if we keep objectives even if they do not yet have targets. The group decided yes, but they will be kicked to their own tab in the spreadsheet for clarity.

The meeting concluded roughly on time. The topic of FY19 WG priorities will be pursued in a later IDT meeting TBD. **Mike will send out a poll to IDT reps to find a date for this meeting by 19 October.**