

Minutes

TRINITY MANAGEMENT COUNCIL

December 6, 2018
Shasta-Trinity National Forest Supervisor Office
3644 Avtech Parkway
Redding, CA

Day 1, Thursday December 6, 2018

Attending Members

Member	Representative Seat
Don Bader	Bureau of Reclamation, Chair
Caryn Hunt DeCarlo	Trinity River Restoration Program, Executive Director
Justin Ly	National Marine Fisheries Service, Vice-Chair
Mike Orcutt	Hoopa Valley Tribe
Teresa Connor	California Department of Water Resources
Dan Everson	U.S. Fish and Wildlife Service
Dave Hillemeier	Yurok Tribe
Terri Simon-Jackson	U.S. Forest Service
Keith Groves	Trinity Council

Other Attendees: Jenny Norris, Damon Goodman (USFWS), Seth Naman (NMFS), Eric Peterson, Mike Dixon, Linsey Walker, Kathy Martens (TRRP), Mark Bransom (KRRRC), George Kautsky, James Lee, (Hoopa Valley Tribe), Leslie Hubbard (Trinity County Planning Dept.), Ken Lindke (CDFW), Kyle De Julio, Yadao Inong (Yurok Tribe), Bill Brock, Scott Russell, Lusetta Sims (USFS), Stewart Reid (Western Fishes), Tom Stokely (PCFFA)

Attending by Phone: Tony LaBanca (CDFW), Vivian Helliwell (PCFFA), Seth Lawrence (DWR), Katrina Harrison (Reclamation)

Notes: Sabrina Kleinman (EPP)

List of Motions

Keith Groves made a motion to approve the December TMC Agenda.

Justin Ly seconded the motion.

The motion passed unanimously.

Keith Groves made a motion to approve the September TMC minutes.

Dave Hillemeier seconded the motion.

Terri Simon-Jackson asked that the following edit be incorporated into the minutes: to change the location of the Delta fire from Shasta Lake to Trinity Lake.

The motion passed unanimously.

Keith Groves made a motion for the TMC to accept and allow the IDT to identify data gaps and solicit proposals to answer outstanding flow management questions. Such proposals would be solicited, reviewed, and shelved to be ready for implementation upon availability of funding.

Teresa Connor seconded the motion.

The motion passed unanimously.

Keith Groves made a motion to accept the budget changes highlighted in yellow in the budget spreadsheet as presented.

Dave Hillemeier seconded the motion.

The motion passed unanimously.

Teresa Connor made a motion that if the TMC is unable to fund an approved FY19 item, the Executive Director has TMC approval to fund options listed in the Options for Reprogramming FY19 Funds table presented during the Dec TMC Meeting through FY2020.

Keith Groves seconded the motion.

The motion passed with 7 yes votes and one abstention.

The Hoopa Valley Tribe abstained from voting.

Action Items from the Meeting

- Caryn Huntt DeCarlo will send the TMC a copy of the Flow Workgroup's letter to Reclamation on parameters for flow management.
- Caryn Huntt DeCarlo will provide the next Synthesis Report update using a two-column format showing the initial completion date for each report and the current proposed completion date.
- Jenny Norris will provide the TMC with an updated version of the SAB survey and provide recommendations to the TMC on the SAB during the April meeting.
- Eric Peterson will send the link for the common Workgroup metric objectives and targets spreadsheet to the TMC members.
- Caryn Huntt DeCarlo will add a sentence to the IDT Proposal regarding Targeted Science Work Plan to note the objection to the first sentence.
- Caryn Huntt DeCarlo will provide the TMC with an updated list of potential discussion topics based on TRRP input for the April TMC meeting.

- Vivian Helliwell will put together a description of work and estimated costs for providing a videographer to record the TMC meetings.
- Katrina Harrison will email the Updated ROC on Coordinated LTO schedule presentation for December 7 to the TMC.
- Caryn Hunt DeCarlo will send a Doodle poll to TMC members, Chad, and Mike Harty to reschedule the Refinements meeting to review the recommendations and next steps.

Regular Business

Welcome and Introductions

Don Bader, Reclamation, opened the meeting with introductions of all TMC members.

Approval of Agenda

Bader opened discussion on the meeting agenda.

Mike Orcutt, HVT, asked to include a discussion on when to reschedule the Refinements meeting that was originally scheduled for Wednesday, December 5. Hunt DeCarlo answered that the discussion would be part of the Executive Director Report.

Keith Groves made a motion to approve the meeting agenda.

Justin Ly seconded the motion.

The motion passed unanimously.

Approval of September TMC Meeting Minutes

Bader opened discussion on approval of the September TMC Meeting Minutes. Terri Simon-Jackson, USFS, asked for one edit to the minutes. She noted that the Delta Fire took place north of Trinity Lake and asked that the minutes change it from Shasta Lake to Trinity Lake.

Dave Hillemeier, Yurok Tribe, commented that it would be helpful for changes in the notes to be highlighted in the final version. Hunt DeCarlo stated that a master copy is created when the notes are edited and revised. Simon-Jackson commented that the notes were extensive for the September meeting. Hunt DeCarlo thought that Sabrina Kleinman, EPP, could send her the initial draft of the notes to pare down on unnecessary items. Hunt DeCarlo noted that the September notes were not pared down and wanted TMC feedback on if she could shorten the notes or not. Justin Ly, NMFS, concurred that they were very thorough, which helps with the public record. Teresa Connor, CDWR, thought it might be helpful for the Executive Director to help reduce the draft where needed. Keith Groves, Trinity County, also noted that the Trinity County Board of Supervisors also has detailed notes which are supported with digital recordings. He preferred having the detailed notes since the TMC does not currently have the same level of record. Bader summarized that the TMC liked having the detailed notes and that the Executive Director can make a first round of cuts to the notes before providing them to TMC members for editing.

Keith Groves made a motion to approve the September TMC minutes.

Dave Hillemeier seconded the motion.

The motion passed unanimously.

CVP Operations Update

Bader gave an update on CVP Operations and reported that it was a good start to the season with five inches of precipitation at Shasta and Trinity Lakes. This is above average for Shasta Lake and normal for this stage. There has been no increase in inflows at the reservoirs due to how dry it is at shoreline. Normally, the first few winter storms do not do much to lake levels. With more rain in the forecast next week, CVP looks in good shape for storage. Carryover for the system also looks good for the winter and end of spring storage levels. CVP is scheduled to get its allocation out on time and there is a big push to get the initial allocation out by the end of February. Orcutt commented that he had seen some initial increase in Trinity storage following the recent storms to 64-70% of capacity. Bader commented that there was a little. Bader reported that the levels are at about 115% of normal right now.

Public Forum

Bader opened discussion from the public. Groves introduced Leslie Hubbard, Trinity County Planning Department, who will be joining the Watershed Workgroup. He also noted Trinity County's continued commitment to the work done by the TRRP.

Report from the Executive Director

Huntt DeCarlo gave the Executive Director Report and noted that different staff would be contributing. Huntt DeCarlo reported that the TRRP continued work on environmental compliance, permitting, cost estimating, and contract development for the Dutch Creek and Chapman Ranch projects. They held a public meeting for the Chapman Ranch project for the public comment period of the environmental assessment. Additional details would be provided by Mike Dixon, TRRP, as part of the specific project report.

Huntt DeCarlo reported that multiple staff were currently working on developing and processing a number of contracts, interagency agreements, grants, and tribal agreements. Staff have also been busy coordinating work on the Program synthesis reports and working on the science metric objectives and targets. She thanked Mike Dixon and Nick Som, USFWS, for coordinating that effort during the Science Coordinator vacancy.

Organizational Update

Huntt DeCarlo read the organizational update regarding Robert Franklin's retirement from the Hoopa Valley Tribe. She noted his many years working on the Trinity River as a private consultant and Hydrologist for the Hoopa Tribal Fisheries. Franklin took pride in the work that the Hoopa Valley Tribe was doing to restore a healthy Klamath-Trinity river system and his work alongside tribal leaders. Huntt DeCarlo added that she remains in awe of Robert's

institutional knowledge and contributions that from the beginning, have helped shaped the Trinity River's restoration.

Huntt DeCarlo reported that the DOI is still coordinating discussions on how best to fill the TRRP Science Coordinator position. She reported that Linsey Walker, TRRP, has been selected as the TRRP Indian Self-Determination Specialist. Walker has been helpful in navigating the 638 tribal agreements between three Area Offices and the Regional Office of Native American Affairs while serving in details for the position. Huntt DeCarlo also reported that the Geomorphologist position with the Yurok Tribe is in its second round of recruitment expected to be filled by the end of the year. There are also still a number of vacant TRRP positions with the USFWS, though their staff have recently worked to provide substantial support for the IDT and Workgroups.

Science Update

Huntt DeCarlo reported that Nick Som and Mike Dixon were currently leading the Inter-Disciplinary Team (IDT) during the Science Coordinator vacancy. Som and Eric Peterson, TRRP, were coordinating Program reports and peer reviews while Huntt DeCarlo was tracking progress on the Synthesis Reports and Workgroup TMC reporting. Mike Dixon and Nick Som were tracking Workgroup development of metric objectives and targets while Eric Peterson is coordinating deliverables in the Program.

James Lee, HVT, provided the briefing from the Riparian and Aquatic Ecology Workgroup and thanked the TMC for its approval to change the Workgroup charter. Since then, the Workgroup held a meeting on November 1. They are currently working on how to refine their metric objectives. Reviews for revegetation designs for Chapman Ranch and Dutch Creek are nearing completion. They are working on two synthesis reports on cottonwood recruitment and updating target models for evaluating flows and its effects on cottonwood and narrowleaf willow. They anticipate using next spring's flow schedule to do intensive monitoring on tree recruitment.

Ken Lindke, CDFW, provided the update for the Fish Workgroup. Lindke reported that the Fish Workgroup met once last quarter and made some progress on their targets and objectives, including a presentation by Nick Som that helped the group make some final decisions on the objectives and targets. Ken will present the results of objectives and targets refinements to TMC when they are complete. The Fish Workgroup has a joint meeting with the Physical workgroup scheduled in December and a tentative meeting at the end of January with the habitat team, both of which will focus on overlapping objectives and targets. They also plan to meet with the Physical and Habitat Workgroups to look at overlapping targets. Lindke noted that their work slowed last quarter due to field projects, a run size project, and the implementation of the weir and redd carcass surveys. They are wrapping up those projects and expect to make more progress next quarter.

Orcutt asked if the Workgroup had been able to clarify a recent question on spawning escapement that had been raised at the last coordination call. Lindke noted that he hadn't been on that call and that the Fish Workgroup hadn't discussed how to clarify that discussion from the

September TMC meeting. He noted that he had talked with Hunt DeCarlo and they hadn't been able to determine who made the request regarding escapement or what it was for. Hunt DeCarlo noted that the discussion on escapement could be added to the April TMC meeting and that the current escapement target was a goal from the ROD. Lindke added that the IDT advised that items in the ROD could be reconsidered but require a well thought out and justified recommendation. Currently, the Workgroup does not have the authority to make such changes. The Workgroup can make a recommendation to the TMC and allow the TMC to take it from there.

Dixon provided the update from the Design Workgroup. He reported that Design met twice during the last quarter with a full day meeting to work on expectations on design reporting. Since different agencies and offices had approached design differently, the Design Workgroup wanted to have agreement on what information needed to be included on all design reports. They met again the previous week to determine how to best incorporate current science on the Trinity from outside sources, which included a coordinated discussion with the Habitat Team on how they could better inform the Design Team.

Dixon provided the update from the Watershed Workgroup. He reported that the Funding Opportunity Announcement (FOA) was currently caught in additional reviews between the Regional and Denver offices. The group does not currently know if they will have sufficient time to fund projects with FY19 dollars due to the delay. One option would be to roll over the FY19 funds to do a larger FOA in FY20, which could fund more ambitious watershed work. Hunt DeCarlo added that if the \$500,000 could not be obligated this year, they could look at pursuing a 2-year watershed solicitation instead. Jenny Norris, USFWS, asked if that that would require raising the limit of the FOA for the two-year process. Hunt DeCarlo answered that they would have to resubmit the FOA to raise the maximum amount, with each individual project going to the solicitor for review, which typically takes 3-4 months. Hunt DeCarlo noted that they were already ahead by 3-4 months. Dixon added that the Watershed Workgroup is also reviewing a GAP analysis project that would help prioritize watershed work. They had talked about presenting that information to the TMC, but it is not quite ready yet.

Hillemeier asked if it would be possible to advertise the FOA the way they used to do it and not go through Grants.gov. Hunt DeCarlo answered that they had to go through Grants.gov based on how Reclamation does their acquisitions. Dixon added that there was a period where the FOA had been administered through the Yurok Tribe and asked if that was still an option. Hillemeier answered that it had been done for one year due to schedule concerns at the time. Hunt DeCarlo asked if the discussion could be moved until the budget discussion later in the day.

Hunt DeCarlo gave the update for the Flow Workgroup noting that they were in the process of finalizing a memo to Reclamation on how safety of dam releases could be scheduled to benefit the Trinity River ecosystem. The Flow Workgroup has some parameters on what they can ask for and are working with the CVO staff and operator. The Flow Workgroup is also working on scheduling for WY19 and updating the modeling table, which will be approved at the April TMC

meeting. Groves asked if the TMC had seen the memo to Reclamation and if they needed to approve it. Hunt DeCarlo clarified that the memo was more to clarify what the TRRP can do with the CVO. Groves added that he would appreciate seeing anything that had to do with flows.

Action Item: Caryn Hunt DeCarlo will send the TMC a copy of the Flow Workgroup's memo to Reclamation on parameters for flow management.

Hunt DeCarlo also provided a brief update from the Physical Workgroup, noting that Conor Shea has been selected as the new Workgroup coordinator. She reported that they have also been working on gravel augmentation, sediment monitoring, habitat modeling inputs, and the metric objectives and targets.

Synthesis Reports

Hunt DeCarlo gave a brief report on the current status of the Synthesis Reports. She reported that they are seeing a lot of work and coordination among the different entities preparing the reports and noted that there had been some slippage in the original estimated schedules as previously noted. She explained that the initial time estimates were developed in 2017 and that some entities had not received funding when originally anticipated. The Yurok and Hoopa Valley Tribes, for example, did not get their funding until a year and half after they had provided the initial estimates. For other reports, some of the original principal investigators had left and work was delayed as replacements were hired. We anticipate that about 75% of the reports will be done within the next 9 months. She noted the delays all appear valid.

Hunt DeCarlo noted that each of the reports had different timelines for completion. Some of the reports were estimated between one to two years, depending on each team's workload. Hunt DeCarlo proposed providing the next update in two columns only, with one column listing the initial completion date for the report and the second column showing the newest estimated completion date. Terri Simon-Jackson asked if the reports would still be tracked as part of the quarterly meetings. Hunt DeCarlo stated that they would be in her ED report.

Action item: Caryn Hunt DeCarlo will provide the next update on the Synthesis Reports with a table that shows the initial completion estimate and the most current completion estimate for each.

Orcutt asked who the principal investigator was for the Cohort Reconstruction project, which had not provided an updated completion date. Hunt DeCarlo stated that Ken Lindke, CDFW, was the principal investigator, but that the report had been delayed as they were working on a data sharing agreement among federal, tribal and state co-managers. George Kautsky, HVT, added that the agreement was a multi-party agreement for data sharing and analysis. Annually, co-managers provide data on coded wire tag recoveries of hatchery fall Chinook sampled in fisheries or escapement to natural or hatchery spawning areas. These data are tabulated annually by the State of California and subsequently error checked and used for fishery management modeling. The agreement as written asks that all parties concur in sharing broadly the error checked data compiled by the State. Kautsky explained that the Tribe is supportive of the data

sharing arrangement proposed in the letter, so long as this also involves sharing the associated cohort model for Klamath Fall Chinook which itself is a product of co-manager efforts over past decades, albeit housed at the Department of Fish and Wildlife and not available to co-managers at this time. Hillemeier asked if there had been a problem with sharing or getting the data. Kautsky answered that they were provisionally sharing the data through recovery year 2018, but wanted the letter to include sharing of the cohort model broadly and not just the data. Hillemeier suggested that it might be good to include the data sharing as part of the annual letter to help save time. Kautsky said that developing the letter was important for the entities in ironing out how best to share the data, but Hoopa's concern is also about sharing the model. Kautsky stated that the Tribe encourages a discussion on what can be shared prior to committing to open access to the assembled inland CWT recovery database. He stated that the State does a good amount of work to tabulate, error check, and ensure accuracy of the data. The subject here has to do with publishing inland recovery CWT data on the Pacific States Marine Fisheries Commission website. Hillemeier suggested that it may be better to separate the data sharing from the discussion on who controls and accesses the model.

Science Advisory Board Formation

Norris reported that she requested from the remaining three Science Advisory Board (SAB) members, to provide the Program information on how best they see the roles and responsibilities for the SAB members could be improved moving forward. From the information provided by SAB, Norris also developed a survey and asked the TRRP, Workgroups, and IDT members for additional input. The survey has 17 questions, which included multiple choice and open-ended questions. At the time of the TMC meeting, 21 TRRP staff had provided responses. The IDT has requested to provide additional feedback on the SAB roles and responsibilities for the TMC to consider. Norris added that the current plan is to get feedback from the TRRP staff on the SAB over the next quarter and provide recommendations to the TMC at April's meeting.

Action Item: Jenny Norris will provide the TMC with an updated version of the SAB survey and provide recommendations to the TMC on the SAB during the April meeting.

Huntt DeCarlo reported that she had been successful in extending agreements for two of the SAB members until new SAB contracts could be finalized. She noted that they are currently working on extending the third, but are unsure if they can. This will cover SAB needs while the new SAB is being formulated.

Metric Objectives and Targets

Dixon reported that the IDT met at the end of the summer and recognized that the Program Workgroups had all been pursuing the metrics work under different methods. The IDT met again in October to develop a cohesive approach, including a set of guidelines and examples for the metric objectives. This effort also included setting a timeline for the Workgroups to finalize their metric objectives and targets by March. Dixon sent the Workgroups a memo to document the agreements. To help the process, each Workgroup has access to a common Google Sheet spreadsheet to document their progress and add their finalized information. Huntt DeCarlo asked

if the TMC would like to see the common spreadsheet. Ly agreed that it would be helpful. Dixon said he would have Eric Peterson send the link. Dixon added that he understands that the objectives and targets should be living things as we are an adaptive management program, so revisiting the objectives and targets will be ongoing. For the time being, however, the groups need to work on prioritizing and finishing their current efforts.

Action item: Eric Peterson will send the link for the common Workgroup metric objectives and targets spreadsheet to the TMC members.

Inter-Disciplinary Team Proposal

Dixon presented the IDT proposal to develop a targeted science work plan for the coming year to identify and prioritize potential studies and projects. The following statement was read and discussed by the TMC:

Many people in the TRRP believe that the scientific evidence over the last 18 years indicates that continuing to apply channel rehabilitation, gravel augmentation, and tributary restoration will not be sufficient to restore salmon numbers to pre-dam levels under the status-quo flow regime. An enormous amount of effort and conversation has gone into justifying changes to flow management, particularly emphasizing fall/winter/early spring flows. For example:

- Literature suggests that winter/early spring flow variability would increase drift forage feeding opportunities. Analysis of a first-year study is ongoing; a second year has been proposed.
- Modeling supports increased juvenile Chinook capacity if flow volumes increase in winter.
- Increased base flow in fall would add spawning area and potentially decrease superimposition.

Additionally, some have hypothesized that the above-natural summer flows adversely impact salmonids from a variety of angles, including:

- Long duration of cool temperatures prolongs in-river time and may result in outmigration at a time of year when lower Klamath conditions are hostile to smolts.
- High, cold flows in summer may reduce growth rates of juveniles.
- Persistent high, cold flows likely cause shifts in invertebrate assemblages with unknown consequences for stream ecology.
- Existing flow and temperature targets may adversely impact spring Chinook by encouraging them to hold and spawn lower in the river where they hybridize with fall Chinook.

If our Program is to someday propose a policy change to our flow management (regardless of water source) and subject it to NEPA analysis, we need to make a robust

scientific argument that will stand up to intense scrutiny. So, the Workgroups propose to prioritize determining:

- What key data needs are necessary to decide if/how to modify our flow release schedule: i.e. whether to add fall/winter baseflow, increase flow variability, or change our summer flow patterns and temperature targets.
- Which of those data needs are being addressed through ongoing work (current research, synthesis reporting, etc.); and
- What is outstanding.

To the TMC: Upon review of the three last bullet items: *Shall the Workgroups, through IDT, propose a targeted science work plan aimed at soliciting proposals to answer the outstanding flow management questions?* Such proposals could be solicited, reviewed, and shelved to be ready for implementation upon availability of funding.

Dixon noted that the language in the statement was intended to be provocative and elicit discussion. The main idea behind the proposal was for the IDT to develop a list of hypotheses that would be ready for testing should funding be made available. Dixon added that the TRRP has put a lot of effort into maintaining flexibility in flow management and that any additional changes would require additional NEPA analysis. The proposal would allow the IDT to identify the known knowns and the known unknowns. In the absence of a TRRP Science Coordinator, the IDT would not do the full-scale work of ironing out the specifics. Instead, the IDT would like to identify what the key research questions are for each Workgroup regarding flow management needs. From there the IDT can solicit proposals in an RFP for projects that would inform flow management, to provide a more strategic approach. Dixon added that the IDT is still uncertain about whether or not to ask people to develop research proposals and would like TMC input.

Simon-Jackson asked if the IDT was clear on what it was asking for in the proposals. Dixon answered that they were not since they still needed to determine the unknowns. Orcutt expressed concern with the wording of the first sentence since the Program has covered a pretty broad period of time and the work completed during that period. Kautsky suggested that the first sentence be omitted since it could be interpreted as a matter of belief that current management actions were inadequate to bring about the fundamental objectives of the Program. He added that it was good to use a variety of methods, but that the statement runs counter to the fundamental aspects of adaptive management. Kautsky did not think the program has arrived at a rigorous refutation of the ROD's fundamental hypotheses as inferred in the opening statement. Further, he maintains that there is room for exploring alternative actions within the scope of the ROD such as annual hydrography. Dixon answered that the statement was not meant to say that the tools were inadequate but that the tools have changed over the years based on what they had learned. Dixon added that what really hasn't been tested are hypotheses related to flow management. The aim of the proposal is to identify what they need to test with regard to flow management. Kautsky added that the way the proposal was initially introduced was different than how it was discussed at the moment.

Dixon clarified that pursuing the ROD as written for flow rates was based on the best knowledge at the time. He added that the proposal does not say that the tools being used would not be able to achieve the Program targets but rather that they have not been fully explored. Bader asked if the language could be changed in the first sentence from “will not be sufficient” to “may not be sufficient.” Groves added that the discussion is not on how the proposal is written since that is not what the TMC would be voting on. Hunt DeCarlo added that she would put a sentence in the proposal to clarify the Hoopa Valley Tribe’s objection.

Action Item: Caryn Hunt DeCarlo will add a sentence to the ED report on IDT Proposal regarding Targeted Science Work Plan to note the objection to the first sentence.

Orcutt noted that looking at the winter flow variability would run into issues with reallocating ROD flows. Dixon answered that the IDT was not looking at where the water would be coming from but rather how to optimize the flow regime. Where the water would come from would be outside the technical Workgroup discussion. The IDT was more interested in what would provide benefits to fisheries and how to test that. Hillemeier asked what it would look like for the IDT to move forward with an RFP under this proposal. Dixon answered that there could be options, such as a literature review, testing, review of existing studies, or a pilot study. The purpose of the proposal was for the IDT to decide what the biggest questions are and to figure out ways to answer them so there would be policy and legal cover to propose changes to the hydrograph.

Ly noted that he was pleased to see the IDT looking at adaptive management and effectiveness of flow management. Ly asked if the IDT potentially had the internal capacity to answer some of the questions identified. Dixon answered that it is possible and that the unknown information may be addressed through in-kind contributions, but that it was early to know. Ultimately, the IDT wanted to formally identify the current science needs and re-establish a process for funding projects. Kyle DeJulio, Yurok Tribe, added that most partners are currently project funded and that meaningful research would need to come from a project that wasn’t base funded. Tom Stokely, Pacific Coast Federation of Fishermen's Associations (PCFFA), added that the Phase I report indicated that the Program had created 0.6% of juvenile habitat in the mainstem each year so there are questions as to whether the current strategy is effective. Initially watershed project funding was proposed at \$1.8 million but has only been funded at \$0.5 million at best.

Norris stated that identifying data gaps and how to close them is currently part of the responsibility of the Workgroups and the IDT. Dixon answered that this approach was the first step to identify potential data gaps that could not be answered in-house. Simon-Jackson asked if the TMC wanted the IDT to solicit proposals without seeing them first. Dixon answered that it would follow the typical approach, with the Workgroups soliciting the proposals, the IDT reviewing them, and then presenting them to the TMC for approval. Groves clarified that the IDT was not asking to move the potential proposals through but to have them shovel ready. Bader asked what the timeframe would be for this effort. Dixon answered that it would take place over this fiscal year, adding that proposals would likely not be ready for review by the next TMC meeting.

Hillemeier stated that it would be good for the TMC to understand the breadth of the data gaps identified, since it could range from 50 potential proposals to two or three. Hunt DeCarlo noted that the IDT could report on that for the April TMC meeting. Dixon added that it might be harder for the Flow Workgroup as they will be busy preparing the hydrographs and all the groups were given a deadline in the next quarter to finish the first review of the Metrics objectives. He asked that instead, the TMC be updated on when the data gaps would be finalized. Groves asked if the IDT proposal should allow the IDT to solicit proposals as well. Bader added that soliciting proposals would also include getting funding for them. Dixon clarified that for prior efforts, the IDT didn't identify funding, just Program needs. Orcutt asked if this approach considered what to do if it was determined that reallocating the water was found to be beneficial. He stated that the approach would eventually need to address where the water comes from and the authority for the water, and suggested that such decisions would need to look at the court decisions. He stated that if there was eventually scientific support, Reclamation could look at raising the volume above and beyond the current ROD volumes. Hunt DeCarlo answered that the main idea is to get the science on the benefits of winter flows and then have a discussion on what water to use or where it can be made available. The science would be used to inform the NEPA analysis to ensure the Program was doing the right thing. Orcutt added that the hypotheses regarding the above-natural summer flows were against the grain for the 2000 ROD and raise a lot of questions about how flow hydrology was looked at in the ROD. Hunt DeCarlo acknowledged his concern and added that to not identify the data gaps would be counter to the adaptive management approach for the Program and that there currently wasn't science to back up the flow management.

Hillemeier noted that he was supportive of the IDT proposal but wanted to add the step for the TMC to see the data gaps and then prioritize how the RFP was advertised, noting his concern about advertising for proposals that weren't funding. Groves answered that IDT would be responsible for prioritizing the list. Connor asked if the solicited proposals would be from internal partners or from outside organizations. Dixon answered that such proposals are typically from internal partners. Norris added that many of the potential questions may be answered from existing data that should be reported in the Synthesis reports. Additionally, she indicated that the that the Program was not currently short on potential hypotheses. She stated that prioritizing a list of science proposals and even shortening the list would be difficult without proper facilitation.

Orcutt suggested adding the last sentence of the IDT proposal to the motion so that if there were strong opinion on what projects to move forward, a discussion on funding could get at those concerns. Everson added his concern that pursuing these new research projects could take resources away from existing work and the Workgroups needed to continue those efforts. Everson noted that maybe the Program was not ready to follow through on such studies before analyzing existing data and before the Synthesis reports were ready. Simon-Jackson added that this discussion was specific to just flow management.

Justin Ly made a friendly amendment to have the IDT identify data gaps and solicit proposals as needed to answer outstanding flow management questions. Mike Dixon commented, suggesting to add that such proposals could be solicited, reviewed, and shelved to be ready for implementation upon availability of funding. Hillemeier made a friendly amendment to solicit the top four identified data gap proposals.

Keith Groves moved for TMC to accept and allow IDT to identify data gaps and solicit proposals to answer the outstanding flow management questions. Such proposals could be solicited, reviewed, and shelved to be ready for implementation upon availability of funding.

Teresa Connor seconded the original motion and all subsequent amendments.

Motion passed unanimously.

BREAK

Information/Decision Items

Presentation on Klamath Dam Removals

Mark Bransom, CEO of Klamath River Renewal Corporation (KRRC) gave a presentation on their efforts to remove dams along the Klamath River. The KRRC is a non-profit organization tasked with taking ownership of four dams (JC Boyle, Copco No 1 & 2, and Iron Gate) for the purposes of removing and restoring the river corridor in compliance with all federal, state, and local regulations. The organization was established as part of the Klamath Hydroelectric Settlement Agreement (KHSAs). Bransom reported on the status of KRRC's effort to address the compliance, planning, and contracting for the project.

KRRC is working on downstream flood control improvements and sediment modeling for 18 miles of river from Iron Gate. Existing hatchery operations are planned to continue for a minimum of 8 years after dam removal with funding from PacifiCorp. During or after the planned dam removals, NMFS and CDFW are not planning steelhead production at the the Iron Gate and Fall Creek hatcheries, which will free up capacity for other production goals. For now, production of Chinook smolts will continue at Iron Gate and yearling production, and coho production will reopen at Fall Creek. Eventually all hatcheries will be transferred from the KRRC to the state of California. Orcutt expressed concern that the provision for fisheries in the KHSAs would result in a substantial fall in Chinook production that could not be made up immediately from natural production. Bransom answered that there is a hatchery plan under review right now and that the State of CA is reviewing those concerns. He added that the production levels are not currently an obligation by the KRRC but they are sensitive to the concern.

Bransom talked about the different phases needed to remove the existing dam. Gates at the existing outlet tunnels will need to be replaced and restored to allow for full reservoir draw down. It is anticipated that drawdown will start on January 1, 2021 and occur over an 8-week period with the potential to extend into March to allow for sediment mobilization. Once the

reservoirs are drawn down, full dam and hydropower facility removal will begin. Bransom added that there is no backend requirement for the removal work, but that KRRC is working within regulatory timeframes and in-water work windows with the option to extend into 2022. KRRC has identified some short-term impacts to aquatic species during this time, which will last 1-2 years with recovery within 5 years depending on species-specific life cycles. To minimize these impacts, the KRRC plans to use a blow-and-go method that focuses on low use period to flush out the sediment.

Bransom continued that after the removals, KRRC would work on restoring the reservoir lands. There is an estimated 15 million cubic yards of sediment behind the four dams and 5-9 million cubic yards of that sediment is expected to mobilize and be transported down-river during the drawdown process. Stabilization of the remaining sediment will occur as those sediments dewater and KRRC undertakes hydroseeding and restoration work. The KRRC has currently started contracts for seed growers, collectors, and nursery operations to propagate materials for the restoration. They are also developing long-term monitoring and adaptive management requirements for land and aquatic mitigation needs.

As part of the effort, recreation and restoration plans are also planned for the restored areas. The recreation plans will focus on moving the systems from lake-based recreation to ones that focus more on boating and fishing access. The KRRC is working on outreach to rafters and fishers to develop the preferred alternative for the new plans. The recreation plan will focus on active recreation opportunities. The KRRC is also working with a cultural resources working group to overlay and prevent impacts to cultural resources in proposed new recreation areas.

Currently the KRRC is in the process of addressing the regulatory needs for the dam removal with two applications pending in front of FERC to transfer the license from PacifiCorp to KRRC. FERC had requested that the license be split between the Klamath Project and the Lower Klamath Project. The current dam decommissioning proposal has been submitted to the Board of Consultants for a cost estimate and risk management assessment. The KRRC will submit that information to the FERC this week along with their response, which should be available next week. Orcutt asked if Oregon had completed the DEQ analysis on the ownership transfer for the Section 401 permit. Bransom responded that they did issue the 401 but that process was separate from the transfer process. He added that once the KRRC accepts the transfer from FERC, FERC would then issue the order for the license to be surrendered, which is needed to begin dam removal. For CA, the 401 application was submitted to the State Water Resources Control Board (Water Board) in 2016. The KRRC has responded to requests for information and have a draft certification. The process in CA did trigger CEQA analysis and they have prepared a draft Environmental Impact Report. KRRC anticipates a 45-day comment period, with the final EIR released in the summer of 2019.

Bransom continued that the KRRC has completed a draft Biological Assessment (BA) for the agencies. However, a recent Presidential memo will delay the NMFS review of the BA because NMFS will need to prioritize completion of the Klamath Operations biological opinion. KRRC

estimates that a joint BO from NMFS and FWS would be completed by the middle of next year. Once FERC notices the surrender application proceeding, it will trigger NEPA and allow the agencies to move forward on the BO. Currently, the surrender notice is not anticipated until the middle of next year.

The Water Board has completed formal tribal consultations under AB 52 with to identify impacts to tribal cultural resources and develop proposed mitigation measures. The cultural resources working group consists of nine affected tribes and meets monthly to develop a historic resources management plan, looting plan, and inadvertent discovery plan. FERC designated the KRRC and PacifiCorp as the non-federal representative and AECOM has been hired to facilitate the Section 106 consultation.

Hillemeier asked if the KRRC was looking for a single contractor for the dam removal effort. Bransom answered that the KRRC was still working on the scope for that solicitation. They have established minimum goals for local and tribal participation and have hired contractors to work on the seed collection and propagation work and title and survey work. They currently have an RFQ for a design engineer to address work on the Yreka water system. For the progressive design-build work, they are looking for one contractor who will determine what work can be done by the contractor and what can be subcontracted through an open-bid process.

Stokely asked Bransom to clarify what was directing NMFS away from the Klamath project. Bransom answered that the Presidential memo was not taking NMFS out of the Klamath but directing them to look at the Central Valley Project. NMFS had indicated that they would not be able to provide an opinion before March or April as they would not be able to get a full staff opinion on the dam removal. He added that KRRC does not see the delay as a major issue, as FWS has full staff capacity and will brief NMFS during the process. Ly added that the Presidential memo included the development of the biological opinion on the Klamath Irrigation Project and that NMFS is aiming for the BO completed by April 2019, which will hinder key staff from completing the biological opinion on the Klamath Dam removal around the same time.

Orcutt asked if they anticipated running into problems with the cost and if the KRRC was below the \$450 million planned for the project. Bransom answered that the “most probable cost” was below the \$400 million mark for the entire program. He noted that the Board of Consultants did look at the issue and made some recommendations for the KRRC to revisit. They will also have the selected contractor provide a guaranteed maximum price to help with cost management.

Stokely asked if steelhead production would cease at the two hatcheries and if funding for the hatcheries would be on-going. Bransom explained that during and following dam removal hatchery production would be done at Iron Gate and Fall Creek Hatcheries and then be subject to change during the 8-year window after removal when PacifiCorp provides funding. In terms of ownership, Bransom explained that Iron Gate would transfer to California. Stokely asked if KRRC expected the sediment to take a few years to flush out. Bransom responded that they did, but needed to assume the worst-case scenario for mitigation. Vivian Helliwell, PCFFA, asked if there was a user-friendly GIS interface for the public to access. Bransom answered that they did

not have one available to the public but that the information could be made available in GIS-format if requested.

LUNCH

TMC Approval of 2019 Meeting and Teleconference Dates

Huntt DeCarlo asked TMC members to review the handout with the proposed dates for the 2019 Quarterly TMC meetings. Bader noted that Reclamation would not have the official water year announcement ready by the April 3-4 meeting date as it would be announced around April 9-10 so asked why not wait longer for the meeting. Huntt DeCarlo answered that it would be possible to vote on proposed hydrograph contingent to the water year announcement as they had done in previous years, usually in March, and that extra time is needed for the FWS and Reclamation Regional Directors approval letters and Public Affairs News Release notifications. Huntt DeCarlo noted that she had not received any feedback from TMC members on potential conflicts with any of the proposed dates. Orcutt asked why the first quarter meeting of the year was not scheduled when they know what the forecast for the year is on April 10. Huntt DeCarlo answered that this timeframe would not give staff time to adjust the hydrograph if the TMC didn't approve it. Huntt DeCarlo added that for the past three years they have gone to the Regional Director to sign-off right after the announcement of the water year. Bader added that the TMC schedule can always be modified throughout the year if needed.

Hillemeier asked if they could talk about rescheduling the Refinements meeting. Huntt DeCarlo answered that this discussion was just to set the quarterly TMC meeting dates and she would cover it later. Bader added that discussion on the Refinements meeting would happen during the continued Executive Director's report.

Topics for April Meeting

Huntt DeCarlo reviewed a handout with items to include for the April TMC meeting agenda. In addition to regular business items, Huntt DeCarlo noted that one of the agenda items is the Chair Officer election. Don Bader's term as Chair of the TMC would end two days before the next meeting. Huntt DeCarlo proposed also emailing Program staff to see if there were potential items they would like to add and then asking the TMC if they wanted to include those items. She noted that the TMC is often asked what they want to discuss without really knowing what might be available for discussion. Connor requested that gravel injection be added to the flow discussion. Hillemeier asked that the IDT provide an update on their work to identify data gaps and solicitation of proposals. Everson asked for a discussion on Synthesis Reports, Metrics, and where the Workgroups were on formulating their objectives and targets. Huntt DeCarlo asked Dixon to provide that update or coordinate it with Nick Som, and include an updated copy of the shared Google Spreadsheet. Hillemeier asked for an update from the Fish and Physical Workgroups on their modeling work.

Action Item: Caryn Huntt DeCarlo will provide the TMC with an updated list of potential discussion topics based on TRRP input for the April TMC meeting.

Hamilton Ponds Adaptive Management

Yurok Cultural Presentation

Yadao Inong, who is a staff member of the Yurok Fisheries Department and a tribal cultural bearer, gave a presentation on the significance of lamprey to the native peoples of the Klamath River. Known as Key'-ween, lamprey are important to the Yurok tribe as their biggest runs are from fall through spring and occur when salmon numbers fall, providing them with an important source of fat through the winter. The Yurok people believe that key'-ween were created for them to keep them alive until the salmon could start running again. Inong noted that the diversity of the species is more important than previously realized.

To prepare lamprey, they are roasted over coals and dried out for long-term storage in the winter and are one of the most sought after foods. It is said that when the rains come and the frogs sing, the Yurok people know that the lamprey will follow soon after. Fishing for lamprey is a cold-weather activity and a skill that is passed down from generation to generation with only the men trained in how to eel. Lamprey are caught near the ocean, making it dangerous work. There are a few different techniques, including the use of eel hooks, and baskets. Inong noted that eel hooks are traditionally made from bone, but some of the materials for the hooks have changed with metal hooks. Traditional eel baskets were also time-intensive to make, but the Yurok figured out how to make baskets by reusing old materials. Another tool is a trigger net, which is the most productive way to catch eel, salmon, and sturgeon in the river. To use it, a person stands on a platform with the net in an A-frame shape. To fish, they go to white water riffles on the river, where the rocky terrain forces the lamprey to come up on the rocks. They often have to change locations along the river, as runs are variable. Since lamprey are so important to the Yurok people, they have been studying their timing and movement with radio tags. Ly asked if the Yurok people had a preference for the kind of bone used for the eel hooks. Inong answered that they try to use animals they have already killed, such as deer or elk, and that they don't try to kill a specific animal for the hooks.

Hamilton Ponds Lamprey Study

Stewart Reid, Western Fishes, gave a presentation on a study of Pacific lamprey done at Hamilton Ponds and how to use it for management. Hamilton Ponds was initially built to trap sediment on the Trinity River with an upper and lower pond. The ponds trap decomposed granite to reduce sediment input in the river. In 2016, Reid and Damon Goodman, USFWS, did a study on habitat use and distribution of lamprey in the pond to look at how to potentially mitigate impacts to lampreys in response to pond management actions, such as excavation of sediment.

Reid gave an overview of how lamprey use the river, with lamprey spawning in similar habitat to salmon. The lamprey use their mouths to move rocks around redds and alter river flow. In the Pacific Northwest, there are seven taxa of lamprey in the Klamath Basin, most of which are endemic. For this study, they focused only on the Pacific lamprey. Lamprey are anadromous and migrate to the ocean after their juvenile phase for an unknown amount of time. When the lamprey get to 2.5 feet long, they travel back to fresh water, stay over the summer, spawn the

following spring, and then die. This migration pattern provides an important input of marine nutrients to the fresh water system. Lamprey larvae are known as ammocoetes, which burrow into sediments, preferring sands and soft substrates, and filter feed. They live as ammocoetes for 5-7 years before becoming juveniles and moving toward the shore. Ammocoetes can be incredibly abundant in streams.

While Pacific lamprey were once very abundant in the river, they have since declined across the western coasts. Population data for the region indicate a massive decline since the 1960s and 70s. In 2004, the Pacific Lamprey Conservation Initiative was established to promote conservation and recovery of the lamprey. They've done several studies to determine what habitats ammocoetes prefer, which have shown that the availability of fines is a limiting factor.

On the Upper Trinity, fines are extremely limited as hydrologic mining removed fines from the substrate. Reid and Goodman did a study in 2016 in the ponds to look at habitat use and distribution. The ponds provide a wide variety of habitat variables and they studied differences in depth, current, substrate, vegetative cover, organic cover, and outgassing. To move the lamprey out of the sediments, they developed a 1m circle with a low meter current that would encourage the ammocoetes to move up to the surface. Their study showed that ammocoetes are active year-round in the ponds, prefer sand and silty areas with high densities near low velocity areas. Ammocoetes avoided areas with dense vegetation and slack water. They are also nocturnal. The study was not able to determine how ammocoetes would respond if the sediments were exposed, such as during excavation operations.

In 2018, the Program received funding to re-dredge the upper pond to increase carrying capacity for sediment. A plan was developed that would divert water flow to the west side of the pond using sand bags and then gradually drop the water to expose the sands and allow the ammocoetes to migrate. The secondary channel would use an existing beaver dam to bring down the water levels. While the sand bags were prepared on site, they conducted a survey to look at the distribution of ammocoetes. Since the 2016 study, the ammocoetes had moved from the entry of the pond to the middle, where the excavation was proposed. Since it was unsure how the ammocoetes would respond when the water level was dropped, they did a test excavation on the emergent bank. The water level was controlled by using sandbags in the beaver pond.

During the test, the ammocoetes did not move when the water level dropped. Those that came to the surface were stranded on top with no indication of successful movement to the water and no evidence of predators. Next, they radio tagged 25 larger ammocoetes to see if they could detect movement for a few days as the water level was dropped. The results show that the ammocoetes stayed within a few square meters. The results indicate that there was the potential for complete mortality of ammocoetes if the pond was excavated. Reid estimated that with 3500 m² of habitat in the pond and an average density of 17 ammocoetes per square meter, there is the potential for 59,500 ammocoetes in the ponds between 1-7 years old, not including any recently hatched. Reid also noted that one of their TRRP volunteers had asked why they wanted to excavate when there

were a variety of different habitat types in the ponds, which was what they were trying to achieve.

Groves asked how far the lamprey would run up the river before the dams were constructed. Reid estimated that the lamprey would go as far as they could to find suitable fines, with some reported up to the Illinois River and Yosemite Valley. Reid also clarified that the land-locked eels in the lakes were freshwater eels that were predatory and got along with the brown trout. Those species were common to see attached to a salmon in the Trinity. The Pacific Lamprey stop feeding once they re-enter the river. Groves asked what would happen to the ammocoetes during catastrophic sediment movements, which have occurred in the past. Reid stated that the lamprey are well adapted to the river and are known to detect light patterns, depth, and chemical information in the river, which could direct them to move towards lower energy water. However, he added, they really did not know at this time and it was possible that they would all end up in the ocean. Goodman added that they are looking at continuing this study up river and that they are still investigating if there is any response to fluctuating water levels.

Hillemeier asked if they had noticed any increases in the population lately. Reid answered that a few years ago, they recorded about 12,000 going through the passage device, but that they've barely showed up this year. He added that the lamprey have lost about 40% of their historic range due to the dams, but are unsure if that is causing the population decline. There has been a contraction on populations in southern California. He also posited that predator prey populations may also be an influence. Stokely asked if Hamilton Ponds was going to be dredged based on this study. Hunt DeCarlo answered that they were no longer moving forward with the dredging. Goodman added that there was still storage available in the lower pond and some nice trails. Connor asked what was the recommended management for Hamilton Ponds moving forward. Hunt DeCarlo answered that the beaver dams could still result in habitat losses for the lamprey, adding that the Program was fine with the changing dynamic and adding that it is possible for the pond to completely fill in. Reid added that this reach has been important habitat for them as it was the only reach with high abundance.

Orcutt asked if they knew what the population levels for lamprey were in the Trinity. Reid answered that the only information they had was from tribal catches. In the lower Trinity, the numbers were good as that is where the fines are. When you get off the mainstem of the Trinity, there are habitat limitations. Orcutt asked what the lamprey's affinity for the streams may be based on. Reid answered that genetic work Goodman did indicated no genetic structure to the populations, suggesting a meta population that mixes broadly. He added that the lamprey are specialized to a stream, but generalized to the coast, where rivers may only be open for a short period of time. If the lamprey are near a river when it's open, there is a pulse. Bader asked if there were any impacts from the stable flow coming from Buckhorn dam. Reid answered that the curvature of the dam was pretty lamprey friendly and that most of the year they were not seeing an effect.

Quarterly Budget Update

Huntt DeCarlo gave an update on the TRRP Budget. She reported that she, Mike Dixon, and Linsey Walker would be meeting with each TMC agency to review the proposed FY2020 budget and then present at the April meeting. On the budget update, Huntt DeCarlo noted that items in yellow were changes that required a TMC vote. For Program Administration, the only change was an additional \$50,000 to hire a Program facilitator for the Refinements meetings. The amount is currently a place holder as the actual amount is still unknown. For the Implementation budget, the contract for the BA development was awarded at \$39,157 higher than originally estimated and could be fully funded from the FY19 budget. Due to approved changes to the budget from the September TMC meeting, the funds available for Construction were changed from \$4.5 million to \$4,240,228 to account for the approval of \$350,000 towards the two new science projects.

For the Science budget, since the Program is working on recommendations for the SAB formulation, the Program will not have time in FY19 to obligate funds for the SAB program. These funds have been removed from the FY19 budget and the SAB will be funded at the \$115,000 level in FY2020. The SAB balance was put back into the rehabilitation Construction budget. Monitoring for the redd distribution was increased by \$20,000 to account for changes in indirect rates. The two studies approved at the September TMC meeting have been added to Effectiveness Monitoring with \$175,000 each as place holders. Both studies are being peer reviewed as requested by IDT and Huntt DeCarlo anticipates they will be approved and funded. An additional \$36,000 was also included in the Science budget for a contract on investigative monitoring by the Denver Technical Service Center, which was included in the investigation plan as a FWS contract. It may have been originally suggested and discussed between Norris and Huntt DeCarlo that Reclamation fund the monitoring, but that is unclear. Huntt DeCarlo stated it is critical to fund now to complete the project work.

Helliwell suggested adding funds for a videographer to record the meetings as there was difficulty in getting the WebEx to work properly and for the public to participate. Ly asked if the TMC should approve the budget as presented or to include the suggestion for a videographer. Huntt DeCarlo answered that she would need the approval of the TMC to include it in the budget. Helliwell added that PCFFA could provide videographer services for about \$100 per day, which would include a hard copy. Hillemeier asked if it would be better to invest in a better conference call system or to set up listening stations in different locations to help people call in as part of the TMC's public participation goal. Huntt DeCarlo added that videotaping the meetings and showing them afterwards would delay public input until the next meeting. Bader asked that discussion of the videographer continue during the Public Forum.

Keith Groves made a motion to accept the budget changes highlighted in yellow in the budget spreadsheet as presented.

Dave Hillemeier seconded the motion.

The motion passed unanimously.

Groves suggested that funds for a videographer come from the Public Outreach agreement budget instead of looking to fund it from the Construction budget and suggested that there should be a plan to give direction on Public Outreach. Helliwell added that they could put the meeting on cable access or YouTube for free and include post-production for free. Hunt DeCarlo asked Helliwell to provide a description of the work and an estimated cost.

Action item: Vivian Helliwell will put together a description of work and estimated costs for providing a videographer to record the TMC meetings.

Connor added that a videographer would not address the connectivity problems with the teleconference line and WebEx. Hillemeier added that it might be good to do both and maybe invest in a good phone system. Dixon noted that the WebEx could allow for video streaming and would not require additional video to run. Groves stated that he would like the TMC to give the Executive Director direction on what is needed and then let her decide, with funding coming from the Operations budget. Norris added her support for having viewing stations set up at locations to allow people to video chat or call in, which might reduce issues with the WebEx.

Hunt DeCarlo then reviewed the second page of the TRRP Budget Report which listed potential options for reprogramming approved funds that may not be able to be expended by the end of the fiscal year. The list included options for funding FY20 costs for FEMA, Annual Report, and CDFW, DWR, NOAA, and RCD agreements. It also included the Dutch Creek and Chapman Ranch projects, YT Large Wood and Gravel Processing, and funds for new science projects the IDT will be recommending; these items did not have known funding levels estimated for them and could be good areas for reprogramming de-obligated funds. Hunt DeCarlo added that they anticipate \$500,000 for the watershed projects and \$200,000 for the Junction House project may need to be reprogrammed before the April TMC meeting. Hillemeier asked if there were other options for how to use the watershed funds. Hunt DeCarlo said they were open to suggestions. Groves added that even if a project isn't completed in the current year it made sense to move the funding aside to do the following year. Hunt DeCarlo explained that this approach would do that by putting the funds toward items that they know would need to fund this year to start. As projects move forward money is then free to shift towards those other needs. Simon-Jackson proposed that agreements that are funded for more than one year be reduced to only one year. Hunt DeCarlo explained that it was done that way to make the modifications easier for those agreements. Orcutt noted that last year some of the construction budget was used to pay for monitoring and asked why it was different this year and why some of those same activities didn't receive funding again. Hunt DeCarlo answered that some of the decisions were based on which entities wanted future funding. For this last year, an additional \$600,000 was reprogrammed to the Science budget to pay for large wood and gravel processing since those items made the most sense to fund ahead. Orcutt added that he could not remember why there were no annual funding agreements for some projects, noting that there were some projects the Hoopa Valley Tribe would like to see in the budget but recognized that the AFAs were not defined. He added that paying those programs forward would help provide those programs with more stability.

Teresa Connor moved that if the TRRP was unable to fund approved FY19 items, the Executive Director has TMC approval to fund the options listed in the Options for Reprogramming FY19 Funds table presented during the December TMC meeting through FY2020.

Keith Groves seconded the motion.

The motion passed with 7 yes votes and one abstention.

Hoopa Valley Tribe abstained from voting.

Updated ROC on Coordinated LTO of CVP and SWP

Katrina Harrison, Reclamation, gave an update on the ROC on Coordinated LTO for CVP and SWP. Since the last meeting, Reclamation does have a schedule for consultation determined by a Presidential Memo. The BA will be completed by the end of January 2019, with a completed draft available for review by January 4, 2019. At the same time, Reclamation has started the NEPA process and is developing alternatives. They anticipate a public draft EIS released at the end of June 2019 with the BiOp released around the same time and the ROD signed by December 2019. Reclamation is currently focused on the following alternatives:

- Flow-focused, which would increase flow actions and propose fewer non-flow actions
- Heavier focus on habitat restoration construction, which may include installing temperature control devices, more habitat reconstruction, and increased spawning and gravel augmentation.
- Direct Interventions, which may include drought contingency plans for hatcheries to keep populations moving around.

Harrison reported that each alternative is being discussed, with a fourth alternative being a combination of the three approaches, which will likely be the preferred alternative. Reclamation is also working on public engagement, with a meeting scheduled for December 7 from 10 am to 12 pm. Harrison invited all members of the TMC to participate and to talk to her if they have any questions on the project schedule. Harrison also offered to email the public presentation to the TMC.

Action Item: Katrina Harrison will email to the TMC the Updated ROC on LTO presentation scheduled to be given December 7.

Hillemeier noted that there were three separate consultations that were going on before and asked how the process had changed. Harrison answered that there is currently only one process, with the focus on making improvements to the water supply in the short-term. Stokely asked if the ROC would include an amendment to the agreement between Reclamation and the State Water Project. Harrison answered that she was not sure if that had been determined yet. Stokely also asked if the alternatives were considering the flow alternative that the PCFFA submitted a year and a half ago. Harrison answered that the flow-focused alternative included sub-alternatives that

were based on comments they received, including the PCFFA suggestion. Stokely asked if the final BO would be released before the EIS is completed. Harrison answered that it would.

Report from the Executive Director (cont.)

Huntt DeCarlo continued the review of the Quarterly Executive Director's report with the help of Dixon. Dixon reported that they are still waiting for the Solicitor's review of the draft Agreement for the Junction City House. The TRRP held a public meeting for the Chapman Ranch Project with 30 attendees. The NEPA document is currently open for public comment and the signed FONSI is expected by the end of January. The Dutch Creek project is a little behind Chapman Ranch. The administrative draft was sent today for agency review and Dixon added that the US Forest Service process was a little different as they required a 30-day objection period. The TRRP expects a decision by late winter and assumes that a second public meeting will not be needed since much of the project was discussed at the Chapman Ranch meeting. Sky Ranch is in the process of updating the design to accommodate boat launch access after it was proposed that the existing access area be dropped. The designs are planned to be at 60% by January and the Program plans to discuss them in April with the TMC.

The Program was able to get a response from FEMA regarding the Conditional Letter of Map Revision (CLOMR) for the Chapman Ranch Phase A project. Dixon reported after discussion with FEMA, there was an avenue for a no effect finding to manage the FEMA floodway. If the Engineer stamps that the project will not affect the floodway, then they will not have to file a CLOMR, which will provide some flexibility. Hillemeier asked Dixon to clarify what he meant by not needing the CLOMR for Dutch Creek. Dixon explained that the CLOMR was still needed but that the TRRP does not need a county floodplain permit. A CLOMR is also needed for Chapman Ranch, which should be filed December 20. Dixon added that by the time the public document closes, there should be sufficient time to file the CLOMR. There should be about six months after comments are closed for the TRRP to get the permits needed before construction. Dixon explained that based on their discussion with the County and FEMA, once FEMA has everything they need to make their decision and the TRRP has a completed package, they have been able to get a floodplain permit in advance of getting the CLOMR. Hillemeier asked about the timeframe for the permitting. Dixon explained that they plan for the permitting to take about six months. While some projects, like Bucktail, were able to get the CLOMR sooner, they did not want to set that as their time estimate. Dixon also added that once they are finished with the permitting and compliance for Dutch Creek, Chapman Ranch Phase A and Phase B, Oregon Gulch, and Sky Ranch, they will have around eight years of permitted construction projects to work on to keep them busy for some time. Hillemeier asked if Chapman Ranch would proceed as if all the permits were in line as they worked on the agreements for the summer. Dixon said they would. He added that the Hoopa Design team had solid modeling that did not support the idea that the elevations around the structures would affect the CLOMR. *[NOTE: When the design was later modeled through the less-precise but FEMA-required HEC-RAS 1D methodology, the model indicated an increase in flood elevation around one structure. The design was subsequently modified to reduce that rise to zero].*

The BA for all Program activities except for flows was awarded to Hamer Environmental and the team has performed site visits for channel augmentation. The plan is to submit the draft BA within one year.

Public Outreach

The TRRP had a scheduled float with a group of river guides that was rescheduled from December to January. The hope is the guides will provide some feedback on restoration work. The January 14 float will visit areas where there are common interests, with participants from a fly shop in Redding and a representative from Cal Trout.

Huntt DeCarlo noted that input provided at the last TMC meeting for the Annual Report would be provided in the 2018 Annual Report and is not reflected in the 2017 hard copy provided to TMC. She added that the TRRP is also working with landowner agreements for future projects.

Refinements

Huntt DeCarlo said that after the initial meeting for Wednesday was canceled due to the Presidential National Day of Mourning for George H. Bush, she talked with Mike Harty, Kearns & West Contract Facilitator, who was willing to continue with a new meeting. Chad Smith, Headwaters Refinements Contractor, sent the final report on Nov 28 and is currently working on Task 7. Chad worked to develop an agenda for the first Refinements meeting. Huntt DeCarlo proposed sending a Doodle poll out to check the availability of the TMC and the facilitator to find a date. Huntt DeCarlo recommended that the first meeting be one day and that part of the discussion would determine a schedule for implementation and whether TMC wanted multi-day workshops. Simon-Jackson asked if they had heard anything about having the discussion as part of a closed Executive session. Huntt DeCarlo answered that they are still waiting to hear back from the Solicitor. Groves asked if part of the meeting could be open to the public and another session closed. Huntt DeCarlo answered that the bylaws say that all TMC regular and special meetings are to be open to the public. Orcutt added that they had originally discussed a workshop where Chad could participate in person and expressed concern about getting the facilitator up to speed. Huntt DeCarlo answered that Chad is still committed to participating and that she would look for dates where he could attend. She also noted that the facilitator had done a tremendous amount of work to read through the reports to get up to speed. Huntt DeCarlo added that the original intent of the meeting was to review the recommendations in the report and schedule time for a robust discussion on how to implement them. Hillemeier noted his concern that they were losing momentum by having a meeting to discuss a meeting. Huntt DeCarlo added that the original agenda would provide an hour and a half to discuss each individual of the 3 Refinements recommendations. There was also discussion about the recommendation on developing a Cooperative Agreement. Huntt DeCarlo proposed to reschedule the meeting for January.

Orcutt asked if it would be possible to get support from the Acting Regional Director. Bader stated that Mike Ryan, Acting Regional Director, would likely be there until only the end of January. Bader added that he thought it would be a good idea to schedule the meeting around Chad and Mike Harty's availability. He noted that he had worked with Harty previously and

thought he had done a good job and was very effective. Hunt DeCarlo added that she had sent out his resume to the TMC and that he understands the current issues and the stakeholders. She asked if it would be okay to schedule the meeting in Weaverville and the group agreed.

Simon-Jackson recommended choosing different days of the week as options for the Doodle poll as January was already filling up.

Action Item: Caryn Hunt DeCarlo will send a Doodle poll to TMC members, Chad Smith, and Mike Harty to reschedule the Refinements meeting to review the recommendations and next steps.

Publications

Peterson reported that a second report on the Trinity fish production model (S3) had been published. This report was on parameterization and calibration for the Trinity River. He noted that it was developed thanks to broad collaboration. The Annual Report is available on the website, including biographies of TRRP and TMC members. Hunt DeCarlo asked for TMC member to provide their biographies for the next report adding that Connor and Simon-Jackson have provided theirs.

The EA/IS for Chapman Ranch is currently available. Orthophotography is available on the TRRP website, which is an update to the environmental study limit boundaries to accommodate logistics for accessing the site.

Public Forum

Tom Stokely noted that with the issues regarding the Watershed program FOA, Hubbard was interested in considering it. He encouraged Hubbard, Groves, and Hunt DeCarlo to look at having the County administer the program. He explained that the funding agreement could be handled through a multi-year RFP.

Bader asked that the TRRP consider what would be needed to get a videographer, noting that they may need to compete it. He expressed support for looking at other equipment as well. Helliwell added that her organization would be happy to compete for that and wouldn't charge for travel time or post production costs.

Other Business

Bader reported that with the retirement of Mid-Pacific Regional Director David Murillo, Mike Ryan is Acting Regional Director.

Bader also announced that he would be taking a detail in Sacramento to replace Deputy Regional Director Federico Barajas, who is leaving Reclamation to serve as the Executive Director for the San Luis Delta Water Authority. To help with the transition, Elizabeth Hadley, NCAO Deputy Area Manager, would be filling in as Acting NCAO Area Manager. Justin Ly would also assume the role as Chair until Bader returns, which is planned for the middle of March. Hillemeier added that one of the recommendations from the Refinements was for agencies to engage at higher levels and encouraged Bader to participate in the Refinements meeting.

Simon-Jackson asked if there had been any progress with the Science Coordinator position.
Huntt DeCarlo answered that it is expected a decision would be announced the following week.

Adjourn at 4:00pm

TRINITY MANAGEMENT COUNCIL

December 2018 Quarterly Meeting – Thursday December 6, 2018

Location: Shasta-Trinity National Forest Supervisor's Office

3644 Avtech Parkway, Redding

Agenda (*WebEx info on page 2*)

Thursday December 6, 2018

Time		Discussion Leader
	<i>Regular Business:</i>	
9:00	Introductions: <ul style="list-style-type: none">▪ Welcome and Introductions▪ Approval of Agenda▪ Approval of September TMC Meeting Minutes▪ CVP Operations Update	Don Bader, Chair
9:30	Public Forum: Comments from the public	Don, Chair
9:45	Report from Executive Director	Caryn Hunt DeCarlo and Mike Dixon
	<i>Information / Decision Items:</i>	
10:45	Presentation Klamath Dam Removals	Mark Bransom, <i>CEO Klamath River Renewal Corporation</i>
11:15	Break	
11:30	TMC approval of 2019 meeting and teleconference dates <i>Decision Item</i>	Caryn
11:45	Topics for April Meeting	TMC members/Caryn
12:00	Lunch	
1:15	Hamilton Ponds Adaptive Management	Damon Goodman <i>USFWS</i>
2:00	Quarterly Budget Update <i>Decision Item</i>	Caryn
3:00	Break	

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|------|---|------------------|
| 3:15 | Update ROC on Coordinated LTO of CVP and SWP | Katrina Harrison |
| 3:30 | Public Forum: Comments from the public | Don, Chair |
| 3:45 | Adjourn | |

TMC - Dec 6

Call-in number: 1-408-792-6300 **Passcode:** 806 076 336

Web link: <https://trrp.webex.com/trrp/j.php?MTID=m0ed3ce2fa5f51ca5dbd474c21681b290>