

Draft Meeting Notes

TRINITY MANAGEMENT COUNCIL

September 15-16, 2021
WebEx Video Conference

Day 1, September 15, 2021 9:00am

TMC Members

Primary	Representative Seat
Don Bader	Bureau of Reclamation, Chair
Justin Ly	NOAA Fisheries, Vice Chair
Nick Hetrick	U.S. Fish and Wildlife Service
Michael Dixon	Trinity River Restoration Program, Executive Director
Michael Orcutt	Hoopa Valley Tribe
Teresa Connor	California Department of Water Resources/Fish & Wildlife
Tim Hayden ¹	Yurok Tribe
<i>Not Present²</i>	U.S. Forest Service
Keith Groves	Trinity County

Other in attendance: Elizabeth Hadley (Reclamation), Seth Naman, Gary Rule, Jeff Abrams, Chris Yates (NOAA Fisheries), Nick Som, Bill Pinnix, Steve Gough, Conor Shea (USFWS), James Lee, Chad Abel, Eric Peterson, Oliver Rogers, Todd Buxton, Brandt Gutermuth (TRRP), Justin Alvarez (HVT), Wade Sinnen, Ken Lindke, Brett Kormos (CDFW), Kyle DeJuilio (Yurok), Liam Gogan (Trinity County), Chad Smith (Headwaters), Darcy Picard (ESSA), Tom Stokely, Russ Giuntini, Blaine Nichols (Sierra Pacific Industries)

¹Kyle DeJuilio served as primary until noon the first day due to a schedule conflict for Tim Hayden.

²No Forest Service representatives were in attendance due to fire management priorities for the agency.

Notes: Sabrina Kleinman (EPP)

List of Motions

Ly moved to approve the September 2021 meeting agenda, noting approval of changing the March Meeting Minutes discussion to the June Meeting Minutes Discussion

Keith Groves seconded the motion with further discussion.

Ly and Groves approved the addition of a discussion topic for Day 1 on post-fire sedimentation.

Motion passed unanimously.

Nick Hetrick moved to approve the June 2021 TMC Meeting Minutes.

Groves seconded the motion

Motion passed unanimously

Action Items from the Meeting

- Don Bader will inquire on the status of the Whiskeytown EA.
- Don Bader will inquire about the status of the Douglas City temperature gage.
- Michael Dixon will develop more details on a proposal for a Trinity River Corridor Management Plan for the TMC's consideration at the October meeting.

Connor updated the TMC that Radley Ott will be the new CDWR TMC representative starting October 4. Sinnen added Brett Kormos will be the new Program Manager for CDFW. The new state representatives will meet to determine who will be the primary and who will be the alternate since both are new to the TMC. Bader thanked Teresa Connor for her work and contributions to the TMC.

Regular Business

Welcome and Introductions

Bader opened the meeting with roll call.

Approval of Agenda

Bader noted the discussion on the Channel Rehab Review SOW was changed from a closed-door session to a TMC discussion on Day Two. Dixon explained he had developed a SOW for the channel rehab review but has since walked back the approach and wanted to discuss his thoughts with the TMC to determine their level of comfort with the adjustments.

Ly moved to approve the agenda. He asked to change the approval of meeting minutes from March to June.

KG seconded the motion and asked for discussion.

Groves wanted to add a discussion item to address the impacts of the recent fires on sediment to the main drainages. Dixon noted he invited Ashley Rust, Ph.D., a researcher from the Colorado School of Mines who has worked with Trout Unlimited on the impacts of wildfire on fish for the December TMC meeting. Bader asked who would lead the discussion for this TMC meeting. Groves explained he and Gogan wanted to know if the TMC should be looking at potential mitigation and discussing how to manage the sediment from the fires as there could be massive impacts with the amount of area burned, sediment from dozer lines, and other factors that increased sediment during the fires. Bader suggested adding the discussion after the Science Symposium Update on Day 1. Orcutt and DeJulio thought USFS should be included as their BAER protocols may address some of the concerns and how the TRRP can assist with mitigation.

Ly approved an additional agenda item at 3:00 for Day 1 on post-fire sediment.

Hetrick noted the USFWS was surprised by the change on the channel rehabilitation review versus a corridor management plan agenda item. He had spoken with Shea and neither were aware of what prompted the change.

Sinnen noted the link on the agenda for the call-in information is actually for the video link.

Agenda passed unanimously.

Approval of June TMC Meeting Minutes

Hetrick moved to approve the June TMC meeting minutes.

Groves seconded the motion.

Motion passed unanimously.

Public Forum

No comments were submitted.

CVP Operations

Bader reported water storage was looking worse for the Sacramento side versus the Trinity side of Shasta Lake. The Sacramento side will get drawn down further to 970 kaf in September and 800 kaf in October, which create a storage deficit next year. Good winter precipitation could help and Bader was encouraged by the storm forecast for the weekend as it could indicate more rain this fall.

On the Trinity side, current storage is projected at 787 kaf and is projected to decrease to 730 kaf by the end of September and 683 kaf by October. These projections may not have included credits for the fall augmentation volumes, which could be encouraging.

DeJulio asked how the Program would know if it was meeting its temperature targets, which start today, as the Douglas City gage has not been transmitting data. Orcutt added the gage had been having issues since mid-summer and Zedonis had put them in touch with a person at USGS. The gage is recording data but not transmitting, which means a person has to go to the gage to upload the data, making it difficult to make real time adjustments. Zedonis indicated in a briefing Reclamation was doing releases from the auxiliary outlet to keep the water cold. Orcutt noted temperature management is a regulatory requirement by the state water boards for water rights orders and they should try to get it operational for compliance. Bader will get an update from Reclamation on the status of the gage and how it will be addressed.

Orcutt also asked about the status of the Whiskeytown draw down EA. Bader explained the EA was never issued due to challenges by environmental groups. Since the release was delayed, it is currently too late for Reclamation to take action, but he will contact the Bay Delta Office to confirm. The Bay Delta office was handling the NEPA compliance as they managed regulatory issues and management plans for CVO as CVO does not have the staff to manage it. Bader will get an update from the Bay Delta Office on the EA.

Report from Executive Director

Dixon explained the fires this last quarter have been the biggest challenge as they have impacted the whole suite of work conducted by the Program. It has delayed and postponed construction work and delayed or cancelled much of the survey and monitoring work.

Organizational Updates

The position description for the civil engineering technician position was approved and will fly soon. The position is now a ladder position (GS 9/10/11) with combined responsibilities for surveying and project management tasks. Dixon is unsure of when the position will be officially posted.

The project coordination specialist, who manages public outreach, is still vacant and pretty far down the recruitment queue. It likely will not be filled until the end of the next fiscal year.

Tonya Summer will be joining the USFWS as their primary representative in October, as well as the State's new representatives.

FY21 Budget Update Adjustments

Chapman Ranch Phase B was fully funded this fiscal year. Abel has not determined if there were any cost overruns associated with the demobilization and remobilization work from the fire evacuations. For now, the crews are back on site in time to be out of the river by October.

\$30,000 was added to the Denver Tech Center's modeling support agreement, which will support water modeling work that informs several aspects of the program, such as their watershed restoration and channel rehabilitation design work and habitat effectiveness modeling. At this point, the FY21 budget has been fully spent.

Watershed NOFO

The Program selected NFWF as the third-party watershed grant administrator. The Program is awaiting final approval of the award from the Denver Policy Office before officially awarding the contract.

Implementation Update

For Chapman Ranch Phase B, civil crews were on track to complete in-channel work by mid-September before work was shut down. County roads reopened on August 30, and crews constructed containment dams and other structures to protect the side channel during the ceremonial boat flows along with other site completion work on the non-USFS side. The revegetation crews are out this week constructing beaver dam analogs and starting revegetation work where feasible. The Program received an exemption on September 9 from the USFS, allowing them to continue work despite the forest closures. Yurok Tribe Construction plans to be back online Monday morning. The team anticipates completing the work by the in-channel closing date. Bader noted the exemption was granted at the program's request by USFS.

Bader asked about the turbidity issues observed during Labor Day weekend. Abel was not sure what caused the turbidity as it came from upstream of the site. Gogan added he observed turbid water all the way to Poker Bar but wasn't sure if it was present above there. He wondered if it was from the boat dance float period and possible from the gravel augmentation at the hatchery reach. Dixon explained while there may have been some sediment flow from the gravel augmentation it would be unlikely for it to travel that far as there would not have been that much fine sediment in the gravel inputs. Gogan noted the turbidity was in the mainstem and not coming from the tributaries. Dixon speculated there may have been sites upstream from Chapman Ranch burned by the Monument Fire where sediment may have mobilized. Also, this was the second time Dutch Creek was hit with elevated flows since its construction last year. Gogan noted there was also significant bulldozer and heavy equipment use at Maxwell Creek and Browns Creek to

Oregon Mountain, as well as bulldozer tracks from Highway 3 to Summit that left significant sediment. Buxton thought the sediment could also be from additional biomatter in the river, which was growing all summer. Gogan thought the color looked more like it was from a slide than from biomatter.

The Program has submitted its modeling for the CLOMR for Oregon Gulch and is in discussion with Trinity County to issue an initial floodplain development permit to remove tailings and a second permit for channel rehabilitation work once the CLOMR is reviewed. The project will be implemented with FY22 funds and could start this winter.

The Team has been communicating with private landowners for the Evans Bar project. There are 8 private parcels upstream that may not be in the site, but they would like to engage them for potential stream access and mobilization needs. A meeting was scheduled for September 11 but was cancelled due to the Monument Fire. Aaron, Oliver, and Chad have since rescheduled the meeting for October 9 to discuss design ideas with the landowners.

There is one landowner for the Upper Conner Creek project they have been unable to reach and the team is focused on getting in touch with them.

The hatchery reach gravel augmentation was completed on July 26. This is the first augmentation at the reach since 2007 and there was some concern about potential impacts in various community forums. Turbidity was monitored, recorded, and submitted to the water board. Abel thanked Buxton for his monitoring work during gravel placement. Gogan explained the public was reacting to the lack of notification about the augmentation given the magnitude of the project. Dixon noted signs were posted in the area and near the reach site. Abel was unsure of how many people read the fliers posted around town and at the boat docks and shores and noted Dixon is working to get approval for the TRRP to post information since social media is the main way people engage in community discussions.

Orcutt added that concerns raised by Kautsky were also not addressed regarding the composition of sediment at the base of the hatchery and the pedigree of fish that spawn there. While the TRRP has limited involvement with the hatchery, the river doesn't segregate the hatchery and the natural fish populations. Lindke offered to speak with Orcutt offline about the Fish Work Group's discussions on the issue that affect the rationale for the decision.

Public Outreach

The annual report was finished and sent to TMC members. Abel appreciated Kathy Marten's work on the report, both for the layout design and detailed editing.

The Program hosted a public float on July 29 with the Trinity County RCD. Buxton, Peterson, Gutermuth, and Laskodi helped lead.

Notices were posted for the pulse flow actions for Spring Chinook and the ceremonial boat flows, which returned to base flow a few days ago.

A public meeting for the Winter Flow EA has been confirmed for October 5. The meeting will be virtual due to COVID restrictions.

The Program has submitted an article to the Trinity County's RCD Conservation Almanac outlining its FY22 Outreach Activities.

Regarding public notifications, Dixon explained the Program did create a post for social media on the boat dance flows. The flier was provided to the Shasta-Trinity National Forest, who were able to share it. This let Dixon share the notice publicly. Under existing DOI policy, the Program is not allowed to directly manage any social media accounts. Those restriction may ease up in the future. Dixon is meeting with their Public Affairs officer to see about directly managing their own page to have more of a presence and make it easier to post notices for the community. The restrictions have been an impediment as there are items the Program cannot share. Currently, items can be shared through the CVP Twitter account, but most people in Trinity County do not follow them. Gogan offered to post fliers at his store since he has a lot of traffic and people asking questions. He also suggested Herb Burton's shop. The administrator for the Trinity County Community page could also be asked to post items. Dixon explained he had posted the boat dance notice. He offered to talk with Gogan offline about posting at Burton's shop.

Science Update

Lee reported an increase in reports submitted to the TRRP, which have created a backlog of peer reviews. The draft temperature synthesis report was recently submitted for peer review with some pretty significant recommendations. The draft juvenile salmonid report is also in peer review along with a draft technical memo on Trinity River riparian mapping. They also received a draft report assessing temperature regimes for juveniles on the Trinity River tributaries and mainstem the day before that was not included in the ED report.

Several reports have been finalized and will be posted to the dataport:

- TRRP hardwood recruitment monitoring report
- Data driven riparian revegetation design method paper was published in *Ecosphere*.
- Thesis from Jasmine William-Shen from HSU on responsive invertebrate drift from Lewiston Dam on the Trinity River.

WG Briefings

Fish – Lindke – The work group met yesterday and started the process to elect a new coordinator. Two people were submitted but should be selected by Friday. They have continued work on targets for two objectives: pre-spawn mortality and juvenile outmigrant temperature targets. The group also discussed priorities for FY22 science funding and Pinnix gave a presentation on the juvenile synthesis report.

Design – Alvarez – The group planned to meet in August to do a field visit at Chapman Ranch but canceled due to fire evacuations. They started discussions for the Phase II channel rehab review but are waiting for further direction given Dixon's discussion topic for Day 2.

Watershed – Abel – The group met on September 10 to discuss priorities for the science funding. Two proposals were generated and sent to the IDT. They were also updated on the selection of NFWF as the third-party grant administrator.

Physical – Dixon – The group met in August. They are looking at potential projects for the science funding and continue work on their objectives and targets. They are discussing guidelines for future sediment augmentation needs and ironing out regulatory steps and technical level needs. It looks like additional NEPA and CEQA compliance maybe needed, which the TMC will hear about as well as potential future augmentation locations.

Coordinators for the Flow and Riparian and Aquatic Ecology Work groups were not available and Lee had technical issues with his video and audio and was unable to provide additional updates at the time.

BREAK

Ly took over Chair duties for Bader.

Inclusiveness and Approaches in Program Outreach

Abel discussed outreach challenges and ideas to improve public perception and engagement with the program. Often, resources are directed towards those who are in most opposition and least likely to change their minds about the program. However, the Program's public events remain well attended by those who support the program.

As an example, Abel went over comments posted to Facebook forums in response to the hatchery gravel augmentation project, which was highly scrutinized despite 13 previous augmentation projects in the same area or below the hatchery site. Most of the negative comments fall in the "out and out opposition" side of the receptivity continuum, indicating they don't like the Program's direction and likely will not be swayed. However, some neutral comments indicate folks who may be swayed one way or another, especially by misinformation. Abel recommended focusing outreach efforts for these folks.

One explanation for why people would be irate over a common management action is due to unresolved issues with the Program. When the Program doesn't address them, opponents become more frustrated and critical. While the work provides opportunities for public involvement, it does not address the underlying issues. Since the work is visual, the public can see what is being done but they may not understand the reasons. For example, the Oregon Gulch project was a lightning rod for the public as the floodplain is 15 ft above the river. While the design dramatically improves existing conditions, the Program had to do some significant contortions to make it work.

Similarly, during the public scoping period for the Flow EA, the local chapter of Trout Unlimited submitted an op-ed saying they believed higher spring flows already accomplished the work needed. They suggested maintaining a higher base flow in the winter. However, their main point was the TRRP lacked transparency and outside groups had difficulty reviewing and commenting

on documents. These oversights led them to not support any changes to the release schedule. However, on their website, the national organization has a quote supporting flow management that mimics natural variability in rivers for salmon and steelhead.

The Fly Shop owners submitted a similar op-ed to the Trinity Journal where they cite the terminations of the TAMWG, poor salmon returns, the undervaluing of steelhead by the program, distrust of how the TRRP conducts business, and a lack of regard for their 40+ years of experience. Very few of the comments were winter flow but do highlight a distrust of the Program.

Abel recalled a disagreement he had with a program partner about how to approach landowners. Abel took a different approach, but he had not shown respect for how others approach these matters in the past. Before coming to the Program, Abel worked with a tribal government where they had a project documenting shoals for fisheries use. The maps they developed were not accurate, making placement difficult since they were unsure if they were setting the nets in the right locations. When they paid a tribal commercial fisherman to help them reset the nets, the fisherman made a remark about one of the areas where they used to fish in the 1980s. He helped them redirect the nets, which were only off by a few hundred meters. This experience underlies the importance of traditional ecological knowledge, whether it is multi-generational or accrued over a lifetime. There are those who have been connected to the resource in valuable ways and while they may not be right about all of the conclusions they draw from their observations, you cannot expect people to listen if they cannot be heard.

Abel proposed an outreach plan that emphasized respect for other views and personal interactions to address issues. While they may not solve them, it could help with the disconnect. The first is using a more person-based focus on media, including staff bios, highlighting individuals in the annual report, and helping refer people to partners with the expertise they are looking for. The last item has become trickier in virtual formats where there may be a lack of civility. Abel recommended taking such interactions offline where possible.

The second approach is to decode government nuance. The public should not be expected to understand the nuances of government structure, processes, and authority. Staff and partners are often asked about topics outside their wheelhouse. Abel recommended developing canned responses to direct people to the right resource. This can facilitate public knowledge by pointing people in the right direction. Lastly, the Program needs to help people know how to effectively engage with them. Peterson has added information to the TRRP website with links to help people navigate and understand how to provide effective comments. The Program does want to hear from folks, but they want to hear in way that can be applied to the work being done.

The third approach is to look at outreach outside of Trinity County. Expanding the scope can counterbalance criticism with more constructive feedback. A lot of the program's stakeholders don't live in the local area. The Program can also do better with tribal communities with a focus on collaboration.

Fourth, the program can improve Work Group transparency. There is a lot of valuable information on the website for people to review. However, the Work Groups could improve transparency by consistently posting their agendas in a timely manner and providing a meeting summary to increase awareness of their performance and decisions.

Lastly, the Program needs to know good advice when they hear it. Not all comments are realistic but there are some that have merit. For example, public floats could be held on weekends instead of weekdays. This comes from criticism that the weekday flows are an attempt to keep people from attending. The floats should be an inconvenience for the Program not the public. Second is to improve communication about the grant program. There is criticism that the annual \$500,000 in watershed grants is limiting, but the Program has failed to highlight how those funds are leveraged to bring additional funding into the basin or where other non-funding related resources assisted with watershed restoration.

The TMC has approved funds to continue working with the Trinity RCD, which helps get information distributed and increased support for in-person events. Abel presented the idea of holding a regular science event with a local business. This provides a chance for people of all views and demographics to come together and hear about projects and ask questions. After the event, there are more opportunities for personal conversations that can build relationships. A regular event could also give other programs or entities a chance to showcase their work.

Orcutt supported Abel's ideas and was interested in helping on the tribal side to develop responses for various topics so they can provide factual and concise information to the public. For example, the Program often gets questions regarding the fishery allocations, because the federal agencies were largely the reason the fisheries were decimated. He suggested a document from USFWS Yreka office that could provide information on the allocations and some input from Kormos, who has served on the PFMC. He also noted that the structure and organization of the TRRP is largely due to the Solicitor's opinion on a number of concerns, which focused on restoration flows and less on fisheries or hatchery management and people may not realize the difference. Kormos clarified that while he had acted on the PFMC for all things salmon, the TMC should not expect his participation to continue with any regularity. DeJulio appreciated having a robust hands-on plan for public relations with real efforts to improve outreach.

Hetrick asked if there had been any surveys on views of the Program to determine which opinions were minority. He noted similar studies done on subsistence management in Alaska and thought it would be good for understanding which perspectives were in the minority. Abel explained they did not know quantitatively which views are minority ones and which are not but did note there are certain folks whose names come up often who they try to reach out to with uncertain success. The RCD did do a survey a few years ago but did not have the same effectiveness as the Alaska studies. Future surveys could be informative if drafted differently.

Juvenile Synthesis Report Findings

Bill Pinnix presented the Long-Term Analyses of Juvenile Chinook Salmon Abundance Estimates – Measures of Success. This is a continuation of his presentation in March to allow more discussion and note key caveats in the results and how they measure success. Pinnix reviewed various measures used to estimate abundance. Overall, stock recruitment models were the primary methods used in the report as they can test density-dependent effects between spawner and juvenile abundance.

The Pear Tree Spawner Recruitment model indicated density dependent factors affected juvenile production per spawner. The Willow Creek Spawner Recruitment split the data between the pre and post ROD populations. Both showed density dependent effects with similar maximum values for spawners. Based on the models, it would suggest maximizing the spawners at 30,000 if the program was focused on juveniles. However, the goal of the program is to maximize adults. He noted the low in the model is from 2004, which was the first year of ROD flows but without full implementation. The high point was from juvenile estimates in 2013 which correspond to the best 2012 spawning population size they saw in recent record. Looking at the full model, Pinnix recommended the best use of the model suggests continued shifting the maximum up and to the right, indicating more juveniles per spawner while increasing spawner population size. However, larger adult runs are needed to determine if those shifts persist with post-ROD flows.

Pinnix cautioned against using the Pear Tree model as evidence for success. The positive trend misses two years of data from 2005 and 2006, which were extremely wet years when the Program used estimates due to issues with sampling. Additionally, data from 2004 and 2003 were also included, which were prior to full implementation of ROD flows. Removing those data points flattens the curve. The curve still indicates density dependence and while juveniles per spawner are increasing, it is largely due to declines in the spawner populations. This means fewer juveniles overall, which decreases the density dependent effects.

Similarly at Willow Creek, the apparent trend is only weakly significant and largely driven by the latter three points where spawners were low. Pre-ROD, there were a few years where juveniles per spawner were fairly high and similar to current years, but it is unclear why.

Based on the report, the Fish Work Group recommends using stock-recruit model parameters as a metric as they can indicate capacity while tracking spawning size against juvenile production. While spawner size is incorporated in the juvenile per spawner calculation, the full recruitment model offers a more complete picture. The goal is to maximize productivity and capacity, by shifting the maximum height of the curve up and to the right.

Sinnen asked if the pre-ROD estimates were calculated using flow-based abundance or mark-recapture estimates. Pinnix explained another forthcoming report reconstructed older data with mark-recapture estimates. However, he noted flow-based abundance was also calculated and used as the primary reporting method from 1993 to 2002, with no mark-recapture estimates taken from 1993 to 2000. The Pre-ROD estimates were developed using the relationship between trap

efficiency and discharge to reconstruct the population. The populations represent estimates and not flow-based expansions. Sinnen pointed out the data indicates high juveniles per spawners in the early 1990s which were low abundance years when habitat was not a limiting factor on production.

Buxton cautioned interpretations on using Ricker curves as it can be used to justify removing what are thought to be extra adults once a certain number of juveniles are hit. However, adult salmon are important for delivering nutrients and could increase future production. Pinnix agreed noting the Program is not managing a juvenile fishery and they should not manage based on how these models were used in the past. Instead, they should track changes over time to give the Program a sense of the interplay between spawner and juvenile populations.

Orcutt asked if the authors used the S3 model in their analysis and whether the report focused on fall Chinook, noting that when Sam Wilson did the modeling there were different races and management standards incorporated. Pinnix answered it was focused on fall Chinook, but they did not use the S3 modeling. However, the authors did not try to separate spring and fall populations as there was no way to do it. The spawning population size represents all adults. Orcutt added these population overlaps are a major consideration as other spawner recruitment models, such as on the Klamath, have identified specific targets for different populations while the TRRP is focused on a target of 62,000 to 63,000 adults. Pinnix explained the team hopes to get a better picture through the cohort analysis. Orcutt suggested looking at other models as well, such as Beverton-Holt.

DeJuilio highlighted the metrics indicate a positive trend and that the most robust metric is the recruitment curve. The analysis indicates a density dependent effect, which suggests a limitation somewhere between escapement and outmigration. Those two findings support continued flow and habitat rehabilitation as it is having some success in the early life stages. DeJuilio recommended processing the results and understanding how to ensure the correct messaging.

Giuntini asked if there was an optimal adult spawner return size that would satisfy a sufficient juvenile population since it appears to be a balance between having enough spawners to generate enough juveniles. Pinnix cautioned against making those parallel as they only look at counts without considering different flow regimes or underlying environmental settings. Instead, the models could assess whether juvenile production or spawning habitat are limiting production. He agreed with Buxton that excess adults are beneficial to the systems and there are not enough high returns to fully understand the dynamics.

Hetrick commented that the improvements do not differentiate between ROD flows and physical habitat restoration. While the ROD flows are standard for the program, restoration activities are expensive and asked if the analysis could parse the two using the S3 modeling to separate the influences of both improvements. Lee asked if the curves could be related to the physical habitat on the river to illustrate the impacts of restoration on outmigrant populations. Pinnix thought it could be and suggested discussing with the Fish Work Group. Som explained they would need measures of habitat at the same scale as the area sampled at each trap. He liked the idea as there

appears to be a benefit from post-ROD flows, but wondered about similar trends for implementation. Pinnix explained the results remain flat when looking at abundance or biomass due to the lower spawner population sizes. A longer time series is needed to detect trends as salmon populations are dynamic. DeJuilio added that habitat would also need to be estimated annually over a range of flow to compare to each year's hydrograph and outmigrant abundance. Currently there is only one systemic estimate over a range of flows based on 2016 conditions. Dixon cautioned against parsing flow and habitat for the post-ROD effects as they interact together. The results demonstrate a density dependent effect, which indicates there is still work to do and the results should inform the Program.

LUNCH

Bader resumed Chair duties after lunch.

Winter Flow EA Update

Abel gave a status update on the Draft EA for the Winter Flow Variability proposal. Under current flow management, pulse flows are in asynchrony in the mainstem compared to the tributaries, resulting in flows that are too late and too cold in late April. Current management results in habitat gains when most juveniles are downstream of Pear Tree. Also, the spring releases decrease temperatures below the adult holding targets and the juvenile rearing ranges, which affect metabolic and growth rates.

While the TRRP cannot change the volumes under the ROD or separate flow from temperature, the ROD does allow the TRRP to adjust the timing and magnitude of releases. Through the proposed action the TRRP hopes to increase fry and parr growth, increase synchronicity of flows, improve thermal cues, increase nursery habitat, provide seasonally appropriate disturbance, and reduce temperature suppression through a more natural flow regime. To do this, volumes would be shifted to two periods: flow synchronization (Dec 15 to Feb 15) based on CNRFC forecasting and elevated base flow (Feb 15 – April 15) based on decision tree parameters. Under the flow synchronization period, the TRRP would coordinate a flow event up to 6500 cfs based on forecasting with a 72-hour notification window to coordinate with Reclamation. Under elevated base flow, two additional flows are possible based on water year type and previous flow releases to determine volumes. These winter flows would use water from the receding limb of the year's hydrograph, truncating the return to baseflow, which would continue to meet ROD objectives for each water year.

Analyses suggest fry capacity should increase with winter flows and increased juvenile sizes, with the effects being most pronounced during wet years. Abel noted cold water suppression is most pronounced during wet years and moving the water appears to have increased benefits. The action would also increase power plant generation with \$2.5 million in additional revenues. The action would not significantly increase redd scour.

Scoping for the proposal was completed between May and June. While not required, the TRRP thought people would be interested in this project since it is the biggest change to flow since the

ROD. They received 72 comments, which is higher than for most channel rehab projects. The public comment period for the Draft EA will be from September 17 to October 18, which has shifted slightly as the team finishes Section 508 compliance and editing. A public meeting is planned virtually for October 5. Once the comment period closes, the TRRP will review the comments and develop responses before finalizing the EA and issuing a FONSI in November.

Lee mentioned the white paper developed for the action is included as an appendix to the EA as it outlines the science behind the action. The paper is also being used as a case study by Reclamation as part of a peer review workshop.

Orcutt asked if the EA looked at diversion rates into the Central Valley from the October 1 since water has been diverted from there historically without consideration of water year and it would be good to compare. Abel explained they did not, except as part of the hydroelectric production estimates. Orcutt added there are still several reports that have not been completed, such as the flow synthesis report and asked if the results were based on peer-reviewed reports or just initial studies. He noted there are other concerns on the river that could use water, but since the Program has limited water, he wanted to make sure the action would not short-change other needs. He also asked how the analysis could use the USFWS models when they are not cited as a participant and what consideration was given to endangered species. Abel answered the USFWS was involved and participated in meetings initially but have been unable to lately due to drought priorities. Ly answered a new BO would be needed if the changes to flow on the Trinity River resulted in additional adverse effects to Coho. If the anticipated effects are only beneficial, the Program can rely on the 2000 BO if it covers Coho.

Connor asked if the analysis accounted for lower reservoir levels during dry years to determine if the winter releases could affect the cold-water pool. Abel explained it was not considered as current ROD management is based on flow volumes and not pool management. DeJuilio added the reservoirs are usually not thermally stratified in the winter and the water volumes released are relatively similar which makes impacts to the cold-water pool unclear.

Science Symposium Update

Lee gave an update on organization of the Science Symposium to review the synthesis reports. It is organized by the SAB, IDT, RCD, and the Riparian and Aquatic Ecology Work Group. The SAB is focused on relating symposium findings back to the Program's adaptive management needs. The Work Group is tasked with managing the symposium schedule and facilitating. RCD is working on outreach and advertising.

The symposium will focus on the synthesis reports. The last symposium was held in 2016 as a DSS workshop. Due to COVID restrictions, the symposium is planned in two parts. The first part will be a seminar series with authors presenting their reports and recommendations. The intended audience for the talks are scientists in the TRRP, but the public is invited to participate. The talks will be grouped by topic and held virtually over Teams. These sessions will run starting next

month until the end of the year, depending on when Chapman Ranch Phase B construction finished to allow Program staff to participate.

The second part will be a 2-day workshop on findings and recommendations to incorporate into management, monitoring, and research plans. The goal is to hold the workshop as an in-person meeting, but contingency plans have been developed in case of COVID restrictions. An in-person meeting would take place in Weaverville with facilitators. The goal is to hold the workshop in January, with potential to shift to February or March. If an in-person workshop is not looking possible, the March workshop would be switched to a virtual format. The call will be made in a few months depending on COVID developments. RCD has reserved the Trinity Performing Arts Center for the workshop and the Riparian and Aquatic Ecology Work Group will start scheduling presenters and publicizing the schedule soon.

Orcutt suggested getting outside help with organizing the symposium to make sure it is well advertised, everyone can participate, and it coincides with the changes being put in place for Refinements. He asked about the outcomes of the last symposium. Lee explained the 2016 symposium focused on developing a DSS to cover all programmatic actions, but ultimately the workshop led to the development of a DSS for the flow scheduling and modeling process, which is where it was most appropriately applied.

Lee added his update for the IDT as he had technical difficulties earlier in the meeting. He noted the IDT is working on a process for evaluating ideas for the \$250,000 in short-term funding for research and modeling needs. Each work group is presenting their suggestions along with pre-proposals, with a limit of 3 topics. The IDT will then rank and select the final projects. The SAB is interested in providing feedback on the IDT's list before it is finalized. PI's for the highest ranked projects will then provide full proposals for SAB review. The IDT hopes to make its final decisions on projects by February or early March.

Orcutt asked if there were sidebars on what proposals could be submitted and if it was limited to TRRP focused projects, noting there were discussions on studies related to the fall augmentation releases which are outside of TRRP flows. Lee explained there were not strong limits on proposals except to see studies the TRRP could use and are separate from status and trend monitoring work to avoid long-term monitoring commitments. The goal is to address questions that come up outside the normal program funding cycle. Orcutt recommended giving partners better information on the parameters next time. There is concern about the effects of the fall augmentation releases on spring ecological effects and they would like a study to be eligible for funding, but groups need to know ahead of time if there are scope or eligibility limitations. Lee explained he asked the work groups to present topics that are linked to either the groups' objectives and targets or the actions they regularly perform to narrow the list of topics.

CVO Updates

Bader reported the Whiskeytown EA was not released. The Bay Delta Office is managing it as it is a CVP-wide action that could affect the Delta. Currently, it is too late in the year for the action to move forward.

CVO has asked USGS about the Douglas City gage. Their staff cannot go to the gage to download data due to the smoke. CVO is using existing data to determine temps based on ambient temperature and time to year to track it. They intend to use the auxiliary valve to meet the Douglas City temperature targets.

Fire and Sedimentation Impacts

Groves explained he and Gogan wanted to discuss the Program's role and responsibility for managing sediment impacts to the river from recent fires, as they estimate the fires and mitigation measures created tens of thousands of yards of material that could slide into the river. Groves asked what the Program had done in the past and thought relying on the USFS could be a fool's errand. Gogan added that sediment from the Carr Fire a few years ago blew the river out for a whole month and that every drainage from Junction City and Burnt Ranch will receive millions of tons of sediment. He asked if the Program should think about how to mitigate inputs into the North Fork and French Creek, which could hamper restoration for the next few years.

Dixon agreed sediment and debris inputs could be a big issue for the next few years, however there is a formal process under the USFS BAER protocols. Their team will assess risks to the slope, including wasting and sediment loading and are trained to start once it is safe to get them to sites. He was unsure if the USFS had already started working on its BAER assessments, noting that soil severity burn mapping will be a major factor that drives what interventions will be needed. Dixon was unsure of what role the Program could take in the emergency phase. The Program intends to participate as a cooperating and/or participation agency to address stabilization. Dixon thought the Program, through Reclamation, could engage more directly and thought it could be a driver for watershed funding in the near future. After the Carr Fire, they worked with a watershed grantee to reprioritize funding for road crossing improvements and erosion reduction in Deadwood Creek.

Gogan reported the Monument fire has an extinguish date of October 30 and was certain that assessments would not occur until the fire is 100% contained, noting that most places actively burning are in some of the largest tributaries in the Basin. Groves suggested he and Gogan could ask the fire teams when they intend to start the process. Gogan noted he would be at a fire meeting tomorrow.

Buxton commented the Program's job is to build resilience in the river channel, which cannot be done without disturbance. Rain would induce a set of circumstances that could be good for the river. He noted the river has a fine sediment deficit and the increased sediment could alleviate that, especially if high flows increase inputs. There is also the recommendation for using dam releases to help route sediment through the system to mitigate damage to incubating eggs. After

the Carr Fire, the BAER team predicted huge sediment inputs based on flow rates that did not happen because it was a critically dry year. There is also a rapid natural stabilization process that occurs in the watershed.

Gogan explained the fine sediment in the area is of epic proportions and there is uncertainty about what the water year will look like. Every single drainage could be impacted in a way they have never seen before these fires. Buxton noted one of the proposed science projects from the Physical Work Group is to monitor turbidity downstream of the burned area to quantify impacts on rearing juveniles. DeJulio agreed the issue was timely and a cause for concern but agreed with Buxton that the impacts of fire on watersheds is still unclear. After the Carr and Camp Fires, Clear Creek and Butte Creek had record returns. While fires have significant sediment impacts, it ignores the history of mining on the river, which were less than when the river was dammed. The river has seen disturbance on this scale. If the winter flow EA is approved, the Program could address a large stream bed mobilizing event this winter. Dixon added that major fires from the last few years resulted in major burn scars that will take the forest decades to recover, while other areas are only moderately affected. Along Hwy 299, there are lots of standing burned trees, but not all of them will die, creating an interesting mosaic. The Program should be cautious about what could happen and only intervene if interventions are needed. Dixon understands there is uncertainty about the ramifications from the fire on watershed function and he is organizing a segment of the December TMC meeting to hear from national experts on wildfire impacts on salmonid streams. It should be a time where the Program can think about how to contribute to watershed restoration from the fires.

Naman added this is also a good reason to synchronize dam releases with tributary flows. If a lot of sediment is delivered to the river, one of the best things the Program can do is synchronize its flows to move it along. Without it, the sediment could be detrimental. Gogan added there are also fallen trees that would also increase woody debris piles. During the mining era, there were probably more frequent large flood events and more flow would be better for recovery. Gogan was unsure if 6,000-7,000 cfs would be sufficient and did not want to underestimate being prepared for what could happen.

Groves added that after the Coffee Fire in 2014, 10,000 acres in the East Fork drainage dumped sediment after a 3" rain event in July, turning the river into soupy mud with dead fish and crawfish. Orcutt suggested arranging an early coordination call with USFS and possibly CalFire to get an update on the positive and negative effects of the fire as a landscape view. A fair amount of the burn area is in wilderness and there are policies and procedures for how to address those areas. Fire is also promoted as a management tool and they should hear how that fits in as well. Bader agreed to continue the discussion as part of the October Conference Call.

Public Forum

No comments were submitted.

Adjourn for Day 1 at 2:53 pm

Day 2, September 16, 2020, 9:00am

Public Forum

Russ Giuntini directed the TMC to consider a quote from the Headwaters Refinements report from 2018.

There was significant concern noted by nearly all interviewees. Interviewees stated that TMC members are voting on budgets that benefit their agencies/entities in staffing, construction projects, and monitoring and see this as a significant conflict of interest. The concept of base funding . . . was noted as one possible remedy, but there was significant concern raised by multiple interviewees that this conflict of interest in the budget, how money is allocated to projects, and how decisions are made about this allocation is a potential flaw for the TRRP (pg. 9).

Giuntini wanted to know how the TMC is eliminating conflicts of interest in the TMC structure.

Tom Stokely, former chair of the TAMWG and former TMC alternate for the County, noted the Headwaters report also criticized the TRPP for its lack of meaningful public participation since the TAMWG was dissolved by the last administration [sic: the TAMWG was dissolved after the Headwaters Report]. He noted TAMWG was one of the most frustrating experiences of his professional life given its failures at managing its large group size, having its recommendations largely ignored by the TRRP, complications with how many members it should include, and how to get the FACA charter approved without Washington interference. He is cynical about how the TMC will be reformed but encouraged by their support of public involvement in decision-making processes and Groves' commitment to the issue.

Refinements: Progress and Schedule

Smith gave an update on Headwaters' and ESSA's work on the Program Document and the Science Plan. While he could not give complete answers to the issues raised by Giuntini and Stokely, he will frame them based on discussions they are having from multiple angles.

The pandemic has impacted the schedule for completing the Program document. While they originally envisioned having the document done by next month, the group had a slow start as they ironed out virtual meetings. Currently, Smith anticipates having the final Program Document completed by the March 2021 TMC meeting, which is within their contract and allows a year to help implement the changes. The Program Document Drafting Committee (PDDC) has held 10 meetings. Currently they do not have a meeting scheduled until November, but Smith will work on scheduling a meeting in late September or October before they work on live edits for the November meeting. Smith will give another update in December and will focus on finalizing language from December to February. He hopes to schedule an in-person meeting, but it will depend on personal and agency restrictions as well as local conditions.

The PDDC has made good progress on several key parts. The general structure of the document has been set with the main front document being short to directly address what the group needs to address and how long it will take them. The document attachments will go into more detail on

specific elements. The Law of the Trinity document is currently a laundry list of legislative actions, administrative decisions, and court cases that frame the Program. This is currently under review by the DOI SOL. The main focus of the Program Document is solidifying the Program Purpose and Goal statements. Prior to the effort, there was not unanimity for the purpose and goal of the Program among partners. The new purpose and goal statements are taking hold and will be clearly linked to the milestones for Phase III. They are also working on what time increments to use and have seemed to settle on a 10-year time frame. Smith noted the 10-year time increment is what people seem to agree on, but it has not been solidly confirmed. Currently they are ironing out what should be addressed by the end of Phase III and what Phase IV should look like so they know when and how they pivot to it.

For the Phase III milestones, consensus has been not to start over from scratch as partners want to maintain access to water, structures, and tools. There are political landmines that could disrupt their ability to start over. Four milestones have been proposed to guide the rest of the Program document and filter the Science Plan. Currently, the ROD provides the main direction. The milestones will be finalized and presented in the Program Document with the Milestones document providing bullets on how the TRRP will discuss and measure them. For example, for channel rehabilitation work, the Program will talk about how to use a Phase II rehabilitation project review to set guideposts for channel rehabilitation projects over the next ten years.

The next big topic is the Organizational Chart. They have discussed several structures to streamline work and address functionality. The PDDC is currently focused on organizational needs from the TMC down as addressing the higher levels (i.e., TRRP Oversight Committee and Interior Secretaries) may be too high to tackle. However, focusing on organization of lower entities would give the program the most bang for their buck as well as ironing out sister processes. One of the main focuses is the Stakeholder Advisory Committee. Since the TAMWG charter expired, there is an opportunity to re-engage and reimagine the group. Smith has drafted a charter for the group and is working with a FACA expert at USFWS to figure out options and recommendations (FACA vs. non-FACA, adding seats to TMC, turning TMC into a FACA committee, other options).

Small groups are working on how to address the conflict-of-interest issue. Currently it is framed as a capacity issue on how to have partners as decision-makers while also providing the expertise to the Program. The group is looking at developing a set of principles to define what capacity means and how agencies contribute. On the financial side, the group is flushing out how money moves around and structured in the budget. There is also discussion on how organizational and structural matters affect how partners work under the Program and how they are funded. The PDDC is being upfront about the conflicts-of-interest and working out how the Program is unique and leverages funds against partner expertise to build its budgets and work flows.

Picard and the Science Plan Document Drafting Committee (SPDDC) have worked a few months behind the PDDC. They have put together a draft document outline to organize components in the document. COVID and the fires have shifted the schedule, with the final

Science Plan done in the second quarter (June 2022). Like the Program document, the Science Plan will be a short document with associated attachments and references. It should bring focus at identifying the most important issues with clearly articulated priorities at the front and technical content in the attachments. The Plan will be a combination of the big-ticket priorities and guidance on process. The document will be living as science priorities are not static and depend on budgets and environmental conditions. The idea is to leverage current work into the process, such as the Objectives and Targets work done by the Work Groups. The small groups are working on the main list of priorities and plan to come back as a full group in October.

The main issues the SPDDC are tackling now include:

1. Developing a simple conceptual model to frame the Science Plan.
2. The role of Adaptive Management in the TRRP
3. A formal process of hypothesis testing to close the loop.
4. How to document the evolution on thinking through TRRP management actions.
5. The role and value of independent science through the SAB and how to leverage them.
6. Linking the Science Plan to the Program Document so they inform each other.

They are also formulating guidance for future synthesis reporting and a prioritization process.

Hetrick commented the USFWS feels strongly about addressing the public input needs and the TAMWG. The decision to dissolve the group was made at the highest level of government giving USFWS and the TMC little control over it. USFWS is anxious to restore meaningful public input and they are listening to folks like Stokely about how to restore a similar entity in the process, but are committed to finishing the Program Document. Smith noted Hetrick connected him with the national FACA coordinator who can answer the PDDC's questions on what it means to have a FACA and potential things to watch out for.

Orcutt thought having the Law of the Trinity document was a good move forward as it will provide a foundational document to refer to. He was concerned about the path forward on adaptive management since there are a variety of responses and opinions on how to address it. Picard noted Alvarez is working with the SPDDC and they hoped to have something to share with the PDDC on adaptive management.

Bader agreed the virtual meeting format has decreased the groups' productivity and thanked Smith and Picard for their work facilitating the discussions. Smith thanked everyone for working through the process and hoped they could get face-to-face soon to work out some of the tough issues they have ahead. Giuntini and Stokely were encouraged by the update and appreciated the opportunity to hear more and track the groups' progress.

Orcutt noted that the document should address how policy is run up the chain of command on the Interior side and asked if that was part of the information being reviewed by the Solicitor's office in the Law of the Trinity document. There have been major modifications since 2000 when DOI

needed concurrence from Hoopa Valley and it would be good to know how to address senior level policy buy-in. Bader suggested discussing in the future with the PDDC.

Status of UKTR Spring Chinook Salmon

Chris Yates and Gary Rule from the Protected Resources Division (PRD) at NOAA Fisheries reviewed their process for addressing petitions submitted for species protection. Jeff Abrams from the NOAA Fisheries Arcata office provided local support on the petition response. Rule explained the PRD oversees petitions reviews. They have received four petitions for coastal populations of Chinook and steelhead. NOAA did a coast-wide review of Chinook in 1998 and determined that coastal ESUs of spring and fall run populations were genetically similar. These groups were interbreeding and not reproductively isolated. The new petitions relied on new research to assert significant genetic difference between fall and spring run populations and concluded their unique evolutionary lineage warrants listing as separate ESUs. Three of the petitions focus on spring run Chinook.

While the ESA defines species as distinct population segments (DPS), it does not define what information is needed to determine those segments. NOAA came up with its evolutionary significant unit (ESU) policy in 1991 and then in 1996, NOAA and USFWS came up with the DPS policy. Both policies are similar but use different criteria. The ESU was developed for salmon and is defined as substantially isolated reproductive populations that represent an important component of the evolutionary legacy of the species. DPS is defined based on the discreteness of the population to the rest of the species and the significance of the population segment to the species.

When NOAA receives the petition, they first conduct a 90-day review of the content and determine if it is well supported. If there is enough information to process, they conduct a status review. The status review is a 12-month period where they determine if the listing is warranted or not. If it is warranted, they will issue a proposed listing, open the listing for public comment, and have one year to make a final determination. Several factors are considered, including an evaluation of the ESU configuration to determine if the populations meet the ESU criteria and a risk assessment to determine demographic risks and threats to the species. The status review will also look at other ongoing work that could ameliorate or mitigate the potential threats identified.

NOAA has made determinations on three of the petitions. The petition for the Northern California summer-run steelhead was found not warranted as the summer-run populations were not markedly separate from winter-run populations. The Oregon Coast and Southern Oregon/Northern California Coastal spring-run Chinook petitions were also not warranted as the spring-run populations are not reproductively isolated and share an evolutionary legacy with fall-run populations. Fall and spring-run Chinook are more like each other than those in neighboring watersheds. NOAA is still working on the Upper Klamath petition. The NMFS Science Center has completed its report with similar findings to the other spring-run petitions. The draft status review has also been completed and was peer reviewed. They are addressing comments now and will publish the determination when completed.

Orcutt asked if they could share the presentation and asked how much current management actions were considered for mitigating or enhancing recovery, noting that salmon in the South Fork Trinity are largely in wilderness with few people and listing could make management very restrictive in these areas. Yates answered they are not allowed to consider or balance the economic or regulatory impacts of listing against the potential conservation benefits. They try to evaluate it scientifically within reason. They are not allowed to look ahead and determine what they can do, but rather they focus on the listing factors as that is what they are litigated and challenged on.

Orcutt asked if the recommendation could include conservation management standards for the PFMC for spring Chinook in the Klamath, using the fall chinook as a surrogate or subpopulation to set standards inclusive of exploitation rates. Yates explained the Protected Resources Division evaluates status and whether it should or should not be listed. They are obligated to consider all current conservation and proposed programs. If they find it should be listed, they proceed with conservation planning which would not include Orcutt's suggestion, but they could look at it in the context of other conservation actions.

Sinnen asked if the status review done by the state would be used for the current review and if NOAA uses a separate body to make its decisions, similar to the California Fish and Game Commission. Rule explained they are reviewing the CDFW status review and Yates explained the state and federal processes are separate, with separate criteria and bodies. NOAA uses various internal processes including a panel of salmon science experts to review the ESU information, peer reviews, Science Center reviews, and an agency recommendation that must go up the chain of command and then back to the area.

DeJulio noted steelhead are listed due to their ecotypic expression from rainbow trout and there are some similar issues for spring Chinook life history and asked why anadromy is considered for rainbow trout but not run timing for salmon. Yates explained the debate is illustrative of how quickly genetics affect ESA listings. Steelhead and rainbow trout are an example of run timing and genetic similarities in the populations, with steelhead meeting the criteria for distinct population segments since it is markedly separate. While the genetics are similar, the populations are separated through anadromy. While DPS does look at genetics it also considers how separate the populations are. DeJulio asked if a DPS determination could be made for salmon as well. Yates explained they had not evaluated or used DPS criteria for salmonids and was unsure if it would be a better criterion but are interested in how it might improve conservation and management.

Sinnen added the FGC will ratify its decision to list the spring-run Chinook as threatened at its next meeting in October. Once ratified, they will submit their finding to the Office of Administrative Law. The listing will not take place until then. It is still uncertain how listing may affect fishing regulations on Klamath or marine populations. However, the FGC does have flexibility and authority to allow some fishing on listed species.

BREAK

Path Forward for Implementation Review/Plan

Dixon offered a mea culpa as he had initially requested a review of the Scope of Work of reviewing the Phase II channel rehabilitation work. However, when he discussed it with the Physical and Design Work Group, he realized the review would not get at the right questions for the TRRP. He met informally with a few other project partners to get feedback and came to the same conclusion. Essentially the review would ask for input on a design strategy the Program does not have nor give a holistic view for restoration work moving forward.

Design work for channel rehab projects has evolved over time, starting in the mid-2000s. At Hocker Flat, in 2005, the Program realized that removing berms would not restore ecological function on a time scale that works for the fish. Instead, they focused on constructing floodplains. At Sawmill, in 2009, they reworked the existing side channel to work better at low and base flows for juveniles to get immediate habitat gains, and started adding wood to increase habitat complexity. A few years later at Wheel Gulch, large engineered features were installed to promote mid-channel bar formation to add wetted areas and complexity. Upper Douglas City represents the peak of the engineered rehab approach with off channel spots, lots of wood, and realignment of the mainstem channel to address infrastructure concerns. However, the approach also armored the forced meander to keep it from changing.

Deep Gulch, in 2017, is an example of the modern engineering approach where they looked at stretches with similar features and geomorphic settings to provide context for what could be built and maintained on its own. The bar has changed since it was built and the meander gave the river room to move to a new channel, creating backwaters and new features that grow and change with high flows.

Chapman Ranch represents a mix of process, restoration objectives, and immediate habitat gains. The floodplain is performing phenomenally with a portion of the right floodplain developing into an emergent wetland. The large valley bottom gives the river room to move. The approach shifts the view to the river in a broad valley setting with an eye for what we want right away but with a light touch. This outgrowth has influenced the design for Oregon Gulch, which uses the Stage 0 principle for stream evolution. The design is very science influenced and almost full circle from Hocker Flat. The design lets the river build habitat where it wants with a massively lower floodplain and an overexaggerated channel to promote channel migration.

Dixon's original proposal was for a third-party review of the design documents to work out what worked and what didn't to inform an approach for the remaining sites lefts. However, Dixon felt an outside party couldn't tell the TRRP where to go when they didn't know where they wanted to go. Overall, the TRRP has a concept of what they want to achieve, but different answers for the role of channel rehab work. There are a range of conceptual designs proposed for Evans Bar and Upper Connor Creek, indicating a lack of strategy on where the Program should be going. The Program needs to be more strategic in what it wants out of the corridor. The strategy would incorporate sediment augmentations with channel rehab work, which can lead to the wrong questions when they're separated.

Dixon proposed developing the Trinity River Corridor Management Plan, which would provide a science-informed common vision for a restored river corridor. The review would serve as a starting point for envisioning Phase III rehab work, reassessing where the Program may need to revisit, and determining future desired conditions based on geomorphic context. This would result in a strategy for channel manipulation and sediment management that is more cohesive and has partner buy-in. Dixon explained a wholly third-party approach would result in another document where some parties weren't heard or couldn't inform the questions being asked and thus don't have buy-in with the results. The Plan would establish a process for partners to provide feedback on what the Program gets before it is final.

Dixon proposed three alternatives moving forward. The Program could maintain the status quo and continue to evolve ideas by bouncing ideas off folks as they look at existing conditions to developing 100% designs. The current approach does work, but it would help to have more strategy. The second option is to hire a contractor to provide recommendations for future work. Lastly, the TMC could develop the Corridor Management Plan, which would require hiring an independent contractor to facilitate development. Developing the plan could give an opportunity for other voices to provide feedback. The contractor would be responsible for developing a plan envisioned by all Program parties.

DeJulio commented in the chat that a River Corridor Plan developed by the Program that is reviewed, revisioned, and refined by a contractor would be better than asking a contractor what to do. Orcutt asked what direction Dixon needed from the TMC and if he was recommending spending the money currently set aside for the rehab review or reprogramming it. Dixon explained he would like to use the existing funds to pursue a more strategic vision for the 40-miles of the river rather than just getting feedback on the channel work. He did not want to reprogram the money to that end without feedback from the TMC. Orcutt asked how this Plan would be vetted against the science and monitoring proposals, noting there might be an overlap given existing riparian and regulatory monitoring requirements.

Hetrick noted the channel rehab review should be viewed as complementary instead of competing against the projects. He liked having the review being framed as a retrospective that could close the loop for adaptive management as it could identify where they are having consistent improvements over time. USFWS sees the rehab review as a critical step in gaining support as it would build credibility and confidence in the work through assessment by outside independent experts. He asked the Program to be specific about how they talked to partners about shifting the focus as the USFWS was surprised as they were not asked about shifting the focus of the rehab review. Dixon explained he spoke with DeJulio and McBain along with the Work Group coordinators.

Ly strongly supported a corridor management plan as he has always recommended and advocated for a strategic plan for science and implementation. A corridor management plan would come close and he appreciated incorporating the channel rehab review as a retrospective while moving forward. He asked if the Program would look only at independent contractors or if

entities like the USGS would be considered and if the costs would be more than what was originally allocated for the review. Dixon explained they are considering whether to bid it or allow for government or academic involvement. The channel rehab review would be incorporated as part of a broader effort, but he was unsure of the costs. He would need to develop a scope of work to develop a government cost estimate, noting the original budget of \$250,000 was a placeholder and not derived from cost estimates.

Hayden agreed with Hetrick that the Phase II rehab review could help get community and stakeholder buy-in while creating a common vision for future rehab projects. He voiced his initial support for the proposal but would like to see the costs estimates stay within the initial \$250,000. Buxton noted that several of the synthesis reports have not been completed, which could provide important linkages for a plan. Timing of the contract would be important as the reports could provide information and lessons learned that are not well understood right now.

Connor asked if the TMC should establish expectations for how the process would inform upcoming projects, considering there are a number currently under design and others on the shelf and not very many remaining sites to design. Dixon explained it would depend on the timeline, since Oregon Gulch is largely shovel ready and Sky Ranch has a fairly mature design they plan to start NEPA on. This could be an opportunity to pause on remaining projects and determine which projects to continue developing or to revisit. Connor asked if the Plan would inform future maintenance or expand to other watersheds actions. Dixon would like to keep the plan focused on the mainstem Trinity as the Klamath IFRMP restoration prioritization decision framework should be developed enough soon to allow other agencies to use it.

Orcutt asked if the TMC should rededicate the channel rehab funds, since the TMC approved funding for the channel rehab review. Dixon explained he labeled it as a decision item as it was unclear if the TMC needed to make a decision. He can still proceed with the channel rehab review if it informs a corridor plan. He asked the TMC if he should proceed with the existing SOW, develop something different, or wait for further discussion. Bader recommended Dixon develop the proposal for next month and the TMC could discuss and make a motion then. Currently, the update was informational and the TMC needs more clarification on what to do. If needed, the TMC could convene a special session to discuss further. Hetrick noted Connor Shea would represent the USFWS for developing the SOW for the rehab review and the river corridor management plan. Bader directed Dixon to reach out to folks and provide an update with subsequent actions at the October 18th meeting.

Topics for December TMC Meeting

- Feedback and decision on Winter Flow EA
- Physical and ecological ramifications of fire on salmonids in streams.
- Scheduling 2022 TMC meetings
- Ly asked for an update on Objectives and Targets
- DeJulio asked for a presentation on the 40-mile juvenile capacity model report findings

- Orcutt asked for an update on when the synthesis reports would be done given the delays with peer reviews, how some reports are being used when others have not been completed, and how to address their recommendations. DeJuilio suggested a debrief of the Science Symposiums to address this.
- Sinnen asked for a discussion on annual flow scheduling and how the Winter Flow EA may be incorporated in hydrograph development.
- Ly asked for a status update on the letter from the TMC to the Regional Director on Infrastructure Studies. Bader noted the Regional Director received the letter and is reviewing it for his response.

Public Forum

No comments were submitted. Bader thanked Teresa Connor for her contributions to the TMC.

Adjourn Day 2 12:04pm