

Final Minutes  
**TRINITY RIVER ADAPTIVE MANAGEMENT WORKING GROUP**  
 April 5, 2016  
 Trinity River Restoration Office, Weaverville, CA

**Tuesday April 5, 2016 9:30 AM**

**Attending Members**

Member	Representative Seat
Elizabeth Hadley	Chair, Utility Companies
Richard Lorenz	Trinity County Residents
Gil Saliba	Environmental Organizations
Darren Mierau	Environmental Organizations
Ed Duggan	Small business Owners
Paul Hauser	Public Utilities
Kelli Gant	Trinity County Residents

**Members Attending by Phone**

Member	Representative Seat
Tom Stokely	Vice-chair, Commercial Fishing Organizations
Sandy Denn	Glenn-Colusa Irrigation District

**Members that did not attend**

Member	Representative Seat
Emelia Berol	Environmental Organizations
Paul Catanese	Local Landowners/Business owners
Joe McCarthy	Local Landowners
Liam Gogan	Trinity River Fishing Guides
David Steinhauser	Whitewater Outfitters /Guides

**Designated Federal Officer:** Joe Polos, Fish and Wildlife Service, Arcata, CA.

**Other attendees:** Julie Catanese (alternate for Paul Hauser), Vina Frye (USFWS); Robert Stewart, Brandt Gutermuth, Dave Gaeuman, Linsey Walker, Caryn Hunt DeCarlo, and Todd Buxton (TRRP).

**Others attending by phone:** Leslie Bryan (Redding Electric Utility), Damion Ciotti (TRRP).

**Notes:** Kim Mattson (ENW).

**List of Motions Made during the Meeting**

**Paul Hauser made a motion to accept the agenda.**

**Kelli Gant seconded the motion**

**The motion passed unanimously.**

**Gil Saliba made a motion to accept the February meeting minutes.**

**Sandy Denn seconded the motion**

**The motion passes unanimously.**

**Paul Hauser made a motion that the TAMWG recommend to the TMC that they reserve 50,000 acre-feet for use until later in the year otherwise accept the Flow Workgroup's recommendation.**

**Kelli Gant seconded the motion.**

**The motion passed with five yes and four no votes.**

**Voting no were Darren Mierau, Ed Duggan, Tom Stokely and Sandy Denn.**

**Gil Saliba made a motion that the TAMWG recommend the TMC to accept the gravel augmentation recommendation as presented above.**

**Darren Mierau seconded the motion.**

**The motion passed unanimously**

**Darren Mierau made a motion that the TAMWG recommend the TMC to wait to approve the budget until peer-review is completed on the science proposals. Also the TMC have the IDT to consider the Flow Workgroup proposal as presented.**

**Rich Lorenz seconded the motion.**

**The motion did not pass.**

**Voting no were Gil Saliba, Paul Hauser, Kelli Gant, Tom Stokely and Elizabeth Hadley.**

**Paul Hauser made a motion that TAMWG recommend the TMC to wait to approve the budget until peer-review is completed on the science proposals.**

**Darren Mierau seconded the motion.**

**The motion passed unanimously.**

**Paul Hauser made a motion that the TAMWG recommend to the TMC increase funding for watershed projects from \$500,000 to \$2 million. The \$1.5 million extra funds would come proportionally from all other discretionary line items.**

**Tom Stokely seconded the motion.**

**The motion passed unanimously.**

**Gil Saliba made a motion that the TAMWG recommend the TMC direct the IDT to consider the Flow Workgroup budget proposal.**

**Rich Lorenz seconded the motion.**

**The motion passed unanimously.**

### **Action Items Designated during the Meeting**

None.

### **Meeting Minutes by Agenda Item**

#### **1. Welcome, Introductions, Approve Agenda and Minutes**

Elizabeth Hadley opened the meeting. She acknowledged the new interim executive director Caryn Hunt DeCarlo. She noted they would focus on the flow recommendation and the FY17 budget.

#### **Approval of the Agenda**

**Paul Hauser made a motion to accept the agenda.**

**Kelli Gant seconded the motion**

**The motion passed unanimously.**

#### **Approval of the minutes**

**Gil Saliba made a motion to accept the February meeting minutes.**

**Sandy Denn seconded the motion**

**The motion passes unanimously.**

#### **2. Designated Federal Officer Items**

Joe Polos commented on several items. He noted there are two new TAMWG members and one new alternate that are in the approval process. The approval documents are currently in the Regional Office in Sacramento waiting to be forwarded to DC. There was a discussion of non-attending members and the need to have a quorum in order to pass motions. There was a discussion of ways to better utilize Web-Ex to allow members to attend remotely.

Polos and Tom Stokely next reviewed the recent workshop on the Decision Support System (DSS). The DSS uses computer models that can be used to simulate hydrology, sediment transport, fish production, and riparian recruitment to help inform management decisions. Stokely said that according that in the Megatable that Wade Sinnen had sent out, last year had the second worst fall Chinook returns since 1978. A mock decision-maker group composed of TMC

members was able to use trial runs of different hydrographs and they chose the natural hydrograph over the ROD. Many issues were discussed such as the big questions, hindcasting with the models, assessment of disease, and whether the restoration strategy was working.

The TAMWG asked what was DSS and if it working to help design future restoration. Polos explained DSS as a set of models that were tools to evaluation restoration actions. It needs monitoring to provide feedback. Polos said they are just starting the DSS process and a set of next steps are being developed. Paul Hauser said there are no results yet, but DSS offers a good opportunity. Kelli Gant asked if the TMC will embrace it. Tom Stokely noted Bruce Bingham said that the TRRP will need to do different monitoring and Stokely wondered whether the TMC would be willing to make these changes. If not, DSS could be a waste of time. Sandy Denn agreed. Joe Polos said the notes from the workshop would be available in one week and he would be able to get the presentations on the web site.

### **3. Water Year 2016 Trinity Flow Recommendations**

The TRRP and partner staff gave a presentation on this year's flow recommendation. Robert Stewart gave a Powerpoint on the current hydrological conditions in the basin (Attachment 1) and these indicated a high probability of it being a Wet Year. He showed the daily water supply report that indicated 1.3 million acre feet in Trinity Reservoir which is 74 % of the 15-year average. Inflow to Trinity Reservoir has been 147 % of the 15-year average. Precipitation at the hatchery has been 107 % of the 15-year average. The snow reports for the basin show water contents are trending slightly below the average and this was thought to be due more to recent warming than low snowfall. This warming was associated with higher inflows to the reservoir in the past few weeks. The 50 % exceedance inflow forecast is trending to a Wet water year. The TRRP hydrograph is based on the April 1st B120 report and this has not come out yet, but Stewart expects California water resources to predict a Wet year.

Kelli Gant asked if they use snow sensors or if they do an actual survey. Stewart said they do actual surveys and they did it about April 1. April 8 is the soonest the report would come out.

Andreas Krause gave a Powerpoint presentation on the flow recommendation (Attachment 2). The Flow Workgroup focused on the Normal, Wet, and Extremely Wet years. They considered five permutations of the hydrograph. He described the ROD recommended flow that starts with rising benches for steelhead, a peak geomorphic flow, and descending limbs with benches for riparian and amphibian effects. The chosen hydrograph, called BPR, had more variability than the ROD with small successive peaks during the rising limb, with two peaks occurring earlier, and small variability in a more slowly descending limb. The rising small peaks were designed for fish and feeding. The double peak had never been done. It was designed to protect the cold water pool and to enhance geomorphic learning. The reasoning was that keeping the peaks at 10,000 cfs would avoid use of the auxiliary outlet and would protect the cold water pool. They wanted to test the effects of a second peak on sediment transport and channel evolution. The descending limb had "squiggles" of varying flow during the descent. There were three benches at the end of the descent to facilitate monitoring.

Kelli Gant asked about the moving the peaks about 2 weeks earlier than the ROD. Krause said it takes a long time to get the flows down to the summer flows since this hydrograph has a slower descent time. Gant asked if the earlier release was better for fish. Krause said yes. The fry rearing goes on during winter lower flows. If they can raise flows earlier, they may be able to get the fry up onto the floodplains where rearing is better.

Ed Duggan asked if going below 450 cfs during the summer and then raising flows to 500 cfs by fall may help keep temperatures down. Krause said they have had a lot of discussion on this. They have considered whether they could do daily management of flows to adjust for short term temperature changes. But they concluded that they did not have enough water to game with flows very much. Paul Hauser suggested they chop off the tops of those massive peaks as this is a difficult PR program given the volume in the lake. Todd Buxton said that last year, they released a lot of water, but that they had large inflows to balance it. Krause clarified that they always release the given volume of water per the ROD, but they may change the peak flows. He said they have multiple objectives for the releases—temperature is one and geomorphic work is another. The reason they released a large peak flow last year is that they had not had high flows in the last three years and they wanted to get additional scour to stop willows from establishing along the banks.

Krause continued his presentation. He gave listed supporting concepts to the recommended hydrograph. He said they do not expect any differences in water temperatures in the recommended hydrograph versus the ROD. The smolt out-migration is not expected to change. They modeled the date at which 80 % of the smolts would pass Pear Tree and found that the recommended BPR hydrograph would be one day earlier than the ROD.

Regarding the learning objectives, Krause said they would be able to monitor whether they get better habitat. They may get delayed Yellow-legged frog breeding, more diverse rearing and feeding conditions, and better Lower Klamath survival. But frogs, feeding, and survival in the Lower Klamath are not currently monitored.

Kelli Gant asked why not monitor Lower Klamath survival. Krause said it has not been in the budget and he couldn't say why. Polos commented that the Yurok Tribe may be monitoring this.

Krause went over the recommendation for the BPR under an Extremely Wet year. This would entail a peak of 11,000 cfs and descending flows that could impact the early portion of construction. A Normal year, BPR hydrograph would have peaks about one week earlier than ROD but otherwise similar to the Wet Year.

Dave Gaeuman presented on the gravel augmentation for this year. Last year they added 1,700 cubic yards since they had 8,500 cfs flows. The amounts added nearly equaled the estimates of transport at Douglas City of 1,300 cfs and this was satisfying. The two proposed injection sites were the Diversion Pool and Upper Lowden Ranch site. The proposed injections for a Normal year and Wet year were 2,800 or 3,600 cubic yards, respectively.

Gaeuman noted that they have several hypotheses about how gravel is moved about in the river. They have higher transport rates on the rising limbs of the hydrograph and then it quickly levels off. They think they may get more work with a double rising peak. They will be monitoring if this is true. He also said they expect the first peak to be more effective than the second peak. He said they expect that gravel injected on rising limbs to move farther downstream than those injected on the top of the peak. Gravel injected on the second peak may move farther downstream than those on the first peak. He reasoned that the first peak may create large bedforms and this would bury gravel added on the first peak. The gravel added on the second peak would pass over these bedforms.

Kelli Gant asked if other groups are doing gravel augmentation that may help to develop hypotheses. Gaeuman said they are but there has not been a lot of interchange.

Paul Hauser asked how gravel results in more fish. Gaeuman said that added gravel can block tributaries but eventually, without additions, the stream will lose gravel with natural export.

Hauser asked with no high flows, would the existing gravel stay in place? Gaeuman said without scour and transport, you get the riparian vegetation establishing and trapping fine sediment and it would create a smaller channel. Hauser asked, with the dam, is it possible to move the river to pre-dam conditions? Gaeuman said the river will be smaller. But it is difficult to say given the dredgers effects of the past. 11,000 cfs does work and is effective. Todd Buxton said sediment transport is important to fish as without it fine sediment would clog redds.

Elizabeth Hadley asked the TAMWG to take up discussion of the recommended flow. Gil Saliba asked why not release less to make up the low storage. Stewart said the recommendations are based on expected inflows not storage. Hadley asked if the Flow Workgroup recommended carry over storage. Stewart said the Flow Workgroup recommended the TMC maintain the low pool storage. Ed Duggan said the TAMWG recommended the TMC maintain a cold-water pool of 600,000 acre feet per the Biological Opinion. Kelli Gant agreed with Saliba and suggested they have a future discussion on how to fix this. Rich Lorenz said the ROD says in a wet year they need to release 700,000 acre-feet but it does not stipulate when it must be released. Why not save some of it for fall flow releases? Krause said Reclamation manages Shasta and Trinity together for Sacramento fish needs. For the fall flows, Krause said that releasing flow for Lower Klamath is not in the ROD objectives. Ed Duggan said maybe the TAMWG could make such a recommendation to the TMC. Stewart pointed out that the reservoir is expected to stay above the 600,000 acre-feet this year. Paul Hauser said it is absurd to release water without considering water levels. Tom Stokely and Sandy Denn both agreed that it is difficult to say where to go, until the Bureau makes its final decisions.

Paul Hauser made a recommendation to follow Lorenz's suggestion that they reserve 50,000 acre-feet for late summer needs. Stokely said they already have 50,000 acre-feet reserved for Humboldt County. Hauser said this is not ROD water and they may use it for something else. Some wondered from whose portion the water would come. Darren Mierau said he could not support this recommendation as the Flow Workgroup has made a clear case for the recommended flow. Kelli Gant said that every acre-foot that could be delayed in released is important to her stakeholder group. The ramps will not be in the water and this is a major problem.

**Paul Hauser made a motion that the TAMWG recommend to the TMC that they reserve 50,000 acre feet for use until later in the year otherwise accept the Flow Workgroup's recommendation.**

**Kelli Gant seconded the motion.**

**The motion passed with five yes and four no votes.**

**Voting no were Darren Mierau, Ed Duggan, Tom Stokely and Sandy Denn.**

The TAMWG next took up the recommendation for gravel augmentation.

**Gil Saliba made a motion that the TAMWG recommend the TMC to accept the gravel augmentation recommendation as presented above.**

**Darren Mierau seconded the motion.**

**The motion passed unanimously**

Andreas Krause had one more recommendation to present on FY17 Science Funding. The recommendation was to elevation the FY17 "emergency science" budget line item proposed by the

Fish Workgroup but prioritized low by the IDT. The funds would be used for water year specific monitoring needs associated with the flow releases. This would move from an ad-hoc process to a more formal monitoring process. Elizabeth Hadley suggested they hold off on this until the discussion of the entire budget.

## Lunch

### **4. Fiscal Year 2017 Trinity River Restoration Program Budget**

Linsey Walker of TRRP presented the recommended budget for FY17 (Attachment 3). The total budget was \$15.0 million divided as 17 % for administration, 51 % for rehabilitation, and 32 % for science. She walked the TAMWG through the line items that compared funds to FY16 and FY15.

Darren Mierau asked about the \$30,000 for support services. Julie Catanese asked about the \$3.3 million for construction projects. Brandt Gutermuth explained how they had arrived at these costs. Kelli Gant asked about the number of people on the AEAM team. Walker thought it was between 15 and 20.

Walker noted that the Science budget had changed the most. She noted an increase in Fish and Wildlife Service budget and that the Science Workplan items were broken out. There was another handout listing the 20 proposals for the Science workplan (Attachment 4). Kelli Gant asked how the list was established. Polos explained that each workgroup proposed their projects and the IDT then prioritized the list.

Damion Ciotti said they were just entering the stage of reviewing proposals. Ed Duggan expressed his concern that support for harvest surveys and creel surveys were rated too low. Gutermuth said they were proposed but there was not funding for them.

Elizabeth Hadley said in the past, the TAMWG generally accepted the budget in concept and did not go through the budget line by line. There was discussion about how much input TAMWG should give. Polos said the TAMWG could give input on priorities if they wished. Ciotti said the proposals will still be peer reviewed and things could change based on the reviews.

Gil Saliba commented that the budget shows that the Program has gone off on a tangent and everything is now geared for fall Chinook. He felt there was too much focus on fall Chinook, channel construction, and the mainstem and not on watershed. Paul Hauser said the fish goals are unrealistic.

Given there were still some uncertainties in the budget details, Hadley did not think the TMC would ask the budget to be finalized before they approve it and that the TMC would likely delay a decision until their next teleconference call. Hadley suggested they discuss this at their May 24 meeting and this was crafted into a motion. The motion included the recommendation of the Flow Workgroup for flow monitoring to be included in the Science workplan prioritized list.

**Darren Mierau made a motion that the TAMWG recommend the TMC to wait to approve the budget until peer-review is completed on the science proposals. Also the TMC shall direct the IDT to consider the Flow Workgroup proposal.**

**Rich Lorenz seconded the motion.**

**The motion did not pass.**

**Voting no were Gil Saliba, Paul Hauser, Kelli Gant, Tom Stokely and Elizabeth Hadley.**

Paul Hauser explained that the no vote was because there was interest in increasing the watershed funding and this motion did not address this.

**Paul Hauser made a motion that TAMWG recommend the TMC to wait to approve the budget until peer-review is completed on the science proposals.**

**Darren Mierau seconded the motion**

**The motion passed unanimously.**

Another motion was made for increasing watershed funding. There was some discussion of whether the watershed projects were ready for \$2 million. There was more discussion of what is non-discretionary.

**Paul Hauser made a motion that the TAMWG recommend the TMC to increase funding for watershed projects from \$500,000 to \$2 million. The \$1.5 million extra funds would come proportionally from all other discretionary line items.**

**Tom Stokely seconded the motion.**

**The motion passed unanimously.**

The TAMWG took up the Flow Workgroup proposal.

**Gil Saliba made a motion that the TAMWG recommend the TMC direct the IDT to consider the Flow Workgroup budget proposal.**

**Rich Lorenz seconded the motion.**

**The motion passed unanimously.**

## **5. Current TMC Issues**

Elizabeth Hadley reviewed this is a standing item for the TAMWG to bring up issues for the TMC to consider. Kelli Gant asked about the Fixer Document. Joe Polos explained it was a request by the two Tribes to have the Program reviewed by a high level person well versed in adaptive management to do provide recommendations on changes the Program needs to implement an AEAM program. Rich Lorenz asked if Hadley would be involved in the Program position interviews. Hadley said she was involved for Branch Chief and she expected that she or Stokely would continue to be involved. Darren Mierau asked about the status of closed door sessions by the TMC. Ed Duggan thought it had not been resolved. Hadley suggested it was less of an issue as a particular issue where there was interest in using the closed door session had already been resolved.

## **6. Public Comment**

Ed Duggan commented that some of the river guides have received the letter requesting surveys of tributary mouths, and he has gotten responses from three guides.

### **Next Meeting Date and Topics**

Elizabeth Hadley noted the next meeting was May 24. She suggested there would be no need for a conference call in the interim.

Ed Duggan suggested an agenda item of brown trout surveys by the Hoopa Valley Tribe. Tom Stokely said he would like to give a presentation on temperature control, the studies, and the regulations.

Darren Mierau asked about another joint meeting and said he enjoyed the site visit. Hadley suggested they consider this as part of the September meeting, but if they had an August meeting, they could see actual construction. Gil Saliba said there are still philosophical issues remaining such as the Program going off on a tangent. Hadley said they could ask the TMC about a joint meeting at tomorrow's TMC meeting. Rich Lorenz said, if the TMC won't attend a joint meeting, the TAMWG should attend the TMC meeting.

**Adjourn 2:30 pm**

**LIST OF ATTACHMENTS AND OTHER DOCUMENTS**

Attachment 1: Powerpoint presentations on Current Hydrological Conditions 2016. Presented by Robert Stewart, TRRP.

Attachment 2: Powerpoint presentation on Flow Recommendations 2016. Presented by Andreas Krause, Yurok Tribe.

Attachment 3: 2016 TRRP Budget. Presented by Linsey Walker.

Attachment 4: Budget and Prioritization for the 2017 Science Workplan.

**Other Documents**

1. Letter to TMC from TAMWG, February 18, 2016.
2. WY176 Flow Workgroup hydrograph, April 1, 2016.
3. Gravel Augmentation WY 2016 Powerpoint presentation.

## Trinity River Adaptive Management Working Group

### DRAFT AGENDA

Meeting of April 5, 2016

*NOTE: Times Subject to Change*

Location: Trinity River Restoration Program office (1313 South Main St, Weaverville, CA 96093)

Web Conference: <http://www.mymeetings.com/nc/join.php?sigKey=mymeetings&i=442336293&p=&t=c>

Conference Call: 866-715-1246, pass code: 4251781

<b>Tuesday, April 5, 2016</b>		
<b>Time</b>	<b>Agenda Item</b>	<b>Presenter</b>
9:30 AM	Welcome, Introductions, Approve Agenda & Minutes	TAMWG
9:45 AM	Public Comment <i>Note: In accordance with traditional meeting practices, TAMWG will not act on any public comment item during its current business meeting</i>	
10:15 AM	Designated Federal Officer Items	Joe Polos
10:30 AM	Water Year 2016 Trinity Flow Recommendation	TRRP Staff
12:00 PM	Lunch	
1:00 PM	Fiscal Year 2017 Trinity River Restoration Program budget	Brandt Gutermuth/ Damion Ciotti
3:00 PM	Current TMC Issues	TBD
3:45 PM	Public Comment	
4:00 PM	Adjourn	