

**DRAFT MINUTES OF THE TRINITY MANAGEMENT COUNCIL MEETING  
OF APRIL 28, 2004 REGARDING TRINITY RIVER FLOWS FOR 2004**

The meeting was a conference call. The meeting began soon after 9 a.m.

**Present at TRRP Office:** Doug Schleusner, Executive Director; Tom Stokely and Janet Clements, minute takers- Trinity County Natural Resources; Bob Sullivan, Daryl Peterson, Andreas Krause and Jay Glase, TRRP.

Present on the phone: Chairman Mike Ryan, Bureau of Reclamation; Irma Lagomarsino, NOAA Fisheries; Neil Manji, State of California; Bill Brock and Sharon Heywood, US Forest Service; Ralph Modine, Trinity County; Scott McBain and George Kautsky, Hoopa Valley Tribe; Russ Smith, USBR; Dave Hillemeier, Yurok Tribe

Missing- Mary Ellen Mueller, U.S. Fish and Wildlife Service

Daryl gave an overview of the 2 alternatives being considered (see attachment from Daryl).

Both proposals include a 6,000 cfs peak at the same time as a wet year peak of 8,500 cfs. However, they can't go to 8500 cfs per the wet year prescription due to bridges and other flood-prone structures.

Under the recommended schedule, the flows are scheduled to go to 500 cfs tomorrow, April 29, to allow a week for public notification, which includes two 2-day benches at 3,000 cfs and 4,500 cfs for sediment sampling and secondarily for scour/sediment mobilization. The benches will allow an update of sediment sampling curves for the GSTARS sediment model. Then it would be 6,000 cfs for 10 days; 3 days shorter than a wet year would have flows above 6k cfs (without being able to go to 8,500 cfs due to bridges, etc.). The purpose of the peak flows is for scour of seedlings, coarse sediment transport and fine sediment transport. There would be a maximum ramp down rate, with two 2-day benches at 3,000 cfs and 4,500 cfs. The benches allow crews to go to 4 locations to do sampling. Once the flow is at 3,000 cfs, there will be a slower ramp down and then it will follow the ROD schedule to reach the 450 base flow by July 21.

Mike Ryan asked if there would be sediment monitoring at other flows? For instance, will there be sediment sampling at 6,000 cfs? Yes, there will be sampling at 6,000 cfs at 4 locations

The alternative flow schedule allows more sampling of sediment, but due to contracting and logistical constraints, it's not possible to perform the alternative sampling schedule. The alternative flow would cost more than \$100,000 to study, and the contracting cannot be completed in time for the flow.

Sharon Heywood asked if there is a cost factor for sediment monitoring with each alternative being considered. The answer was it is \$96,000 for the recommended flow schedule and \$180,000 for the alternative flow.

Bill Brock asked if the TRRP office developed the alternative schedule. No, it was prepared by USFWS and HVT/McBain/Trush

Scott McBain asked how much it costs for sampling- the answer was \$3,700 per sampling day per site

Neil Manji said there is a tradeoff from the 10-day bench at 6,000 cfs vs. losing 4 days at 6,000 cfs to obtain the additional monitoring benches under the alternative flow schedule.

Andreas Krause said more days at 6,000 cfs means more sediment transport. The river would only need 4-5 days at 6,000 cfs to move sediment deposited in the mainstem from this year's accretions, but there hasn't been a flow this high for many years and there's a need to move past years' sediment. The more benches we have the better to refine sediment transport rating curves, but the 2 benches in the proposed schedule will still provide good information. There is some tradeoff, but it should be sufficient for a balance between monitoring and sediment transport purposes.

The flow benches facilitate sediment monitoring by providing a constant flow rate which allows for repeat samples, reduces uncertainty, improves logistics, and enhances safety. Sediment monitoring data is used to refine sediment rating curves, calculate sediment transport rates and total load, calculate a sediment budget, calibrate the GSTARS sediment transport model, and understand the effectiveness of the release on moving sediment.

The recommended (and approved) flow schedule had 4 benches at 3000 cfs and above plus the 6000 cfs peak equating to a total of 7 sampling days (1 day at each bench plus 3 days at the 6000 cfs peak). The alternative flow schedule had 8 benches starting at 2500 cfs plus the 6000 cfs peak, equating to a total of 11 sampling days (1 at each bench and 3 days during the peak). The alternative flow schedule would provide a few extra data points over the recommended flow schedule to better refine the sediment rating curves. The additional refine would be nice but is not critical.

Sediment sampling costs \$3700 per day per crew for labor and sample analysis. Project management, data analysis and reporting are approximately \$20k extra. We have 3 crews covering 4 sites per day for a total of \$11k per day. Therefore, the total cost for sediment monitoring for the recommended flow schedule worked out to just under \$100k (\$11k per day \*7 days + \$20k for everything else). The total cost for sediment monitoring for the alternative flow schedule is over \$150k.

TRRP did not consider the alternative schedule because the sampling costs more than we could contract (we were limited to \$100k).

Dave Hillemeier asked about uncertainty for the model? Is there more uncertainty at 5,000 cfs or 6,000 cfs? Things change at 6kcfs change over time. How does certainty change? Andreas Krause said the program has never monitored sediment at 5k cfs or 3k cfs, but they have previously collected some data at 4500 cfs. At 6k cfs, there have been sediment monitoring stations measured in the past, but they do change with time at 6kcfs. It's expected for them to peak on the ramp up, then drop off somewhat, but maintain some sort of level over time. There has never been 10 days at 6kcfs measured to see how sediment transport rates would change over time.

Hillemeier asked what the most important data point is. McBain said more data points are best. For example, four is better than 3.

Ralph Modine left at 9:25 am and turned over his vote to alternate Tom Stokely.

Mike Ryan asked are 3,000, 4500 and 6,000 cfs OK for a monitoring program this year? McBain said yes it's good, especially with an ascending limb and descending limb with monitoring.

Irma asked what sediment curves do, what do we get? Andreas said it relates sediment transport to flow. The sediment curves provide calibration points for the sediment transport model that BOR is developing (GSTARS).

Mary Ellen Mueller, USFWS TMC Member joined the conference call at 9:26 am.

George Kautsky asked if the sediment curves were related to scour and seedling removal? Daryl Peterson said other modeling is being done to determine scour, not GSTARS.

Irma said it sounds like it would be nice to get more data points, but it's not possible to do because contracting won't allow it? Andreas said the alternative flow monitoring would cause costs to go over \$100,000, which would require Sacramento to do a new contract, as opposed to amending an existing contract through the NCAO at Shasta Dam.

Mike Orcutt, Hoopa Valley Tribe TMC member joined at 9:31 am.

Mary Ellen Mueller, USFWS TMC member left at 9:32 am.

Hillemeier asked if the cost is for field monitoring. Is there any way that work can be done with collaborators at less than \$100,000? Andreas said if they didn't have the contracting limitations, his office would have recommended the alternative flow schedule. Nonetheless, we will be getting lots more sediment data under the proposed flow schedule than we have in the past. The contractor (Graham Matthews) who is doing the work of sediment monitoring has the equipment and staff; it's just a matter of getting paid for labor, travel and lab costs.

Mike Ryan said if it is a tradeoff between contracting issues and additional monitoring, then we must comply with federal contracting regulations (that have the force of law) in whatever we do.

Daryl Peterson added that both alternatives provide a first time systematic sampling of ascending and descending limbs, considerably expanded from past efforts- in more places with a larger number of samples. The proposed schedule will improve the science to implement the TRFE. It comes down to what we can do logistically with 3 days of lead time. He said there is an existing contract in place for the recommended sampling/flow. There isn't one for the alternative sampling/flow scenario.

Orcutt asked if they won't have adequate sampling in place. Daryl reiterated the ability to sample 2 benches vs. 3 benches.

Daryl said the alternative flow refines the data points a little bit more, but both the alternative and the proposed flow will be substantial steps forward.

Doug Schleusner said there is a tradeoff, by getting the extra bench with the alternative flow; you reduce the duration of the 6,000 cfs peak.

Bill Brock agreed and felt that 10 days at 6k cfs would allow more sediment from past years to be moved.

Irma agreed that this would allow "more heavy lifting" of sediment vs. calibration of sediment curves.

Scott McBain said the 10 days at 6k moves more sediment than the increased number of benches would.

Kautsky noted that within the benches, is there a need for more time at each bench?

Andreas said 2 days is sufficient at each bench. They need 1 day for flows to stabilize, then 1 day to sample. The reason for 3 days of bench flows in the alternative schedule was to give more time in case things go wrong in the field. The 3 day benches also extend the temp benefits out into the summer. However, we achieve that objective anyway.

Mike Ryan asked if there should be a reservation of water for fall fish flows, or if the entire volume should go into spring flows, making a conscious decision to not reserve any water for fall fish.

Neil Manji said a State concern is fall flows- there are no additional flows available for prevention of a fall fish die-off. He wants to know more about thoughts to put more water down the Trinity to help deal with Klamath problems.

Mike Orcutt explained the decision to increase flow by the 9<sup>th</sup> Circuit Court of Appeals. The Interior Department (DOI) didn't support the motion by the Hoopa Valley Tribe. Maybe DOI needs to clarify to the court some additional water for fall flows may be necessary.

Mike Orcutt said the Secretary of Interior has discretion to do that, to either seek it out in court or to operate the project if those conditions exist in the Lower Klamath. Some of the triggers that were in place for last year for a fall flow are not there this year.

Irma said she would question not having a reserve for the fall, if we have the option right now.

Mike Orcutt said it is a wet water year. We should be getting the additional 24,000 AF that a wet year flow would provide.

Mike Ryan said it is his understanding that using the 90% exceedance factor on the Trinity, the ROD would have allowed 671,000 for a wet water year volume (without the bridges and other structures relocated, the ROD allows less than the full 701,000 af for a wet year).

Tom Stokely left at 9:55 am and turned over Trinity County's vote to Janet Clements.

Dave Hillemeier said this is a much different flow regime than for the 2002 fish kill. The Yurok Tribe doesn't think that the additional 50,000 reserve is necessary.

Irma said she doesn't see that as part of decision we are making today.

Daryl Peterson said his office and others reviewed a ramp down to 2,000 cfs for the spring flow in regard to stranding issues. USFWS said that stranding usually occurs at flows below 2,000 cfs. Stranding shouldn't be an issue with the proposed flow schedule. The only other thing is the duration of the 6,000 cfs being 10 days, one of the objectives for a wet year is to not only transport tributary sediment from that year but also to reduce mainstem sediment storage. The longer duration will move a lot more fine sediment.

George Kautsky asked about the 500 cfs initial ramp up –can you address that.

Daryl said that was included to include some immediate benefit if we could –NOAA Fisheries suggested that. It is to help small fry that are currently stranded due to the fairly recent Safety of Dams release. Reclamation also didn't want to go immediately to 2,000 cfs in order to allow time for public notification, so they decided upon 500 cfs initially. However, the fishery benefit is uncertain in the off channel areas where the fry are stranded, but it could have a potential temperature benefit. That portion of the flow is not monitored in any rigorous way. It would be sampled but there is no strong strategy in place. They are not particularly set on that, it can bring up other issues. Do people really see that as a benefit?

George Kautsky said it could be used elsewhere on the descending limb to help with reduction of stranding then.

Scott McBain asked would you get any benefit to move the 500 cfs bench to the 4,000 cfs range.

Daryl said yes, it would be good on the descending limb, but it is not a whole lot of water. We can put it in somewhere, but it is not a lot.

It was noted that we will have pretty hot weather for the next few days and the 500 cfs might help keep the river cold.

Daryl said the 500 cfs bench will be water moving through the interstitial spaces. Most stranding sites are close to the channel. Most are in old side channels, or other kinds of off channel features. There is some groundwater exchange. By releasing the flows, the temperature curtain would move a bit.

Andreas said the 500 cfs bench would impact the field crews on the river right now. He would recommend that the bench be postponed until this weekend so the crews could finish their activities to get set up.

Daryl recommended that we don't do the 500 cfs bench and we reallocate it to the descending limb. The TRRP office will take care of the details.

Everyone generally agreed. There were no objections.

Doug said the other thing that this does is give us more time from the standpoint of scheduling a revised schedule, and getting press releases out. It would be much better from that standpoint. One other thing—two or three meetings ago we talked about the berm at Rush Creek, there is a high likelihood that the berm would not be there after the high flows. We will watch closely, get the public notice of the situation and identify areas of concern and pay special attention.

Mike Ryan agreed it is wise to reallocate the 500 cfs bench in the proposed flow. Neil and Irma agreed.

The TMC voted to support TRRP staff's recommended release schedule with reallocation of the 500 cfs bench in early May, such that the volume will then be reallocated to the descending limb. The details of that reallocation will be left to the TRRP staff. Neil Manji (State) made the motion. Mike Orcutt (HVT) seconded the motion.

USFS-yes  
Reclamation-yes  
Trinity County-yes  
NOAA Fisheries-yes  
State-yes  
Yurok Tribe-yes  
Hoopa Valley Tribe-yes  
USFWS- absent  
Motion passed unanimously

Mike Ryan directed Daryl and Doug to immediately work with the technical people to redistribute the 500 cfs bench to the descending limb. Daryl said he will contact the technical people and do it today.

George Kautsky said that the recommendation has 800 AF less than allowable amount of water.

Doug thanked everyone for getting on the call.

The meeting was adjourned 11:30 a.m.