

Meeting Summary
Inter-Disciplinary Team (IDT)
Friday March 22, 2019
TRRP Office, Weaverville, CA

Participants

In person: Mike Dixon* (TRRP/USBR), Nick Som* (USFWS), Eric Wiseman (YT), Justin Alvarez (HVT), Ken Lindke (CDFW), James Lee (HVT), George Kautsky (HVT), Conor Shea (USFWS), Todd Buxton (TRRP/USBR), Kyle DeJulio (YT), Eric Peterson (TRRP/USBR), Wes Smith (NMFS)

By webex: Seth Naman (NMFS), Seth Lawrence (CDWR), Bill Brock (USFS)

Note: Naman indicated that screen sharing did not work on his end. Others on webex did not specify.

Note taker: Eric Peterson (TRRP/USBR)

Consensus Items:

IDT agrees with the recommendation by the Flow WG on WY19 hydrographs (De Julio proposals), noting that ROD hydrographs would be a third option after the Buxton proposal.

IDT raised no significant concerns over the proposed Physical WG recommendations for gravel augmentation locations.

Action Items Derived during the Meeting

Naman to write briefing paper on ESA consultation

Lee to email RAE WG objectives status to Som

All WGs to review table on Modeling Results For Proposed Hydrographs

Buxton & Som to write list of unfunded monitoring to occur during WY19 flows

Recommendations for Future Agenda

Budget, including strategies for site design

BA Draft and connection (or lack thereof) to ROC on LTR

WG Participation by members & workload distribution

Summary of Meeting by Agenda Items

1 Introductions / Agenda Review and Finalization

Mike Dixon and Nick Som coordinated the meeting. Som asked that for all WGs, agenda items to include people that only participate for that item be noted in the agenda and that the time be adhered to so that they don't get rescheduled. Todd Buxton requested an addition to

the agenda on WG participation – added to the end of the meeting (and then recommended for a future agenda).

2 General Program updates

Dixon went over staff changes and vacancies in the Weaverville office (ED, Sci Coord, and Physical Scientist). The first two were submitted to Region and await approval from DC. The later will wait until a Sci Coord is hired.

Budget for FY20 and FY21 do not look good. \$1.9 million cut, but there are a couple projects funded by TRRP that the ED previously thought were funded through the USBR NCAO office. This brings the budget shortfall closer to \$2.4M. However some funding from FY19 was applicable, and will soften the blow to FY20, possibly bringing shortage down to \$0.5M. But FY21 will force some hard decisions on what to not do.

General discussion followed. Shea brought up a philosophical question on site design that has bearing on future budget strategy: we have always done “build and go”, but we should consider “set-up and manage” which could be both cost effective and easier to incorporate adaptive management. Overall discussion was identified as a topic for a future meeting agenda.

Also noted was that the Trinity is currently being removed from ROC on LTO, which may have implications for consultation. Also identified as a future meeting agenda (possibly including Ann Garret, NMFS, as a presenter), plus an action item for Naman to write a briefing.

3 Objectives & Targets

[Eric’s notes missed the beginning of this while getting a spreadsheet to display]
Som presented current status. Discussion quickly moved to the complexity of the task and Som reminded us of a suggestion to take on only 2 or 3 objectives first. Some Workgroups have made a lot of progress though. Som cautioned that we can spend a lot of time trying to be exact but the best benefit may be to just get something roughed-out that can be adapted as time goes on. Having something will make the needed changes apparent. WG leads then went through each of their group’s progress:

Flow WG (Buxton): WG feels that flow is a means, not an end, so objectives are a little awkward. Main one done so far is to release what we have allocated. This is largely a matter of tracking dam releases to make sure they fit what we scheduled.

RAE WG (Lee): WG hasn’t really tackled this yet. Challenge is it could go on and on with this topic. Also some may be in conflict with other WGs (e.g. Frogs vs Fish), though all encouraged to get these down anyway and that conflicts may go away in future.

Gravel/Physical (Shea): Working on them... trying to deal with some ‘fuzzy’ goals such as “reduce” (to what? we may have reduced too far with fine sediment). Also have a synthesis report coming soon that will likely provide some revisions to objectives. Should have more after a May meeting.

Fish (Lindke): making good progress

Watershed and Design don’t really have their own objectives, but rather serve programmatic objectives, so no work is being done in those groups on this topic. De Juilio noted a recent discussion that mainstem-focused objectives feed outward to watershed.

Som to present these at Sept. TMC, says we are on track.

4 WG updates on gaps in science to support flow management

Dixon introduced the topic and guided discussion. Kautsky asked about the purpose of the exercise. Dixon clarified that the point is to be prepared to move studies forward when (if) funding should come available, short of conducting a full science workplan without a science coordinator. Such studies should target a major topic and flow management was chosen for this last fall. Flows were chosen due to current levels of interest in Program for flow management earlier than April and possibly changes to summer baseflows too – we now are told those would require an SEIS and it is intended that possible additional studies would feed into knowledge for the SEIS.

Lists of questions were provided from the Fish and Flow WG, many of which crossed over between the WGs. The attendees launched into combining the lists, wordsmithing along the way. Dixon captured these into a new list along the way (sent separately to IDT following the meeting). Editing continued into a working lunch.

Points made during this session included: a request for clarification from a top-down perspective to better direct workgroups; a couple topics touch on the mechanics of sediment transport and hysteresis – combining may be best for clear research; thoughts on a juvenile survival study need to hone in on specifics... some discussion was perceived as a shot-gun approach that could extend for many years without solid answers on some questions.

5 2019 Spring Restoration Hydrographs [Flow portion]

[add PPT as appendix?]

Buxton provided a PPT presentation on the current water year status (Normal/Wet but strongly trending toward Wet) and the proposed hydrographs put forward by the Flow WG. These were the hydrographs proposed by De Juilio; Buxton noted a lack of full consensus (the USFS favoring the ROD hydrographs) though Brock noted that this stemmed from a miscommunication regarding “ROD” vs hydropower-focused hydrographs and the USFS was intending to support the De Juilio proposed hydrographs. A request was made that

Buxton also show his proposals for reference and to fully educate the group on the possibilities (historic hydrographs scaled to the ROD volumes). Smith noted that the De Juilio proposals 'look' like winter hydrographs with sharp high peaks over a baseflow while Buxton proposals 'look' more like a natural spring/snowmelt hydrograph.

One intent of the De Juilio hydrographs is to give juvenile fish multiple opportunities to move in and out of off-channel ponds. There was some discussion about monitoring this: we have no formal study to provide such monitoring, but De Juilio will look for opportunities to do some monitoring with in-kind contributions from volunteers as had occurred previously.

Buxton requested that WGs review the table on Modeling Results For Proposed Hydrographs. It was pointed out that work has already been done to minimize this table, so WGs should not turn the review into a wish list of things to include, but rather to make sure the list reflects program priorities within modeling capabilities.

The IDT concluded that there was no reason to not support the Flow WG recommendation for Normal and Wet year hydrographs as proposed by De Juilio. Of the other options considered (ROD and Buxton hydrographs), the ROD were specified as least desirable.

A list of unfunded monitoring efforts was requested, which was listed as an action item.

6 **2019 Spring Restoration Hydrographs [Gravel Augmentation portion]**

Shea described the gravel augmentation formulation by the Physical WG to date (still in progress). Augmentation is limited to 5 sites, most/all of which have some issues:

- Diversion pool has gravel piled on banks. There is uncertainty that augmentation here would stay in the channel and interest to monitor if gravels move off banks into channel without augmentation this year. No augmentation proposed.
- Lowden (upper) is hypothesized to be overloaded with gravel resulting in channel simplification, so no augmentation is proposed.
- Lowden (lower) is proposed for augmentation to support downstream channel evolution and possibly a reconnection of the Trinity House Gulch side channel at low flows. Physical WG also recommended some degree of reprocessing to remove oversize materials.
- Augmentation is recommended for Sawmill on point bar across/below Sawmill Pool.

IDT discussion led to a recommendation that there be no augmentation at Diversion Pool and to monitor if gravel previously deposited on banks is remobilized into the channel.

For Gravel Implementation Monitoring, post-release multibeam bathymetry caught much discussion and questioning of uncertainties. Concerns raised included the cost-benefit of annual bathymetry when TRRP targets are longer term, logistics of surveys immediately downstream of Diversion Pool, and potential confounding of interpretation due to high post-Carr Fire sediment inputs from Deadwood Creek and Hoadley Gulch. The group noted that rock tags could be relocated below Diversion Pool to determine remobilization. Cross sections or spot-checks on depth would be sufficient monitoring of any changes to

topography of Sawmill Pool. Hypothesized bank erosion below Sawmill augmentation could be monitored with visual observation.

IDT concluded that Physical WG needed to complete planning before IDT could make a determination and that there was little apparent reason to change augmentation planning (except to omit reprocessing at Lowden). Toward monitoring, the IDT recommended [Conor's summary]:

- Assess gravel movement below the Diversion Pool using the in-place tracers (work already funded and being implemented by Yurok Tribe);
- Assess flushing of the Sawmill Pool using visual observations and field surveys (e.g. cross sections, depth measurements);
- Assess changes in bed complexity (e.g. formation of bars, riffles, and pools) and bank changes using visual observations

7 Added item: Workgroup Participation

Buxton asked the group to discuss participation of WG members for getting WG priorities done. Dixon pointed out that not all TRRP Partner Staff are equally funded for WG participation. Som suggested this be agendized for a future meeting.

3:30 PM Adjourn