

**Glen Canyon Dam Adaptive Management Work Group  
August 17-18, 2022 Meeting  
Meeting Evaluation Summary**

Participants in the August Glen Canyon Dam Adaptive Management Work Group meeting were invited to provide feedback on the meeting via an online survey; 14 respondents participated, 12 AMWG members or alternates and two staff members of an AMWG agency. Feedback on what participants liked about the meeting (+) and what could be improved ( $\Delta$ ), along with ideas for future presentations, was sorted and lightly edited for conciseness and is provided in the table below.

**What participants liked about the meeting (+)**

**FORMAT, LOGISTICS, FACILITATION**

- + This was a very informative and well-planned meeting over a variety of topics.
- + Good discussion on important topics. Thought the agenda moved timely.
- + The topics and how they were presented was helpful. Keep the same format in my opinion.
- + The **willingness to alter the schedule** in order to discuss recent and important issues.
- + The most valuable piece of the meeting was the Secretary's Designee **providing specific direction and leadership** in moving forward with low flows, HFEs, and NNF issues.
- + Clear, concerned communication by Mr. Pullan.
- + The **discussion surrounding the text for the budget motion** was robust and constructive. I also found the **Secretary's Designee's direct engagement** on Day 2 with the additional directives and truths to be immensely refreshing and helpful.

**PRESENTATION CONTENT**

- + I find that the meetings are very inclusive and very productive of the topic presentations.
- + Good Topics. I am glad there were some decisions to rework the agenda a bit in order to address **critical timely items**. Most participants shared openly.
- + Liked Rod's presentation on **AMWG 101** and suggest that something like that be included in the future. Helpful to be reminded about the role of AMWG.
- + Excellent presentations and **candid discussions**. Thank you for the **links** to the AMWG 101 presentation and opening remarks.

- + The science and program updates were helpful, specifically some of the legal updates (AMWG 101 and DROA). Level of detail was very good.
- + I always enjoy the **tribal reports** and their spiritual perspective for the river and canyon. It offers something not easily measured. Arden is great.
- + Mike and **GCMRC team reports** are very good and interesting. I feel like college classes and simply trying to capture the key outcomes. Not sure I am smart enough to offer a suggestion but enjoy the details offered by the staff.
- + Seth's lead discussion on SMB was helpful to understand the challenges and the **options**. Not in favor of the by-pass options but have a better understanding why and hope more studies will offer better solutions.
- + The **river trip** by Peggy was great. I wish we could all do the river trip where we can gather and focus on the issues surrounding you in the canyon. Did the trip 3 years ago and it was very helpful.

### What participants would like to change about the meeting (Δ)

#### FORMAT, LOGISTICS, FACILITATION

- Δ Very hard to concentrate on back to back science-type presentations. Could be VERY helpful to **have the PPTs out ahead of time for the GCMRC presentations** so that we could consider and develop questions.
- Δ Providing presentations in advance would be incredibly helpful
- Δ It was impressive to hear the Secretary's Designee rising to the current crisis with the proposed actions. The presentation of the proposal to the AMWG could have been much improved. It was quite difficult to grasp the information Mr. Pullan was sharing while it was being relayed. **Providing written materials to support the discussion** would have been very helpful in conveying the information and in facilitating the discussion.
- Δ **In person** in January!
- Δ It should be in person
- Δ I hope we can get back to **in-person** meeting soon. The **networking among members** is valuable and can connect people not able thru the net.
- Δ We need to **meet in person ASAP**. There are many new folks in the AMWG and TWG, and others of us that have been in the program for a while who have not connected in person for quite a while. As was noted from the river trip, that in-person connection opportunity is very important for this program. Since we have not used the budget line for travel reimbursement for quite a while, I would hope that for the January AR meeting that funding would be provided for AMWG reps, AMWG alternates, TWG reps, and TWG alternates to all attend. The AR meeting is an important meeting for both AMWG and TWG reps to attend.
- Δ Continue to **encourage conversation**. It is difficult for some members to speak up, and they should be individually encouraged to speak up on controversial topics.

- △ Showing a **map of the non-native fish captures** would be helpful.
- △ The DO figures needed axes labels.
- △ In person would be very helpful. **Very challenging and painful to wordsmith motions on the fly.** Though recognize it is not always possible, **recommend working on them prior** to the meeting with a core group.
- △ **More time for discussion on hot-topic issues'** presentations.
- △ There seems to be little need for a Tribal update agenda item and to also include tribes in the stakeholder update section/agenda item.

#### CONTENT

- △ Hard to juggle necessary **"business" vs. "nice to know" type** of info.
- △ Maybe consider **splitting the "socio" type topics with science topics** so that each day has an equal amount of technical v. non-technical presentations.
- △ The Sankey presentation was in the **"nice to know but not imperative"** category for me. Same with Kennedy, **until we actually get to see the definitive results of the bug flow experiment** for this year. From yesterday's presentation, it is more unclear to me exactly what we were monitoring/hypothesizing during this year's experiment, compared to the prior 3.

**This meeting included a number of items marked specifically for discussion and AMWG member input? Did you find these opportunities for open discussion useful? How could the time set aside for discussion be made more effective?**

- Seemed pretty well balanced. It can be hard to concentrate on back to back science-type presentations and develop meaningful questions on the fly, which was reflected in the questions that came into the chat, for instance, on the Kennedy and Yackulic presentations. Even having attended the SMB ad hoc discussions, Charles' info was very fast paced. Think we may **have needed more discussion time on this important topic.**
- **Good amount of discussion time.** I also appreciated the use of the extra Day 2 lunch time that was used for Chairman Pullan's directives and initial discussion. I think **building some time into the agenda** (like the lunch time, or an extra half hour at the end of the shorter day 2) **provides some room for important discussion if needed.**
- I hope we can meet in person and this will allow for better and more input. This AMWG meeting was managed good and time was allotted for input. However, my experience that from **prior in-person meeting, the open discussion were better, more involved and more ideas**
- Yes, but **discussion prompts should be given in advance**
- The **operational alternatives presentation needed much more time** for discussion.

- These topics were not well explained prior to the meeting, resulting in much of the discussion not being well thought out. **Suggest providing background, purpose and goals 2+ weeks in advance.**
- Has been improving in this capacity 2022 compared to previous years.
- **Discussion prompts and breakout groups** would be very useful.
- I did find the opportunities useful. In person meetings would lend to better opportunities for break out sessions.
- Yes, those are good approaches, where appropriate. Perhaps the members can be **provided with specific questions in advance** to make sure they can better frame their responses.
- More **advance notice of intended discussion items.**
- Yes, to the first question. The second question you are doing good with the virtual meeting and it will change once in person meeting start to happen. Keep following the same format.

#### What special topics or presenters would you like us to consider including for the January AMWG meetings?

- In the past, we have had **presentation by WAPA** and other discussing the **benefits and value of hydro power**. For a more balanced discussion, the utilities are facing climate change, reducing harmful carbon, renewable objectives and lower hydro energy. Utilities are trying to go clean and renewable but the drought is impacting those plans.
- A feature presentation **from WAPA on marketing and rate setting and impacts from low reservoir elevations** would be great
- **Funding discussion.** BOR was given additional money. Can it be used to pay for HFE, additional studies, SMB removal options? What other funding source are available if power revenues continue to be reduced. Don't want to see a public fight over utilities raising rates in order to pay for environmental programs benefiting the greater good. Need to find a better solution.
- **Budget** needs to be discussed in greater detail, including what projects/positions are important at GCMRC as we move forward...The AMWG/TWG needs to give clear direction so that GCMRC can make critical staffing decisions when opportunities arise, such as retirements and other turnover.
- Priority budget issues
- Further **climate change discussions**
- **How to leverage the current aridification crisis** to make positive headway in ecosystem management.

- A review and alternate hypothesis on **Macroinvertebrates and GPP**. Larry Stevens has a wealth of knowledge and discussed some of his work during the Stakeholder River Trip and suggest he present, if he is willing.
- More on the **fish exclusionary technologies report**
- Continuation of **nonnative fish discussions/options**.

**Are there any pressing topics or issues you feel the AMWG ought to address more frequently/in more depth in the next year?**

- **AMWG 101 and LTEMP planning:**
  - Rod's presentation on AMWG 101 was excellent. It is always important to remind all of us what we are supposed to be doing and under what authorities. I really liked the map showing the program in the context of the entire Basin.
  - Establishing clear objectives for the 12 AMP goals
  - Fixing the broken HFE triggering criteria
  - Planning a springtime HFE as an experiment, when suitable water conditions exist
  - Keeping an eye on the end game of LTEMP: where do we want to be at the end of LTEMP, and how do we get there?
  - Integrated discussion among the various Colorado River programs - Upper Basin Fish, Lower Basin MSCP, other programs.
- **Tribal interests and involvement:**
  - Yes to continue streamlining tribal concerns and involvement.
  - Tribal recognition and equity
- **Low flows and associated impacts:**
  - The low flows and the impact to water temperature, water release, power generation, warm water invasive predators and plans for mitigation seem to deserve, and will no doubt get our full attention in the upcoming AMWG meetings.
  - In addition to Smallmouth bass, the focus need to be maintained on all non-native fish.
  - The SMB matter is urgent and looking forward to seeing more results and science on this. Other topics as suggested.
  - adapting to current water availability
  - Climate change and water level issues.
  - I think we need continual conversation on the impacts to low lake levels and stressed hydrology
  - Potential impacts to LTEMP resources and the larger ecosystem of falling below power pool for short or extended periods of time.
- **Budget:**

- Budget, as mentioned above, including a discussion on what projects should be reduced or eliminated to allow for resources to focus on greater priorities...and to allow for some increased nimbleness
- Budget framework - specifically, sharing where GCDAMP-related dollars come from and what they are used for?
- No, all topics are important and presented well at the AMWG.

### Additional Feedback

- Thanks to Wayne and the BOR team for hosting a good group meeting for 2 days. Enjoyed the input and presentation by GCMRC, TWG and Seth, Tribes and others. It **seemed that there was more discussion and input from those on the river trip since it was just completed** as compared to other AMWG meeting in prior years without a river trip. I think the river trip offers great learning opportunities and breaks down barriers in the group. Everyone jump in the warm water of the river and let's talk should be the setting of the next meeting.
- Thank you for hosting this meeting. The topics presented were highly relevant and the time to discuss was much appreciated.
- I think it would be really great to meet in person at the Feb meeting! Preferably in a **location that is accessible to tribes. Maybe Peach Springs, AZ?**
- On the river trip we discussed the form and content of meetings. We discussed the possibility of holding one of **our next in person meetings in Peach Springs with the opportunity to experience a tribal community.**
- Thanks for providing the opportunity to comment. Good job on the coordination this last meeting.

### What did you like about the 2022 AMWG Grand Canyon river trip?

- + It was a very unique gathering of folks coming from different roles and responsibilities and connecting in a natural setting of actually being in the inside the Grand Canyon, a holy place to come together to openly communicate and share the holistic understanding of why we spent the time and energy around each other.
- + Fun!! Super important for members to see the river, and spend that time together.
- + Excellent opportunity to build relationships, have in-depth discussions, and learn about the river and science underway.
- + Great resources to learn about everything we were experiencing. Larry Stevens was amazing. Helen and the tribal partners were also excellent.
- + Well organized; very meaningful discussions; plenty of food and always felt like safety was key. The bonding experience was most meaningful, especially post covid shut down and especially given so many new people in the program
- + Great trip all around - excellent boating crew

- + Having the opportunity to learn from my Basin-wide colleagues about the issues facing each stakeholder was essential. Being able to share my organization's perspective was great. And learning the science behind a lot of the AMWG issues was the most essential part.
- + The trip was well run and topic where talked about in meaning full ways for all to understand.

### What did you NOT like about the 2022 AMWG Grand Canyon River Trip?

- △ Less word smithing, more seeing and doing. Conversations were good but limited some of the time for group bonding as some topics were possible points of contention.
- △ We were blindsided on the plan to work on new language for the AMP Goals, Vision, Mission, etc. A slightly cooler part of the year would have been nice.
- △ It was extraordinarily hot.
- △ Not all agencies and AMP voices were represented.
- △ It was quite a surprise to be told that we would be updating the Principles and Mission Statement. This was framed as a directive, and not a way to seek consensus or opinions.
- △ THE HEAT!! There was nothing wrong with this years trip.

### What about the 2022 Grand Canyon River Trip should be changed or added to?

- I have no comments of what I did not like or what should be changed. It's a life time opportunity to reconnect yourself with nature and away from all the convenience of our day to day lives to see the sacredness of what's left since time immemorial.
- More time to enjoy the river and recreate with the group or individually. Just would allow for more bonding and a space to find common ground.
- More information in advance of the trip would have been helpful for planning. Potential increased attendance from GCMRC scientists. Thank you to all organizers and participants for an excellent trip.
- Remarkable Trip and would go again in a second.
- Holding the trip earlier in the season, before the monsoon season kicks in might be an advantage; particularly in experiencing the LCR
- Make sure to have representation by all AMP voices, esp. FWS, DOI
- Make sure we have good note-keeping - poor Peggy was swamped, although she kept it together.
- More science. It would be great to have a fish biologist on the trip!