

**San Joaquin River Restoration Program  
Water Management Work Group  
Technical Feedback Group Meeting**

**Wednesday, February 20, 2008**

**9:00 a.m. – 5:00 p.m.**

**CA Department of Fish & Game, Central Region Office**

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**MEETING SUMMARY**

**Participants:**

Gary Bobker	The Bay Institute
Antonio Buelna	US Bureau of Reclamation
Steve Collup	Arvin-Edison Water Storage District
Paul Hendrix	Tulare Irrigation District
Carl Janzen	Madera Irrigation District
Dennis Keller	Friant Water Users Authority
Paula Landis	CA Department of Water Resources
Stephen Lee	US Bureau of Reclamation
Steve Ottemoeller	Friant Water Users Authority
Jeffrey Payne	MWH
Jason Phillips	US Bureau of Reclamation
John Roldan	MWH
Monty Schmitt	Natural Resources Defense Council
William Shipp	US Bureau of Reclamation
Dan Steiner	Consultant
Yung-Hsin Sun	MWH
Bill Swanson	MWH

**Facilitation:**

Briana Moseley	Kearns & West (recorder)
Ajay Singh	Kearns & West (facilitator)

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This meeting was convened to share information with stakeholders, in accordance with Paragraph 13(j) of the Settlement:

*“Prior to the commencement of the Restoration Flows as provided in this Paragraph 13, the Secretary, in consultation with the Plaintiffs and Friant Parties, shall develop guidelines, which shall include, but not be limited to: (i) procedures for determining water-year types and the timing of the Restoration Flows consistent with the hydrograph releases (Exhibit B); (ii) procedures for the measurement, monitoring and reporting of the daily releases of the Restoration Flows and the rate of flow at the locations listed in Paragraph 13(g) to assess compliance with the hydrographs (Exhibit B) and any other applicable releases (e.g., Buffer Flows); (iii) procedures for determining and accounting for reductions in water deliveries to Friant Division long-term contractors caused by the Interim Flows and Restoration Flows; (iv) developing a methodology to determine whether seepage losses and/or downstream surface or underground diversions increase beyond current levels assumed in Exhibit B; (v) procedures for making real-time changes to the actual releases from Friant Dam necessitated by unforeseen or extraordinary circumstances; and (vi) procedures for determining the extent to which flood releases meet the Restoration Flow hydrograph releases made in accordance with Exhibit B. Such guidelines shall also establish the procedures to be followed to make amendments or changes to the guidelines.”*

## **Meeting Overview**

Jason Phillips, Program Manager, stated that the meeting is a continuation of stakeholder meetings that began in 2007. The purpose of the meeting is for the Water Management Work Group (WMG) to share with the meeting participants the documents developed to date, including Technical Memoranda and other technical documents; and receive input on these documents for future consideration. There will be no final conclusions or decisions made at this meeting.

Ajay Singh, Stakeholder Coordinator, stated that the desired outcome of the meeting is for each participant to walk away with knowledge of progress made by the WMG in the development of key technical documents. Ajay encouraged participants to voice all issues or concerns that they may have with these documents, in order to provide for a mutually-beneficial information-sharing process. Ajay also reviewed and sought agreement on the meeting groundrules.

## **WMG Presentations, Yung-Hsin Sun, MWH**

### **Morning Session– Restoration Flow Guidelines Discussion**

- Yung-Hsin Sun presented the proposed methodology for year-type classification, development of continued hydrograph, and incorporation of hydrologic forecast uncertainties in the guidelines. Yung-Hsin added that all items in the presentation are still tentative and will be thoroughly examined before decisions are made.
- The group discussed the need for hydrograph smoothing to be consistent with the Exhibit B of the Settlement, and the intent to keep the smoothing process simple for implementation purposes, and the need to preserve equity for Restoration Flow allocation and associated water supply impacts.
  - Three aspects of the hydrograph smoothing were discussed: thresholds for year type determination, the smoothing of annual allocation amount to avoid sudden jumps, and the pattern for distributing the annual amount.
  - Hand-outs and presentation were made available in the meeting for discussion purposes.
- The group exchanged ideas of smoothing and concluded the following.
  - The group understood the proposed default operation that would be accompanied by a set of real-time specifications as part of the guideline.
  - The group would like to discuss the biological significance associated with the stair-step hydrographs for proper inclusion in the transformed hydrograph. A separate meeting should be scheduled with FMWG.
  - The risk management associated with the forecast-based operation in fishery management and subsequent water supply impacts would require further discussion. The procedures for Bulletin hydrologic forecast and the quality of forecast were discussed.
- Next steps:
  - Water management workgroup will meet Peter Vorster on Feb 29 for further discussion.
  - Monty Schmitt will contact their supporting biologists for comments on the proposed smoothing methodology.

- Water Management workgroup will provide a preliminary working draft of the proposed methodology to Settling parties for comments.
- SJRRP will coordinate with the Settling parties for further discussion on biological considerations for hydrograph smoothing with Fishery Management Workgroup.

#### **Afternoon Session, Part I – Recovered Water Account**

- Yung-Hsin Sun presented a simplified methodology proposed for calculating the consequential water supply impacts to be included in the Recovered Water Account.
  - The approach focuses on the difference in flow (and thus, the water supply impacts) in the release to the San Joaquin River with and without the Restoration flow releases, including adjustments for uncontrolled release periods.
- The group discussed the difference between accounting based on river releases and on canal delivery, especially for treatment of 215 water.
- The group discussed the needs for developing concepts associated with how the RWA account can be applied in real time, and how the credits from recirculation projects and other water management actions can be reflected in the account balance.
- Next Steps:
  - Water management workgroup will continue developing the concept of RWA. In particular, examples should be developed to illustrate the accounting mechanism for accumulation and offset.

#### **Afternoon Session, Part II – Water Recapture Opportunities**

- Yung-Hsin Sun presented WMG work on the Water Recapture Opportunities. The working draft TM (provided prior to the meeting) does not represent a complete recapture plan, as opportunities are still being explored. The group exchanged questions and answers for additional clarity associated with the assumptions and analyses included in this working draft TM.
- *Next Steps:*
  - Settling parties will provide comments to the opportunity TM

#### **Review of Technical Feedback**

- Ajay Singh led a discussion to solicit input from the Technical Feedback Group on each presentation.

#### *Restoration Flow Guidelines*

- Stakeholder Suggestions for Additional Data and Analysis:
  - What is the probability/risk of releasing too much or not enough water and how do you balance your water account later in the year?
  - When start date effective for a February start?
  - Where is the midpoint for a wet year to “smooth” the hydrograph?
  - How does the buffer flows relate to the continuous line hydrograph?
  - What are the default assumptions about ramping rates, flow duration, and magnitude in converting to a continuous line hydrograph?

- Are there biological impacts to smoothing the hydrograph?
  - During normal wet to wet water years?
  - From critically high to critically low water years?
- How can water be released to maximize biological benefits?
  - For riparian recruitment?
  - For sediment transport?
- Stakeholder Suggestions on Action Items for the Water Management Work Group:
  - Talk to the Fisheries Management Work Group about how and when to release water.
  - Create an annual schedule that outlines when decisions on water releases are made.
  - Create a coordination process between the Restoration Administrator, Reclamation and the Friant Water Users Authority to decide water year type and the release schedule.
- General Statements by Stakeholders on the Restoration Flow Guidelines:
  - Flexibility is needed when determining water year type in order to include new data and meet water needs.

#### *Hydrologic Forecast Uncertainties*

- Stakeholder Suggestions for Additional Data Needs and Analysis:
  - How to reconcile disparities between forecast and declaration of water supply?
  - What to do with water that exceeds the forecast after a water year type has been determined?
  - What is the ramping rate?
  - How can we have a “tighter” water forecast?
- Suggested Action Items:
  - Provide examples of different scenarios for water releases in different water years and focus the analysis on the most difficult years (create game theory outcomes).

#### *Recovered Water Account*

- Stakeholder Suggestions for Additional Data Collection and Analysis:
  - How do you account for water and determine if it is Class 1, 2 or 215?
  - How is the water account applied?
  - Define conditions when recovered water account water is available.
- Stakeholder Suggestions on Action Items:
  - Track impacts to water users.
  - Focus on all accounting, not just water impact accounting.

#### *Water Recapture Opportunities*

- Stakeholder Suggestions for Action Items:
  - Coordinate and gather input from other water districts.
  - Talk to the DMC District about their capacity during certain times of the year.

### **Closing Remarks**

- Jason Phillips provided closing remarks and expressed appreciation for everyone's input. Jason emphasized that the meeting's goal was not to achieve consensus. The Program has a schedule to follow and will move forward with the input received based on today's consultation with the Settling Parties. He added that Yung-Hsin Sun and Ajay Singh are always available to answer any questions that arise. Jason encouraged informal communication between all participants and expressed interest in achieving consensus on hydrograph smoothing in the near future.
- It was commented that it would be useful to integrate policy-level conversations with the Fisheries Management Group. Ajay Singh indicated that the next Technical Feedback Group meeting will be held with the Fisheries Management Team on March 11. Jason Phillips commented that FMG representation would have been helpful at this meeting, and that the Program will seek to integrate conversations in the future.
- The next step is to incorporate today's feedback into the Draft Restoration Flow Guidelines/Recovered Water Account Technical Memorandum and the Draft Water Recapture Opportunity Technical Memorandum.
- Ajay Singh indicated that today's meeting summary will be available by February 29, 2008. Please return any comments on the meeting summary to Ajay by March 5, 2008.