

EWA "gaming" Stakeholder Briefing
July 12, 2000
1:00-5:00, Room 1131
Draft Meeting Minutes

Attendees:

By Phone

- Jason Peltier - CVPWA
- David Guy - NCWA
- B.J. Miller - SLDMWA
- Tom Boardman - SLDMWA
- Tina Swanson - The Bay Institute
- Walter Bourez - MBK Engineers - upstream interests
- Marc Van Camp - MBK Engineers - upstream interests
- Jerry Johns - SWRCB
- Dave Schuster - KCWA
- Jeff Sandberg - SWRI
- Laura King - SLDMWA
- Dan Fults - SJRGA
- Ed Winkler - MWDSC
- Jim Snow - WWD
- Susan Hoffman - USBR
- Noel Williams - USBR
- Ann Lubas-Williams USBR
- Kellye Kennedy - USBR
- Dave Anderson - DWR
- Armin Munevar - DWR
- John Leahigh - DWR
- Jim White - DFG
- Paul Forsberg - DFG
- Mike Fris - FWS
- Dave Fullerton - CALFED
- Ron Ott - CALFED

Stakeholder questions and suggestions:

1. Does EWA reduce deliveries or affect delivery patterns? Ans: EWA allows shifting of pumping patterns to more fish friendly periods without impacting the overall pumping amounts or delivery patterns.
2. How does ERP water fit into the EWA? Ans: ERP water was not included in the game. It would probably be used much like AFRP water where 1/2 of it could be recaptured in the Delta unless it's designated not be recaptured then it will contribute to Delta outflow.
3. What is run in the CALSIM monthly model vs what's run in the daily gaming model? Ans: CALSIM runs serve as the basis for the daily gaming run. CALSIM includes everything but JPOD, b(2), EWA assets (500 cfs, groundwater storage, source shifting, State Gain, E1 relaxations, purchases) and EWA operations. CALSIM is used primarily to generate Delta inflows, upstream storage traces, and Project delivery traces.

4. In the gaming, how are upstream reservoirs accounted for, separate or in one lump? Ans: Each reservoir is handled as a separate account.
5. Where is interruptible water accounted for? Ans: Interruptible water is included in the CALSIM base run for each year. Interruptible water is delivered as if the EWA did not exist. That is, EWA debts in San Luis do not reduce interruptible deliveries.
6. How frequently is AFRP calculated? Ans: AFRP flows are calculated on a monthly basis, based upon CALSIM releases for each month.
7. What is the priority of EWA water in San Luis Reservoir when San Luis spills? Ans: Project water always has priority in San Luis therefore EWA water always spill first.
8. Has Policy agreed that EWA gaming can use fish salvage at the pumps to trigger EWA actions? Ans: Yes, but they realize that a comprehensive real-time monitoring and evaluation program will be essential to drive future EWA actions. What controls now is T&E take limits at the pumps.
9. Once the CALFED's Ecosystem Restoration Program is fully on-line, will the main fishery emphasis still be on the EWA water requirements or will it shift more to other non-water measures? Ans: Depends on the effectiveness of water and habitat actions and recovery of the species.
10. Did the gaming lump b(2) and EWA together? Ans: No, tended to spend b(2) on upstream actions first, then use EWA for Delta actions.
11. CALFED senior management seems to be putting a lot of weight on the gaming, was all gaming actions approved by them before the gaming? Ans: Senior management approved the baseline and b(2) assumptions, assets and their general operational use before each game. However, many situations came up in the gaming where assumptions had to be made on issues to complete the game. These issues were flagged for the management. Many are complex and will have to be negotiated. For example?????????. [See Fullerton's paper on issues raised by game 6a from about 2 weeks ago. I will try to update that paper, but several examples are in there already]
12. How much was the EWA allowed to borrow from the Project's water stored in San Luis and when did it have to pay it back? Ans: The EWA had to have sufficient collateral (water it could give to Projects) to pay back the Projects borrowed water before it was needed. The EWA was not allowed to take actions that could cause low point problems either in the current year or the following year, assuming only reliable EWA assets. Payback was required as necessary to avoid low point issues. The collateral rule was violated in 1982, based upon very favorable hydrological conditions. However, if 1983 had been very dry, a serious debt repayment problem could have developed, requiring the use of Tier 3 water.
13. How often was tier 3 water used in the 1981-1994 simulation, and can the amounts be shown in the annual graphics? Ans: Tier 3 water was used in 1982 only. During the meeting, Tier 3 was also shown as being used in 1993. However, in the refined accounting, 1993 debts were not as great as originally supposed.
14. Was a financial analysis conducted on the annual cost of the EWA, especially the water and power cost, if not will it be? Ans: General power and water costs were estimated in the

programmatic EIS/EIR. No project specific analysis has been made. Such an analysis should be performed.

15. How often did we actually pump the groundwater? Ans: Groundwater was held as long as possible, since its best use was as collateral. However, 100 kaf of groundwater was pumped in 1985. 100 kaf was redeposited in 1986. 100 kaf was pumped in 1988. The final 100 kaf was pumped in 1989. Thereafter, groundwater remained empty.
16. How important was it to get the distribution of curtailments and debt allocated between the SWP and CVP to follow the COA? Ans: Getting the COA right was important in the baseline Daily Model run, since this determined final carryover storages in San Luis for the Projects. This step was not taken consistently in Game 6A (the gaming team did a better job in Game 6B). However, the distribution of curtailments during the game was less important, since the CALSIM runs each year were based upon the storage that would exist without the EWA. This storage number does not depend on the distribution of EWA debts.
17. How often did the EWA make water purchases SOD, to what amounts each year, and is management sure we can purchase that amount? (It would be completely unreasonable to assume that 150 TAF is available SOD each year) Ans: Purchased 150 TAF SOD each year except (1) in 1991, where the gamers felt it was so dry that the water would be unavailable, and (2) in 1983, when water purchases would have been wasted.
18. Need to show how much each asset was used and the amount of water the asset produced each year.
19. Was there a thorough evaluation of b(2) cost. Who covers when the b(2) exceeds 450 TAF cap? Ans: Just kept track of it and reported it to management.
20. Did we shift debt from San Luis to upstream reservoirs? If so how often? Ans. Rarely, if ever. Debt can be shifted upstream only when (1) the year is dry enough that surplus capacity is available prior to October and (2) enough storage exists upstream for such a release. Such years might occur during the first dry year after a wet year. However, in such years, the CVP frequently would move its own water to compensate for prior b(2) cuts. If additional space were still available, the EWA would move purchased water. Only if pumping capacity and upstream storage were still available after these two actions would debt be shifted upstream. Such actions might have been taken in some years, but only to a limited degree.
21. How did we handle 1:1 to 2:1 Delta Smelt for CVP? Ans: The 2:1 export/inflow ratio was met 50% CVP and 50% EWA.
22. Reset. Resets are not common. Significant resets occurred in 1982 and 1986. In neither case was any credit given to the b2 account. Generally a year wet enough to cause spills before February will be so wet that AFRP releases are not needed the rest of the year.
23. Offset. Much more significant. There were large offsets in many years. In some cases some or all of the offset water was eventually exported. But in many cases no b2 credit was given for a major fraction of the offset water. Some additional work is needed to define just kind of reexport pattern is required to justify giving b2 credit for water backed upstream.
24. How was level 4 refuge water handled? Ans: Level 4 refuge water was not gamed. However, the gaming team watched for opportunities to deliver 50 kaf of water from upstream of the

Delta into the export area for refuges. Such opportunities existed in most years. Either the year was wet enough that the EWA could have sold water for the refuges without much risk, or the year was dry enough that surplus capacity existed in the Delta to move purchased water.

25. How were salvage figures adjusted? Ans: Used salvage at CVP and SWP. CVP considered 1:1 loss. SWP considered 1:4.3 loss as outlined in Four-pumps agreement.
26. Could the WOCP be flexed to improve fish? Ans: There are some insistences that it could help fish, if it were possible.
27. Need to calculate salvage using fish abundance not just salvage at the pumps.
28. Need to integrate b(2) and EWA with the same set of books.
29. Change pumping patterns certainty can have an adverse impact on drinking water quality, especially at higher pumping rates like 8,500 and 10,300 cfs. The DCCHM must consider the results of the EWA in their deliberations. Should have a complete analysis of EWA and factor it into the DCCHM analysis.
30. Need reconcile use of EWA tools from year to year and the cash flow need to accomplish the purpose and use of EWA.
31. Stakeholders will go back and write-up issues for their managers.