

Cal-Fed Water Management Development Team Meeting
Tuesday October 12, 1999

1. **Review of Last Meeting, Agenda and Expectations for this Meeting**

A. Housekeeping

- Co-Chairs called meeting to order
- It was decided that there would be no introductions since everyone was familiar with one another, and it was time consuming
- Mike and Steve will co-chair, Jeff will facilitate. The co-chairs and Jeff will sit at one end of the table. Presentations will be made from the other.
- There has been a request for more detailed notes; detailed notes will be provided to the CT for their work, less detailed notes focusing on agreements to the WMDT.

B. Agenda

- Need to reach agreement on late stage I assets.
- Need to reach general agreement on coordination team's approach to scenario construction.

C. Summary of Last Meeting

- Instructed coordination team not to get hung up on b2 or baseline issues and to incorporate late stage I assets

2. **Workplan Update**

A. Summary

- Week 4 (scenario development, stage 1 assets, operation rules, and continuous progress reports) today: how do we make scenarios, how do we evaluate them.
- *Question: How does the chart relate to the agenda? They are linked. The only issue that seems isolated is financing, not on an agenda handled in subgroup work.*
- Kate gave a summary of finance/governance. There should be a governance presentation next week, with a focus on EWA.
- *Question: What is on the workplan for governance, there will be a description of how EWA will focus?*
- There will not be a partitioning EWA from the whole supply question, need to examine different issues for large supplier and EWA, need to look at a broad EWA.
- Finance handout presents existing funding sources that match up with assets in this group. It has been a lot of work to find someone who knows funding sources and assets. Need to look more closely at the proposed water bond.
- Need to fill in matrix. Not for discussion, just to show what track they are on.
- *Question: If the water bond passes when does it become available?*
- There should not be a delay, probably March, might be helpful to get an update from finance department on this information.
- David Yarde should be contacted, urged to get in touch w/at last meeting. He could clarify the bond issues.
- Product Edit: Who benefits, who pays should be two additional columns in the matrix. Public gift or repayment scheme? It is a very important question.
- At early stage until you figure out the operations hard to figure out who benefits, although you can usually figure out who pays.
- We will integrate these comments into discussion for long term financing.
- We don't have a list of projects and who benefits, at programmatic level. We do have the principles of who pays.
- Product edit: The connection between who benefits and who pays is not evident. Suggest use of heavy bold lines to better illustrate the connection.
- All the questions raised in EIR/EIS, do a cross section of program, assets from here are going to be paired with other parts of the Cal-Fed program. This will not happen until mid- November.
- This timeframe seems realistic.
- *Does that mean we will have recommendation on projects without allocating costs?*

- Suggestion: Create a forum on the issue of beneficiary pays. There are many implications that need to be resolved.
There have been many such workgroups, nothing has come out of them, if there is public money to be had they will be happy to access it, if it has to be repaid, it is a different situation.
- Product edit: The column with funding options should cover a broader range of financing, need to make hand out more clear that this is existing funding.
- Product edit: When we revise table add how asset will be used, purpose needs more detail

3. Asset Group/Scenario Operations Early and Late Stage I

A. Early Stage I Assets

- Elise Holland presented the asset list for early stage I. She asked the group to confirm that these were indeed the assets the Coordination Team would use to develop the scenarios for early stage I into their scenarios.
- *Question: We should discuss ways of measuring results.*
- The purpose is to use these assets to build into scenarios. Measurement questions will be addressed in agenda item #3.
- *Question: Source shifting in the Delta: has an effort been made to contact the stakeholders in the Delta area? Concern that the group is formulating options based on the assumption of having this asset without consulting the stakeholders to determine if source shifting in the Delta or other water assets are even an option.*
- Zuckerman is out of the country right now. We have contacted his staff and will speak with him as soon as he is available. In the meantime, we are not doing any further analysis until we determine the viability of that option. The initial program concerning Delta source shifting was a joint study and any future evaluations need to be joint as well.
- *Barriers in Delta need to be identified because they affect operations.*
- Someone needs to go through the potential water bond, and make sure that its content is accurately portrayed on the potential funding matrix. There could be some reclamation funds available during early stage I, right now it is only listed as a late stage I asset.
- *Question: Why is Sac Valley groundwater specifically identified in the Kern Water Bank "box", is this accurate?*
- *Question: Why is the level of detail inconsistent throughout the matrix? Some are very specific (Sac valley), some are very general (Delta acquisition)?*
- CT: Some assets are more precise and others are not well known to leave as much flexibility as possibility. Last week we had detailed presentations on the various assets and the feedback was that this level of detail was not needed.
- *Question: We have a lot of places we are looking at upstream water but where is the water going to come from?*
- We are focusing on feasible sources.
- To identify water sources, you might want to hook up with Fish and Wildlife, they have an extensive GIS system, to look at potential water sources for refuges.
- Once we have identified where assets have value we then go to localities and work with them.
- There needs to be greater sensitivity to those entities outside this process. You can not publish and identify these assets without first going to the communities and giving them time to understand your decisions. There is not a good track record with these relationships.
- In gaming exercises we have to make specific assumptions and this can cause concern.
- The current perception in Sac Valley is that of alienation from Cal-Fed process. There is a need for outreach and fence mending.
- *Question: Should we not put potential assets on the list without prior dialogue with the stakeholders?*
- Put them on the list, but realize there is a lot of work to being done.
- *Is it better to have Cal-Fed process be water purchases or would it be better to have a purchaser not dominated by federal/state government?*

- *Question: The stakeholders of the assets have a certain fear of governmental intervention, but the concern is not so much with the purchasing agency. The problem is there has been no opportunity to tell them about it before it is put in writing. There has been no opportunity to give a heads up and get feedback to us or for discussion amongst the stakeholders to come back with more details.*
- CT: We need to have assets to run our scenarios; we need some leeway to be able to come up with some solutions.
- Suggestion: We should suspend our concern, these are not products, we are still working at the conceptual level
- Product edit: Unused, source shifting should be, consolidated into one place on the matrix, It should go in the markets section on the second page. Take out specific reference to Sac Valley on pg. 1
- It seems that these Early Stage 1 assets need to identify specific, definitive assets and locations if the analysis is to be done in time frame.
- These issues underscore the problem of complexity. There is an immense amount to process and the lack of specificity leads to mushy responses. We need to have better working groups and to spend more time on fundamental issues. The reality is we could detail ourselves to death.
- *Question: What should the coordination team should be doing? Only specific early stage I for scenarios, or should we include potential markets?*
- We know there is a water market, to ignore it is foolish, to mandate we come up with specifics isn't practical, but it is irresponsible to either ignore it all together or to identify specific transfer transaction without first consulting the stakeholders involved.
- CT: We understand there are a lot of issues behind these bullets, but we need to maximize flexibility so that we can generate scenarios for further discussion.
- It needs to be understood that there are certain conditions under which these assets can be used, and other conditions which they can not be used. It is important to realize those distinctions.

B. Late Stage I Assets

- *Question: Can't efficiency, agricultural and urban reclamation be considered under early stage one?*
- *Question: How do we account for redirected impact to the environment?*
- Benefits were not assigned yet because it depends on how asset plays out.
- I think it is good judgement to be as general possible. Don't identify a specific place if it will be a surprise, don't want to generate a reaction we don't need.
- We have to get to some numbers to see if we are getting enough total water.
- Suggestion: Recommend that flexible standards be moved to Early Stage I, to say that we have changing environmental needs without an updated assessment is not logical. This item needs to be on the table. It costs nothing dollar wise.
- I believe there is an appropriate way to address regulatory standards, but it has been very important that Cal-Fed is not a regulatory body.
- To address the process for changing standards, we may need to examine where we are putting our research money. This allocation issue should be an immediate decision, to put financial resources into better researching the existing standards.
- There will be a presentation on regulatory standards scheduled within stage I on Oct. 26th
- *Question: Are the assets in priority order?*
- No.
- *Cal-Fed is suppose to be a coordinating entity, I don't understand why many other DWR projects are not included on the asset list.*
- Only Cal-Fed projects are included in this analysis to make it manageable.
- *Can DWR suggest generic quantity of water transfer to provide the Coordination Team with, guidance?*
- 50,000-acre feet would be a conservative estimate.
- Focus on scenarios instead of assets in future.

4. Agency Perspective on Fishery Needs

A. Key Points of Presentation

- Mike Fris made the presentation.
- Looking at 7-year assurance “bar”.
- What is the bar? Where do we need to go in Stage I, what types of actions are necessary?
- Unrealistic to expect recovery, it is a trajectory/goal to reach recovery by end of the Cal-Fed program (40 years).
- We need fisheries protection during difficult years. There are more than Cal-Fed programs involved in systems operations and habitat restorations.
- The baseline protections for the fish are determined by their presence in the Delta at different times and under different situations.
- The role of the Environmental Water Account is to fill in the deficiencies in existing Delta protections, augment upstream flow and temp, and allow for adaptive management experimentation.
- We assumed B2 as proposed by the Department of Interior.
- We are not endorsing new standards, just the ability to enhance our protective capabilities.

B. Comments and Questions

- *Question: Do you have a list of out of Delta actions?*
- *Question: What about Sturgeon?*
- We haven't included all fish, but should include sturgeon in future analysis.
- *Question: It is not clear to me what the proposal is above the current requirements?*
- The proposal is based on what it would take to make USFWS feel comfortable with the process and not come back with revisions during stage I.
- You can't make sense of the table without the overlay of the B2 proposal.
- Suggestion: Need to identify upstream impact because it is an important part but not yet spelled out.
- *It is an open question on several issues of where fry end up. Do they reside in the Delta or Bay?*
- *Question: What biological processes are you trying to emulate during the 10 day export reduction?*
- It is an entrainment issue. There is some flexibility in the process depending on the overall hydrodynamics.
- *Question: You have identified 10 days over a 2 month period, for reduced export, what triggers it?*
- It is based on actual detection of fry in the system.
- This whole discussion is of concern; a lot of issues are being raised. I disagree with the position on smelt. I think standards are sufficient to protect smelt, so I can't arrive at that conclusion that they are in need of increased protection. I never saw data to support the further protection of smelt.
- When we developed this proposal we were not at a point to recommend EWA. It should be understood that not all these measures need to be used every year. Our goal with the EWA is to acquire the ability to protect the fish in those years we need additional protection. We are currently working out other options with stakeholders.
- *Question: Can we glean where we need to direct EWA funds? We need to know what water supply opportunities exist given this fish baseline. We need someone to sort through the data and give water supply and quality implications given this baseline for the fish. We need to delegate this exercise to modelers; the scenarios have to include this information. We need to make a broad set of assumptions for water supply. It is difficult because the number of fish triggers it. We need to suggest a scientific review process.*
- *Are you looking at increased future demands that will run the pumps continuously? Have you considered the impact on the fish that the exports will have at various entitlement levels?*
- This analysis was the starting point for a lot of gaming, a lot of analysis of water supply impacts with different levels, but we didn't look at certain fishes.
- Overall the fish are better protected in this proposal than past gaming, not at ground zero.
- *It is of concern to have what was an assumption for gaming purposes now to have it as target for fish recovery. This baseline doesn't reflect all of the current research. There is substantial*

uncertainty. We need a larger block of water for supply reliability. Another way to look at it should be: What actions are needed to avoid extinction instead of recovery? How much of this base could be jettisoned if we were trying to avoid extinction, i.e. (reframe the bar in another way)?

- *Question: What is difference between light colored bars and dark on the chart?*
- Light means the fish occasionally appears in the area, dark means normally present.
- *What does export reduction means?*
- Turning pumps down but not off.
- *Question: What do the terms new facilities and habitat restoration imply?*
- We came out with habitat restoration plans, facilities means screening export facilities.
- There are many uncertain assumptions. Need to do more testing on QWest. QWest is not valid unless you can a significant result. There needs to be more focus on firm answers.
- Many of these factors can have severe water quality impacts for urban issues.
- *Question: We never accepted this baseline as a benchmark in the Quinn-Speer process. This recommendation is devastating to water supply and quality. It should be a challenge to the group to get ourselves out of the prescriptive mode. It is inefficient. Can we find a way to do EWA as a replacement to this approach with less of an impact on water quality? In my mind EWA is not an amendment to the current process, it is a new way.*
- This concept of a biological bar, is the same question that was asked a year ago. No new research has been conducted in that period. In terms of non-jeopardy species versus recovery, Cal-Fed has always been looking at recovery. There has been great opposition to nonjeoporady scenarios as a result of the Cal-Fed process.

5. Approach for Dealing with the B(2) Issues in Developing and Analyzing scenarios

A. Presentation of Assumptions for Scenarios

- Goal: To reach agreement on direction of CT to analyze the initial scenarios.
- Need to assume assets, baselines, sharing formulas in order to model scenarios.
- Baseline: The prescriptive standards you are assuming. B2 treated separately because of discretionary water. VAMP cost is born by environment. If you change a prescriptive standard, you change the scenario.
- The objective was to look at scenarios then to compare the tradeoffs.
- Scenario #1 assumes DOI interpretation of B2. Water users then get a larger share of the variable assets.
- Scenario #2 assumes water users restrictive interpretation of B2. The environmental side gets more variable assets.

B. Scenario #1 and Scenario # 2 (Early Stage I)

- *Question: What exactly is the difference between the first two types of assets (variable/fixed) what exactly is the basis of each?*
- Assets with an asterisk on the table are variable, the others are fixed. The sharing formulas of these assets will be changed in the various scenarios.
- The context of this process is that the CT discussed potential scenarios. To gain more detail on assets, and how to evaluate them. We are seeking approval to evaluate the complete impact on water supply, quality, and fisheries, for better description. We propose to run the models with and without Trinity so the total of first scenarios would be 8.
- Fixed assets (ones without asterisks) are not used as a primary mechanism between balancing between water supply and environmental.
- *Question: This asset list is most of assets for early stage one?*
- *Question: I presume the Department of the Interior is following federal law, so with your two scenarios it is up to Cal-Fed to interpret it?*
- No, the difference is conceptual. The model asks how would benefits from new Cal-Fed actions be coordinated with b2. We are not trying to answer the legal question, we are trying to answer

the question of how can we allocate water assuming various resolutions of legal issues. We are trying to create the information you would need with alternative interpretations of b2.

C. Scenario #3 and #4 (Late Stage I)

- There are different assets than early stage 1.
- Over a longer period time you are more likely to achieve balance without dramatic shifts.
- *Question: Is it accurate to state that no variable assets are going to environment in scenario #2?*
- No, it is not 100%-0%.
- *Question: Is this a biological determination of b2, what are we trying to achieve especially on waterside (it is more clear on environmental)?*
- Our premise would be to get closer to the "bar", there would be less or more benefit, but we do not have specific quantified performance objectives.
- *Question: Is the ultimate goal to achieve as much water in each box?*
- No, the goal is to achieve as much benefit in each box.
- *Question: Are you planning to define balance?*
- We are basically using water purchases as the balancing mechanism to compensate for shortfall.
- When you split between variable and fixed assets, the expensive ones are generally the variable assets.
- *Question: How and why did you make the split between variable and fixed assets?*
- The variables that were most amenable to flexibility were identified as variable. It was a judgement based on our best available information. It needs to be fleshed out with CT,
- There is discomfort with this approach, only if threshold measures are same; level of achievement is a big problem.
- *Question: What have you identified as regulatory flexibility? Why have you identified regulations in late stage I (Bacon ops, Delta salinity, X2) and not early stage I?*
- Until CT has opportunity to deal with these scenarios, it is uncomfortable for us to endorse.
- Product edit: The increment of bank pumping not listed properly in late stage one.
- *Question: Should we split fixed and variable assets, and only deal with variable assets?*
- We are asking for a broader conceptual approval, in an effort to try to run some initial scenarios.
- *Scenario #1,2 the ability to purchase water assumes an asset, how can you purchase water without a definable asset?*
- Water purchase is used to balance.
- We did come out with one scenario from the CT on Thursday, but on Saturday as we looked more closely it turned out it was not balanced, it was heavily weighted toward WSR. We came up with new approach, although we utilized the CT work from Thursday.
- We need some way to test assets, so we can determine cost and benefits.
- *Question: Can we determine significant impacts quickly?*
- We need policy direction to determine a finite number of scenarios, we are hoping to do them quickly.
- *Question: Is it possible to integrate minimal financial constraints into these scenarios?*
- *Question: In end of stage I, new assets crept in, how did that happen?*
- *Question: When you say "water purchase to balance", you are really only defining deficit that would be made up?*
- Yes that is another way to look at it, although theoretically the balancing is not just limited to water purchases.
- *Most of the runs we made earlier in the Quinn Speer process focused on fisheries so what we need to look at is how do we accomplish water supply and water quality. Out of these scenarios we need to see what assets it would take to get there without, the bias or fisheries.*
- *Question: How does a scenario define balance? Cal-Fed has not tried to define specific measures of achievement for balance. It secures an attempt to create a political balance without regard for needs or financial constraints. Trying to design political scenarios ends up to be more confusing.*
- *How do you share fixed assets?*
- *How do you handle mitigation requirements for expansion?*
- Asset definition would deal with the question; of mitigation requirements.

- *Question: What is water user b2 base? I don't object to utilizing the framework if it might illuminate something.*
 - It is very important to clarify biological bar discussed earlier. If you run different scenario you have to have some common place. You need to clarification of the biological bar no matter which one you do. If you have a fixed biological target you can compare the scenarios. If you have different targets and use different assets you have nothing.
 - We need to clarify that the environmental targets are the same, while we have some differences, lets try something and see what we learn.
 - There is also a water bar, and there has to be balance, even with WSR interpretation of b2, lot of work to do, I say move ahead with study and see where we are.
 - Cal-Fed is compelled to see how these assets can perform. We have to do this analysis with or without the WMDT concurrence. We are prepared to do something, and we need general sense we are going in the right direction.
 - Everyone should be aware for the fishing community the bar is restoration and not in 20-30 year but much sooner. Our expectations is that bar should be higher and sooner. If you are looking at balancing and starting from the Fish and Wildlife bar you are leaving out a major constituency. There are people who make their living from commercial fishing and have suffered from a prolonged decline.
 - *Question: Can we run an environmental scenario? Let's consider this*
6. **Summarize Recommendations of the Meeting**
- CT team needs ability to run scenarios and needs direction from WMDT.
 - The CT needs two weeks to run the initial scenarios.
 - Suggestion: give the scenarios for the CT to run and, next week we can talk about coordination and integration.
 - Next week we will talk about coordination, integration, governance, and finance. The CT team should work on the following scenarios: DOI b2, water user b2, (first stage and end stage), environmental scenario (first and end stages).
 - Assumptions need to be very clearly laid out.
 - Try to have baseline issues framed in writing and emailed out.
 - **Agreement: Agenda for next week (1) governance, (2) coordination and integration, (3) subgroup work that did not get addressed this week.**
 - **Agreement: Run six scenarios (Interior b2, water users b2, environmental for each earl and late Stage I) Define assumptions as clearly as possible or compare across the scenarios.**
 - **Agreement: Focus on early stage I but run at least one late stage I, and more as time allows.**