

April 22, 1996

To: Lester Snow and CALFED Staff

From: Scott McCreary and John Gamman, CONCUR; Eugenia Laychak CCPDR

RE: Key Outcomes of Workshop 6 (April 15) and Implications for Next Steps in the CALFED Process

I. Introduction: This memorandum summarizes key outcomes from Workshop 6, synthesized from the notes taken in both the plenary session and the seven breakout session. We are concurrently preparing a detailed meeting summary that will recap the details of each discussion.

In drafting this memorandum, we have tried to pull out the key themes, and have looked across the results of the seven breakout sessions. of the five breakout sessions. We also have identified a preliminary list of process questions and some technical issues that merit further attention.

II. Synthesis of Key Outcomes from Plenary Sessions

- Develop more detailed baseline information (Use as many simulations as possible, and present by components. The program is trying to get consensus on a reasonable short list, and plans to wait until Phase II to do the model runs. If this information were to be available in Phase I, the program would be very different than what is planned and scheduled).
- Demand Management should be a stronger theme throughout all alternatives. Separate out the agricultural retirement program- rethink that program, look at more options that may be available.
- Clarify the ecosystem restoration program, the vision, and how the pieces come together. (A BDAC group has formed to start work on this issue.)
- More flexibility is needed to make alternatives work. A more flexible alternative/solution will be more durable in the future.
- Look at watershed management more thoroughly. The project has not properly valued watershed management.
- Provide more options for storage. Prioritize storage (i.e. what has the most bang for the buck - conjunctive management is the place to start.)
- Clarify operational criteria.
- Look at broader ranges for sizing facilities and restoration. The ranges, at the conceptual level we are now working , were drawn from existing information. Comments suggested looking at broader ranges that would provide more flexibility.
- Concerns were expressed about the problems and solution scope statement. The solution and problem scope is too small, needs to be bigger.
- Establishing institutions is a need which cuts across all sectors and all issues.

- Levee stabilization needs more attention. To the extent we use the Delta for flows, we need to beef up stabilization.
- Drinking water quality/management needs to be beefed up.
- Core actions may need a separate workshop for public review and comment.
- There is a need to define the No Project Alternative for the public to review.
- More time is needed to review all the proposals. The Program needs to determine what information is necessary to bring people's understanding up, without blowing up the time line.
- The Program needs to be willing to look at new combinations of components, which may be very different than the alternatives now proposed.
- Getting to 3-5 must be a key focus.

III. Overview of the Breakout Sessions

The breakout sessions posed four questions:

- What questions and comments did participants have?
- What are the strengths and weaknesses of the alternatives?
- Which alternatives meet solution principles and objectives? How could alternatives be strengthened?
- What suggestions do you have for CALFED staff in refining alternatives? What items should be on the agenda for Workshop 7?

IV. Breakout Item 1-Questions and Comments About the Process and the Alternatives

Again, the question and answer portion of the breakout session proved valuable. The extent of the Q and A varied among groups; the breakout sessions entertained between 7 and 25 questions and comments per group; in all, over 100 questions or comments were posed during this portion of the breakout group agenda. As we saw at Workshop 5, many questions addressed the CALFED planning process. Questions and comments clustered in five areas:

- core and essential elements
- assumptions and data sources used;
- procedures for evaluating, recombining, and refining alternatives;
- how specific alternatives (or groups of alternatives) are operated;
- the relationship between CALFED and parallel processes.

We have excerpted representative questions in each category below.

A. Comments on Core and Essential Elements

What is the difference between core and essential elements?

Core actions should be discussed at length in a workshop.

Core actions have changed and are too specific now.

Why have core actions excluded the Sierra watershed?

Expand the emphasis on groundwater banking.

Do core actions satisfy the solution principles?

B. Questions and Comments on Assumptions and Data Sources Used in Building Alternatives

What assumptions were used in varying the numbers for levels of habitat for each of the alternatives?

What volume was used to calculate urban runoff reduction and what is CALFED proposing to do with retained water?

When will we get data on water supply yield?

Did alternatives take into account growth patterns, conjunctive use, and drought periods?

Can we obtain a list of the assumptions that guide and structure alternatives?

Where did the numbers for demand management come from?

C. Questions and Comments on Evaluating, Recombining and Refining Alternatives

I hear that alternatives can be recombined, but don't see how that works. How do we make a recommendation for a better alternative?

What would help us understand the benefits of each alternative? How does each alternative reach its objective?

Who will decide on the 3 to 5 alternatives and who will decide on the preferred alternative(s)?

How can you compare alternatives that vary in subtlety and complexity without a standard analytic framework?

What is the baseline used to compare alternatives?

How does the time frame for articulating the vision for ecosystem restoration match the time frame for identifying 3 to 5 alternatives?

We need more information on cost.

D. Questions and Comments About the Operation of Specific Alternatives

How many alternatives require voluntary efforts?

What process will be used to acquire lands?

Clarify the intent and mechanics of the purchase of 100,000 acre feet of water.

How and when will staging of core actions be implemented?

How will water derived from demand management be allocated?

How will area of origin water rights be addressed?

What is the difference between conjunctive use and groundwater banking?

Do any alternatives reduce flow and still attain standards?

How do alternatives deal with flows in the San Francisco Bay and address bay health problems?

For through Delta alternatives, what is the purpose of increasing flows through the Delta?

E. Questions on the Relationship Between CALFED and Parallel Processes

What happens if spring run salmon are listed?

How was the partition made between the baseline, no action, and core action?

What is the difference between the alternatives and CVPIA.

V. Strengths and Weaknesses of Alternatives

All seven breakout groups were able to work through a version of this question. In general, most alternatives attracted more comments on weaknesses than on strengths. A first cut at some representative responses are given below; this is not intended to be a complete tally.

System Reoperation Alternatives (A, F, D)

Alternative A - Extensive Demand Management

Strengths	Weaknesses
Implementation is spread statewide	Land retirement looks politically unlikely.
A reliable method of restoring fish populations.	Relies on the existing levee system, which needs upgrading.
Does not rely on facilities	The relationship between in-Delta storage and the rest of the alternative is not well integrated.
Is adaptable	Not a distinct alternative; should be integrated into all alternatives.
Cost is lower than some alternatives.	Reliance on transfers would exert negative impacts on wetlands
	Does not sufficiently address water quality.

Alternative F - Habitat Restoration with Storage

Strengths	Weaknesses
Reduces flood control conflicts	In Delta storage of this scale may conflict with habitat restoration.
Provides extensive habitat restoration; good habitat for species other than fish.	Does not address water quality issues sufficiently.
Provides in Delta storage	Levees and siphons are vulnerable to earthquakes.

Alternative D - Through Delta Conveyance

Strengths	Weaknesses
New screened diversions, strong source control, and drought water bank.	Has significant negative impacts on habitats
Through Delta conveyance is a strength.	Lack of upstream storage.
Adheres to "common pool" concept.	

Reoperation and New Facilities Alternatives (C, E, G, B)

Alternative C- Dual Delta Conveyance

Strengths	Weaknesses
Potential for significant drinking water improvement, real time monitoring, source control, new screened diversions, channel improvements, pump capacity improvements, Old River fix.	Extent of storage could make guarantees harder to enforce.
Operation may be a plus to the Delta.	Rationale for the amount of storage is not clear.
Includes a lot of operational flexibility.	Screens on this scale may not be technically feasible
May be a good compromise between large PC and current conditions.	Isolated facility does not completely solve M & I water quality problem.
	Real time monitoring may not work.

Alternative E - Delta Channel Habitat Conveyance

Strengths	Weaknesses
Flood control, levee setbacks engineered to modern standards, habitat for aquatic species, capacity at lower velocity, general terrestrial and aquatic habitat	Does not sufficiently address water quality or water supply needs.
Habitat restoration outside the line of the existing levees; best for recreational boating	Relies heavily on existing levee system, which needs stabilization.
A thoughtful mix of habitat types at a variety of locations.	The entrainment problem is not solved; not much evidence that widening channels will eliminate entrainment.
	There is still an unscreened diversion on the Sacramento River.
	Timing of conjunctive use is not consistent with fish protection goals.

Alternative G -- Eastside Foothills Conveyance

Strengths	Weaknesses
Enables flexible water quality operations.	Will confuse adult migrating salmon due to water mixture and release points. Will attract migrating salmon to the wrong river.
Moves diversions upstream to avoid impacts to Delta species.	Land retirement will place undue burdens on agriculture.
Extensive reliance on groundwater banking and conjunctive use could have environmental benefits.	Seems difficult to implement and costly.

Alternative B - New Storage to Improve Delta Flow

Strengths	Weaknesses
Increased storage increases operational flexibility and management. Net benefits to fisheries, benefits to existing water supplies.	Cost-inefficient because huge pumps would be idle most of the time.

Recognizes importance of additional storage (groundwater storage).	Conjunctive use for ecosystem is too inefficient and expensive.
Includes storage in western Sacramento County, the only cheap storage left, providing benefits for multiple users.	Year round diversions will increase and cause entrainment at South Delta diversion.
One of the best for M&I water quality operations.	Relies heavily on existing levee system, which needs improvements.
Features real time monitoring and data sharing.	

New Facilities Alternatives (H, I, J)

Alternative H - Chain of Lakes

Strengths	Weaknesses
Includes multiple points of diversion and multiple use of water.	Converts agricultural land into conveyance, losing habitat in the process.
Innovative, creative solution.	Will be difficult to mitigate for habitat loss.
Provides greatest opportunity to capture and store excess flow.	Requires extensive excavation of peat soils, increasing water quality vulnerability.
Makes good use of deteriorating Delta islands.	

Alternative I - Westside Conveyance and River Restoration

Strengths	Weaknesses
Drinking water quality is improved.	The scale of the alternative may reduce fresh water to the Delta.
Access to groundwater on the western side of the valley is good.	Scale of the alternative is expensive.
Has a long shelf life and a vision that would last 100 years.	Could transport unwanted fish species from upper watershed to South of Delta.
Generates a lot of water; provides added flood control benefits.	Many institutional problems must be faced.

Alternative J - Eastside Conveyance

Strengths	Weaknesses
Eliminates entrainment for Delta fish and San Joaquin salmon.	In-Delta water users would become more vulnerable.
Could export more water with less impact on fish.	Institutional guarantees will be tough to work out.
Provides extensive pollution source control.	Needs to be clearly distinguished from old Peripheral Canal, from which it's significantly changed; otherwise, could stir up animosities.
	Too big and expensive; too much water going south.

VI. Comparing Alternatives to Solution Principles

This section of the Agenda really highlighted the different personalities of the sessions. Only two breakout sessions pursued the straw poll. In one group, the overwhelming sentiment was that none of the alternatives met the solution principles or objectives. In the other, Alternatives B, C, D, E, and J received support for inclusion in the short list refinement process. Other groups launched directly into discussing and listing modifications. A couple of groups did not have time for this section.

Recommendations for modifications, by alternative are summarized below. Consistent with previous sections of this memo, this is not an exhaustive list:

Alternative	Suggestions for Improvement
A	Provide options to permanent land retirement Address third party impacts Increase levee stabilization Increase storage
B	Provide more land retirement and demand management detail Include more storage
C	Include more storage Limit size of intakes to match effectiveness of screens Increase habitat restoration Needs new facilities to transport water through Delta
D	Ensure effective screens Combine with Alternative E
E	Include more conveyance and channel improvements Ensure effective screens and limit intake size to effectiveness of screens
F	Identify mechanism for implementing adaptive management Need more levee improvements
G	Increase size of diversion More upstream storage
H	Combine with H & F Operate facilities on seasonal basis to improve shallow water habitat
I	No suggestion received

Alternative	Suggestions for Improvement
J	Include south of Delta storage Consider increasing size of facilities to improve south Delta water quality

VII. Suggestions to CALFED Staff in Refining Alternatives/Suggestions for Workshop 7 Agenda

Many participants requested information on costs. They asked for ball park costs and preliminary modeling results on costs and operational issues. There was also a request to associate costs with modest, moderate, and extensive levels of implementation.

Participants suggested that a drinking water specialist and a representative from the State Agricultural commission be added to the CALFED team. Also, partnering with federal government projects and programs related to the Delta was suggested.

One participant noted that the Delta is used for recreational, as well, as, commercial fishing. However, recreational benefits and issues are not addressed in the alternatives, core actions or essential elements. Staff agreed that recreational issues should be addressed.

VIII. Clarity of Roles

Breakout session participants were comfortable with the way facilitators, Program team leaders and resource people executed their roles. Introductions by Program team leaders set the tone for the sessions and served as a good prelude to the rest of the session agenda.

IX. Next Steps

In planning for Workshop 7, we need to incorporate some created expectations and newly expressed needs and opportunities.

Preview of the Short List of Alternatives

As a planning process on a fast track, CALFED has created the expectation that at the next workshop staff will showcase the next step in the refinement process: the "short list" of the 3 to 5 alternatives.

A challenge the program faces is reaching internal agreement on the methodology for refining alternatives. Following agreement, the second challenge will be completing the analysis and producing the short list in time to get the results in the Workshop 7 packet with ample time for public review.

Some Additional Candidate Topics to Address:

At Workshop 6 we heard participants express a desire to discuss:

- **Core actions.** What do they contain? How do they figure into individual alternatives, and how they are different from "essential elements"?
- **Demand management.** How can it be incorporated into all alternatives? How is it different from land retirement (or permanent land following)?
- **Water Quality.** How do the alternatives address the need to address water quality?
- **Cost.** How are costs being estimated? What are O & M costs? How will staging and revenue sources affect affordability? Which sectors (public or private) benefit from specific components and alternatives? What are total costs of alternatives?
- **Effectiveness of components.** What will be the outcome of components, either individually or in combination?

Some of these items might be most appropriate for a plenary discussion, while others (particularly core actions) might generate useful breakout group discussions.

Need for Breakout Sessions: We recommend that we plan for breakout sessions at the next workshop. Given the increasing attendance at the most recent workshops, it is difficult to imagine how the full group of 200+ can interact effectively in a full day session.

Advance Mailing of Packet: Many workshop participants requested more time to review the CALFED materials in order to participate effectively. Some suggested the program aim to produce the packet and mail it in time to give participants two full weeks to review the material. This would push back the packet production and mailing date to sometime during the third week of May — a very aggressive timeline.

We support the idea of any earlier mailing, but recognize that it represents a tough tradeoff with the need to complete work on the analysis.

Continuation of Workshop Roles: As we noted above, the respective roles of the facilitation teams worked well. We believe they should be continued, although we see a need for further encouraging teams to proceed through the agenda in consistent ways.

Advance Agenda Scoping, Walk Through and Rehearsal: The water community has a heightened level of awareness about the CALFED process as it moves forward with the Program's refined list of alternatives. We have to put a premium on proper preparation for Workshop 7 to ensure that we communicate a clear, consistent message.

Facilitator Coordination, Rehearsal and Logistics: Our facilitators found the rehearsal very useful, and also supported the addition of participant instructions in the packets. They requested a chance to receive the packets earlier, and offered a variety of suggestions for improving facilitation of the breakout sessions. They also felt time

pressured by the agenda and recommended that more time be allocated for stakeholder discussion on issues.

We estimate that between 250 and 270 people, including staff, attended Workshop 6. This is good, because it demonstrates that increasing numbers of stakeholders are interested in devoting a day every two months to discuss the Program. This also means that facilities larger than the Clarion are needed. In addition, we recommend that the plenary room not be used for a breakout session because set-up and take down is difficult, and the session is distracted by other participants who enter the room. Another suggestion for easing logistical hassles is to either reserve breakout rooms for the entire day or to provide additional staff for quick set-up.

Calendar of Activities: Experience from Workshop 6 preparations shows that additional planning is needed, including initial scoping discussions about the agenda (today's briefing session is the first one). Other planning sessions include a walk through the draft agenda, and a full scale rehearsal with appropriate graphics, handouts and other materials. CONCUR, CCPDR and CALFED staff will, by the middle of next week, prepare a proposed calendar of activities.