

CALFED BDAC ERWG MEETING - JULY 24, 1996**INTRODUCTION/AGENDA - MS**

- Targets for ecosystem restoration are to be summarized in a staff report in early September.
- Monthly meetings of the ERWG are planned for fourth Wednesday of the month.
- Agenda for today includes further discussion of the Ecosystem Restoration Strategy, target setting approach, and Adaptive Management concept for CALFED.

PARTICIPANTS - (Attached List)**SUMMARY OF KEY DISCUSSION ITEMS*****Ecosystem Restoration Strategy***

- The ecological and economic value of agricultural lands should be considered in the restoration program.
- Indicators and targets for the program need further development.
- Adaptive management should be a major focus of the program.
- Concern about conversion of diked wetlands that already serve a valuable ecosystem role.
- Present targets in the plan are placeholders.
- CALFED needs to provide more guidance on the vision and targets.

Targets

- Blend the various approaches (i.e. reference period, historical, or predisturbance) to setting targets.
- Develop targets and get feedback.
- Focus on ecological functions, as well as species and habitat.
- Technical teams will be assembled to develop targets. Concern about who would be involved with setting targets.
- Concerns expressed about setting historical targets, because so much has changed.

Adaptive Management

- The institutional requirements of adaptive management must be addressed.
- Further refinement of the CALFED approach to adaptive management is needed.
- Adaptive management has been ongoing for years.
- Category III could be test bed for adaptive management.
- Need case studies of adaptive management to better understand how it will be used in CALFED program.
- To accomplish adaptive management there will be a need for mediating institution.
- Setting fixed targets may or may not be in conflict with adaptive management.

Ecosystem Restoration Strategy - DD/RS

- Role of Agriculture (carryover discussion from previous meeting) - CALFED will acknowledge opportunities to help wildlife with agricultural practices and include incentive programs to help wildlife.
1. BH/KH: Clarification is needed on protecting agriculture with wildlife value.
 2. RS/DD: Some agricultural lands will still be converted to wildlife habitat.
 3. SS: We must consider the economic viability of the agricultural lands in targeting specific lands and landuse types. This is the reality of the restoration process.
 4. PC: Are we targeting lands in tidal areas and subsided areas?
 5. DD: The Delta ecosystem has moved upstream because of subsidence.
 6. PR: Indicators and targets have a way to go, otherwise fine. A comment on adaptive management page 7: "where certainty exists" - we should recognize that there is a continuum between certainty and uncertainty. We should also let adaptive management guide the whole program.
 7. LL: Subsidence is also a problem in Suisun Marsh; e.g. the Montezuma Wetlands Project. Tidal open water has limited value. FWS is going to convert some San Pablo Bay wetlands to tidal action. Selenium in soil of dike lands will be a problem for Suisun Bay ducks.
 8. DD: Tidal wetlands and baylands have value for diving ducks such as redheads and canvasbacks.
 9. SP: We should defer technical details and focus on strategies.
 10. LL: Agree: problem is others interpretation of this strategy. Conversion of managed diked wetlands as part of the CALFED strategy is a problem.
 11. SP: Has a problem with the personal pronouns in the vision statement.
 12. KH: Under Concept on page 8: doesn't see appropriate treatment of terrestrial ecosystem.
 13. NB: On page 3 "economically" should be added as adjective for "fisheries". Reference to reductions in harvest should be reductions in "proportion" of harvest.
 14. DD: Target numbers will be developed in the next six weeks. Present numbers are placeholders.
 15. SS: We should shift focus from the floodplain to tidal waters: the tidal ecosystem is what is sick. Most of the dead-end sloughs have water quality problems. Turbidity is a problem from boat wakes and drainage. CALFED needs to provide guidance in these areas. We can grow more corn to feed ducks or provide them with more natural habitat.
 16. DD: Natural processes is the goal.
 17. SS: "Natural" is just not there anymore.
 18. BH: Reference to limiting factors is out of place. Limiting factors is just one set of the functions being affected. We should focus on providing working functions and not on limiting factors.

Targets - DD***Methods for Setting Targets/Vision***

- Use all four methods described in last meeting.
 - Develop targets and then see how people feel.
 - Feel good about targets, then undertake adaptive management.
1. MS: Can we blend the approaches?
 2. DD: Predisturbance values are best targets for functions such as nutrients, flows, and sediment transport. Reference period can give us a feel for change up to and since; and changes can be documented, as can indirect effects. Diagnose problems and prescribe causes.
 3. JP: What do you consider is preproject if what has happened over last 30 years is problem?
 4. BH: Identify which functions have been compromised. Clean water act has helped, but we do not want to reverse its effects.
 5. DD: A reference period may only be related to a cause, while a target may acknowledge irreverable changes that have occurred since the reference period.
 6. NB: For anadromous fish we have to consider what has happened with ocean productivity.
 7. KH: For the upper Sacramento River we are looking at a function, not a historical reference.
 8. DD: For the meander belt we use predisturbance processes to set targets.
 9. GB: Functions may be difficult to have a single reference condition that addresses all of our functions. A suite of indicators may have different reference conditions.
 10. BH: As we get into specific targets, reference periods will become clear. A skeleton idea is OK for now.
 11. PC: We need to see the product that specifies targets, and determine how comfortable we are with the numbers.
 12. TB: What about introduced species?
 13. DD: We have to be practical when it comes to exotic species. Making system better may reduce problems with exotics; some exotics may not be a problem; others like water hyacinth may limit restoration potential.
 14. NB: CALFED should be concerned about the indirect effects of using 2,4D on water hyacinth.
 15. GB: We need to be cautious about creating niches for new species.
 16. KH: Is AERT going to help in developing targets?
 17. DD: Yes, they are helping. Targets for ESA have already been discussed.
 18. KH: Is 1086 group involved?
 19. DD: There have been several discussions with them.
 20. CD: Other restoration processes: how do they fit it?
 21. DD: Tech teams have been established. We will be developing a bibliography of the references we are using to set targets.
 22. SS: Human factors such as boating and fishing have changed: targets should consider changes and accommodating future changes. We need a vision as to how we will accommodate these changes.

23. DD: We can refocus recreational use away from sensitive habitats.
24. GB: Indicator and Category III workshops determined that there is a need for a technical process with involvement, refinement, technical guidance, and not necessarily involving the public.
25. DD: September 18th there will be a focused workshop on targets.
26. PR: The earlier the better for the workshop.
27. MS: Paper on targets by early September.

Public Comment on Targets

28. Lance Johnson: Concerned about population targets and period 1960's-1970's targets. Projects created habitat that allowed some species to greatly expand and peak during this period. For example the winter run chinook salmon.
29. Dan Folk: We can not reach historical targets because so much has changed. Should be used only as a frame of reference for a new target range.
30. --: It is too early to prescribe target levels. Staff should provide key data to work group. For example: what is shallow water. Explain setback levee concepts.
31. --: Agrees with BH on problems with limiting factors approach. Also has a problem with feel good numbers, since we can't make everyone happy. The 60-70's are not good targets because conditions were poor. Boat wakes are a big problem in the Delta. Should have no-wake zones -- 5 mph.
32. Greg Thomas: We should consider the "maximum feasible" for targets. Should consider component approach for targets like that for storage and conveyance to compare and contrast our restoration options.
33. GB: Ranges were presented, but they were minimal to minimal. Need a wider range.
34. John Winther: Cautions against bringing in agencies to set targets; DFG and FWS permanently flooded wetlands don't work for some species. Canal Ranch and Brack Tract flooding will require terrestrial mitigation.
35. --: tidal wetlands will provide fisheries benefits, but they can't meet the value of managed wetlands. Managed wetlands need more focus in the restoration program.

Adaptive Management (AM)

1. MS: Program needs input on the institutional requirements of AM.
2. DD: A draft paper on AM has been distributed. What AM is not is important. Literature is available. Speakers can be made available. Case studies can be reviewed. New concepts can be incorporated.
3. BH: The draft paper does not reflect his concept of AM. Does not include K. Lee's book on the Columbia experience. Need to design program knowing somethings will fail. Provide for forks in the road for decisions. Ability to change prescriptions after we get results. Need to identify information needs. Examples are needed.
4. PC: Paper has a long way to go: 1) too timid an approach - need big changes - have to do dramatic things; 2) use today's knowledge to identify actions most likely to achieve goals; implement and adjust as needed.
5. BR: Adaptive management is not descriptive operations? AM has been going along for a long time: D1485 was AM and was a failure.

6. DD: State Board standards process is AM; but the difference is that we have a vision. Board has objectives but no vision. Their process is not a broad look at things.
7. GB: Board has too narrow a statutory requirement.
8. PR: Category III is a test bed for AM. How we measure. How we make decisions. Process questions are at heart of AM. Need to know how things work. Need working examples to understand concept of AM.
9. MS: Need case studies. More detail using examples as to how AM works.
10. CD: Missing one step in past; there wasn't a commitment to monitor and change as needed. FERC process is too long - 30 years. Board process is ill defined. Need monitoring and commitment to change as needed.
11. PC: Need to decide what AM is. Then deal with how to achieve it institutionally.
12. BH: Agree, but uncertainty is related to effectiveness of actions. Risks - minimize.
13. NB: Scale of commitment: this is too small - piecemeal - not large enough steps. Big enough bite is needed to see real ecosystem scale responses.
14. SS: We had 14 demonstration projects on Staten Island. Learning from building blocks of information. We were limited by regulatory constraints. Need to adjust vision too. Process will take too long unless we have institutional process to keep on target.
15. SP: Need to foster an institution that does what we want. Projects are forgotten. Lack of followup. Need an institution to followup, monitor, and take needed actions. Success will depend on authority and funding ability of institution. Need boxes for AM institution. Get the concepts of the vision and AM out of the way and work on institution.
16. DD: 1) IEP will be reviewing their monitoring protocols on August 4-6. 2) CVPIA Comprehensive Assessment and Monitoring Program (CAMP) is developing their protocols. 3) on November 15 will have implementation strategy draft paper out.
17. MS: We need to address institutional structure of ERP in next 2 to 3 months.

Public Comment on AM.

1. Challenge with AM. Regulatory community is not adaptive. Need a mediating institution that learns as it goes. Need to set up to be failsafe - needs insurance mechanisms. Minimize downsides. Problem with adequacy of expertise. No good model of AM to follow.
2. GB: We need an institutional work group.
3. Targets and AM do not necessarily go together; targets are too fixed. How do we deal with this incompatibility.
4. GB: AM still has a vision. Based on what we know now, you can build a roadmap that can change.
5. DF: Targets like acres do not fit in with AM. Do not put too much stock in these numbers we will be creating.
6. GB: Targets are first path.
7. BJM: Desire to have more certainty in water, certainty of supply. Can live with adaptability but not varying supply. There are built in AM mechanisms in new standards.
8. DD: Pay back water appears to be a problem.

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STAFF NOTES

9. SP: AM also deals with validation.
10. BH: There is a difference between diagnostic and prescriptive. We can't use AM if process uses fixed tools.
11. MS: Staff need to be clearer on hybrid for prescriptive and diagnostic.

BJ Miller - presentation and handout

- Populations of key fish are declining.
- Table shows timescale of declines.