GENERAL COMMENTS:

DFG:

Comment: DFG offers another alternative for consideration in the Dual Conveyance category.
Response: DFG's suggested alternative and operating criteria represent a great deal of thoughtful work and are very much appreciated. We will study this proposal further to determine whether and how to include it or its component parts (including the proposed operating criteria) as we carry alternatives forward.

Comment: Difficult to know what the common programs are, especially Levee System Integrity Program.
Response: Work is continuing on refining the common programs which should help understanding.

Comment: Upgrading existing screens is dramatically different from new screens at the CCF intake, need more detailed descriptions of impacts of these different approaches in the alternative descriptions.
Response: References to screening in the south Delta were not intended to be site specific at this stage but only to indicate that south Delta diversions would be screened. Refined descriptions will be included in the revised alternative descriptions.

Comment: Statement in general description of alternatives 2 and 3 "would allow full physical pumping capacity" needs qualification as it may be interpreted as expectation of no limits on exports, even as currently in place under the Accord.
Response: Currently, the south Delta pumps do not have a permit to pump at full physical capacity. With physical improvements to some Delta channels and implementation of the common programs we assume this permit can be issued. The operation of the pumps would still be subject to environmental regulatory requirements, which could be modified to reflect changed conditions brought about by various actions and improvements.

Comment: p4, Common Programs, geographic scope. Should be more clear that the program only looking at problems linked to the Delta and Suisun Bay, as agreed to by BDAC.
Response: We agree. It is important to us that the issue is clear. It will be clarified.

Comment: Language protecting upper Sacramento River water quality from impacts (e.g. temperature and turbidity) associated with receiving reservoir discharged water should be included. [Suggest water exchange program with the T&C Canal could accomplish this.]
Response: Reference will be made to the need to assure the temperature of the Sacramento River is not adversely affected in a significant way as a result of operating any new off-stream storage projects. It is not clear, however, how discharges from off-stream facilities would be expected to add turbidity. Typically, the effect of impoundment is to settle suspended solids, resulting in increased water clarity. The suggested water exchange will be reviewed as a possible means of avoiding or mitigating potentially negative temperature effects.

Comment: Descriptions should include discussions of how use of environmental water relates to each alternative, how storage options are analyzed taking into account various impacts from operational and regulatory constraints, and how CALFED environmental water relates to CVPIA water.
Response: We agree-- these issues need to be resolved. CALFED staff is particularly eager to resolve the relationship between CVPIA and CALFED environmental water, and is an interested participant in the current process established by Interior.

Comment: Descriptions should clarify how "new" water will be allocated, equal split as described could make things worse.

Response: Current modeling is intended to provide a rough volumetric accounting of new water supplies, based on an agreed upon set of operating parameters. The 1/3-1/3-1/3 split in allocation of new water supplies is obviously arbitrary and presented only as a starting point for modeling purposes and was agreed to by CALFED agencies, including DFG.

Comment: Need more specific criteria for diversion to offstream storage, above and below Chico Landing.
Response: DFG has raised a good point regarding coordination between ERPP activities and flow assumptions, although the judgment about the selected point of diversion may be premature at this time. The current DWRSIM modeling and spreadsheet post processing have explored the impact of operating both with and without the diversion restrictions. Please note that the maximum rate of diversion to offstream storage is 5kaf.

Comment: Should include statement that environmental water will not be subject to export after flow has "served its purpose" in upstream areas.
Response: This issue has not been resolved from a policy standpoint. The "purpose" of the release and the fate of the water needs to be evaluated on a case-by-case basis and a policy developed. For example, if the purpose is freshwater inflow to the Bay, then it may not be subject to export. If the purpose was to serve tributary needs, then a decision could be made to allow it to be exported. If the water was "paid for" as environmental water then, if exported, reimbursement to an environmental water purchase fund by the export interest may need to be considered. In any case, impact analysis and more detailed modeling must be completed before these judgments can be made.

Comment: Should be more explicit that supplemental water from "willing sellers" expected to be for environmental restoration.
Response: The consequences of obtaining supplemental water from "willing sellers" and constraints on its use will be addressed in the impact analysis. It should be noted, however, that "willing sellers" will also be the focus of the water transfer program.

USFWS:

Comment: Summary Common Programs, p10, San Joaquin Basin. Bromide not an issue in Grasslands as suggested here.
Response: Noted, will review.

Comment: Summary Common Programs, p12, Efficiency. Dilution actions in WQ Program conflict with WUE Program objectives.
Response: The Water Quality and Water Use Efficiency programs have been coordinating their efforts and dilution is a low priority action.

Comment: Redundancy of descriptions makes differentiation difficult.
Response: A summary matrix, tables or charts will be provided in future documents to highlight major differences in alternative configurations.

Comment: Storage descriptions vague, identify sites. Which dams to be raised.
Response: Storage descriptions are not intended to be site specific at this time since a programmatic document.

Comment: Expand description of rationale for priorities of surface storage.
Response: The priorities for storage are a result of CALFED agency management judgment regarding which storage projects would likely be the most implementable, consistent with our solution principles.

Comment: Define "off aqueduct".
Response: This is storage filled by water exported from the south Delta pumps, to distinguish it from other "south of Delta storage" tributary to the Delta.

Comment: Each alternative description needs statement of modified conveyance goal.
Response: More explanation will be provided in the introductory paragraphs.

Comment: Each alternative description needs issue identification and range of additional water expectations. Document should have a water needs analysis with supply/demand information.
Response: Meeting 2020 projected statewide water need is not the goal of the Program.

USEPA:

Comment: Summary Common Programs, p16. Discussion of anticipated results is useful. Suggest adding another bullet point discussing material on p13 of Appendix C on managing improvements to achieve multiple benefits.
Response: The third bullet on page 16 of the Summary of Common Programs indicates a potential savings of 8-12% in current applied water demands. These reductions do not necessarily constitute a source of water that can be reallocated to other beneficial uses. Rather, applied water reductions can provide water quality benefits, allow changes in the timing of reservoir releases, reduce entrainment impacts associated with diversions, and create other "multiple benefit" improvements. It is difficult, however, to determine the extent which such reductions translate into multiple benefits. There is not necessarily a one-to-one correlation between water savings and benefits in ecosystem or water quality.

Comment: P4. Storage and Conveyance and Financing bullets. Need more discussion of allocation of Program costs, and how increased marginal costs of water will affect actual price of water.
Response: The relationship between marginal cost and the actual cost of water paid by customers is a complex issue that varies among agencies. The effect of the cost of "new" water on the actual price will be partly dependent on the allocation of cost determined as part of the CALFED financing package. The potential effects of a range of financing options will be described during impact analysis.

Comment: P11, 2P from bottom. Statement that Agricultural MOU provides balanced review and endorsement may be valid on paper, but, needs to be qualified.
Response: CALFED believes that the agricultural MOU process will result in a balanced approach to the implementation of cost-effective efficiency measures. CALFED is aware of the concerns of some, particularly in the environmental community, regarding a current lack of participation by public interest groups in the MOU. In the event that the MOU process fails to obtain participation by a majority of agricultural water suppliers, CALFED has proposed the triggering of (dis)incentives to initiate water management planning similar to what currently exists in the urban sector. However, if EPA feels that the process as currently proposed will not provide the necessary safeguards, such concerns should be highlighted for further discussion..

Comment: Each common program should reflect broad geographic scope (San Pablo Bay, SF Bay, Pacific Ocean).
Response: All common programs are using the same geographic scope of the "problems" and the "solutions".

Comment: All alternatives need to include development or protection of environmental water in context beyond only a share of yield from new facilities, i.e. acquisition potentials, regulatory flow protections, etc.
Response: We concur. The ecosystem restoration water will have to be delivered via all of the traditional methods and perhaps some new ones. Section 1707 is a means to protect instream flow once acquired.

Comment: Some descriptions indicate provision of habitat benefits beyond the ERPP while others indicate habitat efforts will shift geographically but not cumulatively exceed ERPP levels; both concepts unclear.
Response: Prefeasibility studies currently underway will provide more clarity with regard to these concepts.

Comment: Prerequisites for eligibility to access direct program benefits (e.g. WUE assurances) merits far more detail.
Response: Work on assurances is progressing.

Comment: Introduction refers to "range of reasonable operational policies" but each alternative contains specific policies.
Response: General operational policies were stated to help in the understanding of each alternative and to allow modeling to proceed. These should be considered preliminary in nature. Analysis of the model results will lead to further discussion and refinement of the operational policies.

Comment: Unclear what level of program-level decisions will be considered by CALFED.
Response: Phase II will conclude with CALFED Policy Group selection of a programmatic alternative to take into Phase III.

Comment: If no program-level impact differences, alternatives should be combined, e.g. 3A/3C, 3B/3D (discussions of pipes versus open channel, or other design-specific considerations could be "sidebar" to impact analysis).
Response: Suggestion noted. This concept will be presented to CALFED Policy Group for their consideration.

Comment: CALFED needs to begin considering how pricing of new water will be determined and how it will relate to existing Bureau and DWR mechanisms. Program documents need to show how new water will be priced as close to marginal cost as possible.
Response: It is assumed that "new" water will be priced in a manner which parallels existing Bureau and DWR mechanisms, with some specific changes reflecting the special nature of water developed through the CALFED Program. The marginal cost issue is one that the Finance Group is considering and which contains some embedded policy issues that will need to be resolved in the financing strategy.

Bureau of Reclamation:

Comment: Integration and impacts of integration of common programs with alternatives not clearly depicted.
Response: The Affected Environment report, currently under preparation, provides considerably greater detail of the basis for water quality problem definition, and on the actions to correct these problems. The Impact Analysis report, also under preparation, will describe at the Programmatic Level, the effects of the common program on the alternatives. We acknowledge that, because specific projects and locations will not be identified in the current phase of the program, it will not be possible to perform a detailed analysis of the effects of the Water Quality Common Program on the alternatives prior to Phase III. However, we are confident that general impacts will be known or knowable to adequately use as a filtering tool.

Comment: Suggest Appendix explaining rationale and technical bracketing parameters of alternatives.
Response: Noted.

Comment: More discussion of water quality standards, possibility of modifications to D 95-6, and of State Board process.
Response: A more detailed discussion of water quality standards being used, and possible future modifications will be included in the Affected Environment section of the water quality appendix of the programmatic EIR/EIS.

Comment: Need discussion of difference between CALFED effort and traditional Federal and State approaches.
Response: Unclear how this is appropriate for inclusion in alternative description document.

Comment: Level of detail vis-a-vis the common programs isn't consistent enough for equitable evaluation.
Response: Level of detail reflects current program development. Work progressing on increasing the level of detail of all for the common programs. However, the reviewers need to recognize that the level of

detail to be achieved during this phase of the Program will reflect the programmatic approach authorized by the CALFED Policy Group.

Comment: Some alternative configurations in document received past evaluations, their inclusion may be useful.
Response: Noted, will review for appropriateness of inclusion.

Comment: Descriptions are redundant. Summary table showing specific differences would help identify issues.
Response: A summary matrix, tables or charts will be provided in future documents to highlight major differences in alternative configurations.

Comment: Components of "no action" not captured in document, briefing on totality of "no action" desired.
Response: Separate no action documentation has been prepared and has been circulated, for Agency review since last fall. A briefing can certainly be arranged.

Comment: Bureau's opinion that salinity management in Delta is zero-sum game. If lower concentrations in California Aqueduct, steeper gradient at intake for North Bay Aqueduct. Suggest tracer studies.
Response: Particle tracking modeling is being conducted to evaluate the fate of Br in the system under various alternative configurations. The program team is evaluating actions to address the potential impacts of the alternatives on salinity at the North Bay Aqueduct intake as well as other intakes within the Delta.

Specific Comments on Alternative Descriptions

Alternative 1

DFG:

ALT 1A: This is continuation of status quo, with possible lifting of existing export limits. If done, would expect increased exports in late spring/summer leading to increased striped bass impacts and predation in Clifton Court Forebay (CCF).

Recommend: Keep as "no project alternative" from fish facilities perspective.

Response: [1] The comments are considerations in the impact analyses. [2] The alternative is much more than the "no project alternative" since it, like all alternatives, includes implementation of the common programs.

ALT 1B: This seems to anticipate a diversion of up to 15kcfs from two locations, CVP intake at Old River and enlarged CCF intake. Screening 15kcfs at CVP would entail new screen to handle 30kcfs at high tide unless flow control structures added. Difficult to envision, considering space limitations; unless new high velocity screen, which have yet to be proven for mix of species present in Delta.

Improvements to Skinner screens have to be balanced against predation losses in CCF. Fish Facility Team recommends new state-of-the-art screens at new intake on north of CCF. Screen sizing and possible flow control structures await operations studies and modeling of tides.

This alternative requires more gates and hydraulic control than presented. Need complete flow control flexibility. Two, larger intakes will make South Delta water level/quality impacts more severe since filling CCF.

Recommend: Modify to provide one screen at head of CCF, as recommended by Fish Facilities Team, or abandon this alternative. Entrainment at two sites won't differ much and may not justify expense and complications of two full-sized facilities.

Response: Will refine the description to include one fish screen complex as recommended by the Fish Facilities Team.

ALT 1C:

DFG: Same fish facilities concerns as 1B with possible addition of fish passage facilities to address "flow control structures." Believe advantage to barriers could be increased flexibility in south delta water levels management and thus more flexibility in fish facility operations.

Recommend: Modify to provide one fish screen complex at head of CCF, as recommended by Fish Facilities team, or abandon the alternative.

Response: Will refine the description to include one fish screen complex as recommended by the Fish Facilities Team.

BuRec:

General Response:

Detailed review of the alternative drawings and writeups is very helpful. A number of errors and omissions were noted which we will endeavor to correct during the narrowing and refinement process.

Comment: p9, 4th bullet at bottom, filling groundwater storage facilities. Unclear if to be filled by groundwater recharge, injection, or other means, including water trades. Specify whether new pumping capacity needed at Banks for this and whether sufficient capacity in aqueduct to move additional water.
Response: Filling of groundwater storage could occur by nonproject recharge (i.e. uncontrolled), spreading basins, injection wells, or changes in use patterns (conjunctive use). CALFED's modeling efforts in this regard are currently very limited, in that north of Delta groundwater storage is modeled as a single node in DWRSIM, with nonproject recharge computed as a non-linear function of available capacity and project storage and withdrawal operations limited by specified flow capacities and priorities which have been well documented in previous technical reports.

Comment: p10, aqueduct storage. Indicates storage facility needs a diversion/discharge capacity of 3.5kcfs, unclear if this capacity in addition to normal flows to San Luis. [Ditto pp9,10,16 Alt 2, pp10,11,19,22,26,29 Alt 3.]
Response: New offstream storage facilities for the aqueduct system assumes a 3.5 kcfs capacity spur line to the California Aqueduct at a point just south of San Luis Reservoir (a surrogate for a variety of potential locations). It does not assume additional Delta Pumping Plant capacity or Aqueduct capacity.

Comment: Operational velocities for CCF may conflict with fish screens. Need additional research.
Response: Noted.

Comment: More detailed explanation of water movement into off aqueduct storage would be useful.
Response: Noted.

Comment: p4, 3rd bullet, treatment actions. Unclear what is meant by "reducing pollutants in water diverted from the Delta" and for what purpose. [Ditto p4 of Alts 2/3.]
Response: Noted.

Comment: p7, suggest refinement of bullets to: [bul-1] "New fish screens at the Skinner Fish Facility and the Tracy Fish Collection Facility; or [bul-2] Construct an intertie/interconnection between the Tracy Pumping Plant and the Clifton Court Forebay with a new fish screen at the inlet to Clifton Court Forebay." [Ditto pp7,13,16,19 Alt 2, pp6,16,19,21,25,28 Alt 3.]
Response: Noted.

Alternative 2

General Response:

With regard to Alts 2a through 3I, recommendations will be considered in the alternatives narrowing and refinement process. This applies to proposed operating criteria as well.

DFG:

ALT 2A: Open conveyance, coupled with fish screen at Hood, will present major upstream migrant passage problems. They can be addressed, but will be complex and increase costs. Need to address issue that screened fish at Hood face Cross Channel/Georgianna Slough diversion downstream; since Hood at 10kcfs, could still have 5kcfs drawn unscreened into interior Delta.

Reliance on existing fish facilities in the south delta have same limitations as in Alt 1, as will south Delta improvements.

Recommend: Increase intake at Hood to 15kcfs to allow closure of Cross Channel/Georgianna Slough. Install boat lock and fish passage at intake. Eliminate use of Snodgrass Slough as part of canal as seemingly in conflict with protecting wetlands. Incorporate new fish screens at CCF and build intertie between CCF and CVP. Since most of these improvements are in Alt 2B, abandon this alternative.

ALT 2B: Suffers from same north Delta problems as Alt 2A though adds south Delta facility improvements which have problems as described in comments on Alts 1A and 1C.

Recommend: Incorporate north Delta recommendations from Alt 2A and south Delta recommendations from Alt 1C. Close off Cross Channel and Georgianna Slough and provide boat locks and fish passage for upstream migrants. Abandon Snodgrass Slough.

ALT 2C: This alternative cannot stand alone and is now incorporated into Alt 3I. Same concerns about use of existing CVP/SWP screens as in review of Alt 1. Expect increased CCF predation. Have to resolve western arm converting about a third of Holland tract from habitat (mitigation for "Delta Wetlands").

Recommend: Three intake arms should be screened. Operations of three arms will be difficult. Will need elaborate flow control structures. Fish salvage facilities if not moved suffer same problems as Alt 1. If carry this forward, consider as Alt 3I.

ALT 2D: Consider this alternative identical to Alt 2B from fish facilities standpoint. Same concerns. Also, creation of shallow aquatic habitat along migratory corridors leading to and from the Mokelumne could present anadromous fish problems. Additional consideration should be given to consolidation and screening of agricultural diversion sites adjacent to setback levees.

Recommend: Abandon this alternative as Alt 2B is more reasonable.

ALT 2E:

DFG: This alternative assumes ability to divert onto Delta islands without fish screens, that fish will survive within islands. Sacramento River water in central Delta would add to attraction and confusion of upstream migrants.

Recommend: Abandon since can't be made fish friendly.

BuRec:

Comment: Meeting SWRCB 95-6 requirements before diversion may affect utility of this Alternative.
Response: Noted.

Comment: p6, 3rd bullet. Alternative 2A figure shows entire McCormack-Williamson Tract flooded but doesn't describe how.
Response: The proposal to flood McCormack Williamson Tract would involve breaching levees on the northwestern and southwestern end. No setback levees are contemplated for this island.

Comment: p13, storage. Unclear if conversion of Holland Tract to storage would require pumping for filling, or if it is to be filled to high tide levels by gravity only. Also whether fish screening needed at intake.
Response: The original EPA proposal called for no fish screens at the intake. The CALFED Fish Facilities Technical Team has stated that, "Because the goal is flexibility, it may be necessary to screen each of the three central delta intakes for a full diversion to avoid excessive predation and losses of San Joaquin and Delta fish." If screening is required, pumping would be a certain consequence.

Comment: p15, last bullet. Unclear if existing facilities affected by setback levees to be replaced or relocated, e.g. Los Vaqueros pumping plant and fish screen structure on Old River. [Ditto p19, Alt2 and p24, Alt 3.]
Response: Noted.

Comment: Alternative 2E description, 2nd sentence. Explain in more detail "the additional conveyance" and eliminating the 10,000 cfs intake.
Response: Noted.

Comment: p17, next to last bullet. Unclear how water will enter this system from Sacramento River (Cross Channel, Mokelumne etc.), and what operational criteria will be used (e.g. Cross Channel closure).
Response: Noted.

Comment: p18, 2nd/3rd bullets. Reference to weir intake and inflatable rubber dam not reflected on figure/map.
Response: Noted.

Alternative 3

BuRec:

ALT 3A:

DFG: Since depend on Cross Channel/Georgianna Slough to carry as much as 10kcfs, not compatible with Fish Facilities Team recommendations. Reliance on fish salvage is poor compromise for maintaining significant unscreened cross delta flows.

Recommend: Abandon this alternative as incomplete and inconsistent with objectives of fish facilities.
Response: Noted.

USEPA:

Comment: The "spur conveyance links to the Bay Area and areas east of the Delta" not explained clearly nor do they appear in graphics. Need more definition and discussion of impacts and contribution to program objectives. [Applies to Alt 3D too.]
Response: Noted.

DFG:

General Response: All DFG Recommendations, Noted.

ALT 3B: This alternative is identical to Alt 2A, with addition of new/improved fish facilities for CVP/SWP. Maintaining current location of screening facilities suffers from same problems as Alt 1B.

ALT 3C: Identical to Alt 3B except for use of buried pipeline.

ALT 3D: Identical to Alt 3C except different pipeline configuration.

Recommend: All better than 3A, but questionable fishery benefits. Increase screened Sacramento River diversion.

ALT 3E: Preferred alternative of Fish Facilities Team. All diversions to take place through screened diversion at Hood.

Recommend: Carry forward and adopt as preferred alternative from fish facilities perspective.

ALT 3F:

DFG: This alternative combines all of the worst components from a fish facilities perspective.

Recommend: Abandon.

BuRec: Alternative 3F diagram doesn't show location(s) for the 5kcfs from "distributed pumps" along the facility.
Response: Noted.

DFG:

ALT 3G-3H: This alternative screens only a portion of the water diverted from the Sacramento and leaves improved CVP/SWP fish facilities in present locations.

Recommend: See 3B.

ALT 3I:

DFG: Operational issues and hydraulic impacts will be very complex. Consider need to screen each of the three central Delta intakes for full diversion. If can be monitored and controlled appropriately, this alternative could provide increased flexibility, but at significant cost.

Recommend: Carry alternative forward, but describe operational constraints more explicitly.

BuRec:

Comment: Alternative 3I diagram inconsistent with description of isolated conveyance channels.
Response: Noted.

Comment: Alternative 3I diagram shows no siphon under the San Joaquin River for the channel from Hood.
Response: Noted.

ERPP:

DFG:

Comment: Need clearer link between subsidence reversal and the ERPP.
Response: Subsidence reversal will be a byproduct of the ERPP.

Comment: ERPP summary should be more explicit in description of plants and plant communities.
Response: Volumes I and II of the ERPP will be so.

Comment: ERPP summary should provide clearer linkages between species, plant communities and ecological processes and functions, and a description of why CALFED will succeed where others haven't.
Response: Linkages will be provided in Volumes I & II of the ERPP. CALFED's expectation of success is subject to many factors which are not pertinent to the environmental documentation currently underway.

Comment: p2, T3, A1. Describe specific operational criterion to accomplish "limiting water diversions from the Delta for up to 10 days."
Response: That criterion will be developed and provided to the agencies.

Comment: P10, T2. Discuss feasibility of sediment management program.
Response: That criterion will be developed and provided to the agencies, but use "feasibility" of sediment management program.

Comment: P11 and p15. Seems to be disconnect between this section and levees section, which calls for flooding 30-60k acres for subsidence control. Describe consistency. Also, clarify interrelationship between perennial and emergent wetlands.
Response: We agree. ??

DELTA

Comment: pp1-3, Stream Flow. Document should describe whether totality of potential flow needs has been reviewed and priorities agreed to. Indicate, if so, consistency with main report's reference to 300-500kaf/yr of "increased critical-period flows." Distinguish storage for ecosystem purposes available for flows as contrasted with traditional minimum standards of flow. Minimum flows seems consistent with minimum standards rather than flow. Need to be internally consistent within document.
Response: We agree.

Comment: p3,T5. Use correct definition of QWEST and note species targeted by it.
Response: Please provide your suggested definition of QWEST.

Comment: pp3-4, Delta Channel Hydraulics. Targets and actions still seem deficient to restore downstream flow and other needed hydrodynamic conditions. Feasibility of actions 3 and 4 should be described and action 5 clarified.
Response: We will clarify.

Comment: pp3-4, Delta Channel Hydraulics. Modify Target 1 to include "Modify internal Delta hydrodynamics in all months so that flows, as measured in selected Delta sloughs and rivers at fixed indicator sites are within ten percent of the Delta hydrodynamic conditions that existed under a mid-1960s level of water supply development." Target 2 – same as changes for target 1 except from April through June seek within ten percent of early 1950's level of water supply development and export.
Response: Please provide rationale for your recommendation.

Comment: p4. Water temperature target is incorrect.
Response: Please suggest the correct temperature target.

Comment: p6, food web. Clarify whether actions proposed are likely to accomplish target.
Response: We would not propose actions not expected to be successful based upon current knowledge. Adaptive management will no doubt be necessary over a broad range of project types for accomplish targets.

Comment: P7, T2. Action programs should be more specific.
Response: This is a programmatic document, specificity will come later.

Comment: P7, predators. Clarify feasibility of this action.
Response: Please provide your basis of uncertainty.

Comment: P8, screening diversions. Need to get fish facility folks' comments on this section.
Response: We welcome their input.

BAY

Comment: p1. Inflow targets here and for Delta are in terms of Delta outflow, which seems like substantial change from X2 and Accord. Explain relationship between the two, and whether X2 more or less than this proposal.
Response: We are not recommending a reduction in X2 standards contained in the Accord. Outflow and X2 are related.

Comment: pp4-6. Disclose some tidal wetland may be restored on presently seasonal managed marsh and that other targets and actions will offset losses.
Response: We agree.

USFWS:

Comment: Should note that actions will not affect species and habitats equally, with some localized adverse impacts. Programmatic level of detail makes assessment of impacts to endangered species and their critical habitats difficult, but needs to be done to the extent possible before selection of preferred alternative.
Response: We acknowledge your concerns and they will be addressed in the programmatic and site specific environmental analyses.

Comment: In-kind mitigation should be included in common program to address its own impacts: species, habitat & wetlands.
Response: Mitigation for impacts will be included at programmatic level of analysis. Likely implementation of mitigation will be incorporated into the Ecosystem Restoration Program as an adjunct.

Comment: When proposing "moving" habitat, comprehensive species' value comparisons of new to old sites necessary.
Response: We concur with your comment. We welcome suggestions as to how we could establish overall value.

Comment: When stating intent to "create habitat" or "provide habitat", specify what types and for what species.
Response: Volumes I & II of ERPP will provide additional detail.

USEPA:

[NOTE: *These are only comments on Appendix A. Intensive review to occur with release of ERPP Volumes I-III.*]

Comment: Need more information on processes and functions which integrate ecosystem elements.
Response: Volume I of the ERPP should meet this need.

Comment: Need more scientific support for flow prescriptions intended to affect channel morphology. If further study necessary for particular streams, state so.
Response: We agree and are seeking out the information.

Comment: Mechanisms for streamflow enhancement need to be clear.
Response: We are working in the context of a programmatic document.

Comment: Need to establish ERPP implementation priorities, while considering positive and negative linkages to other program components to assist refinement of alternatives.
Response: Volume III of the ERPP will include concepts for prioritization and phasing implementation.

Comment: Where known, ERPP should provide detail regarding implementation of proposed actions.
Response: We are walking a line between the need for detail and the programmatic nature of the document.

Comment: Explain omission of Critical and Wet years from modeling.
Response: The kinds of flows we have recommended do occur in wet years and would result in redirecting impacts in critical years unless the ERPP were to acquire a very substantial amount of additional storage dedicated especially for that purpose.

Comment: Provide basis for 20-30-40 kcfs March/May modeling flows in Delta Technical Appendix. Unclear whether such flows are additive to or instead of the Accord requirements.
Response: These flows are additive to the Accord and will complement parts of the Accord by adding two extra days and by achieving higher inflow to export ratios.

BuRec:

Comment: Summary of ERPP only covers aquatic species, need to include terrestrial too.
Response: Where there is a nexus between threatened terrestrial species and resolution of a conflict in the Delta, we will include appropriate targets.

Comment: Include San Pablo, SF, and Suisun rather than just "Bay". Replace "hub" with "critical component", as former may be offensive to some.
Response: Noted.

Comment: Explain tools used to assess ERPP 400kaf/10 days.
Response: We have done preliminary modeling of the ERPP flow targets using DWRSIM. We have made a proposal to release 400kaf in ten days.

Comment: Apparent reliance on water transfers to achieve restoration actions may be unrealistic. Helpful to include list of generally accepted potential sources of water and inclusion of examples of past transfers.
Response: Water transfers are but one of several means to obtain environmental water outside the regulatory process. Other suggestion noted.

Comment: Need more detailed definition of Adaptive Management Approach, how it will deal with new scientific information, and list of triggers.
Response: This is the subject of Volume III of the ERPP.

Comment: ERPP focuses on emulating natural conditions in unnatural environment. Perhaps should simulate natural hydrograph rather than historic assumed flows.
Response: We are using historic known flows as a model of the hydrologic pattern.

Comment: Actions need to be prioritized.
Response: Programmatic priorities will be proposed in Volume III of the ERPP, specific priorities will be developed later.

Comment: Should discuss data showing that water temperature controlled by ambient air temperature, raises doubts about really being able to address water temperature in the Delta.
Response: Temperature refugia can be created through the use of riparian vegetation.

Comment: Note that motorized boating targets and actions could cause significant recreational impacts.
Response: We acknowledge it will cause impacts to recreation.

Comment: Need to characterize how and when Trinity flows incorporated into the Sacramento River.
Response: This is part of the existing conditions discussion.

Comment: It would be helpful to provide a list of indicator species and, where pertinent, specific targets.
Response: Volume III of the ERPP will do so.

Comment: Should describe numeric goals for total acres committed to habitat restoration and total water needs.
Response: They are included in Volume II of the ERPP and may be computed therefrom.

Comment: Common program actions should not be contingent upon specific alternative configurations at this time (see Delta zone, p6, Food Web Target, relocation of intake pumps).
Response: We concur; however, since so much nutrient input is lost to the pumps, one cannot avoid some dependency on the variability of impacts associated with the ultimately selected alternative.

Comment: P7, predators, actions. Unclear what methods to be used to remove predators from CCF and prevent reintroduction.
Response: We are uncertain as well. The results of pilot level efforts have been indeterminative.

Comment: P9, harvest, target. Reference made to percentage reduction of illegal harvest, specify what's under consideration.
Response: We would like to use 100%, but know that's unrealistic. We welcome suggestions for a practical level to shoot for.

Comment: Sacramento River Ecological Zone, P1, stream meander belts, actions. Unclear whether removal of riprap from banks predicated on construction of new set-back levees outside meander belt or if intent is to leave area for wildlife.
Response: Specific actions will vary by site.

Comment: Some suggested flows in Sacramento River seem above historic occurrence for certain time periods, need to explain.
Response: The recent history of the Sacramento River does include periods when flows of the magnitude contemplated in the ERPP were interrupted by the existing dams. Real time unimpaired flows are less than those recommended at certain times.

— WD-R
— AKNS

Water Quality Program:

DFG:

Comment: Overall, reasonably comprehensive though format quite different from ERPP. General performance measures need to be described with more specificity.

Response: Effort will be made to provide more specific Performance Measures, realizing that further prefeasibility evaluations will be required in some cases to enable quantification.

Comment: Watershed section should explain processes and contribution to Delta restoration.

Response: The watershed section will be revised to include additional information on CALFED's watershed role and how watershed activities can contribute to restoration of the Delta.

Comment: P4, turbidity. Section written from drinking water quality perspective. Perhaps Delta too "clear" for aquatic ecosystem support. Consequently, section may conflict with ecosystem restoration objectives. Issue needs to be recognized and addressed.

Response: The ecological aspects of turbidity will be discussed in the document. However, while Delta water has evidently increased in clarity, it has not been demonstrated that the effect of this change will in all cases be a reduction of biological productivity. Arguably, increased water clarity should result in higher primary production, up to some limit. Secondly, because of the probable influence of exotic filter feeding organisms on the availability of planktonic food, there appears to be some doubt that reduced productivity is, in fact, a result of increased clarity. Perhaps increased clarity may be an effect, rather than a cause. We propose to incorporate a discussion along these lines.

Comment: P5. Actions related to oxygen, copper and mercury seem to overlap with earlier sections.

Response: The document will be examined to determine whether redundancy exists and can be eliminated.

Comment: P6, salinity in south Delta. Provide documentation whether stated methods actually reduced salinity loads (as opposed to concentrations).

Response: The document will be revised to clarify whether the stated methods will reduce salinity loads, as compared to concentrations.

Comment: P9, water management. Clarify whether dilution to reduce salinity is appropriate.

Response: The document will be revised to clarify whether the stated methods will reduce salinity loads, as compared to concentrations. The policy question will need to be resolved by CALFED management, as there is apparently a different view on this issue held by various CALFED agencies as well as stakeholders.

USFWS:

Comment: P1, mine drainage Cd, Cu, Zn. This seems directed at Iron Mountain Mine. CALFED should carefully consider involvement in IMM considering improvements in progress to date on cleanup.

Response: While Iron Mountain Mine is an important element of the acid mine drainage problems affecting the Delta Estuary and its species, it is not the only abandoned mine of interest with respect to cadmium, copper, and zinc. With respect to remediation of these mines, CALFED management will maintain an awareness of ongoing activities and seek opportunities to contribute to solutions while avoiding complex problems such as toxic site liability and litigation.

Comment: P2, mine drainage, mercury. Specifically identify methods in watersheds to promote methylation (anaerobics).

Response: The document will be altered to mention identification of activities that may promote methylation of mercury.

Akn Strats

Comment: P3, urban/industrial runoff. Cross-reference actions directed at particular parameter.
Response: The document will be amended to cross reference related actions.

Akn Strats Boat Discharge

Comment: P4, wastewater/industrial discharges. Consider expansion of boat discharge actions upstream.
Response: Discharges from boats in upstream reservoirs are generally much better controlled than is the case for boats in the Delta. The document will be amended to indicate that as part of the boat discharge control program, control programs on reservoirs will be evaluated and augmented as needed. It will also be indicated that priority will be given to the Delta.

Akn Strats WW

Comment: P5, wastewater/industrial discharges. Selenium should be included with copper and mercury at Suisun Bay and Carquinez Straits area. Performance measure is reduction. Success indicator is removal of health advisories and decrease in selenium levels in wildlife.
Response: Control of selenium discharges in the Suisun Bay and Carquinez Straits areas is already a separate action.

Akn Strats Ag Drainage

Comment: P5, ag drainage. What about oxygen depletion from nutrient loading? Also, sediment loading.
Response: We will evaluate nutrient and sediment loading for inclusion under agricultural drainage; sediment loading due to farming and logging will also be evaluated.

Akn Strats Ag Drainage

Comment: P6, ag drainage, selenium. Other success indicators are decrease in concentrations in biota, achieve Basin Plan and EPA objectives in San Joaquin River.
Response: These indicators will be shown.

Comment: P6, ag drainage, salinity in South delta. Dilution is no solution. Conflicts with WUE. Should only be considered for possible emergency response to spills or uncontrollable discharges. Important distinction.
Response: The Ecosystem, Urban, and Agricultural water quality teams all identified dilution actions as low priority, and this type of action appears on the list only in reference to dilution of salinity, not other pollutants. While dilution actions certainly have the capacity to be controversial, and may attract severe criticism from some stakeholders, we believe they should be retained on the list for these reasons: 1) Implementation of some CALFED alternatives could have the result of increasing salinities in certain locations. It is conceivable that some form of dilution action might be appropriate to mitigate salinity impacts in limited circumstances. Such actions would be taken only in combination with other actions, and only where the overall result would be no net unreasonable use of water or water quality degradation. 2) The action is a product of stakeholder input, and we do not feel it can be rejected out of hand.

The document will be amended, however, to make note of the ecosystem stakeholders' perspective that dilution actions should be utilized only in emergency circumstances.

Akn Strats Ag Drainage

Comment: P6, ag drainage, salinity in South delta. Old River barriers seems to conflict with no redirected impacts.
Response: Taken by themselves, barriers in the Delta would generally have the characteristic of improving water quality in some areas at the expense of other areas. Therefore, the possibility of redirected impacts is an important consideration. As is the case with dilution actions, it is contemplated that such actions would be taken only in concert with other actions, and only when the net result would be water quality improvement or at least no worsening. Including barriers was a result of stakeholder input, and though it may have limited applicability, this potential tool should not be discarded out of hand, and should be evaluated for its potential to become a component part of comprehensive solutions.

Akn Strats Water Man.

Comment: P9, water management. Dilution is not the answer.
Response: The appropriateness of dilution under specifically defined circumstances will be determined by CALFED management, as there is apparently a different view on this issue held by various CALFED agencies as well as stakeholders.

USEPA:

WQ/TR

Comment: Concerned about seeming lack of depth of program relative to importance.
Response: The Affected Environment report contains substantial supporting information for the water quality program. We may want to consider relocating some of the discussion to the Common Program description in order to increase understanding of the depth of treatment in that section of the report.

Axn Strats
Problem Assessments

Comment: Need to provide problem assessments underlying prescribed actions.
Response: Through our public participation process it has been decided to use the CWA 303(d) list of impaired water bodies as the primary basis for identifying impaired beneficial uses, particularly those affecting the ecosystem. Locations of these impairments will be depicted in the report. Because the problem assessments underlying this designation have been subjected to public review and comment, we believe this constitutes adequate establishment of the existence of the impairments. Drinking water quality problems and agricultural water quality problems are generally associated with treatability and cost. Our evaluation of these beneficial use categories will be based on existing data for parameters of concern compared to desired levels.

Axn Strats
Prioritization of Axns

Comment: Would like to see relative priorities for problems and actions outlined.
Response: While the documentation as a whole will provide context for the actions, delineation of priorities will be more complicated. There appears to be widespread agreement among the water quality agencies and stakeholders that some activities, such as control of acid mine drainage, are high priority. Other priorities are less clear.

At the request of the Bureau of Reclamation, Fish and Wildlife Service staff have considered whether it is possible to prioritize the Water Quality Parameters of Concern. The response we received was that such a prioritization is not at all straightforward. Accordingly, we believe it is necessary to rely strongly on prefeasibility studies to enable priorities to be identified. Pilot and demonstration scale projects will provide us with the most practical information at least cost. We anticipate that such activities can be funded soon through Category III, and will be continued throughout the program leading to completion of the Programmatic document in Fall 1998.

Axn Strats
Coord

Comment: Program doesn't seem to account for existing efforts to improve identified problems. Need discussion of how WQ integrates with past and current programs, i.e. supplementing and expanding ongoing efforts. EPA offers to facilitate process to refine program to accomplish this.
Response: It is certainly the case that numerous activities are underway relative to addressing the water quality problems of the Bay-Delta estuary. It is our intent to provide as complete an accounting of these efforts as practicable. A recent survey by the Department of Water Resources indicated there are dozens of water quality-related programs in the estuary. While it will not be possible to detail each activity, the most important of these will be recognized. The current version of the report includes some of this information, and more will be added as the work progresses. It is intended that information be provided in the report demonstrating how the water quality actions build upon other past and ongoing programs.

With respect to the offer to facilitate further refinements, the water quality program was developed through involvement of numerous stakeholder and agency interests, and we believe it is most appropriate that the development be completed through the existing structures. EPA and other CALFED agencies could contribute greatly by lending staff to the production effort. We would be pleased to discuss interagency staff loans to enable direct agency involvement and enable more resources to be devoted to the effort.

Axn Strats
Info avail

Comment: Need to identify areas where incomplete or unavailable information to move ahead with addressing various issues. Also, explain methods considered but rejected and why (e.g. land retirement for salinity control).
Response: The report, when completed, will contain this information to the extent practicable.

Comment: Integration with ERPP toxic contaminants issues should be explained.
Response: The "Contaminants" section of the ERPP was developed in coordination with the Water Quality Program, and is consistent with it.

AKN Strats
Mine Drainage

Comment: P2, mine drainage. Specify reaches of rivers, streams where mine drainage is a problem for ecosystem/human health.
Response: The Affected Environment section describes and shows locations of mine drainage problems.

AKN Strategies Indicator Success

Comment: P3, pesticides chlorpyrifos & diazinon. Indicators of success should cite DFG criteria.
Response: DFG criteria will be cited.

AKN Strats

Comment: P3, oxygen depletion. Issue is Port of Stockton turning basin, not programmatic. EPA considers localized problem consequence of discharge from particular plant, source control seems appropriate.
Response: Dissolved oxygen depletion from the Stockton discharge is very well known. The city will be required to address the problem by regulatory order; therefore, an action to address the dissolved oxygen depletion from that source is not contemplated under the CALFED program. (Correction of this problem is not, however, assumed as part of the No Action Alternative because details have not yet been finalized). We believe it has not been demonstrated that the treatment plant is solely responsible for this problem; storm drainage to the area and flow patterns in the area are considered to be possible contributing factors.

AKN Strats

Comment: P4, sediment loading/turbidity. Should have agricultural component, not just urban/industrial.
Response: We will evaluate whether sediment loading and turbidity should be included as an agricultural component.

AKN Strats

Comment: P4, wastewater/industrial discharges. Domestic wastes problem for recreational use too, drinking water treats for them but recreational contact problem in some Delta hot spots is pronounced and should be addressed.
Response: We agree that pathogens present health risks to recreational users and this effect should receive greater emphasis. We disagree that "For drinking water, treatment addresses these contaminants" in an absolute sense. Recent disease outbreaks in places such as Milwaukee, WI and Las Vegas, NV have demonstrated that even modern, well operated facilities can in some cases fail to adequately disinfect the water and prevent disease. The development by EPA of the Enhanced Surface Water Treatment Rule is a clear demonstration of this understanding and of the perception that more must be done to protect the public. Studies are underway throughout the country, including in the Delta, but results to date are inconclusive. Accordingly, we believe the action statement should retain an acknowledgment of this potential problem.

AKN Strats

Comment: P5, selenium. "western Delta" should be area upstream of Chipps Island and not include Suisun Bay. Refinery release probably affect Suisun but not western Delta. Tissue concentrations should refer to species occurring in the Bay-Delta.
Response: Recommendations accepted.

See p. 15 (conflicts)

Ag Drainage

Comment: P6, ag drainage/selenium. Support concept of reducing loadings, suggest broadening of methods, including developing and implementing a total maximum daily load (TMDL), total Grasslands watershed, and should include land retirement, etc.
Response: A founding principle of CALFED was the concept of providing incentives for voluntary, cooperative actions, with reduced emphasis on compulsory approaches. TMDLs, Waste Discharge Requirements, etc., must, necessarily, be a part of the overall picture, but should be employed where voluntary, incentive based efforts are ineffective. While regulatory actions are part of the mix, we emphasize cooperative alternatives over regulatory enforcement.

The document will include an explanation of the circumstances and time frame within which land retirement could be appropriate. Namely, we believe land retirement could be an appropriate last resort alternative to controlling selenium for those lands that discharge to the San Joaquin River, once other options such as treatment, cropping changes and other possibilities have been evaluated. The acreage subject to potential retirement will follow the recommendations of the San Joaquin Valley Drainage Program.

Axn strat

Comment: P6, ag drainage/selenium. Distinction between "performance measure" and "indicator of success" unclear.
Response: The distinction between "performance measure" and the "indicator of success" will be clarified.

Comment: P6, ag drainage/salinity. Reverse osmosis does not seem viable. Explain how constructed wetlands remove salts. Changing timing of discharges will reduce concentration but not load which is target.
Response: [1] We agree reverse osmosis does not appear to be a viable, cost effective solution at this time. This methodology was recommended through our public participation process in realization that new technological developments have occurred that have reduced the cost of this method of treatment, and the expectation that further improvements could be possible in the future. [2] The document will be amended to avoid creating the impression that constructed wetlands are expected to remove salts. [3] We agree changing timing of flows will affect only concentrations, not loads. This will be stated.

Axn strats

Comment: P6, salinity/South Delta. Explain special conditions in South Delta problem assessment as compared to other locales in Delta.
Response: Salinity problems peculiar to the South Delta will be more fully described.

Axn strats

Comment: P6, salinity/South Delta. Methods discussed are part of storage/conveyance alternatives (e.g. barriers), should be deleted from WQ common program element.
Response: Taken by themselves, barriers in the Delta would generally have the characteristic of improving water quality in some areas at the expense of other areas. Such actions are contemplated only in concert with other actions, and only when the net result would be water quality improvement or at least no worsening. The barriers action was a result of water quality stakeholder input, and even though it may have limited applicability, we believe this potential tool should not be discarded out of hand, and should be evaluated for its potential to become a contributing part of comprehensive solutions.

Axn strats

Comment: P7, carbofuran. DFG criteria can be cited as "indicator of success."
Response: DFG criteria will be cited:

Axn strats

Comment: P7, ag drainage/ammonia. Methods should include enforcement of existing regulations, BMP incentives.
Response: Enforcement of existing regulations will be mentioned, but in keeping with the earlier discussion, CALFED will emphasize voluntary cooperative actions.

Axn strats

Comment: P8, improved drinking water quality: "incentives" are not an appropriate method.
Response: The actions will receive further consideration and discussion among stakeholders.

Axn strats

Comment: P8, TOC and other problems. Problems need to be clarified, methods rewritten (e.g. bromides are not discharges).
Response: The report will be amended to indicate bromides are not discharges and other portions rewritten for clarity as required.

Axn strats

Comment: P6, ag drainage. EPA supports emphasis on in-valley solutions on methods list.
Response: Our program reflects such an emphasis, however, language will be added to emphasize that "in valley" solutions will be more likely to succeed with alternatives which provide higher quality source water.

BuRec:

Comment: Need to add not just reducing parameters of concern before they enter the Delta, but also those derived within the Delta.
Response: The water quality technical report will be revised to mention the importance of reducing water quality parameters of concern derived within, in addition to outside, the Bay-Delta.

Comment: Method to reduce toxic effects is WUE, need better clarification of actions/practices linkages between WQ & WUE.
Response: The water quality technical report will incorporate a discussion of the potential linkages between the water use efficiency and water quality programs, and will include positive as well as negative effects. Theoretical examples will be cited.

Comment: Should include description of IEP role in CALFED Comprehensive Monitoring, Assessment, and Research Program.
Response: The Interagency Ecological Program is charged with performing ecologically related water quality monitoring in the Bay-Delta. The Comprehensive Monitoring, Assessment, and Research Program will include a sizeable component of ecological monitoring to be conducted through the IEP, and will include other components as well, probably including other entities and citizen involvement. The document will be expanded to include a discussion of this concept.

Comment: Performance targets on p11 are defined as load reductions, should include other methods described in Appendix B.
Response: The methods and targets in Appendix B will be incorporated into the performance targets as appropriate.

Comment: Need clarification as to why WQ programs and actions don't change from Alt 1 to Alt 2, with only minor modifications in Alt 3. Provide more detailed descriptions of differences within each alternative.
Response: By definition, the Common Program is intended to remain virtually the same irrespective of which alternative is ultimately selected. We will create a matrix that compares and contrasts the water quality program actions for the various alternatives, then evaluate whether the matrix significantly improves understanding of the program and should be included in the document.

Comment: Appendix B needs to expand indicators of success beyond survival of test organisms.
Response: We agree that toxicity testing is an imperfect measurement tool. We will consider whether other performance measures can be used in addition to toxicity measurements. However, direct measurements of toxicants also suffers limitations due to incomplete understanding of the relationship of concentrations to observed biological effects.

Comment: Considering linkages between recycled water and water quality, it would be useful to include potential WUE actions consistent with the WQ program.
Response: The document will incorporate discussion of the linkages between water use efficiency and water quality actions. Water use efficiency actions are generally not, however, directed only to water quality improvement and, in fact, may in some cases work to the disadvantage of water quality. We believe water use efficiency actions should be identified as such, as compared to being included as water quality actions. Still, the potential for water quality improvement due to water use efficiency actions will be highlighted.

Comment: Performance measures not necessarily consistent with specified actions, e.g. reducing amount of toxicity may not reduce effects of certain toxins.
Response: Performance measures will be examined for consistency with the actions. The example cited in the comment is unclear, though. Because a toxicity bioassay is a direct measurement of toxic effect, is not a reduction of toxicity equivalent to a reduction of the effect?

Comment: Action to reduce mercury should achieve USEPA 304(a) guidelines, and include amount of reduction in mercury concentration.
Response: 304(a) guidelines will be examined for their applicability. A question to be answered is whether it will be feasible to realistically quantify the reduction of mercury without considerable further study.

Comment: Phrase "unknown toxicity" needs more explanation.
Response: "Unknown Toxicity" has been used to refer to observed toxicity that has not been traced to any particular toxic agent. This terminology is confusing and needs to be improved. Perhaps "toxicity due to unknown causes" would be better. We will work on it.

Comment: Suggest removing increase in juvenile anadromous fish as a performance measure for reduction of sediment loading and turbidity.
Response: We agree that it is not likely that changes in anadromous fish production will be directly linked to changes in sediment loading and turbidity. Direct measurements of sediment loading and turbidity can be made and should be the primary means of determining the effectiveness of control actions. Perhaps, however, it is a good idea to look at fish production as a collective measure of the effectiveness of all actions affecting the fish. We will consider modifying the language accordingly.

Comment: Performance measures need to be directly linked to actions; public workshops and other outreach activities are not a measure of actions to reduce impacts of recreational use and domestic waste.
Response: We agree that numbers of educational events are not a good measurement of the effectiveness of reducing recreational/domestic impacts. Realizing that non-point source pollution is difficult to measure, it seems unlikely that it will be possible to directly measure the effectiveness of the action. The document will be revised to indicate that measures of program effectiveness, such as public opinion/public awareness surveys will be used to quantitatively estimate the effectiveness of raising public consciousness about these forms of pollution.

Comment: Treatment/removal of selenium still experimental, perhaps premature to list as method to reduce its toxic effects.
Response: The document will be revised to indicate treatment methodologies are experimental.

Comment: Nutrient loading section would benefit from more detailed description of success indicator, i.e. achievement of Basin Plan Objectives.
Response: The document will be modified to include a more detailed explanation of the indicator of success (attainment of Basin Plan Objectives).

Comment: Suggest not including evaporation ponds for drainage impoundment.
Response: We agree that use of impoundments that concentrate inorganic constituents have considerable potential for ecological risk, and should generally not be advocated. Yet, use of such approaches was identified through our public participation process as being possibly appropriate in some circumstances. Rather than be faced with the necessity of rejecting stakeholder recommendations in this matter, we believe the preferred approach is to list the method, but also include discussion of the very real limitations and problems that would be associated with its employment.

Comment: Proposal of timed release of pollutant discharges raises question of need and viability of drainage water storage facilities.
Response: We agree that, if timed release actions would require surface storage facilities, the problem discussed in the above comment would pertain. Our approach will be to include this caveat in the document.

Comment: p9, P2, mine drainage. Should include copper, cadmium & zinc, not just mercury.
Response: The document will be modified to include a discussion along the lines that actions upstream of the Delta to reduce copper, cadmium, and zinc introductions will result in benefit to the Delta.

Water Use Efficiency

DFG:

Comment: p9, new water. Clarify use of new water for environmental beneficial uses does not require carrying out appropriate water management measures or implementing cost-effective efficiency measures.

Response: This is not an accurate assumption. Just as other water diverters need to use supplies as efficiently as practicable, so too must environmental water management ascribe to appropriate management and efficiency measures. Note that the water use efficiency program is looking only at effective use of environmental diversions, not in-stream flows.

USEPA:

Comment: Though greatly improved, suggest WUE develop demand management actions specific to each alternative. This will require more work on mechanisms related to pricing of new water supplies.

Response: We understand your use of the term "demand management" to mean land retirement. The Water Use Efficiency Common Program is focused on improving the management of water for beneficial uses. It is not the intention of this component to discuss the relative value of beneficial uses, and therefore demand management actions such as land fallowing, land retirement, and land conversion are not included. Rather, these actions are included as possible tools to help meet other CALFED objectives, namely water quality improvement and ecosystem restoration. The potential to include water savings generated by such actions will be discussed in the Water Quality and Ecosystem Restoration common programs.

The relationship between marginal cost and the actual cost of water paid by customers is a complex issue that varies among agencies. The effect of the cost of "new" water on the actual price will be partly dependent on the allocation of cost determined as part of the CALFED financing package. The potential effects of a range of financing options on pricing will be described during impact analysis.

Comment: Alternatives to Ag Council should be explored since AB3616 MOU not supported in environmental community. Suggest CALFED do more work on measurement and pricing while environmental groups work with DWR to develop technical guidelines for water management plan certification by Ag Council. Perhaps have environmental groups in "audit" role, so don't have to sign MOU.

Response: The Water Use Efficiency Program incorporates the endorsement process of the agricultural council, established under the AB 3616 MOU, to provide demonstration by agricultural water suppliers of efficient use. CALFED is currently working with stakeholder groups to further refine this and other assurance mechanisms. Details of an endorsement process are identified in the AB 3616 MOU and will be further refined by the agricultural council as it begins to function. Other proposed assurance mechanisms included in this program will also facilitate active participation in the MOU process and should result in implementation of more efficient water management practices.

Water measurement is treated differently in the AB 3616 MOU and the CVP conservation criteria. At this point CALFED is inclined to accept the AB 3616 approach. If the EPA believes a different policy is more appropriate, this should be communicated to CALFED for discussion of modifying the draft.

CALFED is aware of the concerns regarding the current lack of participation by environmental groups in the MOU. An "audit" role short of full participation has been proposed. However, use of an "audit" role for environmental groups may do more to limit the value of the MOU process than the lack of participation by these same groups. Agricultural water suppliers might not participate in the MOU if they felt environmental groups could dictate the process without being signatories. The MOU process would benefit most from active participation by both environmental and agricultural interests.

Comment: Need specific agency commitments in personnel and funding for implementing technical, planning and funding assistance promised as part of the WUE program. Also need baseline of current commitments.
Response: CALFED agencies will be expected to fund technical and planning assistance programs as they have in the past, but at increased levels. Stakeholders have raised this as an assurance issue. CALFED will need to make a firm, assurable commitment to adequate long-term funding to these staff efforts. A draft implementation plan and description of CALFED agency actions will be developed.

Comment: Assurances key. Need to convince critics more water savings than without CALFED. Perhaps delayed regulatory trigger after period to test voluntary approach.
Response: CALFED has proposed an assurance mechanism in the event that participation in the agricultural MOU fails to meet criteria we have proposed. This mechanism would make water management planning mandatory for all agricultural water suppliers if an acceptable majority of suppliers have not prepared, adopted, received endorsement, and begun implementation of their agricultural water management plans by a predetermined date. Legislation could be drafted to provide this assurance. The existing Urban Water Management Planning Act would be used as a pattern. Further development and refinement of this assurance mechanism will be developed as part of the overall package of assurances necessary for a CALFED Bay-Delta solution.

Comment: Explain approach to water recycling if water recycling planning not incorporated into BMP MOU.
Response: The Water Use Efficiency Program proposes an action under the urban conservation approach whereby DWR would review and certify Urban Water Management Plans submitted by urban water suppliers. As part of the existing Urban Water Management Planning Act, urban suppliers are required to prepare water recycling feasibility plans. Therefore, even if a water recycling BMP is not developed and included in the urban MOU, certification of Urban Water Management Plans by DWR would require appropriate analysis and implementation of feasible recycling projects.

Comment: Local water management to achieve multiple benefits is an important concept not included in previous drafts, CALFED's ability to influence should be explored further.
Response: The agricultural approach of the Water Use Efficiency Program includes an action which focuses on the identification and implementation of efficiency measures to achieve multiple benefits. Incentives could be used to encourage implementation of practices that meet CALFED objectives and yield environmental, water quality, or other water supply benefits but which are not marginally cost-effective at the local water supplier or water user level. For instance, incentives could be offered to encourage installation of on-farm measures to improve water quality, or for district level measures to vary the timing of diversions in ways that benefit fish species. CALFED is continuing to develop a proposed program to implement management improvements to achieve such multiple objectives.

BuRec:

Comment: WUE Program seems to vary within each alternative, however, no distinguishing differences explained in the document.
Response: The Water Use Efficiency Common Program proposes that CALFED agencies would take the same actions under each alternative. Primarily, these actions consist of providing incentives in the form of planning, technical, and funding assistance. The demand for this assistance could vary somewhat under different alternatives. This could be explored in impact analysis but, at a programmatic level, discerning variable impacts of changes in local agencies' supply mix is probably not possible.

Comment: Need better description of linkages with and impacts upon the other program components.
Response: Some linkages are described in Appendix C, page 4, including general linkages with ecosystem quality and water quality. Additional impacts should be revealed during impact analysis. In addition, the Water Use Efficiency Program includes an action to examine changes in local water management that could be implemented to achieve ecosystem or water quality benefits (see Appendix C, page 13). CALFED has not yet taken steps to further develop this action.

Comment: Need more explicit explanation of what it means to say that appropriate planning and implementation of WUE measures are prerequisites to receiving "new" water.

Response: The Water Use Efficiency Program identifies the endorsement process of the agricultural council, and recommends a certification process for the urban council, to provide demonstration of efficient use. CALFED is currently working with stakeholder groups to further refine these assurance mechanisms.

Comment: Funding for implementation not clearly described.

Response: The Water Use Efficiency Program pledges CALFED support and incentives in the form of planning, technical, and funding assistance. The funding assistance may be support for low-interest loan programs, perhaps grants for the most financially distressed communities. CALFED agencies will be expected to fund technical and planning assistance programs as they have in the past, but at increased levels. Stakeholders have raised this as an assurance issue. CALFED will need to make a firm, assurable commitment to adequate long-term funding for these staff efforts.

Comment: Should include description of parameters of efficiency success to be used to trigger ok for new storage facilities.

Response: This statement implies that California water agencies should demonstrate efficient use before any work on new storage facilities can proceed. CALFED has taken a different approach. The message we heard at scoping was that we must assure efficient use of existing supplies before new supplies are developed. We have proposed to meet this by identifying standards of efficient use and establishing mechanisms to assure that existing supplies are used efficiently and that access to "new," transferred, or drought bank water is conditioned on efficient use.

Levee System Integrity:

DFG:

Comment: This isn't a program yet, only a list of proposed actions. Need more detail. Agree there needs to be coordination with ecosystem program. Glaring weakness in omission of linkage between subsidence control program and ecosystem program.

Response: We are currently working on putting together a comprehensive Delta Levee System Integrity Common Program description to more clearly describe the actions for that program.

BuRec:

Comment: Program description needs more detail to allow proper evaluation.

Response: We are currently working on putting together a comprehensive Delta Levee System Integrity Common Program description to more clearly describe the actions for that program.

Comment: Since levee improvements goal is to reach PL84-99, should include detailed description of that standard.

Response: The Base Level Protection Plan of the Delta Levee System Integrity Common Program will achieve a minimum federal flood control project levee design criteria for project and non-project levees in the Delta. Staff is currently working with the US Army Corps of Engineers to identify draft criteria. A detailed description will be developed based on review by the agencies and interested stakeholders.

Comment: 100 million cubic yards may be too low an estimate to meet PL84-99.

Response: CALFED Bay-Delta Program staff will be developing material and cost estimates to improve project and non-project levees to the desired federal flood control project levee design criteria. This information will be provided for review as soon as it is available.

Comment: Explain possible legal status change from levee to "dam", and requirements if used for storage.

Response: Criteria established within the State Water Code identifies facilities which may require designation as a dam under the jurisdiction of the Department of Water Resources Division of Safety of Dams. Although there are some exemptions, in-Delta storage facilities may fall within these criteria and the designation of surrounding levees may change to "dam". Additional information can be found in the Statutes and Regulations pertaining to Supervision of Dams and Reservoirs.

Comment: Define terminology better, e.g. subsidence vs. settlement.
Response: Subsidence is due primarily to the loss of organic soil such as peat. The loss of this soil within the first few feet of the surface due to oxidation of organic soils, and topsoil erosion is referred to as shallow subsidence. Deep subsidence is caused by ground water withdrawal and a decline of natural gas pressure. Settlement is the compression of underlying soils particularly beneath levee structures.

Comment: Efficacy of restoration and erosion control of in-channel islands doubtful because of geomorphology.
Response: Our Program is coordinating with the Delta In-Channel Islands workgroup of the San Francisco Estuary Project to provide more information on potential erosion control and restoration efforts on these islands. The workgroup has identified several demonstration projects and technical studies to evaluate the performance of erosion control and restoration activities. The workgroup is also circulating a Coordination of Efforts document inviting all interested groups, stakeholders, land owners, and agencies to sign the consensus document and work with them to conserve and restore Delta in-channel islands. [Please contact Paul Schwarz at (707) 579-0270 or Marcie Adams (510) 286-0924 for more information.]

Comment: Describe linkage of moving meander belt to the ERPP.
Response: Setting levees back provides opportunities to improve flood conveyance and provide opportunities for channels to meander in the expanded floodway, increasing habitat opportunities.

Comment: Unclear whether levees will be improved or constructed outside the Delta.
Response: The focus of the Delta Levee System Integrity Common Program is levees within the legally defined Delta. However, potential solutions to address problems identified by the Program may require actions beyond the legally defined Delta. In addition, opportunities may present themselves where program actions such as ecosystem restoration can be combined with efforts to improve or construct levees outside the Delta.

Comment: Should define who will be responsible for O&M and liability of new/improved levees.
Response: As part of the Delta Levee Base Level Protection Plan of the Delta Levee System Integrity Common Program, guidelines for participation including maintenance requirements, and State, federal and local cost-sharing will defined.

Comment: Statement that "The Program will provide for uniform funding and guidance to increase the level of protection throughout the Delta" conflicts with Club-FED retreat position, which was Federal funding only for levees that met FEMA/COE standards prior to damage. This issue needs clarification.
Response: We understand the federal government has certain requirements which must be met prior to providing funds to repair flood damaged levees. However, we are not aware of any formal federal policies which would prohibit providing funds to improve existing levees to meet the requirements of FEMA and/or the USACE. We would appreciate receiving any information discussed at the Club-FED Retreat or otherwise available on this subject.

Comment: Define "acceptably higher level of protection" (50/100/500 yr flood?) and whether it's with/without tidal influences.
Response: The Base Level Protection Plan of the Delta Levee System Integrity Common Program will achieve a minimum federal flood control project levee design criteria for project and non-project levees in the Delta. This criteria will be based on providing a level of protection acceptable to agencies, and stakeholders. A detailed description of the levee design criteria including the level of protection provided will be developed based on review by the agencies and interested stakeholders.

Water Transfers

USEPA:

Comment: Very supportive of developing transfers strategy, critical multiple benefits, including environmental water supply.
Response: We concur. BDAC has created a Transfers Work Group to emphasize the importance of these issues.

Other Comments (not specific to the Alternatives Package)

BuRec:

Comment: Evaluation of power without clearly defined affected environment or modeling results will result in faulty analysis.
Response: Power impact analysis will use available modeling results.

Comment: CVPIA PEIS Power Affected Environment analysis not enough for CALFED, at least add SWP power impacts.
Response: The impact analysis will include the SWP.

Comment: DWRSIM is limited as a tool for assessing power impacts: doesn't estimate available capacity or peak use needs, doesn't estimate transmission losses, doesn't include all CVP pumping plants -- impacts results.
Response: Impact analysis will include some qualitative descriptions where modeling results are not available.

Comment: Power impact assessment of construction equipment premature and inappropriate for programmatic document.
Response: Future drafts are concentrating more on evaluating what occurred with the CVP and SWP projects.

Comment: Useful to separate qualitative and quantitative information when making selection of preferred alternative.
Response: Separating qualitative and quantitative information may not be effective since much of the analysis is qualitative.

Comment: Unclear what level of uncertainties will exist for analytical assumptions of EIR/EIS analysis.
Response: Uncertainties will be discussed where possible.

Comment: Table of references would be helpful to substantiate recommendations and actions.
Response: Many recommendations and actions are based on our qualitative analysis. References will be included where possible.

Comment: Multiple actions, important to identify multiple implementing responsible parties for specific actions.
Response: Identification of implementing agencies is not possible at this time.

Comment: Suggest long-term scientific review process to guide adaptive management decisions.
Response: A scientific review process is being implemented.

Comment: Any cost analyses of alternatives would be helpful.
Response: Work on cost analysis is proceeding and available information is being used where possible to help narrow the number of alternatives.

Comment: Need definitive strategy for analysis of groundwater storage.
Response: Comment noted, such strategy under development.

Comment: Important that technical teams understand each others' work.
Response: "Team 6" has not had meetings. We assumed that review of draft documents after July 1 would be the most efficient means to understanding "Team 6" input.

Comment: CALFED criteria for selecting a preferred alternative if analysis is incomplete or inadequate should be identified.
Response: Selection of an alternative will come down to developing a balance between many tradeoffs while acknowledging imperfect knowledge. Adaptive management will be used to make necessary implementation action corrections.

Comment: Concerned there are no analytical tools for evaluating impacts of ecosystem restoration activities (e.g. water needs).
Response: The ERPP will discuss this issue in greater detail.

Operation Assumptions for Existing Conditions Modeling

General Response: All comments noted.

USFWS:

Winter Run BO: Add closure of cross channel gates Feb 1 B April 30.
CVPIA: Upstream provisions should be preliminary not hard & fast guidance.
CVPIA: Add Delta AFRP actions since represent upstream AFRP actions.
CVPIA: Add upstream AFRP actions on Stanislaus.
CVPIA: Delta Smelt BO provisions absent altogether, should be added.

Specific Editorial Comments:

DFG:

ERPP Bay Section

Comment: P2, unscreened diversions. Change "managed agricultural lands" to "managed wetlands".
Response: We agree.

Comment: P5, strike "the size of" from action regarding vernal pools.
Response: Thank you.

USFWS:

Comment: Summary Common Programs, p3, P4, L5. Substitute "innumerable" with "complex".
Response: Will consider.

Comment: Summary Common Programs, p11, L1. Insert "excessive" between "specifically" and "selenium".
Response: Will consider.

USEPA:

Comment: Summary Common Programs, p13, P2. Change "The greatest current challenge..." to "One of the challenges in..."

Response: Suggestion noted.

Water Quality Watershed Management Section

Comment: p18. To be consistent with Purpose and Need statement; after "water system service area," need to have read "San Pablo Bay, San Francisco Bay, and portions of. . . ."

Response: Will consider.

WQ Common Program Appendix

Comment: pp7-8 wastewater discharge/ammonia. Belongs in "wastewater and industrial discharges" section starting on p4.

Response: The discussion will be moved to the wastewater and industrial discharges section.

Comment: p12. 2P under "coordinated Watershed Approach". Delete "State Water Resources Control Board's" from "Sacramento River Watershed Program." Change "the Sacramento River Toxic Parameter Control Program" to "Toxic Pollutant Control Program".

Response: These changes will be made.

BuRec:

Comment: Move four program goals and program mission ahead of summary of common programs.

Response: Noted.

WQ Common Program Description

Comment: p11. Change statement "to address potential toxicity to water and sediment" to "to address the potential toxicity of contaminated water and sediment."

Response: Suggestion accepted.

ERPP

Comment: Delta zone, p4, water temp target. Should read between 60F and 65F.

Response: Thank you, correction will be made.