

DRAFT

Nature of Decision/Selecting a Preferred Alternative

CALFED is exploring three basic alternatives (approaches) to solving the problems in the Bay-Delta system. Considering the complexity and large number of items to be completed for each alternative, implementation will likely be conducted in several stages over 30 or more years. CALFED will develop an implementation plan which outlines the order in which portions of the Program should be staged and linked with other portions of the Program.

Given that actual implementation will likely occur in stages over several decades, CALFED must now address the form and content for a decision on a preferred program alternative. Will CALFED make one decision to implement a particular alternative or will CALFED use staged decision making over a number of years? Will the decision set a fixed path to the preferred program alternative or will the path include a number targets or other conditions that must be met for implementation to proceed? How specific will the decision be? Answers to these types of questions will help define the "nature of the decision" that CALFED will make on the preferred program alternative.

Staged Implementation

It is important for the CALFED decision on the preferred program alternative to accommodate staged implementation.

Need for Staged Implementation

A number of factors contribute to the need for staging implementation of any CALFED alternative:

- The size of the potential alternatives, with hundreds of individual actions, will require decades to implement. All actions cannot be completed at the same time.
- Any alternative will likely require a number of funding, legislative, regulatory, contractual, and institutional changes that will take time to complete. Staged implementation will help bring these on as needed.

- CALFED has long recognized that all resource areas need to be improved together. Staged implementation with identified benchmarks, milestones, or other conditions that link completion of actions for each stage can keep all parties interested in successful completion of the entire Program. The success of the CALFED Bay-Delta Program will depend to a large extent on how decisions are framed and staged, such that stakeholders can be assured that the level of risk at each decision point is acceptable and that equity is maintained throughout the implementation process. Each stage will require progress in each resource area.
- Adaptive management could be facilitated with staged implementation of the Program. Scientific uncertainty in each stage will require time for new research, implementation, and monitoring and feedback before adjustments can be made in the following stage.

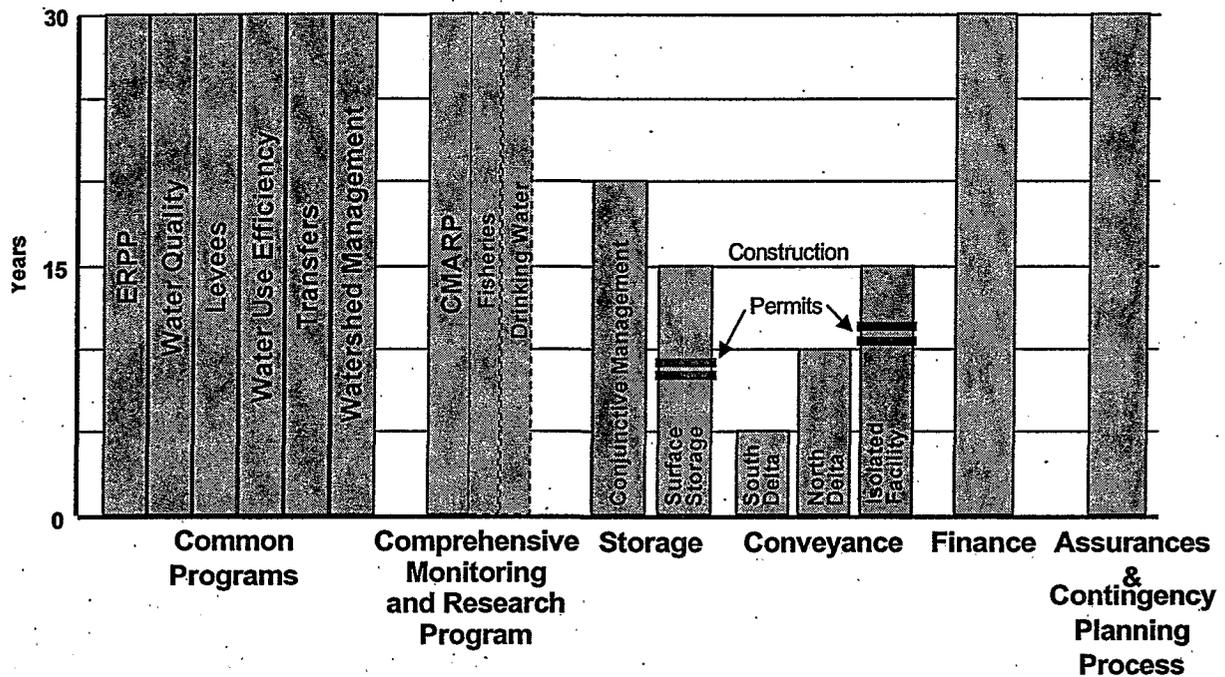
Characteristics of Implementation Plan

The challenge in implementing the Program in stages is to allow actions that are ready to be taken immediately to go forward, while assuring that each interest group has a stake in the successful completion of each stage. Therefore, an implementation plan (or staging plan) should have the following characteristics:

- Each stage should be completed before the next stage can begin
- No single interest group or entity should be vested with the power to prevent the Program from proceeding to the next stage
- Each interest group should have strong inducements to support the completion of each and every stage
- Program elements which are outside of the control of the CALFED agencies should be implemented as early as possible to reduce the risk that outside actors may affect implementation

In addition to chronological schedules and sequences, staging will include a list of actions, or portions of actions to be completed within each stage, the cost of each stage, the measures of success for determining whether actions within a stage have been successfully completed, and benchmarks or milestones that link actions. The implementation plan will also identify the consequences of missing the milestones or benchmarks. The contingency response process will describe the appropriate programmatic responses to missed milestones.

Staging Principles



The above illustrates some basic staging principles. If, for example, Alternative 3 was the preferred program alternative, staging could work as follows:

- All program elements move forward following certification of the Programmatic EIS/EIR
- Stages are initially divided into 5 year (or other) increments
- A comprehensive monitoring and research program is implemented immediately
- Planning, site specific environmental analysis, and construction for common program elements, conjunctive use, and south and north Delta improvements are begun in the first 5-year period
- Land for facilities is acquired in the first 5-year period. If some facilities are ultimately not constructed, the land can be sold or used for other purposes.
- Planning and site specific environmental analysis is begun on surface storage sites and the isolated conveyance facility. Permits may be possible in the 8 to 10 year range. However, these projects would proceed to construction under the

following example circumstances -

- 5-year water use efficiency targets met
- Transfer market enabling legislation or authority in place
- \$___ expended by ecosystem restoration entity or entities
- All funding (paid by beneficiaries) in place for construction of surface water storage facilities

Previous CALFED Policy Decisions

CALFED has already made important decisions that will be included in the programmatic decision regardless of how individual features of the Program are ultimately staged:

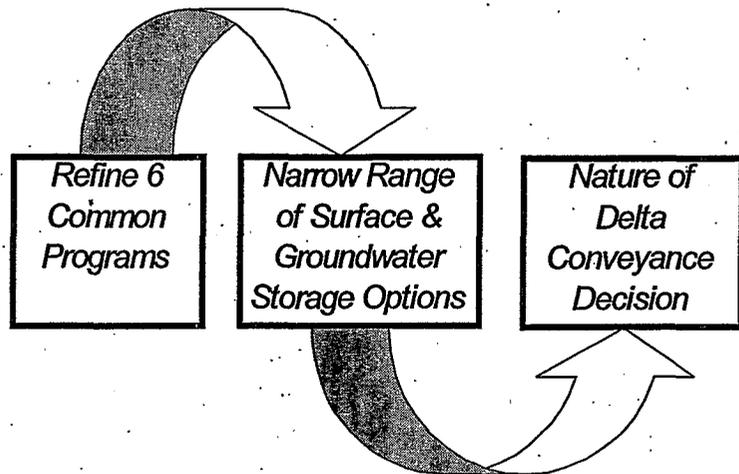
- The six common program elements are included in each alternative. This decision reflects a broad consensus among stakeholders that substantial effort is needed in these areas in order to achieve the Program mission, even though there is still considerable debate over the exact structure and scope of the common programs.
- A potential range of surface and groundwater storage/conjunctive use components will be evaluated for each alternative. This grew out of the recognition that new storage, rather than new Delta conveyance configurations, provides the primary source of new source water supplies. The determination of how much, if any, new system storage capacity to create can be made later in Phase III, independent of the conveyance selection decision in Phase II.
- Considering the above two decisions, the alternatives differ primarily in how they address the issue of Delta conveyance for export water supplies. A major part of the CALFED decision for selection of the preferred program alternative will be focused on the configuration for Delta conveyance.

Pending CALFED Policy Decisions (Storage & Conveyance)

Considering these previous decisions, the decision on whether storage should be included, and the sizing of storage, can be separated from the decision on the type, and size, of Delta conveyance. A selection of one of the alternatives does not necessarily mean that the alternative is to be constructed. Rather, such a selection represents a decision to *consider for implementation* the structural elements included in that alternative in Phase III if certain conditions are met. Therefore, even though the three alternatives and their numerous variations represent distinct alternative solution approaches to the problems facing the Bay-Delta system, the programmatic decision in Phase II only establishes the range of actions available for consideration and implementation for the life of the program. It does not necessarily commit us to build or implement anything. The CALFED decision on the preferred program alternative may therefore be one which establishes the scope of potential implementation actions and their associated triggers, constraints and assurances, rather than a simple commitment to move forward on these actions.

The distinguishing characteristics which affect the selection of a Delta conveyance alternative include diversion effects on fisheries, export water quality (especially Bromides), in-Delta water quality, cost, risk to export water supplies (system structural integrity), and assurances. CALFED staff has compiled substantial technical information to support an evaluation of these distinguishing characteristics, with the exception of assurances, which essentially focuses on policy issues rather than technical ones.

General Order of Decisions for Preferred Alternative



As mentioned previously, the implementation plan will outline the order in which portions of the Program should be staged and linked with other portions of the Program. A workable plan for staging and linking is especially critical for the Delta conveyance component due to the long time potentially needed for implementation and the likely complexity of assurances.

At this time, CALFED has not made any determination about how the alternatives perform in terms of the "assurances" or "consistency with solution principles" characteristics. Although extremely critical to the ultimate decision of a preferred program alternative, evaluation of

these two characteristics is highly subjective, and CALFED intends to make that evaluation only after considering the comments of the interested public. As to the remaining distinguishing characteristics listed above, CALFED is presenting in this Phase II Report the results of the technical evaluations of these characteristics performed thus far. Based on the assumptions made in the technical evaluations, Alternative 3 appears to have the potential to provide greater performance on these particular characteristics. At the same time, however, Alternative 3 appears to present the most serious challenges in terms of assurances and implementability.

Example Linkages Affecting Staging

CALFED will consider a wide variety of potential linkages in development of the implementation plan. The linkages will be key in satisfying the characteristics of the implementation plan discussed above.

There are many potential linkages between the various actions in the common program elements, storage, and conveyance. It is productive to focus on the most important linkages between components which will be necessary to assure that the various Program stakeholders benefit from its implementation. These and other linkages could be used to fashion conditions to include with other assurances for stages of Program implementation. Some of the most important linkages are:

- **Delta Conveyance and North of Delta Storage** - One potential linkage to address regional concerns would require that north of Delta surface storage proceed ahead of or at least concurrently with major Delta conveyance improvements.
- **North of Delta Surface Storage and Groundwater/Conjunctive Use** - Another potential linkage to address regional concerns would require that north of Delta surface storage proceed ahead of or at least concurrently with significant implementation of groundwater/conjunctive use programs. This linkage would likely not apply to increased conjunctive use in the south Sacramento County area, as this would be a groundwater restoration project, with primarily local benefits.
- **Water Use Efficiency, Groundwater and Conjunctive Use, Water Transfers, and Surface Storage** - A potential constraint on new surface storage would be a condition that users of new water supplies meet specific, measurable efficiency criteria and demonstrate that water available through marketing is appropriately incorporated into the source mix prior receiving new water supplies.

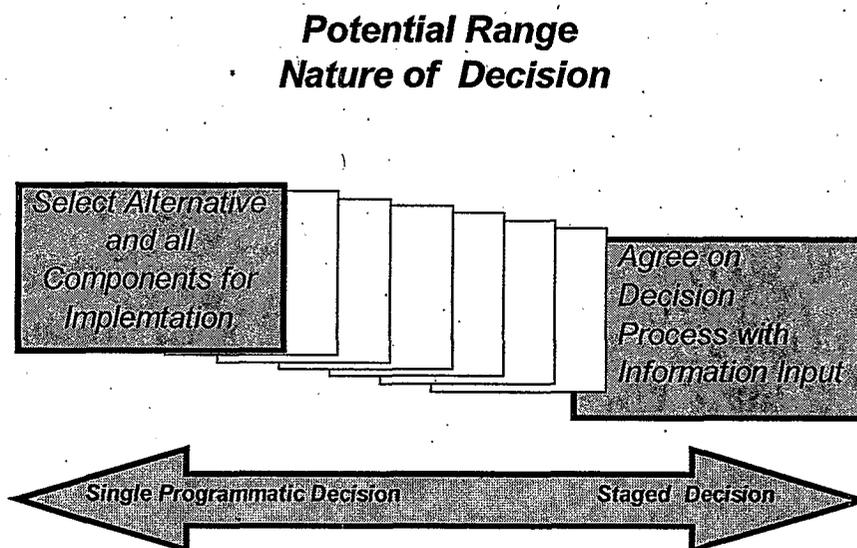
- **Common Program Elements and Storage and Conveyance** - Linkage could be in terms of spending caps on common program elements which would halt their implementation at predetermined checkpoints if inadequate progress is being made on facilities planning, permitting, or construction. There is a great deal of uncertainty surrounding environmental permits for future storage and conveyance facilities. A potential linkage which might provide early assurance that permits will be obtained at the appropriate time would be a Memorandum of Understanding between the permitting and water agencies regarding the programmatic permit requirements (i.e. scope of studies, level of detail, specific constraints and conditions). This could serve to decrease the uncertainty surrounding permits for future project. Such an MOU could be linked to specific expenditure caps for common programs.
- **Ecosystem Restoration and Delta Conveyance Improvements** - It is likely that some stakeholders will expect implementation of ecosystem restoration to be linked to progress on implementing Delta conveyance facilities. While ecosystem restoration actions will face substantial obstacles in terms of potential impacts to agriculture, water supply, and local economies, Delta conveyance facilities face the additional burden of construction and operational impacts on resources protected by the CWA, ESA, and CESA. A potential assurance element could include acquisition of right of way for facilities early in the feasibility evaluation process.
- **North Delta Flood Protection and Delta Conveyance** - Sacramento County, San Joaquin County, north Delta reclamation districts and residents have long sought a regional solution to the chronic flooding in the Mokelumne/Cosumnes River system. Alternative 2 would provide a long-term solution. For Alternative 3 there will likely be a linkage between a small isolated facility and in-Delta channel improvements (and maintenance commitments) to assure that the flood concerns are addressed.
- **Delta Levees and Delta Conveyance** - For Alternative 3 there will likely be a linkage between progress on an isolated conveyance and improvements to Delta levees. Potential assurances to address stakeholder concerns include both maintenance of levees and in-Delta water quality. This could include a funding linkage in the form of user fees on isolated conveyance for funding in-Delta levee improvements and other funding mechanisms. If the peripheral canal is incised into the landscape (rather than balancing cut and fill) its construction may offer a large volume of construction material for long-term improvement of Delta levees. For example, incising the canal 5 feet deeper than required for balanced cut and fill would provide over 15 million cubic yards of material for levee improvements. A commitment to make this excavated material available

for Delta levees could enhance long-term levee maintenance, given that the Delta is generally short of fill materials of suitable quality. This approach could also help address concerns about the peripheral canal posing a seepage and flooding risk to adjacent lands.

- Delta Levees and Ecosystem Restoration** - Close coordination is required to assure that these elements complement each other, particularly with respect to levee maintenance and riparian habitat creation. There may be a need for linkage between cumulative spending on in-Delta ecosystem restoration and agreement on levee maintenance practices which strike an acceptable balance between habitat maintenance and levee integrity. Investments in habitat restoration on Delta islands will need adequate protection against catastrophic flooding in the short term. An underlying assumption is that over the long haul, Delta island regions devoted to habitat would eventually restore vegetative matter and raise interior island surface elevation to near sea level.

The Decision

The nature of the decision will address the form and content for a decision on a preferred program alternative. While staged implementation will be needed for any CALFED alternative, CALFED could still make different types of programmatic decisions (for preferred program alternative) that include staged implementation. The range of decisions could extend from making a single programmatic decision to staging the decision over many years. Many potential variations could fit between these.



The ends of this spectrum are discussed briefly below along with a more "middle-of-the-road" decision:

- Staged Implementation of One Specific Alternative (Single Programmatic**

Decision) - CALFED would decide on one specific alternative and proceed with full implementation. This would include all common programs, identified storage if any, and conveyance for the preferred program alternative. In this instance, the implementation plan would provide some assurance that all program elements would be implemented and provide a process for addressing circumstances that (See Example 1 below).

- **Staged Implementation of an Alternative with Certain Conditions for Completion** - CALFED could decide on one of the three alternatives and then proceed with phased implementation if specified conditions were met. This approach places great emphasis on the implementation plan and how conditions precedent are defined, linked to one another, and the consequences of not satisfying them. The decision would not be a commitment to implement every action in the common programs; rather it would specify conditions that must be met before completion of the actions in the common programs. Likewise, it would include conditions for implementing new surface, groundwater storage, and conveyance. For example, if Alternative 3 were selected as the preferred program alternative, the peripheral canal portion could only be constructed after specified conditions were satisfied; it would not be constructed if the conditions failed to be satisfied. However, a selection of Alternative 2, for example, would exclude consideration of an isolated facility as part of the Program. (See Example 2 below).
- **Staged Decision Making** - CALFED could decide to begin implementation of portions of Alternative 1 and then proceed with staged decision making, with stakeholder input, on other potential portions of the Program. All portions of the three alternatives would be open for consideration and subject to the outcome of specific environmental and feasibility studies in Phase III, financing, and on assurances. The decision would not be a commitment to implement every action in the common programs; rather it would be a decision to *consider for implementation* the actions in the common programs and new surface and groundwater storage. It would also be a commitment to consider for implementation various conveyance options. (See Examples 3 and 4 below).

These show a range of potential CALFED decisions. The actual decision could include some combination of the two. Each option has implications for the Programmatic EIS/EIR currently available for public comment. Each decision also has implications for satisfying meeting the Program goals, objectives and mission, and in satisfying the solution principles.

Four examples of staged implementation follow.

Example 1

Staged Implementation of One Specific Alternative

"We will do Alternative 3 in stages linked to other program elements."

In this option, CALFED will decide now that Alternative 3 is the end-point of implementation. Then, in order to assure implementation of the entire program and to gain stakeholder acceptance, the discrete steps of completing Alternative 3 would be implemented in phases in concert with equivalent steps of other program elements (levees, water quality actions, etc.)

- Advantages:**
- (1) We make a conclusive decision now, so that the course is clearly set.
 - (2) We could avoid making unnecessary or "stranded" investments in components of Alternatives 1 or 2 that are incompatible with Alternative 3.
- Disadvantages:**
- (1) The Phase II Report set up two factors (diversion impacts and bromides) as most relevant to proper resolution. We will not have an answer to bromides, and may or may not have an answer to diversion impacts issues, within the time frame of this present decision. In other words, we will be making a final decision without information we believe is relevant.
 - (2) The reaction to the Interim Phase II Report indicates substantial public concern about Alternative 3.
 - (3) This approach may misrepresent reality; in the real world, there may be future developments that will preclude Alternative 3 regardless of a "conclusive" decision at this time (failure to secure funding, for example).

Example 2 Staged Implementation of an Alternative with Certain Conditions for Completion

"We will do Alternative 3 in stages linked to other program elements unless the following occur..."

In this option, CALFED would commit to implement Alternative 3 in stages, but would have a discrete number of agreed-upon "off ramps" that, if triggered, would end the implementation process short of completing Alternative 3. These "off-ramps" would explicitly be tied to Alternative 3 issues, and would not interfere with the linked staging with other program elements that we are assuming would be done through the assurances package.

- Advantages:**
- (1) This option allows CALFED to identify those critical issues that, if resolved in a way other than we presently anticipate, would eliminate the need for an isolated facility. Example of an "off-ramp": If the data indicate that all species are going to recover due solely to the habitat improvements included in the common programs, CALFED could not rely on the "diversion effects on fisheries" rationale for the Alternative 3, and CALFED may have an "off-ramp" based on monitoring results.
 - (2) This option still includes a decision by CALFED about the ultimate conveyance goal, although the conclusion is not as definitive as in the first option.
 - (3) Less likely to yield stranded assets (components of Alternatives 1 or 2 that are incompatible with Alternative 3).
- Disadvantages:**
- (1) Less decisive than first option
 - (2) Still raises public concerns about Alternative 3
 - (3) Requires CALFED to identify and negotiate the "off-ramps" at this time in the absence of full information about critical distinguishing factors
 - (4) Would require CALFED to predict and be comfortable with the Program's status at the time any "off-ramp" is triggered, given that implementation essentially ends at that point

Example 3

Staged Decision Making (With Pre-Defined Process)

"We will do a combination of Alternatives 1 and 2, and will also adopt a well-defined decision making process to decide, at a later specified date, whether we will pursue any other actions."

Under this option, we would identify the best combination of Alternatives 1 and 2, and carry out a staged implementation of this hybrid. In addition, CALFED would agree to revisit these issues at a specified future date, and take whatever action is appropriate at that time.

- Advantages:**
- (1) Avoids some of the public controversy associated with endorsing Alternative 3
 - (2) Represents an "adaptive management" approach, which most interests endorse in theory
 - (3) Gives maximum flexibility to future decision makers about potential courses of action in the future
- Disadvantages:**
- (1) Possible public perception that a decision is being avoided
 - (2) Requires CALFED to find some way of gaining agency and stakeholder confidence that appropriate action will in fact take place in the future
 - (3) Makes "stranded assets" more likely if Alternative 3 is ultimately built
 - (4) Difficult to develop long-term assurances now under ESA/404 or otherwise if the ultimate program is completely undefined

Example 4

Staged Decision Making (With Pre-Defined Process)

"We will do a combination of Alternatives 1 and 2, and will also adopt a well-defined decision making process to decide, based on specified parameters at a later specified date, whether we will pursue Alternative 3."

Under this option, we would identify the best combination of Alternatives 1 and 2, and carry out a staged implementation of this hybrid. In addition, CALFED would agree upon a well-defined decision process identifying, at a minimum, who would decide if CALFED moves to Alternative 3, based on a limited number of known parameters, at a specified time.

- Advantages:**
- (1) Most clearly represents the actual status of decision making where we have particular relevant information that is unknown at this time. Ties the decision to the development of that relevant information.
 - (2) Avoids some of the public controversy associated with endorsing Alternative 3 now
 - (3) Represents an "adaptive management" approach, which most interests endorse in theory
- Disadvantages:**
- (1) Possible public perception that a decision is being avoided.
 - (2) Requires CALFED to develop a long-term decision making process in which agencies and stakeholder have confidence
 - (3) Makes "stranded assets" more likely if Alternative 3 is ultimately built
 - (4) Difficult to develop long-term assurances now under ESA/404 or otherwise if the ultimate program is undefined