
Attachment I
Concurrent Efforts

DRAFT - For Discussion Only

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Concurrent Efforts

The information necessary for the narrowing and evaluation process will come from several concurrent efforts under the umbrella of the programmatic EIR/EIS. As these concurrent efforts progress, the amount of information available to make decisions about each step of the narrowing and evaluation process will increase and become more refined. These efforts include the following.

Impact Analysis

The primary technical evaluations during Phase II of the CALFED Bay-Delta Program will be the impact analyses for the programmatic EIR/EIS. The impact analyses will examine the differences between the alternatives (including the existing condition and the no-action alternative) at the program level of detail and present the information for decisions on a broad range of alternatives. The impact analyses will provide understanding on how the storage and conveyance components interact with the other components that make up the alternatives, including ecosystem restoration, water quality, levee system integrity, and water use efficiency.

The main purpose of the impact analyses is to compare and contrast the alternatives rather than to optimize sizes, select specific configurations, or select specific sites for any actions within the alternatives. In many cases, the impact analysis will simply provide descriptions of how conditions would be different between the existing condition, the no-action, and the programmatic alternatives. Impact analysis will cover hundreds of individual variables which fall into 26 resource areas:

- Fisheries and Aquatic
- Vegetation and Wildlife
- Surface Water Hydrology
- Groundwater Hydrology
- Riverine Hydraulics and Delta Hydrodynamics
- Water Management, Facilities, and Operations
- Flood Control Operations
- Levee System
- Water Quality
- Agricultural Economics
- Municipal and Industrial Water Supply Economics
- Fish, Wildlife, and Recreation Economics
- Power Production and Energy Economics
- Regional Economics
- Land Use
- Flood Control Economics
- Geomorphology and Soils
- Air Quality

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- Noise
 - Visual
 - Traffic and Navigation
 - Cultural Resources
 - Social Well Being
 - Public Health and Environmental Hazards
 - Recreation
 - Utilities and Public Services

Analytical methods for use in identifying the potential impacts for these resources were discussed at a workshop in April 1997. The workshop packet and summary of comments and answers from that workshop contain descriptions of the methods. Depending on availability of adequate analytical information to assess the impacts, the evaluation may be a quantitative assessment (Modeling analysis, etc.), or a qualitative assessment (professional judgement). Reports for each resource area will summarize and compare the impacts for each alternative.

Impact analysis began in March 1997. Preliminary information on potential impacts will initially be available in administrative drafts of impact reports in July 1997 and will be used in Step 1. The impact analyses are scheduled for completion by fall 1997 and will be used in Step 2.

Prefeasibility studies

Prefeasibility studies will be conducted for the storage and conveyance, water quality, levee system integrity, and ecosystem restoration components; studies for storage and conveyance are currently underway and the others will start soon. These studies will provide more detailed information than that obtained from the impact analyses for the programmatic EIR/EIS.

The prefeasibility studies provide more detailed information on costs, water supply, flows, water quality, site impacts, and other factors for representative combinations of components. For example, the feasibility of implementing offstream storage to enhance water supply opportunities depends on the actual locations available for development such as topography, geology, environmental concern, proximity to a water supply source, and existing conveyance facilities.

While the impact analyses will evaluate a broad range of facility sizes, the prefeasibility studies provide information for additional sizes within that range. For example, if the range of north of Delta storage is 1 million acre-feet to 3 million acre-feet for an alternative, then the impact analysis will include examination of benefits and adverse impacts for the low and high end of the range, and perhaps an additional analysis at the mid-range. The prefeasibility analyses will provide additional detail that may lead to narrowing the range of sizes for the preferred alternative (for example, down to the 1 million acre-feet to 1.5 million acre-feet range).

The programmatic EIR/EIS will primarily display benefits and adverse impacts of the alternatives and will include only program level costs for the ends of the range being studied. The

prefeasibility studies will provide more detailed cost information to assist the stakeholders and decision makers in their considerations on the "preferred alternative". Storage/conveyance prefeasibility studies have been prepared for a range of potential reservoirs and conveyance concepts. These concepts representative of the range of the types, costs, and impacts of facilities which have been historically identified. They are structured so they can be fit together in different ways or modified to form the storage and conveyance portions of each alternative. Prefeasibility studies for Delta conveyance concepts include:

- Chain of Lakes
- Isolated East Delta Conveyance
- Multiple Intakes Delta Conveyance
- Isolated Sacramento Ship Channel Conveyance
- Through Delta Conveyance 1 (large habitat with conveyance) and Through Delta Conveyance 2 (alternate size and location for large habitat with conveyance)
- South Delta Program
- North Delta Program

Prefeasibility studies for storage concepts include:

- In-Delta Storage
- Cottonwood Creek Reservoir
- Lake Berryessa Enlargement
- Los Banos Grandes Reservoir
- Millerton Lake Enlargement
- Montgomery Reservoir
- Orestimba Reservoir
- Red Bank Reservoir Complex
- Shasta Lake Enlargement
- Sites/Colusa Reservoir
- Thomes-Newville Complex
- Los Vaqueros Enlargement

Prefeasibility studies for other conveyances are:

- Chico Landing Intertie
- Delta-Mendota Canal Enlargement
- Lake Berryessa Intertie
- Mid Valley Canal - North and Main
- Tehama-Colusa Canal Enlargement (Including new intake)
- Tehama-Colusa Canal Extension

Draft prefeasibility reports on these storage and conveyance facilities are be available for comparing alternatives in July 1997. Prefeasibility studies on the actions included in the ecosystem program (ERPP), water quality program, water use efficiency program, and levee system integrity program will continue into mid-1998. Preliminary information from these

studies will be available in October 1997.

Reservoir Site Screening

Each alternative includes a relatively specific method for Delta conveyance. However, for storage, the alternatives include more generic descriptions that do not identify specific sites. For example, surface storage can be identified as being upstream of the Delta in the Sacramento or San Joaquin River basins, aqueduct storage (to distinguish storage of exported water from surface storage tributary to the Delta in the San Joaquin basin), or in-Delta storage.

To sort through the many potential reservoir sites, a screening process is being conducted to identify the most promising sites to carry forward with the alternatives. The sites will initially be screened based on engineering feasibility and cost and a "red-flag" review to eliminate sites with excessive problems. This screening will not arrive at a selected site for each type of storage but will identify a reduced set of the most promising sites. Information on the results of this initial screening will be available in the fall of 1997. The screening process does not provide new information for narrowing alternatives towards a draft preferred alternative, but it does contribute to going forth with a narrow set of potential sites in the preferred alternative.

Other institutional input

A programmatic 404(b)(1) analysis is being prepared. The package will document the process for developing and narrowing the broad range of alternatives beginning in Phase I of the CALFED Bay-Delta Program and continuing through Phase II. A draft of the package will be included with the public draft programmatic EIR/EIS. The final document will be prepared in 1998. The preparation of the 404(b)(1) document is essentially a documentation of the reservoir site screening and alternatives narrow and evaluation. It does not provide new information for narrowing alternatives towards a draft preferred alternative, but its approval does allow going forth with the preferred alternative.

A draft format and methodology for preparing a programmatic Habitat Conservation Plan (HCP) will also be included with the public draft programmatic EIR/EIS. The HCP is being prepared in compliance with the Endangered Species Act to assess the impacts of the proposed action on preservation, conservation, and enhancement of fish and wildlife resources. The programmatic HCP will be prepared in 1998. The HCP does not provide new information for narrowing alternatives towards a draft preferred alternative, but provides for more efficient coordination with the EIR/EIS process and ultimate selection of a preferred alternative.

Assurances Plan

The assurances work group is evaluating five alternative management structures and an array of tools to help assure that a preferred alternative will be implemented and operated as agreed. The management structures include:

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- **Informal Coordination Among Agencies** - Existing state and federal agencies implement the Bay-Delta Program. A CALFED-like collaborative effort among the state and federal agencies assures coordination in implementation.
 - **Ecosystem Restoration Joint Authority** - A Joint Authority consisting of the USFWS, NMFS, and DFG would be formed to implement the ecosystem restoration component of the CALFED Program.
 - **Ecosystem Restoration Joint Authority and Operations Joint Authority** - Two new joint authorities would be formed to implement the ecosystem restoration component and to operate the state and federal water project Delta facilities as well as new storage and conveyance facilities. The ecosystem restoration joint authority would be formed as described above. The operations joint authority would be formed by DWR and USBR.
 - **Delta Ecosystem Restoration Agency** - A new agency would be formed in order to oversee implementation of the ecosystem restoration component.
 - **Ecosystem Restoration and Operations Agency** - A new agency would be formed to implement the ecosystem restoration and water supply reliability components.

The tools that may be coupled with these alternative management structures include:

- state and/or federal legislation
- voter referenda
- regulations
- administrative agency orders
- contracts
- easements
- financing mechanisms
- physical constraints

The workgroup will continue to refine the differing means of assuring the preferred alternative. A draft of their preliminary recommendations will accompany the draft programmatic EIR/EIS. Broad information showing some unique assurances packages for the various alternatives is expected to be available to assist in selection of the preferred alternative.

Financial Plan

The financial workgroup is evaluating structures for a financial plan and have developed a set of financial principles relating to allocation of costs to Program beneficiaries. The following principles do not currently help distinguish the alternatives or select a draft preferred alternative. However, they do provide reasonable guidance for development of the financial plan and

eventual cost allocation. The principles which will guide the final cost allocation are:

- Consistent
- Fair
- Flexible
- Inexpensive
- Rational
- Reliable
- Sufficient
- Understandable

Work will continue on refining the financial plan with the final recommended plan available in 1998. Final cost allocation will not be known until the final EIR/EIS near the end of 1998. However, a preliminary indication of cost breakdown between the general public and user groups may be available to assist in selection of a draft preferred alternative in fall 1997.

Technical Workgroups

Technical workgroups continue to provide more refined input to the process in several areas:

- Ecosystem Restoration
- Water Quality
- Levee System Integrity
- Water Use Efficiency
- Water Transfers
- Assurances
- Financial
- Fish Screening

These groups continue to meet periodically. Information developed by the workgroups may be used in Steps 1 and 2.

As these concurrent efforts progress, the amount of information available to make decisions within each step of the narrowing and evaluation process will increase and become more refined.