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EXISTING CONDITIONS, NO-ACTION, AND CUMULATIVE ACTIONS WORKSHOP INFORMATION PACKET

Letter from Lester Snow

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EXISTING CONDITIONS, NO-ACTION, AND CUMULATIVE ACTIONS WORKSHOP

July 11, 1996
Sacramento Convention Center, Room 308
Sacramento, California

- 8:30-9:00** **Registration (CALFED staff)**
- 9:00-9:05** **Welcome and Introductions (Lester Snow)**
- 9:05-9:15** **Process Update (Lester Snow)**
- 9:15-9:25** **Purpose of the Workshop (Rick Breitenbach and Eugenia Laychak)**
- 9:25-10:30** **Presentation of Existing Conditions (Rick Breitenbach)**
- Introduction
 - Resource Categories
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- 10:30-11:15** **Presentation of the No-Action Alternative (Rick Breitenbach)**
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 - Actions Selected for the No-Action Alternative
 - Elements of the No-Action Alternative
 - Possible Additional Analyses
- Questions and Answers on the No-Action Alternative (Rick Breitenbach)**

11:15-12:00 Presentation on the Cumulative Impact Analysis (Rick Breitenbach)

- Introduction
- Differences Between No-Action Analysis and Cumulative Analysis
- Criteria Used to Define the Cumulative Actions
- Actions Considered in Defining the Cumulative Analysis
- Actions Selected for the Cumulative Analysis

Questions and Answers on the Cumulative Impact Analysis (Rick Breitenbach)

12:00-12:15 Next Steps in the Process (Rick Breitenbach and Harlan Glines)

12:15-12:30 Final Comments (Lester Snow)

12:30 Adjourn

Introduction

EXISTING CONDITIONS, NO-ACTION, AND CUMULATIVE ACTIONS WORKSHOP

This information packet is designed to help you prepare for the Existing Conditions, No-Action, and Cumulative Actions Workshop which will focus on how we intend to assess the consequences of the alternatives, evaluate the differences between the alternatives, and understand the incremental effects of the preferred alternative in combination with other related actions.

GROUND RULES FOR PARTICIPATION

In addition to giving your input on this worksheet, we invite you to share your comments during the workshop. Since the format of the workshop is a plenary session, not everyone will have the opportunity to make oral comments at the meeting. We can, however, maximize the opportunity for participants to comment by following these ground rules for participation.

- Please recognize the time constraints of the workshop and phrase your questions and comments as clearly and concisely as possible.
- Participants will comment or ask questions only when called upon by the chair or facilitator.
- Participants are asked to listen and consider the opinions of others.
- No person or interest group will dominate the question and answer period.
- Comments that will be most useful to CALFED at this point in the process are those which identify areas of concern about how to define existing conditions and what projects and actions should be considered for the no-action and cumulative analyses.

A BRIEF ROADMAP OF THE INFORMATION PACKET

Here is a brief "roadmap" of this workshop packet:

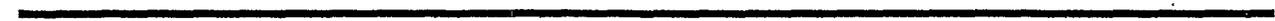
- You will note from review of the agenda that this is a half-day workshop.
- The format for the workshop is a plenary presentation and discussion of existing conditions, the No-Action Alternative, and the cumulative impact analysis.
- To help you focus your preparation for the workshop, we have included a list of key questions and a participant worksheet. In this section, you will see the key questions we will ask you to consider. *We ask that you read through this section before you come to the workshop.*
- The second section of this packet presents the Purpose of the Existing Conditions, No-Action, and Cumulative Actions Workshop. Remember that the purpose of establishing the existing conditions, No-Action Alternative, and cumulative actions is to be able to understand the consequences of the alternatives, the differences between the alternatives, and the incremental effects of the preferred alternative in combination with other related actions.
- Existing conditions will serve as a baseline for comparing alternatives. Existing conditions includes various resource categories, an historic perspective of the resource categories, a description of the period of analysis for each resource category, and elements that are assumed for the existing conditions.
- The No-Action Alternative also will serve as a baseline for comparing alternatives. The No-Action Alternative is a scenario of what would happen if none of the proposed CALFED Alternatives are implemented and existing trends and conditions continued into the future. CALFED proposes to use the following criteria to determine which projects and alternatives should be part of the no-action condition.
 1. Has the action been approved for implementation?
 2. Does the action have funding for implementation?
 3. Does the action have final environmental documents?
 4. Does the action have final environmental permits and approvals?

-
5. Will the action be excluded from the CALFED Bay-Delta actions?
 6. Would the effects of the action be identifiable at the level of detail being considered for the CALFED Bay-Delta Program analysis?
- The cumulative effects are the incremental impacts on the environment that result from the preferred alternative in combination with other related past, present, and reasonably foreseeable future actions. CALFED proposes to evaluate proposed actions to identify reasonably foreseeable future actions using the following criteria:
 1. Is the action under active consideration?
 2. Does the action have recently completed environmental documentation or are environmental documents in some stage of active completion?
 3. Would the action be completed and operational within the timeframe being considered for the CALFED Program?
 4. Does the action, in combination with the CALFED Program action alternatives, have the potential to affect the same resources?
 - The packet concludes with an appendix which includes a glossary of key terms.

KEY QUESTIONS FOR THE EXISTING CONDITIONS, NO-ACTION, AND CUMULATIVE ACTIONS WORKSHOP

After you scan the instructions for participants, please look closely at the sections discussion existing conditions, no-action conditions, and cumulative actions. Here are questions you may want to address in the question and answer portions of the workshop.

1. What questions or comments do you have about existing conditions, the No-Action Alternative, and cumulative actions?
2. What advice do you have for CALFED about the criteria being used to identify the No-Action Alternative and cumulative actions?
3. What projects or actions do you think should be added to or dropped from the No-Action Alternative and the cumulative actions?
4. If you are proposing to add or drop actions from the No-Action Alternative or the cumulative actions, please provide your rationale, including the location where CALFED can obtain more data.



Participant Worksheet

EXISTING CONDITIONS, NO-ACTION, AND CUMULATIVE ACTIONS WORKSHOP

Please use this worksheet to provide us with your thoughts on the information presented at the July 11 workshop. The worksheet poses a series of questions which you should consider in light of the information presented in this packet. If time permits, please write down your comments on these worksheets. The comments will be compiled, and will be considered by CALFED as it continues work on the existing conditions, No-Action Alternative, and cumulative actions.

If you cannot complete this worksheet by the end of the workshop, please mail or fax comments no later than Monday, July 22, 1996 to:

CALFED Bay-Delta Program
1416 Ninth Street, Suite 1155
Sacramento, CA 95814

FAX (916) 654-9780

CALFED will be preparing a report that provides additional details on existing conditions, the No-Action Alternative, and cumulative actions. Copies of this report may be requested by completing the following section and submitting it with your comments or calling CALFED at (916) 657-2666. Copies may also be obtained by writing CALFED Bay-Delta Program, 1416 Ninth Street, Suite 1155, Sacramento, CA 95814.

Please send me a copy of the report on existing conditions, the No-Action Alternative, and cumulative actions.

Name _____
Organization _____
Mailing Address _____

1. Questions and Comments about Existing Conditions

What questions or comments do you have about the existing conditions?

- resource categories
- historic periods for resource categories
- periods of analysis for resource categories
- elements

2. Questions and Comments about the No-Action Alternative

What questions or comments do you have about the No-Action Alternative?

- criteria used to define the No-Action Alternative
- actions considered in defining the No-Action Alternative
- actions selected for the No-Action Alternative
- elements of the No-Action Alternative

3. Questions and Comments about the Cumulative Actions?

What questions or comments do you have about the cumulative actions?

- differences between actions identified for the No-Action Alternative and those identified for the cumulative impact analysis
- criteria used to define the cumulative actions
- actions being considered in defining the cumulative actions
- cumulative actions selected

Purpose of the Existing
Conditions, No-Action, and
Cumulative Actions Workshop

Purpose of the Workshop

The purpose of the workshop is to describe the approach proposed by CALFED for developing the existing conditions, No-Action Alternative, and cumulative impact analysis for the CALFED Programmatic EIR/EIS. We also seek to get input and gain consensus from interested parties on the proposed approaches.

Existing conditions will be one of the baselines against which the impacts of the action alternatives will be compared. "Existing conditions" include all of the current resources that could be affected by the program alternatives, a historic perspective of these resources that describes how they reached their current state, and a description of resource conditions that reflect the dynamic nature of certain of the resources. Additionally, the description includes elements proposed to be included as part of existing conditions. These elements include other items such as Bay-Delta water quality standards, biological opinions, the Coordinated Operations Agreement, and Central Valley Project Improvement Act activities that are currently being implemented.

The No-Action Alternative will be another baseline against which the impacts of the action alternatives will be compared. The No-Action Alternative describes future physical and biological conditions which are likely to exist in the absence of the CALFED Bay-Delta Program. Developing a No-Action Alternative requires some analysis of actions proposed by others to determine whether they are sufficiently certain to be implemented, and therefore whether they should be included in the No-Action Alternative. To conduct this analysis, CALFED has developed criteria for screening potential actions to determine whether they should be included in the No-Action Alternative. The No-Action Alternative also requires that we project likely features that will be in place in the future including Bay-Delta water quality standards, Trinity River flows, additional CVPIA actions, and the Monterey Agreement. It is important to remember that the No-Action Alternative is only a basis for comparing the potential consequences of implementing the alternatives. As such, including or excluding an action from the No-Action Alternative is not, in any way, intended to be a judgement regarding the merits of that action, or an assessment of the likelihood that the action will be implemented in the future.

The purpose of the cumulative impact analysis will be to display the effects of the action alternatives on the environment when they are considered in combination with other past, present, and reasonably foreseeable future actions. Like the No-Action Alternative, the cumulative impact analysis also requires an assessment of various actions that may be implemented by others.

Existing Conditions

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Existing Conditions

PURPOSE OF THE EXISTING CONDITIONS

The National Environmental Policy Act (NEPA) requires that an environmental impact statement (EIS) describe the environment of the area to be affected by the alternatives under consideration. The California Environmental Quality Act (CEQA) requires that an environmental impact report (EIR) describe the environment in the project vicinity, from local and regional perspectives, as it exists before commencement of the project. The description of existing conditions under NEPA and CEQA will be no longer than is necessary to understand the significant effects of the proposed project and its alternatives.

The definition of existing conditions, also known as the affected environment, is important in the preparation of the Programmatic EIR/EIS being developed by CALFED for the Bay-Delta Program because it will form one of the baselines against which the impacts of the No-Action Alternative and the action alternatives will be compared. Additionally, the existing conditions discussion will provide a historical perspective of issues that have influenced present conditions. For example, a description of existing conditions of water quality within the Bay-Delta region will contain a brief synopsis of historical land use practices that have influenced existing water quality.

CRITERIA FOR SELECTING RESOURCE CATEGORIES

The following criteria was used to select resource categories to be included in the Programmatic EIR/EIS:

Will the resource category be affected by an alternative being considered in the CALFED Programmatic EIR/EIS.

Table 1 presents the results of screening of potential resource categories. It is possible that, after additional scope and alternatives development, additional or different assessment variables could be identified.

Table 1. Results of Screening of Potential Resource Categories and Topics for the CALFED Bay-Delta Programmatic EIR/EIS

| Resource Category | Resource Topic |
|----------------------------------|---|
| Physical Environment | Surface-Water Hydrology |
| | Water Management Facilities and Operations |
| | Groundwater Hydrology |
| | Riverine Hydraulics |
| | Bay-Delta Hydrodynamics |
| | Water Quality |
| | Geomorphology and Soils |
| | Air Quality |
| Biological Environment | Riverine Aquatic Habitat |
| | Estuarine Aquatic Habitat |
| | Wetland and Terrestrial Habitat |
| | Fishery Resources |
| | Protected Plant and Animal species |
| Economics and Social Environment | Land Use |
| | Agricultural Economics |
| | Municipal and Industrial Water Supply Economics |
| | Flood Control System and Other Infrastructure |
| | Public Health |
| | Power Production |
| | Recreation (boating, fishing, hunting, etc.) |
| | Visual Resources |
| | Commercial Fishing |
| | Regional Economics |
| | Cultural Resources |

THE HISTORICAL PERIOD FOR RESOURCE CATEGORIES AND PERIOD OF ANALYSIS FOR RESOURCE CATEGORIES

Historical Period for Resource Categories

The purpose of describing the historical perspective is to provide the reader with a general sense of the reasons for a particular resource category being in its current condition and to provide a premise for forecasting future conditions and impacts. The Central Valley Project Improvement Act Programmatic Environmental Impact Statement (CVPIA PEIS) includes a discussion of changes to each resource category during a historical period. The CVPIA PEIS historical periods were ultimately selected based on the availability of data. The historical periods established for the CVPIA PEIS resource topics are considered adequate for the purposes of the CALFED Programmatic EIR/EIS. The historical periods for each category are presented in Table 2.

Period of Analysis for Resource Categories

The importance of the existing conditions in the Programmatic EIR/EIS is that they will provide one of the baselines upon which the impacts of the CALFED Bay-Delta Program will be measured. Many resource categories are, however, dynamic; they fluctuate or change on a daily, seasonal, or annual basis for a variety of reasons. For example, hydrologic and water quality conditions are dependent, in part, on climatic conditions (e.g., wet years vs. dry years); therefore, the description of the existing condition will need to be representative of the dynamic nature of the particular resource. In other words, our description of existing conditions are not just those conditions that exist at a particular point in time. Rather, existing conditions are those conditions reflecting the modern or "today's" environment and the dynamic nature of the resource. Table 2 also shows the period of analysis for resource categories to be used in the CALFED Programmatic EIR/EIS.

The CVPIA PEIS and the State Water Resources Control Board (SWRCB) EIR on the Delta Water Rights Decision have identified a period of analysis for resource categories considered in these documents. Table 3 contrasts the period of analysis used in the CVPIA PEIS and the SWRCB water rights EIR, and what is being proposed for the CALFED Programmatic EIR/EIS. It should be noted that information reported here for the SWRCB water rights EIR is preliminary and subject to change.

Table 2. Historical Period and Period of Analysis for Resource Categories for the CALFED Bay-Delta Program EIR/EIS

| Resource Category | Historical Period ^a | Period of Analysis |
|--|--------------------------------|--------------------|
| Physical Environment | | |
| Surface-Water Hydrology | 1920-1995 | 1920-1995 |
| Groundwater (includes drainage and subsidence) | 1920-1995 | 1986-1995 |
| Water Supply | 1940-1995 | 1986-1995 |
| Geology and Soils | 1940-1995 | 1995 |
| Air Quality | 1967-1995 | 1986-1995 |
| Biological Environment | | |
| Fisheries | pre-1920s | 1986-1995 |
| Vegetation | pre-1920s | 1986-1995 |
| Wildlife | pre-1920s | 1986-1995 |
| Economics and Social Environment | | |
| Agricultural Land Use | 1920-1995 | 1986-1995 |
| Municipal and Industrial Land Use | 1920-1995 | 1986-1995 |
| Agricultural Economics | 1920-1995 | 1986-1995 |
| Municipal and Industrial Economics | 1920-1995 | 1986-1995 |
| Power Production | 1960-1995 | 1986-1995 |
| Recreation | 1940-1995 | 1986-1995 |
| Fish, Wildlife, and Recreation Economics | 1967-1995 | 1986-1995 |
| Visual Resources | 1940-1995 | 1995 |
| Cultural Resources | pre-1920s | 1995 |
| Public Health | 1967-1995 | 1995 |

^a Based on historical period selected for resource categories for the CVPIA PEIS.

Table 3. Comparison of Period of Analysis for Resource Categories Used in the CVPIA Programmatic EIS, SWRCB Water Rights EIR, and Proposed for the CALFED Bay-Delta Programmatic EIR/EIS

| Resource Category | CVPIA | SWRCB EIR | Proposed CALFED Bay-Delta Program |
|---|-----------|---|--|
| Physical Environment | | | |
| Surface-Water Hydrology and Water Quality | 1920-1992 | 1922-1994 hydrologic record; D-1485 water quality standards, upstream river requirements as required by the biological opinions to protect fish | 1922-1995 hydrologic record; SWRCB 95-1WR (Bay-Delta Accord) |
| Groundwater | 1992 | 1985-1994 | 1986-1995 |
| Water Demand and Supply | 1992 | 1995 demand as reported by Bulletin 160-93 | Under consideration |
| Geology and Soils | 1980 | 1985-1994 | 1995 |
| Air Quality | | 1985-1994 | 1986-1995 |
| Biological Environment | | | |
| Fishery Resources | 1967-1991 | 1985-1994 | 1986-1995 |
| Vegetation | 1992 | 1985-1994 | 1986-1995 |
| Wildlife | 1992 | 1985-1994 | 1986-1995 |
| Economics and Social Environment | | | |
| Agricultural Economics | 1990-1992 | 1985-1994 | 1986-1995 |
| M&I Economics | 1983-1990 | 1985-1994 | 1986-1995 |
| Power Production | 1992 | 1985-1994 | 1986-1995 |
| Recreation | 1983-1992 | 1985-1994 | 1986-1995 |
| Fish, Wildlife, and Recreation Economics | 1992 | 1985-1994 | 1986-1995 |
| Visual Resources | 1992 | 1994 | 1995 |
| Land Use | 1992 | 1985-1994 | 1986-1995 |
| Regional Economics | 1992 | 1985-1994 | 1986-1995 |
| Cultural Resources | 1992 | 1994 | 1995 |

ELEMENTS OF EXISTING CONDITIONS

This section discusses the existing elements to be included, and the reasons for their inclusion, as part of existing conditions. Elements include the long-term biological opinions for winter-run chinook salmon and delta smelt, the Coordinated Operations Agreement (COA), water conservation, and CVPIA actions that have been implemented to date.

Bay-Delta Water Quality Standards

SWRCB's interim water quality control plan (95-1 WR) will be incorporated into the existing conditions baseline. The plan was an outgrowth from the December 15, 1994 Bay-Delta Accord. Because the interim water quality control plan is currently in place, CALFED believes that it should be included. Some participants have expressed concern about using this decision because it has led to a reduction in available water supplies. To address this issue, CALFED is considering conducting an analysis of recent hydrologic conditions to document the effects of the SWRCB decision.

Biological Opinions

The long-term biological opinions governing operations of the Central Valley Project (CVP) and State Water Project (SWP) are proposed to be included as part of existing conditions.

Coordinated Operations Agreement

The current COA is proposed to be included as part of existing conditions. COA has been in place for many years and has governed the operations of CVP and SWP.

Central Valley Project and State Water Project Facilities

All existing CVP and SWP facilities and their current operations are proposed for inclusion as part of existing conditions.

Trinity River Flows

Trinity River flows are the subject of a separate ongoing study. For purposes of CALFED, Trinity River flows will be assumed to be 340,000 acre-feet per year (af/yr) in all year types. This assumption generally reflects current operations of the Trinity River system.

Contract and Water Rights Deliveries

Appropriate assumptions for contract and water rights deliveries under existing conditions are under consideration by CALFED. One possible approach is to use actual deliveries over a period of recent years to establish appropriate assumptions. CALFED is interested in receiving input on this topic.

Water Conservation

Current water conservation levels as estimated in California Department of Water Resources Bulletin 160-93 are proposed for inclusion as part of existing conditions.

Power

Current power production policies are proposed for inclusion as part of existing conditions. Power is assumed to be produced incidental to CVP operations and current wheeling agreements are assumed to be in place.

Population Projections

It is proposed that current population estimates will be based on census data.

CVPIA Actions

CALFED proposes to include the dedication of up to 800,000 af/yr of CVP water for fish and wildlife enhancement, the delivery of firm "Level 2" water supplies to wildlife refuges, and the "ramping up" of deliveries to refuges to "Level 4" quantities within the existing conditions scenario. Wildlife refuges are assumed to have received 30% of the additional increment of Level 4 water supplies as of 1995. Because these quantities have been delivered only as firm water for a very short period of time (since enactment of CVPIA) the discussion of existing conditions will describe conditions both prior to and since enactment of CVPIA under several resource categories.

Instream Flow Requirements

CALFED proposes to include instream flow requirements currently in place as part of existing conditions. These include Federal Regulatory Energy Commission (FERC) requirements on the Mokelumne and Tuolumne Rivers and upstream river conditions related to temperature as required in the biological opinions for winter-run chinook salmon and delta smelt.

POSSIBLE ADDITIONAL ANALYSES

CALFED recognizes that there are certain topics that may warrant additional analyses. For example, concerns have been expressed by various groups and individuals that the CALFED Bay-Delta Program is a long-term action that can be perceived as having several possible "start dates" and that selection of a particular point in time as the definition of existing conditions has varying implications for describing resource conditions. This is particularly true for water supply and hydrology. Since 1992, two major actions have occurred that have affected water supply and hydrology. First was the passage of the CVPIA, which required immediate implementation of the dedication of CVP water supplies for fish and wildlife purposes. The second event was the signing and subsequent implementation of the Bay-Delta Accord in December 1994. The Bay-Delta Accord resulted in

revised water quality standards (SWRCB 95-1 WR) that have reduced the availability of water supplies for agricultural and urban uses. To address this issue, CALFED is considering conducting an analysis of the effects of these actions. It is possible that other similar additional analyses may be warranted.

SWRCB'S AND CVPIA'S EXISTING CONDITIONS ELEMENTS

This section discusses what is being used by SWRCB and the U.S. Bureau of Reclamation (Reclamation) in their ongoing environmental documents on the long-term water quality control plan and the CVPIA PEIS. It is not intended to describe all of the SWRCB and CVPIA assumptions, but rather it is intended to identify the differences between CALFED's, SWRCB's, and Reclamation's existing conditions scenarios.

SWRCB EIR

SWRCB intends to use the 1995 demand for water as reported in Bulletin 160-93. Water use assumptions are under consideration by CALFED. SWRCB intends to use SWRCB Decision 1485 (D-1485) water quality standards for its existing conditions baseline. CALFED is proposing to use SWRCB 95-1 standards in its existing conditions scenario.

CVPIA PEIS

The major differences between the existing-conditions scenario being developed for the CVPIA PEIS and those for CALFED are that the CVPIA PEIS generally uses the date of enactment of CVPIA as the "cut-off" date for including information in the PEIS. CALFED will be updating this information to reflect current conditions.

No-Action Alternative

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No-Action Alternative

PURPOSE OF THE No-Action Alternative

Both CEQA and NEPA require that an EIR or EIS include an examination of a no-project or No-Action Alternative (references to these alternatives will be combined and stated as the No-Action Alternative). The No-Action Alternative can be defined in different ways, but it is essentially a scenario of what would happen to the environment if the proposed action were not implemented and existing trends and conditions continued into the future. The purpose of the No-Action Alternative is to provide a baseline for assessing the environmental impacts of the proposed alternatives and to disclose to the public and decision makers the environmental consequences of those alternatives. It is important to remember that the No-Action Alternative is only basis for comparison of the potential consequences of implementing the alternatives. As such, including or excluding an action from the No-Action Alternative is not, in any way, intended to be a judgement regarding the merits of that action, or an assessment of the likelihood that the action will be implemented in the future.

CRITERIA USED TO DEFINE THE No-Action Alternative

NEPA and CEQA do not provide specific guidelines for selecting future actions to include in a No-Action Alternative. The CALFED Bay-Delta Program has chosen to focus on those future actions that could affect the physical features of the Bay-Delta system, and on the future federal and state policies that could affect the CVP and SWP. Local actions and policies will generally not be considered unless they are of sizable magnitude. CALFED is currently proposing to use the land use and population projections included in California Department of Water Resources Bulletin 160-93. Local land use changes and programs will not be specifically considered in the No-Action Alternative.

The CALFED Bay-Delta Program has used the screening criteria listed below to determine which actions to include in the No-Action Alternative. Potential actions that met all applicable criteria are proposed to be included in the No-Action Alternative. Actions that did not meet all of the applicable criteria were considered for inclusion in the cumulative impact analysis. It is important to note that, although the screening criteria are well developed and rigorous, CALFED may be required to use judgement, in some instances, in screening certain actions. Proposed criteria that were used for determining whether an action should be considered for inclusion are:

Criterion 1: Has the Action Been Approved for Implementation? To be included in the No-Action Alternative, implementation of the action must have been approved by the project sponsor or by the ultimate authorizing agency. In the case of construction-related projects, this approval must include authorization for design and construction.

Criterion 2: Does the Action Have Funding for Implementation? To be included in the No-Action Alternative, an action must have sufficient approved funding to provide for its implementation.

Criterion 3: Does the Action Have Final Environmental Documents? This criterion would be satisfied if all environmental documents and approvals necessary for implementation of the action had been completed.

Criterion 4: Does the Action Have Final Environmental Permits and Approvals? This criterion would be satisfied if all final major permits and approvals (such as a Section 404 Permit or Endangered Species Act compliance) necessary to implement the action had been obtained.

Criterion 5: Will the Action Be Excluded from the CALFED Bay-Delta Program Actions? Actions that will be included in the action alternatives for the CALFED Bay-Delta Program will not be included in the No-Action Alternative. A comparison of the action alternatives with the No-Action Alternative would be distorted if an action were included in both.

Criterion 6: Would the Effects of the Action Be Identifiable at the Level of Detail Being Considered for CALFED Bay-Delta Program Analysis? If a project's effects would be undetectable or minor in the programmatic impact analysis, the project need not be included in the No-Action Alternative. For example, if a project to be implemented by a water user could change localized conditions in the vicinity of the project but would not affect regional conditions, or if those changes would be minor, the action may not need to be included in the No-Action Alternative. This criterion is intended to avoid including actions that would not materially affect the outcome of the CALFED Bay-Delta Program alternatives analysis.

No-Action Alternative SCREENING PROCESS

List of Projects Considered

Table 4 provides a list of specific major projects and studies that was developed by CALFED to be screened for inclusion in the No-Action Alternative. Those actions which are not included in the No-Action Alternative were further considered for inclusion as a cumulative action. The first part of the table is derived directly from the CVPIA PEIS process and contains a comprehensive list of actions, studies, and projects.

In addition to the items derived from the CVPIA PEIS process, CALFED has augmented the list with major actions, studies, and projects currently known to be under consideration that could be related to the CALFED effort.

The list is not intended to identify every individual action, project, or program that has been proposed, but rather to focus on the major activities that should be considered for inclusion in the No-Action Alternative.

Table 4. Identified Projects to be Considered for Inclusion
in the No-Action Alternative or the Cumulative Impact Analysis

| Project Name | Project Status | | |
|---|----------------|--------|--------------|
| | Study | Design | Construction |
| Projects Previously Considered for Inclusion in the CVPIA PEIS | | | |
| Federal Projects | | | |
| U.S. Bureau of Reclamation | | | |
| Auburn Dam | X | X | |
| Cache Creek Basin Study | X | | |
| Central Valley Fish and Wildlife Management Study | X | | |
| Central Valley Project Operations, Total Water Management Study | X | | |
| Colusa Basin Study | X | | |
| Contra Costa Pumping Plant Modifications | X | | |
| Enlarged Cross Valley Canal | X | X | |
| Folsom-South and Lower American River Study | X | | |
| Friant Powerplants Study | X | | |
| Glenn-Colusa Irrigation District Fish Facility | X | | |
| Kellogg Unit Reformulation | X | | |
| Kesterson Reservoir Clean Up | X | X | X |
| Keswick Powerplant Enlargement | X | | |
| Lake, Yolo, Napa, Solano Counties Ground Water Study | X | | |
| Mid-Valley Canal (San Joaquin Conveyance Project) | X | | |
| New Melones Lake Resource Management Plan | X | | |
| Offstream Storage | X | | |
| Red Bluff Diversion Dam Fish Passage Program | X | | |
| Refuge Water Supply Study | X | | |
| Sacramento Basin Fish Habitat Improvement Study | X | | |
| Sacramento River Drainage and Seepage Utilization Study | X | | |
| San Luis Unit Drainage Plan | X | X | |
| Shasta Lake Enlargement | X | | |
| Shasta Temperature Control Device | X | X | X |
| Sites Reservoir | X | | |
| Sonora-Keystone Unit (Stanislaus Division) | X | | |
| Spring Creek Toxicity Program | X | X | X |
| Stanislaus River Basin and Calaveras River Water Use Program | X | | |
| Tracy Pumping Plant Improvements | X | | |
| Trinity River Restoration Program | X | X | X |
| Watsonville (Pajaro Valley Basin) Management Plan | X | | |
| Western Energy Expansion Study | X | | |
| Western Sacramento Canals Unit | X | | |
| Whiskeytown Powerplant Study | X | | |

Table 4. Continued

| Project Name | Project Status | | |
|---|----------------|--------|--------------|
| | Study | Design | Construction |
| U.S. Fish and Wildlife Service | | | |
| Coleman Fish Hatchery Improvements | X | X | |
| Stone Lakes National Wildlife Refuge | X | X | X |
| Upper Sacramento River Habitat Study | X | | |
| U.S. Army Corps of Engineers | | | |
| American River Watershed Project (flood detention dam at Auburn site/downstream levee improvements) | X | | |
| Cache Creek Basin Improvements | X | X | X |
| Caliente Creek Feasibility Study | X | | |
| Kaweah River Investigation | X | | |
| Lake Oroville Enhancement Study | X | | |
| Lower San Joaquin River and Tributaries Levees Improvements | X | | |
| Marysville Lake | X | | |
| Marysville Yuba River Levees Study | X | | |
| Merced County Streams Study | X | | |
| Pine Flat Fish and Wildlife Restoration Project | X | | |
| Redbank-Fancher Creeks Dams | X | X | X |
| Sacramento River Flood Control System Evaluation | X | X | X |
| South Sacramento Streams Study | X | | |
| West Sacramento Project | X | X | X |
| Yolo Bypass Westside Tributaries Study | X | | |
| State of California Projects | | | |
| Arroyo Pasajero | X | | |
| Clear Creek Improvements | X | X | X |
| Coastal Aqueduct | X | X | X |
| Georgiana Slough Improvements | X | | |
| Kern Water Bank | X | X | X |
| Los Banos Grandes Dam and Reservoir | X | | |
| North Delta Water Management Program | X | | |
| Old River Barrier | X | | |
| Red Bank Dam Study (Cottonwood) | X | | |
| Sacramento-San Joaquin Delta Levees Subvention Project | X | X | X |
| South Delta Program | X | | |
| Suisun Marsh Protection Plan | X | X | X |
| West Delta Water Management Program | X | | |

| Project Name | Project Status | | |
|---|----------------|--------|--------------|
| | Study | Design | Construction |
| Local Projects | | | |
| Anderson-Cottonwood Irrigation District Fish Passage | X | | |
| Arvin Edison Water Storage District Exchange Program | X | | |
| Delta Wetlands Project | X | | |
| East Bay Municipal Utility District Water Management Plan | X | | |
| Fresno-Clovis Water Resources Master Plan | X | | |
| Los Vaqueros Reservoir Project | X | X | X |
| San Francisco Bay Area and San Joaquin Valley Water Reuse Project | X | | |
| Susanville-Honey Lake Resource Appraisal Study | X | | |
| Upper American River Project | X | | |
| Additional Projects Being Considered by CALFED for Inclusion in the Programmatic EIR/EIS | | | |
| Federal Projects | | | |
| American River Water Resources Investigation | X | | |
| Central Valley Project Improvement Act | X | | |
| Folsom Reservoir Outlet Shutters | X | | |
| Local Projects | | | |
| EBMUD Conjunctive Use Project | X | | |
| Delta-Mendota Conveyance | X | | |
| Folsom-South Canal Connection Project | X | | |
| Interim Reoperation of Folsom Reservoir | X | X | X |
| Raise Pardee Dam Project | X | | |
| Sacramento Water Forum | X | | |

Screening for Inclusion in the No-Action Alternative

The No-Action Alternative will be based initially on the facilities, operations, and institutional and regulatory considerations in place under existing conditions. The purpose of the screening process is to determine what additional actions, projects, and programs should be added to the existing-conditions scenario to form the No-Action Alternative.

Table 5 contains the preliminary results of the screening process for inclusion of actions in the CALFED No-Action Alternative. To be included in the No-Action Alternative, a "yes" response was required under each column heading. The table was completed by reviewing the criteria and responding to each question until either a "no" response was derived, in which case the action, study, or project was excluded from the No-Action Alternative, or until all responses were determined to be positive, in which case the item is proposed to be included in the No-Action Alternative. Using the screening criteria, relatively few projects are currently at the stage where they can be added to the existing-conditions scenario and included in the CALFED No-Action Alternative. As shown in Table 5, the following projects are being considered for inclusion in the No-Action Alternative:

- Kesterson Reservoir Cleanup Program,
- Shasta Temperature Control Device,
- Spring Creek Toxicity Program,
- Stone Lakes National Wildlife Refuge,
- Cache Creek Basin Improvements,
- Sacramento River Flood Control System Evaluation (partial),
- West Sacramento Project,
- Coastal Aqueduct,
- Kern Water Bank (phases already completed or under construction),
- Sacramento-San Joaquin Delta Levees Subvention Project,
- Central Valley Project Improvement Act (dedication of 800,000 af/yr and portion of incremental Level 4 water to refuges),
- Interim Reoperation of Folsom Reservoir, and
- Los Vaqueros Reservoir Project.

Table 5. Screening of Projects for Inclusion in the No-Action Alternative

| Project Name | Criterion 1. Has the action been approved for implementation? | Criterion 2. Does the action have funding for implementation? | Criterion 3. Does the action have final environmental documents? | Criterion 4. Does the action have final environmental permits/approvals? | Criterion 5. Will the action be excluded from the CALFED Bay-Delta actions? | Criterion 6. Would the effects of the action be identifiable at the level of detail being considered for CALFED Bay-Delta Program Analysis? | Incorporate into No-Action Alternative? |
|---|--|--|---|---|--|--|---|
| Projects Previously Considered for Inclusion in the CVPIA PEIS | | | | | | | |
| Federal Projects | | | | | | | |
| U.S. Bureau of Reclamation | | | | | | | |
| Auburn Dam | No | | | | | | No |
| Cache Creek Basin Study | No | | | | | | No |
| Central Valley Fish and Wildlife Management Study | No | | | | | | No |
| Central Valley Project Operations, Total Water Management Study | No | | | | | | No |
| Colusa Basin Study | No | | | | | | No |
| Contra Costa Pumping Plant Modifications | No | | | | | | No |
| Enlarged Cross Valley Canal | No | | | | | | No |
| Folsom-South and Lower American River Study | No | | | | | | No |
| Friant Powerplants Study | No | | | | | | No |
| Glenn-Colusa Irrigation District Fish Facility | No | | | | | | No |
| Kellogg Unit Reformulation | No | | | | | | No |
| Kesterson Reservoir Clean Up | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Keswick Powerplant Enlargement | No | | | | | | No |
| Lake, Yolo, Napa, Solano Counties Ground Water Study | No | | | | | | No |
| Mid-Valley Canal (San Joaquin Conveyance Project) | No | | | | | | No |
| New Melones Lake Resource Management Plan | No | | | | | | No |
| Offstream Storage | No | | | | | | No |
| Red Bluff Diversion Dam Fish Passage Program | No | | | | | | No |
| Refuge Water Supply Study | No | | | | | | No |
| Sacramento Basin Fish Habitat Improvement Study | No | | | | | | No |

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Table 5. Continued

| Project Name | Criterion 1. Has the action been approved for implementation? | Criterion 2. Does the action have funding for implementation? | Criterion 3. Does the action have final environmental documents? | Criterion 4. Does the action have final environmental permits/approvals? | Criterion 5. Will the action be excluded from the CALFED Bay-Delta actions? | Criterion 6. Would the effects of the action be identifiable at the level of detail being considered for CALFED Bay-Delta Program Analysis? | Incorporate into No-Action Alternative? |
|---|--|--|---|---|--|--|---|
| Sacramento River Drainage and Seepage Utilization Study | No | | | | | | No |
| San Luis Unit Drainage Plan | No | | | | | | No |
| Shasta Lake Enlargement | No | | | | | | No |
| Shasta Temperature Control Device | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Sites Reservoir | No | | | | | | No |
| Sonora-Keystone Unit (Stanislaus Division) | No | | | | | | No |
| Spring Creek Toxicity Program | Yes | Yes | Yes | Yes | Yes | Maybe | Yes |
| Stanislaus River Basin and Calaveras River Water Use Program | No | | | | | | No |
| Tracy Pumping Plant Improvements | No | | | | | | No |
| Trinity River Restoration Program | No | | | | | | No |
| Watsonville (Pajaro Valley Basin) Management Plan | No | | | | | | No |
| Western Energy Expansion Study | No | | | | | | No |
| Western Sacramento Canals Unit | No | | | | | | No |
| Whiskeytown Powerplant Study | No | | | | | | No |
| U.S. Fish and Wildlife Service | | | | | | | |
| Coleman Fish Hatchery Improvements | Partial | Partial | No | | | | No |
| Stone Lakes National Wildlife Refuge | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Upper Sacramento River Habitat Study | No | | | | | | No |
| U.S. Army Corps of Engineers | | | | | | | |
| American River Watershed Project (flood detention dam at Auburn site/downstream levee improvements) | No | | | | | | No |

Table 5. Continued

| Project Name | Criterion 1. Has the action been approved for implementation? | Criterion 2. Does the action have funding for implementation? | Criterion 3. Does the action have final environmental documents? | Criterion 4. Does the action have final environmental permits/approvals? | Criterion 5. Will the action be excluded from the CALFED Bay-Delta actions? | Criterion 6. Would the effects of the action be identifiable at the level of detail being considered for CALFED Bay-Delta Program Analysis? | Incorporate into No-Action Alternative? |
|---|--|--|---|---|--|--|---|
| Cache Creek Basin Improvements | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Caliente Creek Feasibility Study | No | | | | | | No |
| Kaweah River Investigation | No | | | | | | No |
| Lake Oroville Enhancement Study | No | | | | | | No |
| Lower San Joaquin River and Tributaries Levees Improvements | No | | | | | | No |
| Marysville Lake | No | | | | | | No |
| Marysville Yuba River Levees Study | No | | | | | | No |
| Merced County Streams Study | No | | | | | | No |
| Pine Flat Fish and Wildlife Restoration Project | No | | | | | | No |
| Redbank-Fancher Creeks Dams | Yes | Yes | Yes | Yes | Yes | No | No |
| Sacramento River Flood Control System Evaluation (partial) | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| South Sacramento Streams Study | No | | | | | | No |
| West Sacramento Project | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Yolo Bypass Westside Tributaries Study | No | | | | | | No |
| State of California Projects | | | | | | | |
| Arroyo Pasajero | No | | | | | | No |
| Clear Creek Improvements | No | | | | | | No |
| Coastal Aqueduct | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Georgiana Slough Improvements | No | | | | | | No |
| Kern Water Bank | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Los Banos Grandes Dam and Reservoir | No | | | | | | No |
| North Delta Water Management Program | No | | | | | | No |

Table 5. Continued

| Project Name | Criterion 1. Has the action been approved for implementation? | Criterion 2. Does the action have funding for implementation? | Criterion 3. Does the action have final environmental documents? | Criterion 4. Does the action have final environmental permits/approvals? | Criterion 5. Will the action be excluded from the CALFED Bay-Delta actions? | Criterion 6. Would the effects of the action be identifiable at the level of detail being considered for CALFED Bay-Delta Program Analysis? | Incorporate into No-Action Alternative? |
|---|--|--|---|---|--|--|---|
| Old River Barrier | No | | | | | | No |
| Red Bank Dam Study (Cottonwood) | No | | | | | | No |
| Sacramento-San Joaquin Delta Levees Subvention Project | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| South Delta Program | No | | | | | | No |
| Suisun Marsh Protection Plan | No | | | | | | No |
| West Delta Water Management Program | No | | | | | | No |
| Local Projects | | | | | | | |
| Anderson-Cottonwood Irrigation District Fish Passage | No | | | | | | No |
| Arvin Edison Water Storage District Exchange Program | No | | | | | | No |
| Delta Wetlands Project | No | | | | | | No |
| East Bay Municipal Utility District Water Management Plan | Yes | No | | | | | No |
| Fresno-Clovis Water Resources Master Plan | No | | | | | | No |
| Los Vaqueros Reservoir Project | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| San Francisco Bay Area and San Joaquin Valley Water Reuse Project | No | | | | | | No |
| Susanville-Honey Lake Resource Appraisal Study | No | | | | | | No |
| Upper American River Project | No | | | | | | No |

Table 5. Continued

| Project Name | Criterion 1. Has the action been approved for implementation? | Criterion 2. Does the action have funding for implementation? | Criterion 3. Does the action have final environmental documents? | Criterion 4. Does the action have final environmental permits/approvals? | Criterion 5. Will the action be excluded from the CALFED Bay-Delta actions? | Criterion 6. Would the effects of the action be identifiable at the level of detail being considered for CALFED Bay-Delta Program Analysis? | Incorporate into No-Action Alternative? |
|--|--|--|---|---|--|--|---|
| Additional Projects Being Considered by CALFED for Inclusion in the Programmatic EIR/EIS | | | | | | | |
| Federal Projects | | | | | | | |
| American River Water Resources Investigation | No | | | | | | No |
| Central Valley Project Improvement Act (dedication of 800,000 af/yr and portion of incremental level 4 water to refuges) | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Central Valley Project Improvement Act (remaining) ^a | No | | | | | | No |
| Folsom Reservoir Outlet Shutters | Yes | No | | | | | No |
| Local Projects | | | | | | | |
| EBMUD Conjunctive Use Project | No | | | | | | No |
| Delta-Mendota Conveyance | No | | | | | | No |
| Folsom-South Canal Connection Project | No | | | | | | No |
| Interim Reoperation of Folsom Reservoir | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Raise Pardee Dam Project | No | | | | | | No |
| Sacramento Water Forum | No | | | | | | No |

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^a Remaining CVPIA actions include all actions except the dedication of 800,000 af/yr for fish and wildlife and from Level 4 water to refuges.

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ELEMENTS OF THE NO-ACTION ALTERNATIVE

This section discusses the elements assumed to be included, and the reasons for their inclusion, as part of the No-Action Alternative. Elements discussed below are similar to those discussed under existing conditions and include such items as Bay-Delta water quality standards, the long-term biological opinions for winter-run chinook salmon and delta smelt, and the COA. Comparisons of elements used as part of the CVPIA PEIS and the SWRCB EIR also are included.

Bay-Delta Water Quality Standards

CALFED has determined that SWRCB's interim water quality control plan (95-1 WR) should be incorporated into the No-Action Alternative because it is representative of the likely standards that would be set in the future.

Biological Opinions

The long-term biological opinions governing operation of CVP are assumed to apply to the No-Action Alternative. Although these opinions may be modified, CALFED believes that the current opinions represent a reasonable approximation of future requirements for delta smelt and winter-run chinook salmon under the No-Action Alternative.

Coordinated Operations Agreement

CALFED proposes to include the current COA in the No-Action Alternative. Although various changes may be made to the COA to reflect future changes in operational requirements, there is no specific information on what these future changes may include; therefore, CALFED believes that the current COA represents the best available information.

CVP and SWP Facilities

Although there are numerous proposals under consideration to modify and add to CVP and SWP facilities, none of these proposals have received complete environmental and regulatory approval; therefore, for purposes of the No-Action Alternative, CALFED proposes to include only currently operating facilities. Major modifications and additions to these facilities will be included, as appropriate, to the cumulative impact analysis.

Trinity River Flows

Trinity River flows are the subject of a separate ongoing study. CALFED proposes to include minimum flows of 340,000 af/yr as a baseline measurement in the No-Action Alternative. The Trinity River study is examining the need for higher flows; these higher flows will be considered in the study's cumulative impact analysis. Additionally, CALFED will consider conducting additional

analysis, if appropriate, to determine what effect changes to these flows might have on water availability and sensitive resources.

Contract and Water Rights Deliveries

Appropriate assumptions for contract and water rights deliveries under the No-Action Alternative are under consideration by CALFED. One possible approach is to assume that water rights and CVP and SWP contract amounts are delivered unless such deliveries would be restricted by other requirements or current physical facility limitations. CALFED is interested in receiving input on this topic.

Water Conservation

CALFED proposes to assume the conservation levels under future conditions that are described in DWR Bulletin 160-93.

Power

CALFED proposes to assume that CVP power will continue to be generated incidental to CVP operations and that no power-generation optimization would occur. CALFED also proposes to assume that a wheeling or similar arrangement would be in place to assist in CVP power marketing and delivery.

Population Projections

CALFED proposes to use future statewide population projections contained in DWR Bulletin 160-93.

CVPIA Actions

CALFED proposes to include the dedication of up to 800,000 af/yr of CVP water for fish and wildlife enhancement and the delivery of Level 4 quantities of water to wildlife refuges in its No-Action Alternative. Level 4 water supplies to wildlife refuges must be delivered by 2004 and are assumed to continue through the timeframe being considered by CALFED. Other CVPIA actions that are the subject of its PEIS will be discussed as part of the cumulative impact analysis.

Instream Flow Requirements

In developing hydrologic modeling assumptions for the No-Action Alternative, CALFED will need to establish a reasonable scenario for future water use and instream flow assumptions for future years. For example, there are substantial entitlements to water in the American River system that are not currently being fully used. CALFED does not believe that it is appropriate to assume full contract and water right deliveries under the No-Action Alternative because, in some cases, substantial new and costly facilities would be required to make those deliveries; deliveries are most likely to be constrained by institutional, regulatory, and ecosystem requirements; and such an assumption would not recognize the recent cooperative approach to integrated water-resource planning that is being

undertaken by California water interests. Over the next several months, CALFED will be working to develop appropriate assumptions.

Monterey Agreement

The Monterey Agreement was approved in 1995 and environmental documentation on the agreement was subsequently challenged in court. The court recently upheld the environmental documentation and the agreement is therefore considered appropriate to include in the No-Action Alternative. The Monterey Agreement includes 14 principles for water management for the SWP.

POSSIBLE ADDITIONAL ANALYSES

As with existing conditions, issues may arise that will warrant additional analyses for the No-Action Alternative. For example, Trinity River flows are the subject of a separate study and that study is likely to develop additional recommendations during the preparation of the Programmatic EIR/EIS. To the extent that such recommendations are different than the assumptions for Trinity River flows described above, CALFED may undertake additional analyses to determine the effect of those differences on the No-Action Alternative to determine whether such differences have important implications for the CALFED Bay-Delta Program. Similarly, flow assumptions for the American River are the subject of significant study by several agencies and groups. The material presented above indicates that appropriate assumptions for American River flow requirements will need to be developed by CALFED, in conjunction with other interested parties. It is possible that this issue will not be completely resolved during preparation of the Programmatic EIR/EIS, and it may therefore be important to examine some alternate scenarios to determine potential effects on the CALFED Bay-Delta Program.

SWRCB'S AND CVPIA'S NO-ACTION ALTERNATIVE ELEMENTS

This section discusses what is being used by SWRCB and the U.S. Bureau of Reclamation (Reclamation) in their ongoing environmental documents on the long-term water quality control plan and the CVPIA PEIS. It is not intended to describe all of the SWRCB and CVPIA assumptions, but rather it is intended to identify the differences between CALFED's, SWRCB's, and Reclamation's No-Action Alternative.

SWRCB is proposing to examine two no-project alternatives. The primary no-project alternative will consist of D-1485 and the long-term biological opinion requirements. The secondary no-project alternative will incorporate Reclamation and California Department of Water Resources implementation of the 1995 water quality control plan (SWRCB 95-1 WR). CALFED proposes to use only SWRCB 95-1 WR.

The No-Action Alternative for the CVPIA PEIS is similar to the No-Action Alternative being considered by CALFED, therefore, the CVPIA PEIS includes future contract renewals and CVP operations as major components, it is somewhat more inclusive of potential CVP operational changes such as increased Trinity River flows and future contract deliveries.

Cumulative Impact Analysis

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Cumulative Impact Analysis

PURPOSE OF THE CUMULATIVE IMPACT ANALYSIS

In a NEPA and CEQA evaluation, it is required that the preferred alternative be evaluated with the combined effects of the cumulative actions in a single analysis. Cumulative impacts are defined by NEPA and CEQA as incremental impacts on the environment that result from the proposed project in combination with other related past, present, and reasonably foreseeable future actions. The impacts of the related past and present actions will be identified as part of the discussion of existing conditions in the Programmatic EIR/EIS; therefore, this effort to identify a list of actions for the cumulative impact analysis focuses on potential future actions, particularly those that do not meet the criteria for inclusion in the No-Action Alternative.

SCREENING CRITERIA FOR INCLUSION IN THE CUMULATIVE IMPACT ANALYSIS

CALFED used the following criteria to identify reasonably foreseeable actions to be included in the cumulative impact analysis. All of the criteria had to be met for an action to be included in the cumulative impact analysis.

Criterion 1: Is the action under active consideration? Active consideration is defined as having current funding and staff support for planning and design.

Criterion 2: Does the action have recently completed environmental documentation or are environmental documents in some stage of active completion? This criterion is intended to eliminate actions that have been under consideration for a long period of time but for which no recent effort has been undertaken that would allow a reasonable projection for completion.

Criterion 3: Would the action be completed and operational within the timeframe being considered for the CALFED Bay Delta Program (Assumed to be 2020)?

Criterion 4: Does the action, in combination with the CALFED Bay-Delta Program action alternatives, have the potential to affect the same resources? This criterion is intended to exclude actions that meet the other criteria, but that have little or no potential to result in cumulative impacts.

SCREENING FOR INCLUSION IN THE CUMULATIVE IMPACT ANALYSIS

Once the actions were screened for inclusion in the No-Action Alternative, CALFED conducted a second screening of the remaining actions, studies, and projects to determine whether those items should be included in the cumulative impact analysis. Similar to the approach for screening items for inclusion in the No-Action Alternative, the remaining items were assessed by comparing each of the items to the screening criteria for inclusion in the cumulative impact analysis (Table 6). Each of the criteria was evaluated and the item was considered until either a "no" response was appropriate or, if all responses were positive, the action was considered appropriate to include in the cumulative impact analysis. The following actions are tentatively considered appropriate for inclusion:

- Cache Creek Basin Study,
- Glenn-Colusa Irrigation District Fish Facility,
- Trinity River Restoration Program,
- American River Watershed Project,
- Sacramento River Flood Control System Evaluation (partial),
- South-Delta Program,
- Delta Wetlands Project,
- American River Water Resources Investigation,
- CVPIA (remaining),
- Delta Mendota Conveyance Project,
- Folsom South Canal Connection Project, and
- Sacramento Water Forum Process.

POSSIBLE ADDITIONAL ANALYSES

It is possible that during preparation of the Programmatic EIR/EIS, additional projects will be developed to the point that they would pass the screening criteria described above. CALFED will review such projects and determine the need for any additional analyses to incorporate these projects into the cumulative impact analysis.

Table 6. Summary of Projects Considered for Inclusion in the Cumulative Impact Analysis

| Project Name | Is the Project Under Active Consideration? | Does the Action Have Recently Completed or Active Environmental Documentation? | Could the Action Be Completed Within the Time Frame Being Considered for the Program? | Does the Action, in Combination with the Program Alternative Have the Potential to Affect the Same Resources? | Include in Cumulative Impact Analysis? |
|---|--|--|---|---|--|
| Projects Previously Considered for Inclusion in the CVPIA PEIS | | | | | |
| Federal Projects | | | | | |
| U.S. Bureau of Reclamation | | | | | |
| Auburn Dam | No | | | | No |
| Cache Creek Basin Study | Yes | Yes | Yes | Yes | Yes |
| Central Valley Fish and Wildlife Management Study | No | | | | No |
| Central Valley Project Operations, Total Water Management Study | No | | | | No |
| Colusa Basin Study | No | | | | No |
| Contra Costa Pumping Plant Modifications | No | | | | No |
| Enlarged Cross Valley Canal | No | | | | No |
| Folsom-South and Lower American River Study | No | | | | No |
| Friant Powerplants Study | No | | | | No |
| Glenn-Colusa Irrigation District Fish Facility | Yes | Yes | Yes | Yes | Yes |
| Kellogg Unit Reformulation | No | | | | No |
| Keswick Powerplant Enlargement | No | | | | No |
| Lake, Yolo, Napa, Solano Counties Ground Water Study | No | | | | No |
| Mid-Valley Canal (San Joaquin Conveyance Project) | No | | | | No |
| New Melones Lake Resource Management Plan | No | | | | No |
| Offstream Storage | No | | | | No |
| Red Bluff Diversion Dam Fish Passage Program | No | | | | No |
| Refuge Water Supply Study | No | | | | No |
| Sacramento Basin Fish Habitat Improvement Study | No | | | | No |
| Sacramento River Drainage and Seepage Utilization Study | No | | | | No |

Table 6. Continued

| Project Name | Is the Project Under Active Consideration? | Does the Action Have Recently Completed or Active Environmental Documentation? | Could the Action Be Completed Within the Time Frame Being Considered for the Program? | Does the Action, in Combination with the Program Alternative Have the Potential to Affect the Same Resources? | Include in Cumulative Impact Analysis? |
|---|--|--|---|---|--|
| San Luis Unit Drainage Plan | No | | | | No |
| Shasta Lake Enlargement | No | | | | No |
| Sites Reservoir | No | | | | No |
| Sonora-Keystone Unit (Stanislaus Division) | No | | | | No |
| Stanislaus River Basin and Calaveras River Water Use Program | Yes | No | | | No |
| Tracy Pumping Plant Improvements | No | | | | No |
| Trinity River Restoration Program | Yes | Yes | Yes | Yes | Yes |
| Watsonville (Pajaro Valley Basin) Management Plan | No | | | | No |
| Western Energy Expansion Study | No | | | | No |
| Western Sacramento Canals Unit | No | | | | No |
| Whiskeytown Powerplant Study | No | | | | No |
| U.S. Fish and Wildlife Service | | | | | |
| Coleman Fish Hatchery Improvements | No | | | | No |
| Upper Sacramento River Habitat Study | No | | | | No |
| U.S. Army Corps of Engineers | | | | | |
| American River Watershed Project (flood detention dam at Auburn site/downstream levee improvements) | Yes | Yes | Yes | Yes | Yes |
| Caliente Creek Feasibility Study | Yes | No | | | No |
| Kaweah River Investigation | Yes | No | | | No |
| Lake Oroville Enhancement Study | Yes | No | | | No |
| Lower San Joaquin River and Tributaries Levees Improvements | Yes | Yes | Yes | Possibly | Possibly |

Table 6. Continued

| Project Name | Is the Project Under Active Consideration? | Does the Action Have Recently Completed or Active Environmental Documentation? | Could the Action Be Completed Within the Time Frame Being Considered for the Program? | Does the Action, in Combination with the Program Alternative Have the Potential to Affect the Same Resources? | Include in Cumulative Impact Analysis? |
|--|--|--|---|---|--|
| Marysville Lake | No | | | | No |
| Merced County Streams Study | Yes | Yes | Yes | Possibly | Possibly |
| Pine Flat Fish and Wildlife Restoration Project | Yes | No | | Possibly | No |
| Sacramento River Flood Control System Evaluation (partial) | Yes | Yes | Yes | Yes | Yes |
| South Sacramento Streams Study | Yes | No | | | No |
| Yolo Bypass Westside Tributaries Study | Yes | No | | | No |
| 39 State of California Projects | | | | | |
| Arroyo Pasajero | Yes | No | | | No |
| Clear Creek Improvements | Yes | No | | | No |
| Georgiana Slough Improvements | Yes | No | | | No |
| Los Banos Grandes Dam and Reservoir | No | | | | No |
| North Delta Water Management Program | No | | | | No |
| Old River Barrier | No | | | | No |
| Red Bank Dam Study (Cottonwood) | No | | | | No |
| South Delta Program | Yes | Yes | Yes | Yes | Yes |
| West Delta Water Management Program | No | | | | |

Table 6. Continued

| Project Name | Is the Project Under Active Consideration? | Does the Action Have Recently Completed or Active Environmental Documentation? | Could the Action Be Completed Within the Time Frame Being Considered for the Program? | Does the Action, in Combination with the Program Alternative Have the Potential to Affect the Same Resources? | Include in Cumulative Impact Analysis? |
|---|--|--|---|---|--|
| Local Projects | | | | | |
| Anderson-Cottonwood Irrigation District Fish Passage | No | | | | No |
| Arvin Edison Water Storage District Exchange Program | No | | | | No |
| Delta Wetlands Project | Yes | Yes | Yes | Yes | Yes |
| East Bay Municipal Utility District Water Management Plan | Yes | No | | | No |
| Fresno-Clovis Water Resources Master Plan | No | | | | No |
| San Francisco Bay Area and San Joaquin Valley Water Reuse Project | Yes | No | | | No |
| Susanville-Honey Lake Resource Appraisal Study | No | | | | No |
| Upper American River Project | No | | | | No |
| Additional Projects Being Considered by CALFED for Inclusion in the Programmatic EIR/EIS | | | | | |
| Federal Projects | | | | | |
| American River Water Resources Investigation | Yes | Yes | Yes | Yes | Yes |
| Central Valley Project Improvement Act (remaining) | Yes | Yes | Yes | Yes | Yes |
| Local Projects | | | | | |
| Delta-Mendota Conveyance | Yes | Yes | Yes | Yes | Yes |
| EBMUD Conjunctive Use Project | Yes | No | | | No |
| Folsom-South Canal Connection Project | Yes | Yes | Yes | Yes | Yes |
| Raise Pardee Dam Project | Yes | No | | | No |
| Sacramento Water Forum | Yes | Yes | Yes | Yes | Yes |

Appendix

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Appendix

GLOSSARY OF TERMS

Action - A structure, project, operating criteria, program, regulation, policy, or restoration activity that is intended to address a problem or resolve a conflict in the Bay-Delta system.

Affected environment - The physical, biological, social, and economic environment within which human activity is proposed. Also known as existing conditions or current conditions.

Baseline - There are two baselines for comparison with alternatives; existing conditions and the No-Action Alternative.

Cumulative actions - All of the actions proposed by others that could occur during the timeframe being considered for the CALFED Programmatic EIR/EIS.

Cumulative impacts - Two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.

(A) The individual effects may be changes resulting from a single project or a number of separate projects.

(B) The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

Effect - "Effect" and "impact" are synonymous.

(A) Direct or primary effects are those caused by the project and occur at the same time and place.

(B) Indirect or secondary effects are those caused by the project, and occur later in time or are farther removed in distance, but are still reasonably foreseeable. Indirect or secondary effects may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density, or growth rate, and related effects on air and water and other natural systems, including ecosystems.

Element - Conditions and regulatory considerations that make up part of existing conditions and the No-Action Alternative.

Existing condition - see "Affected environment".

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