GUIDE TO REGULATORY COMPLIANCE FOR IMPLEMENTING CALFED ACTIONS

Volume 1: General Guidance

Revised July 2002

Disclaimer: This guide is intended to provide accurate and current information on federal and California regulations most pertinent to projects implementing CALFED's long-term plan. The discussions of regulations are necessarily general and do not cover all exceptions and variations to general rules. In some cases, common language is used rather than precise legal language to improve understandability. This publication should not be relied on for legal guidance; consultation with legal counsel may be required to address specific regulatory situations. Ultimate authorities on environmental compliance issues are the regulatory agencies and not the information provided in this guide.

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LIST OF ACRONYMS AND ABBREVIATIONS

ASIP	action specific implementation plan
BCDC	San Francisco Bay Conservation and Development Commission
CALFED	CALFED Bay-Delta Program
CCC	California Coastal Commission
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CWA	Clean Water Act
DFG	California Department of Fish and Game
EA	environmental assessment
EIR	environmental impact report
EIS	environmental impact statement
EPA	U.S. Environmental Protection Agency
FESA	federal Endangered Species Act
FONSI	finding of no significant impact
JARPA	joint aquatic resource permit application
MOU	memorandum of understanding
MSCS	Multi-Species Conservation Strategy
NCCP	natural community conservation plan
NCCPA	Natural Community Conservation Planning Act
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
PEIS/EIR	CALFED Bay-Delta Program Programmatic Environmental Impact Statement/ Environmental Impact Report
PPA	Preferred Program Alternative
ROD	record of decision
SHPO	State Historic Preservation Officer
SLC	State Lands Commission
SWP	State Water Project
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service

CHAPTER 1. INTRODUCTION

CHAPTER OVERVIEW

The Guide to Regulatory Compliance for Implementing CALFED Activities has been prepared pursuant to the Memorandum of Understanding on a Permit Clearinghouse for the Bay Delta Program, signed by certain CALFED agencies in December 2000. The purpose of the Guide is to assist program and project managers in meeting CALFED commitments and environmental regulatory requirements.

This chapter includes a brief background of the CALFED Bay-Delta Program, Guide objectives, a description of how the Guide is organized and a section on how to use the Guide.

BACKGROUND OF THE CALFED BAY-DELTA PROGRAM

The CALFED Bay-Delta Program (CALFED) is a consortium of federal and State agencies working to restore ecological health and improve water management for beneficial uses of the San Francisco Bay/Sacramento–San Joaquin River Delta estuary. The CALFED effort is a collaboration between these agencies and Bay-Delta "stakeholders"—urban and agricultural water users, fishing interests, environmental organizations, businesses, and others—who contribute to CALFED design, problem solving, and decision making.

The CALFED planning effort has been divided into three phases:

- **Phase I.** During this phase, the participants identified actions to resolve Bay-Delta problems and developed these actions into a set of alternatives for programmatic environmental review.

- **Phase II.** In this phase, the CALFED agencies identified a Preferred Program Alternative, which represents a long-term plan (CALFED Plan) to address Bay-Delta problems; conducted programmatic environmental review focused on broad policy and resource-allocation decisions; and developed a strategy for implementing the CALFED Plan. Phase II concluded in August 2000 with the filing of the Programmatic Record of Decision (ROD), including certification, for the CALFED Bay-Delta Program Final Programmatic Environmental Impact Statement/Environmental Impact Report (CALFED PEIS/EIR).

- **Phase III.** This phase consists of implementing, over a 30-year period, a variety of site-specific actions that are components of the CALFED Plan analyzed in Phase II; the actions will be implemented in stages, with Stage 1 consisting of the first 7 years of implementation.

The CALFED agencies achieved programmatic compliance with the National Environmental Policy Act (NEPA), the California Environmental Quality Act (CEQA), and other environmental processes during Phase II. Implementation of all actions in Phase III will require site-specific environmental review and project-specific permitting and other regulatory compliance.

The responsibility for implementing specific CALFED Plan actions lies with various CALFED member agencies and stakeholders. Implementing any specific action probably will require the completion of project-level compliance with NEPA and CEQA that tiers from the CALFED PEIS/EIR. Project proponents also will need to comply with the environmental review and permitting requirements of numerous federal, State, and local agencies. Depending on the size and complexity of the action, several of the agency authorizations and permitting requirements may involve complex procedures, detailed review of proposed actions by the agencies that have regulatory authority, and potentially lengthy procedures for processing applications.

The CALFED agencies are committed to coordinating and facilitating the permit application and environmental compliance processes across all CALFED programs as this site-specific work progresses. The CALFED agencies have undertaken a number of initiatives to assist project proponents through this process, including the preparation of this Guide. The permit coordination efforts are focused on increasing the efficiency and effectiveness of the environmental compliance process. However, CALFED Plan projects will not have any higher priority in the permitting and review process than non-CALFED Plan projects.

OBJECTIVES OF THIS GUIDE

The CALFED agencies' objectives in providing this Guide are to:

- Explain CALFED's environmental commitments and provide guidance and materials to help project proponents meet these commitments;
- Help project proponents develop environmental compliance strategies for their projects;
- Explain how to comply with NEPA and CEQA;
- Explain how to use the CALFED programmatic compliance documents; and
- Explain the various permits and approvals that may be needed for projects and how they can be integrated into the NEPA/CEQA compliance process.

GUIDE ORGANIZATION

This Guide is designed to provide clear guidance on the environmental regulatory requirements that could apply to CALFED Plan actions. To provide this guidance, the Guide is presented in two volumes, one providing general recommendations on environmental regulatory compliance for CALFED Plan actions and the second presenting detailed information on specific regulatory processes.

Volume 1 contains the following chapters:

- **Chapter 1, "Introduction"**—Provides an overview of CALFED, guide objectives, organization of the guide, and recommendations for using the guide.
- **Chapter 2, "Environmental Compliance Commitments Outlined in the CALFED Bay-Delta Program Programmatic Record of Decision"**—Discusses the need for individual projects to recognize and comply with environmental compliance commitments made in the Programmatic Record of Decision. This chapter lists the environmental compliance commitments. Attachments to Chapter 2 provide information about how to meet the commitments and how to document that the commitments have been met.
- **Chapter 3, "Developing an Environmental Compliance Strategy including Integrating Permitting into the NEPA/CEQA Compliance Process**"—Describes a general strategy for completing the environmental compliance requirements for implementing CALFED Plan actions. An important component of the strategy recommended by the CALFED agencies is how project proponents can integrate compliance with other environmental laws and regulations into the steps of NEPA and CEQA compliance. This chapter includes a section on this topic.

Volume 2 provides information to assist project proponents in complying with the specific federal, State, and local environmental regulatory processes that could apply to CALFED Plan actions. Included are examples of applications and agency approvals and permits.

USING THIS GUIDE

This Guide was prepared by CALFED Bay-Delta Program staff and consultants. It does not replace formal or informal guidance issued by agencies on their regulatory programs. Every effort has been made to assure that this Guide is consistent with the respective agencies' interpretations of their regulatory requirements. Nevertheless, this Guide necessarily summarizes the various programs, and readers should consult the formal and informal guidance and other official sources referenced in the bibliography for a more complete understanding of each regulatory program. To the extent that there is any inconsistency between this Guide and official regulatory agency guidance, the agency guidance must supercede this Guide.

This Guide provides two types of recommendations for achieving efficient environmental regulatory compliance. One set of recommendations is not specific to a particular type of action

or regulatory process, but applies generally to implementation of CALFED Plan actions. These recommendations are in this volume, and apply to the environmental compliance commitments made by the CALFED agencies in adopting the Programmatic ROD. This volume includes guidance on meeting these commitments (Chapter 2), a general strategy for addressing regulatory compliance requirements, (Chapter 3) and recommendations on integrating compliance with NEPA and CEQA with other regulatory processes. The size and complexity of a project, as well as the type of agencies involved and resources affected by the project, will determine the recommendations that specifically apply to any action.

The second set of recommendations applies to specific regulatory processes. These recommendations are presented for each regulatory process in Volume 2 under the heading "What Are the Opportunities for Facilitating Compliance with This Process?" The CALFED agencies also have made various programmatic commitments and developed programmatic permits to administer these processes. The recommendations in Volume 2 include guidance on using these programmatic commitments and permits.

Volume 1 is structured to be used as a stand-alone guide. The intent of this volume set is to assist CALFED Bay-Delta Program member agencies and project proponents in developing consistent, coordinated, and thorough strategies for environmental documentation and regulatory compliance for the individual CALFED Plan actions. Project proponents, however, are encouraged to use Volume 2 in conjunction with this volume to obtain additional information and recommendations on completing specific regulatory processes, including recommendations on using programmatic permits or approvals for some of these processes.

The regulatory compliance recommendations in this Guide are provided to facilitate the project management and planning process; however, facilitating regulatory compliance is only one aspect of project planning and should be coordinated with the other aspects, including development of the project budget, schedule, design, and monitoring program.

There are a number of public and privately published references that provide additional information on regulatory processes in California. Some of these are listed below:

- California Office of Permit Assistance. 1997. *California Permit Handbook.* California Trade and Commerce Agency. Sacramento, CA.

- Bass, R. E., A. I. Herson, and K. M. Bogdan. 2001. *The NEPA Book: A Step-by-Step Guide to the National Environmental Policy Act.* Solano Press Books. Point Arena, CA.

- Bass, R. E., A. I. Herson, and K. M. Bogdan. 1999. *CEQA Deskbook: A Step-by-Step Guide on How to Comply with the California Environmental Quality Act.* Second edition. Solano Press Books. Point Arena, CA.

- Cylinder, P. D., K. M. Bogdan, E. M. Davis, and A. I. Herson. 1995. *Wetlands Regulation: A Complete Guide to Federal and California Programs.* Solano Press Books. Point Arena, CA.

■ Curtin, D. 1999. *Curtin's California Land Use and Planning Law*. Solano Press Books. Point Arena, CA.

CHAPTER 2. ENVIRONMENTAL COMPLIANCE COMMITMENTS OUTLINED IN THE CALFED BAY-DELTA PROGRAM PROGRAMMATIC RECORD OF DECISION

CHAPTER OVERVIEW

This chapter describes the environmental compliance commitments of the CALFED Bay-Delta Program Programmatic Record of Decision (CALFED ROD). All projects carrying out the CALFED Plan need to meet these commitments. There are four attachments related to this chapter: (1) a summary of the Permit Clearinghouse Memorandum of Understanding and the complete text of the MOU; (2) Guidance for Tiering from the CALFED Programmatic EIS/EIR; (3) the Environmental Consequences—Mitigation Strategies Checklist, and (4) an example illustrating how to meet commitments, entitled Meeting the CALFED ROD's Environmental Compliance Commitments.

To help projects meet the CALFED Plan goals, CALFED ROD environmental compliance commitments and environmental regulatory requirements, CALFED agencies entered into the Memorandum of Understanding on a Permit Clearinghouse for the CALFED Bay-Delta Program (MOU). This MOU established "permit coordinators" within the CALFED Program. These permit coordinators are available to assist Program and agency staff implementing CALFED Plan activities in meeting regulatory requirements and the environmental compliance commitments. The MOU also contains understandings regarding the roles of CALFED agency staff in the various environmental compliance processes, outlines a dispute resolution process, and other items designed to facilitate environmental compliance. Attachment 1 contains a summary (part A) and the entire MOU (part B).

ENVIRONMENTAL COMPLIANCE COMMITMENTS

The environmental compliance commitments listed are in the CALFED ROD. References provided in the following text are to help the reader locate the appropriate citations in the CALFED ROD as well as other sections of this Guide that discuss the commitments.

1. **NEPA/CEQA documents for the many projects enacting the CALFED Plan must "tier" from the CALFED Programmatic EIS/EIR (CALFED PEIS/EIR).**

   "For actions contained within the Preferred Program Alternative that are undertaken by a CALFED Agency or funded with money designated for meeting

CALFED purposes, environmental review will tier from the Final Programmatic EIS/EIR." (CALFED Program ROD, page 6)

Besides meeting a requirement to disclose the "whole" project, this establishes the link between the individual project and the extensive analysis already completed in the CALFED PEIS/EIR, avoiding having to repeat this work. Additional information and recommendations for tiering from the CALFED PEIS/EIR can be found in Attachment 2.

Briefly, tiering environmental documents refers to the process of addressing a broad, general program, policy, or proposal in an initial, general environmental document and analyzing site-specific proposals related to the initial program, plan, or policy in a subsequent document that focuses on the issues specific to the later project. The CALFED PEIS/EIR broadly describes the expected environmental effects of the CALFED Plan and is considered a "first tier" document. Site-specific projects that implement the CALFED Plan and undergo NEPA/CEQA review will be using the CALFED PEIS/EIR as a guide and template. Lead agencies preparing subsequent "second tier" documents will focus on project-specific environmental analysis.

Tiering allows lead agencies to focus on the site-specific impacts of the project, rather than addressing broader, more general issues that have been addressed in the first-tier EIS/EIR. Issues ripe for decision at the time of preparation of the tiered document should be the focus; issues that were discussed and settled for the overall program need not be re-addressed. Second tiered documents should focus on impacts on the local area, site-specific mitigation measures, and project design or alignment alternatives. Second tier documents should refer to CALFED PEIS/EIR discussions regarding broader program alternatives. Analyses of cumulative impacts, growth inducement, and areawide impacts in the second tiered document may reference the CALFED PEIS/EIR as the basis of analysis, but in most cases will require more specific information about the particular project's potential to cause wide-ranging effects.

Tiering from the CALFED PEIS/EIR means that a portion of the analysis that would be required for a stand-alone environmental document has already been prepared, and that many of the difficult larger issues have already been addressed. Duplicative consideration of larger policy issues contained in the program can be avoided, saving considerable time and expense.

An agency choosing not to tier can expect to make a substantial commitment of time and resources to reanalyze a full range of alternatives, cumulative impacts, and other issues that were already addressed in the CALFED PEIS/EIR. Use the CALFED PEIS/EIR to benefit from the CALFED Program's work in identifying significant impacts and mitigation strategies, and to ensure that your approaches to implementing mitigation and monitoring are consistent with the CALFED Plan.

2. **NEPA/CEQA documents for projects carrying out the CALFED Plan must consider the Mitigation Strategies adopted in the CALFED ROD, and adopt mitigation measures derived from these strategies or other mitigation measures to avoid, minimize or reduce significant adverse environmental impacts.**

"The Final Programmatic EIS/EIR sets out many potential mitigation measures to be used during project-specific planning where appropriate. The CALFED Agencies will consider and adopt these measures when conducting second-tier environmental review. In addition to the mitigation measures identified at the programmatic level, the CALFED Agencies will also consider and adopt feasible mitigation measures intended to address project-specific impacts." (CALFED Program ROD, page 29)

Attachment 3 consists of a series of checklists displaying the potentially significant adverse impacts identified in the CALFED PEIS/EIR and associated mitigation strategies. Project proponents (or lead governmental agency) should use these checklists to help identify specific project impacts and to demonstrate and document that the mitigation strategies in the CALFED PEIS/EIR were considered in implementing project NEPA/CEQA documents.

The checklists are meant to be reproduced and used as they appear or modified to fit the format of the NEPA and/or CEQA environmental document (environmental assessment/initial study or EIS/EIR) into which they are incorporated. An explanation of how to use the tables is provided at the beginning of Attachment 3.

3. Projects carrying out the long-term CALFED Plan must include a monitoring plan to ensure the mitigation measures that were adopted are implemented.

"The [CALFED] mitigation monitoring plan includes review, guidance, and reporting components. The lead agencies for second tier documents will note which applicable programmatic mitigation strategies are being adopted and explain why others are not. They will provide a schedule for implementing the adopted mitigation measures, and for reviewing the implementation of those measures. The lead agencies will provide a written report periodically, but at least once a year to the CALFED Agencies for programmatic review by the lead scientist as to the overall progress in implementing the mitigation measures and the efficacy thereof. A summary of this information will be included in the annual report." (CALFED Program ROD, pages 30-31)

"Projects and activities that implement the CALFED Preferred Program Alternative will be monitored to ensure that mitigation strategies developed in the Final Programmatic EIS/EIR are considered, adopted and implemented. CALFED Agencies will use this mitigation monitoring plan for projects that are within the scope of the Final Programmatic EIS/EIR and carried out or funded by CALFED Agencies as part of the CALFED Program. If and when a new governing agency with authority to carry out CALFED projects is created, this plan would apply to that new agency as well." (CALFED Program ROD, page 30)

The project proponents (or lead governmental agency) will prepare a mitigation monitoring plan. The plan will include a schedule for implementing and reporting on mitigation measures, and elements and procedures necessary to monitor the mitigation measures. Attachment 4 provides more information about mitigation monitoring and some example mitigation plan wording.

The CALFED agencies intend to manage this information so future projects can benefit from the experience gained. Mitigation monitoring results should be submitted to CALFED's lead scientist. The lead scientist will assess overall progress in implementing the mitigation measures and incorporate a summary of the mitigation monitoring information into the CALFED Annual Report.

4. CALFED agencies must consider and include the following commitments when completing both the NEPA and CEQA processes:

A. Environmental Justice Analysis (CALFED Program ROD page 32) Additional information is provided in Chapter 2, Volume 2 of this Guide under "Executive Order 12898 (Federal Actions To Address Environmental Justice In Minority And Low-Income Populations)." While the Executive Order is aimed at federal agencies, in signing the CALFED ROD State agencies agreed to undertake this evaluation. Senate Bill 115 (Solis) (Government Code Section 65040.12(c)) established the Governor's Office of Planning and Research (OPR) as the coordinating agency in State government for environmental justice programs. As defined by SB 115, environmental justice is "the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation and enforcement of environmental laws and policies."

B. Tribal Consultation/Indian Trust Assets Analysis (CALFED ROD page 34). Additional information is provided in Chapter 2, Volume 2 of this Guide under "Indian Trust Assets." While this requirement is aimed at Federal agencies, in signing the ROD State agencies agreed to undertake this evaluation.

C. Adaptive Management/Science (CALFED ROD page 34). The CALFED agencies will use science-based adaptive management in the implementation of the CALFED Plan.

5. CALFED agencies made certain programmatic environmental regulatory compliance determinations with regards to the CALFED Plan.

The following programmatic environmental compliance agreements, understandings and determinations were adopted by CALFED agencies in the CALFED ROD and need to be considered when seeking project-level compliance with the applicable regulatory requirement:

- Clean Water Act Section 404 MOU (CALFED ROD, page 77 and Attachment 4 of the ROD).

  Additional information is provided in Chapter 2, Volume 2 of this Guide under "Section 404 of the Clean Water Act/Section 10 of the Rivers and Harbors Act."

- Conservation Agreement Regarding Multi-Species Conservation Strategy (CALFED ROD, pages 77-78 and Attachment 5 of the ROD).

  Additional information is provided in Chapter 2, Volume 2 of this Guide under "Federal Endangered Species Act, California Endangered Species Act, and Natural Community Conservation Planning Act."

- Programmatic Endangered Species Act Section 7 Biological Opinions (CALFED ROD, pages 79-80 and Attachment 6a and 6b of the ROD).

  Additional information is provided in Chapter 2, Volume 2 of this Guide under "Federal Endangered Species Act, California Endangered Species Act, and Natural Community Conservation Planning Act."

- Natural Community Conservation Plan Determination (CALFED ROD, page 80 and Attachment 7 of the ROD)

  Additional information is provided in Chapter 2, Volume 2 of this Guide under "Federal Endangered Species Act, California Endangered Species Act, and Natural Community Conservation Planning Act."

- Clean Water Act Section 401 MOU (CALFED ROD, pages 80-81 and Attachment 8 of the ROD)

  Additional information is provided in Chapter 2, Volume 2 of this Guide under "Section 401 of the Clean Water Act."

- Coastal Zone Management Act Programmatic Consistency Determination (CALFED ROD, page 81 and Attachment 9 of the ROD)

  Additional information is provided in Chapter 2, Volume 2 of this Guide under "Coastal Zone Management Act."

In seeking permits for projects subject to these regulatory requirements, project proponents (or lead governmental agency responsible for complying with the permit) need to:

- Consult with the agency administering the regulatory requirement.
- Determine if project-level compliance is required.
- Review the understanding, agreement or determination and use and/or comply with any commitments made at the programmatic level.
- Determine if the Action Specific Implementation Plan (ASIP) process is applicable to projects subject to FESA, CESA and NCCPA and if appropriate, prepare an ASIP.
- Use the Summary of Consistency table and other information from the Coastal Zone Management Act (CZMA) Programmatic Consistency Determination in evaluating the project's consistency with the CZMA and Bay Conservation and Development Commission policies.

A hypothetical example on meeting the CALFED environmental compliance commitments is provided in this volume as Attachment 4.

CHAPTER 3. DEVELOPING AN ENVIRONMENTAL COMPLIANCE STRATEGY INCLUDING INTEGRATING PERMITTING INTO THE NEPA/CEQA COMPLIANCE PROCESS

INTRODUCTION

This chapter describes a general strategy for complying with the various environmental processes. A primary recommendation in developing an environmental compliance strategy is integrating, to the fullest extent practicable, the NEPA and CEQA processes with other regulatory processes, such as those of the National Historic Preservation Act (NHPA), the federal Endangered Species Act (FESA), the California Endangered Species Act (CESA), and Section 404 of the Clean Water Act (CWA). Depending on the size and complexity of the proposed actions, the more minor actions will not require the same level of effort at integration. More detailed recommendations for integration are provided later in this chapter.

The recommendations provided in this chapter are straightforward and primarily address project timing and design. They are summarized in the following statements.

Timing:

- Plan for compliance early in the project's development.
- Begin coordinating with agencies early in the process.

Project design:

- If at all possible, design your project to address multiple CALFED Plan objectives.
- Use adaptive management to address uncertainties.

More substantially, the recommendations are:

1. Participate in early agency consultations and establish a multi-agency team to assist in regulatory compliance. Make sure agencies are aware that the project is implementing the CALFED plan.

2. Prepare a statement of purpose and need.

3. Conduct a preliminary assessment to identify any environmental, physical, or policy constraints to project implementation.

4. Prepare a preliminary description of the proposed project and alternatives.

5. Work with the multi-agency teams and CALFED Program staff to identify how the proposed project can address multiple CALFED Plan objectives.

6. Integrate environmental permitting processes into NEPA/CEQA processes, group projects when appropriate, and optimize tiering opportunities.

7. Involve the public.

8. Prepare a well-defined project description and a site-specific map (USGS topo map 1:24,000 scale).

9. Identify areas of uncertainty or controversy related to the project objectives or impacts, and develop a science-based adaptive management strategy to address these uncertainties.

10. Identify any general permits that may apply to the project.

11. Complete environmental compliance documentation and submit documents in coordination with the appropriate regulatory agencies.

12. Use the regulatory compliance strategies adopted by the CALFED agencies to make it easier to complete appropriate regulatory compliance processes.

13. Adhere to all environmental compliance commitments during project implementation, and provide data to CALFED Program staff.

Each of these recommendations is described in more detail below. They are presented here in the chronological order in which they generally would be followed. However, for many projects, some steps will be taken concurrently, while others (particularly development of the proposed project description and alternatives) may be undertaken iteratively. The following discussion generally refers to the process of preparing an environmental impact statement/ environmental impact report (EIS/EIR) to comply with NEPA and CEQA. However, NEPA and CEQA also provide for other types of environmental documents to achieve compliance. The recommendations below generally apply to all other types of documents but all recommendations may not be applicable. The recommendations do not apply to categorical exclusions and categorical exemptions.

RECOMMENDATIONS FOR AN ENVIRONMENTAL COMPLIANCE STRATEGY

1. PARTICIPATE IN EARLY AGENCY CONSULTATIONS

The project proponent or proponents should consult with appropriate agencies early in the project process regarding the types of activities planned. Make sure the agencies are aware that the project is implementing the CALFED Plan. If the project proponent consults with the agencies before submitting applications, it will be easier to develop methods to simplify and streamline permitting and integrate the permitting processes into NEPA/CEQA compliance. As part of this effort, the project proponent should begin to identify the similarities and differences between compliance requirements for the various permits that may be needed (for example, definitions of existing conditions, project scope, alternatives, and impacts). By identifying these similarities and differences, the project proponent will help ensure that different regulatory requirements are addressed effectively in one process with minimal redundancy.

For difficult or complex permitting issues, a permit coordinator (see the explanation of permit coordinators in the MOU, Attachments 1A and 1B) should be consulted to assist in this effort. The permit coordinators are CALFED Program staff members who oversee environmental compliance for the CALFED Plan projects. The permit coordinator's role is to assist in developing strategies for integrating environmental review and permitting processes and to help project proponents complete those processes. Permit coordinators also work with other CALFED staff to coordinate among the various CALFED Plan projects and to ensure that projects meet the CALFED agencies' environmental compliance commitments. They can provide a link to the CALFED Science Program so project proponents can get the assistance they need to integrate adaptive management into the development of their projects.

Project design should remain flexible, if possible, so the project proponent can modify project design and operations to avoid impacts and therefore avoid triggering regulatory compliance requirements. The issuance of permits at later stages of a project can be simplified if the project proponent defines the project early in the process in ways that identify and overcome barriers to permitting.

For larger or more complex projects, a multi-agency review team should be formed very early in the process. A more dedicated and sustained effort will be needed for these projects because more issues must be addressed and the issues are more complex. If project proponents believe they need a team, they can contact CALFED Program staff, who will assist in forming a team of representatives from each principal regulatory agency that has authority over a proposed project. The regulatory review team can assist with all the steps in environmental regulatory compliance, including:

- preparing an overall environmental compliance strategy for a proposed project;
- developing the purpose and need statement;

- identifying ways in which a project developed under the purpose and need statement can achieve multiple CALFED Plan objectives;
- defining existing conditions;
- defining the no-action alternative and the action alternatives;
- defining the range of alternatives to be analyzed;
- establishing the range of resource issues to be addressed in the environmental document;
- selecting analysis methods and tools (e.g., appropriate models);
- defining mitigation measures;
- consulting with CALFED's Science Program and developing adaptive management strategies to deal with any uncertainties regarding project effectiveness, project impacts, or mitigation measures;
- facilitating the completion of environmental review for projects, and
- ensuring that processing and mitigation requirements are applied consistently.

The team can continue to work on the project once environmental review is complete and implementation starts; tasks in this phase can include:

- ensuring that mitigation requirements are completed,
- evaluating the results of implementing the adaptive management strategy and determining whether any changes are needed, and
- using the experience gained with the completion of each project to develop more efficient strategies for completing subsequent projects.

2. PREPARE A STATEMENT OF PURPOSE AND NEED

A statement of purpose and need should be prepared when the proponent has a goal in mind and is actively preparing to make a decision on one or more alternative means of accomplishing that goal. Sometimes known as the "project objectives," the statement of purpose and need is important because it explains why the project proponent is undertaking the proposed action and what objectives the project proponent intends to achieve by that action.

To develop the purpose and need statement, the project proponent must first identify the problem to be addressed or the opportunity to be seized. Then the specific objectives of the project—what the project proponent wants to accomplish or achieve with the project—are identified. This information constitutes the project's purpose and need. The proposed action may have multiple purposes and thus require the preparation of a complex statement of purpose and need. Project proponents are encouraged to work closely with CALFED Program staff and with the multi-agency team when developing the purpose and need statement to determine whether a proposed action can serve multiple CALFED Plan objectives.

The Council on Environmental Quality's (CEQ's) NEPA guidelines specify that a statement of purpose and need for a NEPA-compliance document should be brief (not much longer than a paragraph). The guidelines direct that the statement should serve as an important screen for determining what reasonable alternatives exist to resolve the identified problem or seize the identified opportunity. Care must be taken to ensure that the statement provides an objective presentation of, rather than a justification for, a specific project. A purpose and need statement will generally allow for a range of reasonable alternatives. If a purpose and need statement appears to allow only one solution, it should be re-examined to make sure that it is not precluding reasonable alternatives.

If a CWA Section 404 permit will be required for a project, it is particularly important that the project proponent provide a well-considered purpose and need statement because the analysis and screening of alternatives for Section 404 permitting are strictly defined (see "Integrating Environmental Permitting into the NEPA/CEQA Compliance Process" later in this chapter). For this and other reasons, the agency review team should assist in the development and review of the purpose and need statement before it is finalized.

3. Conduct a Preliminary Assessment to Identify Any Environmental, Physical, or Policy Constraints to Project Implementation

Project proponents should conduct a preliminary analysis to determine whether the project's implementation might be limited by physical characteristics of the project site or conflict with other CALFED Plan programs or objectives. Such an analysis—often called a preliminary constraints analysis—should be conducted for each CALFED Plan action early in the project development process. The analysis should include an assessment of the physical features of the proposed project site to identify environmental resources and concerns specific to the site based on a preliminary understanding of the basic project features and to anticipate the environmental permitting and compliance requirements associated with it. At a minimum, the assessment should include preliminary surveys of the site for characteristics that could constitute barriers to project implementation, such as wetlands, endangered and threatened species and their habitats, cultural resources, and hazardous waste sites. The preliminary survey information could be used to identify potential areas of concern and areas to be avoided on a particular site. It could also alert project planners to the need to consider alternative sites.

In addition to the preliminary survey information, the constraints analysis should include an evaluation of whether alternatives could conflict with or have redirected effects on other CALFED Plan programs or objectives.

4. Prepare a Preliminary Description of the Proposed Project and Alternatives

Based on the purpose and need statement prepared earlier and information from the preliminary constraints analysis, the project proponent should develop a preliminary description of the proposed project and alternatives. The proposed project and alternatives should represent a reasonable range of alternatives for achieving the stated purpose and need. The development of alternatives should focus on ways to avoid or minimize environmental effects identified during the preliminary constraints analysis. If the project will require Section 404 permitting, special attention should be paid during this stage to the direction given in the CWA Section 404(b)(1) guidelines regarding ways to define practicable alternatives and allowable reasons for screening out alternatives. The multi-agency review team should be involved in formulating the proposed project and alternatives to ensure that the concerns of agencies are appropriately addressed.

5. Work with the Multi-Agency Teams and CALFED Program Staff to Identify How the Project Can Address Multiple CALFED Plan Objectives

As mentioned above in recommendation 2, "Prepare a Statement of Purpose and Need," the project proponent should attempt to identify ways in which an action can address multiple CALFED Plan objectives. At a minimum, the project proponent should select alternatives that are consistent with other CALFED Plan programs or objectives. If the actual purpose and need statement does not identify multiple CALFED Plan objectives, the project proponent can work with the multi-agency teams and CALFED Program staff to determine whether there are project alternatives that can provide benefits for other CALFED Plan programs or objectives.

6. Integrate Environmental Permitting Processes Into NEPA/CEQA Processes, Group Projects When Appropriate, and Optimize Environmental Compliance Tiering Opportunities

The project proponent can use the preliminary constraints analysis and the preliminary description of the proposed project and alternatives to refine the environmental compliance strategy to integrate environmental permitting into the NEPA/CEQA process, incorporate adaptive management, group projects when appropriate, and optimize tiering opportunities.

The objective of this step is to efficiently and effectively manage the time and effort needed to comply with NEPA/CEQA and regulatory requirements by concurrently performing necessary environmental analysis and process steps for NEPA/CEQA and regulatory compliance. In other words, the project description, alternatives development, environmental analysis and other NEPA/CEQA document requirements should be completed so they can be used for preparing regulatory permit applications. Likewise, NEPA/CEQA process steps, such as required public meetings and circulation of draft documents should be used for parallel regulatory permit processes.

One of the first steps in assessing how to comply with appropriate environmental laws and regulations is to address NEPA and CEQA requirements. After NEPA and CEQA compliance needs have been determined, the project proponent should identify the other environmental laws and regulations that require compliance based on the particular resources affected, as presented in the preliminary constraints analysis. At this stage, the project proponent can also develop a realistic environmental compliance schedule that can be incorporated into the overall project implementation schedule.

INTEGRATE PERMIT AND AUTHORIZATION REQUIREMENTS INTO THE NEPA/CEQA PROCESS

As described above under recommendation 1, "Participate in Early Agency Consultations," a primary component of an environmental compliance strategy is a plan for integrating the requirements of the other environmental laws and regulations into the NEPA/CEQA process. Suggestions for how best to accomplish this integration are provided later in this Chapter and in Tables 1 and 2. In general, attention should be paid to defining existing conditions, the proposed project and alternatives, the no-action or no-project alternative, and the scope of analysis to be undertaken in the environmental document.

GROUP PROJECTS

CALFED Plan actions may be proposed in groups where appropriate. When proposed actions are interdependent and interrelated, depending on the regulations and agencies involved, the agencies may consider the actions to be one project and may assess them in a single regulatory process. This grouping can save both time and budget by reducing the number of separate permit applications that must be prepared and negotiations that must be completed. However, if grouped actions are not interdependent and interrelated, regulatory agencies may consider them separate actions and may require separate applications and permits. Furthermore, grouping actions in this fashion may lessen the potential for permit coordination that exists for the separate actions and may increase the amount of time needed to complete regulatory compliance.

For a regulatory agency to more easily authorize a particular action, the project proponent should inform the regulatory agency why implementation of that action needs to be linked with implementation of other actions. Because of the complexity involved, the project proponent should make decisions about grouping or splitting up actions when it is developing the environmental compliance strategy.

PREPARE TIERED ENVIRONMENTAL COMPLIANCE DOCUMENTS

CALFED agencies have entered into several programmatic environmental compliance documents from which project-specific compliance will be tiered. These documents include:

- the CALFED PEIS/EIR, for compliance with NEPA and CEQA;
- the Multi-Species Conservation Strategy (MSCS), for compliance with FESA, CESA, and the Natural Community Conservation Planning Act (NCCPA);
- a programmatic Coastal Zone Management Act consistency determination;
- a programmatic memorandum of understanding (MOU) for compliance with CWA Section 404; and
- a programmatic MOU for compliance with CWA Section 401.

These documents provide important environmental compliance benefits for next-tier projects but can also result in some changes from the way an agency might have complied previously with environmental laws. The use of these documents for next-tier projects is described under each individual environmental process in Volume 2 of this Guide. Attachment 2 in this volume also includes information on how a NEPA or CEQA document should tier from the CALFED PEIS/EIR.

7. INVOLVE THE PUBLIC

Early in the environmental review process, the project proponent should solicit the views of and suggestions from landowners, local governments, tribes, and other stakeholders and from the general public. While both NEPA and CEQA generally include formal scoping and notice requirements, project proponents are encouraged to move beyond the normal requirements and actively engage the public and stakeholders. All of the following methods can be used to inform the public and stakeholders about a specific project:

- press releases,
- newsletters,
- announcements,
- presentations at stakeholders' or local watershed working groups' meetings or at other interest group functions, and
- meetings with adjacent landowners and other individuals or groups known to be interested in the proposed project.

The project proponent can more effectively scope out relevant issues for the environmental review process and obtain support for an action if it solicits input at public workshops before committing resources to a particular alternative or method of analysis.

8. Prepare a Well-Defined Project Description

Before proceeding far into the environmental review process, the project proponent should refine the description of the proposed project, taking into consideration the issues raised through public input and early agency consultation and the overall compliance strategy for the project. Project descriptions should be flexible during early consultations with agencies, but changing the project description later in the process can significantly delay environmental compliance and permitting. The more the description of the proposed action changes after environmental review or permitting has started, the longer the compliance process will be delayed; additional environmental analysis may be needed and permit applications may have to be amended. Changes to the description of the proposed action also can lead to the identification of impacts and environmental constraints not previously identified. Further definition of the project description may lead to the need to perform an additional constraints analysis and develop a more refined environmental compliance strategy, as described above.

9. Identify Areas of Uncertainty or Controversy Related to the Project Objectives or Impacts, and Develop a Science-Based Adaptive Management Strategy to Address These Uncertainties

The CALFED agencies are committed to addressing areas of uncertainty through adaptive management. Adaptive management is defined as using and treating actions as partnerships between scientists and managers, designing those actions as experiments with a level of risk commensurate with the status of the species involved, and bringing science to bear in evaluating the feasibility of those experiments. Much attention has been focused on using adaptive management to guide overall program implementation; however, project proponents should not overlook opportunities to use adaptive management as an effective approach to environmental compliance for individual projects. Where there is a lack of scientific information regarding impacts or mitigation measures, the project proponent can work with the CALFED Science Program and permit coordinators to identify studies or monitoring that can be conducted to reduce the areas of uncertainty. These types of studies can be used to refine mitigation for a project over time, especially when a project has ongoing operational impacts. They can also be used to guide future decisions on similar projects.

One of the implementation policies CALFED agencies have agreed to use is the application of science and adaptive management. The environmental compliance strategy for a project should include peer review of studies, reports, monitoring plans, and other documents as needed. The project proponent can work with the Science Program staff to identify the points in the process where scientific peer review should be included.

As the environmental compliance strategy is developed, the project proponent should identify areas of uncertainty or controversy, or areas in which additional information could lead to improved decision making. The necessary steps should be integrated into the environmental compliance strategy to enable the project proponent to obtain the information that will aid in decision making in these areas now or in the future. This implementation policy does not ensure that decisions on permits are free of uncertainty, but is intended to ensure that a reasonable attempt to overcome any uncertainty will be incorporated into the compliance process.

10. IDENTIFY ANY GENERAL PERMITS THAT MAY APPLY TO THE PROJECT

Several permitting agencies have established streamlined processes for projects that meet particular criteria (see Volume 2 for details). These agencies are authorized to issue general permits that have less detailed application requirements and shorter approval processes than standard permits. However, there are often conditions associated with these streamlined processes. Some conditions require early coordination or limit the extent of impacts allowed. By developing an environmental compliance strategy early in the development of a project, the project proponent can often make changes to the project that qualify it for an expedited review and can consult with regulatory agencies early in the process.

11. PREPARE AND COMPLETE ENVIRONMENTAL DOCUMENTS AND PERMITS IN COORDINATION WITH THE APPROPRIATE REGULATORY AGENCIES

The assistance of the multi-agency review team and permit coordinator should be obtained in coordinating, preparing and completing environmental documents for NEPA/CEQA compliance and applications for permits and authorizations from regulatory agencies. The multi-agency review team should review relevant parts of environmental documents as they are prepared. This will facilitate the NEPA/CEQA processes by assuring that the draft environmental documents address the needs of their agencies. Information developed for the environmental documents should also then be useful for completing required permits. By using this process, the multi-agency team members' review of the public comment draft environmental document should be facilitated, and the need to comment on the draft document should be minimal or nonexistent. The multi-agency review team should also review the lead agency's responses to comments and changes made to the environmental document to respond to comments about resources within their authority. This will ensure consistency of the final environmental document with the statutory authority of the regulatory agencies. (Refer to Volume 2 for descriptions of the specific steps for completing environmental documents for NEPA/CEQA compliance and for completing the processes for obtaining permits and other agency approvals.)

As mentioned earlier, the CALFED agencies have committed to implementing the program using adaptive management. Therefore, in formulating mitigation measures for a proposed project, a completely prescriptive approach is not appropriate. Project proponents should work with multi-agency teams to formulate more flexible mitigation approaches consistent with an adaptive management approach. Such an approach could include measurable

mitigation objectives, a defined initial mitigation approach, monitoring protocols, and a process for modifying the mitigation approach based on monitoring results.

12. USE THE REGULATORY COMPLIANCE STRATEGIES ADOPTED BY CALFED AGENCIES

The CALFED agencies are committed to facilitating completion of the permitting process. The agencies have signed a Permit Clearinghouse MOU that details the steps they are taking to establish a permit clearinghouse to coordinate and expedite permit applications for all CALFED programs. Carrying out the steps of the Permit Clearinghouse is dependent upon adequate budget being available to the agencies to accommodate the workload. A summary and the complete MOU is presented in Attachments 1A and 1B in this volume. Some of its most important provisions are explained below.

PERMIT COORDINATORS

As described above in recommendation 1, the CALFED agencies' strategy for facilitating environmental compliance includes using a multi-agency team of regulatory compliance experts and permit coordinators to help project proponents develop environmental compliance strategies and complete the environmental review and permitting processes. For more information on the roles of these permit coordinators and multi-agency teams, see recommendation 1, "Participate in Early Agency Consultations."

SINGLE APPLICATION FORM

CALFED Program staff are currently investigating the feasibility of using a single application form for environmental permits. Many CALFED Plan projects will require compliance with a variety of regulations. One way to simplify the presentation of information necessary to process permits for CALFED Plan projects is to develop a single form that would provide the initial information needed for the regulatory and permitting processes. Both the State of Washington and the Association of Bay Area Governments/San Francisco Estuary Project have developed joint aquatic resource permit applications (JARPAs). The JARPAs used in both Washington and the San Francisco Bay Area have proven to be successful in facilitating the completion of regulatory processes.

PROJECT, ENVIRONMENTAL DOCUMENT, MITIGATION MEASURE AND PERMIT TRACKING SYSTEM

CALFED agencies are developing systems to track expenditures, schedules, and environmental compliance for all CALFED-funded projects. As part of this system, a permit tracking system may be developed to assist with permit coordination. This system will be a database with information about all CALFED projects, including a list of the permits required for each project, implementation schedules, and the current status of all permitting processes. The permit coordinator(s) will use the system to track progress against schedules, ensure that all necessary permits are being obtained, and help develop strategies for grouping actions. The

permit tracking system would also assist regulatory agencies with implementation schedules and allow them to view upcoming workload demand. Furthermore, it could be used to report progress to implementing entities and to help identify where scheduling conflicts may cause regulatory bottlenecks. This system would also allow stakeholders and the general public to monitor implementation of CALFED Plan projects.

ISSUE RESOLUTION ASSISTANCE

The CALFED agencies have agreed to work to identify and resolve issues as early as possible and at the lowest staff level possible. They have encouraged their staff members to use existing issue-resolution processes where possible. However, in the event that an issue cannot be resolved in a timely manner, the Permit Clearinghouse MOU permit coordinators can offer assistance. This can include providing facilitation, bringing in technical or scientific review, or seeking non-binding input from the CALFED Management Group.

A project proponent who is interested in assistance can contact the program manager or CALFED Program staff. The project proponent should be prepared to explain the issue, what steps have been taken to resolve the issue, whether any existing issue-resolution process has been or could be used, and what assistance is desired. Please note that nothing in this process is intended to supplant or delay existing issue-resolution processes or to change agency authorities.

13. ADHERE TO ALL ENVIRONMENTAL COMMITMENTS DURING PROJECT IMPLEMENTATION, AND PROVIDE DATA TO CALFED

When the project is implemented, the project proponent will need to ensure adherence to the mitigation commitments made in the environmental documents, the requirements called for in permits, and the monitoring and evaluation included in the adaptive management planning for the project. The project proponent will need to provide the CALFED agencies with any project tracking and monitoring data that is requested.

INTEGRATING ENVIRONMENTAL PERMITTING INTO THE NEPA/CEQA COMPLIANCE PROCESSES

Project proponents who must comply with NEPA and CEQA can integrate many of the steps involved in complying with other environmental laws and regulations into the NEPA/CEQA processes. First in this section, an overview of the NEPA/CEQA processes is presented to add context to the recommendations about integrating permit process into the NEPA/CEQA processes that follows thereafter. This discussion provides more details about the permit processes integration possible within each step of the NEPA/CEQA process. Tables 1 and 2 provide an outline for accomplishing this integration. Table 1 illustrates this integration for the preparation of an EIS, EIR, or EIS/EIR. Table 2 illustrates this integration for the

preparation of a FONSI, negative declaration, or FONSI/negative declaration. There can be small variations for NEPA-only or CEQA-only processes, but the variations are relatively minor. Integration under the FONSI/negative declaration process is very similar to integration under the EIS/EIR process, although it is compressed into a smaller number of steps.

Please note that for FESA and CESA, the phrase "coverage under the Multi-Species Conservation Strategy" (MSCS) is used to refer to coverage under the programmatic biological opinions and programmatic Natural Community Conservation Plan (NCCP) determination.

Please also note that this discussion includes actions to be taken as part of the most important permitting processes. In many cases, individual projects will not need to comply with all these processes. Volume 2 of this Guide provides detailed information on requirements and procedures of the permitting processes that are anticipated to apply to various CALFED long term plan implementing actions. Table 3 lists the laws and regulations that may apply to CALFED projects. These laws and regulations are described in Volume 2.

1. Overview of the NEPA and CEQA Compliance Processes

This section provides a brief overview of the NEPA and CEQA compliance processes. It is intended to provide background information for the following discussion about integrating permitting processes with NEPA/CEQA compliance, and is not intended to provide complete information on the content or procedural requirements of NEPA and CEQA. Refer to Volume 2 of this guide for detailed information on NEPA, CEQA, and other laws and regulations that may apply to CALFED projects.

Actions That Are Subject to NEPA and CEQA Compliance

NEPA requires that a federal agency assess the effects of a proposed action on the human environment. This requirement applies to actions that the federal agency would undertake directly, approve by issuing a permit or other authorization, or fund wholly or in part.

CEQA requirements apply to activities of State and local public agencies that are defined by CEQA as "projects." A project is an activity that causes a direct or indirect physical change in the environment, undertaken by (1) a public agency or (2) a private entity that must receive some discretionary approval from a government agency (meaning that the agency has the authority to deny the requested permit or approval).

General Steps in NEPA/CEQA Compliance

The first step in NEPA/CEQA compliance is determining the lead agencies. The NEPA lead agency is the federal agency with primary responsibility for NEPA compliance and is

generally the federal agency with greatest responsibility for approving or denying approval of the proposed action. The CEQA lead agency is the State or local government agency with primary responsibility for carrying out or approving a project and, therefore, the primary responsibility for preparing CEQA documents. For a project or activity that is being carried out by a non-governmental entity through a grant or loan program, the lead agency will generally be the agency providing the funding.

It is not uncommon for projects to require both NEPA and CEQA compliance, in which case there will be a federal NEPA lead agency and a State or local government CEQA lead agency. A project carried out by a non-federal entity that requires federal permits or authorizations will often require NEPA compliance conducted by the federal agency with regulatory authority over the project. Similarly, if the funding source for a project conducted by a non-government entity is only State or only federal, it does not necessarily mean that there will only be a State or a federal lead agency, respectively. If both Sate and federal permits are required to carry out the project or activity, it is likely that both NEPA and CEQA will apply. If a project requires a variety of permits from different agencies, it is important that the project proponent identifies these agencies early so that the lead agency can be identified and confirmed.

For example, if a non-profit organization receives a grant from the California Department of Fish and Game to carry out a project, the Department of Fish and Game most likely would be the CEQA lead agency. If this hypothetical project includes activities that discharge dredged or fill material into waters of the United States, the project proponent would need to obtain a CWA Section 404 permit. The CWA Section 404 permits are administered through the U.S. Army Corps of Engineers (USACE). The USACE, therefore, would most likely be the lead federal agency for preparing a NEPA document if there are no other federal agencies involved in issuing permits. The non-profit organization would need to contact these agencies to confirm lead agency status.

The lead agency then determines the level of NEPA/CEQA compliance required. Under NEPA, if a project is not "categorically excluded" (i.e., in a category of actions considered by the lead agency to have no potential significant environmental effect) or otherwise exempt from NEPA, the NEPA lead agency must determine whether the proposed action may "significantly affect the quality of the human environment." This generally involves preparing an environmental assessment (EA) to determine whether the proposed action would result in any significant environmental effects. An EA is a concise public document that a lead agency prepares when it does not know whether impacts would be significant. The EA analysis leads to the preparation of either a finding of no significant impact (FONSI) or an EIS. The lead agency prepares a FONSI if it determines that no significant effects would occur as a result of the proposed action, or prepares an EIS if it determines that the proposed action may have significant effects on the quality of the human environment. (An agency may, however, bypass the preparation of an EA and prepare an EIS for certain types of actions that it determines normally require preparation of an EIS.)

Similarly, the CEQA lead agency must determine whether a "categorical exemption" (similar to a categorical exclusion) applies to an action. If it does not, the lead agency prepares an initial study to determine whether the project may have a significant environmental effect.

The initial study analysis leads to the preparation of either a negative declaration or an EIR. The agency prepares a negative declaration if it determines that the project would not have a significant effect. It prepares an EIR if it determines that the project may have a significant effect. (An agency may forgo preparing an initial study if it determines that the proposed project does have the potential to significantly affect the environment and that preparation of an EIR will therefore be required.)

Scoping

Scoping entails public and agency outreach to determine the scope of issues to be addressed in an environmental document. It should be an open, public process to obtain the views of other agencies and the public. The Council on Environmental Quality's (CEQ's) NEPA regulations require that an EIS preparation process include scoping, and at least one scoping meeting is required when an agency proposes a project of statewide, regional, or area wide significance (PRC section 21083.9). However, scoping is recommended as part of any CALFED Plan project because it can be a useful tool for discovering alternatives to a proposal or potential significant impacts that may have been overlooked in the lead agencies' preliminary consideration of the project. Scoping should occur as early as possible after a lead agency decides to prepare an environmental document. Providing greater specificity about the alternatives to be analyzed will enhance the scoping process.

Procedures for and Required Contents of NEPA/CEQA Documents

The preparation of NEPA/CEQA documents consists of a series of procedural steps to ensure that adequate analysis of environmental issues and public notification occurs.

NEPA requires that an EIS include a statement of the purpose and need for the proposed action, and that an EA include a statement of the need for the proposed action. CEQA requires that the project description include a statement of objectives sought through implementation of the proposed project; this is analogous to the NEPA statement of purpose and need. CEQA does not require a statement of objectives for an initial study/Negative Declaration.

An EA/initial study or an EIS/EIR must describe:

- the affected environment/environmental setting for the proposed project;
- the environmental consequences/environmental impacts of the proposed project, including direct, indirect, and cumulative effects; and
- any feasible mitigation that exists for adverse environmental impacts.

NEPA requires that an EIS analyze the environmental effects of a reasonable range of alternatives that would meet the project purpose and need; an EA must analyze the effects of alternatives that would meet the project need (essentially the same as purpose and need in an

EIS). A no-action alternative must also be analyzed in either document. CEQA requires that an EIR analyze feasible alternatives to the proposed project that would feasibly attain most of the project objectives and would avoid or substantially lessen one or more of the anticipated significant impacts of the proposed project; a no-project alternative must also be analyzed. An analysis of alternatives is not required for an initial study.

Once a draft EIS or EIR is prepared, the lead agencies must distribute the document for review and comment by other agencies and the public. The NEPA requirements for public notice of an EA/FONSI vary by agency; CEQA requires public circulation of an initial study/negative declaration.

NEPA requires that a lead agency hold a public hearing on a draft EIS if substantial environmental controversy exists concerning the proposed action, if many parties are interested in holding a hearing or another agency with jurisdiction over the action requests a hearing. CEQA does not require a public hearing on the draft EIR; however, in practice, most agencies conduct such hearings to receive comments on the draft EIR. Holding public hearings or meetings is generally permissive for NEPA EAs and CEQA initial studies.

After the NEPA/CEQA lead agencies review comments on the draft EIS/EIR, they prepare a final EIS/EIR. The final document must contain the lead agencies' responses to comments and discuss any opposing views on substantive issues raised. Generally, a final EIS consists of a rewrite of the draft EIS that incorporates the suggestions made in the comments and adds any new analysis and information that may be pertinent. A final EIR must include the draft EIR or a revision of the draft EIR, but CEQA does not require that the draft EIR be rewritten. Similarly, lead agencies consider comments made on EAs and initial studies, revise the documents accordingly, and consider the comments in deciding whether to issue a FONSI or Negative Declaration for the project.

The NEPA lead agency must circulate the final EIS before making a decision on the proposal. The final EIS must be provided to agencies with jurisdiction by law or special expertise, environmental regulatory agencies, the project applicant and those requesting copies, and anyone who submitted substantive comments on the draft EIS. After a 30-day waiting period, when the lead agency determines that the EIS meets the standards of the CEQs' NEPA regulations and the agency's own NEPA regulations, it files the final EIS and prepares the ROD, a written public record that explains the agency's course of action. A FONSI generally requires a minimum 30-day public review before an action may start, but there are exceptions.

The CEQA lead agency must circulate the final EIR for 10 days and then may certify the document and make a decision on the project. The agency must prepare findings of fact for each significant impact identified in the EIR, and must prepare a statement of overriding considerations if it is approving the project with unavoidable significant environmental effects. The findings of fact identify the mitigation adopted to avoid or substantially lessen the impacts; recommended mitigation that is within the jurisdiction of another agency; or specific economic, social, legal, technical, or other considerations make the proposed mitigation measure or alternative infeasible. After the lead agency determines to approve or carry out a project for which an EIR or Negative Declaration has been prepared, the agency files a Notice of

Determination. Filing this Notice begins the statutes of limitations on filing CEQA court challenges to approval of the project. The project may commence, however, after filing the Notice and other required permits have been obtained, unless ordered by a court not to proceed because of a valid CEQA challenge.

2. INTEGRATING ENVIRONMENTAL PERMIT PROCESSING INTO NEPA/CEQA PROCESSES

This section focuses on the fact that environmental review processes and permitting processes require applicants to go through similar types of investigations and disclosures. Agencies can coordinate their actions to meet multiple requirements and avoid duplicative effort. This approach means that NEPA/CEQA and permitting processes run concurrently. Components of NEPA/CEQA documents, such as the project description or impact analyses, are designed to be used in the permitting processes. This is accomplished by being aware of the requirements of the various permits as the NEPA/CEQA document is prepared, and incorporating those requirements into the analyses performed for the environmental document.

Integration When Determining Lead Agency or Agencies

If a non-government entity is proposing a project that is funded by a government agency or requires government approvals, the project proponent must identify the government agencies involved in the project so the NEPA and/or CEQA lead agency and permits required can be determined. A government agency carrying out a project is typically the lead agency and must also identify the permits required to carry out a project. Identifying the permits required and the lead agency begins the integration process by identifying environmental resource information needed to obtain the permits and identifying the NEPA and/or CEQA lead agency that can use and incorporate the environmental resource information in the NEPA and/or CEQA process.

After the NEPA and CEQA lead agencies have been identified, the project proponent should request species lists from the National Marine Fisheries Service (NMFS), U.S. Fish and Wildlife Service (USFWS), and California Department of Fish and Game (DFG).

If the proposed project affects a watercourse or wetland, the U.S. Army Corp of Engineers (USACE) should be contacted to determine information requirements need for USACE permits.

At this time, a records search can be conducted by a cultural resources specialist to determine whether any known cultural resources exist on or near the project site. This information can be used to avoid impacts on these sites when the proposed project and alternatives are designed.

This early stage is also a useful time to elicit input from NMFS and USFWS and to request that they participate on an agency review team. Early and continuing participation by these agencies can reduce or eliminate the need to prepare a Fish and Wildlife Coordination Act report. The participation of these and other resource agencies, such as DFG, USACE, and

others, starting early in the NEPA/CEQA process can help to define the proposed project in ways to avoid hurdles in permitting later in the process. As displayed in Tables 2 and 3, many other regulatory agencies and permit processes may also be required for project approval. Early coordination with these agencies will also be helpful to elicit input early in the process. Specifically, early coordination with DFG should include a determination of whether take authorization for State endangered species will be provided through a tiered NCCP or a Section 2081 process under the MSCS.

Integration While Preparing Environmental Assessment/Initial Study

As described above in Section 1, "Overview of the NEPA and CEQA Compliance Processes", preparing an environmental assessment/initial study is a recommended step under both NEPA and CEQA to determine whether an EIS/EIR needs to be prepared. Often, however, lead agencies know from the beginning that the preparation of an EIS/EIR is needed because of the likelihood that the proposed project will result in significant effects. In such circumstances, the preparation of an opportunities and constraints analysis is strongly recommended. (See recommendation 3 "Conduct a Preliminary Assessment to Identify Any Environmental, Physical, or Policy Constraints to Project Implementation" earlier in this chapter.)

Whether this step involves preparing an EA/initial study or an opportunities and constraints analysis, several actions related to permitting processes can occur at this step. Surveys of the project site can be undertaken to determine whether "waters of the United States" exist on the site, an important step in the CWA Section 404 process.

Regarding FESA and CESA, once the species list has been received from NMFS, USFWS, and DFG, this list can be reviewed by a biologist to determine which endangered or threatened species have the potential to occur at the project site. The CALFED Multi-Species Conservation Strategy (MSCS) should then be reviewed to determine whether the project meets the threefold test for coverage under the MSCS: (1) whether the proposed project is a covered action in the MSCS, (2) whether the species with the potential to occur at the project site are species covered under the MSCS, and (3) whether the project proponent wants to adopt all of the pertinent conservation measures listed in the MSCS. If the project proponent wants to confirm the species list, surveys also can be conducted.

Regarding Section 106 of the NHPA, cultural resources records searches, surveys and consultations with Indian tribes will reveal whether any previously unidentified cultural resources exist at the project site. If the project area has not previously been adequately inspected for the presence of cultural resources, a pedestrian field survey should be conducted. If any cultural resources are identified on the project site, a Cultural Resources Inventory Report shall be prepared and submitted to the California State Historic Preservation Officer (SHPO) by the agency leading the Section 106 compliance effort.

The project proponent can contact the State Lands Commission (SLC) to determine whether the proposed project is on lands under the SLC's jurisdiction, and can contact the

California Department of Toxic Substances Control to obtain early guidance on addressing any known hazardous materials in the vicinity of the proposed project.

Finally, any nonfederally sponsored project that takes place in the coastal zone or San Francisco Bay Area may require either a development permit from the California Coastal Commission (CCC) or from the San Francisco Bay Conservation and Development Commission (BCDC). A Coastal Zone Consistency Determination from one of those two agencies may also be needed for federally sponsored, permitted, or funded projects in the coastal zone. Coordination, at this early stage of project planning, with the CCC, BCDC, and local government agencies responsible for administering the federal and state coastal protection laws is valuable in ensuring that any environmental documentation or studies that are prepared appropriately address sensitive coastal resources and to determine whether a development permit or consistency determination will be required for the proposed project, and which agency will be responsible for overseeing these processes. In addition, the project proponent can hold discussions with agencies to determine whether changes to the proposed project should be made regarding sensitive coastal resources and public access.

INTEGRATION WHILE PREPARING STATEMENT OF PURPOSE AND NEED/PROJECT OBJECTIVES

Consideration of the requirements of the U.S. Environmental Protection Agency (EPA) Section 404(b)(1) Guidelines is critical in preparing a statement of project purpose and need/project objectives if a CWA Section 404 permit will be required for a proposed project. These guidelines provide very strict rules that are intended to lead to the selection by the project proponent of the least environmentally damaging practicable alternative that meets the project's overall project purpose. The statement of purpose and need/project objectives will have a large influence on the range of alternatives that must be considered by the project proponent. A broad purpose and need will likely lead to a broad range of alternatives. A narrow purpose and need will likely lead to a more focused range of alternatives. Note that the EPA and Corps will reject a project purpose too narrowly stated. Considering the implications of this step in light of the EPA guidelines is essential at this point.

At this point in the process, the project proponent can also have the NEPA lead agency contact USFWS to determine whether the preparation of a Fish and Wildlife Coordination Act report will be required for the project. The proponent can also find out what steps can be taken to avoid the need to prepare a report.

Integration While Scoping

The scoping process is an excellent time for the project proponent to contact local agencies and other parties who may have an interest in or be affected by the proposed project. It is a good opportunity to learn which city and county codes and ordinances may apply to the project (helpful in formulating a compliance strategy) and to contact local reclamation districts, affected landowners, and other interested parties (helpful if a Reclamation Board Encroachment Permit is required).

Integration While Developing The No-Action/No-Project Alternative

During the development of the No-Action/No-Project Alternatives it is important to consider how the definition of this alternative matches what USFWS, NMFS, DFG, and the responsible coastal agency will consider baseline conditions during the MSCS consultations. Certain permits may require a definition of baseline conditions different from what NEPA and CEQA allow for a Lead Agency. Having these be as closely matched as possible will reduce the work needed in preparing the action specific implementation plan (ASIP), as the analysis of impacts on covered species and proposed mitigation measures in the EIS/EIR can be used in the ASIP analysis. Eliciting the input of USFWS, NMFS, DFG, and the responsible coastal agency as part of the agency review team in developing the No-Action/No-Project alternative will greatly assist in this effort.

Integration While Developing a Preliminary Set of Alternatives

The development of a range of alternatives to be analyzed in the EIS/EIR is a critical step in integrating other important compliance efforts. As mentioned under "Integration While Preparing Statement of Purpose and Need/Project Objectives," the EPA Section 404(b)(1) Guidelines provide strict rules that are intended to lead to the selection of the least environmentally damaging practicable alternative by the project proponent. The development of a reasonable range of alternatives is often undertaken by brainstorming alternatives that could potentially meet the project purpose and need, then eliminating those that are unacceptable. EPA guidelines define three valid reasons to eliminate alternatives: (1) considerations of cost, (2) existing technology and (3) logistics. The EPA guidelines should be consulted for a more thorough understanding of the rules regarding alternatives development and screening.

FESA requires that impacts on listed species be addressed in the following order: avoidance, minimization, and mitigation. To the extent possible, alternatives should be developed that avoid adverse impacts on listed species or critical habitat. If avoidance is not possible, minimization of impacts should be attempted. This should make obtaining a permit under the MSCS easier by providing a record of evidence that the project proponent made reasonable efforts to reduce impacts in the prescribed order. Please note that for some species covered under the MSCS, avoidance of direct impacts is required.

Reasonable efforts should also be made to design alternatives that avoid impacts on the cultural resources identified on the project site. Avoiding impacts on cultural resources can reduce project compliance and mitigation costs and expedite the project compliance schedule by eliminating the need to undertake a mitigation process.

Similarly, designing alternatives to avoid or minimize impacts on rivers designated wild and scenic can reduce the effort needed to comply with the National and California Wild and Scenic Rivers Acts. Avoiding or minimizing effects on rivers, streams, or lakes can reduce or eliminate the effort needed to obtain a Section 1600 Lake or Streambed Alteration Agreement.

Avoiding or minimizing affects on farmland can streamline compliance with the Farmland Protection Policy Act. Avoiding or minimizing construction where existing hazardous substances exist can reduce or eliminate the effort needed to comply with numerous laws and regulations related to hazardous materials.

Both the California Coastal Act and the McAteer-Petris Act require that project alternatives minimize impacts on resources in the coastal zone: public access, environmentally sensitive habitat areas, prime agricultural land, water- dependent resources, and visual resources. The project proponent ultimately must be able to demonstrate that the preferred alternative minimizes impacts on these coastal resources. It is important to note that these resources are often defined differently under these acts than they are under USACE and other agency regulations.

Integration While Finalizing The Set of Alternatives

The same recommendations described under "Integration While Developing Preliminary Set of Alternatives" apply in finalizing the set of alternatives.

Integration While Preparing Draft Environmental Impact Statement/Environmental Impact Report

To facilitate compliance with CWA Section 404, the draft EIS/EIR should include an analysis of the impacts of the proposed project and alternatives on waters of the United States, including wetlands. If care has been taken to comply with the EPA Section 404(b)(1) Guidelines, this analysis can be used in preparing a draft Section 404 alternatives analysis. This analysis also will ensure that compliance with Executive Order 11990 is being completed. At this time, a Section 404 permit application can also be prepared.

The draft EIS/EIR should also analyze the impacts of the proposed project and alternatives on listed species, their potential habitat, and any critical habitat within the project area. Appropriate conservation measures from the MSCS should be included to mitigate any impacts identified for listed species. Also, if the EIS/EIR identifies the potential to affect listed species, an ASIP should be prepared for all listed species covered by the MSCS. Where CESA compliance will be through a tiered NCCP, nonlisted covered species should also be included.

The draft EIS/EIR should analyze the effects of the proposed project and alternatives on any identified cultural resources on the project site. At this same time, a Determination of Effects report can be prepared for resources listed or eligible for listing on the National Register of Historic Places. Resources listed on or eligible for listing on the California Register of Historic Resources should also be included in this report for projects complying with CEQA.

Effects of the proposed project and alternatives on farmland, floodplains, environmental justice, the observance of traditional American Indian religions, and Indian trust assets should also be addressed in the EIS/EIR, if appropriate. This consideration will ensure compliance with

the Farmland Protection Policy Act, Executive Orders 11988 and 12898, the American Indian Religious Freedom Act of 1978, and Department of Interior guidelines regarding Indian trust assets. If needed, detailed geotechnical, soil, hydraulic, and sediment transport analyses can also be completed at this time for inclusion in the application for a Reclamation Board encroachment permit.

The draft EIS/EIR should analyze project-related effects of construction and stormwater runoff on water quality. Mitigation of water quality impacts should include standard best management practices.

If the project is in the coastal zone, the EIS/EIR provides an excellent opportunity to explicitly address concerns associated with coastal resources. Coastal resources are often considered more sensitive or valuable than inland resources, and, hence, are regulated more strictly. Therefore, the EIS/EIR provides a forum to discuss these distinctions and to develop appropriate mitigation measures to be developed for the project as a whole, not just for a coastal development permit. In addition, a draft Coastal Zone Management Act Consistency Determination can be prepared at this point.

Integration When Circulating the Draft Environmental Impact Statement/Environmental Impact Report for Review and Holding Public Hearing

If a Section 404 permit application has been prepared, it can be submitted to USACE for review with a request that public review of the application be concurrent with the NEPA/CEQA review period. If a draft Section 404 alternatives analysis has been prepared, it can be circulated for public review as part of the EIS/EIR. These actions can assist USACE with the public involvement requirements associated with issuing a Section 404 permit.

If an ASIP has been prepared, it can also be circulated for public review with the draft EIS/EIR. At a minimum, it should be sent by the NEPA lead agency to USFWS and NMFS and by the CEQA lead agency to DFG for review. If comments are received on the draft ASIP, a final ASIP can be prepared and submitted to USFWS, NMFS, and DFG by the NEPA lead agency, along with a letter requesting formal consultation.

If a Determination of Effects report has been prepared under NHPA Section 106, it can be submitted by the NEPA lead agency to the SHPO.

If a draft Coastal Zone Management Act Consistency Determination has been prepared, it can be circulated with the EIS/EIR.

Although coastal development permits from the CCC, BCDC, or local governing body cannot be issued until a final EIS/EIR has been approved, incorporating a draft Coastal Zone Management Act Consistency Determination and any discussion of coastal-related concerns in the EIS/EIR allows for public and agency review of coastal issues.

Integration When Preparing and Publishing the Final Environmental Impact Statement/Environmental Impact Report

During this period, if comments were received on the draft Section 404 alternatives analysis, a final alternatives analysis can be prepared and submitted to USACE by the NEPA lead agency.

If biological opinions have been received from USFWS and NMFS, and an NCCP determination has been received from DFG, these can be circulated with the final EIS/EIR.

If a Section 106 Determination of Effects has been submitted to the SHPO, a memorandum of agreement can be negotiated with the SHPO during this time.

Depending on the type of federal action, if a consistency determination has been submitted to the CCC, an agreement or certification from the CCC may be circulated with the Final EIS/EIR.

Integration During the Agency Decision

The lead agencies should select as the preferred alternative the least environmentally damaging practicable alternative that meets the project purpose and need, as described in the EPA Section 404(b)(1) Guidelines. The lead agency should also incorporate into the preferred alternative the reasonable and prudent measures identified in the biological opinions and Section 2081 permit/NCCP determination.

Integration When Issuing the Record of Decision/Findings, Statement of Overriding Considerations, and Notice of Determination

If a CWA Section 404 permit application has already been submitted to USACE and changes have occurred to the proposed project since the application was submitted, these changes should be communicated to USACE. USACE will then inform the project proponent if any additional information or resubmission of the application is required. If a permit application has not yet been submitted, it can be submitted at this time.

Other permit applications can also be submitted at this time; these include the Coastal Zone Consistency Determination and applications for coastal development permits, DFG Section 1600 Agreement, CWA Section 401 certification, SLC Land Use Lease, and National Pollutant Discharge Elimination System permits.

Table 1. Integrating Environmental Permitting into the Environmental Impact Report and Environmental Impact Statement Processes*

NEPA/CEQA Process Step	Clean Water Act Section 404	Federal Endangered Species Act, California Endangered Species Act**	National Historic Preservation Act Section 106	Others
Determine Lead Agency or Agencies	If proposed activities include discharges into waters of the United States, the U.S. Army Corps of Engineers (USACE) may be the NEPA lead agency.	Request species list from the National Marine Fisheries Service (NMFS), U.S. Fish and Wildlife Service (USFWS), and California Department of Fish and Game (DFG).	Initiate consultation with the State Historic Preservation Officer (SHPO).	Elicit the input of appropriate resource agencies early in the process.[1]
Prepare Environmental Assessment/Initial Study	Conduct surveys to identify waters of the United States on the project site.	Determine the presence of listed species or their potential habitat and the extent of critical habitat on the project site. Consult the Multi-Species Conservation Strategy (MSCS) to determine whether all listed species are covered. Determine whether the proposed action is covered under the MSCS. Determine whether the project proponent will adopt pertinent MSCS conservation measures. Determine whether to seek compliance under the MSCS.	Conduct records search and cultural resource surveys to determine what resources are on the project site. Consult with Native American organizations. Prepare a cultural resources inventory report and submit to the SHPO.	Contact the State Lands Commission to determine whether the project is on sovereign tide and submerged lands and beds of navigable waters within its jurisdiction.[2] Contact the Department of Toxic Substances Control and other resource agencies regarding hazardous materials.[3] Contact agencies responsible for coastal zone regulation to determine which agencies will oversee regulation.[4]
Prepare Statement of Purpose and Need/Project Objectives	Consider implications of purpose and need statement on range of alternatives to be analyzed under the U.S. Environmental Protection Agency (EPA) Section 404(b)(1) Guidelines.			Contact USFWS to determine whether preparation of a Fish and Wildlife Coordination Act report is required.[1]
Complete Scoping (Including Notice of Intent/Notice of Preparation)				Contact local agencies and other interested parties.[5] Contact local reclamation districts, affected landowners, and other interested parties.[6]

Table 1. Continued

NEPA/CEQA Process Step	Clean Water Act Section 404	Federal Endangered Species Act, California Endangered Species Act**	National Historic Preservation Act Section 106	Others
Develop No-Action/ No-Project Alternative		Consider that baseline conditions for federal and California Endangered Species Act consultations may be existing conditions rather than the No-Action/No-Project Alternative.		Contact coastal zone regulatory agencies responsible regarding the definition of the No-Action/No-Project Alternative.
Develop Preliminary Set of Alternatives	Ensure that alternative development and screening is done according to EPA Section 404(b)(1) Guidelines.	Ensure that alternatives are developed that avoid or minimize impacts on listed species and critical habitat.	Ensure that alternative(s) avoid or minimize effects on known cultural resources, where practicable.	Avoid or minimize effects on: coastal resources[4]; resources for which rivers have been designated wild and scenic[7]; effects on rivers, streams, or lakes[8]; effects on farmland[9]; and construction where existing hazardous substances exist[3].
Finalize Set of Alternatives	Ensure that alternative development and screening is done according to EPA Section 404(b)(1) Guidelines.	Ensure that alternatives are selected that avoid or minimize impacts on listed species and critical habitat.	Ensure that alternative(s) avoid or minimize effects on known cultural resources, where practicable.	

Table 1. Continued

NEPA/CEQA Process Step	Clean Water Act Section 404	Federal Endangered Species Act, California Endangered Species Act**	National Historic Preservation Act Section 106	Others
Prepare Draft Environmental Impact Statement/ Environmental Impact Report (EIS/EIR)	Analyze effects of alternatives on waters of the United States. Prepare draft Section 404 alternatives analysis.	Use information from the MSCS to assist in analyzing the effects of alternatives on listed species and their habitats. Include pertinent MSCS conservation measures to mitigate impacts on listed species covered by the MSCS. Coordinate with NMFS, USFWS, and DFG. Determine whether DFG authorization will be through a tiered Natural Community Conservation Plan (NCCP) determination or through a Section 2081 permit. Prepare a draft action specific implementation plan (ASIP) if potential to affect listed species is identified.	Analyze the effects of alternatives on cultural resources. Prepare a Determination of Effects report for resources listed or eligible for listing on the National Register of Historic Places or California Register of Historic Resources.***	Analyze effects of the project on farmland[9]; wetlands, floodplains, and environmental justice[10]; the observance of traditional Native American religions[11]; and Indian trust assets[12]. Analyze geotechnical, soil, hydraulic, and sediment transport effects[6]. Analyze effects of construction on water quality and on stormwater quality. Propose best management practices for mitigation. Analyze effects on coastal resources. Prepare draft Coastal Zone Management Act consistency determination.
Circulate Draft EIS/EIR for Review and Hold Public Hearing	Circulate draft Section 404 alternatives analysis. Prepare Section 404 permit application.	Circulate draft ASIP to the public and to NMFS, USFWS, and DFG with draft EIS/EIR, if appropriate. Receive comments, and submit final ASIP with request for formal consultation.	Submit Determination of Effects report to SHPO.	Circulate draft Coastal Zone Management Act consistency determination with draft EIS/EIR.
Prepare and Publish Final EIS/EIR	Prepare final Section 404 alternatives analysis.	Circulate biological opinion/NCCP determination/Section 2081 permit with final EIS/EIR.	Negotiate memorandum of agreement with the SHPO.	Submit final Coastal Zone Management Act consistency determination.

NEPA/CEQA Process Step	Clean Water Act Section 404	Federal Endangered Species Act, California Endangered Species Act**	National Historic Preservation Act Section 106	Others
Adopt/Certify EIS/EIR				
Finalize Agency Decision	Ensure that the preferred alternative is selected according to the EPA Section 404(b)(1) Guidelines.	Incorporate reasonable and prudent measures into the agency decision.		
Issue Record of Decision/Findings, Statement of Overriding Considerations, and Notice of Determination	Submit Section 404 alternatives analysis. USACE issues permit after NEPA process is complete.			Prepare and submit other permit applications.

* This table covers the major steps of various environmental regulations. For more details, see Volume 2.

** Covers the federal Endangered Species Act, California Endangered Species Act, and Natural Community Conservation Planning Act. References to coverage under the MSCS are shorthand for coverage under the programmatic biological opinions and programmatic NCCP determination. See Volume 2 for more information about compliance with the these documents.

*** The California Register of Historic Resources applies only for CEQA documents.

Notes:

1 Fish and Wildlife Coordination Act
2 State Lands Commission Lease
3 Hazardous materials laws and regulations
4 Coastal Zone Management Act
5 City and County zoning codes and ordinances
6 Reclamation Board Encroachment Permit
7 National Wild and Scenic Rivers Act, California Wild and Scenic Rivers Act
8 Section 1600 Lake or Streambed Alteration Agreement
9 Farmland Protection Policy Act
10 Executive Orders 11990, 11988, and 12898
11 American Indian Religious Freedom Act of 1978
12 Per Department of Interior and individual agency guidelines

Table 2. Integrating Environmental Permitting into the Finding of No Significant Impact and Negative Declaration Processes*

NEPA/CEQA Process Step	Clean Water Act Section 404	Federal Endangered Species Act, California Endangered Species Act**	National Historic Preservation Act Section 106	Others
Determine Lead Agency or Agencies	If proposed activities include discharges into waters of the United States, the U.S. Army Corps of Engineers (USACE) may be the NEPA lead agency.	Request species list from the National Marine Fisheries Service (NMFS), U.S. Fish and Wildlife Service (USFWS), and California Department of Fish and Game (DFG).	Initiate consultation with SHPO.	Elicit the input of appropriate resource agencies early in the process.[1] Contact the State Lands Commission to determine whether the project is on sovereign tide and submerged lands and beds of navigable waters within its jurisdiction.[2] Contact the Department of Toxic Substances Control and other resource agencies regarding hazardous materials.[3]
Prepare Statement of Purpose and Need/Project Objectives	Consider implications of purpose and need statement on range of alternatives to be analyzed under the U.S. Environmental Protection Agency (EPA) Section 404(b)(1) Guidelines.			Contact USFWS to determine whether preparation of a Fish and Wildlife Coordination Act report is required.[1]

Table 2. Continued

NEPA/CEQA Process Step	Clean Water Act Section 404	Federal Endangered Species Act, California Endangered Species Act**	National Historic Preservation Act Section 106	Others
Prepare Environmental Assessment/Initial Study	Conduct surveys to identify waters of the United States on the project site. Ensure that alternative development and screening is done according to EPA Section 404(b)(1) Guidelines. Analyze effects of alternatives on waters of the United States. Prepare draft Section 404 alternatives analysis.	Conduct surveys to determine presence of listed species or their potential habitat and the extent of critical habitat on the project site. Consider baseline conditions for Multi-Species Conservation Strategy (MSCS) consultations when developing the No-Action/No-Project Alternative. Ensure that alternatives are developed that avoid or minimize impacts on endangered species. Analyze effects of alternatives on listed species and critical habitat. Prepare draft action specific implementation plan (ASIP) if potential to affect listed species is identified.	Conduct cultural resource surveys to determine what resources are on the project site. Consult with Native American organizations. Prepare a cultural resources inventory report and submit to the State Historic Preservation Officer (SHPO). Ensure that alternative(s) avoid or minimize effects on known cultural resources. Analyze the effects of alternatives on cultural resources. Prepare a Determination of Effects report for resources listed or eligible for listing on the National Register of Historic Places and the California Register of Historic Resources***.	Contact local agencies and other interested parties.[4] Contact local reclamation districts, affected landowners, and other interested parties.[5] Avoid effects on resources for which rivers have been designated wild and scenic[6]; effects on rivers, streams, or lakes[7]; effects on farmland[8]; and construction where existing hazardous substances exist.[3] Analyze effects of the project on farmland[8]; wetlands, floodplains, and environmental justice[9]; the observance of traditional Native American religions[10]; and Indian trust assets.[11]
Identify Mitigation Measures and Incorporate Them Into Project Description		Ensure that the proposed project avoids or minimizes impacts on listed species. Consider MSCS requirements when selecting mitigation measures.		

Table 2. Continued

NEPA/CEQA Process Step	Clean Water Act Section 404	Federal Endangered Species Act, California Endangered Species Act**	National Historic Preservation Act Section 106	Others
Prepare Draft Finding of No Significant Impact (FONSI)/Negative Declaration	Circulate draft Section 404 alternatives analysis.	Circulate the draft ASIP to the public or NMFS, USFWS, and DFG with draft FONSI/negative declaration, if appropriate.	Submit Determination of Effect report to the SHPO.	
Meet Requirements for Public Notice and Review				Contact all parties listed above under APublish Notice of Intent≅.
Consider Comments Received		Receive comments on draft ASIP and submit final ASIP with request for formal consultation.	Negotiate memorandum of agreement with the SHPO.	
Issue FONSI/Adopt Negative Declaration	Prepare final Section 404 alternatives analysis.	Receive biological opinion or Anot likely to effect≅ concurrence letter.		
	Ensure that the preferred alternative is selected according to EPA Section 404(b)(1) Guidelines.	Incorporate reasonable and prudent measures, if any received, into FONSI/negative declaration.		
	Submit Section 404 alternatives analysis with USACE Section 404 permit application.			

* This table covers the major steps of various environmental regulations. For more details, see Volume 2.

** Covers the federal Endangered Species Act, California Endangered Species Act, and Natural Community Conservation Planning Act. References to coverage under the MSCS are shorthand for coverage under the programmatic biological opinions and programmatic NCCP determination. See Volume 2 for more information about compliance with the these documents.

*** The California Register of Historic Resources applies only for CEQA documents.

Table 2. Continued

Notes:

[1] Fish and Wildlife Coordination Act
[2] State Lands Commission Lease
[3] Hazardous materials laws and regulations
[4] City and County zoning codes and ordinances
[5] Reclamation Board Encroachment Permit
[6] National Wild and Scenic Rivers Act, California Wild and Scenic Rivers Act
[7] Section 1600 Lake or Streambed Alteration Agreement
[8] Farmland Protection Policy Act
[9] Executive Orders 11990, 11988, and 12898
[10] American Indian Religious Freedom Act of 1978
[11] Per Department of Interior and individual agency guidelines

Table 3. Major Environmental Regulations and Triggers for Compliance

Law, Regulation, or Authorization	Feature Triggering the Need for Compliance
National Environmental Policy Act (NEPA)	■ A federal agency proposes to: – undertake an action directly, – approve an action by issuing a permit or other authorization, or – fund an action wholly or in part.
California Environmental Quality Act (CEQA)	■ A State or local public agency proposes to undertake an activity defined as a "project" under CEQA. ■ A private entity proposes to undertake an activity that: – is defined as a "project" under CEQA, – requires discretionary approval from a government agency, and – may cause a direct physical change in the environment or a reasonable foreseeable indirect change in the environment.
Federal Endangered Species Act (FESA), California Endangered Species Act (CESA), Natural Community Conservation Planning Act	■ A federal agency proposes to conduct, fund, or permit a major construction activity in an area that may contain a species listed as threatened or endangered under FESA and that may affect the species. ■ A nonfederal entity proposes an action that may result in the take, as defined by FESA, of a species listed as threatened or endangered under FESA. ■ A project proponent proposes an action that may result in the take, as defined by CESA, of species listed under CESA.
Other Federal Regulations	
Section 404 of the Clean Water Act	■ Any person or public agency proposes to dump or place dredged or fill material in waters of the United States.
Section 10 of the Rivers and Harbors Act	■ Any person or public agency proposes to work in, over, or under navigible waters of the United States.
National Wild and Scenic Rivers Act	■ A project would be carried out or at least partially funded by a federal agency and would be a water resources project that may affect the free-flowing characteristics, scenic value, or natural resources of a wild and scenic river or scenic river.
Executive Order 11990 (Protection of Wetlands)	■ A project would be located on federal land, sponsored by a federal agency, or funded with federal monies and may affect wetlands.
Executive Order 11988 (Floodplain Management)	■ A project would be located on federal land, sponsored by a federal agency, or funded with federal monies and may affect a floodplain.
Fish and Wildlife Coordination Act	■ A project would be sponsored or funded by a federal agency and is intended to control or modify surface water.

Table 3. Continued

Law, Regulation, or Authorization	Feature Triggering the Need for Compliance
Section 106 of the National Historic Preservation Act	■ A project: – would be located on federal land, sponsored by a federal agency, permitted by a federal agency, or funded with federal monies; and – would occur in an area where there exist or may exist properties listed or eligible for listing on the National Register of Historic Places.
Farmland Protection Policy Act	■ A project would be located on federal land, sponsored by a federal agency, or funded with federal monies and involves prime or unique farmland as identified by the Natural Resources Conservation Service.
Coastal Zone Management Act	■ A project would involve activities in Suisun Marsh or filling, dredging, shoreline work, or other projects around San Francisco Bay or Suisun Bay.
American Indian Religious Freedom Act	■ A project would be located on federal land, sponsored by a federal agency, or funded with federal monies and could involve impacts on the observance of traditional Native American religions.
Indian trust assets	■ A project could affect Indian trust assets.
Executive Order 12898 (Environmental Justice in Minority and Low-Income Populations)	■ A project would be located on federal land, sponsored by a federal agency, or funded with federal monies and may affect minority or low-income populations.
Other State Laws and Regulations, and State Administered Federal Laws	
Section 401 of the Clean Water Act	■ A project or activity requiring a federal agency license or permit that involves a discharge of a pollutant, including dredged or fill material, into waters of the United States and that could violate state water quality standards.
Waste discharge requirements	■ A project would involve: – nonpoint discharge of waste into surface waters of the State or – discharge of waste that may affect groundwater quality.
National Pollutant Discharge Elimination System	■ A project would involve: – construction that would disturb 5 acres or more of soil or – the discharge of pollutants into surface waters from point sources or nonpoint sources.

Table 3. Continued

Law, Regulation, or Authorization	Feature Triggering the Need for Compliance
Water rights	■ A water right holder seeks to: – change the point of diversion, place of use, or purpose of use of existing appropriative water rights; – change the quantity of water used under an appropriative water right or the season in which it is used; or – sell or transfer water rights. ■ A project proponent wishes to: – obtain a new right to divert and use water not authorized under an existing water right, or – store more than 10 acre-feet of water for more than 30 days.
Groundwater right or authorization for groundwater use	■ A project would involve: – the use, replenishment, transfer, or sale of groundwater; – the use of a groundwater basin for storage; or – the construction, abandonment, or destruction of a well.
California Fish and Game Code, Section 1600CLake or Streambed Alteration Agreement	■ A project would: – alter the flow or bed, channel, or bank of a water body; – occur within the annual high-water mark of a water body; or – involve the use or alteration of any streambed material.
California Wild and Scenic Rivers Act	■ A project would take place on a river segment designated as wild, scenic, or recreational that could affect the resources for which the river was designated.
Division of Safety of Dams (DSOD) approval	■ A project would entail the construction, modification, or removal of a dam, levee, artificial pond, reservoir, or other structure falling under DSOD jurisdiction.
State Lands Commission land use lease	■ A project would be conducted in state-owned areas waterward of: – the ordinary high-water mark as it last existed naturally, before artificial influences, in waterways that are subject to tidal action; or – the ordinary low-water mark before artificial influences, in waterways that are not subject to tidal action.
California State Reclamation Board (Reclamation Board) permit	■ A project would involve: – the placement, construction, reconstruction, removal, or abandonment of any landscaping, culvert, bridge, conduit, fence, projection, fill, embankment, building, structure, obstruction, or encroachment within an area under the jurisdiction of the Reclamation Board; or – work of any kind within an area for which there is an adopted flood-control plan.

Table 3. Continued

Law, Regulation, or Authorization	Feature Triggering the Need for Compliance
California Department of Transportation encroachment permit	■ A project would include an area within, under, or over a State highway right-of-way.
Air districts' authority to construct and permit to operate	■ An activity would involve: – a new or modified source of air pollutant emissions or – fugitive dust emissions.
Local Regulations and Approvals	■ A project would involve: – an activity not consistent with a general plan (variance), – earthmoving activities (grading permit), – construction within the right-of-way of a public road (encroachment permit), – construction or significant modification of a structure (building permit), – a proposed use for a property that is not a designated land use in the zoning for the property (special-use or conditional-use permit), – the division of private land (subdivision map approval), – planned development of an area (specific plan approval), – a use of land not permitted conditionally or by right (zoning ordinance amendment), – mining and reclamation activities (Surface Mining and Reclamation Act compliance), or – fee-title acquisition of lands under Williamson Act contracts.
Hazardous Materials Laws and Regulations	■ A project would involve exposure of individuals or the environment to hazardous materials or wastes.

ATTACHMENT 1A

SUMMARY OF KEY PROVISIONS OF THE MEMORANDUM OF UNDERSTANDING ON A PERMIT CLEARINGHOUSE FOR THE CALFED BAY-DELTA PROGRAM

Listed below are key provisions of the Permit Clearinghouse MOU. It does not contain all the points and qualifying language contained in the MOU, and is intended only to provide a general overview of the MOU contents. Please refer to the MOU for more information.

GENERAL INFORMATION

- Definition of the Permit Clearinghouse: The process of coordinating and facilitating permit applications and approvals and compliance with the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA).

- Nothing in the MOU is intended to or has the effect of constraining or limiting any public entity in carrying out its statutory responsibilities. The Permit Clearinghouse does not change the requirements or standard of review of any regulatory agency.
- The Permit Clearinghouse does not provide CALFED projects with any higher priority than non-CALFED projects.
- Carrying forth the commitments and obligations under the Permit Clearinghouse MOU is subject to the availability of appropriated funds duly authorized and committed by federal or State processes.

Persons eligible to use the Permit Clearinghouse are:

- agencies that are participants in the CALFED Policy Group ("CALFED Agencies"), and
- other agencies or persons implementing a project, program, or activity of the CALFED Bay-Delta Program pursuant to an agreement with a CALFED Agency.

CALFED STAFF FUNCTIONS

- CALFED Bay-Delta Program staff carry out many functions in the Permit Clearinghouse MOU. The MOU contains provisions for CALFED staff permit coordinators. Permit coordinators:
- Provide project managers and program managers with advice on tiering environmental compliance documents from the Final Programmatic EIS/EIR, the Multi-Species Conservation Strategy, and other programmatic documents,

developing an environmental compliance strategy for individual CALFED projects, completing permit applications, and general environmental compliance issues on a project or program level.

- Encourage CALFED project managers and program managers to utilize existing regulatory agency processes to resolve outstanding issues.
- Advise project managers and program managers that the ultimate authorities on environmental compliance issues are the regulatory agencies rather than the permit coordinator.
- Assist in establishing multi-agency, multidisciplinary teams to work with project managers to develop and review a project or, where appropriate, a bundle of projects.
- Assist in developing regional permits as appropriate, standard mitigation measures, study plans, or any other aspect of the implementation of this MOU.
- Work with the CALFED Science Program, program and project managers, and regulatory agencies to assure that environmental commitments, permit conditions, and mitigation measures are implemented and tracked for each project and that a monitoring program, consistent with the Programmatic mitigation monitoring plan, is prepared and implemented.
- Work with the CALFED program and project managers and the Science program to ensure that the monitoring information for each project is collected.
- Pursuant to the MOU, CALFED Bay-Delta Program staff prepared a "Guide to Regulatory Compliance for CALFED Projects." The Guide provides information to program and project managers on CALFED Bay-Delta Program environmental commitments contained in the Record of Decision, which permits will be needed for projects and the process involved in obtaining those permits, and compliance with NEPA and CEQA.

As required in the MOU, a permit tracking database is under development. The permit tracking database tracks key steps associated with environmental review and permitting (e.g., submittal of a permit application, public notice of that application, issuance of a permit). The information in the database will be available to the CALFED program managers, project managers, and regulatory agencies.

- The CALFED Bay Delta Program staff may develop one or more permit application formats so a single permit application can be completed for each project or a single cover sheet can accompany individual permit applications. It is envisioned that different application formats or cover sheets may be developed for different geographic areas or for different types of projects.
- The annual CALFED report will include summary information on implementation of the MOU.

- The CALFED Bay-Delta Program staff will work with regulatory agencies to develop estimated workloads for the development review and permitting of CALFED projects and to identify ways to meet this workload.

NON-BINDING DISPUTE RESOLUTION PROCESS

- The CALFED signatory agencies to the MOU agree to work to identify and resolve issues as early as possible and at the lowest staff level possible. Staff will use existing issue resolution processes where possible.

- In the event that an issue cannot be resolved in a timely manner, an agency or a permit coordinator can ask that the issue be considered at the next CALFED Management Group meeting.

- The CALFED Management Group or an appropriate subset of the Management Group will discuss the issue and make any appropriate recommendations to the interested parties.

- If an issue is elevated to the CALFED Policy Group by the CALFED Management Group, the CALFED Policy Group or an appropriate subset of the Policy Group may make any appropriate recommendations for resolving the issue.

- Any recommendation from the Management Group or Policy Group is non-binding on the parties involved.

SIGNATORY AGENCY FUNCTIONS

- Each CALFED agency agrees to designate a lead person for each permit or project as appropriate. Each CALFED agency will have a single contact responsible for identifying the lead person for each permit or project.

- Each CALFED agency lead person for a permit or project shall make their best efforts to coordinate with the permit coordinators and other CALFED Bay-Delta Program staff.

- Each CALFED agency agrees to participate as appropriate in the dispute resolution process.

ATTACHMENT 1B

MEMORANDUM OF UNDERSTANDING ON A PERMIT CLEARINGHOUSE FOR THE CALFED BAY-DELTA PROGRAM

This information is part of the CALFED Bay-Delta Program website. Click here to view the Permit Clearinghouse MOU.

ATTACHMENT 2

GUIDANCE FOR TIERING FROM THE CALFED FINAL PROGRAMMATIC EIS/EIR

PURPOSE OF GUIDANCE

These guidelines are provided to help agencies prepare tiered environmental documents for projects that implement the CALFED long-term Plan. The guidelines will help focus tiered environmental documents on the project-specific issues ripe for review by eliminating repetitive discussions of material covered in the CALFED PEIS/EIR. CALFED prepared the PEIS/EIR to address the overall environmental issues associated with a large-scale, long-term plan. The PEIS/EIR evaluated the general environmental consequences of the long-term plan and presented mitigation strategies that could be used to address the consequences. Specific projects that implement parts of the long-term plan will cause environmental consequences that are within the range of effects described in the PEIS/EIR. Mitigation measures for specific projects, likewise, will be within the range of mitigation described in the PEIS/EIR.

These tiering guidelines are intended to be used by federal agencies and State agencies (including regional, county, city, and other California public agencies). The guidelines do not affect the authorities or responsibilities of lead agencies under NEPA and CEQA, or other applicable laws or regulations. The following types of projects qualify for tiering from the PEIS/EIR:

- projects funded with money designated for meeting CALFED purposes; and
- projects carried out by CALFED agencies in furtherance of the CALFED Plan.

Under some circumstances, projects undertaken by or subject to approval by federal or state agencies other than the CALFED agencies in furtherance of the CALFED Plan may tier from the PEIS/EIR. In these cases, it will be important to assure that the location and kind of action, impacts (including cumulative effects), mitigation measures, and other commitments are in concert with the CALFED Program, impact documentation and ROD.

The remainder of this section is organized as follows:

1. "CALFED's Regulatory Compliance Process" provides a general overview of CALFED's regulatory compliance process.

2. "What is Tiering?" describes the concept of tiering and the regulations that pertain to tiering.

3. "General Tiering Guidance" provides general guidance about incorporating the tiering concept into the environmental compliance process for CALFED actions.

4. "Recommendations for Using the PEIS/EIR in Preparing Tiered Documents" discusses how to use specific components of the PEIS/EIR when preparing tiered environmental compliance documents for CALFED actions.

5. "NEPA/CEQA Monitoring" describes the relationship of CALFED's NEPA/CEQA Monitoring Plan to tiered environmental documents.

6. "Using the CALFED Record of Decision and Response to Comments Document" recommends ways to use the CALFED ROD and response to comments document in preparing tiered documents.

1. CALFED Regulatory Compliance Process

The CALFED process has established an important precedent in coordinated and cooperative State and federal agency relationships. The CALFED Bay-Delta program staff will continue these efforts by assisting, monitoring, coordinating, and tracking projects that carry out the CALFED plan. Generally, the CALFED agencies will establish or participate in multi-agency teams to facilitate project implementation and assist with regulatory compliance. These teams provide a forum for tracking project development, coordinating congruent permitting steps, identifying and resolving issues, and ensuring permit compliance.

CALFED Bay-Delta program staff will assist with environmental regulatory compliance as projects are proposed and developed. Environmental regulatory compliance includes NEPA/CEQA efforts as well as the permits, consistency determinations, and other approvals that may be necessary for each project.

CALFED Bay-Delta program staff will assist lead agencies in:

- ensuring consistent interpretation and approach,
- developing a preliminary constraints analysis,
- developing a regulatory strategy,
- ensuring that environmental considerations are an integral part of project formulation,
- communicating with regulatory agencies,
- developing contracts for environmental compliance efforts,
- helping with compliance monitoring,
- reviewing documents,
- establishing and maintaining a data management system, and

- providing issue resolution services.

The CALFED Bay-Delta program staff can also:

- help the project proponent develop adaptive management strategies that can be included in mitigation measures and permit conditions,
- develop adaptive management strategies that can be included in mitigation measures and permit conditions,
- develop peer review for studies required under permit conditions or monitoring programs,
- develop measurable criteria that are project specific that can demonstrate project contributions to the CALFED Plan, and
- interlink project monitoring with regional monitoring or with project monitoring on other nearby projects.

2. WHAT IS TIERING?

THE CONCEPT OF TIERING

Tiering of environmental documents refers to the process of addressing a broad, general program, policy, or proposal in an initial, general environmental document and analyzing site-specific proposals related to the initial program, plan, or policy in a subsequent document that focuses on the issues specific to the later project.

Federal agencies operating under NEPA originated the concept of a programmatic document. For large federal projects involving multiple smaller projects over large geographic areas, agencies recognized that a document addressing a program as a whole, rather than a number of documents on component pieces, would be easier to understand. Having a broader perspective and assessing larger-scale impacts that might not be visible at the project document level were central benefits of this approach. When individual, or "second-tier", project documents were undertaken, these documents could use analyses already completed to address many of the large-scale, non-site-specific issues. The use of a first-tier EIR, paralleling the NEPA program EIS, is authorized under CEQA and the CEQA Guidelines.

NEPA TIERING GUIDANCE. Section 1502.20 of the CEQ NEPA Regulations establishes federal tiering requirements. That section encourages tiering environmental documents to avoid repeating issues that have already been evaluated. Subsequent, or second-tier, documents can summarize issues discussed in the broader statement, and may incorporate discussions from the higher-level document by reference. The emphasis in the second-tier document is on project-

specific impacts. The CEQ has emphasized that second-tier NEPA reviews must still be carried out, but that tiering can avoid unnecessary duplication of analysis. Individual federal agencies have adopted their own NEPA guidelines that establish their tiering procedures.

CEQA TIERING GUIDANCE. CEQA Guidelines Section 15152 provides that the environmental documents for later related projects can be tiered from a first-tier EIR. Section 15152(a) provides that the level of detail contained in the first-tier EIR need not be greater than that of the program being analyzed. Subsections (b) and (c) provide that the first-tier EIR may defer developing site-specific information until site-specific, second-tier projects are considered, as long as the deferral does not prevent adequately identifying significant effects. Subdivisions (d)–(h) of Section 15152 establish the rules for tiering later environmental documents.

Tiering is limited to situations where the later project is consistent with the program for which the first-tier EIR was certified. The second-tier document can be limited to project-specific effects that were not examined as significant effects in the first-tier EIR or that are susceptible to substantial reduction or avoidance through specific mitigation measures or revisions in the second-tier project. Subdivision 15152(f) provides that a second-tier EIR must be prepared when the later project may cause significant effects on the environment that were not adequately addressed in the first-tier EIR. Under the circumstances specified in subdivision 15152(f), it may not be necessary to discuss cumulative impacts in detail if they have been adequately addressed in the first-tier EIR.

CALFED AGENCIES' TIERING STRATEGY

The CALFED PEIS/EIR describes the expected environmental effects of the CALFED Preferred Program Alternative. The CALFED agencies' strategy in preparing a PEIS/EIR was to discuss major program-level issues in the programmatic document, identifying significant impacts at the program level and suggesting mitigation strategies. Throughout the process of preparing the PEIS/EIR, holding public hearings, and responding to comments, CALFED indicated to all levels of government and to all stakeholders that site-specific projects will undergo NEPA/CEQA review, using the program document as a guide and template. The CALFED agencies do not intend that lead agencies proceed with projects without appropriate project-specific environmental analysis.

LEVEL OF ANALYSIS. Tiering allows lead agencies to focus on the site-specific impacts of the project, rather than addressing broader, more general issues that have been addressed in the first-tier EIS/EIR. Issues that are ripe for decision at the time of preparation of the tiered document should be the focus; issues that were discussed and settled for the overall program need not be readdressed. For CALFED, projects appropriate for tiered analysis would include any that were included in the scope of the Preferred Program Alternative at the time of issuance of the ROD and CEQA certification, or in any later environmental document tiering from the program document. Tiered documents should focus on impacts on the local area, site-specific mitigation measures, and project design or alignment alternatives. Tiered documents should refer to PEIS/EIR discussions regarding broader program alternatives. Analyses of cumulative

impacts, growth inducement, and areawide impacts in the tiered document may reference the PEIS/EIR as the basis of analysis, but in most cases will require more specific information about the particular project's potential to cause wide-ranging effects.

ADVANTAGES OF TIERING. Tiering from the PEIS/EIR means that a portion of the analysis that would be required for a stand-alone environmental document has already been prepared, and that many of the difficult larger issues have already been addressed. Duplicative consideration of larger policy issues contained in the program can be avoided, saving considerable time and expense.

CONSEQUENCES OF NOT TIERING. Preparing environmental documents for CALFED projects that are not tiered from the PEIS/EIR may require a substantial commitment of time and resources to reanalyze a full range of alternatives, cumulative impacts, and other issues that were addressed in the PEIS/EIR. Also, failure to consider significant impacts and mitigation strategies developed in the PEIS/EIR could lead to concerns that individual lead agencies' approaches to implementing mitigation and monitoring may be inconsistent. This could lead to document revisions, significant delays to the project, and substantial additional costs.

3. GENERAL TIERING GUIDANCE

The following are general tiering recommendations.

TIERING REFERENCE

A second-tier document must contain a conspicuous reference to the first-tier document. The cover page or introduction of the environmental document should: (1) provide the title of the previous program document; (2) state where a copy of the programmatic document can be found for review; (3) indicate that the second-tier lead agency is using the tiering concept, and (4) state that the document is being tiered from the original programmatic document. As a template, the following statement can be used:

This document is tiered from the CALFED Bay-Delta Program Final Programmatic EIS/EIR and the Record of Decision issued August 28, 2000 (including CEQA certification). The Programmatic EIS/EIR can be reviewed at the CALFED Bay-Delta Program, 1416 Ninth Street, Room 1147, Sacramento, CA. Tiering is provided for in NEPA (CEQ) Regulations Section 1502.20 and CEQA Guidelines Section 15152.

SCOPING

An agency undertaking scoping for a project implementing a portion of the CALFED long-term Plan should state in scoping notices that the agency proposes to tier portions of the environmental analysis from the CALFED PEIS/EIR.

The PEIS/EIR may contain information that will help focus issues during the scoping process. This includes, for example, the scope of the proposed action, alternatives not considered, and impacts that are not considered significant.

DEVELOPING THE ADMINISTRATIVE RECORD

For environmental documents that tier from the PEIS/EIR, the PEIS/EIR becomes part of the administrative record. The agency should have on hand at least one, and preferably two, copies of the PEIS/EIR to which it may refer. If the agency's decision becomes the subject of litigation, a copy will need to be provided to the court.

INCORPORATION BY REFERENCE

Pertinent analysis of program alternatives, analysis of overall program planning-level effects, and analysis of cumulative impacts can be incorporated by reference into the second-tier environmental document. When document preparers are incorporating by reference, they should cite the discussion and findings of the PEIS/EIR and summarize them briefly (CEQ NEPA Regulations Section 1502.21 and CEQA Guidelines Section 15150).

The portions of the PEIS/EIR that may be incorporated by reference will vary depending on the characteristics of the site-specific project. Incorporation by reference is to be used only when the referenced subject is pertinent to the project at hand and incorporation by reference would avoid the need to repeat the full discussion from the PEIS/EIR in the project-specific document. Incorporation by reference does not substitute for project-specific analysis.

DETERMINING SIGNIFICANCE

Determining whether a project will have a significant effect on the environment is the key to both the NEPA and CEQA processes. When determining significance, the lead agency must consider both direct effects on the environment, such as habitat removal, and indirect effects, such as contribution to air quality degradation.

The PEIS/EIR identifies potentially significant, program-level environmental impacts that would occur as a result of the activities implementing the CALFED long-term Plan. Lead agencies tiering from the PEIS/EIR must review these impacts and determine whether their projects would result in any of the same significant effects. Chapter 3 of the PEIS/EIR summarizes the impacts of CALFED that were identified in Chapters 5, 6, and 7 of the document. The Environmental Consequences–Mitigation Strategies Checklist included as Attachment 3 can be used to help identify the significant effects that may apply to a project.

The lead agency must also follow its own standard NEPA or CEQA procedures to determine whether the project would result in any project-specific effects.

4. Recommendations for Using the PEIS/EIR in Preparing Tiered Documents

The following are recommendations regarding use of information in the PEIS/EIR in tiered environmental documents. The recommendations follow the chapters in the PEIS/EIR.

Project Description, Including Purpose and Need Statement

The project description of a tiered environmental document should include a discussion of the project's integration with the larger CALFED long-term Plan. The project description should discuss the CALFED mission, goals, and objectives and describe how the proposed action helps meet them. Related CALFED projects should also be described. These discussions and descriptions should be sufficiently detailed to allow a reader to understand where the tiered project fits into the larger CALFED plan as presented in the Programmatic Record of Decision.

The statement of purpose and need in tiered environmental documents should illustrate the linkage to the CALFED purpose and needs statement in the PEIS/EIR (CEQA's "project objectives" are analogous to the purpose and need statement). A tiered project's statement of purpose and need should be consistent with the overall CALFED objectives. CALFED's statement of purpose and need is in Chapter 1.2 of the PEIS/EIR.

The purpose and need statement of a tiered project will be a subset of the CALFED purpose and need statement. For example, a CALFED objective is to "improve and increase aquatic and terrestrial habitats and improve ecological functions in the Bay-Delta to support sustainable populations of diverse and valuable plant and animal species". This objective is further summarized in the PEIS/EIR. One sub-objective is to "improve the in-Delta, upstream, and downstream movement of larval, juvenile, and adult life stages of aquatic species". One means to partially achieving this sub-objective is to build a fish screen at a water diversion facility. The purpose and need statement in a tiered environmental document for such a fish screen project should trace the purpose and needs back to the PEIS/EIR. Information from the PEIS/EIR may be incorporated by reference.

See Attachment 5 for an example of how to develop a statement of purpose and need for a CALFED action.

Alternatives Analysis

NEPA and CEQA require that EISs and EIRs identify feasible alternatives that would meet the project purpose and need or objectives. Under CEQA, the alternatives selected are those that could feasibly attain most of the project objectives and would avoid or substantially lessen one or more of the anticipated significant impacts of the proposed project. The discussion of overall program alternatives from the PEIS/EIR should be incorporated by reference.

The following is an example of incorporation of the alternatives analysis by reference. Actual incorporation by reference would require a more complete summary of environmental consequences.

Alternatives—Four alternatives for the overall CALFED long-term Plan are discussed in Section 2 of the CALFED PEIS/EIR (Record of Decision and CEQA certification issued August 2000). These alternatives represent differing approaches to conveying water through the Delta. Each of the alternatives addresses the eight elements of the program: Ecosystem Restoration, Water Quality, Levee System Integrity, Water Use Efficiency, Water Transfer, Watershed, Storage, and Conveyance.

Alternative 1 relies primarily on the year 2000 configuration of the Delta channels. It also proposes a channel enlargement in the Old River adjacent to Victoria Island, flow control barriers along the Fabian Tract and the Middle River, and fish screens at the Clifton Court Forebay. Environmental consequences of Alternative 1 would include disruption and fragmentation of vegetation and wildlife communities, conversion of up to 15,700 acres of farmland, etc.…

Alternative 2 adds improvements to north Delta channels, including possible setback levees or channel modifications on the North Fork adjoining Staten Island, to the south Delta changes contemplated in Alternative 1. Other features include a 10,000 cubic foot per second diversion facility on the Sacramento River near Hood. Environmental consequences would include greater adverse impacts on vegetation and wildlife than under Alternative 1, conversion of up to 19,500 acres of farmland, etc.…

Alternative 3 adds a canal connecting the Sacramento River in the north Delta near Hood to the SWP and CVP export facilities in the south Delta at the Clifton Court Forebay, in addition to the north and south Delta facilities contemplated in Alternatives 1 and 2. Consequences of this alternative include greater adverse impacts on vegetation and wildlife than under Alternative 2, conversion of up to 21,000 acres of farmland, etc.…

Alternative 4, the Preferred Program Alternative, incorporates elements similar to some of the elements in Alternatives 1 and 2. It includes possible setback levees or channel modifications on the North Fork and South Fork adjoining Staten Island, a new screened diversion facility on the Sacramento River and channel to the Mokelumne River as under Alternative 2, but on a considerably smaller scale. Consequences of this alternative include adverse impacts on vegetation and wildlife similar to those under Alternative 1, conversion of 15,700 to 19,500 acres of farmland, etc.…

Chapter 2 of the PEIS/EIR is incorporated by reference into this document.

ENVIRONMENTAL CONSEQUENCES

The environmental consequences of the Preferred Program Alternative and alternatives were presented in Chapter 5, "Physical Environment;" Chapter 6, "Biological Environment;" and Chapter 7, "Land Use, Social Issues and Economics," of the PEIS/EIR. Each of these chapters is divided into sections according to resource category. The following discussions describe how these sections of "environmental consequences" chapters were organized and recommends ways to use the information they provide in tiered environmental documents. Information from the PEIS/EIR may be incorporated by reference.

SUMMARY. At the beginning of each resource category section in the PEIS/EIR environmental consequences chapters, a summary of the conclusions of the detailed impact analysis was provided. It gave an overview of the benefits and potentially significant adverse impacts that could result from implementing the program, and listed possible mitigation strategies to lessen potentially significant impacts. Information presented in the summary for each resource was the basis for the summary comparison of impacts presented in Chapter 3 of the PEIS/EIR. Tables in each resource section summarized the significant adverse impacts and mitigation strategies that apply to them.

Tiered environmental documents should follow this format. It provides a good overview of environmental consequences for readers not wishing to read the entire document. It also provides a convenient means of preparing a summary chapter and tracking environmental consequences and mitigation measures, and simplifies preparing the ROD and CEQA findings.

AREAS OF CONTROVERSY. This section was included in the PEIS/EIR to highlight the uncertainty in many areas of analysis of environmental consequences and discussed issues mentioned in the public review process. In most cases, the issues were addressed in the impact analyses. In some cases, the issues could not be addressed at the programmatic level and need to be addressed in tiered environmental documents.

Tiered environmental documents should follow this format. Identifying uncertainties and means of resolving them is essential to the adaptive management approach of the CALFED long-term Plan. Incorporating discussions of uncertainty, as applicable, in implementing projects will lead to development of research and monitoring programs to resolve them. Highlighting issues can help resolve them. Reviewing the response to comments document for the PEIS/EIR may help identify areas of controversy.

AFFECTED ENVIRONMENT/EXISTING CONDITIONS. The "affected environment/existing conditions" sections in the PEIS/EIR provided a historical perspective and an overview of current conditions for each resource. The discussions were organized by CALFED study regions:

- Delta region,
- Bay region,
- Sacramento River region,
- San Joaquin River region, and
- Other State Water Project (SWP) and CVP service areas.

Tiered environmental documents should identify the CALFED study region(s) where the Preferred Program Alternative–implementing project(s) would be located. Useful information for tiered documents may be extracted from the affected environment/existing conditions sections in the PEIS/EIR, with more specific detail added to fully describe the project area. Information from the PEIS/EIR may be incorporated by reference.

ASSESSMENT METHODS. Descriptions of assessment methods in the PEIS/EIR were resource-specific and provided the approach and analytical models used to identify and assess the environmental consequences for the resource category. Preparers of tiered environmental documents should review the assessment methods used in the PEIS/EIR, and evaluate whether the programmatic methods can be used to develop more specific assessment methods to analyze environmental consequences in tiered projects.

SIGNIFICANCE CRITERIA. The thresholds of significance for many of the environmental resources discussed in the PEIS/EIR were described in qualitative terms and covered a broader spectrum of impacts than would be included in a site-specific, project-level analysis. Consequently, the thresholds for most resources could not be established with a quantitative measurement. The measure of significance will vary depending on the nature and type of the proposed actions, the site characteristics where the actions take place, and how they affect the existing conditions at the time of the proposed actions. The thresholds used in the PEIS/EIR were intended to identify potentially significant impacts at a programmatic level and to provide guidance for developing significance criteria at subsequent tiers of analysis. The thresholds also provided a tool to predict whether it was likely that the impacts identified as potentially significant at the programmatic level can be avoided, reduced, or mitigated to a less-than-significant level.

Preparers of tiered environmental documents should review the significance criteria used in the PEIS/EIR, and use them to the extent practicable to develop more specific significance criteria to analyze the environmental consequences of their projects.

NO-ACTION ALTERNATIVE. This section of the PEIS/EIR presented the environmental consequences of the No-Action Alternative compared to existing conditions. The No-Action Alternative makes predictions about the future condition of environmental resources, taking into consideration recently constructed projects and projects proposed for construction. For the No-Action Alternative, assumptions based on current expectations were made about existing trends that may continue into the future and about future water project operations. For example, urbanization that is expected to continue would require additional land and water resources, with consequences to a variety of environmental resources. A list of projects included in the

PEIS/EIR No-Action Alternative impact analysis and water operation modeling assumptions was provided in Attachment A of the PEIS/EIR.

Preparers of tiered environmental documents should review the No-Action Alternative used in the PEIS/EIR. The broad assumptions and the analysis used for the PEIS/EIR No-Action Alternative may be useful for developing more specific assumptions or models for the No-Action Alternative for Preferred Program Alternative–implementing projects.

Program Alternatives Environmental Consequences

The PEIS/EIR identified a number of significant environmental impacts. They are listed in the PEIS/EIR at the beginning of the environmental consequences chapters in the Summary section. For example, noise impacts are listed in the PEIS/EIR in Section 5.6.1. Other sections in Chapter 5.6 present the analysis of how these impacts were determined. These impacts are also included in the mitigation monitoring checklist in Attachment 3.

Preparers of second-tier environmental documents should use the mitigation strategies checklist or environmental consequences chapters of the PEIS/EIR in preparing their environmental documents. A logical time to do this is during preparation of environmental assessments or initial studies. If a resource impact listed in the PEIS/EIR as significant also could result from the tiered project, the impact should be evaluated in the tiered document and mitigation measures for it derived from the PEIS/EIR mitigation strategies. The evaluation of the impacts of the PEIS/EIR may show that the impact is not significant for the tiered project. This conclusion should be documented and kept in the administrative record. It should also be noted that an impact of a Preferred Program Alternative–implementing project may be found to be significant at the site-specific level even if it was not found to be significant in the PEIS/EIR.

Preparers of tiered documents also should consider using the approach presented in the PEIS/EIR for economic and social issues. In the PEIS/EIR, economic and social effects were presented, and methods to avoid or reduce adverse social and economic effects were addressed, as applicable, in the text of each of the environmental consequences chapters. These effects were not included in the summary sections because social and economic changes resulting from a project are treated somewhat differently under NEPA and CEQA. Under NEPA, economic or social effects must be discussed if they are interrelated to the natural or physical environmental effects of a project. CEQA does not treat economic or social changes resulting from a project as significant impacts on the environment. However, if economic or social effects cause a physical change in the environment, the physical change may be regarded as a significant impact based on the same criteria used to determine the significance of other physical changes from the project. In addition, economic and social effects of a project may be used to assess the significance of a physical effect.

Note that the PEIS/EIR separated the description of environmental consequences into two categories: *Program Elements with Consequences Common to All Alternatives* and *Program Elements with Consequences That Differ Among Alternatives*. The first category was used because, at the program level, all program alternatives contained certain common elements. These common elements caused similar environmental consequences and grouping them together eliminated repetitive text. It is

anticipated that environmental documents prepared for projects that implement the Preferred Program Alternative will not use this approach because project alternatives should be different enough to preclude considering a category such as *Program Elements with Consequences Common to All Alternatives.*

PROGRAM ALTERNATIVES COMPARED TO EXISTING CONDITIONS. Under CEQA, the existing conditions are normally the baseline for comparison of the effects of the project. In the PEIS/EIR, the No-Action Alternative was used as the primary baseline because of the long-term nature of the program. However, an analysis with existing conditions as the baseline was conducted and the results were presented in this section. This ensured that all potentially significant impacts were identified. In most cases, because of the general nature of the environmental assessment, the conditions under the existing conditions baseline were similar to those under the No-Action Alternative.

Most tiered environmental documents should be specific enough to differentiate between existing conditions and the No-Action Alternative. Tiered documents should be formatted to clearly describe the environmental consequences using both baseline conditions.

ADDITIONAL IMPACT ANALYSES. Four other topics were included in the PEIS/EIR environmental consequences chapters: cumulative impacts, growth-inducing impacts, the relationship between short-term uses of the environment and maintaining and enhancing long-term productivity, and irreversible and irretrievable commitments of resources. These topics generally are separate sections in EISs and EIRs, but need not be. Preparers of tiered environmental documents should review these sections to guide preparation of the tiered environmental documents.

In the PEIS/EIR, a summary of each of these topics was included in Chapter 3, "Summary Comparison of Environmental Consequences."

CUMULATIVE IMPACTS. The analysis of cumulative impacts in the PEIS/EIR considered the long-term environmental impacts of the CALFED Preferred Program Alternative and alternatives, including those that would be less than significant, together with similar impacts of other projects. The other projects reviewed were listed in Attachment A to the PEIS/EIR. Because CALFED actions affected a large geographic area over a 30-year time frame, many impacts of the program that might not be significant in a short-term, site-specific analysis were treated as significant at the programmatic level of review. No additional environmental impacts that individually would be minor, but collectively significant, were identified. As a result, the analysis of the contribution of the Preferred Program Alternative and alternatives to cumulative impacts was very similar to the analysis of their long-term impacts. The mitigation strategies identified for impacts were also applicable to mitigate cumulative impacts. Chapter 3 of the PEIS/EIR contained a table that identified, by region, the resource category in which potentially significant cumulative adverse impacts resulting from the incremental impact of the Preferred Program Alternative, when added to the impacts of applicable projects and activities listed in Attachment A of the PEIS/EIR, were anticipated.

Tiered EISs and/or EIRs should incorporate the relevant cumulative and long-term impact analyses of the PEIS/EIR and add detail about other "reasonably foreseeable future projects" and their contribution to cumulative impacts. Any significant environmental impacts, including contributions to a cumulative impact that the PEIS/EIR did not address, need to be evaluated in the tiered environmental reviews. Information from the PEIS/EIR may be incorporated by reference.

GROWTH-INDUCING IMPACTS. Water supply reliability and growth-inducing impacts were discussed in Chapter 5.1 of the PEIS/EIR. The effect of the Preferred Program Alternative on the majority of the resources discussed in this document would not induce additional growth; however, these resources could be affected by additional growth. There are wide differences of opinion regarding whether additional water supplies or improvements in water supply reliability cause growth-inducing impacts. The PEIS/EIR assumed that any increase in water supplies or improvements in water supply reliability that are associated with the Preferred Program Alternative would stimulate growth.

Tiered EISs and EIRs will need to evaluate growth-inducing impacts based on their specific characteristics and location. Water supply reliability projects that increase the amount of water available for consumptive use will need to carefully evaluate the question of whether water supply availability fosters growth or accommodates growth. Growth-inducing impacts may have effects on ESA/CESA permitting processes, and consultation with ESA/CESA agencies about growth-inducing impacts should occur early in the NEPA/CEQA document preparation process (see Chapter 3).

RELATIONSHIP BETWEEN SHORT-TERM USES AND LONG-TERM PRODUCTIVITY AND IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS. These sections in the PEIS/EIR discussed the relationship between local short-term uses of the environment and the maintenance and enhancement of long-term productivity required by NEPA and the NEPA/CEQA requirement for discussion of irreversible and irretrievable commitments of resources. Resource-specific summaries were provided in Chapter 3 of the PEIS/EIR.

Preparers of tiered environmental documents should review these sections for useful information applicable to specific projects.

MITIGATION STRATEGIES. Because the PEIS/EIR did not evaluate site-specific actions, no specific mitigation measures were presented. Instead, general mitigation strategies were identified as ways to avoid, minimize, restore, or compensate for potentially significant adverse impacts. For some resources, specific mitigation measures were provided as examples to display the array of techniques available to carry out the strategy. For example, construction activities can cause erosion of soils that leads to adverse impacts on water quality. A mitigation strategy would be to avoid and minimize the impact. Mitigation measures available to carry out this strategy include conducting work during dry periods and using erosion-control fencing or straw bales, water detention basins, and so forth.

The analyses of economic and social information in the PEIS/EIR (agricultural economics, agricultural social issues, urban water supply economics, regional economics, and environmental justice) did not contain separate mitigation strategy sections. However, the PEIS/EIR presented possible methods to alleviate potential adverse effects on these resources within the discussion of potential effects.

Preparers of tiered environmental documents should use the mitigation strategies developed in the PEIS/EIR as a starting point to determine appropriate mitigation measures. Because all the potential actions and impacts for tiered projects cannot be anticipated at a programmatic level, each project needs to select the strategies and actions applicable to the specific location and type of action and to consider additional project-specific mitigation measures. Mitigation plans and mitigation measure monitoring will necessarily be different for each individual project.

Attachment 3, "Environmental Consequences—Mitigation Strategies Checklist," lists the environmental impacts and mitigation strategies identified in the PEIS/EIR and ROD. According to CALFED's NEPA/CEQA Monitoring Plan (see "NEPA/CEQA Monitoring" below), Preferred Program Alternative–implementing projects will be monitored to determine whether mitigation strategies presented in the PEIS/EIR were considered in environmental documents and appropriate mitigation measures proposed for significant environmental impacts.

POTENTIALLY SIGNIFICANT UNAVOIDABLE IMPACTS. The PEIS/EIR contained a discussion of potentially significant unavoidable impacts for each resource category. This section identified potentially significant adverse impacts that were anticipated to remain significant even after mitigation strategies and measures are implemented. For the economic and social information analyses, this section is titled "Adverse Effects."

Preparers of tiered environmental documents should review these sections and determine whether they are applicable to specific projects. Including this section in EISs and EIRs is also recommended to ensure that unavoidable impacts are clearly disclosed and to aid in the preparing CEQA findings.

5. NEPA/CEQA MONITORING

NEPA and CEQA require monitoring of mitigation measures that are incorporated into projects. Chapter 9 of the PEIS/EIR described a framework for monitoring mitigation strategies that were included in the programmatic document. Section 2.1.6 of the ROD also included this mitigation monitoring plan.

As required by NEPA and CEQA, projects that implement the CALFED Plan will also need to contain their own mitigation monitoring plans. These plans will present how the lead agency will monitor and report on the implementation of specific mitigation measures adopted by the agency in approving a project. They will provide a schedule for implementing the adopted mitigation measures and for reviewing the implementation of those measures. The lead

agencies will provide a written report periodically, but at least once a year, to CALFED for programmatic review by the lead scientist regarding the overall progress in implementing the mitigation measures and their effectiveness.

The PEIS/EIR mitigation monitoring plan includes CALFED review, guidance, and reporting components. CALFED has prepared the checklist of environmental consequences and mitigation strategies from the PEIS/EIR and ROD that is included as Attachment 3; it should be used by lead agencies preparing environmental documents that tier from the PEIS/EIR. The lead agencies for tiered documents should document the applicable programmatic mitigation strategies that are being adopted and explain why others are not being adopted. This checklist should be used early in the environmental process to focus impact analyses on pertinent issues and document that all environmental consequences and mitigation strategies in the PEIS/EIR were considered. CALFED will use the checklist to monitor whether all mitigation strategies were considered in project development and implementation.

6. Using the CALFED Record of Decision and Response to Comments Document

The ROD reflects the final selection of a long-term plan (Preferred Program Alternative) and sets out actions for implementing Stage 1 of the CALFED Plan. Actions will be carried out in a manner consistent with the ROD. The ROD can be used as a guide for formatting project-specific impact analyses so that creating project-specific findings from these impact analyses will be faster and easier.

The response to comments document contains responses to comments received on the CALFED draft PEIS/EIR, dated June 25, 1999. The response to comments document will be useful in preparing tiered environmental documents because it identifies concerns about specific resource categories expressed during the review of the draft PEIS/EIR. It will also allow review of comments made by specific agencies and individuals that may also be reviewing and commenting on specific implementation projects because of the nature or location of the projects. Using the response to comments document in this manner should facilitate the scoping process and preparation of the environmental analysis by focusing on issues very early in the process. However, it is not a substitute for consultation and scoping as required by NEPA and CEQA.

Within the response to comments document, the "common responses" provide information about concerns that were expressed by many reviewers. Comments about more specific concerns can be located using the index of the response to comments document. The indices of the PEIS/EIR and appendices were used to sort comments and responses by subject matter. For example, if an implementation project has potential environmental impacts on fishery resources, the preparers of the second-tier document should review the responses to comments on fishery impacts in Volume I, Impact Analyses, Chapter 6.1 of the response to comments document. Additionally, information concerning comments and responses about

proposed actions for fishery restoration in CALFED's Ecosystem Restoration Program is available in Volume II: Technical Appendices of the response to comments document in the Ecosystem Restoration Program section. For more detailed information on how to use the response to comments document, please refer to the "How to Use the Response to Comments Document" guide in the PEIS/EIR.

ATTACHMENT 3

ENVIRONMENTAL CONSEQUENCES—MITIGATION STRATEGIES CHECKLIST

The Environmental Consequences—Mitigation Strategies Checklist (Checklist) consists of 17 tables and lists, each covering a different resource category. Information in the Checklist was derived from the impact summary tables in the CALFED PEIS/EIR. The resource categories covered in the tables and lists are typically analyzed in environmental documents

For any significant adverse impact identified in project-specific environmental documents, mitigation measures need to be identified. These mitigation measures should be consistent with the programmatic mitigation strategies listed in the Checklist. Selection of specific mitigation measures is left to the project lead agency, but the program level mitigation strategies need to be considered and the reasons specific mitigation measures were or were not selected need to be documented. This ensures that all environmental documents tiering from the CALFED PEIS/EIR appropriately address the issues and mitigation measures identified in the CALFED PEIS/EIR.

The Checklist is to be used by those preparing environmental documents tiering from the CALFED PEIS/EIR. It should be used in two ways. Initially, as a tool to help identify potential environmental effects early in the preparation of an environmental document and to suggest mitigation mitigation measures for significant adverse impacts. Secondly, after the environmental document has been completed, use the Checklist to document that the environmental document tiered from the CALFED PEIS/EIR and addressed issues and mitigation measures identified in the CALFED PEIS/EIR.

The following explains how to use the Checklist to help identify potential environmental effects and mitigation measures. The example (Utilities and Public Services) consists of a table and list. The Utilities and Public Services table, as do all other resource category tables, has text in the first two columns (Potentially Significant Adverse Impacts and Mitigation Strategies). The text in these two columns was derived from the impact summary tables in the CALFED PEIS/EIR. The project proponent fills in the other four columns as necessary (shown in italics).

All the resource category tables in the Checklist follow the format of the Utilities and Public Services' table and list. All 17 resource categories identified in the CALFED PEIS/EIR are presented on the following 36 pages. We encourage you to photocopy or otherwise reproduce the Checklist. The Checklist should become a part of the your administrative record.

Steps in Using the Checklist

1. As you identify impacts associated with your project, read through the descriptions of impacts (*Potentially Significant Adverse Impacts* column) for each resource category in

the Checklist. If a description in the column is found to apply to your project, indicate "yes" or "maybe" in the *Applicable?* column/box to the right of that impact. If an impact is not applicable, indicate a "no" in the *Applicable?* column. In the illustration that follows we have indicated that the example project does not result in a "Possible need for relocation or modification of major infrastructure components" by placing a "no" in the *Applicable?* column. We do, however, note that the project does have an "Increased risk of gas line rupture during construction phase."

2. As you develop the draft environmental document for the project, enter in the "Discussed" column the section(s) or page(s) where the potential impact is discussed. In the example, we indicated that the draft environmental document discusses a risk of gas line rupture on pages 23-24.

3. As you analyze and focus on the specific environmental effects of your project, review the mitigation strategies, listed after the table and numbered in the second column of the table, and identify strategies which best address the specific environmental effects of your project. Finally, list the mitigation strategies that you will use in the *Mitigation Proposed* column. In the example, mitigation strategies 3 and 5 (coordinating construction activities with utility providers, and designing project facilities to avoid or minimize their effect on existing infrastructure) were identified as strategies that best address the risk of gas line rupture. The numbers 3 and 5 are noted in the *Mitigation Proposed* column. Also noted is a summary of the specific efforts ("PGE will review construction plans to locate existing buried gas line. Spoil disposal will be located away from line").

4. Use the *Notes* column at any time to record thoughts or ideas, such as noting where to find a parallel discussion in the environmental document.

5. The CALFED agencies found that implementation of the CALFED Plan may cause significant unavoidable impacts. A sentence in bold type near the top of each table of the Checklist identifies resource categories that could experience unavoidable significant impacts, or else notes that unavoidable significant impacts are not associated with a resource category. Project lead agencies should carefully evaluate the impacts associated with projects. If an impact occurs that was identified as unavoidable in the CALFED PEIS/EIR, the lead agency must thoroughly evaluate all mitigation measures that are available to reduce the impact to a level that is less than significant. The lead agency must then make its own conclusion as to whether or not the impact is unavoidable.

When the Checklist is completed systematically, it shows that your project tiered from the programmatic mitigation strategies. Since this is a CALFED ROD commitment, it is an important step to assure that your project is consistent with the CALFED Plan and may help if the adequacy of the environmental document is challenged.

Some users will find the descriptions of potentially significant impacts for one resource category overlap with those of another resource category. You should use the *Notes* column of the applicable resource category table to refer to another resource

category table or a portion of the environmental document where particular impacts and/or strategies are described in better detail.

The mitigation strategies will often require interpretation to suit the specific needs of unique projects. The lead agency should document in the record how it is tailoring a mitigation strategy to meet its particular needs.

EXAMPLE - UTILITIES AND PUBLIC SERVICES

No potentially significant unavoidable impacts related to utilities and public services are associated with the Preferred Program Alternative.

Potentially Significant Adverse Impacts	**Mitigation Strategies**	**Applicable?**	**Discussed?**	**Mitigation Proposed**	**Notes**
Possible need for relocation or modification of major infrastructure components	1,2,4,5	*No, no relocation or modification of components involved*		*None needed*	
Increased risk of gas line rupture during construction phase	3, 5	*Yes, gas line in area of proposed spoil site.*	*Yes, pages 23-24*	*#s 3 and 5 PGE will review construction plans to locate existing buried gas line. Spoil disposal will be located away from line.*	

Mitigation Strategies

1. Siting project facilities and transmission infrastructure to avoid existing infrastructure.

2. Constructing overpasses, small bridges, or other structures to accommodate existing infrastructure.

3. Coordinating construction activities with utility providers.

4. Designing and operating facilities to minimize the amount of energy required and to maximize the amount of energy created.

5. Designing project facilities to avoid or minimize their effect on existing infrastructure.

ENVIRONMENTAL CONSEQUENCES—MITIGATION STRATEGIES CHECKLIST

WATER SUPPLY AND WATER MANAGEMENT

No potentially significant unavoidable impacts related to water supply and water management are associated with the Preferred Program Alternative.

Potentially Significant Adverse Impacts	Mitigation Strategies	Applicable?	Discussed?	Mitigation Proposed	Notes
Potential temporary local water supply interruptions due to turbidity of water during construction of Program facilities and habitat restoration activities.	1				

Mitigation Strategies

1. Using best construction and drainage management practices to avoid transport of soils and sediments to waterways.

WATER QUALITY

Bold indicates a potentially significant unavoidable adverse impact.

Potentially Significant Adverse Impacts	Mitigation Strategies	Applicable?	Discussed?	Mitigation Proposed	Notes
Releases of inorganic and organic suspended solids into the water column and turbidity resulting from increased erosion during construction, dredging, or drainage of flooded lands	7,8,9,19				
Releases of toxic substances, such as pesticides, selenium, and heavy metal residues, into the water column during construction and dredging and other Program actions.	7,8,9,14,15, 19				
Net increases in salinity, if evaporation increases from converting irrigated cropland to wetlands.	2,3,13				
Increased EC (a measure of salinity) of water in the Delta	2,3,12				
Increases of TOC in river water caused by the increased contact between flowing or ponded water and vegetation or peat soils that would result from conversion of agricultural lands to wetlands and from actions in other Program elements.	4,5,10,11,12				
Increased water temperatures and resultant decreased dissolved oxygen concentrations due to the increased residence time of water in the Delta.	2,3,13, 17				

(continued from previous page)

Decreases in in-stream water quality if water use efficiency measures or water transfers reduce diluting flows.	1,2,3				
Increases in concentrations of constituents of concern if water transfers reduce in-stream flows and deplete river assimilative capacities.	1,2,3,6				
Increases in methylation of mercury in constructed shallow-water habitat.	16				
Degradation of surface water by the transfer of poorer quality groundwater.	2,3				
Changes in natural flow regimes in areas where new surface storage is built.	17				
Surface storage inundation of toxic material.	18				

Mitigation Strategies

1. Improving treatment levels provided at municipal wastewater treatment plants to upgrade the quality of the constituents of concern discharged to receiving waters in order to compensate for the reduction in dilution caused by improved water use efficiency or water transfers. Salt concentrations in discharges could be reduced by improved salt management of wastewater inputs to treatment plants.

2. Releasing additional water from enlarged or additional off-stream storage, or from additional groundwater storage.

3. Releasing additional water from storage in existing reservoirs or groundwater basins.

4. Treating water at the source (such as Delta drains), upgrading water treatment processes at drinking water treatment plants, and/or providing treatment at the point of use (consumer's tap).

5. Using innovative, cost-effective disinfection processes (for example, UV irradiation and ozonation- in combination with other agents) that form fewer or less harmful DBPs.

6. Using existing river channels for water transfers and timing the transfers to avoid adverse water quality impacts.

7. Using best construction and drainage management practices to avoid transport of soils and sediments into waterways.

8. Using cofferdams to construct levees and channel modifications in isolation from existing waterways.

9. Using sediment curtains to contain turbidity plumes during dredging.

10. Separating water supply intakes from discharges of agricultural and urban runoff.

11. Applying agricultural and urban BMPs, and treating drainage from lands with concentrations of potentially harmful constituents to reduce contaminants. Treating drainage from agricultural lands underlain by peat soils to remove TOC.

12. Relocating diversion intakes to locations with better source water quality.

13. Restoring additional riparian vegetation to increase shading of channels.

14. Conducting core sampling and analysis of proposed dredge areas and implementing engineering solutions to avoid or prevent environmental exposure of toxic substances after dredging.

15. Capping exposed toxic sediments with clean clay/silt and protective gravel.

16. Testing for mercury in soils and locating constructed shallow-water habitat away from sources of mercury until methods for reducing mercury in water and sediment are implemented.

17. Operating surface storage release times and magnitude to mimic natural regimes.

18. Avoiding inundation or designing solutions to inundation of toxic materials, such as covering with an engineered cap.

19. Scheduling ground-disturbing construction during the dry season.

GROUNDWATER RESOURCES

No potentially significant unavoidable impacts on groundwater are associated with the Preferred Program Alternative.

Potentially Significant Adverse Impacts	Mitigation Strategies	Applicable?	Discussed?	Mitigation Proposed	Notes
Changes in groundwater levels	1,2,3,4,5,6, 12,15,19,20				
Increased demand for groundwater supplies	1,2,3,5,7,9, 15				
Increased groundwater overdraft	4,8,10,11,15, 16,19				
Increased land subsidence	4,8,10,11,12, 13,14,15,16, 19,20				
Increased degradation of groundwater quality from contaminant movement, salt-water intrusion, or natural poor-quality water drawn into the aquifer	2,8,10,11,12 14,15,16,17, 18, 19,20				
Impacts from groundwater recharge and storage system operations	4,7,8,10,11, 12,15,16,18, 19,20				

Mitigation Strategies

1. Creating additional groundwater or surface water storage facilities to meet demand without resorting to overdraft.

2. Importing water from other basins.

3. Purchasing water rights from willing sellers (including transferring water rights between sectors – for example, from agriculture to municipal uses).

4. Regulating groundwater withdrawals to avoid overdraft and third-party impacts.

5. Implementing water conservation measures to reduce demand.

6. Integrating Ecosystem Restoration Program floodplain restoration efforts with setback levees.

7. Increasing water supplies from recycling.

8. Increasing regulations regarding new and existing domestic wells and septic systems.

9. Developing alternative water supplies.

10. Monitoring and testing groundwater wells and aquifers.

11. Limiting new septic tank systems in vulnerable areas.

12. Allowing water levels to increase periodically

13. Importing new soil (including dredged spoil) to raise land surface.

14. Reducing or discontinuing groundwater pumping.

15. Recharging vulnerable aquifers through injection wells (confined aquifers) or percolation ponds (unconfined aquifers).

16. Distributing groundwater pumping over a wide region rather than to a concentrated area to minimize drawdown of the aquifer.

17. Treating extracted groundwater at the well head.

18. Diluting poor-quality groundwater with higher quality water.

19. Developing groundwater basin management plans, including defining objectives, project boundaries, responsibilities, operations and maintenance specifications and procedures, and conditions under which corrective action must be taken.

20. Temporarily removing the recharge system from service.

GEOLOGY AND SOILS

No potentially significant unavoidable impacts on geology and soils are associated with the Preferred Program Alternative.

Potentially Significant Adverse Impacts	Mitigation Strategies	Applicable?	Discussed?	Mitigation Proposed	Notes
Increased conversion of agricultural land soils for levee system construction and increased potential for erosion on outboard slope of levees.	3,4,5,6,8,9, 14,15,16				
Potential for increases in local subsidence from potential increased reliance on groundwater use.	1,2				
Potential for increases in wind and soil erosion and in soil salinity due to fallowed agricultural lands.	4,9,10,11				
Increased construction-related short-term soil erosion, and increased sediment deposition or soil compaction.	4,5,6,8,14, 16				
Potential changes to downstream geomorphology from enlarging existing storage facilities.	6,7,8,12, 17, 18				
Ground disturbance, inundation, seepage, and shoreline wind- and wave-generated erosion from new storage facilities.	4,5,6,14, 16,19,20, 21,22				

Mitigation Strategies

1. Monitoring groundwater levels and subsidence in areas of increased reliance on groundwater resources and regulating withdrawal rates at levels below those that cause subsidence.

2. Minimizing or avoiding direct groundwater transfers or groundwater substitution transfers from regions; (1) experiencing long-term overdraft, (2) where subsidence historically has occurred, or (3) where local extensometers indicate that subsidence rates are increasing.

3. Protecting flooded Delta island inboard levee slopes against wind and wave erosion with vegetation, soil matting, or rock.

4. Protecting exposed soils with mulches, geotextiles, and vegetative ground covers to the extent possible during and after project construction activities in order to minimize soil loss.

5. Implementing erosion control measures and bank stabilization projects where needed.

6. Increasing sediment deposition and providing substrate for new habitat by planting terrestrial and aquatic vegetation.

7. Measuring channel morphology over time to monitor changes and implementing erosion control measures where needed.

8. Re-using dredged materials to reduce or replace soil loss.

9. Leaving crop stubble from previous growing season in place while fallowing and employing cultivation methods that will cause the least amount of disturbance in order to minimize erosion of surface soils.

10. Limiting the salinity of replacement water, relative to local conditions, in water transfers.

11. Ensuring that the volume of irrigation water used is sufficient to flush accumulated salts from the root zone.
12. Operating new storage facilities to minimize sediment trapping and transport in rivers and tributaries.
13. Preparing and implementing best construction management plans.
14. Preparing and implementing a water quality and soils monitoring program.
15. Preparing and implementing construction mitigation plans.
16. Preparing and implementing contingency plans for wetland and marshland restoration.
17. Modifying storage facility operations to maintain the frequency, magnitude, and duration of flows necessary to maintain and restore downstream riparian habitat.
18. Controlling boat traffic in order to reduce boat wake levels that will not cause levee or bank erosion.
19. Monitoring water-level conditions on islands adjacent to in-Delta storage.
20. Installing interception wells around in-Delta storage facility and operating to remove excess seepage.
21. Lining conveyance for in-Delta storage to prevent seepage.

NOISE

No potentially significant unavoidable noise impacts are associated with the Preferred program Alternative.

Potentially Significant Adverse Impacts	Mitigation Strategies	Applicable?	Discussed?	Mitigation Proposed	Notes
Increased noise from heavy equipment operation during construction.	1,4,5,6,7,8, 9,10,11				
Increased noise from increases in traffic along major access and haul routes, and increased vehicle traffic associated with the construction labor force.	2,3,4,8,11				
Increased noise from diversion and storage facility operations, including spillways, pumps, generating plants and switchyards.	1,4,5,6,9,10				
Increased noise from automobile or boat traffic associated with recreational use at enlarged reservoirs.	10				
Increased traffic noise from permanently relocated roadways.	10,12				

Mitigation Strategies

1. Using electrically powered equipment instead of internal combustion equipment where feasible.

2. Locating staging and stockpile areas, and supply and construction vehicle routes as far away from sensitive receptors as possible.

3. Establishing and enforcing construction site and haul road speed limits.

4. Restricting the use of bells, whistles, alarms, and horns to safety warning purposes.

5. Designing equipment to conform with local noise standards.

6. Locating equipment as far from sensitive receptors as possible.

7. Equipping all construction vehicles and equipment with appropriate mufflers and air inlet silencers.

8. Restricting hours of construction to periods permitted by local ordinances.

9. Locating noisy equipment within suitable sound-absorbing enclosures.

10. Erecting sound wall barriers or noise attenuation berms between noise generation sources and sensitive receptors.

11. Scheduling construction activities to avoid breeding seasons of sensitive species and peak recreation use.

12. Locating redirected roadways as far from sensitive receptors as possible.

TRANSPORTATION

Bold indicates a potentially significant unavoidable adverse impact.

Potentially Significant Adverse Impacts	Mitigation Strategies	Applicable?	Discussed?	Mitigation Proposed	Notes
Relocating or permanently closing roads.	3				
Increasing local traffic flows as the public accesses recreational resources at new storage facilities.	3				
Changing traffic flows as roads are temporarily rerouted around construction sites	1,3				
Detouring traffic as new roadways and railroad bridges are constructed around storage facility construction.	1,2				
Adding construction vehicles to existing traffic levels, especially on narrow, two-lane local roads with winding routes.	4				
Closing two-lane roads to one lane in order to facilitate roadway improvements or relocations in association with the Watershed Program.	1,4				
Impeding or blocking patrol or rescue boats in Delta sloughs where fish barriers and flow control structures are installed.	5				

Mitigation Strategies

1. Providing convenient and parallel detours to routes closed during construction.
2. Allowing trains to use existing tracks while bridges are being built.
3. Encouraging use of public transportation and carpooling for construction workers.

4. Clearly marking roadway intersections with warnings where visibility is poor in the project vicinity.

5. Providing boat portage or a stationary jib crane, relocating boat launch facilities, or relocating emergency access roads.

6. Requiring contractors to use appropriate state and federal safety protocols

AIR QUALITY

No potentially significant unavoidable impacts on air quality are associated with the Preferred Program Alternative.

Potentially Significant Adverse Impacts	Mitigation Strategies	Applicable?	Discussed?	Mitigation Proposed	Notes
Direct, short-term air pollutant emissions during construction activities.	1,2,3,6,7,8,9, 10,11,12,13				
Increased fugitive emissions of wind-blown dust.	13, 6,7,8,11,12, 14				
Increased fugitive emissions of wind-blown dust from unvegetated, fallowed land; shifts to crops associated with drier topsoil; or changes in cultivation practices. **This impact not discussed in findings	13,14				
Increased emissions associated with prescribed burning programs.	5				
Increased emissions from increases in equipment use and cultivation, agricultural chemical use, and crop shifting and burning.	2,4, 5				
Increased emissions if land use changes lead to higher residential, commercial, or recreational uses.	3,15,16				
Increased use of fossil fuels or other energy resources associated with pressurized irrigation systems.	2,3,10				

Mitigation Strategies

1. Setting traffic limits on construction vehicles.

2. Maintaining properly tuned equipment.

3. Limiting the hours of operation or amount of equipment.

4. Limiting the use of agricultural chemicals.

5. Coordinating prescribed burning programs with relevant air quality management agencies to ensure that the programs are accounted for in state and federal air quality management plans.

6. Regular, periodic watering of construction sites to control levels of dust in the air.

7. Using soil stabilizers and dust suppressants on unpaved service roadways.

8. Daily contained sweeping of paved surfaces.

9. Limiting vehicle idling time.

10. Using alternatively fueled equipment.

11. Requiring selection of borrow sites that are closest to fill locations.

12. Implementing construction practices that reduce generation of particulate matter.

13. Hydroseeding and mulching exposed areas.

14. Using cultivating practices that minimize soil disturbance.

15. Following air basin management plans to avoid or minimize vehicle-related emissions.

16. Restricting the kinds of recreational vehicles or the times of operation for certain off-road vehicles on fallowed agricultural land to limit the amount of fugitive dust.

AQUATIC AND FISHERY RESOURCES

Bold indicates a potentially significant unavoidable adverse impact.

Potentially significant impacts of the Preferred Program Alternative on fish and other aquatic species populations would be avoided or reduced to a less-than-significant level through application of mitigation strategies. The p identifies those potentially significant impacts that reflect potential harm to individual organisms of special-status species.

Potentially Significant Adverse Impacts	Mitigation Strategies	Applicable?	Discussed?	Mitigation Proposed	Notes
Potential increased non-native species abundance and distribution to levels detrimental to native species from reestablishment of aquatic areas.	**4, 9**				
Potential blocked access to habitat and potentially altered water quality and flow conditions from placement of barriers in the south Delta p	3,5				
Potential altered natural ecosystem structure, removal of benthic communities, and creation of conditions that may damage habitat for desired species from dredging activities.	1,2,3				
Release of toxic substances into surface waters.	10,11,12				
Potential short-term disturbance of existing biological communities and species habitat, mobilized sediments, and input contaminants from construction activities.	1,2, 10 (in findings)				
Potential reduced streamflow and Delta outflow, changed seasonal flow and water temperature variability from water supply management, and changes in salinity associated with several Program	5,9				

Potentially Significant Adverse Impacts	Mitigation Strategies	Applicable?	Discussed?	Mitigation Proposed	Notes
elements—potentially resulting in reduced habitat abundance, impaired species movement, and increased loss of fish to diversions. p					
Potential increased entrainment loss of chinook salmon and other species from diversions to new off-stream storage.	5,6,7,9				
Potential reduced frequency and magnitude of net natural flow conditions in the south and central Delta (potentially reducing system productivity, impairing species movement, and increasing losses to diversions) from DCC operations and south Delta barriers. p	5,9				
Potential for reduced net flow conditions in the Sacramento River downstream from the diversion facility on the Sacramento River, potentially reducing fresh-water area and affecting species movement and survival. p	5,8,9				
Potential increased fish mortality through abrasion, increased predation, and other factors from the new fish screen facility for the diversion facility on the Sacramento River. p	5,7,8,9				
Potential delayed migration and reduced spawning success for adult fish moving from the Mokelumne River channels into the Sacramento River from fish screens and the diversion facility on the Sacramento River. p	5				

Mitigation Strategies

1. Implementing BMPs, including a stormwater pollution prevention plan, toxic materials control and spill response plan, and vegetation protection plan.

2. Limiting construction activities to windows of minimal species vulnerability.

3. Creating additional habitat for desired species, including increasing aquatic area and structural diversity through construction of setback levees and channel islands.

4. Controlling undesirable non-native species.

5. Operating new and existing diversions to avoid and minimize effects on fish (avoiding facility operations during periods of high species vulnerability). The operational changes could reduce water availability for other beneficial uses identified in Section 5.1, "Water Supply and Water Management."

6. Locating the diversion point to avoid primary distribution of desired species.

7. Controlling predators in the diversion facility (screen bays) and modifying diversion facility structure and operations to minimize predator habitat.

8. Constructing a barrier to fish movement on Georgiana Slough. Adverse impacts of a flow barrier, however, would need to be considered.

9. Coordinating and maximizing water supply system operations flexibility consistent with seasonal flow and water temperature needs of desired species.

10. Conducting core sampling and analysis of proposed dredge areas and engineering solutions to avoid or prevent environmental exposure of toxic substances after dredging.

11. Capping exposed toxic sediments with clean clay/silt and protective gravel.

12. Locating constructed shallow-water habitat away from sources of mercury until methods for reducing mercury in water and sediment are implemented.

VEGETATION AND WILDLIFE RESOURCES

Bold indicates a potentially significant unavoidable adverse impact.

Potentially Significant Adverse Impacts	Mitigation Strategies	Applicable?	Discussed?	Mitigation Proposed	Notes
Temporary or permanent loss or degradation of wetland and riparian communities.	1,2,3,4,5,13, 14, 15				
Substantial temporary or permanent loss or disturbance of wintering waterfowl habitat.	5, 6				
Substantial decrease in important upland wildlife habitat and use areas.	1,4,7, 9,14				
Temporary or permanent fragmentation of riparian habitats and/or wildlife movement corridors.	1,3,4, 5,8, 9				
Temporary or permanent loss of habitat or direct impacts on special-status species.	1,2,3,4,5,9, 10,11,14, 15				
Loss or degradation of portions of rare natural communities and significant natural areas.	1,2,3,4, 10				
Temporary disturbance or mortality of special-status species due to construction and habitat management activities.	1,4,12, 14				
Permanent loss of incidental wetland and riparian habitats that depend on agricultural inefficiencies.	3				
Reduction in quantity or quality of forage for species of concern.	2,5,6, 11				

Mitigation Strategies

1. Avoiding direct or indirect disturbance to wetland and riparian communities, special-status species habitat, rare natural communities, significant natural areas, or other sensitive habitat.

2. Designing Program features to permit on-site or nearby restoration of wetlands, riparian habitat, special-status species habitat, rare natural communities, and significant natural areas that have been removed by permanent facilities.

3. Restoring or enhancing in-kind wetland and riparian habitat or rare natural communities and significant natural areas at off-site locations before, or at the time that, project impacts are incurred.

4. Restoring wetland and riparian communities, special-status species habitat, and wildlife use areas temporarily disturbed by on-site construction activities immediately following construction.

5. Phasing the implementation of Ecosystem Restoration Program habitat restoration to offset temporary habitat losses and to restore habitat (including special-status species habitat) before, or at the same time that, project impacts associated with the Ecosystem Restoration Program are incurred.

6. Restoring or enhancing waterfowl foraging habitat near existing use areas.

7. Enhancing or restoring upland habitat areas (including modification of existing land management practices) within affected watersheds or in other watersheds.

8. Phasing the implementation of modifications to levees that would be necessary to meet PL 84-99 standards in order to minimize the effects of fragmentation of riparian habitats and associated wildlife.

9. Avoiding construction or maintenance activities within or near habitat areas occupied by special-status wildlife species or in important wildlife use areas when species may be sensitive to disturbance.

10. Establishing additional populations of special-status species in protected suitable habitat elsewhere within their historical range for species for which relocation or artificial propagation is feasible.

11. Altering agricultural practices to improve habitat conditions for affected special-status species that use agricultural lands. This could include planting and managing crops to increase the availability or quantity of forage for affected species.

12. Implementing BMPs.

13. Maintaining sufficient outflow downstream of constructed off-stream reservoirs to maintain existing downstream wetland riparian communities.

14. Managing recreation-related activities on lands managed under the Program to reduce or avoid impacts on sensitive habitat, important wildlife use areas, and special-status species.

15. Avoiding creation of wetlands in areas with high concentrations of mercury in sediments.

AGRICULTURAL LAND AND WATER USE

Bold indicates a potentially significant unavoidable adverse impact.

Potentially Significant Adverse Impacts	Mitigation Strategies	Applicable?	Discussed?	Mitigation Proposed	Notes
Conversion of prime, statewide important, and unique farmlands to project uses.	1,2,5,6,7,8,9, 10,11,12,13, 14,15,16,17, 18,20,21,24, 25, 26, 27, 28, 29				
Conflicts with local government plans and policies.	3,4,25,29				
Conflicts with adjacent land uses.	19,22,23,29, 30,31				

Mitigation Strategies

1. Siting and aligning Program features to avoid or minimize impacts on agriculture.

2. Examining structural and nonstructural alternatives to achieving project goals in order to avoid effects on agricultural land.

3. Implementing features that are consistent with local and regional land use plans.

4. Involving all affected parties, especially landowners and local communities, in developing appropriate configurations to achieve the optimal balance between resource impacts and benefits.

5. Retaining water allocations from retired drainage-impaired lands within the existing water districts.

6. Supporting the testing and application of alternative crops to idled farmland (for example, agroforestry or energy crops).

7. Providing water supply reliability benefits to agricultural water users.

8. Supporting the California Farmland Conservancy Program in acquiring easements on agricultural land in order to prevent its conversion to urbanized uses and increase farm viability. Focusing on lands in proximity to where any conversion effect takes place.

9. Restoring existing degraded habitat as a priority before converting agricultural land.

10. Focusing habitat restoration efforts on developing new habitat on public lands before converting agricultural land.

11. If public lands are not available for restoration efforts, focusing restoration efforts on acquiring lands that can meet ecosystem restoration goals from willing sellers where at least part of the reason to sell is an economic hardship (for example, lands that flood frequently or where levees are too expensive to maintain.

12. Using farmer-initiated and developed restoration and conservation projects as a means of reaching Program goals.

13. Where small parcels of land need to be acquired for waterside habitat, seeking out points of land on islands where the ratio of levee miles to acres farmed is high.

14. Obtaining easements on existing agricultural land for minor changes in agricultural practices (such as flooding rice fields after harvest) that would increase the value of the agricultural crop(s) to wildlife.

15. Including provisions in floodplain restoration efforts for compatible agricultural practices.

16. Purchasing water for habitat purposes so that the same locality is not affected over the long term.

17. Using a planned or phased habitat development approach in concert with adaptive management.

18. Minimizing the amount of water supply required to sustain habitat restoration acreage.

19. Developing buffers and other tangible support for remaining agricultural lands. Vegetation planted on these buffers should be compatible with farming and habitat objectives.

20. In implementing levee reconstruction measures, working with landowners to establish levee reconstruction methods that avoid or minimize the use of agricultural land.

21. Working with landowners to establish levee subsidence BMPs that avoid impacts on land use practices. Through adaptive management, further modify BMPs to reduce impacts on agricultural land.

22. Implementing erosion control measures to the extent possible during and after project construction activities. These erosion control measures can include grading the site to avoid acceleration and concentration of overland flows, using silt fences or hay bales to trap sediment, and revegetating areas with native riparian plants and wet meadow grasses.

23. Protecting exposed soils with mulches, geotextiles, and vegetative ground covers to the extent possible during and after project construction activities in order to minimize soil loss.

24. Using rotational fallowing to reduce selenium drainage.

25. Advising the Director of Conservation and the local governing body responsible for the administration of the preserve of a proposal, when it appears that land within an agricultural preserve may be acquired from a willing seller by a state CALFED agency for a public improvement as used in Government Code Section 51920.

26. Limiting the number of acres that can be fallowed (in order to produce transferrable water) in a given area (district or county) or the amount of water that can be transferred from a given area.

27. Supporting assistance programs to aid local entities in developing and implementing groundwater management programs in water transfer source areas.

28. Dredged materials will be analyzed, dredged and handled in accordance with permit requirements. Permits will incorporate mitigation strategies identified in Section 5.3 to prevent release of contaminants of concern.

29. Utilize the criteria and objectives in the Water Transfer Program, in conjunction with existing legal constraints on water transfers, to protect against adverse effects due to water transfers. The criteria for future water transfer proposals include:

- Water transfers must be voluntary.
- Water market transactions must result in the transfer or exchange of water that truly increases the utility of the supply, not water that a transferor has never used or water that would have been legally available for downstream use in the absence of a transfer.
- Water rights of all legal water users must not be impaired.
- Transfers must not cause overdraft or degradation of groundwater basins, or impair correlative rights of overlying users.
- Entities receiving transferred water should be required to show that they are making efficient use of existing water supplies.
- Water rights holders (whether districts or individuals) must play a strong role in determining whether water to which they have a right is transferred.
- The beneficial and adverse impacts on fiscal integrity of the districts and on the economy of agricultural communities in source and receiving areas cannot be ignored.

30. Implement seepage control measures.

31. Support local groundwater management that reduces overdraft and third-party effects, including reduction or discontinuation of groundwater pumping.

URBAN LAND USE

No potentially significant unavoidable impacts related to urban land use are associated with the Preferred Program Alternative.

Potentially Significant Adverse Impacts	Mitigation Strategies	Applicable?	Discussed?	Mitigation Proposed	Notes
Displacement of some existing commercial uses and residents from Program actions located in urban land use areas.	1,2,5,6				
Physical disruption or division of established communities.	1-10				
Potential conflicts of habitat development and storage and conveyance facilities with general plan land use designation or zoning if located in urban use areas.	3,4				

Mitigation Strategies

1. Selecting and designing program actions that minimize the displacement of existing residents.

2. Selecting and designing Program actions that do not physically disrupt or divide established communities.

3. Selecting Program actions, to the extent practicable, that are consistent with local and regional land use plans.

4. Notifying all affected persons (for example, residents, property owners, school officials, and business owners) in the project area of the construction plans and schedules.

5. Providing relocation assistance to displaced persons or businesses.

6. Minimizing the amount of permanent easement required for construction of facilities and consulting with property owners to select easement locations that would lessen property disruption and fragmentation, if applicable.

7. Relocating roads and utilities prior to project construction to ensure continued access and utility service through the project area.

8. Preparing a detailed engineering and construction plan as part of the project design plans and specifications, and including procedures for rerouting and

excavating, supporting, and filling areas around utility cables and pipes in this plan.

9. Verifying utility locations through consultation with appropriate entities and field surveys (such as probing and pot-holing).

10. Reconnecting disconnected cables and lines promptly.

UTILITIES AND PUBLIC SERVICES

No potentially significant unavoidable impacts related to utilities and public services are associated with the Preferred Program Alternative.

Potentially Significant Adverse Impacts	Mitigation Strategies	Applicable?	Discussed?	Mitigation Proposed	Notes
Possible need for relocation or modification of major infrastructure components	1,2,4,5				
Increased risk of gas line rupture during construction phase	3, 5				

Mitigation Strategies

1. Siting project facilities and transmission infrastructure to avoid existing infrastructure.

2. Constructing overpasses, small bridges, or other structures to accommodate existing infrastructure.

3. Coordinating construction activities with utility providers.

4. Designing and operating facilities to minimize the amount of energy required and to maximize the amount of energy created.

5. Designing project facilities to avoid or minimize their effect on existing infrastructure.

RECREATION

Bold indicates a potentially significant unavoidable adverse impact.

Potentially Significant Adverse Impacts	Mitigation Strategies	Applicable?	Discussed?	Mitigation Proposed	Notes
Temporary closure of recreation areas during construction	1,2,3,6,7,8,9, 10,15,16,17				
Increased speed zone restrictions or prohibition of motorized boating in some areas	1,2,3,6,8,9,17				
More stringent regulation of boat discharges	1,9,11				
Temporary or permanent changes in boating access and navigation	1,2,3,4,5,6,7,8, 9,17				
Permanent closure of some recreation facilities	1,2,9, 11,15,17				
Increases in boat traffic in some areas because of speed and access restrictions	1,2,3,4,5,6,7,8, 9,17				
Decrease in recreation opportunities because of speed and access restrictions	1,2,3,4,5,6,7,8, 9,17				
Potential decrease in flooded lands suitable for wildlife, hunting, and fishing as a result of water use efficiency actions	1,9,10,11,14				
Potential for reduced water-contact recreation quality from releases of reservoir cold water	1,9,15,16,17				
Displacement of fish and wildlife from new off-stream or expanded on-stream reservoirs	9,14				

Potentially Significant Adverse Impacts	Mitigation Strategies	Applicable?	Discussed?	Mitigation Proposed	Notes
Potential loss of terrestrial and on-stream recreation from new off-stream or expanded on-stream reservoirs	1,9,14,15,17				
Potential for reduced access to recreation facilities and decreased recreation opportunities from changes in reservoir levels	1,9,10,11,12, 13,17				
Potential short-term construction impacts of dredging, such as obstructing or closing channels and creating noise and visual impacts	7				

Mitigation Strategies

1. Incorporating project-level recreation improvements and enhancements.
2. Maintaining boating access to prime areas.
3. Identifying and marking alternate boating routes.
4. Constructing portage facilities.
5. Constructing boat locks.
6. Providing public information regarding alternate access.
7. Avoiding construction during peak-use seasons and times.
8. Posting warning sings and buoys in channels.
9. Working with recreational interests to protect and enhance recreation resources.
10. Providing in-kind recreation facilities.
11. Relocating or constructing new recreation facilities and infrastructure.
12. Maintaining reservoir levels as high as possible during the recreation season.
13. Minimizing water level fluctuation and establishing minimum pool levels.
14. Purchasing trail rights-of-way or recreational easements.

15. roviding or improving vehicle access and parking for recreation areas.

16. Providing access to waterfront areas and island edges.

17. Creating new day-use boating and camping areas.

FLOOD CONTROL

No potentially significant unavoidable impacts on flood control are associated with the Preferred Program Alternative.

Potentially Significant Adverse Impacts	Mitigation Strategies	Applicable?	Discussed?	Mitigation Proposed	Notes
Impacts on levee stability from levee and berm vegetation management practices for habitat purposes.	1,2				
Reduced levee stability from habitat restoration using conservation easements along riparian corridors.	1,2,4				
Increased seepage on adjacent islands, possibly leading to flooding from seepage-induced failure from shallow flooding of Delta islands susceptible to subsidence.	5,6,7,8				
Increases in wind-fetch and wave erosion on landside levee slopes from island flooding.	9,10,11				
Increased levels of flooding downstream of diversions after removal of diversion structures and other obstructions to flow in the Sacramento River tributaries.	3				
Increased flood stages along streams due to increases in the roughness of the stream channel from vegetation on stream banks.	4				
Potential localized subsidence, resulting in levee slumping or cracking if occurring near levees, caused by potential increases in groundwater pumping.	13,14				
Increased stage upstream of and possibly decreased stage downstream from gate structures located in channels that reduce the channel's flood flow conveyance.	15				

Mitigation Strategies

1. Allowing reasonable clearing of deep-rooted trees and shrubs from levee side slopes to support inspection, maintenance, repair, and emergency response, while preserving some habitat values.

2. Permitting clearing of deep-rooted shrubs and trees on levee side slopes. Trees and shrubs should be allowed to grow only on adjacent berms. If roots penetrate levees, fill materials should be added to levee landside slopes in order to construct a partial setback levee and increase stability.

3. Widening streams downstream of removed water diversion structures to increase conveyance capacity.

4. Incorporating flood control criteria into the design of stream bank revegetation projects. For example, by increasing the width of vegetated sections to maintain conveyance capacity, the net effect of vegetation on flood control would be negligible.

5. Identifying location susceptible to seepage-induced failure on Delta islands that may be intentionally flooded for habitat.

6. Implementing a seepage monitoring program on nonflooded islands adjacent to potential shallow-flooded islands.

7. Developing seepage control performance standards to be used during island flooding and storage periods to determine net seepage caused by shallow flooding.

8. Improving levees to withstand expected hydraulic stresses and seepage

9. Designing erosion protection measures to minimize or eliminate wave splash and run-up erosion.

10. Using riprap or another suitable means of slope protection to dissipate wave force.

11. Constructing large wind/wave breaks in the flooded islands to reduce wind-fetch and erosion potential.

12. Identifying existing or planned wells that could affect groundwater and substrate conditions underlying nearby levees or flood control facilities.

13. Providing incentives to terminate use of wells that can adversely affect levee stability, reducing their pumping volume to safe withdrawal levels as they affect substrate stability, or otherwise replacing them with sources that could not affect levee stability.

14. Designing structures to minimize the loss of channel conveyance at gate structures located in channels.

CULTURAL RESOURCES

No potentially significant unavoidable impacts on cultural resources are associated with the Preferred Program Alternative.

Potentially Significant Adverse Impacts	Mitigation Strategies	Applicable?	Discussed?	Mitigation Proposed	Notes
Impacts on cultural resources from ground-disturbing activities.	1-9,11				
Impacts on cultural resources from new construction, excavation, or fill.	1-9, 11				
Inundation of cultural resources from flooding	1-11				
Impacts on cultural resources from alteration of existing facilities.	1,7,10				
Impacts on cultural resources from construction of new facilities.	1-9,11				
Alteration of the historic setting of a cultural resource.	1-11				
Introduction of elements out of character with a cultural resource site.	1-11				

Mitigation Strategies

1. Conducting cultural resource inventories.
2. Avoiding sites through project redesign.
3. Mapping sites.
4. Conducting surface collections.
5. Performing test excavations.
6. Probing for potentially buried sites.
7. Preparing reports to document mitigation work.
8. Conducting full-scale excavations of sites slated for destruction as a result of projects.

9. Preparing public interpretive documents.

10. Documenting historic structures by preparing Historic American Engineering Records or Historic American Building Surveys.

11. Conducting ethnographic studies for traditional cultural properties.

PUBLIC HEALTH AND ENVIRONMENTAL HAZARDS

No potentially significant unavoidable impacts on public health are associated with the Preferred Program Alternative.

Potentially Significant Adverse Impacts	Mitigation Strategies	Applicable?	Discussed?	Mitigation Proposed	Notes
Short- and long-term increases in mosquito breeding habitat from wetland restoration activities or fluctuating water levels.	1,2,3,4,5				
Increased risk of groundwater and surface water contamination from naturally occurring or spilled hazardous materials and from improper handling of hazardous materials.	6				
Increased exposure to hazardous materials and waste from construction activities related to storage and conveyance projects.	6,7,8,9,11, 12				
Increases in water quality degradation, resuspension of contaminates, and exposure to hazardous materials from dredging activities.	6,8,9,11,12				
Increases in levels of methyl mercury released to the Bay-Delta ecosystem from wetland restoration and levee rehabilitation activities.	10				

Mitigation Strategies

1. Using various mosquito control methods, such as biological agents, chemical agents, and ecological manipulation of mosquito breeding habitat.

2. Supporting actions to establish or find funding for mosquito abatement activities.

3. Removing or disturbing water that remains stagnant for more than 3 days at a construction site.

4. Limiting construction to cool weather, when mosquito production is lowest.

5. Limiting construction to periods of low precipitation to avoid forming pools of standing water.

6. Following established and proper procedures and regulations for removing and disposing of contaminated materials.

7. Increasing monitoring activities to ensure that groundwater pumping equipment is operating to existing standards.

8. Limiting or coordinating construction activities to favorable weather conditions to forestall dispersing hazardous materials.

9. Conducting core sampling and analysis of proposed dredge areas and engineering solutions to avoid or prevent environmental exposure of toxic substances after dredging.

10. Modifying engineering plans to minimize mercury-related problems.

11. Capping exposed toxic sediments with clean clay/silt and protective gravel.

12. Locating constructed shallow-water habitat away from sources of mercury until methods for reducing mercury in water and sediment are implemented.

VISUAL RESOURCES

Bold indicates a potentially significant unavoidable impact.

Potentially Significant Adverse Impacts	Mitigation Strategies	Applicable?	Discussed?	Mitigation Proposed	Notes
Introduction of new facilities or presence of constructed linear and obtrusive features (such as levees, dams and spillways), view obstructions, and a bathtub ring effect caused by fluctuating water levels from drawdown and replenishment of storage reservoirs.	1,5,6,7,9, 10,11,12, 13,14				
Impacts in visually sensitive areas from restoration actions, such as creating borrow pits for gravel replacement and installing fish screens in areas with high visual sensitivity.	7,9,14				
Degraded watershed views from such actions as altered timber harvesting practices.	3,8,13,14				
Creation of borrow pits or spoils material disposal sites associated with storage, conveyance, and levee projects.	8,9,10,11, 12,14				
Long-term visual impacts from construction activities extending more than five years.	2,3,4,5,8,9, 14				

Mitigation Strategies

1. Timing changes in flow regimes to minimize "bathtub ring" effects during times of peak recreation use.
2. Minimizing construction activities during the peak-use recreation season.
3. Watering areas where dust is generated, where feasible, particularly along unpaved haul routes and during earth-moving activities, to reduce visual impacts caused by dust.
4. Avoiding unnecessary ground disturbance outside the necessary construction area.

5. Locating and directing exterior lighting at facilities and during construction activities so that it is concealed to the extent practicable when viewed from local roads, nearby communities, and any recreation areas.

6. Siting proposed reservoir(s), if possible, to minimize required cut-and-fill and locating the reservoir on the flattest topographic section of the site to minimize its visibility.

7. Constructing facilities such as pumping-generating plants with earth-tone building materials.

8. Revegetating disturbed areas as soon as possible after construction.

9. Locating visually obtrusive features, such as borrow pits and dredged material disposal sites, outside visually sensitive areas and observation sites.

10. Selecting vegetation type, placement, and density to be compatible with patterns of existing vegetation where revegetation occurs in natural areas.

11. Installing landscape screening, such as grouped plantings of trees and tall shrubs, to screen proposed facilities, such as pumping-generating plant, from nearby sensitive viewers such as motorists and residents.

12. Using native trees, shrubs and groundcover for landscaping, when appropriate, at facilities such as dams and pumping-generating plants, and along new and expanded canals and conveyance channels, in a manner that does not compromise facility safety and access.

13. Creating viewing opportunities of outstanding features (such as Mount Diablo and the Vaca Mountains) through selective vegetation reduction or constructing roadside viewing areas.

14. Recontouring and adding vegetation to areas rated as “poor” in variety class.

ATTACHMENT 4

MEETING THE CALFED ROD'S ENVIRONMENTAL COMPLIANCE COMMITMENTS

This is a step by step example of how to meet CALFED's environmental compliance commitments. It is based on an imaginary project called "Upland County's Access Road Relocation Project." Assume for the purpose of this example that this project is funded through CALFED and meets CALFED Plan goals.

The "Project"

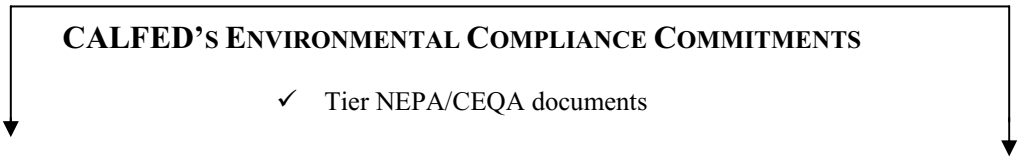
A public drinking water supply reservoir in fictitious Upland County has been in use for 19 years. Approximately 10 years ago, some vacant county-owned land adjacent to the reservoir was developed as a soccer complex. Access to the soccer complex is by way of a road that is upslope and near to the reservoir. Upland County developed a plan to protect its drinking water source. Part of the plan is to eliminate the access road and replace it with a new access road over undeveloped property on the opposite side of the complex, which does not drain into the reservoir. The new route is on property owned by the County.

TIERED ENVIRONMENTAL DOCUMENT

In compliance with CEQA, the County, as lead agency, conducted an initial study. A biological survey of the project area disclosed the presence of a healthy stand of Ione manzanita, which is a federally-listed endangered plant, in the area. In the process of preparing the initial study, the County also completed the CALFED Environmental Consequences and Mitigation Strategies Checklist (see below). After early consultation with fish and wildlife agencies, the County was able to modify the project so that it would not have a potential impact to this species. The county rerouted the road to completely avoid the listed plant.

The lead agency prepared a draft mitigated negative declaration, circulated the draft for public review, and after reviewing and considering public comments received, adopted a mitigated negative declaration. The County then determined to proceed with the project and filed a notice of determination as required by CEQA.

The checklist of environmental commitments partially reproduced below shows the County satisfying each CALFED commitment.



To indicate that this environmental document was tiering from the CALFED PEIS/EIR, the County included within the draft and final environmental document:

This document is tiered from the CALFED Bay-Delta Program Final Programmatic EIS/EIR and the Record of Decision issued August 28, 2000 (including CEQA certification). The Programmatic EIS/EIR can be reviewed at the CALFED Bay-Delta Program, 1416 Ninth Street, Room 1147, Sacramento, California. Tiering is provided for in CEQA Guidelines Section 15152.

The District also incorporated the CALFED PEIS/EIR into the administrative record for the project.

MITIGATION STRATEGIES

The County used the environmental consequences and mitigation strategies checklists (see Attachment 3) to help identify specific project impacts and to consider mitigation strategies in preparing the initial study, accomplishing the second commitment.

CALFED'S ENVIRONMENTAL COMPLIANCE COMMITMENTS

- ✓ Tier NEPA/CEQA documents
- ✓ Consider (and use) PEIS/EIR mitigation strategies

The Upland County environmental document referenced the PEIS/EIR's discussion of environmental consequences and mitigation strategies. All the tables of the checklist in Attachment 3 were reviewed. Several of the topics of investigation were found to be not applicable, because the project did not have the potential to affect those resources. The County found potential impacts in the Noise, Transportation, Air Quality, Vegetation and Wildlife Resources, Recreation, and Visual Resources tables that apply to the project, as shown in the following excerpts from the CALFED Environmental Consequences—Mitigation Strategies checklist completed for the Upland County Road Relocation project.

The County will report to the CALFED Program on the success or failure of mitigation measures annually as long as the mitigation measures require monitoring.

ENVIRONMENTAL CONSEQUENCES--MITIGATION STRATEGIES CHECKLIST

NOISE

Potentially Significant Adverse Impacts	Mitigation Strategies	Applicable?	Discussed?	Mitigation Proposed	Notes
Increased noise from heavy equipment operation during construction.	1,4,5,6,7,8, 9,10,11, 15	*no*			
Increased noise from increases in traffic along major access and haul routes, and increased vehicle traffic associated with the construction labor force.	2,3,4,8,11, 13, 15	*no*			
Increased noise from diversion and storage facility operations, including spillways, pumps, generating plants and switchyards.	1,4,5,6,9,10, 15	*no*			
Increased noise from automobile or boat traffic associated with recreational use at enlarged reservoirs.	10, 14, 15	*no*			
Increased traffic noise from permanently relocated roadways.	10,12, 15	*Yes, but not significant*	*Yes (page 5, initial study)*		*No sensitive receptors near project*

Mitigation Strategies

1. Using electrically powered equipment instead of internal combustion equipment where feasible.

2. Locating staging and stockpile areas, and supply and construction vehicle routes as far away from sensitive receptors as possible.

3. Establishing and enforcing construction site and haul road speed limits.

4. Restricting the use of bells, whistles, alarms, and horns to safety warning purposes.

5. Designing equipment to conform with local noise standards.

6. Locating equipment as far from sensitive receptors as possible.

7. Equipping all construction vehicles and equipment with appropriate mufflers and air inlet silencers.

8. Restricting hours of construction to periods permitted by local ordinances.

9. Locating noisy equipment within suitable sound-absorbing enclosures.

10. Erecting sound wall barriers or noise attenuation berms between noise generation sources and sensitive receptors.

11. Scheduling construction activities to avoid breeding seasons of sensitive species and peak recreation use.

12. Locating redirected roadways as far from sensitive receptors as possible.

13. Encourage use of public transportation and carpooling for construction workers.

14. Restrict boating speeds or access to areas with sensitive receptors

15. Conduct project-specific noise analyses for actions with noise impacts.

TRANSPORTATION

Bold indicates a potentially significant unavoidable adverse impact.

Potentially Significant Adverse Impacts	Mitigation Strategies	Applicable?	Discussed?	Mitigation Proposed	Notes
Relocating or permanently closing roads.	3, 12, 13, 14	*Yes; not significant impact*	*Yes, see project description*		*Project proposes a new road to replace a road to be closed*
Increasing local traffic flows as the public accesses recreational resources at new storage facilities.	11, 13, 14	*no*			
Changing traffic flows as roads are temporarily rerouted around construction sites	1,3, 12	*no*			
Detouring traffic as new roadways and railroad bridges are constructed around storage facility construction.	1,2, 10	*no*			
Adding construction vehicles to existing traffic levels, especially on narrow, two-lane local roads with winding routes.	4, 10	*yes*	*Yes (page 6 of initial study)*	*10*	*Construction will be scheduled to avoid affecting use of soccer complex.*
Closing two-lane roads to one lane in order to facilitate roadway improvements or relocations in association with the Watershed Program.	1,4, 10	*no*			
Impeding or blocking patrol or rescue boats in Delta sloughs where fish barriers and flow control structures are installed.	5, 6, 7	*no*			

Mitigation Strategies

1. Provide convenient and parallel detours to routes closed during construction.
2. Allow trains to use existing tracks while bridges are being built.

3. Encouraging use of public transportation and carpooling for construction workers.

4. Clearly marking roadway intersections with warnings where visibility is poor in the project vicinity.

5. Providing boat portage or a stationary jib crane, relocating boat launch facilities, or relocating emergency access roads.

6. Relocate boat launch facilities.

7. Relocate emergency access roads.

8. Require contractors to use appropriate state and federal safety protocols

9. Coordinate dredging and safety precautions with state and local authorities

10. Schedule construction at times and seasons to minimize delays or conflicts.

11. Expand public transportation resources and local roadways.

12. Expand public transportation, roads, and highways.

13. Locate roadways in areas with fewer conflicts.

14. Design roadways to avoid or minimize traffic congestion.

AIR QUALITY

Potentially Significant Adverse Impacts	Mitigation Strategies	Applicable?	Discussed?	Mitigation Proposed	Notes
Direct, short-term air pollutant emissions during construction activities.	1,2,3,6,7,8,9, 10,11,12,13, 20	*yes*	*Yes (page 8, initial study)*	*1,6, 7*	
Increased fugitive emissions of wind-blown dust.	6,7,8,11,12, 13, 14	*yes*	*Yes (page 8, initial study)*	*6,7,12,*	
Increased fugitive emissions of wind-blown dust from unvegetated, fallowed land; shifts to crops associated with drier topsoil; or changes in cultivation practices.	13,14	*no*			
Increased emissions associated with prescribed burning programs.	5, 17	*no*			
Increased emissions from increases in equipment use and cultivation, agricultural chemical use, and crop shifting and burning.	2,4, 18, 19	*no*			
Increased emissions if land use changes lead to higher residential, commercial, or recreational uses.	3,15,16	*no*			
Increased use of fossil fuels or other energy resources associated with pressurized irrigation systems.	2,3,10	*no*			
Indirect air quality impacts from increased power generation to meet Program energy consumption and changes in operation	21, 22	*no*			

Mitigation Strategies

1. Setting traffic limits on construction vehicles.

2. Maintaining properly tuned equipment.

3. Limiting the hours of operation or amount of equipment.

4. Limiting the use of agricultural chemicals.

5. Coordinating prescribed burning programs with relevant air quality management agencies to ensure that the programs are accounted for in state and federal air quality management plans.

6. Regular, periodic watering of construction sites to control levels of dust in the air.

7. Using soil stabilizers and dust suppressants on unpaved service roadways.

8. Daily contained sweeping of paved surfaces.

9. Limiting vehicle idling time.

10. Using alternatively fueled equipment.

11. Requiring selection of borrow sites that are closest to fill locations.

12. Implementing construction practices that reduce generation of particulate matter.

13. Hydroseeding and mulching exposed areas.

14. Using cultivating practices that minimize soil disturbance.

15. Following air basin management plans to avoid or minimize vehicle-related emissions.

16. Restricting the kinds of recreational vehicles or the times of operation for certain off-road vehicles on fallowed agricultural land to limit fugitive dust.

17. Implement prescribed burning during favorable weather conditions

18. Implement alternatives to crop burning including tilling and shallow flooding.

19. Coordinate crop stubble burning with relevant air quality management agencies to ensure that the programs are accounted for in air quality management plans.

20. Encourage use of public transportation and carpooling for construction workers.

21. Obtain replacement power from non-emitting sources such as other hydro, solar, and wind sources. This can occur through construction of, or the use of incentives to construct non-emitting power plants. This approach is consistent with state and federal policies related to promoting use of renewable resource type generation as expressed in Public Utility Code Section 381(c) (part of what is commonly referred to as AB 1890) and Executive Order 12902.

22. Utilize the best available control technology for new power production facilities.

VEGETATION AND WILDLIFE RESOURCES

Bold indicates a potentially significant unavoidable adverse impact.

Potentially Significant Adverse Impacts	Mitigation Strategies	Applicable?	Discussed?	Mitigation Proposed	Notes
Temporary or permanent loss or degradation of wetland and riparian communities.	1,3,4,5,6, 9, 10, 24	*No, not a wetland/riparian area*			
Substantial temporary or permanent loss or disturbance of wintering waterfowl habitat.	10, 25, 26	*No, no waterfowl habitat*			
Substantial decrease in important upland wildlife habitat and use areas.	11, 12, 13, 15, 17, 24	*no*			
Temporary or permanent fragmentation of riparian habitats and/or wildlife movement corridors.	1,4, 7, 11, 13, 27, 28, 29	*no*			
Temporary or permanent loss of habitat or direct impacts on special-status species.	1,3,4,5,6, 14, 15, 17, 18, 19, 20, 24, 28	*no*			*Project description was revised to avoid an impact to Ione manzanita, a listed species.*
Loss or degradation of portions of rare natural communities and significant natural areas.	3, 19, 21, 28, 30	*No, upland scrub predominates here*			
Temporary disturbance or mortality of special-status species due to construction and habitat management activities.	1,5,8, 24	*no*			*Project description was revised to avoid an impact to Ione manzanita, a listed species.*
Permanent loss of incidental wetland and riparian habitats that depend on agricultural inefficiencies.	2	*no*			
Reduction in quantity or quality of forage for species of concern.	3,10, 20, 25, 26	*no*			*Restoration of old road; no net loss of ground cover*

Mitigation Strategies

1. Avoiding direct or indirect disturbance to wetland and riparian communities, special-status species habitat, rare natural communities, significant natural areas, or other sensitive habitat.

2. Restore and enhance in-kind wetland and riparian habitat or rare natural communities and significant natural areas at off-site locations before or at the time that, project impacts are incurred.

3. Designing Program features to permit on- site or nearby restoration of wetlands, riparian habitat, special-status species habitat, rare natural communities, and significant natural areas that have been removed by permanent facilities.

4. Phase the implementation of Ecosystem Restoration Program habitat restoration to offset temporary habitat losses and to restore habitat (including special-status species habitat) before, or at the same time, project impacts associated with the Ecosystem Restoration Program are incurred.

5. Restore wetland and riparian communities, special-status species habitat, and wildlife use areas temporarily disturbed by on-site construction activities immediately following construction.

6. Avoid creating wetlands in areas with high concentrations of mercury in sediments and anaerobic conditions.

7. Phase the implementation of modifications to levees that would be necessary to meet PL84-99 standards in order to minimize the effects of fragmentation of riparian habitats and associated wildlife.

8. Implement BMPs such as avoiding disturbance to highly erodible soils and installing siltation barriers and detention basins to reduce the potential for siltation of nearby wetlands.

9. Maintain sufficient outflow downstream of constructed off-stream reservoirs to maintain existing downstream wetland riparian communities.

10. Restore or enhance sufficient waterfowl foraging habitat near existing use areas to offset impacts on the abundance, quality and availability of waterfowl forage. Restoration and enhancement actions include restoring and managing seasonal wetlands for wintering waterfowl, producing crops with high forage value (such as corn and rice), and modifying farming practices to increase forage availability (for example, leaving portions of forage crops unharvested through winter or shallowly flooding fields.)

11. Avoid important wildlife habitat areas, such as critical deer winter range and fawning habitat.

12. Restore and enhance important wildlife habitat use areas temporarily disturbed by on-site construction activities by planting and maintaining native species immediately following construction.

13. Restore and enhance upland habitat areas within affected watersheds or in other watershed if sufficient habitat enhancement is unavailable within the affected watershed. This could include modifying existing land management practices (for example, grazing and fire management practices) to improve conditions for the natural reestablishment and long-term maintenance of affected plant communities and habitat.

14. Avoid direct or indirect disturbance to areas occupied by special-status species.

15. Avoid construction or maintenance activities within or near habitat areas occupied by special-status wildlife species or in important wildlife use areas when species may be sensitive to disturbance.

16. Restore habitat areas occupied by special-status species that are temporarily disturbed by on-site construction activities immediately following construction.

17. Restore and enhance suitable habitat areas that are occupied by, or are near and accessible to, special status species that have been affected by the permanent removal of occupied habitat areas.

18. Phase habitat restoration actions to restore sufficient suitable habitat to minimize the adverse affects of impacts on occupied special-status species habitats before impacts are incurred.

19. For species for which relocation or artificial propagation is feasible, establish additional populations of special-status species in protected suitable habitat elsewhere within their historical range.

20. Provide incentives to alter agricultural practices to improve habitat conditions for affected special-status species that use agricultural lands. This could include planting and managing crops to increase the availability or quantity of forage for affected species.

21. Avoid direct or indirect disturbances to rare natural communities and significant natural areas.

22. Restore or enhance disturbed rare natural communities or significant natural areas at off-site locations before, or when, Program actions that could affect these communities are incurred.

23. Restore rare natural communities or significant natural areas at or near affected locations after Program activities are completed.

24. Manage recreation-related activities on lands managed under the Program to minimize or avoid potential adverse effects of recreation-related activities on sensitive habitats, important wildlife use areas, and special-status species.

25. Phase ERP to initially restore natural waterfowl foraging on agricultural lands with low forage value while restored habitat with high forage value develops.

26. Phase ERP to initially restore wetland habitat with high forage value to offset the loss of agricultural foraging habitat that may result from the ERP.

27. Restore riparian vegetation disturbed by on-site construction activities immediately following construction.

28. Restore or enhance sufficient in-kind riparian habitat at off-site locations, near project sites, in a manner that reduces the degree of existing habitat fragmentation before, or when, project impacts are incurred to offset habitat losses.

29. Restore habitat temporarily disturbed by on-site construction activities immediately following construction. Example actions include direct planting of native plants, controlling non-native plants to improve conditions for reestablishing native plants, and enhancing and restoring the original site hydrology to allow for the natural reestablishment of the affected plant community.

30. Restore rare natural communities, significant natural areas, and wildlife use areas temporarily disturbed by on-site construction activities immediately following construction. Example actions include direct planting of native plants, controlling non-native plants to improve conditions for reestablishing native plants, and enhancing and restoring the original site hydrology to allow for the natural reestablishment of the affected plant community.

31. Restore and enhance suitable habitat areas that are occupied by, or are near and accessible to, special-status species that have been adversely affected by the permanent removal of occupied habitat areas.

RECREATION

Bold indicates a potentially significant unavoidable adverse impact.

Potentially Significant Adverse Impacts	Mitigation Strategies	Applicable?	Discussed?	Mitigation Proposed	Notes
Temporary closure of recreation areas during construction	1,2,3,4, 5, 6,7,8,9, 10, 11, 12,17,18, 19	*yes*	*Yes (page 10 of initial study)*	*10*	*Construction will be scheduled to avoid affecting use of soccer complex*
Decrease in recreational opportunities and increase in boat traffic due to Increased speed zone restrictions or prohibition of motorized boating in some areas	1,2,3, 4, 6, 7, 8,9,10, 11, 19	*no*			
More stringent regulation of boat discharges	1,2, 20	*no*			
Temporary or permanent changes in boating access and navigation	1,2,3,4,5,6,7,8, 9,10, 11, 19	*no*			
Permanent closure of some recreation facilities	1,2,3, 5, 6, 17, 19, 20	*no*			
Potential decrease in flooded lands suitable for wildlife, hunting, and fishing as a result of water use efficiency actions	1,2,12,16,20	*no*			
Potential for reduced water-contact recreation quality from releases of reservoir cold water	1,2,17,18,19	*no*			
Displacement of fish and wildlife from new off-stream or expanded on-stream reservoirs	1,2, 16, 17, 19	*no*			
Potential loss of terrestrial and on-stream recreation from new off-stream or expanded on-stream reservoirs	1,9,14,15,17	*no*			

Potentially Significant Adverse Impacts	Mitigation Strategies	Applicable?	Discussed?	Mitigation Proposed	Notes
Potential for reduced access to recreation facilities and decreased recreation opportunities from changes in reservoir levels	1,2,12,13, 14, 19	*no*			
Potential short-term construction impacts of dredging, such as obstructing or closing channels and creating noise and visual impacts	10	*no*			

Mitigation Strategies

1. Incorporate project-level recreation improvements and enhancements.
2. Work with recreational interests to protect and enhance recreation resources.
3. Conduct an analysis of boating circulation to ensure that appropriate alternative routes are identified and clearly marked if boating circulation in the Delta is to be modified due to temporary, seasonal, or permanent channel closures or to speed restrictions.
4. Identify and mark alternate boating routes.
5. Restore and design existing and new levees to accommodate vehicular access and parking for shoreline fishing, boat launching, swimming, hiking, bicycling, and wildlife viewing where feasible.
6. Maintain boating access to prime areas.
7. Construct portage facilities.
8. Construct boat locks.
9. Provide public information regarding alternate access.
10. Avoid construction during peak-use seasons and times.
11. Post warning signs and buoys in channels.
12. Provide in-kind recreation facilities.
13. Maintain reservoir levels as high as possible during the recreation season.
14. Minimize water level fluctuation and establishing minimum pool levels.

15. Coordinate operation of all reservoir facilities to minimize adverse reservoir fluctuations in any particular facility consistent with regulatory and other operational constraints.

16. Purchase trail rights-of-way or recreational easements.

17. Provide or improve vehicle access and parking for recreation areas.

18. Provide access to waterfront areas and island edges.

19. Create new day-use boating and camping areas.

20. Relocate or construct new recreation facilities and infrastructure.

VISUAL RESOURCES

(The environmental document for this project uses the term "aesthetics" to include visual resources.)
Bold indicates a potentially significant unavoidable adverse impact.

Potentially Significant Adverse Impacts	Mitigation Strategies	Applicable?	Discussed?	Mitigation Proposed	Notes
Introduction of new facilities or presence of constructed linear and obtrusive features (such as levees, dams and spillways), view obstructions, and a bathtub ring effect caused by fluctuating water levels from drawdown and replenishment of storage reservoirs.	1,5,6,7,9, 10,11,12, 13,	*yes*	*Yes (page 3 of initial study)*	*11, 12*	
Impacts in visually sensitive areas from restoration actions, such as creating borrow pits for gravel replacement and installing fish screens in areas with high visual sensitivity.	7,9,14	*no*			
Degraded watershed views from such actions as altered timber harvesting practices.	3,4, 8, 13, 14	*no*			
Creation of borrow pits or spoils material disposal sites associated with storage, conveyance, and levee projects.	8,9,10,11, 12,14	*no*			
Long-term visual impacts from construction activities extending more than five years.	1,2,3,4,5,8, 9, 14	*no*			

Mitigation Strategies

1. Timing changes in flow regimes to minimize "bathtub ring" effects during times of peak recreation use.
2. Minimizing construction activities during the peak-use recreation season.
3. Watering areas where dust is generated, where feasible, particularly along unpaved haul routes and during earth-moving activities, to reduce visual impacts caused by dust.
4. Avoiding unnecessary ground disturbance outside the necessary construction area.
5. Locating and directing exterior lighting at facilities and during construction activities so that it is concealed to the extent practicable when viewed from local roads, nearby communities, and any recreation areas.

6. Siting proposed reservoir(s), if possible, to minimize required cut-and-fill and locating the reservoir on the flattest topographic section of the site to minimize its visibility.

7. Constructing facilities such as pumping-generating plants with earth-tone building materials.

8. Revegetating disturbed areas as soon as possible after construction.

9. Locating visually obtrusive features, such as borrow pits and dredged material disposal sites, outside visually sensitive areas and observation sites.

10. Selecting vegetation type, placement, and density to be compatible with patterns of existing vegetation where revegetation occurs in natural areas. Recontouring and adding vegetation to areas rated as "poor" in variety class.

11. Installing landscape screening, such as grouped plantings of trees and tall shrubs, to screen proposed facilities, such as pumping-generating plant, from nearby sensitive viewers such as motorists and residents.

12. Using native trees, shrubs and groundcover for landscaping, when appropriate, at facilities such as dams and pumping-generating plants, and along new and expanded canals and conveyance channels, in a manner that does not compromise facility safety and access.

13. Creating viewing opportunities of outstanding features (such as Mount Diablo and the Vaca Mountains) through selective vegetation reduction or constructing roadside viewing areas.

14. Recontour and add vegetation to areas rated as "poor" in variety class.

MITIGATION MONITORING

Upland County developed a plan for implementing each of the selected mitigation measures. Success criteria and a mitigation monitoring process were developed for all project mitigation measures. The success or failure of mitigation measures will be reported to CALFED, contributing to efforts to further refine mitigation strategies. The Mitigation Plan for the project was adopted along with the environmental document.

CALFED'S ENVIRONMENTAL COMPLIANCE COMMITMENTS

- ✓ Tier NEPA/CEQA documents
- ✓ Consider and use PEIS/EIR mitigation strategies
- ✓ Comply with the CALFED mitigation monitoring commitment

The following provides a template for a mitigation and monitoring plan. We use the example to fill in (shown in *italics*) each area of the template.

Mitigation and Monitoring Plan Template showing Mitigation Measures for the Upland County Road Relocation Project

- Mitigation Measure: *Aesthetics 1 (A1)*

This measure is to minimize the visual impact of a proposed road, fence and gate by planting bushes and vines on the public side.

✓ Describe the impact or "why" mitigation is planned (briefly reproduce what was disclosed in the environmental document)

- *By abandoning the current access road and replacing it with a new access road and gate on the north side of the Recreation District property, the project could cause aesthetic impacts to the users of Oak Lane. To decrease this potential impact to a less-than-significant level, plants will be added close to the fence to screen the view from Oak Lane.*

✓ Describe the mitigation measure

- *Upon installation of the metal fence and gate, 10 plants of native Rhamnus (coffeeberry) and Ribes (currant) species will be planted to partially conceal the fence and the new road behind it. Part of the reason for choosing native species is to enhance habitat by providing forage plants for wildlife and to lessen the need for irrigation of established plantings.*

✓ Set performance criteria that must be met in order for the measure to be considered a success

- *This mitigation measure will be judged a success if within 1 year of project construction at least five plants are established near the 45-foot fence line on Oak Lane and within 2 years at least five of the plants are still alive. Control of invasive exotic plants is an ongoing Recreation District activity, and will occur as needed within the area.*

- ✓ Indicate who will carry out the measure
  - *The Recreation District landscape maintenance staff will carry out the project and the Environmental Manager will monitor the success of the measure.*

- ✓ Indicate when, or at what stage of the project, the action will occur
  - *The planting will occur immediately upon completion of the road and fence installation.*

- ✓ Specify who will monitor and set a schedule for monitoring the measure and reporting the results
  - *Planting will occur at the completion of construction, which is scheduled for late fall, a good time of year for young plants to get established. Informal monitoring will occur as time allows and formal monitoring will be at 6-month intervals, continuing for at least 24 months. On an annual basis, (i.e,. after the second, fourth, etc. 6-month monitoring) a copy of the monitoring worksheet will be submitted to the County, until performance criteria are met.*

- Mitigation Measure: *Aesthetics 2 (A2)*

This measure is to improve aesthetics in the area of the current access road.

- ✓ Describe the impact (briefly reproduce what was disclosed in the environmental document
  - *The current access road to the maintenance shed behind the recreation district's soccer complex is not paved, but it is hard-packed gravel. If it remains visible after it is abandoned, it will diminish scenic views of the adjacent reservoir.*

- ✓ Describe the mitigation measure
  - *The goal of this measure is to reclaim the roadbed at minimal cost with minimal ground disturbance. As a first step, Upland County Water Agency will block the roadway to vehicle access using a post and a sign (pedestrian access will be allowed) and scatter a layer of mulch/brush chippings 4 inches deep on the roadway. If grasses do not invade within two years, a disc tractor or plow will be used during the rainy season to break the compacted soil and accelerate the process of plants re-claiming the roadway.*

- ✓ Set Performance criteria that must be met in order for the measure to be considered a success
  - *Within two years, the current roadway will look less like a gravel road and more like a narrow walking trail; this will be a subjective judgement to be made by the recreation district environmental manager. If, after two years, the appearance of the roadway is not satisfactory, the second level of mitigation will be performed.*

- ✓ Indicate who will carry out the measure
  - *Work will be completed by water agency maintenance and landscaping staff.*

- ✓ Indicate when, or at what stage of the project, the action will occur
  - *Immediately after completion of the new roadway, the old roadway will be abandoned.*

- ✓ Specify who will monitor, and set a schedule for monitoring the measure and reporting the results
  - *The Water Agency environmental compliance manager will monitor the results at 3-month intervals and record the results of monitoring in the Agency files. Annually, results will be reported to the County, until performance criteria are met.*

- Mitigation Measure: *Air Quality 1 (AQ1)*

This mitigation measure is to prevent airborne dust during construction of the new roadway.

- ✓ Describe the impact (briefly reproduce what was disclosed in the environmental document)
  - *Roadway scraping and grading could cause airborne dust.*

- ✓ Describe the mitigation measure
  - *Construction vehicle speed will be limited to 10 mph and bare areas will be regularly watered down. If speed limit and watering is not effective, dust suppressant and mulch will be applied.*

- ✓ Set performance criteria that must be met in order for the measure to be considered a success
  - *Any visible dust will be a sign that watering or dust suppression is needed. At the end of each workday more water or dust suppressant will be applied so that nuisance dust will not blow from the worksite.*

- ✓ Indicate who will carry out the measure
  - *The construction contractor onsite crew will carry out dust control as a condition of the contract.*

- ✓ Indicate when, or at what stage of the project, the action will occur
  - *This measure will occur during construction and will conclude when construction is complete.*

- ✓ Set a schedule for monitoring the measure and reporting the results
  - *Recreation District construction supervisor will monitor the project daily and may delegate the responsibility for onsite monitoring to a member of the staff. Annually, results will be reported to the County, until performance criteria are met.*

- Mitigation Measure: *Transportation 1 (T1)*

This measure mitigates the potential traffic congestion caused by the project.

- ✓ Describe the impact (briefly reproduce what was disclosed in the environmental document)
  - *Construction could cause delays to users of the soccer complex. The existing road that will be replaced by this project is only used when soccer matches are scheduled. However, construction equipment and workers will need to use this road.*

- ✓ Describe the mitigation measure
  - *Project construction use of the road will timed to avoid creating transportation impacts by scheduling construction use of the road to periods when the soccer complex is not being used.*

- ✓ Set performance criteria that must be met in order for the measure to be considered a success
  - *Zero complaints will be received about traffic associated with the project.*

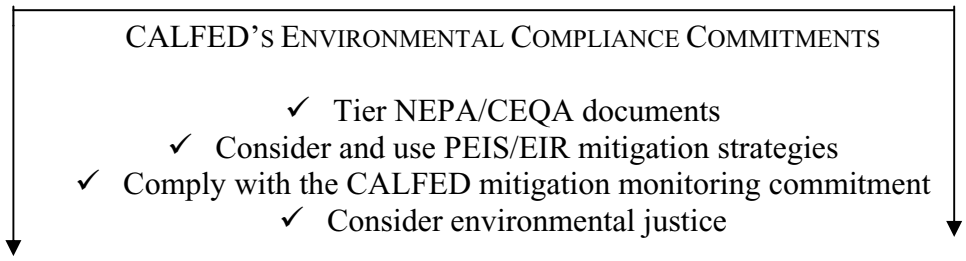
- ✓ Indicate who will carry out the measure
  - *The project manager will enforce the schedule. Construction crew members will participate.*

- ✓ Indicate when, or at what stage of the project, the action will occur
  - *This action will occur during construction.*

- ✓ Set a schedule for monitoring the measure and reporting the results
  - *Weekly during the construction phase of the project.*

ENVIRONMENTAL JUSTICE

The tiered environmental document developed for the Upland County Road Relocation Project discussed the potential for impacts that would be disproportionate on any segment of the community, thereby meeting the CALFED environmental compliance commitment concerning environmental justice.



The County consulted with the County's Office of Economic Development and determined that this project does not cause any segment of the population to bear a disproportionately high or adverse health, environmental, social, or economic impact. It was also determined the project did not have the potential to disproportionately impact any group or community in any other way because it will not affect any private parties physically or economically. The County owns the lands on which the road is to be constructed, no other property owners are affected, and no established community will be affected by the project. This information was disclosed in the initial study.

INDIAN TRUST ASSETS

Upland County met the CALFED commitment for analyzing the potential for impact to Indian trust assets and met another CALFED environmental compliance commitment.

CALFED'S ENVIRONMENTAL COMPLIANCE COMMITMENTS

- ✓ Tier NEPA/CEQA documents – see section 1
- ✓ Consider and use PEIS/EIR mitigation strategies – see section 2
- ✓ Comply with the CALFED mitigation monitoring commitment
- ✓ Consider environmental justice
- ✓ Consider Indian trust assets

The County consulted the Bureau of Indian Affairs and determined there are no legal interests in assets held in trust by the federal government for Indian tribes or individuals that could be affected by the project. This information was disclosed in the initial study.

ADAPTIVE MANAGEMENT AND SCIENCE

There were no areas of uncertainty in this project that needed to be addressed through a science program or to adaptively manage the implementation of the project based on information obtained through a science program. Therefore, the County did not need to incorporate adaptive management or science into the project.

CALFED'S ENVIRONMENTAL COMPLIANCE COMMITMENTS

- ✓ Tier NEPA/CEQA documents – see section 1
- ✓ Consider PEIS/EIR mitigation strategies – see section 2
- ✓ Follow the PEIS/EIR mitigation monitoring plan
- ✓ Consider environmental justice
- ✓ Consider Indian trust assets
- ✓ Incorporate adaptive management and science

TIERING FROM PROGRAMMATIC AGREEMENTS

No permits were required for which programmatic compliance with the CALFED program was obtained, so the County did not need to refer to any of CALFED's programmatic compliance requirements.

Since the Upland project was modified, it avoided affecting a federally-listed species, Ione manzanita. Had it not been possible to avoid a listed species, compliance with the federal Endangered Species Act would have required the county to develop an action-specific implementation plan (ASIP) pursuant to the programmatic Biological Opinion issued by the US Fish and Wildlife Service for the CALFED program.

ATTACHMENT 5

DEVELOPING A STATEMENT OF PURPOSE AND NEED

RECOMMENDED APPROACH FOR DEVELOPING A STATEMENT OF PURPOSE AND NEED

BACKGROUND

The Council on Environmental Quality's regulations for implementing the National Environmental Policy Act (NEPA) state that an EIS "shall briefly specify the underlying purpose and need to which the agency is responding in proposing the alternatives including the proposed action." The California Environmental Quality Act (CEQA) guidelines require that the project description contain a clearly written statement of objectives, including the underlying purpose of the project.

TWO-STEP APPROACH TO PREPARING A STATEMENT OF PURPOSE AND NEED/STATEMENT OF OBJECTIVES

CALFED proposes a two-step approach:

- First, identify the problem(s) to be addressed or opportunity(ies) to be seized; this is the **need**.

- Then, identify what is to be achieved or accomplished in relation to the problem or opportunity; this is the **purpose**.

The statement of purpose and need under NEPA should not be confused with the "project purpose" under Section 404 of the Clean Water Act, but to the extent practicable, they should be the same (see page 3-19).

Below is a simple example to illustrate the steps described above.

- Step 1:

  – Identify the problem to be addressed or opportunity to be seized: "Existing homes, businesses and agricultural lands are being damaged by high flows and flooding."

- Refine the description to define the problem or opportunity as specifically as possible: For example, "Existing homes, businesses and agricultural lands in a 2- to 3-square-mile area have been flooded to depths of 3-5 feet every other year for the past 20 years."

This is the underlying need for an action.

- Step 2:

  - Identify what you want to accomplish or achieve: "Reduce damage to existing homes, businesses and agricultural lands resulting from high flows and flooding."

  - Make that description as specific as possible to help screen/limit the range of alternatives: For example, "Provide existing homes, businesses and agricultural lands with 1-in-100-year protection from high flows and flooding."

  This is the underlying purpose.

  There may be more than one thing you intend to achieve or accomplish to meet the identified need. Being as specific as possible by including these when identifying the underlying purpose of an action will help in the selection and screening of project alternatives.

Another way to prepare a statement of purpose and need using this two-step approach is to work backward from the CALFED action you intend to implement. With the action in mind, you would develop the statement of purpose and need by identifying the problems or opportunities that are driving the need for that action (the need), then what you want to achieve or accomplish by implementing the action (the purpose). The CALFED agencies have already identified the broad actions that are needed to restore ecological health and improve water management for beneficial uses of the Bay-Delta system; project proponents of CALFED actions should use these broadly described actions when developing project-specific statements of purpose and need.

When using this "work backward" approach, however, caution is needed, especially if a project proponent has already planned a fairly specific project to implement a CALFED action. To be legally defensible, a purpose and need statement must not be so narrowly construed to preclude reasonable alternatives from being considered in the environmental analyses. If a CWA Section 404(b)(1) permit is required, the EPA and the Corps will reject a project purpose too narrowly stated.

SELECTION OF ALTERNATIVES

Once a statement of purpose and need is developed, you can begin to identify alternatives. In the example used above, this would involve identifying all reasonable ways to reduce damage to existing homes, businesses and agricultural lands that could result from high flows and flooding. These initial alternatives would be assessed to ensure that they would meet the goal of providing 1-in-100-year protection. Alternatives that could provide 1-in-100-year protection are the alternatives that address the underlying purpose and need and should be evaluated in the environmental document.

Please note the following:

- An alternative that addresses the statement of purpose and need should not be part of the statement of purpose and need.
- The words "purpose" and "need" need not be mentioned and need not be defined separately in the statement of purpose and need.
- The statement of purpose and need does not include a discussion of impacts or a statement that the document is being prepared to satisfy NEPA or CEQA.

EXAMPLE OF DEVELOPMENT OF A STATEMENT OF PURPOSE AND NEED FOR A CALFED ACTION

The following section describes the process for developing a statement of purpose and need for a hypothetical CALFED action.

Providing storage north and south of and within the Delta was an action broadly described in the Preferred Program Alternative. Storage was analyzed in the CALFED Bay-Delta Program Final Programmatic Environmental Impact Statement/Environmental Impact Report (PEIS/EIR). Developing a statement of purpose and need for north-of-Delta storage meant identifying the problems or opportunities driving the need for north-of-Delta storage or other practicable alternatives and identifying what would be achieved or accomplished by implementing north-of-Delta storage or other practicable alternatives.

This involved reviewing the objectives and goals for the CALFED program elements and the specific characteristics cited in the Phase II Report, Framework for Action, and Programmatic Record of Decision regarding storage proposals, particularly those for north-of-Delta storage. The results of this review were used, and, as indicated below, the two-step approach described above was followed.

- Step 1—Identify problems that need to be addressed and why they need to be addressed:

  – Inadequate cold-water temperatures for anadromous species in the Sacramento River.

  – Inadequate instream flow standards for Delta outflow.

  – Inadequate water supply to meet fishery protection and restoration/recovery needs.

  – Inadequate amount of flexibility in water system operation to aid in offsetting Trinity River water reductions.

  – Inadequate Central Valley Project (CVP) yield during drought conditions.

  – Inadequate flood control to protect Delta levees.

  – Inadequate and unreliable water supplies for urban and agricultural water users.

  In the interest of brevity, this example does not include a detailed description of the problems that need to be addressed; however, project proponents should not omit this part of the step.

- Step 2—Identify what is to be accomplished or achieved in relation to the problems:

  – Water quality improvements to ensure appropriate cold water temperatures for anadromous species in the Sacramento River and to meet instream flow standards for Delta outflow. (What temperature is needed and for what period of time/distance down the river? What instream flow standards should be achieved and for what period of time?)

  – A reliable water supply (environmental water account?) to assist in the restoration of natural processes, including fishery protection and restoration/recovery needs, in the Sacramento River and Delta. (How much water is needed? When is it needed?)

  – Improvements in the flexibility of water system operation to aid in offsetting Trinity River water reductions, improvements in CVP yield during drought conditions, and flood control improvements to protect delta levees. (What specifically is meant by enhanced flexibility? Improved flood control?)

  – Accessible and affordable new water supplies for urban and agricultural water users. (What does accessible mean? What is affordable water?)

Answering the parenthetical questions shown in step 2 helps make the statement of underlying purpose more specific and thereby helps screen or limit the range of alternatives to be evaluated in the environmental document.

After completing steps 1 and 2, the project team can prepare a draft statement of purpose and need. The challenge is keeping the statement short (typically a paragraph or two) but having adequate detail to limit the alternatives to a reasonable range, given the scope and magnitude of the proposed project. Typically, the project team will work through many drafts to arrive at the final statement of purpose and need.

EXAMPLE BACKGROUND DESCRIPTION FOR A STATEMENT OF PURPOSE AND NEED FOR A CALFED ACTION

It is suggested that a Background Description be developed to help explain the context of the purpose and need statement and its relationship to the CALFED long term Plan. The Background Description does not necessarily need be used in the environmental document. The following is an example Background Description for a hypothetical storage project. The following paragraphs refer to storage; project proponents would need to replace them with paragraphs specific to their projects.

> Seeking solutions to the resource problems in the Bay-Delta, State and federal agencies signed a "Framework Agreement" in June 1994. The impetus to forge this joint effort came at the State level in December 1992 with the formation of the State Water Policy Council and the Bay-Delta Oversight Council, an advisory group to the State Water Policy Council. In September 1993, the Federal Ecosystem Directorate was created to coordinate federal resource protection and management decisions for the Bay-Delta. The Framework Agreement laid the foundation for the Bay-Delta Accord and the CALFED Bay-Delta Program (CALFED). The Accord, also called the Principles for Agreement on Bay-Delta Standards between the State of California and the Federal Government, detailed interim measures for both environmental protection and regulatory stability in the Bay-Delta.
>
> CALFED oversees the coordination and increased communication between federal agencies, State agencies, and stakeholders in three areas outlined in the Framework Agreement:
>
> 1. Substantive and procedural aspects of water quality standard setting.
>
> 2. Improved coordination of water supply operations with endangered species protection and water quality standard compliance.
>
> 3. Development of a long-term solution to fish and wildlife, water supply reliability, flood control, and water quality problems in the Bay-Delta.

The CALFED Bay-Delta Program is charged with responsibility for the third issue identified in the Framework Agreement. CALFED's mission is to develop and implement a long-term comprehensive plan that will restore ecological health and improve water management for beneficial uses of the Bay-Delta system. CALFED conducted programmatic evaluation of a long-term plan (the Preferred Program Alternative) to address Bay-Delta problems in its Final Programmatic Environmental Impact Statement/Environmental Impact Report (Programmatic EIS/EIR). The Programmatic EIS/EIR was completed in July 2000, and a Programmatic Record of Decision (ROD), including State certification, was issued in August 2000. Approval of the ROD/certification provides the general direction for implementation of CALFED's Preferred Program Alternative.

To practicably achieve its mission, CALFED will concurrently and comprehensively address problems of the Bay-Delta system within each of four resource categories: ecosystem quality, water quality, water supply reliability, and levee system integrity. Important physical, ecological, and socioeconomic linkages exist between the problems and possible solutions in each of these categories. Accordingly, a solution to problems in one resource category cannot be pursued without problems in the other resource categories being addressed. CALFED's Preferred Program Alternative includes a range of balanced actions that can be implemented to move forward on a comprehensive, multi-agency approach to managing Bay-Delta resources. A comprehensive solution to Bay-Delta problems will also be supported by governance and finance mechanisms that overcome problem-specific or resource-specific limitations of previous, more narrowly focused approaches.

A fundamental concept included in the Preferred Program Alternative is adaptive management. No long-term plan for management of a system as complex as the Bay-Delta can predict exactly how the system will respond to restoration efforts or foresee events such as earthquakes, climate change, or the introduction of new species to the system. The possibility of sea-level changes induced by global warming or by other long-term climate trends is a good example of the need for an adaptive management approach to planning issues.

Adaptive management is an essential part of every element of the Preferred Program Alternative. Implementation of this long-term plan involves proposals for new kinds of actions or actions that are more intensive than those attempted in past efforts. Along with these proposed actions comes uncertainty. What actions work best to achieve the Preferred Program Alternative objectives? How can these actions be modified to work better, cost less, or be simpler to implement? How should the emphasis among actions change over time? Are there new or different actions that should complement or replace those that are being implemented? An adaptive management approach helps to answer these questions and allows CALFED to act upon those answers.

CALFED's strategic approach for implementation includes staged implementation and staged decision making. The selection of the Preferred Program Alternative establishes the broad resource framework and strategy for implementing a comprehensive strategy for addressing Bay-Delta Program problems. The Preferred Program Alternative is composed of hundreds of individual actions that will be implemented and refined over time.

The challenge in implementing Preferred Program Alternative in stages is to allow actions to go forward if they are ready to be implemented immediately, while ensuring that everyone has a stake in the successful completion of each stage. Linkages and assurance mechanisms will facilitate successful implementation.

When site-specific proposals are developed that involve potentially significant additional environmental impacts, those proposals will be subject to subsequent site-specific environmental review. Final decisions on individual projects will be based on a full suite of analysis and public comments on the projects.

Stage 1 comprises the first 7 years of implementation. A detailed list of Stage 1 actions is provided in CALFED's Implementation Plan for the Preferred Program Alternative. The Stage 1 actions are subject to revision, based on information developed during program implementation; available resources, including funding and personnel; and logistical considerations. The Stage 1 actions place an emphasis on ecosystem restoration, water use efficiency/recycling, environmental water quality, drinking water quality, storage, conveyance, levees, water transfers, watershed management, and the CALFED Science Program.

CALFED will annually review the status of implementation of all actions, the progress toward achievement of all goals and objectives, and compliance with CALFED schedules and financing agreements. Funds for implementation of components of the Preferred Program Alternative will continue to be available only if implementation of all actions, progress toward achievement of all goals and objectives, and compliance with schedules and financing agreements are occurring in a balanced manner.

As noted above, during Stage 1, storage will be developed as appropriate to meet CALFED's goals as part of a comprehensive Water Management Strategy that includes aggressive implementation of water conservation, recycling, improved water transfers market, and habitat restoration. Decisions to construct groundwater or surface storage will be predicated on maintaining balanced implementation of all elements of the Preferred Program Alternative and compliance with all environmental review and permitting requirements.

The CALFED agencies have identified 12 potential surface storage projects. The Programmatic EIS/EIR generically analyzed the consequences of hypothetical storage sites north of the Delta, within the Delta, and south of the Delta. CALFED

will continue to evaluate these surface and groundwater storage opportunities, initiate permitting, NEPA and CEQA documentation, and construction—if all conditions are satisfied. These efforts will be coordinated under CALFED's Integrated Storage Investigation (ISI).