

Section 4. Level of Detail of Analysis for the CALFED Tier 1 EIR/EIS

THRESHOLD OF ANALYSIS TO DIFFERENTIATE ALTERNATIVES

The major objectives of the impact analysis in the Tier 1 EIR/EIS are to provide enough information so that decision makers can:

- differentiate between programmatic alternatives through an understanding of the effects of the major components or elements of the alternatives,
- assess the impacts of alternatives compared with those of the No-Action Alternative and Current Conditions,
- assess the cumulative impacts of the preferred alternative, and
- avoid unnecessarily detailed analysis so that the above objectives can be met.

As detailed in Sections 2 and 3 of this report, the purpose of the Tier 1 EIR/EIS is to provide enough information to allow for decisions about the ultimate direction of the CALFED Bay-Delta Program. The alternatives to be addressed in the Tier 1 EIR/EIS represent a reasonable range of approaches to achieving the program objectives. Site-specific details on implementing solutions will be determined and assessed in parallel or subsequent planning reports and environmental documents.

The CALFED Bay-Delta Program initially drafted 20 alternatives that consisted of different combinations of 19 major components. The 20 draft alternatives and the major components of the alternatives were described in detail in the February 14, 1996 Workshop 5 Information Packet. The initial set of 20 alternatives have now been consolidated into 10 alternatives; however these consolidated alternatives still represent combinations of the 19 major components. Table 4-1 summarizes the major components associated with the 10 draft alternatives. Appendix F includes a description of each of the 10 draft alternatives and its major components.

To accomplish the objectives of the impact analysis listed above, the CALFED Bay-Delta Program Tier 1 EIR/EIS needs to effectively and concisely assess the differences between alternatives. Distinguishing alternatives can best be accomplished by ensuring that the analysis differentiates between various levels of implementation of the major components of the alternatives. For example, the demand management component of the alternatives may vary between modest and extensive levels of implementation.

In Tables 4-2, 4-3, and 4-4, each of the major components of the 10 draft alternatives have been displayed to identify the differences between the levels of implementation of each and its geographic scope. Different levels of implementation and geographic scopes can be used as **differentiating factors** to identify the appropriate thresholds of analysis necessary to isolate these differences in the impact analysis.

The **minimum threshold of analysis** displayed in the far right column of Tables 4-2, 4-3, and 4-4, in most cases represents the minimum difference between levels of implementation of major components. For example, in Table 4-2, the component "Relocate Export Diversion Point" has two levels of implementation: one, a diversion relocation of 7-10,000 cubic feet per second (cfs) and the other, a diversion relocation of 10-20,000 cfs. The minimum threshold of analysis is identified as 3,000 cfs because that is the minimum difference between the two levels of implementation and is less than the difference between the components and the No-Action Alternative or the Current Conditions.

To differentiate between the levels of implementation as well as between alternatives and the No Action alternative or current conditions, the analysis would need to identify impact differences resulting from a change in diversion of 3,000 cfs. This minimum threshold provides one of the inputs to the determination, in Table 4-5 "Water/Hydrology" (p. 1 of 10), of the appropriate time step for data analysis and data presentation. Other inputs include minimum thresholds from other components.

In some cases, the minimum threshold of analysis represents the minimum value associated with a component, rather than the difference between levels of implementation. For example, in Table 4-3 the component "In-Delta Surface Storage" has three levels of implementation: one, an in-Delta storage of 100,000 acre-feet (af), two, an in-Delta storage of 300,000-400,000 af, and three, an In-Delta storage of 600,000 af. In this case, the minimum value is 100,000 af of in-Delta storage, which is less than the difference between the levels of implementation, and is, therefore, the minimum threshold of analysis necessary to differentiate this component from the No-Action Alternative. As in the previous example, this minimum threshold provides one of the inputs to the determination, in Table 4-5 "Water/Hydrology" (p. 1 of 10), of the appropriate time step for data analysis and data presentation.

The minimum threshold of analysis provides a guide to the level of detail of analysis necessary to assess the difference in impacts of alternatives. The minimum threshold will also be instrumental in guiding the selection of analytical tools. If the minimum threshold is identified as 3,000 cfs, then the analytical tools for hydrologic analysis need to be specific enough to be able to discriminate at that level of detail, but no more specific than that. In this manner, the minimum threshold will be a screening criteria for analytical tools to be used in the impact analysis.

Resource-Specific Level of Detail of Analysis for the Tier 1 EIR/EIS

The differentiating factors and minimum thresholds of analysis described above provide the information necessary to identify the level of detail of analysis for resource-specific issue areas to be addressed in the Tier 1 EIR/EIS. Table 4-5 lists each issue area proposed to be addressed in the Tier 1 EIR/EIS and, based on the analysis presented in Tables 4-2, 4-3, and 4-4, identifies the specific issues of concern for each resource area, the type of data required to assess the impact, and the level of detail (time step) of data for the analysis and for presentation in the Tier 1 EIR/EIS. Table 4-5 also includes a summary explanation of the focus of the proposed impact analysis.