

Approach to Impact Analysis

Water Quality Program

1. Revise water quality action statements to be compatible with the Programmatic EIR/EIS. Through the public participation process, 32 water quality actions were identified that, when implemented, would be expected to improve water quality conditions with respect to the Parameters of Concern. A number of these are means-specific, such as the action to reduce concentrations of selenium by using impoundments for storage and timed release of agricultural drainage. At the Programmatic level, it is appropriate to identify what action will be taken and generally where, but not exactly how. This action might be rewritten to say "*Reduce selenium concentrations in the San Joaquin River and Delta from subsurface agricultural drainage in the Grasslands Area of the San Joaquin Valley.*" Alternatives for accomplishing this action might include drainage treatment, impoundment and timed release, and land use conversion. The choice among these alternatives would be made based on project-specific environmental documentation in Phase III of the CALFED program. When written in a manner consistent with the Programmatic EIR/EIS, the number of water quality actions should be smaller.

2. Establish *Performance Targets* and *Environmental Targets* for the actions.

Performance targets will be a realistic estimate of the level of improvement is feasible and be based, wherever possible, on actual studies or other supporting basis. Environmental Targets will identify what the condition looks like when the problem is resolved. Water Quality Control Plan objectives, where they exist, will be used as Environmental Targets. As an example, an action might be written "*Reduce concentrations of copper, zinc, and cadmium from abandoned and inactive mines in the Upper Sacramento River watershed*". The Performance Target might be to reduce the copper loading from 30,000 lbs/year to 5,000 lbs/year, based on studies that have been done of the problem and the estimated feasibility of accomplishing this target. Zinc and cadmium concentrations would be reduced as well, as the source is the same. The Environmental Target might then be the Water Quality Control Plan objective of 5.1 ug/L copper in the Sacramento River above Hamilton City.

Establishment of Performance Targets is quite necessary to developing an accurate picture, at the Program Level, of what water quality actions are likely to be implemented, the degree to which the actions would be implemented, and what impacts are to be expected. This work could be classified as prefeasibility study but, as it is fundamental to impact analysis, it can equally be classified as a component of impact analysis.

3. Identify water quality problem areas that will define the geographic areas in which water quality actions and associated impacts will occur. The Clean Water Act Section 303(d) list of impaired water bodies will be utilized as the basis for identifying problem areas.
4. Identify generalized impacts of the water quality actions. This activity will be undertaken

in parallel to action statement refinement, establishment of water quality targets, and identification of water quality problem areas for impact analysis. When action statements have been refined and their geographic locations better defined, potentially significant impacts will be identified more specifically.

5. Identify generalized impacts of other CALFED actions on water quality. As the actions of other resource areas are better defined during the process of alternative development, potentially significant impacts of these actions will be identified in greater detail.
6. Identify mitigation strategies for the potentially significant impacts identified.
7. The product of impact analysis will be embodied in a technical appendix that identifies potentially significant impacts, suggests potential mitigation strategies, and provides documentary support for the findings.

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