Chapter 8
Water Quality

8.1 Summary Comparison of Proposed Project

The proposed project would have similar effects on water quality as the approved project related to construction of the modified facilities and the incremental effect of the proposed project would be minor compared to the approved project. Similarly, potential effects of Environmental Commitments on water quality for the proposed and approved projects would be similar because the Environmental Commitments for the proposed and approved projects would be approximately the same. The proposed project would not result in any new significant impacts on water quality. Because of the minimal changes to water quality under the proposed project compared to the approved, a summary figure is not provided for this resource topic.

8.2 Environmental Setting/Affected Environment

8.2.1 Affected Environment

The Existing Conditions of water quality that would be affected by construction and operation of the proposed project are the same as described in Final EIR/EIS Chapter 8, *Water Quality*, Section 8.1, *Environmental Setting/Affected Environment*. The Final EIR/EIS provides a discussion of the watershed factors that affect water quality, the regulatory framework and applicable water quality standards, and the primary constituents of concern and known impairments (i.e., Clean Water Act Section 303[d]-listed constituents). The modifications to the proposed project would be located entirely within the previously analyzed project area and, consequently, the Existing Conditions have not changed.

8.3 Environmental Consequences

This section describes the potential effects of the modifications to the approved project on water quality within the study area. The focus of this assessment is on determining the incremental effect on water quality that is attributable to these modifications. With the exception of focusing on the incremental effects, the methods of analysis and determination of effects are the same as indicated in the Final EIR/EIS.

No additional discussion of operational effects is presented for the proposed project because the proposed project and approved project operations are identical. Please refer to Chapter 8, *Water Quality*, of the Final EIR/EIS for those operational-based water quality analyses. Similarly, no additional discussion of impacts associated with the Environmental Commitments is presented because restoration acreages under the proposed project and approved project would be approximately the same and construction-related water quality effects would not change.

8.3.1 Effects and Mitigation Approaches

8.3.1.1 No Action Alternative

Under the No Action Alternative, the new Byron Tract Forebay, reusable tunnel material (RTM) storage and other footprint changes described for the proposed project would not occur. For the purposes of this Supplemental EIR/EIS, the No Action Alternative, against which this proposed project is compared, is consistent with the No Action Alternative Early Long-Term in the Final EIR/EIS. No differing effects on water quality would occur along the proposed project alignment from what was previously described in the No Action Alternative Early Long-Term in the Final EIR/EIS if the No Action Alternative were to occur.

8.3.1.2 Proposed Project

Impact WQ-31: Water Quality Effects Resulting from Construction-Related Activities for the Water Conveyance Facilities

The effects on water quality of RTM storage areas and construction of a new Byron Tract Forebay and conveyance, instead of Clifton Court Forebay modifications, would be similar to those described for the approved project in Final EIR/EIS, Chapter 8, *Water Quality*, Section 8.3.4.2, under Impact WQ-31: Water Quality Effects Resulting from Construction-Related Activities for the Water Conveyance Facilities and Environmental Commitments. This is because the RTM storage areas, new Byron Tract Forebay facilities and other modifications would involve the same types of construction activities and equipment under the proposed project, and thus the same types of potential for contaminant discharges. As described in Final EIR/EIS Impact WQ-31, construction-related activities would be conducted in accordance with the environmental commitments identified in Appendix 3B, *Environmental Commitments, AMMs, and CMs*, to develop and implement best management practices (BMPs) for all activities that may result in discharge of soil, sediment, or other construction-related contaminants to surface water bodies. Because the construction-related activities would be conducted with implementation of environmental commitments, including but not limited to those identified in Appendix 3B, the proposed project would not be expected to cause constituent discharges of sufficient frequency and magnitude to result in a substantial increase of exceedances of water quality objectives/criteria, or substantially degrade water quality with respect to the constituents of concern, relative to Existing Conditions and the No Action Alternative, and thus would not adversely affect any beneficial uses in the Delta.

NEPA Effects: The effect determination for construction of the proposed project facilities would be the same as for the approved project described in Final EIR/EIS, Chapter 8, *Water Quality*, Section 8.3.4.2, under Impact WQ-31: Water Quality Effects Resulting from Construction-Related Activities for the Water Conveyance Facilities and Environmental Commitments—no adverse effect.

CEQA Conclusion: The impact determination for construction of the proposed project facilities would be the same as for the approved project described in Final EIR/EIS, Chapter 8, *Water Quality*, Section 8.3.4.2, under Impact WQ-31: Water Quality Effects Resulting from Construction-Related Activities for the Water Conveyance Facilities and Environmental Commitments—less than significant.

Incremental Impact: The impact on water quality associated with construction of the water conveyance facilities under the proposed project would be approximately the same as under the approved project. The impact under the proposed project would remain less than significant. No mitigation is required.

8.3.2 Cumulative Analysis

The Final EIR/EIS found that there was potential for the approved project to have a cumulative effect on electrical conductivity as a result of facilities operations and maintenance and mercury as a result of implementation of Environmental Commitment 4: Tidal Natural Communities Restoration. Because the proposed project would not involve any operational changes and because Environmental Commitments would be approximately the same for the proposed project and the approved project, no change to the Final EIR/EIS cumulative analysis is necessary. The analysis for cumulative effects on water quality for the proposed project remains the same as described in Final EIR/EIS Chapter 8, Section 8.3.5.3, *Cumulative Effects of the Action Alternatives*, with consideration of the proposed project modifications.

8.4 References Cited

None.