

Chapter 7

Groundwater

7.1 Summary Comparison of Proposed Project

This chapter provides the results of the assessment of the incremental impacts on groundwater resources that would result if the changes to the project footprint as described in Chapter 3, *Project Description*, are constructed. The focus of this assessment is to compare the impacts on groundwater resource previously determined for the approved project with how those impacts may either increase or decrease as a result of implementing the proposed changes to the footprint of the water conveyance facilities. This incremental analysis addresses whether the proposed project, compared with the approved project, would lead to any new significant environmental effects or to any substantial increase in the severity of previously identified significant effects. The incremental difference between the original impacts and the newly anticipated impacts are compared with the groundwater impact determinations described for the approved project in the Final EIR/EIS.

Some impact topics addressed in the Final EIR/EIS are not addressed herein because the change in the footprint of the water conveyance facilities would not result in a change in those impact determinations. This chapter does not address depleting or degrading groundwater supplies during construction of the water conveyance facilities; depletion of groundwater supplies during operation; changes in groundwater recharge quality as a result of implementing Environmental Commitments 3, 4, 6–12, and 15; or alteration of groundwater supplies, degradation of groundwater quality, or land subsidence from the changes disclosed for the approved project within the State Water Project (SWP)/Central Valley Project (CVP) Export Service Area. Cumulative impacts on groundwater resources would not change from the conditions disclosed for the approved project. These impacts on groundwater resulting from these actions, are fully disclosed in the Final EIR/EIS and would not change if the footprint changes described for the proposed project are constructed.

The incremental impacts which would be attributable to the proposed project include a change in the location of impacts associated with agricultural drainage. Because of the minimal changes to groundwater under the proposed project compared to the approved, a summary figure is not provided for this resource topic.

7.2 Environmental Setting/Affected Environment

7.2.1 Affected Environment

Physical modifications to the approved project would not change the water supply operations or related groundwater conditions, or expand the project study area. Therefore, related to groundwater conditions, the Existing Conditions are the same as presented in the Final EIR/EIS and *Developments after Publication of the Proposed Final EIR*.

1 7.3 Environmental Consequences

2 This section describes the potential effects of the proposed project on groundwater due to
3 construction and operation of the proposed project. The focus of this assessment is on determining
4 the incremental effect on groundwater attributable to the proposed project. With the exception of
5 focusing on the incremental effects, the methods of analysis and determination of effects is the same
6 as indicated in Final EIR/EIS Chapter 7, *Groundwater*.

7 7.3.1 Effects and Mitigation Approaches

8 The following discussion provides the results of the assessment of the incremental impacts on
9 groundwater resources that would result from the changes in the footprint of the water conveyance
10 under the proposed project. Most environmental impacts would not change from the conclusions for
11 the approved project disclosed in the Final EIR/EIS and, consequently, are not repeated in this
12 chapter. These include impacts driven by (1) operation of the California WaterFix, (2)
13 implementation of Environmental Commitments, and (3) cumulative impacts. For cumulative
14 impacts, the relatively small change represented by the incremental impacts is not expected to
15 result in a cumulatively considerable change in the conclusions provided in the Final EIR/EIS.

16 7.3.1.1 No Action Alternative

17 Groundwater conditions under the No Action Alternative as compared with Existing Conditions are
18 consistent with previous analyses conducted for the approved project as presented in the Final
19 EIR/EIS. There would be no changes to the groundwater resources (supply and quality) within the
20 Delta or in areas north of the Delta because there would be no changes in surface water or
21 groundwater diversions within those geographic regions. Similarly, there would be no change in the
22 supply or quality of groundwater resources within the SWP/CVP Export Service Area.

23 7.3.1.2 Proposed Project

24 **Impact GW-4: During Construction of Conveyance Facilities, Interfere with Agricultural** 25 **Drainage in the Delta**

26 Overall, the proposed project facilities would affect a slightly smaller area with agricultural drainage
27 than would approved project facilities, as described in Chapter 14, *Agricultural Resources*.
28 Construction of the Byron Tract Forebay would affect more agricultural land under the proposed
29 project as compared with the approved project. However, agricultural drainage from lands near the
30 Byron Tract Forebay would not be affected due to the installation of slurry walls around the forebay
31 site and seepage control measures around the forebay embankments, as described in Appendix 3B,
32 *Environmental Commitments, AMMs, and CM*.

33 **NEPA Effects:** Due to the measures described in Appendix 3B, *Environmental Commitments, AMMs,*
34 *and CMs*, related to installation of slurry cutoff walls, construction activities associated with the
35 proposed project conveyance facilities are not anticipated to result in effects on surrounding
36 groundwater levels that would affect agricultural drainage. Therefore, construction of conveyance
37 features is not forecasted to result in adverse effects to agricultural drainage under the proposed
38 project.

1 **CEQA Conclusion:** Due to the measures described in Appendix 3B, *Environmental Commitments,*
2 *AMMs, and CMs,* related to installation of slurry cutoff walls, construction activities associated with
3 the proposed project conveyance facilities are not anticipated to result in effects on surrounding
4 groundwater levels that would affect agricultural drainage.

5 **Incremental Impact:** The impact on agricultural drainage during construction of the proposed
6 project would be slightly less when compared with the approved project. There would be a
7 beneficial incremental impact on agricultural drainage attributable to the proposed project and
8 the impact would remain less than significant.

9 7.4 References Cited

10 None.