TRANS-1 and TRANS-2). Detailed information on the updated traffic modeling results can be found in Appendix 19A, *Air Quality Analysis Methods*, Section 22A.1 in Appendix A. This revised construction noise assessment is included for Alternative 4A in Section 4.3.19, for Alternative 2D in Section 4.4.19, for Alternative 5A in Section 4.5.19, and for the remainder of the alternatives in Chapter 23, *Noise* in Appendix A of this RDEIR/SDEIS (refer to Impact NOI-1). Traffic volumes on certain segments and construction noise levels at some receptor locations increased, relative to the DEIR/EIS. Traffic mitigation to enhance capacity of congested roadway segments and improve the physical condition of affected roadway segments would be pursued, in addition to limits on construction hours and activity. Noise-reducing measures would also be implemented to reduce construction-related noise and vibration levels. However, impacts would remain significant and unavoidable, consistent with what was presented in the DEIR/EIS.

### 2.4 Revised Project Descriptions and Enhanced Level of Detail

The RDEIR/SDEIS includes a number of revisions to the project description and an enhanced level of detail for Alternative 4. These include more explanation regarding the analysis of water conveyance facilities, updates to CM2–CM21, clarification on the role of the Bureau of Reclamation, and the use of CM3–CM11 to offset impacts related to CM1. As explained above, the RDEIR/SDEIS also includes new sub-alternatives 4A, 2D, and 5A. The project descriptions for these sub-alternatives are included in Section 4, *New Alternatives: Alternatives 4A, 2D, and 5A*, of this RDEIR/SDEIS.

#### 2.4.1 Analysis of Water Conveyance Facility Impacts

Each component feature of the water conveyance facilities is analyzed at a resource-specific level, based on complete water conveyance facility project footprints developed by DWR’s Division of Engineering. Analyses of Alternatives 4, 4A, 2D, and 5A in the RDEIR/SDEIS reflect GIS data from DWR that incorporate recent revisions to the alignment of water conveyance features and associated lands required for construction. The features in this GIS dataset, which represents each conveyance facility component (e.g., intakes, intermediate forebay, tunnels, spoils areas), were overlaid onto resource-specific GIS data layers to identify physical effects of conveyance facility construction. This GIS-based approach facilitated both a component-specific, or project-level, analysis of the individual features of the conveyance facilities, as well as a program-level analysis of construction of the conveyance facilities in aggregate. For example, the local effects on parcels of agricultural land associated with construction of a particular intake facility can be assessed through GIS analysis; at the same time, the overall temporary and permanent loss of agricultural lands associated with construction of the conveyance facilities as a whole can be aggregated to convey a comprehensive picture of the effects on the resource.

#### 2.4.2 Updates to Conservation Measures, Environmental Commitments, and Avoidance and Minimization Measures

The RDEIR/SDEIS reflects changes made to the conservation measures and avoidance and minimization measures (AMMs) for Alternative 4 and, where applicable, Alternatives 4A, 2D, and 5A.
These revisions are made to ensure that CM2–CM21 are described consistently where needed in the RDEIR/SDEIS and reflect additional detail that may have been developed since publication of the Draft BDCP. A discussion of the conservation measures and AMMs that have been substantively changed and that would potentially affect the characterization of impacts can be found in Appendix D.

The list of environmental commitments incorporated into all of the action alternatives (i.e., all alternatives except for the No Action/No Project Alternative) was updated extensively to account for refined project engineering. Like the formal mitigation measures prescribed in the Draft EIR/EIS, these environmental commitments, which sometimes take the form of best management practices (BMPs), were intended to avoid or minimize potential adverse effects (a NEPA term) and potential significant impacts (a CEQA term). Both DWR and the federal Lead Agencies were aware that, in many instances, the environmental commitments, as well as related “avoidance and minimization measures,” functioned as de facto mitigation measures. The Draft EIR/EIS is therefore written with a recognition that, where appropriate and necessary, its text should explain how the environmental commitments and avoidance and minimization measures would function, and whether particular commitments or measures would or would not be effective in reducing various significant or adverse effects to less-than-significant or less-than-adverse levels. Despite these efforts in the Draft EIR/EIS, which was issued for public review in December 2013, several commenters have asserted that the document does not comply with the requirements subsequently announced by the California Court of Appeal in a January 2014 decision known as Lotus v. Department of Transportation. In response to these comments, Appendix 3B (in Appendix A) has been significantly modified as part of this RDEIR/SDEIS. In addition to the refinements made to some of the environmental commitments, Appendix 3B as modified now includes, after each specific environmental commitment and avoidance and minimization measure, one or more narrative discussions explaining both how it reduces the severity of environmental effects and whether the level of impact reduction is sufficient to render the effects less than significant.

2.5 Analysis of Geotechnical Investigations

As described in Appendix 3B, Environmental Commitments, in Appendix A of this RDEIR/SDEIS, DWR will perform a series of geotechnical investigations along both the selected water conveyance alignment and at locations proposed for facilities or material borrow areas. The work to be performed will constitute a subsurface investigation program to provide information required to support the design and construction of the water conveyance facilities. Geotechnical investigations will be conducted to identify surface and subsurface conditions as necessary to complete design of the water conveyance facilities. The potential environmental effects resulting from conducting geotechnical investigations are described in Chapter 31, Other CEQA/NEPA Required Sections, Section 31.5.1.1, of the Draft EIR/EIS.

Following publication of the Draft EIR/EIS, DWR developed a Draft Geotechnical Exploration Plan (Phase 2) for the Alternative 4 conveyance alignment. The geotechnical investigation plan provides additional details regarding the rationale, investigation methods and locations, and criteria for obtaining subsurface soil information and laboratory test data (California Department of Water Resources 2014). Because this new information allows for a more detailed assessment of the

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