

Exhibit B

San Clemente Dam Seismic Safety Project California State Clearinghouse #2005091148

Findings on Environmental Impacts

The Department of Water Resources (DWR), acting as a lead agency, makes the following findings in response to the potentially significant effects on the environment identified and analyzed in the Final Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for the San Clemente Dam Seismic Safety Project. DWR is the lead agency because the Division of Safety of Dams, which has jurisdiction over applications to repair, alter, or remove a dam, and which has determined that the San Clemente Dam must be brought into compliance to withstand loading from a Maximum Credible Earthquake on nearby faults and to safely pass the Probable Maximum Flood, is the state agency with the greatest responsibility for supervising or approving the project as a whole.

Findings for impacts that will be rendered less than significant with mitigation are discussed in Part IA. Impacts that cannot be reduced to a less than significant level are discussed in Part IB. Table 1 lists impacts in the order in which they are discussed in the EIR/EIS, and indicates where they are discussed in the findings. Findings regarding alternatives to the project are contained in Part II. Discussions of the environmental impacts and mitigation measures contained in these findings paraphrase language contained in the final EIR/EIS (the language of the final EIR/EIS governs).

A Statement of Overriding Considerations for significant and unavoidable impacts is contained in Exhibit C. The specific mitigation measures that are within the responsibility and jurisdiction of the Department are also included in the Mitigation, Monitoring and Reporting Program (MMRP) found in Exhibit D. Implementation of this MMRP shall be accomplished by the Project Proponent (CAW) and its agents.

TABLE 1.

Impact Issue	Impact Determination	Page Number
Section 4.1 Geology and Soils		
GS-2	less than significant with mitigation	4
GS-4	less than significant with mitigation	4
GS-5	less than significant with mitigation	4
Section 4.2 Hydrology and Water Resources		
WR-2a	significant and unavoidable even with mitigation	16
WR-2b	significant and unavoidable even with mitigation	16
WR-3b	less than significant with mitigation	5
WR-4b	significant and unavoidable, cannot be mitigated	16
WR-7	less than significant with mitigation	5
Section 4.3 Water Quality		
WQ-1	less than significant with mitigation	5
WQ-2	less than significant with mitigation	5
WQ-3	less than significant with mitigation	6
WQ-5	less than significant with mitigation	6
WQ-6	less than significant with mitigation	6
WQ-7	less than significant with mitigation	7

Impact Issue	Impact Determination	Page Number
WQ-8	less than significant with mitigation	7
WQ-9	significant and unavoidable even with mitigation	17
WQ-10	significant and unavoidable, cannot be mitigated	17
WQ-12	less than significant with mitigation	7
WQ-14	less than significant with mitigation	8
WQ-16	less than significant with mitigation	8
WQ-17	less than significant with mitigation	8
Section 4.4 Fisheries		
FI-1	less than significant with mitigation	8
FI-2	significant and unavoidable even with mitigation	17
FI-4	significant and unavoidable even with mitigation	18
FI-5	significant and unavoidable even with mitigation	18
FI-6	less than significant with mitigation	9
FI-10	less than significant with mitigation	9
FI-13	significant and unavoidable, cannot be mitigated	18
FI-15	less than significant with mitigation	9
Section 4.5 Vegetation and Wildlife		
VE-1	less than significant with mitigation	10
VE-2	less than significant with mitigation	10
VE-3	less than significant with mitigation	10
VE-4	less than significant with mitigation	10
WI-2	less than significant with mitigation	11
WI-3	significant and unavoidable even with mitigation	19
WI-4	less than significant with mitigation	11
WI-8	less than significant with mitigation	12
WI-9	less than significant with mitigation	12
WI-10	significant and unavoidable even with mitigation	19
WI-11	significant and unavoidable even with mitigation	19
WI-13	significant and unavoidable even with mitigation	20
Section 4.6 Wetlands		
WET-1	less than significant with mitigation	12
WET-2	less than significant with mitigation	13
WET-3	less than significant with mitigation	13
Section 4.7 Air Quality		
AQ-1	significant and unavoidable even with mitigation	20
AQ-2	significant and unavoidable even with mitigation	20
AQ-3	significant and unavoidable even with mitigation	20
Section 4.8 Noise		
NO-1	significant and unavoidable even with mitigation	21
NO-2	significant and unavoidable even with mitigation	21
NO-3	significant and unavoidable even with mitigation	21

Impact Issue	Impact Determination	Page Number
Section 4.9 Traffic and Circulation		
TC-1	significant and unavoidable even with mitigation	21
TC-3a	less than significant with mitigation	13
TC-3b	significant and unavoidable even with mitigation	22
TC-4	less than significant with mitigation	14
TC-6	significant and unavoidable even with mitigation	22
TC-7	less than significant with mitigation	14
Section 4.10 Cultural Resources		
CR-1	less than significant with mitigation	14
CR-2	less than significant with mitigation	14
CR-3	less than significant with mitigation	15
CR-4	significant and unavoidable even with mitigation	22
CR-5	significant and unavoidable even with mitigation	22
CR-6	significant and unavoidable even with mitigation	23
Section 4.12 Recreation		
REC-2	significant and unavoidable even with mitigation	23

The San Clemente Dam Seismic Safety Project final EIR/EIS is comprised of the Draft EIR/EIS (DEIR/EIS), the Final EIR/EIS (FEIR/EIS) and related appendices. The final EIR/EIS includes a list of persons, organizations and public agencies that commented on the DEIR/EIS, comments and recommendations received on the DEIR/EIS either verbatim or in summary, and the Department's responses to significant environmental points raised in the review and consultation process.

The custodian and location of the final EIR/EIS and other documents or other materials which constitute the record of the proceedings is:

California Department of Water Resources
Division of Safety of Dams
2200 X Street
Sacramento, CA 95818

PART IA

Potentially Significant Impacts Reduced to a Less Than Significant Level by Mitigation Measures Incorporated into the Carmel River Reroute and Dam Removal Project

4.1 GEOLOGY AND SOILS

GS-2: Access Route Landslides/Slope Stability

Landslides could be triggered during the construction or operation of the project by oversteepening hillsides during the improvement of access routes. These improvements may require notching into adjacent hillside slopes, which could increase susceptibility to a landslide. (See Section 4.1, page 4.1-17, the Proponent's Proposed Project discussion on pages 4.1-12 and 4.1-13, and Appendix K).

Finding: Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure GS-2 requiring that the Project Proponent conduct route surveys, comply with design specifications required in the SWPPP, and to implement additional BMPs identified during the design phase.

GS-4: Soil Erosion

Blasting of canyon walls at select locations adjacent to the low and high roads would be required to widen roadways for equipment access. Road improvements immediately upslope of the river or where vegetation may be removed to accommodate road widening or new road construction could cause localized changes in drainage patterns which could result in erosion and introduction of sediment or rock into the stream channel. Construction along steep hillslopes and banks adjacent to watercourses could affect water quality by increasing turbidity or by introducing foreign material and construction debris. Road construction activities could alter drainage patterns, initiate slope instability, accelerate erosion, and discharge sediment to stream channels. (See Section 4.1, page 4.1-17, the Alternative 1 discussion on pages 4.1-15, and 4.1-16, and Appendix K).

Finding: Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure GS-4 requiring the implementation of standard erosion control methods and BMPs on both the upslope and downslope sides of all construction zones. BMPs would be customized to address site-specific conditions encountered on the steep slopes that adjoin the river. Erosion control measures included in the SWPPP (Appendix K) will be implemented.

GS-5: Bypass Rock Removal by Blasting

Blasting will alter the landscape by removing approximately 145 acre-feet of rock in a 450-foot-long channel between the Carmel River and San Clemente Creek, approximately 2,500 feet upstream of the SCD. Blasting entails safety hazards including the potential to trigger landslides on adjacent unstable slopes. (See section 4.1, pages 4.1-17 and 4.1-18, and Appendix K).

Finding: Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure GS-5 requiring that a blasting plan be prepared as part of final design for construction that will summarize BMPs to be employed during all blasting

activities to ensure safety and minimize potential damage from an associated landslide. The applicant will require the contractor to submit BMPs that meet measures specified in the SWPPP (Appendix K).

4.2 HYDROLOGY AND WATER RESOURCES

WR-3b: Increased Sediment Deposition that Obstructs Fish Passage

Potential for blockage of fish passage would occur from sediment deposition in the channel and at the diversion dike. Fish would have to traverse the bypass channel and the dike to move from the San Clemente Creek arm to the Carmel River arm. The bypass channel and the San Clemente Creek channel would be steep (2.9 percent) relative to the current channel through the stored sediment (2.5 percent). (See Section 4.2, page 4.2-81).

Finding: Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure WR-3b requiring that both the reconstructed channel and the new bypass channel be designed to allow fish passage. The design would include runs and pools that reflect a geomorphically stable channel and the passage requirements for the fish.

WR-7: Impact to the Location or Timing of Water Supply Diversions

The existing CAW point of diversion will be replaced at an elevation of 525 ft. in the immediate vicinity of San Clemente Reservoir, which could affect fish passage. (See Section 4.2, page 4.2-78, and the Alternative 1 discussion on page 4.2-68).

Finding: Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure WR-7 requiring the diversion to be operated to maintain fish passage flows in Carmel River in January through May while also providing the necessary water supply to the downstream community. Any other necessary mitigation for a change in a point of diversion would be addressed by the SWRCB during in the permit process.

4.3 WATER QUALITY

WQ-1: Road Construction and Improvement Activities

Road improvements immediately upslope of the river or where vegetation may be removed to accommodate road widening or new road construction could cause localized changes in drainage patterns, which could cause slope instability, accelerate erosion, and introduce excess sediments to the stream channel. Road construction and improvements along the steep hillslopes and banks adjacent to the river could affect water quality by increasing turbidity. (See Section 4.3, page 4.3-47, the Proponent's Proposed Project discussion on 4.3-33, and Appendix K).

Finding: Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure WQ-1 requiring the implementation of erosion control methods, BMPs, and associated water quality monitoring measures in the SWPPP (Appendix K).

WQ-2: Instream, Streambank, and/or Stream Margin Construction Activities

Construction activities and use of machinery, equipment and workers in the streambed or in vicinity of a stream, may cause erosion of the streambank and soils of the stream margins, deposition of rock debris in the stream, and increased turbidity. (See Section 4.3, page 4.3-47, the Proponent's Proposed Project discussion on pages 4.3-33 and 4.3-34, and Appendix K).

Finding: Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure WQ-2 requiring implementation of erosion control measures identified in the SWPPP (Appendix K). The SWPPP may be modified during consultation with the CCRWQCB and other permitting agencies to include additional provisions to prevent impacts due to erosion and sediment input to protect streams from construction/deconstruction activities.

WQ-3: Accidental Leaks and Spills of Toxic Substances

Accidental leaks and spills of chemicals or fluids from equipment and machinery, wet concrete, concrete leachate or particulates, or demolition debris in the construction area could release toxic substances to surface water, or to soil areas within the margins of the active channel. This would potentially violate water quality standards or impact aquatic resources. (See Section 4.3, page 4.3-47, the Proponent's Proposed Project discussion on pages 4.3-34 and 4.3-35, and Appendix K and Appendix R).

Finding: Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure WQ-3 requiring implementation of BMPs identified in the SWPPP (Appendix K) and the Spill Prevention, Containment, and Countermeasure Plan (SPCC, Appendix R).

WQ-5: Stream Diversions Poneded Areas

Installation of sheetpile barriers or a check dam would create a ponded area with increased water temperature and turbidity, and decreased dissolved oxygen. Water discharged downstream of the construction area could have increased temperature and turbidity, and decreased dissolved oxygen. (See Section 4.3, page 4.3-47, the Proponent's Proposed Project discussion on pages 4.3-36 and 4.3-37, and Appendix K).

Finding: Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure WQ-5 requiring implementation of measures contained in the SWPPP (Appendix K) to minimize heating of the diverted water around the construction site. Measures include monitoring stream temperatures, dissolved oxygen, and turbidity downstream of SCD during construction. Criteria for maximum water temperatures, minimum dissolved oxygen, and maximum turbidity will be based on steelhead requirements. If water temperatures exceed the criteria, the bypass flow will be mixed with cooler water from the upstream well point field to reduce temperatures to an acceptable level.

WQ-6: Stream Diversions Return of Bypassed Flows

Bypassed stream flows would be discharged back into the stream below the active construction area and could cause localized scour, sedimentation and turbidity effects. (See Section 4.3, page 4.3-47, and the Proponent's Proposed Project discussion on page 4.3-37).

Finding: Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure WQ-6 requiring installation of energy dissipation structures in the areas where bypassed project waters are discharged.

WQ-7: Rewatering After Stream Diversions

Following completion of construction activities, streamflow would be returned to the previously dewatered area. Water quality standards could be violated if fine sediments and toxic materials settled in the dewatered area during construction. (See Section 4.3, page 4.3-47, the Proponent's Proposed Project discussion on page 4.3-37, and Appendix K).

Finding: Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure WQ-7 requiring implementation of appropriate BMPs identified in the SWPPP (Appendix K) such as use of a filter cloth or other fabric barrier placed on the ground surface of the active construction area to catch fine sediments, cement dust, or other materials used or spilled during construction activities. All sand-size and finer construction fill, and any angular crushed rock will be disposed of at an appropriate off-site location.

WQ-8: Discharge from Settling Basins

Temporary settling basins would be constructed below the plunge pool, at the Old Carmel River Dam (OCRD) bridge, and in the reservoir near the 494-foot elevation intake. Water ponded in settling basins would have increased temperature, decreased dissolved oxygen, and increased turbidity. This water may be discharged, or leak around the bottom or edges of the settling basin into downstream waters, resulting in degradation of water quality. (See Section 4.3, page 4.3-47, the Proponent's Proposed Project discussion on page 4.3-38, and Appendix K).

Finding: Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure WQ-8 requiring implementation of BMPs identified in the SWPPP (Appendix K) including use of settling basins and a sedimentation tank/holding facility located above the ordinary high water zone that allows only clear water to be returned to the stream. Settled solids would be disposed of at an appropriate off-site location. If effluent water quality does not meet water quality criteria, discharge would be discontinued until acceptable conditions are met. Additional water filtration may be implemented.

WQ-12: OCRD Notching

The release or deposition of concrete particles in surface waters while notching the OCRD could violate water quality standards or impact aquatic resources. (See Section 4.3, page 4.3-47, the Proponent's Proposed Project discussion on page 4.3-40, and Appendix K).

Finding: Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure WQ-12 requiring implementation of appropriate BMPs and associated water quality monitoring identified in the SWPPP (Appendix K).

WQ-14: Dam-Related Construction or Demolition

The release or deposition of concrete particles in surface waters during dam-related construction and demolition could violate water quality standards or impact aquatic resources. (Section 4.3, page 4.3-48, the Alternative 2 discussion on pages 4.3-46 and 4.3-47, and Appendix K).

Finding: Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure WQ-14 requiring implementation of appropriate BMPs incorporated in the SWPPP (Appendix K) such as placing blasting mats over the dam and concrete blocks to prevent flying concrete debris, and placing a fabric barrier on the ground surface in the active construction/demolition area to catch sediment and cement debris.

WQ-16: Sediment Disposal

Sediment could be entrained in the sediment disposal area during large or prolonged stormwater runoff events and discharged to the Carmel River, where it could increase turbidity. (See 4.3, page 4.3-49, and Appendix K).

Finding: Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure WQ-16 requiring implementation of appropriate erosion control BMPs identified in the SWPPP (Appendix K) and monitor effectiveness for a period of 10 years at the end of each rainy season, with additional monitoring conducted periodically during the rainy season to identify any imminent erosion problems.

WQ-17: Construction of Diversion Channel and Diversion Dike

Construction of the diversion channel and dike could cause the discharge of rock debris and the mobilization of fine sediments into San Clemente Creek and the Carmel River, resulting in elevated turbidity levels. (Section 4.3, pages 4.3-49 and 4.3-50, and Appendix K).

Finding: Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure WQ-17 requiring implementation of appropriate BMPs incorporated in the SWPPP (Appendix K). In addition, a blasting mat will be used to catch and direct flying rock debris to an area where it can be removed. This material would be disposed of at an appropriate on-site location in the Carmel River arm of the reservoir.

4.4 FISHERIES

FI-1: Access Route Improvements

Road improvements along the Carmel River between the Sleepy Hollow Ford and OCRD would affect aquatic habitat through removal of riparian vegetation reducing shading and food resources. Short-term impacts may be caused by sedimentation and increased turbidity along the Carmel River from OCRD downstream to the Sleepy Hollow Ford. Road widening activities along the Carmel River would potentially expose rearing juvenile steelhead along about a third of Reach 4 to increases in suspended sediment. Reduction of riparian habitat would reduce the amount of shading along the river and reduce the source of terrestrial insects as a food resource for juvenile steelhead along Reach 4 of the Carmel River. (See Section 4.4, page 4.4-81, the Alternative 1 discussion on page 4.4-71, the Proponent's Proposed Project discussion on pages 4.4-53, 4.4-54, and 4.4-55, and Appendix U and Appendix K).

Finding: Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure FI-1 requiring implementation of BMPs for riparian vegetation, identified in the Botanical Resources Management Plan (Appendix U). Water quality will be protected during construction by implementing measures in the SWPPP (Appendix K). When construction is complete, revegetate stream margins with native species as described in Appendix U.

FI-6: Water Quality Effects on Fish

Construction activities, river diversions, and reservoir dewatering would affect turbidity, DO, and temperature in the river downstream of SCD during the summer low flow period. These effects may extend downstream for several miles. Turbidity levels would attenuate in a downstream direction with the most pronounced effects in Reach 4 attenuating to minor or undetectable effects in Reach 6. Collectively these three reaches support about 40 percent of the total steelhead in the river and about 30 percent of the rearing habitat in the Carmel River downstream of LPD. (See Section 4.4, page 4.4-81, and the Proponent's Proposed Project discussion on pages 4.4-59, 4.4-60, and 4.4-61).

Finding: Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure FI-6. This measure requires moderating the rate at which the reservoir is dewatered, aerating the water prior to release into the river, dewatering the reservoir during cool periods or during the early part of the day, limiting increase of river temperatures downstream of the SCD to no more than 1 to 2 degrees Celsius over water temperature levels upstream of the sheet-pile diversion, and reducing thermal loading in diversion pipes around the reservoir by placing the pipeline in shaded locations or by burying the pipe beneath a shallow layer of sand, covering the pipe with shade cloth or burlap, or by painting the pipe white. During bypass operations for the river, the water will be aerated as it descends from the SCD to the river. Water pumped from the reservoir or from well points will be discharged in a similar manner to fully aerate low DO water prior to discharge into the river.

FI-10: Relocate CAW Water Diversion Upstream

Relocating the water supply diversion intake 2,900 feet upstream on the Carmel River from the current dam site would reduce flow in the river between the diversion intake and the SCD site compared to existing conditions. (See Section 4.4, page 4.4-81, and the Alternative 1 discussion on pages 4.4-74 and 4.4-75).

Finding: Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure FI-10 requiring developing and complying with an MOU between Monterey Peninsula Water Management District (MPWMD), the California Department of Fish and Game (CDFG), the National Marine Fisheries Service (NMFS) and CAW to provide flows for steelhead habitat in the reach of the river affected by the new point of diversion.

FI-15: Sleepy Hollow Steelhead Rearing Facility

The Carmel River Reroute and Dam Removal alternative could result in poor quality water to the Sleepy Hollow Steelhead Rearing Facility (SHSRF) during project construction. (See Section 4.4, page 4.4-81, and the Proponent's Proposed Project discussion on pages 4.4-70 and 4.4-71).

Finding: Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure FI-15 requiring that water be pumped from the

Russell Wells and made available to the SHSRF as an alternative water supply during construction years, or during periods of excessive turbidity or sediment levels in the Carmel River.

4.5 VEGETATION AND WILDLIFE

VE-1: Special-Status Plant Species

Populations of special-status plant species are located in the project area and could be impacted by construction activities. (See Section 4.5, pages 4.5-59, and the Proponent's Proposed Project discussion on page 4.5-33).

Finding: Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure VE-1 requiring that, to the extent possible, populations of CNPS List 4 species will be avoided during construction activities.

VE-2: Loss of Protected Oak Woodland

Construction activities could result in loss of oak woodlands protected by the Monterey County Oak Protection Ordinance. (See Section 4.5, page 4.5-59, the Proponent's Proposed Project discussion on pages 4.5-33 and 4.5-34, and Appendix U).

Finding: Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure VE-2 requiring that impacts to oak trees be avoided by confining access improvement activity in the vicinity of the oak woodlands. Measures in the Botanical Resources Management Plan (Appendix U) will be finalized and implemented including elements from the Monterey County Oak Protection Ordinance.

VE-3: Loss of Other Native Vegetation

Project activities are expected to result in loss of native vegetation, including several types of sensitive riparian habitat and oak woodland habitat. (See Section 4.5, page 4.5-59, the Proponent's Proposed Project discussion on pages 4.5-34, 4.5-35, 4.5-37, and 4.5-38, and Appendix U).

Finding: Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure VE-3 requiring that the proposed access road improvements, laydown areas, plunge pool, and staging areas be designed to minimize loss of native vegetation. Unnecessary clearing of, or disturbance to, native vegetation outside of the road right-of-way will be avoided. Fencing will be used to prevent encroachment of vehicles or project activity into undisturbed native habitat or within the dripline of native trees outside of designated areas. Project outflows will be designed to diffuse water rather than allow it to flow out in a concentrated stream, and will be placed to minimize bank erosion. Supplemental irrigation will be provided to alders around the reservoir fringe when the reservoir is dewatered and to riparian vegetation above the bypass outflow. Measures in the Botanical Resources Management Plan (Appendix U) will be implemented.

VE-4: Indirect Effects on Native Vegetation

Project construction activities may result in indirect adverse impacts to vegetation, including increased erosion and sedimentation, damage to roots of oaks and other tree species adjacent to areas where heavy equipment would be operated, dust impacts to roadside vegetation, and colonization of exposed

substrate by exotic plant species. (See Section 4.5, page 4.5-59, the Proponent's Proposed Project discussion on pages 4.5-38 and 4.5-39, and Appendix U and Appendix K).

Finding: Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure VE-4 requiring that road widening be designed to avoid placing fill above canyon walls, and to avoid or minimize alterations of existing drainage patterns that could lead to increased erosion and sedimentation. Construction work will be scheduled to occur during the dry season. Standard erosion and sedimentation control BMPs will be implemented for all grading, filling, clearing of vegetation, or excavating that occurs in site preparation according to the Botanical Resources Management Plan (Appendix U) and SWPPP (Appendix K).

Excavation and operation of construction vehicles off of the right-of-way will be prohibited within the dripline of oak and other tree species. To minimize dust, unpaved access roads will be frequently watered. Any areas where existing vegetation cover is removed outside the roadway will be revegetated, according to the Botanical Resources Management Plan (Appendix U).

WI-2: Removal of Ancillary Facilities

Removing the valve house from the SCD and other structures near the dam may displace special-status bat species from traditional roosts and may increase mortality if the structures are removed when newborn or very young bats are present in the roosting colonies. (See section 4.5, page 4.5-59, the Alternative 1 discussion on page 4.5-52, the Proponent's Proposed Project discussion on pages 4.5-39 and 4.5-40, and Appendix V).

Finding: Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure WI-2 requiring that, if possible, structure removal would be scheduled after juvenile bats are weaned and capable of flight, as determined by a biologist with expertise in bat biology. A preconstruction survey will be conducted for bat roosts. If bats are observed nesting or roosting in the area, USFWS and CDFG will be notified. Mitigation measures previously agreed to by the agencies will be implemented. Protection measures set forth in Appendix V, Protection for Special Status Species, will be implemented.

WI-4: Notching Old Carmel River Dam (OCRD)

Instream work during notching of the OCRD could damage CRLF summer and spawning habitat downstream of the SCD. It could also affect western pond turtle, two-striped garter snake, foothill yellow-legged frog, and Coast Range newt habitat or individuals. (See Section 4.5, page 4.5-59, and the Proponent's Proposed Project discussion on page 4.5-43).

Finding: Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure WI-4 requiring that, prior to OCRD notching, USFWS protocol-level surveys will be conducted for CRLF along the Carmel River up to one-half mile downstream of OCRD. Surveys for other special-status aquatic species will be occur concurrently. If work on the ORCD is interrupted for more than two weeks, the surveys will be repeated if the initial surveys indicated the presence of special-status species habitat or populations.

WI-8: Vegetation Removal and Construction-Related Disturbance

Potential impacts to special-status birds from vegetation removal and other construction activities include disturbance to breeding individuals during the nesting season. Impacts could include loss of eggs or nestlings, displacement from increased noise and human presence in the vicinity of the construction activity, and a reduction in foraging habitat. (See Section 4.5, page 4.5-61, the Alternative 1 discussion on page 4.5-52, and the Proponent's Proposed Project discussion on page 4.5-48).

Finding: Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure WI-8 requiring that, to the extent possible, vegetation removal will be conducted between August 1 and March 1. If any vegetation removal is conducted between March 1 and August 1, pre-construction surveys for breeding birds would be conducted in these areas. Any active nests found will be isolated from construction activities by a species-specific buffer area (from 50 to 500 feet), USFWS and CDFG will be notified, and the nests will be avoided until the eggs are hatched and the nestlings fledged.

WI-9: Pre-Existing Access Road Improvements

Widening and improving the existing Jeep Trail could impact Monterey dusky-footed wood rat and other special-status wildlife species. Potential impacts to special-status birds include disturbance during the nesting season. Impacts could include loss of eggs or nestlings, displacement due to increased noise and human presence in the vicinity of the nests, and a reduction in foraging habitat. (Section 4.5, page 4.5-59, the Alternative 1 discussion on pages 4.5-52 and 4.5-53, and Appendix V).

Finding: Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure WI-9 requiring that tree and vegetation removal be restricted to the minimum amount necessary to allow access by construction vehicles. Pre-construction surveys of the Jeep Trail will be conducted by qualified wildlife biologists, to assess the presence or habitat use by any special-status wildlife species. In consultation with the USFWS and CDFG, BMPs included in the Protection Measures for Special Status Species Plan (Appendix V), will be finalized and implemented to avoid or reduce impacts to special-status wildlife species habitat or individuals.

4.6 WETLANDS

WET-1: Permanent Loss of Wetlands and Other Waters of the U. S.

Construction activities would result in the permanent loss of jurisdictional wetlands and Other Waters of the U.S. due to installation of the diversion dam and elimination of San Clemente Reservoir by removal of the SCD. (See section 4.6, page 4.6-14, the Proponent's Proposed Project discussion on pages 4.6-8 and 4.6-9, and Appendix U).

Finding: Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure WET-1 requiring implementation of measures in the Botanical Resources Management Plan (Appendix U), including provisions for restoration, mitigation, and monitoring for wetlands and Other Waters affected by the project. Riparian and fringe palustrine emergent wetlands similar in function to the lost acreage will be created or restored at a 3:1 ratio, grading will be conducted as necessary, and cuttings or seedlings will be placed in appropriate habitat under the supervision of a qualified botanist. Seedlings will be from Carmel Valley area populations. Replacement plantings will be monitored for at least five years. Seedlings will be replanted as necessary to ensure long-term survival. Impacts to Other Waters may be mitigated by stream channel improvements along

the Carmel River upstream of the Project Area, or along other streams in the watershed. The project proponent may either conduct this restoration work or provide funding to other property managers for projects that restore natural channel conditions. Restoration may be conducted at sites in lands along the Carmel River owned by the Project Proponent or on appropriate streams elsewhere in the watershed. Restoration sites will be coordinated with the USACE and CDFG and will be conserved in perpetuity.

WET-2: Short-term Disturbance of Wetlands and Other Waters of the U.S.

Construction activities would result in the temporary filling or dewatering of fringe palustrine emergent wetlands and Other Waters of the U.S. (See section 4.6, pages 4.6-14 and 4.6-15, the Proponent's Proposed Project discussion on pages 4.6-9 and 4.6-10, and Appendix U).

Finding: Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure WET-2 regarding the design of construction features and implementation of measures in the Botanical Resources Management Plan.

WET-3: Indirect Impacts to Wetlands and Other Waters of the U.S.

Construction activities that accelerate erosion and sedimentation could have indirect impacts on jurisdictional wetlands and Other Waters of the U.S. (See section 4.6, page 4.6-15, the Proponent's Proposed Project discussion on pages 4.6-10 and 4.6-11, and Appendix U and Appendix K).

Finding: Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure WET-3 requiring that road improvements be designed to avoid placing fill above canyon walls, and to avoid or minimize alterations of existing drainage patterns that could lead to increased erosion and sedimentation. Construction work will be scheduled to occur during the dry season. Standard erosion and sedimentation control BMPs will be implemented for all grading, filling, clearing of vegetation, or excavating that occurs in site preparation according to the Botanical Resources Management Plan (Appendix U) and SWPPP (Appendix K). Areas where existing vegetation is removed outside of the roadway will be revegetated, according to the Botanical Resources Management Plan (Appendix U).

4.9 TRAFFIC AND CIRCULATION

TC-3a: Traffic Safety Carmel Valley Road

The project would add construction traffic to a segment of Carmel Valley Road east of Carmel Village, which currently experiences relatively high accident rates. Cachagua Road would be used to transport aggregate to the project site for improvements to dam access roads. This segment of Cachagua Road also has an accident rate that exceeds the expected rate. Construction traffic on these roads could increase accident rates. (See Section 4.9, page 4.9-46, the Alternative 1 discussion on pages 4.9-34 and 4.9-35, and the Proponent's Proposed Project discussion on pages 4.9-23 and 4.9-24).

Finding: Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure TC-3a requiring implementation of a trip reduction plan, a traffic coordination and communication plan, a traffic safety plan, and to pay for additional enforcement.

TC-4: Inadequate Corner Sight Distances

The corner sight distances looking to the east from the Cachagua Road approach to Carmel Valley Road, looking to the north from the Jeep Trail approach to Cachagua Road, and looking north from the Cachagua Road intersection with the Jeep Trail are inadequate. Construction traffic in these areas will impact safety. (See Section 4.9, page 4.9-46, and the Alternative 1 discussion on page 4.9-39).

Finding: Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure TC-4 requiring the applicant to construct improvements at the Carmel Valley Road/Cachagua Road intersection to increase the sight distance provided for a motorist looking to the east from the Cachagua Road approach. The applicant will relocate the stop bar on the Cachagua Road approach to Carmel Valley Road to lengthen the sight distance looking to the east. Physical improvements will be required at the intersection to improve the sight distance. The applicant will construct improvements at the Cachagua Road/Jeep Trail intersection to increase the sight distance provided for a motorist looking to the north from the Jeep Trail approach.

TC-7: Pavement Loadings

Project construction would cause pavement loading impacts. (See Section 4.9, page 4.9-46, and the Alternative 1 discussion on pages 4.9-40 and 4.9-41).

Finding: Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure TC-7 requiring that the applicant coordinate with local agencies to determine whether the proposed routes for truck travel are appropriate before beginning construction. The applicant will repair any damage to Carmel Valley Road east of Carmel Village and to Cachagua Road between Carmel Valley Road and the Jeep Trail, and will restore them to pre-project conditions immediately after construction has been completed.

4.10 CULTURAL RESOURCES

CR-1: Ground Disturbance

Construction activities and ground disturbance could damage or destroy archaeological resources. (See Section 4.10, page 4.10-27, and the Proponent's Proposed Project discussion on pages 4.10-17, 4.10-21, and 4.10-22).

Finding: Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure CR-1 requiring the applicant to complete the Section 106 process, prepare a MOA, and conduct archaeological monitoring during clearing and grubbing of the site and during any subsurface excavation prior to disposal activities. Activities involving the "saddle" (the peninsula of land bordered to the east, north and west by the reservoir) could damage or destroy buried deposits in CA-MNT-1253 (BRM features) (AR-4), which has not been tested. If the site is eligible for the NRHP, it will be avoided. If avoidance is not possible, the SHPO will be contacted. Data recovery of the site may be required.

CR-2: Damage to Historic Structures from Construction-related Vibration

Construction activities could cause vibrations that could damage historic structures. (See Section 4.10, page 4.10-26, and the Proponent's Proposed Project discussion on page 4.10-22).



Finding: Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure CR-2 requiring that rigid support of excavation structures be used to minimize movement of the ground.

CR-3: Introduction of Short-term Dirt/Unintended Damage

Construction activities would cause accumulation of dirt on historic properties. (See Section 4.10, page 4.10-26, and the Proponent's Proposed Project discussion on pages 4.10-22 and 4.10-23).

Finding: Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure CR-3 requiring that dust associated with construction activities will be reduced by spraying water on the ground surface prior to ground disturbance.

PART IB

Potentially Significant Impacts that Cannot be Reduced to a Less than Significant Level by Mitigation Measures Incorporated into Alternative 3 (Carmel River Reroute and Dam Removal)

4.2 HYDROLOGY AND WATER RESOURCES

WR-2a: Changes in Sediment Flow Passing SCD Immediately After Construction

Sediment stored behind SCD would be excavated and removed. After years of being submerged by water and sediment, the canyon walls would lack stabilizing vegetation. The residual sediment layer would be composed of sands up through gravels, along with cobbles and boulders that pre-date the reservoir. The fine gravel would rapidly wash off the hillsides in rain events and would be available for transport downstream. Because the SCD would be removed, the full annual sediment load plus a portion of the residual sediment remaining in the reservoir area would pass the SCD site to the lower river. (See Section 4.2, page 4.2-78, the Alternative 2 discussion on pages 4.2-69 and 4.2-70, and Appendix K and Appendix U).

Finding: The impact has been reduced by adoption of Mitigation Measure WR-2a which requires that, following sediment excavation, geomorphically stable channels will be designed and constructed through the reservoir to the confluence of the San Clemente Creek and Carmel River channels. These channels would have the necessary slope and dimensions to convey the flow and estimated sediment loads. A stream restoration plan will be prepared as part of final design for this alternative, and will include mitigation for the increase in sediment supply following construction. However, even with the mitigation discussed above, the short-term impact will remain significant and unavoidable.

WR-2b: Changes in Sediment Storage and Composition in the Lower River During Construction

Sediment stored behind SCD would be excavated and removed. After years of being submerged by water and sediment, the canyon walls would lack stabilizing vegetation. The residual sediment layer would be composed of sands up through gravels, along with cobbles and boulders that pre-date the reservoir. The fine gravel would rapidly wash off the hillsides in rain events and would be available for transport downstream. Because the SCD would be removed, the full annual sediment load plus a portion of the residual sediment remaining in the reservoir area would pass the SCD site to the lower river. (See Section 4.2, page 4.2-78, the Alternative 2 discussion on pages 4.2-69 and 4.2-70, and Appendix K and Appendix U).

Finding: The impact has been reduced by adoption of Mitigation Measure WR-2b which requires that following sediment excavation, geomorphically stable channels would be designed and constructed through the reservoir to the confluence of the San Clemente Creek and Carmel River channels. These channels would have the necessary slope and dimensions to convey the flow and estimated sediment loads. A stream restoration plan will be prepared as part of final design for this alternative, and will include mitigation for the increase in sediment supply following construction. However, even with the mitigation discussed above, the short-term impact will remain significant and unavoidable.

WR-4b: Increase in Frequency of High Suspended Sediment Concentrations

Sediment would be trapped in the reservoir area and the downstream suspended sediment concentration would exceed the 500 ppm limit under both wet and dry year conditions. (See Section 4.2, page 4.2-82).

Finding: No mitigation is available. High suspended sediment concentrations are a significant and unavoidable impact of the project.

4.3 WATER QUALITY

WQ-9: Reservoir Drawdown

Lowering of water levels in the reservoir would cause increased turbidity and decreased dissolved oxygen. Installation of a sheetpile barrier in the reservoir and removal of sediments near the intake gate would increase turbidity. In addition to fine suspended solids, the release of stream channel porewater from the Carmel River and San Clemente Creek into the reservoir would cause iron oxidation to occur, further increasing turbidity and decreasing dissolved oxygen levels. During and following drawdown, movement of sediment previously deposited near the mouths of the Carmel River and San Clemente Creek could slump and shift into the reservoir. This sediment movement could cause further release of anaerobic porewater, resulting in lowered dissolved oxygen. (See Section 4.3, pages 4.3-47 and 4.3-48, the Alternative 2 discussion on 4.3-46, and the Proponent's Proposed Project discussion on 4.3-38, and 4.3-39).

Finding: The impact has been reduced by adoption of Mitigation Measure WQ-9 which requires that reservoir water level be drawn down at a relatively slow rate (about 0.5 feet or less per day). However, even with the mitigation discussed above, water quality degradation resulting from reservoir drawdown would remain significant and unavoidable.

WQ-10: Reservoir Sediment Excavation

About 500,000 cubic yards of sediment would be excavated and transported to a central stockpile area within the reservoir area, where the material will be allowed to drain. Excavation of sediment above the reservoir could cause further turbidity increases and dissolved oxygen decreases within the reservoir through disturbance of sediments and subsurface flows. Very fine suspended sediment and iron oxides would be expected to remain in suspension in the reservoir, resulting in elevated turbidity and decreased dissolved oxygen levels during the periods of excavation activity and for about two months following excavation. (See Section 4.3, pages 4.3-47 and 4.3-48, and the Alternative 1 discussion on page 4.3-43).

Finding: No mitigation is available. The effect of sediment excavation on turbidity and dissolved oxygen in the reservoir is significant and unavoidable.

4.4 FISHERIES

FI-2: Dewatering River Channels for Construction Purposes

The plunge pool and about 400 feet of channel immediately downstream of the SCD would be dewatered to facilitate dam removal. Rearing habitat supporting about 270 juvenile steelhead would be lost in the plunge pool and river channel. (Section 4.4, page 4.4-81, the Alternative 2 discussion on pages 4.4-76 and 4.4-77, and the Proponent's Proposed Project discussion on pages 4.4-55, 4.4-56, and 4.4-57).

Finding: The impact has been reduced by adoption of Mitigation Measure FI-2 which requires that stream flow from the Carmel River upstream of SCD be diverted around the plunge pool and the section of the river to be dewatered. Once flow is diverted out of the channel, water levels will be reduced in the plunge pool and other sections of the river. After water levels are lowered, fish rescues will be undertaken to capture and relocate fish from the affected reaches and relocate them to sections of the Carmel River that would support their growth and development. Fish rescues will continue until all possible fish are removed from the dewatered reach. Captured fish will be temporarily held in aerated coolers for transport to relocation sites. However, even with the mitigation discussed above, the fish losses, along with the short-term loss of habitat for steelhead, cannot be fully mitigated and would remain significant and unavoidable.

FI-4: Diversion of Carmel River and San Clemente Creek around San Clemente Reservoir for Construction Purposes

The Carmel River and San Clemente Creek would be diverted around San Clemente reservoir and dam site. The Carmel River would be diverted out of its channel for about 3,300 feet upstream of the SCD and about 1,350 feet for San Clemente Creek. Both stream channels would be out of production for two years. Loss of seasonal rearing habitat would affect an unknown number of juvenile steelhead rearing in the reservoir. (Section 4.4, pages 4.4-81 and 4.4-82, the Alternative 2 discussion on page 4.4-77, the Alternative 1 discussion on page 4.4-72, and the Proponent's Proposed Project discussion on pages 4.4-57 and 4.4-58).

Finding: The impact has been reduced by adoption of Mitigation Measure FI-4 which requires that fish be rescued from the area of the diversion sites prior to constructing the diversion structures. Once the sheet piles are installed and the diversion pipes connected, water will be diverted into the pipes. Flow in the river channel downstream of the diversion will be reduced and the reduction in flow would facilitate fish rescues. After water levels are lowered, a fish rescue will occur in the Carmel River and San Clemente Creek channels between the diversion point and the reservoir. Rescues will capture and relocate fish from the affected reaches and relocate them to sections of the Carmel River that will support their growth and development, and will continue until all possible fish are removed from the dewatered reach. Captured fish will be temporarily held in aerated coolers for transport to relocation sites. However, even with the mitigation discussed above, the fish losses, along with the short-term loss of rearing habitat for steelhead, cannot be fully mitigated and would remain significant and unavoidable.

FI-5: Reservoir Dewatering

The reservoir would be lowered to 510 feet elevation. Lowering the water level would create a shallow, warm pool of standing water behind the dam with an estimated maximum depth of about five feet. The water level would be lowered to the bottom of the dam once the intake gate is repaired. Construction dewatering would cause a loss of steelhead and a short-term loss of steelhead rearing habitat in the reservoir. (Section 4.4, page 4.4-82, and the Proponent's Proposed Project discussion on pages 4.4-58 and 4.4-59).

Finding: The impact has been reduced by adoption of Mitigation Measure FI-5 which requires installation of nets and fish traps across the channels leading into the reservoir to prevent fish from swimming upstream into the Carmel River and San Clemente Creek. A fish rescue will occur in the reservoir during drawdown. Rescued fish will be relocated to other suitable habitat downstream of OCRD in the Carmel River. However, even with the mitigation discussed above, the fish losses, along with the loss of rearing habitat for steelhead, cannot be fully mitigated and would remain significant and unavoidable.

FI-13: Stream Sediment Removal, Storage, and Associated Restoration

About 2,200 feet of San Clemente Creek would become the Carmel River including about 850 feet of channel currently submerged in the reservoir in the San Clemente arm. The Carmel River would change in length from about 3,000 feet to 2,650 feet, a reduction of about 350 feet. San Clemente Creek would lose 1,350 feet of channel from the reservoir upstream to the confluence with the realigned Carmel River channel. There would be a net loss of about 1,700 feet of channel. Accumulated sediment would be excavated from about 800 feet of the existing San Clemente Creek channel. About 3,600 feet of the present Carmel River channel upstream of the SCD would be permanently lost to sediment storage. A temporary loss of habitat for steelhead and other aquatic species would result in the reservoir and in both channels during construction. The Carmel River and San Clemente Creek would not support conditions for rearing steelhead during CY 4. (Section 4.4, pages 4.4-82 and 4.4-83).

Finding: The impact has been reduced by adoption of Mitigation Measure FI-13 which requires construction of a new channel for the Carmel River through the diversion bypass channel between the

Carmel River and San Clemente Creek, and down the San Clemente Creek arm. The new configuration would include about 300 feet of constructed channel through the bypass, and about 2,200 feet of newly constructed channel in the existing San Clemente Creek arm. Channel restoration activities will include excavation and placement of gravel, cobble, and boulder materials salvaged during sediment removal. Habitat in the restored channels will be revegetated with native trees and shrubs. The SCD will be removed, restoring unimpaired fish access past the SCD site to the upper watershed and substantially restoring sediment transport to the lower river. However, even though there is a long-term benefit, there are significant and unavoidable short-term impacts that cannot be mitigated.

4.5 VEGETATION AND WILDLIFE

WI-3: Cofferdam Construction and Plunge Pool Dewatering

Construction of a cofferdam and subsequent draining of the plunge pool could adversely affect any CRLF, western pond turtles and other special-status species. (See 4.5, page 4.5-59, the Proponent's Proposed Project discussion on pages 4.5-40, 4.5-41, 4.5-42, and 4.5-43, and Appendix V).

Finding: The impact has been reduced by adoption of Mitigation Measure WI-3 which requires pre-construction surveys, the capture and relocation of CRLF, western pond turtles, two-striped garter snakes, and other special-status species, and a bullfrog eradication program. However, even with implementation of this mitigation, project impacts cannot be fully mitigated and would remain potentially significant and unavoidable.

WI-10: Reservoir Drawdown or Elimination with Sediment Removal

Reservoir drawdown may strand CRLF tadpoles from pool habitat and may isolate transformed and adult CRLF far enough from moisture sources to cause desiccation and death. As pools decline, CRLF and tadpoles may become increasingly vulnerable to predation as well as to weather extremes. The drawdown may also isolate western pond turtles and potentially impact juveniles by limiting available cover and forage. (See Section 4.5, page 4.5-59, the Alternative 1 discussion on pages 4.5-53 and 4.5-54, the Proponent's Proposed Project discussion on pages 4.5-40, 4.5-41, 4.5-42, and 4.5-43, and Appendix V).

Finding: The impact has been reduced by adoption of Mitigation Measure WI-10 which requires that CDFG and USFWS-approved biologists monitor and oversee all terrestrial wildlife-related activities associated with the drawdown and subsequent activities in the reservoir bed. The biologists and crew will rescue CRLF, tadpoles, and western pond turtle adults, juveniles and hatchlings from the inlet streams and pools in the sediment bed, and relocate them to appropriate nearby aquatic habitat within one mile of the San Clemente reservoir site. Other native wildlife taken incidentally during these operations will be transported to appropriate habitat (which may be the same sites selected for relocation of CRLF and tadpoles and western pond turtle juveniles and hatchlings). Rescue and relocation will continue throughout reservoir drawdown, vegetation clearing, and sediment excavation operations. However, even with implementation of this mitigation, project impacts cannot be fully mitigated and would remain potentially significant and unavoidable.

WI-11: Sediment Removal

Removal of sediment from San Clemente Reservoir would adversely affect nearly all CRLF spawning and summer habitat within the reservoir. Some species loss would occur also occur during rescue and relocation of CRLF and tadpoles, Coast Range newt larvae, and western pond turtle juveniles and hatchlings from the sediment bed. Other losses would occur if individuals are missed during the rescue operation. (See Section 4.5, page 4.5-59, the Alternative 1 discussion on pages 4.5-54, and 4.5-55, the Proponent's Proposed Project discussion on pages 4.5-40, 4.5-41, 4.5-42, and 4.5-43, and Appendix V).

Finding: The impact has been reduced by adoption of Mitigation Measure WI-11 which requires that surveys be conducted, measures be implemented for Protection Measures for Special Status Species, that rescue and relocation actions be conducted, and that vegetation be removed using handheld tools. However, even with implementation of this mitigation, project impacts cannot be fully mitigated and would remain potentially significant and unavoidable.

WI-13: Bypass Channel Excavation

Brushland and riparian habitat clearing and channel excavation would remove habitat for aquatic species including the CRLF, Coast Range newt and the western pond turtle. These activities may also affect other special-status terrestrial wildlife species, particularly the Monterey dusky-footed wood rat. (See Section 4.5, pages 4.5-61 and 4.5-62, the Proponent's Proposed Project discussion on pages 4.5-40, 4.5-41, 4.5-42, and 4.5-43, and Appendix V).

Finding: The impact has been reduced by adoption of Mitigation Measure WI-13 which requires that surveys be conducted, measures be implemented from Protection Measures for Special Status Species, and that rescue and relocation actions be conducted. However, even with implementation of this mitigation, project impacts cannot be fully mitigated and would remain potentially significant and unavoidable.

4.7 AIR QUALITY

AQ-1: Dam Site Activities

Construction activities would generate temporary emissions from diesel-powered equipment and road dust. Fugitive dust could exceed the Monterey Bay Air Pollution Control District (MBUAPCD) construction thresholds of significance for PM10. (See Section 4.7, pages 4.7-28 and 4.7-29, and the Proponent's Proposed Project discussion on pages 4.7-13, 4.7-14, 4.7-17, 4.7-18, and 4.7-19).

Finding: The impact has been reduced by adoption of Mitigation Measure AQ-1 which requires implementation of measures to control emissions and fugitive dust during construction will partially mitigate this impact. However, even with the mitigation discussed above, the short-term impact will remain significant and unavoidable.

AQ-2: Access Road Upgrades

Construction activities during access road improvements could create a dust nuisance. (See Section 4.7, pages 4.7-28 and 4.7-29, and the Proponent's Proposed Project discussion on pages 4.7-13, 4.7-14, 4.7-17, 4.7-18, and 4.7-19).

Finding: The impact has been reduced by adoption of Mitigation Measure AQ-2 which requires implementation of measures to control fugitive dust during access road construction. However, even with the mitigation discussed above, the short-term impact will remain significant and unavoidable.

AQ-3: Project-Generated Traffic

Construction activities during access road improvements and truck travel on the unpaved roads could create a dust nuisance. (See Section 4.7, page 4.7-28, and the Proponent's Proposed Project discussion on pages 4.7-21, 4.7-22, and 4.7-23, and 4.7-19 and 4.7-20, and 4.7-21).

Finding: The impact has been reduced by adoption of Mitigation Measure AQ-3 which requires implementation of measures to control fugitive dust during access road construction and construction use

of unpaved roads. However, even with the mitigation discussed above, the short-term impact will remain significant and unavoidable.

4.8 NOISE

NO-1: Dam Site Activities

Construction activities associated would cause short-term noise impacts. (See Section 4.8, page 4.8-19, and the Proponent's Proposed Project discussion on page 4.8-10).

Finding: The impact has been reduced by adoption of Mitigation Measure NO-1, which limits construction activities to normal daytime hours. However, even with implementation of this mitigation, given the sparsely populated rural nature of the Project area, the impact will remain significant and unavoidable.

NO-2: Access Road Upgrades

Road and bridge widening and improvements would generate noise detectable to sensitive receptors. Noise impacts may remain at a significant level for several weeks. (See Section 4.8, page 4.8-19, and the Proponent's Proposed Project discussion on pages 4.8-11, 4.8-12, 4.8-13, and 4.8-14).

Finding: The impact has been reduced by adoption of Mitigation Measure NO-2 which requires the use and maintenance of quiet design construction equipment, the installation of engine enclosure panels, and the implementation of timing restrictions and limitations on equipment idling. Implementation of these mitigation measures would reduce the impacts of noise generated during access road improvements, but the impact would remain significant and unavoidable.

NO-3: Project-Generated Traffic

Typical project-generated traffic would be comprised of material delivery trucks, concrete-mixing trucks, and construction worker vehicles traveling to and from the site. Noise levels at various times and at some locations may exceed the normally acceptable range or be more than 5 dBA above background. (See Section 4.8, page 4.8-19, and the Proponent's Proposed Project discussion on pages 4.8-14, 4.8-15, and 4.8-16).

Finding: The impact has been reduced by adoption of Mitigation Measure NO-3 which requires the use and maintenance of quiet design construction equipment, the installation of engine enclosure panels, and the implementation of timing restrictions and limitations on equipment idling. Implementation of these mitigation measures would reduce the impacts of noise from construction related travel, but the impact would remain significant and unavoidable.

4.9 TRAFFIC AND CIRCULATION

TC-1: Road Segment Traffic Operations

Access improvements and construction use of the Jeep Trail and the new road connecting the Jeep Trail to the reservoir would add additional traffic to the roadway. During peak construction activity, it is estimated that 160 vehicle trips per day would be generated by Alternative 3, most of which would use the Jeep Trail between Cachagua Road and the new access road to the reservoir. Non-project traffic using the Jeep Trail would be subjected to delays. (See Section 4.9, pages 4.9-46, 4.9-47, 4.9-48, and 4.9-49).

Finding: The impact has been reduced by adoption of Mitigation Measure TC-1 which requires implementation of a construction management plan and a traffic control plan. Even with implementation of these measures, traffic delays to non-project related users may exceed 10 minutes, therefore the impact remains potentially significant and unavoidable.

TC-3b: Traffic Safety San Clemente Drive

The Cachagua Access Route would be the primary route providing access above the SCD. However, San Clemente Drive would be needed to provide access below the dam. San Clemente Drive is a narrow two-lane road with no facilities for pedestrians and bicyclists. Pedestrian and bicycle circulation on San Clemente Drive would be impacted. (See Section 4.9, page 4.9-46, the Alternative 1 discussion on page 4.9-35, and the Proponent's Proposed Project discussion on pages 4.9-19, 4.9-20, 4.9-21, and 4.9-22).

Finding: The impact has been reduced by adoption of Mitigation Measure TC-3b which requires the implementation of a trip reduction plan, a traffic coordination and communication plan, and a traffic safety plan in addition to funding additional traffic enforcement. Even with implementation of these measures, the impact to traffic safety would remain potentially significant and unavoidable.

TC-6 Neighborhood Quality of Life

Construction traffic would increase on to San Clemente Drive. San Clemente Drive is a private street that serves a residential development and provides access below the SCD. Truck traffic in this residential development would impact the quality of life of the residents. Use of the Jeep Trail would impact the neighborhood quality of life of the users of the Stone Cabin. (See Section 4.9, page 4.9-46, the Alternative 1 discussion on page 4.9-39 and 4.9-40, and pages 4.9-27, 4.9-28, 4.9-29, 4.9-30, and 4.9-31).

Finding: The impact has been reduced by adoption of Mitigation Measure TC-6 which requires the implementation of a trip reduction plan, a traffic coordination and communication plan, and a traffic safety plan in addition to funding additional traffic enforcement. However, even with implementation of these mitigation measures impacts to San Clemente Drive and the Jeep Trail would remain potentially significant and unavoidable.

4.10 CULTURAL RESOURCES

CR-4: Demolition or Alteration to Historic Properties

The OCRD and associated fish ladder would be altered due to proposed improvements to access roads to SCD. The SCD and associated fish ladder would be demolished. (See Section 4.10, page 4.10-26).

Finding: The impact has been reduced by adoption of Mitigation Measure CR-4 with the requirement to perform historic properties recordation and to complete HABS/HAER level documentation. However, even with implementation of these mitigation measures, the impact will remain significant and unavoidable.

CR-5: Alteration of Surrounding Environment

Project construction would result in alteration to the character of the setting of significant historic resources of the SCD Historic District. (See Section 4.10, page 4.10-26, and the Proponent's Proposed Project discussion on page 4.10-24).

Finding: The impact has been reduced by adoption of Mitigation Measure CR-4 with the requirement to prepare a National Register of Historic Places Nomination Form for the SCD Historic District. However, even with implementation of this mitigation, this impact will remain significant and unavoidable.

CR-6: Introduction of Visual Obstructions

Visual effects to the SCD Historic District and alteration or demolition of historic resources within the district would adversely affect their visual integrity. (See Section 4.10, page 4.10-26, and the Proponent's Proposed Project discussion on page 4.10-24).

Finding: The impact has been reduced by adoption of Mitigation Measure CR-6 with the requirement to conduct photo documentation of historic resources in the project area. However, even with implementation of this measure, this impact would remain significant and unavoidable.

4.12 RECREATION

Issue REC-2: Disruption of Use of Jeep Trail to Stone Cabin

During the construction season, there would be daily construction traffic use of the Jeep Trail. (See Section 4.12, page 4.12-8, and the Alternative 1 discussion on pages 4.12-6 and 4.12-7).

Finding: The impact has been reduced by adoption of Mitigation Measure REC-2 with the requirement to operate construction equipment during normal working hours. However, even with implementation of this measure, this impact would remain significant and unavoidable.

PART II

Findings Regarding Alternatives to the Project

The findings on significant effects and mitigation showed that the following categories of effects will remain significant even after the imposition of mitigation:

- Hydrology and Water Resources
- Water Quality
- Fisheries
- Vegetation and Wildlife
- Air Quality
- Noise
- Traffic and Circulation
- Cultural Resources
- Recreation

Under CEQA, when an agency finds that feasible mitigation measures alone will not lessen one or more effects to a level of less than significant, the agency must make a finding on whether the alternatives examined in the EIR could eliminate or avoid the significant effect. DWR finds that none of the alternatives examined in the EIR would be a feasible means to avoid or eliminate the remaining significant effects.

The EIR examines four alternatives to the proposed project:

1. Dam Notching
2. Dam Removal
4. No Project
5. Dam Strengthening (described as the Proponent's Proposed Project in the final EIR/EIS)

The need for the SCD Seismic Safety Project is to increase dam safety to meet current standards for withstanding a MCE and passing the PMF at the dam. The purposes and objectives for the project are to protect public safety, provide fish passage at the dam, maintain a CAW point of diversion on the Carmel River to support existing water supply facilities, water rights, and services, and to minimize financial impacts to CAW ratepayers. With the exception of No Project, all of the alternatives in the EIR/EIS will meet the need of eliminating safety risks associated with the MCE and PMF at the SCD and address the stated objectives. The No Project Alternative is not feasible because it fails to meet the need for the project to increase dam safety to meet current standards for withstanding a MCE and passing the PMF at the dam.

The Department finds that analysis of impacts and mitigation contained in the EIR/EIS (summarized in Chapter 2, Table 2.1) shows that the remaining project alternatives, Dam Strengthening (Proponent's Proposed Alternative), Dam Notching, Dam Removal, and the Carmel River Reroute and Dam Removal, all would entail some significant unavoidable and unmitigable environmental impacts. The Department finds that, overall, none of the alternatives is more environmentally favorable than the others. The Department finds that no alternative can reduce all significant unavoidable and unmitigable impacts to a level that is less than significant and that implementation of the Carmel River Reroute and Dam Removal alternative will meet DSOD safety standards, through dam removal, and will satisfy the project objectives. The Department explains how it balances the benefits of the project against its unavoidable environmental risk in Exhibit C - Statement of Overriding Considerations. The discussion below provides more detail on each alternative and significant unavoidable, and unmitigable environmental impacts.

During the EIR/EIS progress, the project proponent (CAW) identified Dam Strengthening as the Proponent's Proposed Project, which was identified as such in the final EIR/EIS. All other alternatives

considered in the final EIR/EIS were numbered. CAW now proposes to undertake the project identified in the final EIR/EIS as Alternative 3 (Carmel River Reroute and Dam Removal). The Dam Strengthening alternative is discussed herein as Alternative 5 to the Carmel River Reroute and Dam Removal proposal.

Alternative 1: Dam Notching with Partial Sediment Removal

Alternative 1 would eliminate safety risks by notching the SCD in the area of the existing spillway bays to about EL. 506 feet. The gates, piers and walkway at the top of the SCD would be removed. This alternative would reduce mass sufficiently to avoid catastrophic failure of the SCD during a MCE event. Notching to EL. 506 feet also would ensure dam safety during a PMF. Alternative 1 would meet the project need to increase dam safety to current standards for withstanding a MCE and passing the PMF, and would address the objectives stated in section 1.4 of the EIR/EIS.

A new facility to divert water would be constructed upstream of the SCD to replace the existing surface water diversion. The electrical system at the SCD would be upgraded to support a conveyor sediment transport system. During construction, the Carmel River and San Clemente Creek would be diverted around the construction area, the plunge pool at the base of the SCD would be dewatered, and a fish rescue and relocation operation would be operated during construction years. The plunge pool downstream of the SCD would be completely drained prior to dam notching to allow access for construction workers and machinery for notching operations and construction of a new fish ladder.

Sediment in the reservoir would be removed down to the level of the notch. The Carmel River channel and San Clemente Creek channel would be reconstructed in a geomorphically stable configuration in the excavated sediments in the reservoir's inundation zone. Approximately 1.5 million cubic yards of sediment would be removed over by excavation. Sediment would be transported from the reservoir via a conveyor belt system to a disposal area east of San Clemente Reservoir.

The existing fish ladder would be removed and a new ladder would be designed and built to accommodate the lowered dam elevation and to comply with criteria for fish passage promulgated by NMFS and CDFG. A sluice gate would be installed to enable managed sediment releases to maintain upstream passage from the fish ladder exit to upstream channels. Sediment management following the SOMP would be required to ensure fish passage through the accumulated sediment. A notch would be cut into the OCRD, which is about 1800-feet downstream of SCD, in order to provide adequate fish passage.

A design for sediment transport and disposal would be implemented that avoids sediment transport by truck through populated areas. Existing access roads (including San Clemente Drive) with minor improvements would be used to reach the base of the SCD for construction activities. OCRD bridge and the access road from the CVFP to the SCD would be improved. The existing access road along the east side of the Carmel River, between OCRD and the base of SCD, would be rebuilt. An existing 4WD road (the Jeep Trail) would be improved to connect Cachagua Road with the sediment disposal site and to the reservoir area above the SCD. This route would only be used to move construction equipment and materials. All sediment transport would occur via conveyor belt from the SCD to the disposal site. No sediment would be hauled by truck over any roads. The stream channels through the upstream sediment plain would be stabilized.

The dam notching alternative would take an estimated six years to complete, including environmental review, permitting, design, infrastructure improvements, sediment removal, dam notching and upstream channel reconstruction through the sediment plain.

Implementation of Alternative 1 would cause significant and unavoidable impacts to Water Quality (WQ-9, WQ-10, and WQ-13), Fisheries (FI-2, FI-4, and FI-5, and FI-13), Vegetation and Wildlife (WI-3, WI-10, and WI-11), Air Quality (AQ-1, AQ-2, and AQ-3), Noise (NO-1, NO-2, NO-3, and NO-5), Traffic and Circulation (TC-1, TC-3b, and TC-6), Cultural Resources (CR-4, CR-5, and CR-6), Aesthetics (VQ-5), Recreation (REC-2 and REC-4), and Land Use (LU-1). Less than significant impacts, and potentially significant impacts that would be reduced to a less than significant level by mitigation measures

incorporated into Alternative 1 would occur in all resource categories as identified in Chapter 2 and Chapter 4 of the EIR/EIS.

In comparison, as discussed above, and in Chapter 2 and Chapter 4 of the EIR/EIS, implementation of the Alternative 3 (Carmel River Reroute and Dam Removal) would cause significant and unavoidable impacts to Hydrology and Water Resources (WR-2a, WR-2b, and WR-4b), Water Quality (WQ-9 and WQ-10), Fisheries (FI-2, FI-4, FI-5, and FI-13), Vegetation and Wildlife (WI-3, WI-10, WI-11, and WI-13), Air Quality (AQ-1, AQ-2, and AQ-3), Noise (NO-1, NO-2, and NO-3), Traffic and Circulation (TC-1, TC-3b and TC-6), Cultural Resources (CR-4, CR-5, and CR-6), and Recreation (REC-2).

Alternative 1 would pose fewer significant and unavoidable impacts to hydrology and water resources, vegetation and wildlife, than would Alternative 3, and would have similar impacts to fisheries, air quality, traffic and circulation, and cultural resources. But Alternative 1 would pose more significant and unavoidable impacts to water quality, aesthetics, and recreation, and land use than would Alternative 3.

DWR finds that Dam Notching with Partial Sediment Removal, while not an infeasible means to avoid some of the residual significant effects of the project, creates other significant effects, equally undesirable, that are avoided by the selection of the Carmel River Reroute and Dam Removal project.

Alternative 2: Dam Removal with Total Sediment Removal

Alternative 2 would permanently eliminate safety concerns through the removal of the SCD. A new facility to divert water would be constructed upstream of the SCD site to replace the existing surface water diversion. The electrical system at the SCD would be upgraded to support a conveyor sediment transport system.

During construction, the Carmel River and San Clemente Creek would be diverted around the construction area, the plunge pool at the base of the SCD would be dewatered, and a fish rescue and relocation operation would be operated during construction years. The plunge pool downstream of the SCD would be completely drained prior to dam removal to allow access for demolition.

Approximately 2.4 million cy of sediment would be removed by excavation. Sediment would be transported from the reservoir via a conveyor belt system to a disposal area east of San Clemente Reservoir. The historic Carmel River channel and San Clemente Creek exposed by sediment excavation in the reservoir's inundation zone would be reconstructed in their historical valleys.

A design for sediment transport and disposal would be implemented that avoids sediment transport by truck through populated areas. Improvements would be made to existing access roads (including San Clemente Drive) and would be used to reach the base of the SCD for construction activities at and below the dam. The OCRD bridge and the access road from the CVFP to the SCD would be improved and the existing access road along the east side of the Carmel River, between OCRD and the base of SCD, would be rebuilt. An existing 4WD road (the Jeep Trail) would be improved to connect Cachagua Road with the sediment disposal site, and to the reservoir area above the SCD. This route would only be used to move construction equipment and materials. All sediment transport would occur via conveyor belt from the SCD to the disposal site.

The existing dam and fish ladder would be demolished and removed from the site. A notch would be cut into OCRD to provide adequate fish passage.

The dam removal alternative would take an estimated seven years to complete, including environmental review, permitting, design, infrastructure improvements, sediment removal, dam demolition, and creek channel reconstruction.

Implementation of the Dam Removal alternative would cause significant and unavoidable impacts to Hydrology and Water Resources (WR-2a, WR-2b, WR-4a, WR-4b, WR-5, and WR-6), Water Quality (WQ-9 and WQ-10), Fisheries (FI-2, FI-4, FI-5, FI-9a, and FI-13), Vegetation and Wildlife (WI-3, WI-10,

and WI-11), Air Quality (AQ-1, AQ-2, and AQ-3), Noise (NO-1, NO-2, NO-3, and NO-5), Traffic and Circulation (TC-1, TC-3b, and TC-6), Cultural Resources (CR-4, CR-5, and CR-6), Aesthetics (VQ-5), Recreation (REC-2 and REC-4), and Land Use (LU-1). Less than significant impacts, and potentially significant impacts that would be reduced to a less than significant level by mitigation measures incorporated into Alternative 2 would occur in all resource categories as identified in Chapter 2 and Chapter 4 of the EIR/EIS.

In comparison, as discussed above, and in Chapter 2 and Chapter 4 of the EIR/EIS, implementation of the Alternative 3 (Carmel River Reroute and Dam Removal) would cause significant and unavoidable impacts to Hydrology and Water Resources (WR-2a, WR-2b, and WR-4b), Water Quality (WQ-9 and WQ-10), Fisheries (FI-2, FI-4, FI-5, and FI-13), Vegetation and Wildlife (WI-3, WI-10, WI-11, and WI-13), Air Quality (AQ-1, AQ-2, and AQ-3), Noise (NO-1, NO-2, and NO-3), Traffic and Circulation (TC-1, TC-3b and TC-6), Cultural Resources (CR-4, CR-5, and CR-6), and Recreation (REC-2).

Alternative 2 would meet the project need to increase dam safety to current standards for withstanding a MCE and passing the PMF, and would address the objectives stated in section 1.4 of the EIR/EIS. It would pose fewer significant and unavoidable impacts to vegetation and wildlife than would Alternative 3, and would have similar impacts to water quality, air quality, traffic and circulation, and cultural resources. But Alternative 2 would pose more significant and unavoidable impacts to hydrology and water resources, fisheries, noise, aesthetics, land use, and recreation than would Alternative 3.

DWR finds that Dam Removal with Total Sediment Removal, while not an infeasible means to avoid some of the residual significant effects of the project, creates other significant effects, equally undesirable, that are avoided by the selection of the Carmel River Reroute and Dam Removal project.

Alternative 4: No Project

The No Project alternative would leave the SCD in place with all its existing facilities. A new fish ladder would not be constructed, the sediment would be left in place behind the dam, and the OCRD would not be notched. The reservoir would continue to accumulate sediment at an average rate of about 16.5 AF per year. Minor sediment removal may occur to allow the SCD to maintain the existing surface water supply intake serving the upper Carmel Valley Village area. The existing drawdown ports in the SCD and the existing fish bypass facility would both likely remain operational until the reservoir fills with sediment.

However, selection of the No Project alternative would eliminate significant and unavoidable construction impacts associated with implementation of Alternative 3 (Carmel River Reroute and Dam Removal) and the other alternatives. As discussed above, and in Chapter 4 of the EIR/EIS, implementation of Alternative 3 would cause significant and unavoidable impacts to hydrology and water resources, water quality, fisheries, vegetation and wildlife, air quality, noise, traffic and circulation, cultural resources, and recreation.

Implementation of the No Project Alternative would avoid all of the potentially significant impacts that would be reduced to a less than significant level by mitigation measures with implementation of Alternative 3 and the other alternatives. However, as identified in Chapter 2 of the EIR/EIS, the No Project alternative would cause significant and unavoidable impacts to Geology and Soils (GS-1 and GS-6), Hydrology and Water Resources (WR-3b and WR-8), Water Quality (WQ-9 and WQ-15), Fisheries (FI-5, FI-8, FI-12, and FI-15), and would significantly and unavoidably impact public health and safety, hydrology, water quality, and fisheries.

The No Project Alternative would not meet the project need to increase dam safety to current standards for withstanding a MCE and passing the PMF at the dam, and would not address the objective of protecting public safety as stated in section 1.4 of the EIR/EIS. The No Project alternative would fail to adequately address the objective of providing fish passage at the SCD because the existing fish ladder no longer meets NMFS or CDFG standards, and the increase in sediment deposition behind the SCD would obstruct fish passage over time.

DWR finds that the No Project alternative is not a feasible means to avoid the residual significant effects of the project.

Alternative 5: Dam Strengthening (Proponent's Proposed Project in final EIR/EIS)

The Dam Strengthening alternative represents the project originally proposed by CAW. The Proponent's Proposed Project would comply with DSOD requirements to address safety deficiencies and eliminate the risk of failure during a MCE or a PMF event. The Proponent's Proposed Project would eliminate safety risks by thickening the downstream face of the SCD with concrete, strengthening the right abutment near the dam crest, modifying the spillway and dam crest to increase effective spillway width and armoring the abutments with gunite to prevent erosion.

A concrete batch plant would be at the base of the SCD. The electrical system at the dam would be improved. During construction, the Carmel River and San Clemente Creek would be diverted around the construction area, the plunge pool at the base of the SCD would be dewatered, and a fish rescue and relocation operation would be operated during construction years. The plunge pool downstream of the dam would be completely drained prior to dam thickening to allow access for construction workers and machinery for thickening operations and new fish ladder construction.

The existing fish ladder allows steelhead trout to ascend 68 feet to the reservoir and watershed above the SCD. The Proponent's Proposed Project includes construction of a new fish ladder that would comply with criteria for fish passage promulgated by the NMFS and the CDFG. Construction of the fish ladder would ensure long-term fish passage over the dam, but passage would still be considered impeded as compared to the dam removal alternatives. A sluice gate would be installed to manage sediment releases, to maintain upstream passage to the fish ladder exit and to maintain water flow into the CAW diversion pipeline. Sediment management following the Sediment Operations and Management Plan (SOMP) would be required to maintain the existing surface water supply intake and to ensure fish passage through the accumulated sediment. In addition, a notch would be cut into the Old Carmel River Dam (OCRD), which is about 1800-feet downstream of SCD, in order to provide adequate fish passage.

A new access from Carmel Valley Road, the Tularcitos Access Route, would be constructed to bypass the portion of San Clemente Drive which goes through the Sleepy Hollow community. The access route would cross Tularcitos Creek and connect Carmel Valley Road to San Clemente Drive near CAW's Carmel Valley Filter Plant (CVFP). The ORCD bridge and the access road from the CVFP to the SCD would be improved. The existing access road along the east side of the Carmel River, between the OCRD and the base of SCD would be rebuilt. The bypassed portion of San Clemente Drive would be used for up to eight months the first year of construction until the Tularcitos Access Route is completed.

The dam strengthening alternative would take an estimated four to five years to complete, including environmental review, permitting, design, and infrastructure improvements.

Implementation of the Proponent's Proposed Project would cause significant and unavoidable impacts to Water Quality (WQ-9 and WQ-13), Fisheries (FI-2, FI-4, and FI-5), Vegetation and Wildlife (WI-3 and WI-7), Air Quality (AQ-1, AQ-2, and AQ-3), Noise (NO-1, NO-2, NO-3, and NO-4), Traffic and Circulation (TC-3b and TC-6), Cultural Resources (CR-4, CR-5, and CR-6), and Aesthetics (VQ-3). Less than significant impacts, and potentially significant impacts that would be reduced to a less than significant level by mitigation measures incorporated into the Proponent's Proposed Project would occur in all resource categories as identified in Chapter 2 and Chapter 4 of the EIR/EIS.

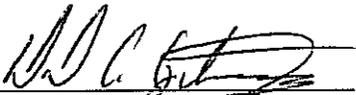
In comparison, as discussed above and in Chapter 2 and Chapter 4 of the EIR/EIS, implementation of the Alternative 3 (Carmel River Reroute and Dam Removal) would cause significant and unavoidable impacts to Hydrology and Water Resources (WR-2a, WR-2b, and WR-4b), Water Quality (WQ-9 and WQ-10), Fisheries (FI-2, FI-4, FI-5, and FI-13), Vegetation and Wildlife (WI-3, WI-10, WI-11, and WI-13), Air Quality (AQ-1, AQ-2, and AQ-3), Noise (NO-1, NO-2, and NO-3), Traffic and Circulation (TC-1, TC-3b and TC-6), Cultural Resources (CR-4, CR-5, and CR-6), and Recreation (REC-2).

The Proponent's Proposed Project would meet the project need to increase dam safety to current standards for withstanding a MCE and passing the PMF, and would address the objectives stated in section 1.4 of the EIR/EIS. The Proponent's Proposed Project would pose more significant and unavoidable impacts to noise and aesthetics, than would Alternative 3, and would have similar impacts to air quality and cultural resources. It would pose fewer significant and unavoidable impacts to hydrology and water resources, fisheries, vegetation and wildlife, traffic and circulation, and Recreation than would Alternative 3.

DWR finds that Dam Strengthening, while not an infeasible means to avoid some of the residual significant effects of the project, creates other significant effects, equally undesirable, that are avoided by the selection of the Carmel River Reroute and Dam Removal project. However, neither alternative is inherently superior to the other from an environmental impact perspective.

FINDINGS DETERMINATION

I adopt the Findings set forth in this Exhibit B which meet the requirements of CEQA *Guidelines* Section 15091. To the extent that these findings conclude that various mitigation measures are feasible and within the Department's responsibility and jurisdiction, I direct the Department to implement these measures, thereby incorporating them as part of the proposed project.



David A. Gutierrez, Chief
Division of Safety of Dams

3/11/11

Date

**San Clemente Dam Seismic Safety Project
California State Clearinghouse #2005091148**

**EXHIBIT C
STATEMENT OF OVERRIDING CONSIDERATIONS**

When called on to approve a project that would have one or more significant effects that cannot be avoided or substantially lessened, a public agency must explain how it views the balance of the economic, legal, social, technological, or other benefits of the project against the unavoidable adverse environmental effects before approving the project.

The Department adopts this Statement of Overriding Considerations and finds that, as part of the approval process, (a) the proposed project has been modified to eliminate or substantially lessen all significant effects on the environment where feasible, and (b) the remaining unavoidable impacts of the proposed project are an acceptable environmental cost in light of the environmental, economic, legal, social, technological, and other considerations set forth herein.

The findings above show that the following categories of environmental effects will remain significant even after the imposition of mitigation and the examination of alternatives:

- Hydrology and Water Resources
- Water Quality
- Fisheries
- Vegetation and Wildlife
- Air Quality
- Noise
- Traffic and Circulation
- Cultural Resources
- Recreation

The Department concluded that there are no feasible alternatives that can reduce all potentially significant and unavoidable impacts to a less than significant level and that all feasible alternatives have some significant and unavoidable impacts. (See Exhibit B.)

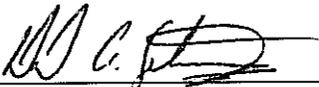
The Department determines that the San Clement Dam Seismic Safety Project Alternative 3 (Carmel River Reroute and Dam Removal) cannot be implemented in a way that would meet the need of the project without resulting in the significant and unavoidable impacts described in the Final EIR/EIS and summarized above, primarily because the project cannot be implemented in a way that accomplishes the basic project objectives without resulting in direct construction impacts. As discussed in the Exhibit B Findings, all potentially significant impacts have mitigation measures associated with them, except for Hydrology and Water Resources, WR-4b (increase in the frequency of high suspended sediment concentrations), Water Quality, WQ-10 (reservoir sediment excavation), and Fisheries, FI-13 (stream sediment removal, storage, and associated restoration). The remaining 23 potentially significant impacts that cannot be reduced to a less than significant level by incorporated mitigation measures all have associated mitigation measures that will at least lessen the overall impact, although not to less than significant levels. The Department has balanced the economic, legal, social, technological, and other benefits of the project and has determined that the benefits of the project outweigh its unavoidable adverse environmental impacts.

The Department determines that the San Clement Dam Seismic Safety Project Alternative 3 (Carmel River Reroute and Dam Removal) provides the following public benefits as described in detail in the Final EIR/EIS that justify proceeding with the project despite the environmental cost of the residual significant effects:

1. The Carmel River Reroute and Dam Removal project meets the need of eliminating safety risks associated with the MCE and PMF at the SCD;
2. The Carmel River Reroute and Dam Removal project protects public safety by removing the dam;
3. The Carmel River Reroute and Dam Removal project provides fish passage by removing the dam and rerouting the Carmel River to provide unobstructed flow from the mouth of the Carmel River to Los Padres Dam above the site of the San Clement Dam site;
4. The Carmel River Reroute and Dam Removal project maintains a CAW point of diversion on the Carmel River to support existing water supply facilities, water rights, and services; and
5. Although the cost of implementing Alternative 3 is more costly than the Proponent's Proposed Project as identified in the Final EIR/EIS, CAW is working with other parties to provide funding to minimize financial impacts to CAW ratepayers.

STATEMENT OF OVERRIDING CONSIDERATIONS DETERMINATION

I adopt the Statement of Overriding Considerations set forth in this Exhibit C, which meets the requirements of CEQA Guidelines Section 15093.



David A. Gutierrez, Chief
Division of Safety of Dams

3/11/11

Date