3.7 Cultural Resources

This section evaluates the potential impacts of the Proposed Action on cultural resources. This evaluation includes an assessment of the direct, indirect, short-term, long-term, and cumulative effects of the Proposed Action on cultural resources, which are defined as historic-period buildings and structures, and prehistoric or historic-period archaeological resources. The evaluation is based on a Supplemental Inventory and National Register Testing Report prepared by ASM Affiliates, Inc. (ASM, 2007) and the Native American Consultation Report prepared by Tierra Environmental Services (Tierra, 2007). These reports comprise Appendix D to this EIR/EIS. Because Appendix D has confidential site location information, it is bound under separate cover and will not be circulated for general public review. Appendix D is available for review by qualified individuals at the Water Authority's San Diego office located at 4677 Overland Avenue, San Diego, CA 92123.

3.7.1 Affected Environment

3.7.1.1 Environmental Setting

Refer to Appendix D to this EIR/EIS for a detailed discussion of the prehistoric and historic settings within San Diego County, including Early Human Occupation, the Paleoindian Period, Archaic Period, Late Prehistoric Period, and Ethnographic Period. The following section describes the prehistoric and historic settings within the SV 100K study area.

Prehistoric Use of San Vicente Area

Prehistoric sites can often be found adjacent to natural water features such as San Vicente Creek, which originally extended across the SV 100K study area prior to construction of the San Vicente Dam. Early archaeological investigations of five prehistoric sites (the most likely major habitation areas) occurred along San Vicente Creek before construction of the existing dam. The sites appeared to be Late Prehistoric (1300/800 – 200 Before Present [BP]) based on the presence of ceramics and diagnostic projectile points. Specific data concerning the artifact assemblage collected are not known, although the sites are generally believed to be human occupation sites. All of these sites are currently submerged below the reservoir's waterline and most likely buried under layers of lake sediments.

Since the reservoir's construction, archaeological investigations have been limited to the areas above the water line and below the dam. Beginning with Ogden's surveys in 1995, numerous prehistoric archaeological sites were recorded in these areas. Extensive investigations of these sites by EDAW (Cleland and McCorkle-Apple, 2001) and ASM demonstrated that the steep, rocky terrain of the valley was used for ceremonial activities and plant processing; archaeological sites on the hillsides consist of bedrock milling features, rock shelters, and ceremonial features. There is no evidence for camps or habitation areas in these locations.

The area below the dam, alongside San Vicente Creek, was also used for specific activities, including processing plant materials and production of stone tools. Again, no major habitation areas were identified in the lower reaches of the creek—although this area has been disturbed by historic construction activities.

The upper reach of San Vicente Creek, where it connects to Kimball Valley, contains more evidence for habitation and concentrated plant and animal processing. The terraces of this narrow gorge contain archaeological evidence of bedrock milling stations, stone tool manufacturing, and limited habitation.

The habitation sites and the resource processing sites tested by EDAW and ASM are part of a cultural landscape established by the Kumeyaay Indians for the San Vicente Valley area. This landscape includes living areas, ceremonial features, and plant and animal processing locations, as found through the archaeological investigations. Other components no longer visible would have included trails, gathering and hunting lands, and landmarks.

Historic Use of San Vicente Area

The history of the SV 100K study area begins with the construction of the railroad to San Diego in the mid-1880s, bringing people, goods, and services to the region. The railroad brought a land boom to San Diego. The town of Foster, located in the vicinity of San Vicente Dam and at the end of the line of the San Diego, Cuyamaca, and Eastern Railroad, was founded in 1889. Upon reaching Foster, travelers had to continue east by coach, up Mussey Grade to Ramona. The stagecoach was owned by John Foster, and it ran up Mussey Grade Road (built in 1874) to the east county. The town of Foster was never a large settlement. It was built to service passengers traveling east, and had a hotel and store, as well as a few residences.

However, the famous Hatfield flood of 1916 washed out the railroad line to Foster. The decision was made not to rebuild, but to make Lakeside the new end of the line. By 1920, there were still 52 people living in Foster, mostly ranchers and farmers. The Depression resulted in an end to many small farms and ranches, and the population of Foster declined. With the construction of the dam in the early 1940s, the town was abandoned.

3.7.1.2 Regulatory Setting

The Proposed Action is intended to be covered by the existing ESP Programmatic Agreement (PA), which was executed in 1998 between the U.S. Army Corps of Engineers (Corps), the California State Historic Preservation Officer (SHPO), the Advisory Council on Historic Preservation, and the Water Authority. The Corps has assumed lead responsibility for compliance under Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended (16 U.S.C. 470f). The Corps archaeologist, Pam Maxwell, has determined the CSP is a design modification to the San Vicente Dam Raise portion of ESP. The PA allows for project changes such as this. In implementing the provisions of the PA, the Corps and the Water Authority satisfy their responsibilities under Section 106 of the NHPA. All of the PA provisions

identified for the ESP San Vicente Dam Raise have been completed, including site evaluations and data recovery. As such, all cultural resources mitigation measures for the ESP San Vicente Dam Raise are complete. The following discussion addresses federal, state, and other plans, policies, and regulations relevant to cultural resources issues of the Proposed Action.

Federal

National Historic Preservation Act

Federal regulations for cultural resources are primarily governed by Section 106 of the NHPA, which applies to actions taken by federal agencies. The goal of the Section 106 review process is to offer a measure of protection to sites that are determined eligible for listing on the National Register of Historic Places (NRHP). Section 106 of the NHPA requires federal agencies to take into account the effects of their undertakings on historic properties and affords the Federal Advisory Council on Historic Preservation (Council) an opportunity to comment on the undertaking. The Council's implementing regulations, "Protection of Historic Properties," are found in the Code of Federal Regulations, Title 36, Part 800 (36 CFR Part 800). The NRHP criteria (contained in 36 CFR 60.4) are used to evaluate resources when complying with NHPA Section 106. Those criteria state that eligible resources comprise districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and

a) are associated with events that have made a significant contribution to the broad patterns of our history; or

b) are associated with the lives of persons significant in our past; or

c) embody the distinctive characteristics of a type, period, or method of construction, or that possess high artistic values, or that represent a significant distinguishable entity whose components may lack individual distinction; or

d) have yielded or may be likely to yield, information important to history or prehistory.

Archaeological site evaluation assesses the potential of each site to meet one or more of the criteria for NRHP eligibility based upon visual surface and subsurface evidence (if available) at each site location, information gathered during the literature and records searches, and the researcher's knowledge of and familiarity with the historic or prehistoric context associated with each site.

National Environmental Policy Act

NEPA is a procedural statute that requires federal agencies to assess and disclose environmental impacts of the Proposed Action, including impacts on cultural resources.

State

Under CEQA, public agencies must consider the effects of their actions on both "historical resources" and "unique archaeological resources." Pursuant to Public Resources Code, Section 21084.1, a "project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment." "Historical resource" is defined in Public Resources Code, Section 21084.1, and in CEQA Guidelines Section 15064.5 (a) and (b) as any resource listed in or determined to be eligible for listing in the California Register of Historical Resources (CRHR), which includes NRHP sites; some California State Landmarks and Points of Historical Interest; and properties of local significance that have been designated under a local preservation ordinance (local landmarks or landmark districts) or that have been identified in a local historical resources inventory.

In addition, these regulations define a historical resource as any object, building, structure, site, area, place, record, or manuscript that:

a) is historically or archeologically significant; or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political or cultural annals of California; and

b) meets any of the following criteria:

   1. is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
   2. is associated with the lives of persons important in our past;
   3. embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
   4. has yielded, or may be likely to yield, information important in prehistory or history.

For historic structures, CEQA Guidelines Section 15064.5 (b)(3) requires that a project follow the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings, or the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (1995).

As noted above, CEQA also requires lead agencies to consider whether projects will impact "unique archaeological resources", defined in Public Resources Code, Section 21083.2 (g), as an archaeological artifact, object, or site that meets any of the following criteria:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type.

3. Is directly associated with a scientifically recognized important prehistoric or historic event or person" (Public Resources Code, Section 21083.2 (g)).

Other

ESP Programmatic Agreement

As mentioned above, the Proposed Action is considered a design and engineering modification of the ESP and is intended to be covered by the existing ESP PA (Appendix D to this EIR/EIS). The PA anticipated a multi-phased effort developed over several years, with an evolving project design. The PA provides guidance for the protection of historic properties and the mitigation of adverse effects while maintaining flexibility during the project design phase. The PA sets forth stipulations for Section 106 compliance for cultural resources that could be affected by the ESP or the Proposed Action, including:

1. Any additional areas not associated with the project at the time of the execution of the PA shall be inventoried in a manner consistent with the prior inventory, the Secretary of the Interior's Standards and Guidelines, and SHPO publications.
2. Determinations of eligibility to the NRHP shall be made for all cultural resources within areas of potential effect.
3. The Corps shall coordinate all overall actions under the PA and shall also facilitate consultation with Native American groups.
4. A Historic Properties Treatment Plan (HPTP) shall be developed to systematically address the cultural resources within the ESP and SV 100K study areas. The HPTP shall contain:
    a. Data Recovery Plan for eligible properties that cannot be avoided or preserved.
    b. Monitoring and Site Protection Plan to specify how cultural resources will be protected during project implementation.
    c. Public Interpretation Plan.
5. A Supplemental Inventory Report shall be prepared if there is a change in the construction right-of-way or in development of ancillary areas. This report would include recommendations of determinations of eligibility and effect, and treatment measures. The Corps, SHPO, and interested Native American groups shall comment on the Supplemental Inventory Report.
6. The following procedures shall be implemented in the event human remains are discovered:
    a. Unanticipated discoveries of human remains shall be documented and evaluated. If avoidance of human remains is not feasible, a data recovery program may be necessary. If human remains are discovered during any phase of construction, the discovery shall be reported immediately to the Water Authority and the Corps, and all

ground-disturbing activity within 50 feet of the remains shall be halted immediately. The San Diego County coroner shall be notified immediately, under California Public Resource Code 5097 and Health and Safety Code 7050.5.

b. If the remains are determined by the County coroner to be Native American, the Native American Heritage Commission (NAHC) shall be notified within 24 hours, the guidelines of the NAHC shall be adhered to in the treatment and disposition of the remains, and the County of San Diego shall prepare pre-excavation agreements with the participation of Native American descendents. A professional archaeologist with Native American burial experience shall conduct a field investigation of the specific site and consult with the Most Likely Descendant, if any, identified by the NAHC. As necessary, the archaeologist may provide professional assistance to the Most Likely Descendant, including the excavation and removal of the human remains.

In compliance with the PA, a HPTP for the ESP was prepared by EDAW in 2001 (Cleland and McCorkle-Apple, 2001) and provides a context for future data recovery research designs, and anticipates updates and supplements. The ASM Supplemental Inventory Report for the Proposed Action amends the HPTP, because additional sites are now included in the SV 100K study area.

3.7.2 Project Design Features

The Proposed Action would include design features to minimize cultural resources impacts. These features will be governed by the PA and HPTP, and will be incorporated into the construction plans and specifications. These design and construction features could include, but would not be limited to, the following:

- Training will be provided to all construction personnel to educate them on cultural resources protection measures.
- Sites that are in proximity to construction limits, but are outside the area of potential adverse effects, will be protected. Fences will be installed at a distance of 20 meters around the site boundaries, and signs will be posted identifying the areas as an "Environmentally Sensitive Area (ESA)." Monitoring will be conducted at these sites to ensure avoidance and protection of the sites**.**
- Construction monitoring will be performed during initial site grading at sites within the construction limits where there is a potential for unanticipated and unknown buried cultural deposits. These are sites that were either found to lack significance or where mitigation through data recovery has been accomplished. Monitoring will focus on unanticipated, significant artifacts and intact deposits that may be present. If cultural resources are observed in exposed areas, protocols for unanticipated discoveries will be followed in accordance with the PA (e.g., protection, identification, and evaluation).
- The Water Authority will implement the recommendations contained in the Native American Consultation Report, including continuing consultation, providing an opportunity for Native American monitoring during construction, and notifying the

interested tribes of project modifications and discovery of any unanticipated cultural resources.

3.7.3 Direct and Indirect Effects

3.7.3.1 Thresholds of Significance

Thresholds used to evaluate potential impacts on cultural resources are based on applicable criteria in the State CEQA Guidelines (CCR §§15000-15387), Appendix G. A significant impact on cultural (historical and/or archaeological) resources would occur if the Proposed Action would:

1. Cause a substantial adverse change in the significance of a historical or archaeological resource as defined in §15064.5 of the State CEQA Guidelines and §106 of the NHPA.
2. Disturb any human remains, including those interred outside of formal cemeteries.

3.7.3.2 Impact Analysis

Methodology

Background information on cultural resources within the SV 100K study area was obtained from a review of previous applicable studies, updated record searches, Native American consultation, and field investigations and significance evaluations of new and previously recorded sites. This background information is provided below.

Records and Archival Searches

An updated records search was obtained from the South Coastal Information Center (SCIC) of the California Historical Resources Information System and from the San Diego Museum of Man for known cultural resources within a ¼-mile radius of the SV 100K study area. Information reviewed included SHPO records, base maps, historic maps, and literature for the area on file at the SCIC. All of the archaeological sites recorded within the study area are included in Appendix D, Table I-1, to this EIR/EIS.

Several previous studies focused on the inventory and evaluation of cultural resources up to the ESP inundation level of 740 feet AMSL. The area between the existing waterline (at the time of the ESP surveys) and 740 feet AMSL, including a limited buffer of 60-100 feet beyond this elevation, was inventoried by Ogden Environmental and Energy Services (ASM Report; Carrico and Cooley, 1995). Several subsequent studies were conducted to evaluate cultural resources within the SV 100K study area; specific details from these studies are included in Appendix D to this EIR/EIS.

In addition, several sites were recorded in the valley before the reservoir was filled. In 1942, Benjamin McCown, an avid amateur archaeologist, conducted an archaeological survey in San Vicente Creek and recorded five prehistoric sites (McCown, 1964).

Native American Consultation

Consultation with Native Americans is one element of the NHPA Section 106 process. Staff from Tierra formally consulted with Tribal leaders and elders to determine Tribal concerns, to learn of any cultural resources and/or sacred sites that might be present, to arrange any field visits that may be desired, and to record and summarize other Native American concerns. The Native American Consultation Report prepared by Tierra (Appendix D to this EIR/EIS) summarizes the results of these investigations including a list of the Tribes contacted, copies of contact letters, and a log of telephone conversations with Tribal representatives. No written comments from Tribal representatives were received regarding the Proposed Action. Thirteen Tribes and two individuals were included in the consultation. Eleven representatives requested that they be kept informed about the project's progress.

The Manzanita Band of Mission Indians requested that Tribal Monitors be on site when construction activities occur at known site locations, although they do not have their own monitors. Ms. Carmen Lucas, who served as the Native American monitor for previous (ESP) field testing at 11 locations around the reservoir, made the same request. She also expressed an interest in visiting some of the sites. A site visit was held on June 6, 2006, to review the results of ASM's investigations. Dr. Susan Hector and Mr. Scott Wolf of ASM offered tours of the San Vicente area. Representatives from the Kumeyaay Cultural Repatriation Committee were invited to attend. Ms. Lucas attended, representing herself. Her comments on the importance of traditional landscapes have been incorporated into the ASM report. A mailing list has been developed that will be used to ensure that all reports and project updates are provided to interested Tribal members.

Field Investigations and Significance Evaluations

The previous ESP surveys covered the area around the reservoir between 740 feet AMSL and 800-840 feet AMSL (Carrico and Cooley, 1995). Kimball Valley was an apparent exception to these ESP survey boundaries. Although the valley is below 840 feet AMSL, it was not anticipated at the time of the ESP surveys that this area would be inundated or subject to direct or indirect impacts, so it was not included in previous surveys. EDAW previously completed significance evaluations for all of the sites within the APE for ESP. In addition, all of the mitigation and treatment recommendations for the ESP sites have been implemented. No further work is necessary for the ESP sites.

Field surveys for the Proposed Action were conducted in 2005 by ASM. Given the difficulty in precisely surveying along an elevation contour in the rugged terrain surrounding San Vicente Reservoir, the survey team inspected previously unsurveyed areas around the reservoir shoreline as well as ridges and valleys that would potentially be within a buffer zone above 778 feet

AMSL. The current surveys included accessible areas of Kimball Valley, up to the bridge, and over 550 acres below the dam. The land around the perimeter of the reservoir is steep and covered in medium- to boulder-sized rocks. When terrain permitted, the survey team walked parallel transects no greater than 10 meters apart. On rough, uneven ground, the survey interval varied, depending on steepness and the amount of large rock present.

As a result of the current field surveys, nine previously unrecorded archaeological sites were identified in areas outside the previous ESP surveys. Three of the nine sites are isolated artifacts. In addition, the survey team checked the locations of sites that were previously recorded within the ESP survey areas but were not evaluated during past studies because they were outside the ESP impact areas. All but two of these previously recorded sites are well above the PMF level of 778 feet AMSL for the Proposed Action.

Following completion of the field surveys, the Water Authority requested evaluation of significance for the cultural resources identified. Evaluation of significance was accomplished in compliance with the PA and NHPA. For the Proposed Action, ten cultural resources required evaluation of eligibility for inclusion in the NRHP (Table 3.7-1). One site (SDI-13630) was previously determined to be eligible for the NRHP. Three major management objectives guided the investigations at these sites. The following management goals are related to federal guidelines regarding NRHP evaluation of prehistoric archaeological sites:

1) Define the area, extent and depth of the cultural deposit at each site, document the presence or absence of any natural strata, the diversity and characteristics of the cultural materials, and if possible, their chronological placement.

2) Determine if the cultural deposits possess the integrity and the informational content to address questions important to prehistory, thus establishing the sites as potentially eligible for the NRHP.

3) Determine if, in consultation with Tribal representatives, items of special heritage importance to contemporary Native Americans, such as human remains, are present at any of the 11 sites.

With respect to the second management goal listed above, research topics used to evaluate site significance and NRHP eligibility for the region include general research issues such as chronology, settlement patterns and site function, site spatial organization, and lithic material procurement and use during the Archaic and Late Prehistoric periods. Another issue considered in the analysis of these sites is the use of combined data from various sites in a region to further our knowledge of the regional prehistory. Data from an association of sites such as this study group (i.e., similar sites in a relatively small geographic area) can be analyzed in combination to provide a more detailed picture of prehistoric use of the area than can be provided by any one of the sites.

Table 3.7-1. NRHP Eligibility for Cultural Resources Associated with the CSP

Site	Description	Location	Recommended Eligible
SDI-13630[(1)]	Habitation site	Outside dam construction zone and area of impact.	Yes
SDI-13848	Bedrock milling station	Dam construction zone.	No
SDI-16913	Road to Barona	Dam construction zone.	No
SDI-17286	Bedrock milling station	Dam construction zone.	No
SDI-17650	Bedrock milling station	Dam construction zone.	No
SDI-17652	Bedrock milling station	Dam construction zone.	No
SDI-17654	Historic refuse deposit	Dam construction zone.	No
SDI-17655	Foster Quarry (historic)	Dam construction zone.	No
SDI-17656	Southern road segment-Foster to Julian	Partial reservoir inundation.	No
SDI-17657	Northern road segment-Foster to Julian	Partial reservoir inundation.	No
SDI-13542	Campsite with milling gear	Complete reservoir inundation.	No

[(1)] This site was determined eligible for the NRHP as part of ESP.
Source: ASM, 2007

As indicated in Table 3.7-1, SDI-13630 has previously been determined to be eligible for the NRHP; the site was located outside the previous ESP construction limits. This recommendation is being carried forward here because the site would still be outside but near the dam construction zone for the Proposed Action. Based on the management goals and research topics listed above, the results of the significance evaluations conducted by ASM indicate that none of the remaining ten sites identified in Table 3.7-1 would be considered eligible for inclusion in the NRHP.

Analysis

Threshold 1: Cause a substantial adverse change in the significance of a historical or archaeological resource as defined in §15064.5 of the State CEQA Guidelines and §106 of the NHPA

Impacts on cultural resources from the Proposed Action would result from direct effects to sites due to inundation or ground disturbance for dam construction, or from indirect effects from potential erosion due to wave action during reservoir filling or operations (Table 3.7-1). Eight of the 11 sites evaluated are located south of, or below, the dam and would be directly affected by construction activities. The remaining three sites evaluated are located above, or north of, San Vicente Dam and would be indirectly affected by reservoir filling or operations.

Of the eight sites located below the dam, two require further actions to avoid significant impacts: SDI-13630 and SDI-17650. The second project design feature in Section 3.7.2 above requires fencing and signage at site SDI-13630, which is in proximity to construction limits, and monitoring to ensure avoidance and protection of the site. Site SDI-17650 was evaluated, and the results of the testing indicated that it is not significant; however, the site could contain buried

deposits that were not identified during testing. The third project design feature in Section 3.7.2 above requires construction monitoring at site SDI-17650, which could have the potential for buried cultural deposits. With the exception of burials, which are addressed in Threshold 2 below, any unanticipated discoveries resulting from ground disturbance at this site would be removed and evaluated in accordance with the PA, while construction activities are allowed to proceed. Therefore, potential indirect impacts at site SDI-13630 and direct impacts at site SDI-17650 from dam construction activities would be less than significant.

Of the three sites located above the dam, two historic road sites (SDI-17656 and SDI-17657) would be partially inundated and subject to potential erosion from wave action during reservoir operations. The other site, a prehistoric milling site (SDI-13542), would be completely inundated. The significance evaluations for sites SDI-17656, SDI-17657 and SDI-13542 indicate that no further work is recommended for these. However, there is the possibility that buried cultural deposits not identified during evaluation exist at SDI-13542. The third project design feature in Section 3.7.2 above requires construction monitoring at site SDI-13542, which could have the potential for buried cultural deposits. With the exception of burials, which are addressed in Threshold 2 below, any unanticipated discoveries resulting from ground disturbance or inundation during reservoir filling at this site would be removed and evaluated in accordance with the PA, while construction activities are allowed to proceed. Therefore, direct and indirect impacts at sites SDI-17656, SDI-17657 and SDI-13542 from reservoir filling and operations would be less than significant.

The significance evaluations for sites SDI-13848, SDI-16913, SDI-17286, SDI-17652, SDI-17654, and SDI-17655 indicate that these sites do not possess the integrity and the informational content to address questions important to prehistory. It is highly unlikely that these sites have unidentified, buried cultural deposits, and monitoring is not recommended. Therefore, direct impacts at sites SDI-13848, SDI-16913, SDI-17286, SDI-17652, SDI-17654, and SDI-17655 from dam construction activities would be less than significant.

Two additional sites that are not included in Table 3.7-1 require further actions to avoid significant impacts: SDI-16514 and SDI-13629H. Previous studies indicate that these sites possess the integrity and the informational content to address questions important to prehistory. SDI-16514 is located outside, but near, the dam construction limits; therefore, implementation of the second project design feature listed in Section 3.7.2 above would avoid impacts at site SDI-16514. SDI-13629H is located within the dam construction zone; therefore, implementation of the third project design feature listed in Section 3.7.2 above requires construction monitoring at site SDI-13629H, which could have the potential for buried cultural deposits. Any unanticipated discoveries would be removed and evaluated in accordance with the PA. Therefore, potential impacts at sites SDI-16514 and SDI-13629H would be less than significant.

In addition, there are eight recorded submerged sites in San Vicente Reservoir. They are located at what was once the confluence of two streams that met near the western end of Lowell Island. Based on a review of bathymetric data (i.e., a contour map of the reservoir bottom), these sites would be substantially below the proposed reservoir drawdown level of approximately 590 feet

AMSL and would not be exposed during construction of the Proposed Action. Therefore, there would be no impacts on these submerged archaeological sites in San Vicente Reservoir from drawdown of the reservoir during construction.

The Proposed Action would not cause a substantial adverse change in the significance of an historical or archaeological resource as defined in CEQA Guidelines Section 15064.5. Implementation of the project design features listed in Section 3.7.2 above would avoid impacts on cultural resources. Therefore, impacts of the Proposed Action would be less than significant.

Threshold 2: Disturb any human remains, including those interred outside of formal cemeteries

The Proposed Action is not expected to disturb any human remains, including those interred outside of formal cemeteries. Stipulations in the PA (Section 3.7.1.2 above) address appropriate procedures for handling unexpected discoveries during construction or reservoir drawdown; these conditions would be incorporated into the final construction specifications. Therefore, potential impacts on human remains from the Proposed Action would be less than significant.

The Proposed Action is not expected to disturb human remains, including those interred outside of formal cemeteries, and the Water Authority would implement the PA to address unexpected discoveries during construction. Therefore, impacts of the Proposed Action would be less than significant.

3.7.3.3 Mitigation Measures

Impacts on cultural resources would be less than significant. Therefore, no mitigation measures are required.

3.7.3.4 Residual Impacts after Mitigation

No residual impacts would occur.

3.7.4 Cumulative Effects

3.7.4.1 Other CIP Projects

The PEIR for the Regional Water Facilities Master Plan concluded that the significant direct and cumulative impacts on cultural resources associated with the CIP projects, such as Slaughterhouse Terminal Reservoir, when combined with other reasonably foreseeable future projects, could be reduced to below a level of significance or avoided by implementing program-level mitigation measures identified in the PEIR along with mitigation measures outlined during subsequent environmental analysis of these projects. This conclusion is incorporated into the cumulative analyses in Section 3.7.4.3 below.

3.7.4.2 ESP Projects

Previous studies associated with the ESP EIR/EIS and the San Vicente Pipeline Subsequent EIR concluded that there is no potential for the presence of cultural resources in the area of the San Vicente tunnel portal. In addition, grading and excavation has been completed at the tunnel portal area. Therefore, this ESP project would not contribute to cumulative cultural resources impacts in conjunction with the Proposed Action.

3.7.4.3 Other Planned Projects with CIP and ESP Projects

This section evaluates the cumulative cultural resources impacts of the Proposed Action when considered in conjunction with the other planned projects listed in Table 3.2-1 (Section 3.2 [Cumulative Projects for the Proposed Action] of this EIR/EIS), and incorporates the cumulative impacts associated with the Slaughterhouse Terminal Reservoir CIP project described in Section 3.7.4.1 above. The following cumulative analysis addresses the two significance thresholds listed in Section 3.7.3 above**.**

Cumulative Threshold 1: Cause a substantial adverse change in the significance of a historical or archaeological resource as defined in §15064.5 of the State CEQA Guidelines and §106 of the NHPA

The Proposed Action would not cause a substantial adverse change in the significance of an historical or archaeological resource, as defined in CEQA Guidelines Section 15064.5, because implementation of the project design features listed in Section 3.7.2 above would avoid impacts on cultural resources. Under the "worst-case" assumption that all of the cumulative projects in the vicinity of the Proposed Action (refer to Table 3.2-1 in Section 3.2 [Cumulative Projects for the Proposed Action] of this EIR/EIS) would be constructed within the same timeframe as the Proposed Action, some of these projects could contribute to cumulative impacts on cultural resources. These projects would be required to comply with mitigation measures or regulations intended to avoid or mitigate significant impacts on cultural resources. Effects would not be cumulatively considerable. Therefore, potential cumulative impacts on cultural resources due to the Proposed Action, when combined with the cumulative impacts from the Slaughterhouse Terminal Reservoir CIP project and other planned cumulative projects listed in Table 3.2-1 (Section 3.2 [Cumulative Projects for the Proposed Action] of this EIR/EIS), would be less than significant after mitigation.

Cumulative Threshold 2: Disturb any human remains, including those interred outside of formal cemeteries

The Proposed Action is not expected to disturb human remains, including those interred outside of formal cemeteries, with implementation of stipulations in the PA that address unexpected discoveries during construction. Under the "worst-case" assumption that all of the cumulative projects in the vicinity of the Proposed Action (refer to Table 3.2-1, Section 3.2 [Cumulative Projects for the Proposed Action] of this EIR/EIS) would be constructed within the same

timeframe as the Proposed Action, some of these projects could contribute to cumulative impacts on human remains. These projects would be required to comply with mitigation measures or regulations intended to avoid or mitigate significant impacts on human remains. Effects would not be cumulatively considerable. Therefore, potential cumulative impacts on human remains due to the Proposed Action, when combined with the cumulative impacts from the Slaughterhouse Terminal Reservoir CIP project and other planned cumulative projects listed in Table 3.2-1 (Section 3.2 [Cumulative Projects for the Proposed Action] of this EIR/EIS), would be less than significant after mitigation.

Implementation of PA conditions (i.e., data recovery for unanticipated discoveries in accordance with the Treatment Plan) and project design features would mitigate or avoid cumulative impacts on cultural resources and human remains from the Proposed Action. The Slaughterhouse Terminal Reservoir CIP project, and other planned cumulative projects listed in Table 3.2-1 (Section 3.2 [Cumulative Projects for the Proposed Action] of this EIR/EIS), would be required to comply with mitigation measures or regulations intended to avoid or mitigate significant impacts on cultural resources and human remains. Therefore, cumulative impacts on cultural resources and human remains from the Proposed Action, when combined with the potential cumulative impacts associated with the Slaughterhouse Terminal Reservoir CIP project and other planned cumulative projects listed in Table 3.2-1 (Section 3.2 [Cumulative Projects for the Proposed Action] of this EIR/EIS), would be less than significant after mitigation.