CALIFORNIA ENVIRONMENTAL QUALITY ACT FINDINGS IN CONNECTION WITH THE APPROVAL OF THE VALLECITOS WATER DISTRICT 2018 WATER, WASTEWATER AND RECYCLED WATER MASTER PLAN

I. Certification of the Final Environmental Impact Report

The Vallecitos Water District (VWD), as the lead agency, has prepared the Final Program Environmental Impact Report (Final PEIR) for the 2018 Water, Wastewater and Recycled Water Master Plan (2018 Master Plan). The Final PEIR, which incorporates the Draft PEIR circulated for public review, assesses the potential environmental effects of implementation of the 2018 Master Plan, identifies the means to eliminate or reduce potential significant adverse impacts, and evaluates a range of alternatives to the proposed 2018 Master Plan. In addition, the Final PEIR provides text changes to the Draft PEIR; Responses to Comments on the Draft PEIR from responsible agencies, interested groups, and individuals; and the Mitigation Monitoring and Reporting Program (MMRP) for the 2018 Master Plan.

The Board of Directors of the VWD (VWD Board) certifies that the Final PEIR for the 2018 Master Plan has been completed in compliance with the California Environmental Quality Act (CEQA). The VWD Board further certifies that the information contained in the Final PEIR has been reviewed and considered by the VWD Board prior to making the approvals set forth below in Section III and that the Final PEIR reflects the VWD Boards' independent judgment and analysis. The conclusions presented in these Findings are based upon the Final PEIR and other evidence in the administrative record.

II. Findings

In this action, the VWD Board is approving the 2018 Master Plan. The VWD Board, having received, reviewed, and considered the Final PEIR, together with the Draft PEIR and all other information in the administrative record including oral comments received at public hearing, adopt the following Findings in compliance with CEQA and the CEQA Guidelines. The VWD Board certifies that its Findings are based on full appraisal of all viewpoints, including all comments received up to the date of adoption of these Findings, concerning the environmental impacts identified and analyzed in the Final PEIR, and are supported by substantial evidence.

A. Environmental Review Process

1. Preparation of the PEIR

On November 21, 2017, VWD released a Notice of Preparation (NOP) announcing the preparation of a Draft PEIR which described the 2018 Master Plan and the scope of the Draft PEIR. VWD issued the Draft PEIR on October 22, 2018 and circulated it for public review and comment for a 45-day period ending on December 7, 2018. Seven comment

letters on the Draft PEIR were received from various federal, state, and local agencies and the public. Additional oral comments were provided at the March 13, 2019 public Board Workshop. The 2018 Master Plan Final PEIR contains all of the comments received during and after the public comment period, together with written responses to those comments which were prepared in accordance with CEQA. The VWD Board, having reviewed the comments received and responses thereto, finds that the Final PEIR for the 2018 Master Plan provides adequate, good faith, and reasoned responses to the comments.

2. Absence of Significant New Information

CEQA Guidelines Section 15088.5 requires a lead agency to recirculate an EIR for further review and comment when significant new information is added to the EIR after public notice is given of the availability of the Draft EIR but before certification. New information includes: (i) changes to the project; (ii) changes in the environmental setting; or (iii) additional data or other information. Section 15088.5 further provides that "new information added to an EIR is not 'significant' unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project's proponents have declined to implement." Having reviewed the information contained in the Draft and Final PEIR and in the administrative record, as well as the requirements of CEQA Guidelines Section 15088.5 and interpretive judicial authority regarding recirculation of draft EIRs, in connection with their certification of the Final PEIR, the VWD Board finds that no new significant information was added to the PEIR following public review and, thus, recirculation of the PEIR was not required by CEQA.

B. Master Plan Impacts and Mitigation Measures

This section summarizes the direct and indirect environmental impacts of the 2018 Master Plan identified in the Final PEIR, and provides Findings to those impacts, as required by CEQA and the CEQA Guidelines. As discussed in detail in the Final PEIR for the 2018 Master Plan, all direct and indirect impacts of the 2018 Master Plan will be fully mitigated by the identified mitigation measures. As laid forth below, the 2018 Master Plan has no significant and unavoidable impacts.

The Final PEIR found that the following impacts within these environmental topics would be less than significant without mitigation incorporated into the 2018 Master Plan:

Agriculture and Forest Resources (see pages 5-2 and 5-3 of the Final PEIR); Energy (see pages 4.4-1 through 4.4-8 of the Final PEIR); Greenhouse Gas Emissions (GHG) (see pages 4.6-1 through 4.6-17 of the Final PEIR); Mineral Resources (see page 5-3 of the Final PEIR); Population and Housing (see page 5-6 of the Final PEIR); Public Services (see pages 5-6 and 5-7 of the Final PEIR); Recreation (see page 5-7 of the Final PEIR); Public Utilities (see pages 5-7 and 5-8 of the Final PEIR); Transportation and Traffic (see page 5-4 of the Final PEIR); and Tribal Cultural Resources (see page 4.3-22 of the Final PEIR). The Final PEIR found that the following impacts would be less than significant with the incorporation of the mitigation measures identified below:

Air Quality

1. The 2018 Master Plan would have the potential to create objectionable odors where new wastewater facilities would vent to open air.

The 2018 Master Plan includes new wastewater pipelines that would result in new vents that could be a new source of odor. The land outfall would generally contain odors within the proposed underground pipelines; however, similar to the wastewater pipelines, odors would generally only be detectable where the pipelines vent to the open air. These vents would be a new source of odor. The replacement of the Montiel Lift Station would also have the potential to result in a new source of odor if the odor control measures currently implemented at the pump station are not installed in the replacement lift station. Therefore, the 2018 Master Plan may create objectionable odors affecting a substantial number of people, which would be considered a potentially significant impact.

Potentially significant impacts from objectionable odors will be mitigated as described below:

Air-1 Odor-Control Measures. VWD will install odor-controlling features, such as activated carbon structures, at all vents along Capital Improvement Program (CIP) wastewater pipelines and outfall alignments, at the Montiel Lift Station, and the bioxide station, to the extent required to ensure that nuisance odors cannot be detected at the nearest receptor.

FINDING: For the reasons stated in the Final PEIR (see pages 4.1-17 and 4.1-18 of the Final PEIR), the VWD Board finds that implementation of the 2018 Master Plan could result in the potential for people to be affected by objectionable odors created from some 2018 Master Plan wastewater CIP projects. Changes or alterations have been required in or incorporated into the 2018 Master Plan which avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Implementation of Air-1 would reduce potentially significant impacts related to objectionable odors to a less than significant level through the installation of odor-controlling features as required to ensure no nuisance odors at sensitive nearby receptors. All other impacts related to air quality are less than significant and no mitigation is required (see pages 4.1-16 through 4.1-17 of the Final PEIR).

Biological Resources

1. Implementation of the 2008 VWD Master Plan may result in direct and indirect impacts to sensitive plant and wildlife species.

Implementation of CIP projects R-4, R-5, R-10, R-11, PS-4, PS-6, PS-8, P-43, P-16 and P-56, P-30, P-64, P-42, P-10, P-15, SP-10, SP-11, SP-13, SP-25, LO-D1, LO-D2, LO-A1, and LOA2 could result in direct and/or indirect impacts to grassland, coastal sage scrub, chaparral,

riparian, and wetland vegetation communities that are considered sensitive natural communities. Therefore, the 2018 Master Plan could result in a significant impact to these communities.

Direct impacts include the direct destruction or displacement of special status species and their habitat through activities such as clearing, grubbing, grading, and other initial land disturbance activities. Indirect impacts to special status species and their habitat from construction of proposed CIP projects under the 2018 Master Plan could include those resulting from storm water runoff from construction sites, fugitive dust, noise, night lighting, and staging areas. Special status species and U.S. Fish and Wildlife Service (USFWS)-designated Critical Habitat for the federally threatened coastal California gnatcatcher could be present within habitat adjacent to proposed CIP project sites during construction for CIP projects. Indirect impacts to sensitive species from implementation of the 2018 Master Plan could be considered significant.

Implementation of the following mitigation measures would reduce direct and indirect impacts to special status species and their habitats to less than significant levels. CEQA analysis has been conducted separately for CIP projects R-1, R-7, SP-11, and SP-12 (see Section 3.3.2 of the Final PEIR); therefore, these projects are not subject to the mitigation measures identified below:

Bio-1A Project-Level Biological Resource Surveys. During the design phase and prior to the construction of individual CIP projects, VWD will retain a qualified biologist to conduct project-level biological resources surveys and prepare biological resources technical reports for the following CIP projects: R-4, R-5, R-10, R-11, PS-4, PS-6, PS-8, P-43, P-16 and P-56, P-30, P-64, P-42, SP-11, SP-13, SP-25, LO-D1, LO-D2, LO-A1, and LO-A2.

Surveys and reports will be conducted and prepared as part of the project-level CEQA documentation for these projects. VWD will map and quantify project level impacts to special status species and habitats in a biological resources technical report as part of the CEQA documentation. Detailed project-specific avoidance and mitigation measures for significant impacts to biological resources will be finalized as part of the approval and certification process for the subsequent project-level CEQA documentation. Project-specific avoidance and mitigation measures will be determined during project review, consultations, permitting, and/or negotiations between the VWD and the responsible local, state, and federal agencies from which approvals and permits would be required.

If the project-level surveys and reporting determine that suitable habitat for special status species occurs, and that special status species could be present within the CIP project sites and/or could be adversely affected as a result of project implementation, including direct and/or indirect impacts to the species and occupied habitat, then the appropriate presence/absence and protocol-level surveys will be conducted, as necessary for required approvals. VWD will retain a qualified biologist to conduct rare plant surveys for CIP projects determined to have the potential to affect special status plant species. Further, VWD will retain a qualified biologist to conduct focused protocol-level surveys for CIP projects determined to have the potential to affect special status wildlife species. Surveys will follow protocols and guidelines approved by the USFWS, California Department of Fish and Wildlife (CDFW), and California Native Plant Society (CNPS), and will be conducted by qualified biologists permitted by the USFWS and/or CDFW, where applicable.

If the rare plant surveys or focused protocol-level surveys identified above determine the presence of federally or state-listed endangered or threatened species and occupied habitat on-site, then, in compliance with the Federal Endangered Species Act (FESA) and the California Endangered Species Act (CESA), and as stated in Section 3.3.5.4 of the 2011 PEIR, VWD will consult and obtain all applicable regulatory permits and authorizations from the USFWS and CDFW, and the conditions of the regulatory permits and authorizations will be implemented accordingly and/or the underlying CIP project would be modified to avoid direct "take" of the species and/or minimize adverse effects to the species and occupied habitat.

In accordance with consultation and/or permitting requirements, mitigation measures Bio-1B and Bio-1C below would prevent direct "take" of listed species that are most likely to be affected by individual CIP projects (e.g., coastal California gnatcatcher and least Bell's vireo) and minimize potential impacts to individuals and occupied habitat in the vicinity of the CIP project sites that may be displaced from habitat or otherwise adversely affected. VWD will further mitigate the loss of habitat according to mitigation measures Bio-2A through Bio-2C.

- **Bio-1B** Coastal California Gnatcatcher Avoidance Measures. In addition to those mitigation measures described above within Bio-1A above, and any avoidance, minimization, and conservation measures prescribed by the USFWS during consultation and/or permitting, the following mitigation measures will be implemented for proposed CIP projects potentially affecting the federally threatened coastal California gnatcatcher, including suitable and/or occupied habitat, as applicable:
 - 1. Within one year prior to CIP project construction, VWD will retain a qualified biologist to commence focused surveys in accordance with USFWS protocols to determine the presence or absence of the coastal California gnatcatcher. Documentation of the survey results will be provided to VWD and USFWS within 45 days of completing the final survey. If surveyed habitat is determined to be occupied by coastal California gnatcatcher, then the following measures will be implemented in addition to those described above within Bio-1A:
 - a. Habitat occupied by gnatcatcher will not be removed during the gnatcatcher breeding season (February 15 through August 30).

Vegetation clearing, grading, and/or construction activities that have commenced within unoccupied habitat prior to the breeding season will be allowed to continue without interruption. The contractor(s) will maintain continuous construction activities on or in the immediate vicinity (500 feet) of suitable habitat for gnatcatcher, until the work is completed, in order to minimize potential indirect impacts. If gnatcatchers move into an area within 500 feet of ongoing construction and attempt to nest, then it can be deduced that the noise and other indirect impacts are not great enough to discourage gnatcatcher nesting activities.

In addition, if these activities are initiated prior to, and extend into, the breeding season, but they cease for any period of time and the contractor wishes to restart work within the gnatcatcher breeding season window (February 15 through August 30), then the VWD will retain a qualified biologist to conduct updated surveys, as described above. If updated surveys indicate no breeding gnatcatchers occur on or within 500 feet of the proposed work, then construction activities will be allowed to commence. However, if breeding gnatcatchers are confirmed, then construction activities will be postponed until all nesting activities have ceased, as determined by a qualified biological monitor.

- b. Prior to vegetation clearing, grading and/or construction activities that will occur on or in the immediate vicinity (within 500 feet) of coastal sage scrub and/or USFWS-designated Critical Habitat during the gnatcatcher breeding season (February 15 through August 30), VWD will retain a qualified biologist to monitor construction activities. The biologist will be knowledgeable of gnatcatcher biology and ecology. VWD will submit the biologist's name, address, and telephone number, and proposed work schedule, to the USFWS at least seven days prior to construction activities.
- c. Noise monitoring will be conducted if construction activities would occur during the gnatcatcher breeding season (February 15 through August 30), if the construction-related noise levels exceed 60 decibels equivalent noise level (dB L_{eq}) (i.e., the noise threshold suggested by the USFWS for indirect impacts to gnatcatcher), and if gnatcatchers are found within 500 feet of the noise source. Noise monitoring will be conducted by a biologist experienced in both the vocalization and appearance of coastal California gnatcatcher, and in the use of noise meters. Construction activities that generate noise levels over 60 dB L_{eq} may be permitted within 300 feet of occupied habitat if methods are employed that reduce the noise levels to below 60 dB Leq at the boundary of occupied habitat (e.g., temporary noise attenuation barriers or use of alternative equipment). During construction activities, daily testing of noise levels will be conducted by a noise monitor with the help of the biologist to ensure that a noise level of 60 dB L_{eq} at the boundary of occupied habitat is not exceeded. Documentation of the noise monitoring results will be provided to VWD and USFWS within 45 days of completing the final noise monitoring event.
- **Bio-1C** Least Bell's Vireo Avoidance Measures. In addition to those mitigation measures described within Bio-1A above, and any avoidance, minimization, and conservation measures prescribed by the USFWS and CDFW during consultation

and/or permitting, the following mitigation measures will be implemented for CIP projects potentially affecting the federally and state endangered least Bell's vireo, including suitable and/or occupied riparian habitat, as applicable:

- 1. Within one year prior to CIP project construction, VWD will retain a qualified biologist to perform focused surveys in accordance with USFWS guidelines to determine the presence or absence of the least Bell's vireo on and within 500 feet of the CIP project site. Documentation of the survey results will be provided to the USFWS and CDFW within 45 days of completing the final survey. If surveyed habitat is determined to be occupied by vireo, then the following measures will be implemented in addition to those described above within Bio-1A:
 - a. CIP projects will not remove riparian habitat that is occupied by least Bell's vireo during the species' breeding season (March 15 through July 15).
 - b. A minimum 100-foot-wide biological buffer will be maintained between all construction activities and occupied vireo habitat at all times.
 - c. VWD will retain a qualified biologist to monitor all construction activities that would occur within 300 feet of occupied vireo habitat during the species' breeding season (March 15 through July 15). The biologist will be knowledgeable of vireo biology and ecology. VWD or its designated representative will submit the biologist's name, address, and telephone number, and proposed work schedule, to the USFWS and CDFW at least seven days prior to construction activities.
 - d. VWD will retain a qualified biologist to perform noise monitoring of all construction activities that would occur within 300 feet of occupied vireo habitat. Noise levels at the riparian canopy edge will be kept below 60 dB(A) L_{eq} from 5:00 a.m. to 11:00 a.m. between March 15 and July 15. For the remainder of the season, the noise levels will not exceed 60 decibels, averaged over a one-hour period on an A-weighted decibel [dB(A); i.e., 1-hour L_{eq} /dB(A)]. Documentation of the noise monitoring results will be provided to the USFWS and CDFW within 45 days of completing the final noise monitoring event.
- 2. Permanent and temporary impacts to riparian habitat will be mitigated in full, as proposed within mitigation measures Bio-2A through Bio-2C, to ensure no net loss of the habitat and enhancement of functions and values.
- **Bio-1D** Avoidance of Nesting Birds. To prevent impacts to nesting passerines (song birds) and other non-raptors protected under the federal Migratory Bird Treaty Act (MBTA) and California Fish and Game Code, VWD will enforce the following:
 - 1. If construction occurs during the general nesting season (February 1 through August 31), and where any mature tree, shrub, or structure capable of supporting a bird nest occurs within 300 feet of proposed CIP project

construction activities, VWD will retain a qualified biologist to conduct a preconstruction survey for nesting birds prior to clearing, grading and/or construction activities. The survey will be conducted within 72 hours prior to the start of construction.

- 2. If any nesting birds are present on or within 300 feet of the proposed project construction area, the following will be required, as approved by the USFWS and/or CDFW:
 - a. VWD will retain a qualified biologist to flag and demarcate the location of all nesting birds and monitor construction activities. Temporary avoidance of active bird nests, including the enforcement of an avoidance buffer of 300 feet, as determined by the qualified biological monitor, will be required until the qualified biological monitor has verified that the young have fledged or the nest has otherwise become inactive. Requests for buffer reductions of less than 300 feet will be provided to the Wildlife Agencies. Documentation of the nesting bird surveys and any follow-up monitoring will be provided to USFWS and CDFW within 10 days of completing the final survey or monitoring event.
- **Bio-1E** Avoidance of Raptor Nests. To prevent impacts to nesting raptors protected under the federal MBTA and California Fish and Game Code, VWD will enforce the following:
 - 1. If construction occurs during the raptor nesting season (January 15 through July 31), and where any mature tree or structure capable of supporting a raptor nest occurs within 500 feet of proposed CIP project construction activities, VWD will retain a qualified biologist to conduct a pre-construction survey for nesting raptors prior to clearing, grading, and/or construction activities. The survey will be conducted within 72 hours prior to the start of construction.
 - 2. If any nesting raptors are present on or within 500 feet of the proposed project construction area, the following will be required, as approved by the USFWS and/or CDFW:
 - a. VWD will retain a qualified biologist to flag and demarcate the location of all nesting raptors and monitor construction activities. Temporary avoidance of active raptor nests, including the enforcement of an avoidance buffer of 500 feet will be required until the qualified biological monitor has verified that the young have fledged or the nest has otherwise become inactive. Documentation of the raptor surveys and any follow-up monitoring, as necessary, will be provided to USFWS and CDFW within 10 days of completing the final survey or monitoring event.
 - 3. In the event that a California state fully protected species (e.g., white-tailed kite) is found to be nesting on the project site, all work in the area will stop and VWD will notify the CDFW and/or USFWS. No impacts will be permitted to occur to fully protected species.

Bio-1F Construction Fencing. Prior to vegetation clearing, grading, and/or construction activities, VWD will retain a qualified biologist to oversee installation of appropriate fencing and/or flagging to delineate the limits of construction and the approved construction staging areas for protection of identified sensitive resources for the following CIP projects: R-4, R-5, R-10, R-11, PS-4, PS-6, PS-8, P-43, P-16 and P-56, P-30, P-64, P-42, SP-10, SP-11, SP-13, SP-25, LO-D1, LO-D2, LO-A1, and LO-A2.

Temporary fencing (with silt barriers) will be installed at the limits of project impacts (including construction staging areas and access routes) to prevent additional sensitive habitat impacts and to prevent the spread of silt from the construction zone into adjacent habitats to be avoided. Fencing will be installed in a manner that does not impact habitats to be avoided. For projects potentially affecting special-status species and sensitive resources, and for which permits or approvals from the USFWS or CDFW require confirmation of project impacts and submittal of as-built plans, VWD will submit to the USFWS and CDFW for approval, at least 30 days prior to initiating project impacts, the final plans for initial clearing and grubbing of sensitive habitat and project construction. These plans will also be submitted to the U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), or other local agency, from which, approval or permitting is required, as applicable. The final plans will include photographs that show the fenced limits of impact and all sensitive areas to be impacted or avoided. If work occurs beyond the fenced or demarcated limits of impact, all work will cease until the problem has been remedied to the satisfaction of VWD and the USFWS, CDFW, USACE, and/or other agency. Temporary construction fencing will be removed by VWD upon project completion.

- **Bio-1G** Construction Staging Areas. Prior to construction activities for CIP projects where it has been demonstrated through project-level studies that drainages, wetlands, and areas supporting sensitive habitats or species could be affected by project construction, VWD will design CIP project construction staging areas to avoid and setback from drainages, wetlands, and areas supporting sensitive habitats or species, where feasible. Fueling of equipment will occur in designated off-site fueling zones. All equipment used within the approved construction limits will be maintained to minimize and control fluid and grease leaks. Provisions to contain and clean up unintentional fuel, oil, fluid and grease leaks/spills will be in place prior to construction.
- Bio-1H Pre-Construction Meeting. Prior to vegetation clearing, grading, and/or construction activities, VWD will retain a qualified biologist to attend a preconstruction meeting to inform construction crews of the sensitive species and habitats for the following CIP projects: R-4, R-5, R-10, R-11, PS-4, PS-6, PS-8, P-43, P-16, P-56, P-30, P-64, P-42, SP-10, SP-11, SP-13, SP-25, LO-D1, LO-D2, LOA1, and LO-A2.

- **Bio-11 Construction-Related Night Lighting.** All construction-related night lighting adjacent to sensitive habitat areas will be of low illumination; shielded and directed downwards and away from adjacent native habitat areas.
- **Bio-1J** Avoidance of Special Status Habitat Areas. Prior to construction activities for CIP projects where it has been demonstrated through project-level studies that special status plant and wildlife species, as well as USFWS-designated Critical Habitat and coastal Environmentally Sensitive Habitat Area (ESHA), could be affected by project construction and/or operation, VWD will design and/or modify CIP projects to avoid and setback from special status plant and wildlife species, USFWS-designated Critical Habitat, and coastal ESHA, where feasible. Specific setback requirements for CIP project avoidance would be determined in consultation with the USFWS, CDFW, City of Carlsbad, and/or the California Coastal Commission.

Implementation of mitigation measures Bio-1A, Bio-1F through Bio-1H, and Bio-1J would reduce direct and indirect impacts to natural communities and habitat potentially resulting from CIP projects R-4, R-5, R-10, R-11, PS-4, PS-6, PS-8, P-43, P-16 and P-56, P-30, P-64, P-42, P-10, P-15, SP-10, SP-11, SP-13, SP-25, LO-D1, LO-D2, LO-A1, and LO-A2, and access roads for CIP projects P-43, P-30, P-64, P-42, SP-11, and SP-25 to a less than significant level. These measure would achieve this through mandated project-level surveys, ensuring that coastal California gnatcatcher avoidance measures (focused surveys, restrictions on habitat removal during breeding season, construction monitoring, and noise monitoring) are implemented, ensuring that least Bell's vireo avoidance measures (focused surveys, restrictions on removal of riparian habitat during breeding season, construction monitoring, noise monitoring), ensuring that nesting birds are avoided during construction, and through limitation son fencing, staging areas, nightlight, etc. Implementation of mitigation measure Bio-2A through Bio-2C (identified below, and incorporated herein) would further reduce impacts to upland, riparian, and wetland sensitive natural communities associated with these CIP projects to a less than significant level.

FINDING: For the reasons stated in the Final PEIR (see pages 4.2-53 through 4.2-100 of the Final PEIR), the VWD Board finds that implementation of the 2018 Master Plan could result in the potential for direct and indirect impacts to sensitive species from implementation of the 2018 Master Plan. Changes or alterations have been required in or incorporated into the 2018 Master Plan which avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Implementation of mitigation measures Bio-1A through Bio-1J would reduce potentially significant direct and indirect impacts to sensitive species to below a level of significance.

2. Implementation of the 2018 Master Plan has the potential to result in impacts to upland, riparian, and wetland habitats that are considered sensitive natural communities.

Sensitive natural communities with the potential to occur within the VWD service area include upland (e.g., Diegan coastal sage scrub), riparian (southern riparian scrub), and wetland (e.g., freshwater marsh). Direct impacts include the direct permanent or temporary removal of sensitive natural communities from clearing, grubbing, grading, and other initial land disturbance activities.

Potential indirect impacts to special status species and their habitat from construction of proposed CIP projects under the 2018 Master Plan could include those resulting from storm water runoff from construction sites, fugitive dust, noise, night lighting, and staging areas. Indirect impacts to on-site sensitive natural communities could also occur during the installation of any on-site mitigation or revegetation activities after project construction. Implementation of the 2018 Master Plan could result in significant indirect impacts to sensitive natural communities.

Implementation of mitigation measures Bio-1A, Bio-1F through Bio-1H, and Bio-1J would reduce direct and indirect impacts to natural communities and habitat potentially resulting from CIP projects R-4, R-5, R-10, R-11, PS-4, PS-6, PS-8, P-43, P-16 and P-56, P-30, P-64, P-42, P-10, P-15, SP-10, SP-11, SP-13, SP-25, LO-D1, LO-D2, LO-A1, and LO-A2, and access roads for CIP projects P-43, P-30, P-64, P-42, SP-11, and SP-25 to a less than significant level. Implementation of mitigation measure Bio-2A through Bio-2C would further reduce impacts to upland, riparian, and wetland sensitive natural communities associated with these CIP projects to a less than significant level.

Bio-2A Habitat Replacement. Unavoidable impacts to sensitive natural communities will be mitigated by VWD according to the range of ratios provided below, consistent with the North County Multiple Habitat Conservation Program (MHCP; AMEC et al. 2003), and would be increased or decreased depending on whether the habitat supports special status species or other sensitive resources, and/or the impacts and mitigation would occur inside or outside an existing preserve area:

Sensitive Natural Community	Mitigation Ratio
Non-native grassland	0:1 - 0.5:1
Valley needlegrass grassland	1:1 - 3:1
Diegan coastal sage scrub	1:1-2:1
Diegan coastal sage – chaparral scrub	1:1-2:1
Chamise chaparral (granitic, mafic)	1:1, 1:1 - 3:1
Scrub oak chaparral	1:1-2:1
Southern maritime chaparral	1:1 - 3:1
Southern mixed chaparral (granitic, mafic)	1:1, 1:1 - 3:1
Coast live oak woodland	1:1 - 3:1
Southern coastal live oak riparian forest	1:1 - 3:1
Southern riparian forest	1:1 - 3:1
Southern riparian scrub	1:1 - 3:1
Coastal and valley freshwater marsh	1:1 - 3:1

Permanent and temporary impacts to sensitive natural communities will be mitigated in-kind by VWD through implementation of any one or combination of the following measures, as approved and/or amended by the USFWS, USACE, RWQCB, and/or CDFW for individual CIP projects, if applicable:

1. On-site as creation of new habitat, or enhancement or restoration of existing habitat within avoided and preserved areas at the CIP project site;

- 2. On-site as restoration of existing habitat within temporary impact areas and/or avoided and preserved areas at the CIP project site;
- 3. On-site as enhancement of existing habitat within avoided and preserved areas at the CIP project site;
- 4. Off-site as purchase of habitat credits within an approved mitigation bank(s) (e.g., North County Habitat Bank);
- 5. Off-site as habitat preservation, creation, restoration, and/or enhancement within other properties or approved mitigation programs available at the time of grading; or
- 6. A combination of the above.

For on- or off-site creation, restoration, and/or enhancement mitigation of upland sensitive natural communities (e.g., grassland, coastal sage scrub, chaparral, woodland), VWD will prepare an Upland Habitat Restoration Plan, Habitat Mitigation and Monitoring Plan, or similar plan, detailing the specific upland habitat creation, restoration, and/or enhancement measures to be implemented as project mitigation. The Upland Habitat Restoration Plan will be approved by the USFWS and CDFW prior to vegetation clearing, grading, and/or construction activities.

For on- or off-site creation, restoration, and/or enhancement mitigation of riparian and wetland sensitive natural communities (e.g., riparian forest, riparian scrub, willow scrub, mule fat scrub, freshwater marsh), VWD will prepare a Riparian/Wetland Habitat Restoration Plan, Habitat Mitigation and Monitoring Plan, or similar plan, detailing the specific riparian/wetland creation, restoration, and/or enhancement measures to be implemented as project mitigation. The Riparian/Wetland Habitat Restoration Plan will be approved by the USFWS, USACE, RWQCB, and/or CDFW, as appropriate, prior to vegetation clearing, grading, and/or construction activities.

Reference Cited: AMEC Earth and Environmental, Inc., Conservation Biology Institute, Onaka Planning and Economics, and The Rick Alexander Company. 2003. Final Multiple Habitat Conservation Program. Administered by SANDAG for the Cities of Carlsbad, Encinitas, Escondido, Oceanside, San Marcos, Solana Beach, and Vista. March. Available at https://www.sandag.org/index.asp?projectid=97&fuseaction=projects.detail.

- **Bio-2B Riparian/Wetland Replacement Ratio**. Any upland or riparian/wetland habitat impacts that occur beyond the approved fencing described above within Bio-1F will be mitigated at a ratio to be negotiated with the USFWS, USACE, RWQCB, and/or CDFW.
- **Bio-2C** Hydroseeding of Graded Areas. Unless otherwise required by the USFWS, USACE, RWQCB, and/or CDFW, and excluding those CIP projects where a permanent access road, path, or other permanent development is required, after completion of final grading for CIP projects located adjacent to native vegetation, the construction documents will require that all graded areas within 100 feet of

native vegetation are hydroseeded and/or planted with native plant species similar in composition to the adjacent undisturbed vegetation communities. VWD or the construction contractor will retain a qualified biologist to monitor these activities to ensure non-native or invasive plant species are not used in the hydroseed mix or planting palettes. The hydroseeded/planted areas will be watered via a temporary drip irrigation system or watering truck. Irrigation will cease after successful plant establishment and growth, to be determined by the biologist. Any irrigation runoff from hydroseeded/planted areas will be directed away from adjacent native vegetation communities, and contained and/or treated within the development footprint of individual projects. All planting stock will be inspected for exotic invertebrate pests (e.g., argentine ants) and any stock found to be infested with such pests will not be allowed to be used in the hydroseeded/planted areas.

FINDING: For the reasons stated in the Final PEIR (see pages 4.2-53 through 4.2-100 of the Final PEIR), the VWD Board finds that implementation of the 2018 Master Plan could result in direct and indirect impacts to upland, riparian, and wetland habitats that are considered sensitive natural communities. Changes or alterations have been required in or incorporated into the 2018 Master Plan which avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Implementation of mitigation measures Bio-2A through Bio-2C would further reduce impacts to upland, riparian, and wetland sensitive natural communities associated with these CIP projects to below a level of significance.

3. Implementation of the 2018 Master Plan could result in impacts to waters, wetlands, and associated resources subject to the regulatory jurisdiction of the U.S. Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Game, including federally protected wetlands as defined by Section 404 of the Clean Water Act.

Implementation of the Master Plan could result in direct and indirect impacts to waters, wetlands, and associated habitats subject to the regulatory jurisdiction of the USACE, RWQCB, CDFW, and USFWS during project construction and operation. As discussed in Section 4.7 of the Final PEIR, VWD would comply with Section 404 and 401 of the Clean Water Act (CWA), and Sections 1600 et seq. of the California Fish and Game Code by conducting the appropriate project-level wetland delineation studies and obtaining permits, if required, from the USACE, RWQCB, and CDFW.

During the design phase and prior to the construction of individual CIP projects, VWD will retain a qualified biologist to conduct jurisdictional wetland delineations and prepare jurisdictional delineation reports for the following CIP projects: P-24, P-42, P-43, SP-10, SP-11, SP-25, LO-D1, LO-D2, and LO-A2. Wetland delineations will be conducted according to the methodologies and current regulatory guidance recommended by the USACE, RWQCB, and CDFW. The results of wetland delineations will be verified by the USACE during or prior to obtaining permits from the USACE, RWQCB, and CDFW.

In accordance with permit requirements, VWD will mitigate the loss of jurisdictional waters and wetlands through the implementation of the riparian and wetland sensitive

natural community measures proposed within Bio-2A through Bio-2C (identified above, and incorporated herein).

Implementation of mitigation measures Bio-3A and Bio-3B below would reduce direct impacts to oak trees to a less than significant level:

- **Bio-3A** Oak Tree Avoidance. All oak trees and their root systems will be avoided by CIP projects R-4, P-16, and P-56 through project design or site selection, to the extent practicable.
- **Bio-3B** Oak Tree Replacement. To offset any impacts to oak trees potentially resulting from CIP projects R-4, P-16, and P-56, VWD will implement the following measures:
 - 1. Unavoidable impacts will be compensated by VWD at a ratio of 1:1 to 3:1. A minimum of one 15-gallon oak tree will be planted within approved areas at the CIP project site as a replacement for every one oak tree damaged. For temporary impacts, trees will be replaced at the same location as the impact area. For permanent impacts, trees will be replaced within avoided areas at the CIP project site where natural water is available.
 - 2. The landscape architect/designer for the project will design replacement trees into landscape plans which will be subject to review by the VWD and local jurisdiction in which the planting would occur.
 - 3. Planting specifications will comply with the following:
 - a. The newly planted trees will be planted high, as much as 0.75 feet above the new adjacent grade.
 - b. Amend the backfill soil with wood shavings, unless existing soil is high in natural organic matter with a sandy loam texture as reflected in soils tests following County protocol.

FINDING: For the reasons stated in the Final PEIR (see pages 4.2-86 through 4.2-90 of the Final PEIR), the VWD Board finds that implementation of the 2018 Master Plan could result in potentially significant impacts to waters, wetlands, and associated resources. Changes or alterations have been required in or incorporated into the 2018 Master Plan which avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Implementation of mitigation measures Bio-2A, Bio-2B, and Bio-2C would reduce potentially significant direct and indirect impacts to waters, wetlands, and associated resources to below a level of significance. Implementation of mitigation measures Bio-3A and Bio-3B would reduce direct impacts to oak trees to a less than significant level.

4. Implementation of the Master Plan could conflict with the County of San Diego Resource Protection Ordinance (RPO) and City of Carlsbad Coastal Resource Protection Overlay Zone (CRPOZ) Ordinance.

CIP projects R-4, P-16, and P-56 could result in a conflict with the RPO protecting oak trees, which would result in a significant impact. CIP projects R-5, R-11, P-42, and P-43 may result in a conflict with the HLP Ordinance; however, VWD would obtain an HLP from the County of San Diego and mitigate the loss of coastal sage scrub habitat in accordance with Bio-2A, thereby reducing the impact to less than significant. CIP projects LO-D1 and LO-D2 could result in a conflict with the Carlsbad CRPOZ Ordinance; however, VWD would obtain a CDP from the City of Carlsbad and CCC and mitigate the loss of ESHA in accordance with mitigation measures Bio-2A and Bio-2B (identified above, and incorporated herein), thereby reducing the impact to less than significant.

FINDING: For the reasons stated in the Final PEIR (see pages 4.2-91 through 4.2-94 of the Final PEIR), the VWD Board finds that implementation of the 2018 Master Plan could result in potentially significant impacts relating to conflicts with the County of San Diego RPO and City of Carlsbad CRPOZ Ordinance. Changes or alterations have been required in or incorporated into the 2018 Master Plan which avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Implementation of mitigation measures Bio-3A and Bio-3B would reduce potentially significant direct and indirect impacts to below a level of significance.

5. Implementation of the Master Plan could conflict with the Carlsbad MHCP Subarea Plan (Carlsbad HMP).

CIP projects SP-13, LO-D1, LO-D2, LO-B, and LO-A2 could result in potential conflicts with the adopted Carlsbad MHCP Subarea Plan. The City of Carlsbad holds a Section 10(a) permit to approve development within its planning area and has the authority to extend the 3rd party benefits to developers. Conflicts with the Subarea Plan may result in a significant impact. Implementation of mitigation measures Bio-2A, Bio-2B, Bio-2C, Bio-1F, Bio-1G, Bio-1H, Bio-1J, BIO-3A and Bio-3B (identified above, and incorporated herein), as well as Geo-1 and Geo-2 (identified below, and incorporated herein) would eliminate potential conflicts with the adopted Carlsbad MHCP Subarea Plan. Implementation of mitigation measures Bio-4A through Bio-4C would further ensure that the 2018 Master Plan would not conflict with the adopted Carlsbad MHCP Subarea Plan.

- **Bio-4A Project-Level Biological Studies**. During the design phase of CIP projects SP-13, LO-D1, LO-D2, LO-B, and LO-A2 occurring within the jurisdictional boundaries of the city of Carlsbad, VWD will prepare project-level biological studies, to include consistency analysis with the Carlsbad MHCP Subarea Plan (also known as the Carlsbad HMP), in order to ensure that CIP projects would not conflict with this adopted plan. As necessary, VWD will conduct project design and review of biological studies in consultation with the USFWS, CDFW, and City of Carlsbad when covered resources identified under the Carlsbad MHCP Subarea Plan have the potential to be affected by individual CIP projects.
- **Bio-4B** Species and Habitat Avoidance within Carlsbad MHCP Subarea Plan. VWD will implement the following specific measures for CIP projects SP-13, LO-D1, LO-D2, LO-B, and LO-A2 occurring within the Carlsbad MHCP Subarea Plan:

- 1. Impacts to narrow endemic species will be avoided to the maximum extent practicable; however, where impacts to a narrow endemic species population are demonstrated to be unavoidable, impacts will be restricted to less than the maximum allowed under the Carlsbad MHCP Subarea Plan.
- 2. All development projects will be located and designed to minimize overall impacts to natural habitat.
- 3. Impacts to wetland and riparian habitats will be avoided to the maximum extent feasible. All development projects that would affect these habitats must demonstrate that the impacts: (1) cannot be avoided by a feasible alternative; (2) have been minimized to the maximum extent practicable; (3) are mitigated at a minimum 3:1 ratio; and (4) will be mitigated in ways that assure no net loss of habitat value or function.
- **Bio-4C Habitat In-Lieu Fees**. Prior to issuance of permits from the City of Carlsbad, VWD may pay Habitat In-Lieu Mitigation Fees for impacts to Group E (Non-Native Grassland) and Group F (Disturbed Habitat, Eucalyptus Woodland) Habitats identified within the Carlsbad MHCP Subarea Plan for CIP projects SP-13, LO-D1, LO-D2, LO-B, and LO-A2. Fees may be paid in an amount to be determined by City Council, in lieu of providing on-site or off-site mitigation land. The Habitat In-Lieu Mitigation Fee will also apply to off-site mitigation for impacts to Group D (Unoccupied Coastal Sage Scrub, Coastal Sage/Chaparral, Chaparrals – excluding Southern Maritime Chaparral) Habitat which is not conserved or mitigated on-site in accordance with mitigation measures Bio-2A through Bio-2C, or otherwise required by the City of Carlsbad, USFWS, and CDFW during review of individual CIP projects.

FINDING: For the reasons stated in the Final PEIR (see pages 4.2-95 through 4.2-97 of the Final PEIR), the VWD Board finds that implementation of the 2018 Master Plan could result in the potential to conflict with an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional or state habitat conservation plan. Changes or alterations have been required in or incorporated into the 2018 Master Plan which avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Implementation of mitigation measures Bio-2A, Bio-2B, Bio-2C, Bio-1F, Bio-1G, Bio-1H, Bio-1J, Bio-3A Bio-3B, Bio-4A, Bio-4C, Geo-1, and Geo-2 would reduce potentially significant conflicts with adopted habitat conservation plans to below a level of significance.

Cultural Resources

1. Construction activities associated with construction of the proposed CIP projects, such as grading, trenching, and clearing have the potential to adversely affect historic resources or archeological resources within the VWD service area.

One multiple resource historic property (Rancho de los Kiotes), listed in the National Register of Historic Places (NRHP) and California Register of Historical Resources (CRHR),

was found within 0.75 mile of the proposed land outfall alignment in Carlsbad. Historical resources in close proximity to the proposed CIP projects could be directly adversely affected by construction activities that may cause excessive groundborne vibration, such as grading, clearing, blasting, and demolition; or activities that may cause dust or debris fallout that may damage the historic resource. Additionally, the northeastern, southwestern, and a centrally located island area within the VWD service area have high archaeological resource sensitivity. The proposed alignment for the outfall also has high archaeological resource sensitivity. Known archeological resources (such as CA-SDI-4558 and CA-SDI-9882) may be affected by the construction of proposed CIP project sites. Additionally, due to the frequency of known and recorded archaeological sites throughout the VWD service area, including significant archaeological sites, the potential exists for proposed CIP projects to encounter unrecorded archaeological resources during facility construction. Ground-disturbing activities, such as clearing, trenching, and grading, and the construction of access roads have the potential to damage or destroy archaeological resources that may be present on or below the ground surface, particularly in areas that have not previously been developed. Therefore, implementation of the 2018 Master Plan could result in significant impacts to historical and unique archaeological resources.

Implementation of the following measures would reduce impacts to potential historical and unique or significant archaeological resources to a less than significant level by ensuring that project-level analysis occurs through site-specific records searches, Phase I cultural resources studies, and mandated procedures and performance measures if unanticipated resources are uncovered. CEQA analysis has been conducted separately for the Diamond Siphon Replacement Project (CIP SP-10); therefore, this project is not subject to the mitigation measures identified below.

- **Cul-1** Site-specific Records Search. Prior to construction activities within a CIP project site, a qualified cultural resource professional shall be retained by VWD to complete a CIP project site-specific records search at the South Coastal Information Center to determine if the CIP project site has been subject to a professional survey. If a current cultural resources report to address potential impacts on cultural resources is available, VWD shall implement the mitigation measures provided within the report.
- Cul-2 Phase I Cultural Resources Study. In the event that a current and valid report (completed within the last five years) is not available, or if the entirety of the CIP project site has not been professionally surveyed (see Cul-1), a Phase I Cultural Resources Survey study shall be completed by a qualified cultural resource professional.
 - 1. If the Phase I study detects built-environment resources (buildings or structures aged 45 years old or older), and construction or implementation of the CIP project will either disturb or destroy such buildings or affect their historic setting, then a cultural resource professional who minimally meets the Secretary of the Interior's Professional Qualifications Standards for Architectural History shall be contracted to determine if the resource site is significant and if the project may cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 of the CEQA Guidelines. VWD shall be responsible for implementing methods for

eliminating or substantially reducing impacts on historical resources identified in the technical report or memorandum. Such methods could include, but are not limited to, written and photographic recordation of the resource in accordance with the level of Historic American Building Survey documentation that is appropriate to the significance (federal, state, local) of the resource.

- 2. In the event that known or previously undetected archaeological resources are identified during the Phase I study then such resources must be recorded or updated onto Department of Parks and Recreation (DPR) 523 forms in accordance with all applicable regulations. In addition, any addressed resources must be evaluated for significance and eligibility for inclusion in federal, state, and local registers of significant resources. This evaluation shall be undertaken by a cultural resource professional who minimally meets the Secretary of the Interior's Professional Qualifications Standards for Archaeology. In the event that such resources are found to be historical resources pursuant to CEQA, potential adverse impacts must be analyzed as stated in Public Resources Code (PRC) Sections 21084.1 and 21083.2(l), and appropriate measures must be generated to avoid or substantially reduce potential impacts on archaeological resources as necessary, including data recovery excavation and/or construction monitoring.
- Cul-3 Procedure for Unintentional Disturbance of Cultural Resources. If historical resources are identified during a Phase I Cultural Resources Study and cannot be avoided, construction monitoring by a qualified archaeologist and a Native American monitor, if requested during Assembly Bill (AB) 52 consultation, would be required. If subsurface cultural resources are encountered during CIP project construction, or if evidence of an archaeological site or other suspected historic resources are encountered, all ground-disturbing activity shall cease within 100 feet of the resource. A qualified archaeologist shall be retained by VWD to assess the find, and to determine whether the resource is significant and requires further study. Potentially significant cultural resources could consist of, but are not limited to, stone, bone, fossils, wood or shell artifacts or features, including structural remains, historic dumpsites, hearths and middens. Midden features are characterized by darkened soil, and could conceal material remains, including worked stone, fired clay vessels, faunal bone, hearths, storage pits, or burials and special attention should always be paid to uncharacteristic soil color changes. Any previously undiscovered resources found during construction should be recorded on appropriate DPR 523 forms and evaluated by a qualified archaeologist retained by VWD for significance under all applicable regulatory criteria.
 - 1. No further grading shall occur in the area of the discovery until VWD approves the measures to protect and mitigate the resources. Any archaeological artifacts recovered as a result of mitigation shall be donated to curated at a qualified scientific institution approved by VWD where they would be afforded long-term preservation to allow future scientific study. Curation fees are the responsibility of VWD. Upon completion of monitoring,

a final results report with resource data and analysis shall be completed and submitted to VWD and the South Coastal Information Center. Should no resources be encountered, a letter report may be submitted to document completion of construction monitoring.

FINDING: For the reasons stated in the Final PEIR (see pages 4.3-1 through 4.3-17 of the Final PEIR; see also Responses to Comment Letter D [San Diego Archaeological Society Letter]), the VWD Board finds that implementation of the 2018 Master Plan could result in potentially significant impacts to historical and archaeological resources. Changes or alterations have been required in or incorporated into the 2018 Master Plan which avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Implementation of mitigation measures Cul-1 through Cul-3 would reduce potentially significant impacts to historical and archaeological resources to below a level of significance.

2. Construction activities associated with construction of the proposed CIP projects, such as grading, trenching, and clearing have the potential to adversely affect unanticipated human remains, including those interred outside of formal cemeteries.

Based upon the results of the records search, no formal cemeteries were identified within the footprint of the proposed CIP project sites. Therefore, it is not expected that construction activities at CIP projects would disturb formal cemeteries. However, one known and previously recorded archaeological site located within the footprint of a proposed CIP site included cremated human remains (CA-SDI-9822), which indicates that remnants of cremated human remains may still be present on the site or in the surrounding area. Sections 15064.5(d) and (e) of the CEQA Guidelines assign special importance to human remains and specifies procedures to be used when Native American remains are discovered. These procedures are detailed under PRC Section 5097.98. The disturbance of any human remains is considered a significant impact, regardless of archaeological significance or association. Any ground disturbing activities associated with the 2018 Master Plan, including grading, trenching, and excavation during construction, would have the potential to unintentionally disturb human remains, resulting in a significant impact. However, with implementation of mitigation measure Cul-4, potential impacts to human remains resulting from the 2018 Master Plan would be reduced to a less than significant level.

Cul-4 Unintentional Disturbance of Human Procedure for Remains. Implementation of the procedures set forth in PRC Section 5097.98 and California State Health and Safety Code 7050.5 would reduce impacts to human remains to a less than significant level. The procedures outline steps to be followed upon unintentional disturbance of human remains. California State Health and Safety Code Section 7050.5 dictates that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98. 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, and the guidelines of the NAHC shall be adhered to in the treatment and disposition of the remains. A professional archaeologist with Native American burial experience shall conduct a field investigation of the specific site and consult with the Most Likely Descendant (MLD), if any, identified by the NAHC. As necessary and appropriate, a professional archaeologist shall be retained by VWD to provide technical assistance to the MLD, including but not limited to, the excavation and removal of the human remains. Compliance with California State Health and Safety Code Section 7050.5 and PRC Section 5097.98 would reduce any potential impacts to human remains from the 2018 Master Plan to a level below significance.

FINDING: For the reasons stated in the Final PEIR (see pages 4.3-17 through 4.3-18 of the Final PEIR), the VWD Board finds that implementation of the 2018 Master Plan could result in potentially significant impacts to human remains. Changes or alterations have been required in or incorporated into the 2018 Master Plan which avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Implementation of mitigation measure Cul-4 would reduce potentially significant impacts to unanticipated human remains to below a level of significance.

c. Construction activities associated with construction of the proposed CIP projects, such as grading, trenching, and clearing have the potential to adversely affect tribal cultural resources.

The NAHC was contacted for a search of their sacred lands files. A reply letter indicated that sites have been located in the Bonsall and Valley Center U.S. Geological Survey quadrangles. Additionally, in November 2017, VWD sent a notice regarding the Master Plan to interested Native American tribes, including the Pala Band of Mission Indians, the Rincon Band of Luiseno Indians, and the Torres Martinez Desert Cahuilla Indians. The Pala Band of Mission Indians indicated via response letter on November 22, 2017 that they declined AB 52 consultation. No response was received from the Torres Martinez Desert Cahuilla Indians. The Rincon Band of Luiseno Indians requested consultation via letter on November 29, 2017. VWD attempted to contact the Rincon Band of Luiseno Indians via telephone on April 17, 2018, and via letter on May 2, 2018. VWD engineer Robert Scholl spoke with Destiny Colocho on June 8, 2018, who provided a confidential cultural sites exhibit indicating that there are seven cultural sites within and immediately adjacent to the VWD service area boundary. Of these, two cultural sites may be in the vicinity of future work. Ground-disturbing activities, such as clearing, trenching, and grading, and the construction of access roads have the potential to damage or destroy tribal cultural resources that may be present on or below the ground surface at these cultural sites, particularly in areas that have not previously been developed. In the event that significant tribal cultural resources are discovered during construction, such resources could be damaged or destroyed, potentially resulting in significant impacts to tribal cultural resources. For these reasons, construction of the 2018 Master Plan CIP projects has the potential to result in potentially significant impacts to tribal cultural resources. However, with implementation of mitigation measure Cul-5, potential impacts to tribal cultural resources resulting from the 2018 Master Plan would be reduced to a less than significant level.

Cul-5 Procedure for Unintentional Disturbance of Tribal Cultural Resources. If tribal cultural resources are identified within future CIP project areas and cannot be avoided, construction monitoring by a Luiseño Native American monitor would be required. If subsurface tribal cultural resources are encountered during CIP project construction, all ground-disturbing activity shall cease within 100 feet of the resource. Through AB-52 consultation, appropriate measures to protect the resource will be determined between interested Native American tribes/monitor and VWD. No further grading shall occur in the area of the discovery until VWD approves the measures to protect the resources.

Further, as documented in Section 4.3.3.3 of the PEIR, VWD successfully completed AB 52 consultation with the Rincon Band of Luiseno Indians, and VWD will conduct AB 52 consultation for future actions if it is determined that a subsequent project would potentially have effects on tribal cultural resources that were not analyzed in the PEIR.

FINDING: For the reasons stated in the Final PEIR (see pages 4.3-19 through 4.3-20 of the Final PEIR; see also Responses to Comment Letter D [Rincon Band of Luiseno Indians]), the VWD Board finds that implementation of the 2018 Master Plan could result in potentially significant impacts to tribal cultural resources. Changes or alterations have been required in or incorporated into the 2018 Master Plan which avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Implementation of mitigation measure Cul-5 would reduce potentially significant impacts to tribal cultural resources to below a level of significance.

Geology, Soils, and Paleontology

1. Portions of the proposed CIP facilities could be located on geologic or soil units that are unstable and could result in damage from liquefaction, lateral spreading, subsidence, expansive soils, and/or landslides.

All of San Diego County is located within Seismic Design Categories E and F, which have the highest seismic potential (San Diego County General Plan Update Final Environmental Impact Report. SCH #2002111067; 2011). Therefore, proposed CIP projects may be subject to the adverse effects of seismic ground shaking. Additionally, many of the proposed CIP projects, such as water and sewer pipelines, including the outfall, are located within areas of high liquefaction potential. Further, some CIP projects are located within high slope areas and would be at risk for damage from landslide potential, particularly areas within slopes of 15 percent or greater. Additionally, some CIP projects (primarily sewer pipelines and the parallel outfall) are located within areas of high soil expansion potential. Therefore, CIP projects proposed under the 2018 Master Plan may expose structures to the adverse effects to seismic ground shaking, liquefaction, landslides and expansive soils. This could be considered a significant impact.

Implementation of the following mitigation measure would reduce the exposure of people and CIP facilities to substantial adverse effects associated with seismically induced ground shaking, liquefaction potential, landslides, and expansive soils to a less than significant level. CEQA analysis has been conducted separately for CIP projects R-1, R-7, SP-2, SP-3, SP-11, and SP-12; therefore, these projects are not subject to the mitigation measure identified below.

- Geo-1 Site-specific Geotechnical Investigation. Prior to construction of proposed CIP projects, a site-specific geotechnical investigation shall be conducted to determine whether geologic or other hazardous conditions exist and, if so, provide recommendations for construction that would reduce the damage potential. Areas of liquefaction; static or ground shaking-induced landslides, lateral spreading, subsidence, liquefaction, soil collapse, expansive soils, and/or mudslide potential shall be identified as part of the geotechnical investigation. The investigations shall specifically address foundation and slope stability in liquefiable, landslide, expansive soils and mudslide areas proposed for construction. Recommendations made in conjunction with the geotechnical investigations shall be implemented during construction, including (as appropriate) but not necessarily limited to the following actions:
 - 1. Over-excavate unsuitable materials and replace them with engineered fill.
 - 2. For thinner deposits, remove loose, unconsolidated soils and replace with properly compacted fill soils, or apply other design stabilization features (i.e., excavation of overburden).
 - 3. For thicker deposits, implement applicable techniques such as dynamic compaction (i.e., dropping heavy weights on the land surface), vibrocompaction (i.e., inserting a vibratory device into the liquefiable sand), vibroreplacement (i.e., replacing sand by drilling and then vibro-compacting backfill in the bore hole), or compaction piles (i.e., driving piles and densifying surrounding soil).
 - 4. Lower the groundwater table to below the level of liquefiable soils.
 - 5. Perform in-situ densification of soils or other alterations to the ground characteristics.
 - 6. For landslides, implement applicable techniques such as stabilization (i.e., construction of buttress fills, retaining walls, or other structural support to remediate the potential for instability of cut slopes composed of landslide debris); remedial grading and removal of landslide debris (e.g., overexcavation and recompaction); or avoidance (e.g., structural setbacks).
 - 7. To minimize or avoid lateral spreading of on-site soils, remove compressible soils and replace them with properly compacted fill, perform compaction grouting or deep dynamic compaction, or use stiffened conventional foundation systems.
 - 8. To minimize or avoid differential compression or settlement of on-site soils, manage oversized material (i.e., rocks greater than 12 inches) via off-site disposal, placement in non-structural fill, or crushing or pre-blasting to generate material less than 12 inches. Oversized material greater than 4 feet shall not be used in fills, and shall not be placed within 10 feet of finished grade, within 10 feet of manufactured slope faces (measured horizontally from the slope face), or within 3 feet of the deepest pipeline or other utilities.

9. Locate foundations and larger pipelines outside of cut/fill transition zones and landscaped irrigation zones.

As part of the geotechnical investigation, a database search of hazardous materials sites pursuant to Government Code Section 65962.5 shall be performed within a one-mile radius surrounding the proposed CIP site. If the database search identifies hazardous material sites within the search parameters, a Phase I environmental assessment shall be required. In the event hazardous materials sites are identified within the database search and a Phase I Environmental Site Assessment is required, VWD shall retain a registered environmental assessor to perform a Phase I Environmental Site Assessment.

The Phase I Environmental Site Assessment shall follow the current ASTM standard and the recommendations contained within the Phase I Environmental Site Assessment shall be implemented according to standard regulatory procedures.

FINDING: For the reasons stated in the Final PEIR (see Final PEIR pages 4.5-13 through 4.5-24 of the Final PEIR), the VWD Board finds that implementation of the 2018 Master Plan could result in the potential for structures to be significantly impacted from seismic and/or geologic hazards. Changes or alterations have been required in or incorporated into the 2018 Master Plan which avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Implementation of mitigation measure Geo-1 would reduce potentially significant impacts to structures from seismic or geologic hazards to below a level of significance.

2. Construction activities associated with CIP projects could result in soil erosion or loss of topsoil.

Grading, excavation, on-site soils balancing and soil stockpiling operations would have the potential to expose soils to wind erosion and substantial erosion or topsoil loss during a rain event. Soil removal associated with grading and excavation activities would reduce soil cohesion, which could accelerate erosion. Increased erosion and soil loss could impact soil stability, in addition to causing indirect effects on communities and sensitive biological resources downstream of the proposed CIP project site.

Construction activities associated with CIP facilities would have the potential to result in substantial soil erosion or loss of topsoil. This would be considered a significant impact.

Implementation of mitigation measure Geo-2 would reduce construction-related impacts associated with soil erosion or loss of topsoil to a less than significant level. CEQA analysis has been conducted separately for CIP projects R-1, R-7, SP-2, SP-3, SP-11, and SP-12; therefore, these projects are not subject to the mitigation measures identified below.

Geo-2 Construction-Related Erosion Control Plan. The construction bid documents for each proposed CIP project shall include either a 90 percent Erosion Control Plan (for projects that would result in less than one acre of land disturbance) or a 90 percent Storm Water Pollution Prevention Plan (SWPPP)

(for projects that would result in one acre or greater of land disturbance). The Erosion Control Plan shall comply with the storm water regulations or ordinances of the local agency jurisdiction within which the proposed CIP project occurs; the SWPPP shall comply with the National Pollutant Discharge Elimination System (NPDES) General Construction Permit. These plans shall be based on site-specific hydraulic and hydrologic characteristics, and identify a range of Best Management Practices (BMPs) to reduce impacts related to storm water runoff, including sedimentation BMPs to control soil erosion. The Erosion Control Plan or SWPPP shall identify the specific storm water BMPs to be implemented during the construction phase of a given CIP project. Typical BMPs to be implemented as part of the Erosion Control Plan or SWPPP may include, but may not be limited to, the actions listed below.

- 1. Development of a written plan that includes sequencing of construction activities and the implementation of erosion control and sediment control BMPs that shall take local climate (rainfall, wind, etc.) into consideration. The purpose of the written plan is to reduce the amount and duration of soil exposed to erosion by wind, rain, runoff, and vehicle tracking, and to perform the construction activities and control practices in accordance with the planned schedule.
- 2. Preserve existing vegetation to minimize the potential of removing or injuring existing trees, vines, shrubs, and grasses that protect soil from erosion.
- 3. Use hydraulic mulch on disturbed soils to provide a layer of temporary protection from wind and water erosion.
- 4. Temporarily protect exposed soils from erosion by water and wind by applying hydraulic seeding, hydroseeding, or other appropriate soil cover.
- 5. Divert runoff or channel water to a desired location by constructing earth dikes or drainage swales. A drainage swale is a shaped and sloped depression in the soil surface used to convey runoff to a desired location. Earth dikes and drainage swales are used to divert off-site runoff around the construction site to divert runoff from stabilized areas and disturbed areas, and direct runoff into sediment basins or traps.
- 6. Prevent scour of the soil caused by concentrated, high velocity flows by providing outlet protection; a physical device composed of rock, grouted riprap, or concrete rubble, which is placed at the outlet of a pipe or channel.
- 7. Apply a compost blanket to slopes and earth-disturbed areas to prevent erosion, and in some cases, increase infiltration and/or establish vegetation. The compost blanket can be applied by hand, conveyor system, compost spreader, or pneumatic delivery (blower) system. The blanket thickness is determined from the slope steepness and anticipated precipitation. A compost blanket protects the soil surface from raindrop erosion, particularly rills and gullies that may form under other methods of erosion control.

- 8. Detain sediment-laden water, promoting sedimentation behind a silt fence. A silt fence is made of a woven geotextile that has been entrenched, attached to supporting poles, and sometimes backed by a plastic or wire mesh for support.
- 9. Contain sediment-laden runoff in a sediment trap, allowing sediment to settle out before the runoff is discharged. Sediment traps are formed by excavating or constructing an earthen embankment across a waterway or low drainage area.
- 10. Place fiber rolls at the toe and on the face of slopes along the contours. Fiber rolls intercept runoff, reduce its flow velocity, release the runoff as sheet flow, and provide removal of sediment from the runoff (through sedimentation). By interrupting the length of a slope, fiber rolls can reduce sheet and rill erosion until vegetation is established.
- 11. Intercept or divert sheet flows with a sandbag barrier on a level contour. Sandbag barriers placed on a level contour pond sheet flow, allowing sediment to settle out.
- 12. Construct a straw bale barrier to pond sheet-flow runoff and allow sediment to settle out. A straw bale barrier is a series of straw bales placed on a level contour to intercept sheet flows.

FINDING: For the reasons stated in the Final PEIR (see pages 4.5-19 through 4.5-22 of the Final PEIR), the VWD Board finds that implementation of the 2018 Master Plan could result in potentially significant impacts due to increased soil erosion or topsoil loss. Changes or alterations have been required in or incorporated into the 2018 Master Plan which avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Implementation of mitigation measures Geo-2 would reduce potentially significant impacts from soil erosion or topsoil loss to below a level of significance.

3. Construction of CIP projects proposed within the Santiago formation has the potential to disturb or destroy paleontological resources.

The Santiago formation has produced so much paleo-environmental information that the County of San Diego Department of Land Use and Planning has assigned it to the special category of Very High Sensitivity. Excavation and construction activities associated with proposed CIP projects located within the Santiago formation have the potential to disturb or destroy paleontological resources. Proposed CIP projects located within or near the Santiago formation include SP-6, SP-13, SP-15, SP-19, SP-20, SP-23, SP-28, SP-29, R-1, R-3, R-7, and the parallel land outfall. Construction of these CIP projects could impact paleontological resources, which would be considered a significant impact.

Implementation of mitigation measure Geo-3 would reduce potential impacts associated with disturbance of paleontological resources to a less than significant level. CEQA analysis has been conducted separately for CIP projects R-1, SP-2, SP-3, SP-11, and SP-12; therefore, these projects are not subject to the mitigation measures identified below.

- **Geo-3** Paleontological Resources Investigation. For CIP projects that propose ground-disturbing activities located within the Santiago formation (potentially SP-6, SP-13, SP-15, SP-19, SP-20, SP-23, SP-28, SP-29, R-1, R-3, R-7, and the parallel land outfall), a project-level paleontological resources investigation shall be conducted by a qualified professional paleontologist in cooperation with the County of San Diego and the San Diego Natural History Museum. The paleontological resources investigation shall include:
 - 1. A review of the records search performed in the Paleontological Resources Evaluation for the VWD Service Area and, if necessary, an updated records search;
 - 2. Project-level pedestrian surveys of portions of the proposed CIP site where paleontological resources could be encountered based on presence and depth of sensitive formations;
 - 3. Formal evaluation of any potentially affected paleontological resources to determine whether they qualify as unique paleontological resources; and
 - 4. Recommended measures to avoid, where feasible, impacts on unique paleontological resources, such as preservation in place, planning construction to avoid unique paleontological sites, placing paleontological sites into permanent conservation easements, or planning parks, green space, or other open space to incorporate paleontological sites. Where avoidance or preservation in place is not feasible, excavation and curation may be recommended as mitigation.
 - 5. The results of the paleontological resources investigation shall be compiled into a technical report or memorandum and submitted to VWD for further coordination with the County of San Diego Department of Planning and Land Use and the San Diego Natural History Museum, as necessary.

FINDING: For the reasons stated in the Final PEIR (see pages 4.5-22 through 4.5-24 of the Final PEIR), the VWD Board finds that implementation of the 2018 Master Plan could result in potential impacts to paleontological resources. Changes or alterations have been required in or incorporated into the 2008 Master Plan which avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Implementation of mitigation measure Geo-3 would reduce potentially significant impacts to paleontological resources to below a level of significance.

Hydrology and Water Quality

1. Above-ground 2018 Master Plan CIP projects (reservoirs, pump and lift stations) could be subject to potential damage by a mudflow.

The VWD service area contains many areas with steep slopes, or mountainous areas, that would be subject to mudflows in the event of large amounts or precipitation. The 2018

Master Plan involves no housing or human occupancy; therefore, life loss would not occur in the event of a mudflow. However, in the event of a mudflow CIP projects that include above-ground facilities such as reservoirs, lift and pump stations would have the potential to be at risk of structure loss.

Implementation of Geo-1 (described in Section 4.5, Geology, Soils, and Paleontology, identified above and incorporated herein) would reduce the exposure of above-ground CIP facilities to substantial adverse effects associated with mudflows to a less than significant level; therefore, no additional mitigation is required. CEQA analysis has been conducted separately for CIP projects R-1, R-7, SP-11, and SP-12; therefore, these projects are not subject to mitigation measure Geo-1.

FINDING: For the reasons stated in the Final PEIR (see pages 4.7-23 through 4.7-25 of the Final PEIR), the VWD Board finds that implementation of the 2018 Master Plan could result in potentially significant impacts from mudflows. Changes or alterations have been required in or incorporated into the 2008 Master Plan which avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Implementation of mitigation measure Geo-1 would reduce potentially significant impacts to below a level of significance. All other hydrology and water quality impacts are less than significant and no mitigation is required (see pages 4.7-15 through 4.7-28 of the Final PEIR).

Landform Alteration and Aesthetics

1. Construction of CIP projects and access roads could both temporarily and permanently degrade the existing visual character and quality of project sites and their surroundings during construction and in areas without existing VWD facilities.

Temporary visual impacts would occur from construction of all types of CIP projects, including pipelines, water storage reservoirs, pump/lift stations, and pipeline access roads primarily through the removal or alteration of existing vegetation. Short-term construction impacts would remain significant unless disturbed areas were revegetated to ensure that all disturbed areas of the construction site return to preexisting visual character conditions, to the extent feasible, after completion of construction. This would be considered a significant impact.

Additionally, one CIP reservoir project, R-11, would be constructed in an area that is currently undeveloped and characterized by chaparral habitat. Water storage reservoirs would typically be the most visible of the proposed CIP projects because the function of these facilities requires them to be located at higher elevations, often on hillsides, hilltops, or ridges. The construction of CIP project would place an above-ground facility in an undeveloped area, which would alter the visual character of the existing natural setting. This would be considered a significant impact.

Further, the construction of access roads, in addition to supporting features and highcontrast or highly reflective coatings, through the VWD open easement within an area where the existing visual character is primarily undeveloped would permanently alter the color, texture, and pattern of the naturally vegetated landscape. This change in visual character is considered a potentially significant impact.

Implementation of the following mitigation measures would reduce impacts associated with incompatible visual character to a less than significant level. CEQA analysis has been conducted separately for CIP projects R-1, R-7, SP-11, and SP-12; therefore, these projects are not subject to the mitigation measures identified below:

- Aes-1 Landscaping Measures. The following landscaping measures shall be implemented for all CIP projects:
 - 1. For proposed pipeline projects and access roads installed in naturally vegetated areas, the short-term disturbance footprints associated with construction for the pipeline corridor and associated staging areas (with the exception of the drivable pathway, which will remain clear) shall be hydroseeded, following backfilling and recontouring, using a non-irrigated native plant mix consistent with original site conditions and surrounding vegetation.
 - 2. For proposed CIP reservoirs, pump stations, lift stations, and access roads in naturally vegetated settings, any disturbed unpaved areas following construction that are not designated for vehicular or pedestrian access shall be revegetated (hydroseeding and/or plantings) using native plant materials consistent with original site conditions and surrounding vegetation. A temporary irrigation system will be installed and maintained by VWD, or watering trucks will be used at a frequency to be determined by VWD to maintain successful plant growth. Temporary irrigation shall be discontinued upon VWD's determination that the landscaping has permanently established, without the need for supplemental watering.
 - 3. For proposed CIP reservoirs, pump stations and lift stations in urban settings, any disturbed unpaved areas following construction that are not designated for vehicular or pedestrian access shall be landscaped using plant materials consistent with original site conditions and/or surrounding ornamental vegetation in order to return the disturbed area to its existing visual character.
 - 4. The landscaping plan for CIP reservoirs, pump stations, and lift stations shall include the planting of large trees and/or shrubs in addition to native vegetation, where appropriate, to adequate provide screening of the proposed structures.
- Aes-2 Visually Compatible Design. The following design measures shall be implemented for all CIP projects that include aboveground facilities (including access roads):
 - 1. Reservoirs and access roads shall use appropriate building materials and color palettes that are visually consistent with the surrounding natural vegetation and/or built environment.

- 2. Reservoirs, pump station buildings, access roads and lift station buildings shall use low-reflective low-glare paint and materials unless required for safety or by law.
- 3. Access roads shall be designed to minimize grading, slope ratios and the blockage of existing views when possible. Access roads will not contain features such as asphalt coating, lighting fixtures, signage, guard rails, walls, fences, curbing, pavement marking, or other service structures or appurtenances unless required for safety or by law.
- 4. Areas of temporary disturbance will be revegetated to minimize visual incongruity with the surrounding landscape.

FINDING: For the reasons stated in the Final PEIR (see pages 4.8-7 through 4.8-21 of the Final PEIR), the VWD Board finds that implementation of the 2018 Master Plan could result in potentially significant impacts to visual character and quality. Changes or alterations have been required in or incorporated into the 2018 Master Plan which avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Implementation of mitigation measures Aes-1 and Aes-2 would reduce potentially significant impacts to below a level of significance.

2. CIP project R-11 would be located on an undeveloped hillside within the Merriam Mountains Resource Conservation Area and construction of the proposed reservoir has the potential to adversely impact scenic vistas and views.

CIP project R-11 is located within the unincorporated county of San Diego, and is located within the Merriam Mountains Resource Conservation Area. The proposed location for CIP project R-11 is on an undeveloped hillside within the Merriam Mountains Resource Conservation Area. The hill proposed for CIP project R-11 is the highest landform within a 2,000-foot radius of CIP project R-11 and would be visible from lower elevations to the north, east and south, which are currently undeveloped land characterized by chaparral habitat. Because CIP project R-11 is located within the Merriam Mountains Resource Conservation Area, an area designated as requiring special attention in order to conserve resources, including scenic vistas, scenic natural resources and astronomical dark skies, construction of this CIP project has the potential to impact scenic vistas.

Implementation of the following mitigation measure would reduce scenic vista impacts from CIP project R-11 to a less than significant level:

Aes-3 Visual Resources Report. Prior to construction of proposed CIP Project R-11, a Visual Resources Report shall be prepared. The Visual Resources Report shall analyze the compatibility of the proposed reservoir with the existing aesthetic character of the surrounding area; assess the potential effect to the visual resources within the Resource Conservation Area, and determine whether any proposed security or emergency lighting would be detrimental to adjacent residential uses and/or wildlife.

FINDING: For the reasons stated in the Final PEIR (see pages 4.8-19 and 4.8-20 of the Final PEIR), the VWD Board finds that implementation of the 2018 Master Plan could result in potentially significant impacts to scenic vistas. Changes or alterations have been required in or incorporated into the 2018 Master Plan which avoid or substantially lessen the significant environmental effect as identified in the Final PEIR.

Implementation of mitigation measure Aes-3 would reduce potentially significant impacts to below a level of significance.

3. Lighting associated with CIP projects would be limited to emergency lighting and temporary security lighting and would not create a substantial new lighting source. Glare impacts could occur from sunlight reflecting off of above-ground CIP facilities.

Potential impacts from glare could occur from the sunlight reflecting from the proposed reservoirs, pump station building surfaces lift station building surfaces or access roads. Implementation of Aes-1 and Aes-2 would reduce potential impacts associated with lighting and daytime glare from proposed CIP reservoirs, pump stations, lift stations and access roads to a less than significant level. No further mitigation is required.

FINDING: For the reasons stated in the Final PEIR (see pages 4.8-18 and 4.8-19 of the Final PEIR), the VWD Board finds that implementation of the 2018 Master Plan could result in potential impacts from increased glare. Changes or alterations have been required in or incorporated into the 2008 Master Plan which avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Implementation of mitigation measures Aes-1 and Aes-2 (identified above and incorporated herein) would reduce potentially significant impacts to below a level of significance.

Land Use and Planning

1. The 2018 Master Plan has the potential to conflict with local land use policies and result in incompatibilities with surrounding land uses.

The 2018 Master Plan's compatibility with local land use plans and policies has been addressed in a variety of different sections within the Final PEIR. The potential for the 2018 Master Plan to conflict with or obstruct implementation of an applicable air quality plan or violate any air quality standard is addressed in Sections 4.1.3.1 and 4.1.3.2 (Air Quality Issues 1 and 2) of this PEIR. The potential for the 2018 Master Plan to conflict with any local policies or ordinances protecting biological resources or to conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional or state habitat conservation plan is addressed in Sections 4.2.3.4 and 4.2.3.5 (Biological Resources Issues 4 and 5) of this PEIR. The potential for the 2018 Master Plan to result in or expose people to noise levels in excess of standards established in applicable noise plans, noise ordinances, or noise standards is addressed in Sections 4.10.3.1 and 4.10.3.2 (Noise Issues 1 and 2) of this PEIR. Further, PEIR Table 4.9-1 summarizes the consistency of the 2018 Master Plan with local community policies, including HCPs or NCCPs, and other local policies adopted for the purpose of avoiding an environmental impact. Consistency with local community policies also ensures that any

potential impacts that would result in incompatibility with adjacent land uses, such as dust and noise from construction activity, which could impact sensitive receptors or air quality objectives, potential impacts associated with scenic vistas or community aesthetic character, or potential public safety hazards, would be avoided.

With implementation of mitigation measures identified in the following sections, the 2018 Master Plan would be compatible with adjacent land uses and impacts would be reduced to a level below significant: Section 4.1 (Air Quality), Section 4.2 (Biological Resources), Section 4.3 (Cultural Resources), Section 4.5 (Geology, Soils, and Paleontology), Section 4.7 (Hydrology and Water Quality), Section 4.8 (Landform Alteration and Aesthetics), Section 4.10 (Noise), and Section 4.11 (Public Safety). CEQA analysis has been conducted separately for CIP projects R-1, R-7, SP-11, and SP-12; therefore, these projects are not subject to these mitigation measures. Specifically, implementation of measures Air-1, Bio-1A, Bio-1B, Bio-1C, Bio-1D, Bio-1E, Bio-1F, Bio-1G, Bio-1H, Bio-1I, Bio-1J, Bio-2A, Bio-2B, Bio-2C, Bio-3A, Bio-3B, Bio-4A, Bio-4B, Bio-4C, Cul-1, Cul-2, Cul-3, Cul-4, Geo-1, Geo-2, Geo-3, Aes-1, Aes-2, Aes-3, and Noi-1.

FINDING: For the reasons stated in the Final PEIR (see pages 4.9-13 through 4.9-18 of the Final PEIR), the VWD Board finds that implementation of the 2018 Master Plan could result in potential conflicts with local land use policies and surrounding land uses. Changes or alterations have been required in or incorporated into the 2018 Master Plan which avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Implementation of various mitigation measures identified in the environmental topic sections of this PEIR would reduce potentially significant impacts to below a level of significance.

Noise

1. Construction of CIP projects would temporarily increase ambient noise levels in the project vicinity.

Construction of CIP projects proposed under the 2018 Master Plan could result in temporary increases in ambient noise levels. Equipment that would be associated with construction of the proposed CIP projects includes dozers, rollers, dewatering pumps, backhoes, loaders, and delivery trucks. Temporary noise impacts associated with construction and blasting activities have the potential to exceed the applicable local noise ordinances and regulations, including the County of San Diego, the City of San Marcos, City of Vista, City of Escondido and City of Carlsbad.

Implementation of mitigation measure Noi-1 would reduce impacts associated with a substantial temporary or periodic increase in ambient noise to a level below significance:

Noi-1 Construction Noise Limits. Construction activities shall comply with applicable local noise ordinances and regulations specifying sound control, including the County of San Diego, the City of San Marcos, the City of Escondido, the City of Carlsbad, and the City of Vista. Measures to reduce construction/demolition noise to the maximum extent feasible will be included in contractor specifications and will include, but not be limited to, the following:

- 1. Construction activity shall be restricted to the hours specified within each respective jurisdiction's municipal code, depending on the location of the specific CIP project, as follows:
 - a. Construction activity for CIP projects occurring within San Diego County shall occur between the hours of 7:00 a.m. and 7:00 p.m., Monday through Saturday (see Table 4.10-1 of the Final PEIR). For construction activities on Sunday or during night hours, a variance from the County must be obtained. CIP projects subject to this provision include R-3, R-4, R-5, R-6, R-9, R-10, R-11, PS-3, PS-4, PS-5, PS-7, P-16 & P-56, P-30, P-64, P-42, SP-15, SP-22, SP-31, and P-600.
 - b. Construction activity for CIP projects occurring within the City of San Marcos shall occur between the hours of 7:00 a.m. and 6:00 p.m., Monday through Friday, and between the hours of 8:00 a.m. and 5:00 p.m. on Saturdays. For construction activities on Sunday or during night hours, a waiver from the City Manager must be obtained. CIP projects subject to this provision include PS-6, PS-8, P-100, P-101, P-300, P-301, P-400, P-15, SB-1, SP-5, SP-6, SP-8, SP-9, SP-10, SP-18, SP-19, SP-20, SP-21, SP-23, SP-24, SP-25, SP-26, SP-27, SP-28, SP-31, SP-33, SP-34, SP-35, and SP-36.
 - c. Construction activity for CIP projects occurring within the City of Escondido shall occur only between the hours of 7:00 a.m. to 6:00 p.m., Monday through Friday, and between the hours of 9:00 a.m. to 5:00 p.m. on Saturdays (see Table 4.10-3 of the Final PEIR). For construction activities on Sunday or during night hours, a variance from the City Manager must be obtained. CIP projects subject to this provision include R-8, PS-2, P-43, P-100, P-400, and SP-22.
 - d. Construction activity for CIP projects occurring within the City of Carlsbad shall occur between 7:00 a.m. and before sunset, Monday through Friday, and between 8:00 a.m. and sunset on Saturday; construction shall be prohibited on Sundays and federal holidays. For construction activities on Sundays, federal holidays, or during night hours, a permit from the City must be obtained. Projects subject to this provision include SP-6 and SP-13 and the parallel land outfall.
- 2. Construction noise for CIP projects located within San Diego County, City of Vista, and City of San Marcos shall not exceed an average sound level of 75 dB(A) for an eight-hour period at the CIP project's property boundary.
- 3. Construction noise for CIP projects located within the City of Escondido shall not exceed a one-hour average sound level limit of 75 dB(A) at any time, unless a variance has been obtained from the City Manager.
- 4. All construction equipment shall be properly outfitted and maintained with manufacturer-recommended noise-reduction devices.

FINDING: For the reasons stated in the Final PEIR (see pages 4.10-10 through 4.10-20 of the Final PEIR), the VWD Board finds that implementation of the 2018 Master Plan could result in significant impacts from excessive ambient noise. Changes or alterations have been required in or incorporated into the 2008 Master Plan which avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Implementation of mitigation measure Noi-1 would reduce potentially significant impacts to below a level of significance. All other noise impacts are less than significant and no mitigation is required (see pages 4.10-10 through 4.10-12 and pages 4.10-15 and 4.10-16 of the Final PEIR).

Public Safety

1. Excavation or trenching activities associated with construction of CIP projects could result in the accidental release of a hazardous material, resulting in a hazard to the public or the environment.

The potential exists for CIP project sites to have been previously contaminated by hazardous substances as a result of former uses of the sites, leaks from unidentified underground storage tanks, or unidentified buried debris that could contain hazardous substances or hazardous by-products. Typical pathways of exposure to pollutants from existing contamination include inhalation of volatiles and fugitive particulates, dermal absorption, and ingestion of contaminated groundwater caused by migration of chemicals through soil to an underlying potable aquifer. Potential exposure to contaminants could also occur to construction workers during grading, trenching, excavation and site development activities. Construction activities could also uncover underground storage tanks or other buried hazards. Due to the potential for unknown contamination to occur on a CIP project site, this could be considered a potentially significant impact.

With the implementation of mitigation measure Geo-1, which requires a site-specific geotechnical investigation and a hazardous materials database search, impacts would be reduced to a level below significance. No further mitigation is required.

FINDING: For the reasons stated in the Final PEIR (see pages 4.11-7 through 4.11-16 of the Final PEIR), the VWD Board finds that implementation of the 2018 Master Plan could result in potentially significant impacts to the public or the environment from listed hazardous materials sites. Changes or alterations have been required in or incorporated into the 2018 Master Plan which avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Implementation of mitigation measure Geo-1 would reduce potentially significant impacts to below a level of significance. All other public safety impacts are less than significant and no mitigation is required (see pages 4.11-7 through 4.11-16 of the Final PEIR).

Cumulative Impacts and Mitigation Measures

Section 15130(a) of the CEQA Guidelines requires that a PEIR discuss the cumulative impacts of a project when the project's incremental effect is determined to be cumulatively considerable. The discussion of cumulative impacts must evaluate whether the impacts of the project will be significant when considered in combination with past, present, and

future reasonably foreseeable projects, and whether the project would make a cumulatively considerable contribution to those impacts.

The Final PEIR found that the 2018 Master Plan's contribution to the following cumulative impacts would be less than significant with the implementation of mitigation measures: air quality (see pages 4.1-17 through 4.1-20 of the Final PEIR); biological resources (see pages 4.2-98 through 4.2-101 of the Final PEIR); cultural resources (see pages 4.3-21 and 4.3-22 of the Final PEIR); geology, soils, and paleontology (see pages 4.5-24 and 4.5-25 of the Final PEIR); greenhouse gas emissions (see page 4.6-15 of the Final PEIR); hydrology and water quality (see pages 4.7-26 through 4.7-28 of the Final PEIR); landform alteration and aesthetics (see pages 4.8-19 through 4.8-21 of the Final PEIR); and public safety (see pages 4.11-14 through 4.11-16 of the Final PEIR). The Final PEIR found that the 2018 Master Plan would not result in any cumulatively considerable impacts with implementation of specific mitigation measures, identified above.

FINDING: For the reasons stated in the Final PEIR, the VWD Board finds that implementation of the 2018 Master Plan would not result in any cumulatively considerable contributions to cumulatively significant impacts.

C. Other CEQA Findings

1. Findings Relating to Growth Inducement

As required by CEQA Guidelines Section 15126.2(d), an EIR must include a discussion of the ways in which a proposed project could directly or indirectly foster economic development or population growth, and how that growth would affect the surrounding environment. Implementation of the 2018 Master Plan would not directly create or induce growth within the planning area because the VWD has no land use authority and cannot approve land development. As stated above, indirect growth may result from the removal of physical impediments or restrictions to growth, as well as the removal of planning impediments resulting from land use plans and policies. In this context, physical growth impediments may include nonexistent or inadequate access to an area or the lack of essential public services, while planning impediments may include restrictive zoning and/or general plan designations.

The majority of the CIP projects within the 2018 Master Plan would be constructed at sites that contain existing VWD facilities. These projects would not result in indirect growth effects because they would not extend new infrastructure into areas without existing infrastructure and would not encourage growth in a region without existing infrastructure. The construction of new CIP facilities within undeveloped areas would be phased commensurate with growth; therefore, these projects would also not result in indirect growth effects because the timing of implementation is intended to serve the water delivery and wastewater service needs of specified planned developments as they are approved. In other words, none of the CIP projects proposed within the 2018 Master Plan would be developed in anticipation of unforeseen or unplanned future growth. Therefore, implementation of the 2018 Master Plan would not be growth-inducing because it would not remove an impediment to growth.

Furthermore, construction of CIP projects proposed as part of the 2018 Master Plan could generate a small number new jobs throughout the VWD service area, but this additional economic activity would be incremental compared to the economic growth of the greater San Diego region. Therefore, implementation of the 2018 Master Plan would not be growthinducing because it would not foster substantial economic expansion or growth in the region.

2. Findings Relating to Irreversible Environmental Effects

Section 15126.2(c) of the CEQA Guidelines requires a discussion of any significant irreversible environmental changes that would be caused by a proposed project. Development of potable water infrastructure under the 2018 Master Plan would allow VWD to continue to supply water to its current and projected future users within the VWD service area. Resources that would be permanently and continually consumed by implementation of the 2018 Master Plan include water, electricity, natural gas, and fossil fuels. However, the amount and rate of consumption of these resources would not result in significant environmental impacts or the unnecessary, inefficient, or wasteful use of resources for the reasons given in PEIR Section 5.2 and PEIR Section 4.4 (Energy). Nonetheless, construction and operations associated with implementation of the 2018 Master Plan would result in the irretrievable commitment of nonrenewable energy resources. It is also possible that new technologies or systems would emerge, or would become more cost-effective or user-friendly, upon which VWD may rely to further reduce their reliance on nonrenewable energy resources. Overall, the consumption of natural resources associated with implementation of the 2018 Master Plan is expected to increase at a lesser rate than the projected population increase within the service area due to the variety of energy conservation measures that VWD will continue to implement, expand and develop to achieve energy efficiency for their construction and operational activities (refer to PEIR Section 4.4, Energy).

The CEQA Guidelines also require a discussion of the potential for irreversible environmental damage caused by an accident. As discussed in PEIR Section 4.11 (Public Safety), VWD uses, transports, stores, and disposes of hazardous materials in accordance with applicable federal, state and local regulations, as well as with existing VWD programs, practices, and procedures related to hazardous materials, to reduce the likelihood and severity of accidents that would result in irreversible environmental damage. Therefore, compliance with existing regulations and implementation of mitigation measure Geo-1 would reduce hazards to the public or the environment through the transport, storage, use, or disposal of hazardous materials during CIP operations, and associated accidental releases of hazardous materials into the environment and near schools, to a less than significant level.

D. Alternatives

Because the 2018 Master Plan will potentially cause significant environmental effects, the VWD Board must consider the feasibility of an environmentally superior alternative to the 2018 Master Plan. The VWD Board must evaluate whether these alternatives could avoid

or substantially lessen the unavoidable significant environmental effects while achieving most of the objectives of the Master Plan (see Table 6-2 of the Final PEIR). Chapter 6 of the Final PEIR evaluates a range of potential alternatives to the 2018 Master Plan. In compliance with CEQA and the CEQA Guidelines, the alternatives analysis also includes an analysis of a No Project Alternative and discusses the Environmentally Superior Alternative. The analysis examines the feasibility of each alternative, the environmental impacts of each alternative, and the ability of each alternative to meet the Master Plan objectives identified in Section 3.1 and Section 6-1 of the Final PEIR (see pages 3-1, 3-2, and 6-2 of the Final PEIR).

The VWD Board has independently reviewed and considered the information on alternatives provided in the Final PEIR and the administrative record, and finds that all the alternatives would either not meet the majority of the Master Plan objectives or would hinder VWD's ability to meet the future water and wastewater demands of its service area in comparison to the 2018 Master Plan, for the reasons set forth below.

1. Master Plan Objectives

The VWD Board finds that the objectives for the 2018 Master Plan are as described in Chapter 3 of the Final PEIR. The goals and objectives of the 2018 Master Plan include the following actions:

- 1. Plan facilities to meet treated and untreated water demand and supply projections;
- 2. Optimize the use of existing infrastructure;
- 3. Protect the public's health, safety, and welfare by maintaining a safe and reliable water supply;
- 4. Plan facilities that are cost-effective;
- 5. Develop facility plans adaptive to changes in future conditions;
- 6. Update water demands and wastewater flows based on current land uses, approved land uses, and projected growth-based land uses using CIP phasing periods corresponding with the phases used in relevant growth projection data.
- 7. Ensure that proposed CIP facilities are designed and sized to serve the "build-out" land use through either upgrades of existing facilities or expansion of the existing system, and to construct CIP projects within existing rights-of-way, to the extent feasible, to avoid and minimize environmental impacts.
- 8. Update VWD's wastewater treatment capacity needs at both Encina Water Pollution Control Facility and Meadowlark Water Reclamation Facility, and review and update wastewater land outfall capacity needs based on the new wastewater flow forecast.

2. Alternatives to the 2018 Master Plan

The evaluation of environmental impacts in the PEIR concluded that the 2018 Master Plan would not result in temporary or permanent significant and unavoidable effects for any of the environmental issue areas analyzed. However, a range of feasible alternatives to the proposed Project was nonetheless developed to provide additional information and flexibility to the decision-makers when considering the 2018 Master Plan.

Where significant impacts are identified, section 15126.6 of the State CEQA Guidelines requires EIRs to consider and discuss alternatives to the proposed actions. Subsection (a) states:

(a) An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation. An EIR is not required to consider alternatives which are infeasible. The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason.

Subsection 15126.6(b) states the purpose of the alternatives analysis:

(b) Because an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment (Public Resources Code Section 21002.1), the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.

In subsection 15126.6(c), the State CEQA Guidelines describe the selection process for a range of reasonable alternatives:

(c) The range of potential alternatives to the proposed project shall include those that could feasibly accomplish most of the basic objectives of the Project and could avoid or substantially lessen one or more of the significant effects. The EIR should briefly describe the rationale for selecting the alternatives to be discussed. The EIR should also identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency's determination. Additional information explaining the choice of alternatives may be included in the administrative record. Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are: (i) failure to meet most of the basic project objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental impacts.

The range of alternatives required is governed by a "rule of reason" that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed Project. Alternatives are limited to ones that would avoid or substantially lessen any of the significant effects of the Project. Of those alternatives, the EIR need examine in detail only the ones that the lead agency determines could feasibly attain most of the basic objectives of the Project.

However, when a project would not result in any significant and unavoidable impacts, the lead agency has no obligation to consider the feasibility of alternatives to lessen or avoid environmental impacts, even if the alternative would reduce the impact to a greater degree than the proposed Project. (Pub. Res. Code § 21002; Laurel Hills Homeowners Association v. City Council (1978) 83 Cal.App.3d 515, 521; Kings County Farm Bureau v. City of Hanford (1990) 221 Cal.App.3d 692, 730-731; Laurel Heights Improvement Assn. v. Regents of the University of California (1988) 47 Cal.3d 376, 400-403.)

Consistent with the above, the PEIR analyzed three alternatives to the proposed 2018 Master Plan: No Project Alternative; Reduced Footprint Alternative; and Alternative Outfall Alignment.

No Project Alternative

In accordance with CEQA and the CEQA Guidelines, the Final PEIR evaluates the "No Project Alternative," which compares the impact of approving the 2018 Master Plan with the impact of not approving it.

Description: Under the No Project Alternative, the 2018 Master Plan would not be adopted and none of the proposed CIP projects would be constructed at this time. The existing 2008 Master Plan Update (adopted in 2011) would remain the planning document for the District. The No Project Alternative would not necessarily preclude the future implementation of individual projects listed in the 2008 Master Plan (individual infrastructure projects would still be required to undergo CEQA environmental review).

Environmental Analysis: The No Project Alternative would avoid all of the potentially significant environmental impacts identified for the 2018 Master Plan because no proposed CIP projects from the 2018 Master Plan would be constructed at this time, and the existing adopted 2008 Master Plan would remain the planning document for VWD (the environmental impacts associated with the construction of CIP facilities proposed under the 2008 VWD Master Plan were evaluated in a separate Environmental Impact Report in March 2011 [SCH No. 2010071073]). Compared to the proposed 2018 Master Plan Update, all currently identified impacts related to air quality (odors), biology, cultural resources, geology and soils, hydrology and water quality (mudflows), landform alteration/aesthetics, land use, noise (construction), and public safety (listed hazardous material sites) as a result of the 2018 Master Plan would be avoided under the No Project Alternative.

This conclusion assumes, however, that none of the currently proposed CIP projects would be constructed. In reality, the No Project Alternative does not preclude the future construction of CIP projects. Although future infrastructure projects would still be required to undergo individual environmental review, the impacts would be evaluated on a projectby-project basis and the potential cumulative impact associated with all of the CIP projects within the 2018 Master Plan may not be addressed adequately. In other words, cumulative environmental impacts could potentially be addressed in "piece-meal" manner, which may result in under-estimating the total extent of cumulative environmental impacts in comparison to evaluating the entire 2018 Master Plan at the PEIR level. In addition, this approach restricts the District's ability to properly plan for projected growth and to design infrastructure accordingly. So while new and upgraded infrastructure projects would still occur under this alternative, they would be implemented in a more disorganized, less efficient, and likely more costly manner.

Ability to meet project objectives: The No Project Alternative would not achieve any of the 2018 Master Plan objectives identified in Chapter 3 of the Final PEIR including: updating water demands and wastewater flows based on current land uses; ensuring proposed CIP projects are designed and sized to serve the 2030 population; and updating VWD's wastewater treatment capacity needs at Encina Water Pollution Control Facility and Meadowlark Reclamation Facility. This alternative would hinder VWD's ability to meet the future water demands of its service area because water demands and wastewater flows would not be updated to reflect future demand, CIP facilities would not be properly sized for future demand, and wastewater capacity needs would not be updated to reflect future sever flows.

Further, this alternative would result in more disorganized, less efficient and likely more costly infrastructure projects.

FINDING: Although findings rejecting alternatives in favor of the 2018 Master Plan are not required because the project as proposed would not result in any significant and unavoidable impacts (Pub. Res. Code § 21002), for the reasons set forth above and as discussed further in the PEIR, the VWD Board hereby rejects the No Project Alternative because: (1) it fails to meet any of the project objectives; (2) it fails to reduce or eliminate any significant and unavoidable impacts of the proposed project; and (3) it is infeasible. Each of these reasons provides a separate and independent ground for rejecting the No Project Alternative.

Reduced Footprint Alternative

Description: The Reduced Footprint Alternative would reduce the footprint of the 2018 Master Plan CIP potable water reservoir projects and potable water pump station projects that were determined to result in direct impacts to special status biological species. These CIP projects include R-4, R-5, R-10, PS-3, PS-6, and PS-8. Under the Reduced Footprint Alternative, each of these CIP projects would be reduced in size so that their development footprint would not extend into sensitive habitat. In some cases, the reduction in the development footprint would also result in a reduction in CIP storage and pumping capacity or the reduction in capacity or footprint of an associated CIP storage, pumping, or pipeline project. Under the Reduced Footprint Alternative, no pipelines, storage tanks, or reservoir projects would be increased in capacity or size. Additionally, under this alternative CIP project R-11 would not be constructed, and no CIP projects would be located in areas with designated scenic vistas. Under this alternative, the location and sizes of the parallel land outfall and potable water and wastewater pipelines would remain the same as in the 2008 Master Plan.

Environmental Analysis: The VWD Board considered the Reduced Footprint Alternative as a means of further reducing the 2018 Master Plan's already less than significant potential impacts to biological resources and landform alteration. Under this alternative, potential impacts related to biological resources would be reduced because development footprints would not extend into sensitive habitat. Additionally, impacts related to landform alteration and visual aesthetics would be reduced, because CIP projects would not be located in areas with designated/protected scenic vistas.

Although this alternative would have a reduced overall footprint in comparison to the 2018 Master Plan, it would involve similar types of uses and construction methods. Therefore, for this alternative the following issues would result in a reduced level of impact when compared to the 2018 Master Plan, and impacts would either remain less than significant or would require mitigation to reduce impacts to a less than significant level: cultural resources; geology, soils, and paleontology; hydrology and water quality; land use and planning; and public safety. Any mitigation that would be required for the Reduced Footprint Alternative would be similar to the 2018 Master Plan. More specifically, the Reduced Footprint Alternative's impacts related to air quality, biological resources, energy, GHG emissions, landform alteration and visual aesthetics, and noise compared to the 2018 Master Plan are discussed below.

Ability to meet project objectives: The Reduced Footprint Alternative would meet seven of the eight project objectives identified for the 2018 Master Plan. The one project objective that would not be met is Objective #7: ensure that proposed CIP facilities are sized to serve the "build-out" land use through either upgrades of existing facilities or expansion of the existing system, and to construct CIP projects within existing right-of-ways, to the extent feasible, to avoid and minimize environmental impacts.

Additionally, the Reduced Footprint Alternative may result in VWD not fully satisfying the projected water or wastewater demand within their service area. Therefore, the Reduced Footprint Alternative does not provide a comparative environmental advantage over the 2018 Master Plan.

Finding: Although findings rejecting alternatives in favor of the 2018 Master Plan are not required because the project as proposed would not result in any significant and unavoidable impacts (Pub. Res. Code § 21002), for the reasons set forth above and as discussed further in the PEIR, the VWD Board hereby rejects the Reduced Footprint Alternative because: (1) it fails to reduce or eliminate any significant and unavoidable impacts of the proposed project; and (2) it is infeasible given that it would not satisfy the projected water or wastewater demand within the VWD service area. Each of these reasons provides a separate and independent ground for rejecting the Reduced Footprint Alternative.

Alternative Outfall Alignment

Description: The Alternative Outfall Alignment would revise the proposed location of CIP LO-A1, LO-A2, LO-B, LO-D1, and LO-D2 to avoid areas within and near sensitive biological resources. Under this alternative, these portions of the outfall would not be parallel to the existing outfall, and a greater portion of the outfall may be located within existing street right-of ways than in the 2018 Master Plan. The total length of outfall could be extended in order to avoid the biological resources that would be impacted by the 2018 Master Plan CIP outfall projects. As a result, topographic constraints in alternative outfall alignments could increase construction operations and duration and potentially require the use of lift stations. All other CIP projects would remain the same as those proposed in the 2018 Master Plan.

Environmental Analysis: The VWD Board considered the Alternative Outfall Alignment as a means of reducing the project's already less than significant potential impacts to biological resources associated with the construction on the 2018 Master Plan. The VWD service area would be the same under this alternative as the 2018 Master Plan and all applicable regulations would also apply to the Alternative Outfall Alignment. Therefore, this alternative would result in similar impacts to the following issues compared to the 2018 Master Plan: geology, soils, and paleontology; hydrology and water quality; landform alteration and visual aesthetics; land use and planning; and public safety. Additional environmental impacts could result to air quality, biological resources, cultural resources, energy, GHG emissions, and noise as a result of the alternative outfall alignment and the need to increase construction operations and duration to construct the alternative outfall.

Ability to meet project objectives: The Alternative Outfall Alignment would meet all eight of the objectives identified for the 2018 Master Plan because this alternative would change only the location of the proposed outfall and not the outfall size. Further, all other CIP projects would remain the same as those proposed in the 2018 Master Plan, although the potential exists for more lift stations to be required under this alternative.

Finding: Although findings rejecting alternatives in favor of the 2018 Master Plan are not required because the project as proposed would not result in any significant and unavoidable impacts (Pub. Res. Code § 21002), for the reasons set forth above and as discussed further in the PEIR, the VWD Board hereby rejects the Alternative Outfall Alternative because: (1) it fails to reduce or eliminate any significant and unavoidable impacts of the proposed project; and (2) it potentially could result in increased environmental impacts associated with increased construction operations and duration. Each of these reasons provides a separate and independent ground for rejecting the Alternative Outfall Location Alternative.

Environmentally Superior Alternative

CEQA does not require the VWD Board to choose the environmentally superior alternative. Instead CEQA requires the VWD Board to consider environmentally superior alternatives, explain the considerations that led it to conclude that those alternatives were infeasible from a policy standpoint, weigh those considerations against the environmental impacts of the proposed Project, and make findings that the benefits of those considerations outweighed the harm. However, because the 2018 Master Plan would not result in any significant and unavoidable impacts, the VWD Board is under no obligation to consider or adopt any alternative to the 2018 Master Plan, even if that alternative would reduce the already less than significant impacts further and/or would achieve all of the project objectives, and the information provided herein is therefore informational purposes only. (Pub. Res. Code § 21002.)

The No Project Alternative assumes that none of the proposed CIP projects would be constructed at this time, and would, therefore, avoid all potentially significant environmental impacts identified for the 2018 Master Plan. However, this alternative would not preclude implementation of some, if not all, of the CIP projects on an individual basis sometime in the future. Although future infrastructure projects would still be required to undergo individual environmental review, the impacts would be evaluated on a project-by-project basis, and the potential cumulative impacts associated with all of the CIP projects within the 2018 Master Plan may not be addressed adequately. In other words, cumulative environmental impacts could potentially be addressed in "piece-meal" manner, which may result in underestimating the total extent of cumulative environmental impacts in comparison to evaluating the entire Master Plan at the PEIR level. In addition, this approach restricts the VWD's ability to properly plan for projected growth and to design infrastructure accordingly. So while new and upgraded infrastructure projects would still occur under this alternative, they would be implemented in a more disorganized, less efficient, and likely more costly manner. In addition, this alternative would not meet any of the objectives of the 2018 Master Plan.

In this case, the next environmentally superior alternative would be the Reduced Footprint Alternative, which would reduce, but not eliminate, potential impacts to biological resources, cultural resources, geology/soils, hydrology/water quality, landform alteration/aesthetics, land use, noise, and public safety. However, this alternative would only achieve seven of the eight project objectives of the 2018 Master Plan. This project would not ensure that VWD facilities would be adequately sized for future water and wastewater demand. Water demand and wastewater generation in the VWD service area will continue to grow regardless of Master Plan implementation; therefore, this alternative would hinder the VWD from being able to meet future demand.

E. Statement of Overriding Considerations Impacts that Remain Significant

The VWD Board finds that implementation of the 2018 Master Plan would result in no impacts that remain significant after implementation of the mitigation measures described in the Final PEIR.

F. Record of Proceedings

The record of proceedings upon which the VWD Board has based these Findings consists of all the documents and evidence relied upon by VWD in preparing the 2018 Master Plan Final PEIR. The custodian of the record of proceedings is VWD, 201 Vallecitos de Oro, San Marcos, California 92069.

G. Summary

Based on the foregoing Findings and the information contained in the record, the VWD Board has made one or more of the following Findings with respect to the significant environmental effects of the 2018 Master Plan as described in the Final PEIR:

- 1. Changes or alterations have been required in, or incorporated into, the 2018 Master Plan which avoid or substantially lessen the significant environmental effects on the environment.
- 2. Changes or alterations that are wholly or partially within the responsibility and jurisdiction of another public agency have been, or can and should be, adopted by that other public agency.
- 3. Specific economic, legal, social, technological, or other considerations make infeasible certain mitigation measures and alternatives.

Based on the foregoing Findings and the information contained in the record, it is hereby determined that:

- 1. All significant effects on the environment due to approval of the 2018 Master Plan have been eliminated or substantially lessened where feasible.
- 2. No significant effects on the environment were found to be unavoidable.