Chapter 1
Executive Summary

1.1 Introduction

This Environmental Impact Report (EIR) evaluates the potential for environmental impacts associated with the proposed Malibu Civic Center Wastewater Treatment Facility Project (Project), in the City of Malibu, and addresses appropriate and feasible mitigation measures and alternatives to the proposed Project that would reduce or eliminate those impacts. Since the proposed Project would be implemented in phases (Phases 1 to 3) over a period of years and would encompass a fairly large geographic area, the City determined that a Program EIR would be the appropriate document for the proposed Project. According to the State California Environmental Quality Act (CEQA) Guidelines (California Code of Regulations, Title 14, Section 15000 et seq, a Program EIR can provide the following advantages:

- provide an occasion for a more exhaustive consideration of effects and alternatives than would be practical in an EIR on an individual action;
- ensure consideration of cumulative impacts that may be slighted on a case-by-case basis;
- avoid duplicative reconsideration of basic policy considerations;
- allow the lead agency to consider broad policy alternatives and program-wide mitigation measures at an early time when the agency has greater flexibility to deal with basic problems or cumulative impacts; and
- allow reduction in paperwork.

A project EIR is defined in Section 15161 of the State CEQA Guidelines as a document that "examines the environmental impacts of a specific development project." A project EIR provides a site-specific review of all phases of the project, including planning, construction and operation. This ~~Draft~~ Final EIR contains both Project-level and Program-level analysis. Phase 1 of the Project is evaluated at a project level, while Phases 2 and 3 are considered at a Program level.

In addition, because the City will apply for funding from the State Revolving Fund (SRF) Loan Program, which is partially funded by the U.S. Environmental Protection Agency (USEPA), this ~~Draft~~ Final EIR has been prepared to address certain federal environmental compliance requirements, including regulations related to the General Conformity Rule for the Clean Air Act (CAA), the Endangered Species Act (ESA), and the National Historic Preservation Act (NHPA).

This ~~Recirculated Draft~~Final EIR is a compilation ~~partial recirculation~~ of the original Draft EIR released on May 30, 2014 and the recirculated Draft EIR released on June 12, 2014. Revisions have been made to ~~correct errors and/or omissions in~~ the ~~original~~ Draft EIR ~~pertaining to the number and location of pump stations expected to be needed for Phases 2 and 3 of the Project, visual renderings of the proposed CCWTF site, and to provide clear analysis for the potential for injection-induced seismicity~~to address comments received from the public during the review period and to provide additional analyses required to address these comments. The revisions and additions to the Draft EIR do not affect any conclusions made in the original Draft EIR.

~~Consistent with CEQA Guidelines Section 15088.5(c), this Recirculated Draft EIR contains only the portions of the original Draft EIR that have been revised and replaced. Revisions are depicted in underline / strikethrough text for ease of identifying the changes. The revised chapters (including~~

~~sections) include the following~~This EIR has been prepared pursuant to CEQA (Public Resources Code Section 21000 et seq.) and the State CEQA Guidelines.~~:~~

~~Chapter 1 – Executive Summary, Section 1.2 – text modified to reflect the proper number of pump stations at Project completion (Phase 3).~~

~~Chapter 3 – Project Description – Figure 3-3 modified to show proper number of pump stations at Project Completion (Phase 3) and Figures 3-8 and 3-9 modified to properly show CCWTF site at 5-years and 10-years post-construction.~~

~~Chapter 4 – Impact Analysis, Section 4.1 – Aesthetics – Visual Simulation Figures 21A, 21B, 22A, 22B, 23A and 23B were modified to properly show CCWTF site at 5-years and 10-years post-construction.~~

~~Chapter 4 – Impact Analysis, Section 4.3 – Biological Resources – Figures 4.3-1, 4.3-2, 4.3-3 and 4.3-4 were modified to show proper number of pump stations at Project Completion (Phase 3)~~

~~Chapter 4 – Impact Analysis, Section 4.5 – Geology and Soils – Figures 4.5-1, 4.5-2 and 4.5-3 were modified to show proper number of pump stations at Project Completion (Phase 3). Additionally, text was added to Section 4.5.2 – Environmental Impact Analysis, Impact GEO-1 to directly address induced seismic activity with injection.~~

~~Chapter 4 – Impact Analysis, Section 4.6 – Hazards and Hazardous Materials – Figure 4.6-1 modified to show proper number of pump stations at Project Completion (Phase 3)~~

~~Chapter 4 – Impact Analysis, Section 4.7 – Hydrology and Water Quality – Figures 4.7-2 and 4.7-4 were modified to show proper number of pump stations at Project Completion (Phase 3)~~

~~Chapter 4 – Impact Analysis, Section 4.9 – Noise and Vibration – text modified to reflect the proper number of pump stations at Project completion (Phase 3)~~

~~Chapter 5 – Comparison of Alternatives – Figure 5-1 modified to show proper number of pump stations at Project Completion (Phase 3)~~

~~Chapter 9 – References – 2014 Geosyntec Consultants reference added.~~

1.2 Proposed Project

In order to comply with Los Angeles Regional Water Quality Control Board (LARWQCB) Resolution No. R4-2009-007 prohibiting ~~the use of~~discharges from on-site wastewater and/or sewage disposal systems (OWDSs), also known as "septic systems," in the Malibu Civic Center area, and reduce the City's reliance on OWDSs, the City is proposing to construct a wastewater treatment facility and associated collection and recycling infrastructure to treat wastewater from the Civic Center area and recycle and/or dispose of the treated effluent. The specific treatment objectives for the proposed treatment facility include, but are not limited to, ~~California~~ Title 22 of the California Code of Regulations for "unrestricted" reuse of disinfected tertiary recycled water.

The proposed Project consists of the Civic Center Wastewater Treatment Facility, nine pump stations, and approximately 13.7 miles of pipeline. The proposed Project would develop a centralized wastewater treatment facility that would collect, treat, reuse, and/or dispose of the Civic Center area's projected wastewater flow. The City is proposing to build the wastewater treatment facility on an approximately 4.8-acre site located southwest of Civic Center Way, between Winter Canyon Road and Pacific Coast Highway (PCH), east of Malibu Canyon Road. The proposed

treatment plant would consist of various below-ground elements, including aeration basins, concrete anoxic basins, post-anoxic basins, and recirculation facilities. The above-ground elements would include an operations building, a crane for removing membrane bioreactor filters for maintenance, ultraviolet (UV) disinfection facility, recycled water storage tank, pump station, landscape screening, and a driveway for vehicles. In addition, the Project would construct a collection system that would convey wastewater flows within the Civic Center area to the proposed wastewater treatment facility. A recycled water distribution system would be constructed to distribute disinfected tertiary-treated effluent from the treatment facility to various land uses for reuse purposes. Additionally, a portion of the treated effluent would be ~~percolated and/or~~ injected in the lower aquifer of the Malibu Valley Groundwater Basin and/or percolated into Winter Canyon. The collection and distribution systems would consist of underground pipelines that would, generally, run beneath public rights-of-way or within easements, and approximately nine pump stations with minimal above-ground elements. For Phase 1, both the collection and recycled water distribution systems would follow existing street alignments, including Civic Center Way, Stuart Ranch Road, Cross Creek Road, Webb Way, Malibu Road, Malibu Canyon Road, Winter Canyon Road, and a small portion of PCH.

The Project would be implemented in phases with an ultimate treatment goal and build-out wastewater flowrate of 507,000 gpd for the entire Prohibition Area. Phase 1 Infrastructure associated with raw wastewater collection and treated effluent distribution would be constructed and completed by April ~~October~~ 201~~6~~7. The capacity sizing of the first facilities would allow for future expansion to the Phase 2 and Phase 3 connections and would be constructed as needed to meet the requirements of the LARWQCB Resolution and subsequent agreements with the City on implementation.

1.3 Areas of Controversy

Concerns raised during the public scoping period, expressed both verbally at the public scoping meeting held on December 11, 2013, and in letters submitted to the City in response to the Notice of Preparation (NOP), include the following:

Ocean Impacts: Concerned organizations in the Malibu area have raised the issue of potential for impacts to ocean water quality and sea life due to mixing of injected treated effluent with sea water. Requests for UV disinfection and additional study of impacts to the ocean were made during the public scoping meeting and in letter format.

Septic System Removal and Collection System Connections: Requests to the City have been made asking that the City allow some property owners to maintain their septic systems as a backup system in the event of a service outage. Other issues have been raised regarding property owners whose properties lie below grade and the needed infrastructure to facilitate connection of these properties to the wastewater treatment system.

Natural Disaster: Numerous comments were raised during project scoping related to the potential for impacts to residents and the environment in the event of a natural disaster.

Cumulative Construction Impacts: Several commenters raised concerns about the potential for cumulative construction impacts due to the concurrent construction of the Project with other planned projects in the City, most notably, the Rancho Malibu Hotel and the Pepperdine Campus Life project.

These comments and other Project scoping documentation are provided in Appendix A to this EIR.

1.4 Issues to Be Resolved

Issues to be resolved include formation of a funding/assessment district to fund each phase of the Project, and development of ordinances to address well installation and use in the Prohibition Area, regulations regarding municipal waste discharges (which would likely need to include a prohibition on salt-based water softeners), and requirements for property owners to provide water-tight hook-ups to the collection system that do not allow groundwater infiltration into the collection system. Additional design and planning related to Phases 2 and 3 of the Project will need to be completed to define the timing and scope of Phase 3 improvements based on future modeling, monitoring and testing after implementation of Phase 1 occurs. Accordingly, some unknown aspects of Phases 2 and 3, such as but not limited to recycled water booster pump and storage tank locations, have yet to be resolved.

1.5 Summary of Environmental Impacts and Mitigation Measures

Potentially significant environmental impacts requiring mitigation measures have been identified in the areas of Aesthetics, Biological Resources, Prehistoric Cultural Resources, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, and Noise and Vibration. No impacts were identified in the area of Historical Resources. All other environmental areas were found to have less than significant impacts. Table 1-1 provides a summary of the proposed Project's impacts, their associated significance, and measures to mitigate potential impacts. The identified levels of significance assume implementation of permit requirements, standard conditions of approval, and construction best management practices.

Table 1-1. Summary of Environmental Impacts of the Proposed Project

Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance after Mitigation
Aesthetics			
Impact A-1. None of the Project elements (wastewater treatment facility, and pump stations) would have the potential to block scenic vistas including but not limited to Escondido Falls, Coastal Slope Trails, or informal scenic view points on Malibu Canyon Road. While the wastewater treatment facility would be visible from Malibu Creek Trail and Malibu Beach Trail these views would be indistinct due to their distance and the facility would not block views of the mountains, notable natural features, or of the ocean. LIP requirements also set standards that limit the maximum height of new structures to 28 feet, and requires siting, design and landscaping measures to minimize the facility's appearance.	Less than Significant	None	Less than Significant
Impact A-2. None of the proposed Project elements would have a significant effect on noteworthy scenic resources including scenic highways Pacific Coast Highway and Malibu Canyon Road because of intervening landforms separating the site from the road. However, the proposed Project would require removal of protected California walnut trees, which may be considered a scenic resource.	Potentially Significant (Removal of trees)	See **MM BIO-3** below.	Less than Significant
Impact A-3. Development of the Project would result in a permanent change to the visual character of the proposed wastewater treatment facility site as new buildings and wastewater treatment facilities would be introduced. In addition, above ground facilities associated with pump stations and injection wells would also be visible. However, conformance with the City's Local Coastal Program (LCP) LIP is required for the granting of a Coastal Development Permit. Accordingly, required design/development standards under the LIP, and as proposed in the LCP Amendment and corollary Zoning Text Amendment (LCPA/ZTA), would ensure consistency with the existing visual environment.	Less than Significant	None	Less than Significant
Impact A-4. The need for nighttime lighting, other than security lighting, would be rare during operation of the proposed treatment facility, and motion-detector lighting is proposed at the entrance gate, and above doorways at the operations building, headworks, MBR modules, and solids storage facility. The light systems would also include manually activated pole-mounted lighting around	Less than Significant	None	Less than Significant

Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance after Mitigation
other process areas. The entrance road would have a photo-sensor-activated bollard lighting system for safety. Lighting would be used only when needed for maintenance and would use zero uplight LEDs, which are dark-sky compliant. In addition, other features proposed as part of the Project (e.g., metal fencing, tanks, and small buildings) would be painted with non-glare-producing colors and finishes so as to blend in with the design setting and avoid adverse glare impacts. Per the ~~Local Coastal Program~~ LIP, the lighting would be appropriately shielded and directed to avoid glare and spillover lighting and would not exceed a 60-watt light bulb level of illumination. ~~Thus, the Project would not produce significant new light or glare-related impacts. Per the Local Coastal Program LIP, the lighting would be appropriately shielded and directed to avoid glare and spillover lighting and would not exceed a 60-watt light bulb level of illumination.~~ In addition, the LCP Amendment and ~~zoning~~ Zoning ~~text~~ Text ~~amendment~~ Amendment would require that lighting for the Project be designed to avoid offsite light spill. . Thus, the Project would not produce significant new light or glare-related impacts.			
Air Quality			
Impact AQ-1. According to the ~~Local Coastal Plan (~~LCP~~)~~, the site of the proposed wastewater treatment facility is currently zoned for Commercial Visitor-Serving 2 (CV-2) uses, but the LCPA and ZTA would establish a Civic Center Wastewater Treatment Facility ~~CCWTF~~ Institutional Overlay district and development standards so that that the proposed use would be in compliance with the City's LCP, Zoning Code, and General Plan; therefore, the Project would be consistent with the Air Quality Management Plan (AQMP) growth projections. Project construction would be in compliance with AQMP regulatory measures and operational emissions would fall below the SCAQMD thresholds of significance.	No impact	None.	No Impact
Impact AQ-2. The proposed Project would contribute to regional air pollutant emissions during short-term construction and short- and long-term operations; however, the estimate of construction- and operations period daily emissions would not exceed South Coast Air Quality Management District (SCAQMD) regional or local significance thresholds.	Less than Significant	None	Less than Significant
Impact AQ-3. The proposed Project would result in increases in criteria pollutants, but would be consistent with the AQMP, which is intended to bring the Basin into attainment for all criteria	Less than Significant	None	Less than Significant

Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance after Mitigation
pollutants. The estimates of construction-period and operational emissions would not exceed the applicable SCAQMD daily significance thresholds, which factor in cumulative effects and are designed to assist the region in attaining the applicable state and national ambient air quality standards.			
Impact AQ-4. The Project would not expose sensitive receptors to substantial pollutant concentrations because local and on-site emissions would not exceed SCAQMD significance thresholds. In addition, toxic air contaminant exposure related to diesel emissions from heavy equipment required for construction of the Project would be well below the 70-year exposure period associated with increased cancer risk.	Less than Significant	None	Less than Significant
Impact AQ-5. Given mandatory compliance with SCAQMD rules, no construction activities or materials are proposed that would create a significant level of objectionable odors. The wastewater treatment facility would be fully odor-scrubbed on a regular basis and while some methane may be produced in the influent pump station, headworks, and equalization basin, all of these components would be enclosed and have odor control processes.	Less than Significant	None	Less than Significant
Biological Resources			
Impact BIO-1. No special-status listed plant species are known or expected to occur on the Project site; however, if construction intrudes into habitat at Malibu Lagoon and Malibu Creek, disturbance or damage to special-status plant species habitat can result. Removal of vegetation when there are nesting birds present could result in a violation of the Migratory Bird Treaty Act and/or Fish and Game Code. Malibu Lagoon and Malibu Creek are also designated critical habitat for tidewater goby and southern steelhead. If during auguring operations underneath Malibu Creek fine particles associated with the boring fluid migrate to the surface, it would have the potential to smother fish and their eggs. However, anticipated improved water quality conditions in Malibu Lagoon resulting from the Project would be expected to benefit southern steelhead and tidewater goby. Bat roosts may occur on the PCH bridge crossing over Malibu Lagoon, where a pipeline crossing would be placed during Phase 2 of the Project. If construction on or below the bridge deck caused enough disturbances through noise, vibration, and/or motion for a maternity bat roost to be abandoned, it would be considered a potentially significant impact. In addition, bat roosts may occur on	Potentially Significant	**MM BIO-1:** To reduce impacts to special-status species and their habitats to a less than significant level, the following avoidance and minimization measures shall be implemented: • All work areas shall be approved by the Project Engineer in consultation with an approved biologist. • No new areas of disturbance for lay down areas, parking, staging, or other support areas shall be developed. Previously disturbed areas will be utilized to support these work zones. • Work areas shall be clearly marked in the field to prevent impacts outside of the designated work areas. **MM BIO-2:** The drilling contractor shall prepare a Fraction Mitigation Contingency Plan for the Malibu Creek crossing that	Less than Significant

Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance after Mitigation
the Cross Creek bridge crossing over Malibu Creek, immediately adjacent to where work area for auguring under Malibu Creek may occur. If construction of the entry/exit bores or the auguring caused enough disturbances through noise, vibration, and/or motion for a maternity bat roost to be abandoned, it would be considered potentially significant. Treated wastewater injection would alter groundwater outflow conditions which is of potential concern because it could change habitat conditions supporting benthic settling and development of the larval life stages of sensitive species. This is particularly true given the potential presence of highly imperiled abalone species, and the importance of successful larval recruitment to the conservation of these species. However, a conservative analysis of potential marine water quality effects indicates that ocean water quality would not be substantially affected by the Project. In summary, the Project has the potential to significantly impact, both directly and indirectly, several special-status species. Implementation of MM BIO-1 through MM BIO-47, and MM BIO-~~6~~ 17 would reduce these potential impacts to below a level of significance. Indirect impacts to the freshwater environment from the injection wells are expected to be beneficial when compared to the current condition. Indirect impacts to the near-shore marine environment from the injection wells were determined to be less than significant. No other special-stats species are expected to be potentially impacted by the project. Implementation of MM BIO-5 and MM BIO-7 would ensure compliance with Migratory Bird Treaty Act and Fish and Game Code.		would include, at a minimum, the following elements for the protection of biological resources: 1) design protocols shall require a geotechnical engineer or qualified geologist to make recommendations regarding the suitability of the formations to be bored to minimize the potential for the inadvertent release of drilling fluids into the creek; 2) definition of how such releases of drilling fluids would be detected in a timely manner; 3)identification of steps to be implemented in the event of a drilling fluid release; and 4) a reporting protocol to ensure that all appropriate notifications are made to agencies. **MM BIO-3:** Within six months of any site preparation, construction, or other site disturbance associated with the Project, a focused bat roost habitat assessment shall be conducted. The assessment shall include the PCH bridge, Cross Creek bridge, and any mature trees occurring within 100 feet of any element of the Project construction of infrastructure, and trees proposed for removal. The bat maternity season (typically April 1-August 31) shall be avoided to the greatest extent feasible. If the maternity season cannot be avoided, then a focused bat survey, utilizing current ultrasonic technology, shall be conducted by a qualified biologist acceptable to the CDFW and the City. If active maternity roosts are identified, no work will continue in those areas until such time as the City authorizes re-initiation of the work in consultation with CDFW. **MM BIO-4:** A biological monitor, approved by the City, shall be present for all construction activities related to	

Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance after Mitigation
		auguring activities at Malibu Creek or any other jurisdictional feature, or placing of piping on the PCH bridge over Malibu Creek. Within five days prior to any work being initiated at a work site for the first time, or in the event work is stopped at a given work site for more than five days and is re-initiated, the biological monitor shall complete a preconstruction survey to ensure wildlife species unlikely to escape on their own are not present, ensure that construction is not intruding into any environmentally sensitive areas, and that no special-status biological resources are being impacted. The biological monitor shall track compliance with the EIR biological mitigation measures and any other permit conditions that may pertain to biological resources. The monitor shall keep a daily activity log and provide the daily logs to the City Biologist on a weekly basis. Any and all violations or notable events shall be reported to the City immediately. **MM BIO-5:** Construction activities shall avoid the nesting season for birds, generally accepted to be (February 1 (January 1 for raptors) through September 15). Should avoidance be infeasible, beginning 30 days prior to construction, a qualified biologist, approved by the City, shall conduct weekly surveys for nesting birds in all work zones and a 500 foot buffer area, with the final survey being no less than five days from the start of construction If there is a delay of more than five days between when the nesting bird survey is performed and vegetation removal or other construction begins, it will be necessary to reconfirm whether any new	

Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance after Mitigation
		nesting has occurred between the time the first nesting bird survey was performed and ground disturbance. Standard buffers for active nests are 300 feet for passerine species and 500 feet for raptors. If an active nest is identified, an appropriate buffer will be established, as determined by a qualified biologist, in consultation with CDFW, based on the sensitivity of the species and the nature of the construction activity. The contractor will be notified of active nests and directed to avoid any activities within the buffer zone until the nests are no longer considered to be active by the qualified biologist. **MM BIO-6:** Any work resulting in materials that could potentially be discharged into jurisdictional features will adhere to strict BMPs and the requirements set forth in regulatory agency (ACOE, RWQCB, or CDFW) permits/agreements to prevent potential pollutants from entering any jurisdictional feature. Applicable BMPs to be applied will be included in SWPPP and/or WQMP. At a minimum, barriers (straw bales or sedimentation fences) will be erected between the construction site or bore sites and Winter Canyon Creek and Malibu Creek prior to construction or drilling, as appropriate, to prevent released material from reaching Winter Canyon Creek or Malibu Creek and associated habitats. **MM BIO-7**: To the extent feasible, all trees that must be removed to enable construction of facilities shall be removed outside the breeding seasons for birds and bats. The City will retain a tree removal specialist to remove all trees during times when birds and bats are not breeding. In order to further minimize impacts to	

Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance after Mitigation
		potentially occurring bats, a two-step process for removal of any tree that cannot be avoided shall be implemented. This will involve removing all branches less than two inches in diameter from trees that will be removed, to create a disturbance that will encourage bats to choose another roosting site after foraging that night. The following day the tree would be completely removed. See also **MM BIO-17.**	
Impact BIO-2. The proposed Project is not expected to result in impacts to riparian vegetation or sensitive natural communities. However, since work areas will occur immediately adjacent to riparian habitat and sensitive natural communities associated with Winter Canyon Creek, Malibu Creek, and Malibu Lagoon, implementation of MM BIO-1, MM BIO-2, MM BIO-4, MM BIO-6, and MM BIO-17 would ensure avoidance of potential direct impacts. The injection of treated wastewater into groundwater aquifers will increase the volume of naturally occurring groundwater discharge to the Malibu Lagoon. By extension, this could affect riparian habitat, southern coastal salt marsh, and/or southern California coastal lagoon conditions. However, per Section 4.7 (Hydrology and Water Quality) of this EIR, no appreciable change is expected to the minimum depth to groundwater at Malibu Lagoon or Malibu Creek, nor are there any anticipated changes to breaching patterns or salinity anticipated as a result of Project implementation. Furthermore, if the existing condition were maintained, the volume of groundwater would increase by 45 percent under future buildout conditions instead of the approximately ~~20~~ 3 percent as with the proposed Project under planned average operating conditions. Therefore, by implementing the Project, the potential future impacts of additional groundwater flows to Malibu Creek and Lagoon and changes in riparian habitat, southern coastal salt marsh, and/or southern California coastal lagoon would be reduced, and thus this impact is considered less than significant. Similarly, changes in salinity would be reduced as a result of Project.	Potentially Significant	See mitigation measures **MM BIO-1, MM BIO-2, MM BIO-4,** ~~and~~ **MM BIO-6,** and **MM BIO-17**	Less than Significant
Impact BIO-3. Jurisdictional features, including federally	Potentially Significant	See mitigation measures **MM BIO-1, MM**	Less than Significant

Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance after Mitigation
protected waters, do not occur within the disturbance footprint of the Project. As currently proposed, only street level modifications would be made on the PCH bridge that occurs above Malibu Lagoon, a feature that would be a jurisdictional feature. In addition, work areas associated with auguring under Malibu Creek would be placed outside the jurisdictional limits for that feature. However, regulatory agency jurisdiction (ACOE, RWQCB, or CDFW) over the Creek would require that appropriate permits, or other agreements regarding the auguring process be obtained and adherence to any measures to protect wildlife contained in these permits/agreements would be required.		**BIO-2, MM BIO-4, ~~and~~ MM BIO-6, and MM BIO-17**	
Impact BIO-4. The Project site supports one regionally important wildlife corridor, Malibu Creek. The proposed Project would not result in any direct impacts to Malibu Creek, but would cause temporary indirect impacts during construction that could significantly impact some species that would be utilizing Malibu Creek for movement, such as southern steelhead and tidewater goby.	Potentially Significant	See mitigation measures **MM BIO-1, MM BIO-2, MM BIO-4, ~~and~~ MM BIO-6, MM-BIO-7, and MM BIO-17**	Less than Significant
Impact BIO-5. Several ESHA areas occur within the Project site. Additionally, the new proposed driveway and adjacent biofilter to be constructed in the footprint of the existing unpaved driveway at the proposed wastewater treatment facility site occurs within the 100 foot ESHA wetland buffer of Winter Canyon Creek. In addition, the Phase 2 pipelines would cross through ESHA, beneath Malibu Creek and over Malibu Lagoon along the PCH bridge. The LCPA/ZTA would allow for a reduced ESHA buffer, if it can be demonstrated that all treatment plant facilities are sited within previously disturbed areas as much as feasible, the proposed driveway is located along the existing unpaved driveway at the treatment plant site, any fuel modification that encroaches into the ESHA buffer is limited to thinning only, onsite pipelines and equipment located within 100 feet of ESHA shall be installed under pavement or within previously disturbed areas, and that the area of reduced ESHA buffer is offset with ESHA enhancement elsewhere on the site on a one to one basis and incorporated into the site landscape plan subject to City Biologist approval. The LCPA/ZTA also would require that all pipelines and ancillary infrastructure associated with the wastewater treatment system be sited to avoid ESHA to the greatest extent possible and that temporary impacts to ESHAs from construction would be restored. Any permanent impacts to ESHAs would be required to be offset through payment of in lieu fees in according with the LIP.	Potentially Significant	See **MM BIO-~~4~~** and **MM BIO-7** **MM BIO-~~7~~8:** To ensure that potential temporary impacts will not affect the health of trees that remain on-site, the following shall be implemented, as applicable: • Drainage shall be directed away from the root zones of all native trees. • Poisonous chemicals or materials that could be deleterious to tree health shall be discarded in approved storage containers. • Tree trunks shall not be used as winch supports, anchors, or signposts or for any other function. • The storage of vehicles, building materials, refuse, or excavated soil materials shall not occur within the protected zones of trees. • The use, access, or parking of heavy vehicles or equipment (e.g., backhoes, tractors) shall not occur within the protected zones of trees. **MM BIO-~~8~~9:** Prior to construction along	Less than Significant

Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance after Mitigation
Calculations of impact areas to ESHAs would be required for review and approval by the City Biologist as part of the CDP application process and prior to issuance of a grading permit.~~Because a portion of the proposed wastewater treatment facility overlaps the ESHA buffer and the Phase 2 pipelines would be constructed over and under Malibu Creek ESHA, MM BIO-16 will be implemented to minimize or avoid impacts to ESHAs.~~ California black walnut trees, a CRPR 4 plant, occur within the proposed wastewater treatment facility site, which would be constructed as part of Phase 1 of the Project. This species is protected by the LCP/LIP tree ordinance. Based on current design, two walnut trees would be removed and three additional walnut trees would experience temporary impacts due to construction. A portion of Phase 2 of the Project occurs within the county's jurisdiction and beyond the limit of the City of Malibu where native oaks are legally protected from being damaged or removed during the course of a project if they have a single-trunk diameter at breast height (DBH) of 8 inches or more, if any two trunks have a combined DBH of 12 inches or more, or if it is considered heritage. Although pipelines would be constructed underground and along existing roadway easements, native oaks that occur adjacent to the roadways may have roots extending under or branches extending over the roadways.		the pipeline alignment and in collection and distribution system areas, a qualified biologist or arborist shall conduct a focused native tree survey in these areas to determine if there are any other protected native trees within the direct impact area. If it is apparent that any protected native trees not previously identified would require removal, these trees shall be reported to the City, and all mitigation measures in the tree protection plan shall be implemented for these trees pursuant to LIP Chapter 5. **MM BIO-~~9~~10:** Prior to construction, highly visible protective fencing (i.e., Environmentally Sensitive Area fencing) shall be installed around the wastewater treatment facility's limits of disturbance to avoid direct impacts on native trees adjacent to the construction area. In addition, exclusionary fencing shall be installed around the outermost limits of the tree protection zones (i.e., five feet outside of the dripline or 15 feet from the trunk, whichever is greater) of the native trees within or adjacent to the construction area that will not be removed but have the potential to be disturbed during construction or grading activities. All tree fencing shall be supervised by a qualified biologist or arborist prior to the commencement of any clearing, grading, or other construction activities. Fencing shall be maintained in place for the duration of all construction. No construction, grading, staging, or material storage shall be allowed within the fenced exclusion areas or within the protected zones of any native trees. This includes around any native trees (if present) potentially	

Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance after Mitigation
		occurring within the collection and distribution system areas. **MM BIO-~~10~~11:** Any construction-related activity (e.g., pruning) that encroaches into the tree protection zone of a native tree must be done using only hand-held tools. Prior to encroachment into the tree protection zone, the tree must be inspected by a qualified arborist to ensure that the activity will not result in loss or worsen the health of the tree. This includes around any native trees (if present) potentially occurring within the collection and distribution system areas. **MM BIO-~~11~~12:** A qualified arborist or biologist shall monitor native trees that are within or adjacent to the construction area. The monitor shall be present during installation of exclusionary fencing and shall ensure that construction personnel or equipment do not encroach into sensitive areas. The monitor shall also oversee work with hand tools in the protected zone and check the exclusionary fencing weekly to ensure that the fencing remains intact during all construction phases of the Project. This includes directing construction personnel when the fencing needs repair or replacement. **MM BIO-~~12~~13:** The proposed wastewater treatment facility design shall avoid removal of and temporary impacts on protected native trees to the maximum extent feasible. If the proposed design does not prevent protected native tree removal or encroachment, then the fewest or least significant impacts shall be selected. Adverse impacts on protected native trees shall be fully mitigated, with priority given to on-site	

Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance after Mitigation
		mitigation. The coastal development permit shall include the mitigation requirements as conditions of approval. **MM BIO-~~13~~14:** Any California walnut trees that meet the LIP Chapter 5 protection criteria and that are proposed for removal or where development encroaches into the protected zone of the native tree, resulting in loss or worsened health of the tree, shall be replaced on-site (if suitable habitat is present) at a ratio of 10:1. Seedlings (less than 1 year old) shall be planted in an area of the proposed wastewater treatment facility site where suitable habitat is present. **MM BIO-~~14~~15:** If impacts to protected native trees cannot be feasibly avoided, mitigation shall be provided by one of the following methods pursuant to LIP Sections 5.3 and 5.5, and the Native Tree Protection Plan prepared for the Project (Appendix D): • Off-Site Mitigation: Planting at least 10 replacement trees for every tree removed (can occur off-site in suitable habitat that is restricted from development or in public parklands). Seedlings (less than 1 year old) shall be planted in an area where there is suitable habitat; OR • In-Lieu Fee Program: For unavoidable impacts resulting in the loss of native trees and native tree habitat, payment of an in-lieu fee shall be provided. The fee shall be paid into the Native Tree Impact Mitigation Fund, which is administered by the Santa Monica Mountains Conservancy. The fee shall be based on the type, size, and age of the trees removed. **MM BIO-~~15~~16:** Pursuant to LIP Chapter 5,	

Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance after Mitigation
		Section 5.6.1, each affected protected tree that is not removed, but encroached upon shall be monitored annually for a period of not less than 10 years. An annual monitoring report shall be submitted for review by the City for each of the 10 years. The monitoring report shall include measurements of the tree (i.e., DBH, approximate height, and canopy width) and the relative health of each of the replacement trees, including notes regarding any damage from fire, disease, insects, or other vectors that affect health. If at any time the health of a replacement tree begins to decline beyond recovery, that tree shall be replaced in kind with an equal healthy replacement. Monitoring reports shall be provided to the City annually and at the conclusion of the 10-year monitoring period to document the success or failure of the mitigation. If performance standards are not met by the end of 10 years, the monitoring period shall be extended until the standards are met. If any of the trees is lost or its health or vigor is worsened as a result of the proposed wastewater treatment facility, the impact shall be mitigated through replanting at a ratio of 10:1 on-site, off-site mitigation, or an in-lieu fee (as described above). **MM BIO-1~~6~~7:** ~~All construction activities that occur within or adjacent to an ESHA (including augering work at the Malibu Creek crossing and piping placement on the PCH bridge) will have a biological construction monitor present.~~ All construction activities that occur within 100 feet of an ESHA will be evaluated by a biologist to determine if biological monitoring of the construction activity is	

Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance after Mitigation
		warranted. Biological construction monitoring ~~would~~ shall occur as needed to ensure that no direct or indirect impacts to ESHAs occur. At a minimum, a daily monitoring log would be prepared documenting construction compliance with the biological EIR mitigation measures, and any other subsequent measures that may be added.	
Impact BIO-6. The project would not conflict with any habitat or natural community conservation plans, or other conservation plans because, there are no habitat conversation plans, natural community conservation plans, or other local, regional or state habitat conservation plans that cover the Project area.	No impact	None	No impact
Cultural and Paleontological Resources			
Impact HR-1. No historical resource listed or determined eligible for listing in the CRHR would be demolished or materially altered in an adverse manner such that the physical characteristics of the historical resource would no longer convey its historical significance.	No impact	None	No impact
Impact HR-2. No historical resource listed in a local register of historical resources or identified during a historical resource survey would be demolished or materially altered in an adverse manner such that the physical characteristics of the historic resource would no longer convey its historical significance	No impact	None	No impact
Impact HR-3. No historical resource determined eligible for listing in the CRHR by a lead agency for the purposes of CEQA would be demolished or materially altered in an adverse manner such that the physical characteristics of the historical resource would no longer convey its historical significance.	No impact	None	No impact
Impact AR-1. Project construction in areas near known archaeological sites would have a moderate to high level of potential for encountering and inadvertently demolishing or materially altering in an adverse manner physical characteristics of archaeological resources that may be a eligible for inclusion in the CRHR and NRHP.	Potentially Significant	**MM AR-1**: A certified archaeologist and a culturally ~~-~~affiliated Native American, with knowledge of cultural resources, shall monitor all initial Project-related ground-disturbing activities in the area of the proposed wastewater treatment facility as well as excavations or other impacts, should they take place, from pipeline construction adjacent to CA-LAN-	Less than Significant

Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance after Mitigation
		266, CA-LAN-12715, CA-LAN-1417 or the Humaliwo site, CA-LAN-264. Monitoring should take place on both sides of Malibu Lagoon, specifically from Cross Creek Road east to a point on the other side of the Lagoon opposite the western end of the parking lot at Malibu State Beach, west beyond the Adamson House. This area may need to be extended, if significant materials are discovered during monitoring. In those areas that are not monitored by a certified archaeologist and a culturally-affiliated Native American, if buried cultural resources are uncovered during construction, all work shall be halted in the vicinity of the archaeological discovery until a qualified archaeologist can visit the site of discovery and assess the significance of the archaeological resource. Provisions for the disposition of recovered prehistoric artifacts shall be made in consultation with culturally affiliated Native Americans. The Native American Heritage Commission shall be the final arbiter should disagreement arise over the disposition of the recovered artifacts. In the event of an accidental discovery of human remains in a location other than a dedicated cemetery, the steps and procedures specified in Health and Safety Code Section 7050.5, State CEQA Guidelines Section 15064.5(e), and PRC Section 5097.98 shall be implemented. **MM AR-2**: Pre-excavation borings shall be installed along the proposed pipeline location in Malibu Road adjacent to CA-LAN-1417. A certified archaeologist and a culturally-affiliated Native American, with knowledge of cultural resources, shall	

Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance after Mitigation
		monitor the pre-construction investigation and determine if archaeologically significant artifacts are located in the proposed pipeline location and have the potential to be impacted by project construction. Should archaeologically significant artifacts be discovered, all work in the area shall be halted until a treatment plan can be development and implemented, following which construction would continue.	
Impact AR-2. Project construction near known archaeological sites would have a moderate to high level of potential for encountering and inadvertently disturbing human remains, including those interred outside of formal cemeteries.	Potentially Significant	See Mitigation Measures **MM AR-1** and **MM AR-2**	Less than Significant
Impact PR-1. Project construction has a moderate to high level of potential for encountering and inadvertently damaging or destroying paleontological resources. The paleontological sensitivity of the Project area, including the older Quaternary alluvium and, in places, marine sediments, is considered high.	Potentially Significant	**MM PR-1**: A qualified ~~paleontologic~~paleontological monitor shall be required in any areas where excavation will occur below a depth of 5 feet. The qualified ~~paleontologic~~paleontological monitor shall retain the option to reduce monitoring if, in his or her professional opinion, the sediments being monitored were previously disturbed. Monitoring may also be reduced if the potentially fossiliferous units, previously described, are not present or, if present, are determined by qualified paleontologic personnel to have a low potential for containing fossil resources. The monitor shall be equipped to salvage fossils and samples of sediments as they are unearthed to avoid construction delays and be empowered to halt or divert equipment temporarily to allow removal of abundant or large specimens. Recovered specimens shall be prepared to a point of identification and permanent preservation, including washing to recover small invertebrates and	Less than Significant

Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance after Mitigation
		vertebrates. Specimens shall be curated into a professional, accredited museum repository with permanent retrievable storage. A report of findings, with an appended itemized inventory of specimens, shall be prepared and submitted to the City. The report and inventory, when submitted to the City, will signify completion of the program to mitigate impacts on paleontological resources.	
Geology and Soils			
Impact GEO-1. There are no earthquake faults delineated on Alquist-Priolo Fault Zone maps within the Project area. Because the Project area is not traversed by a known active fault and is not within 200 feet of an active fault trace, surface fault rupture is not considered to be a significant hazard for the Project area.	No impact	None	Less than Significant
Impact GEO-2. The Project area is located within a seismically active area of Southern California and may experience severe shaking in the future from the Malibu Coast fault and other nearby faults.	Potentially Significant	**MM GEO-1:** All Project facilities shall be designed to comply with City and state seismic hazard requirements. **MM GEO-2:** The Project shall conform to all applicable provisions and guidelines set forth by the Uniform Building Code, which sets for regulations concerning proper design for seismic safety MM GEO-3: Project operating protocols shall include facility personnel training regarding appropriate response actions following a seismic event.	Less than Significant
Impact GEO-3. Increases in groundwater levels as a result of proposed injection would have a negligible effect on liquefaction potential.	Less than Significant	None	Less than Significant
Impact GEO-4. Some areas of slope instability have been identified within the Civic Center area. While it is naturally buttressed and the area is likely stable, the Project would require additional measures to confirm stability. In addition, there is the potential for localized sloughing of near-vertical slopes and overhangs, as well as toppling of soil columns during construction	Potentially Significant	**MM GEO-~~4~~3:** All earthwork and grading shall meet the requirements of State of California building and structural codes, as well as City Geotechnical Guidelines, and be performed in accordance with the recommendations in the geotechnical	Less than Significant

Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance after Mitigation
		investigation conducted for the Project and the Erosion Control Plan required as part of the LARWQCB NPDES permit. **MM GEO-5~~4~~:** The Project shall comply with guidelines in the City's General Plan, LUP, and LIP Chapter 17, such as those related to fill buttressing, the use of retaining walls, drainage control, and the provision of debris basins and setbacks where appropriate. **MM GEO-6~~5~~:** Site preparation and earthwork shall be done in accordance with recommendations in geotechnical reports for the Project including recommendations from Geosytec (2014~~3~~). This would include performing earthwork in accordance with Section 300 of the most recent approved edition of the *Standard Specifications for Public Works Construction* and *Regional Supplemental Amendments*. **MM GEO-7~~6~~:** Geotechnical investigations shall be conducted to develop slope stabilization criteria for any pipelines that would be constructed in areas that are prone to landslides. In addition, steep slopes shall be evaluated to determine whether detailed geotechnical investigations should be performed. The geotechnical reports shall be submitted to the City for review and approval of the slope stabilization measures as well as the collection and distribution system pipeline installations included in the Project design. Slope stabilization measures may include soil improvements, buttressing of the slopes, or compaction of trench backfill. In addition, erosion control measures, such as water bars, trench dams, and revegetation, shall be identified in the Project's Erosion Control,	

Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance after Mitigation
		Landscaping, and Revegetation Plan.	
Impact GEO-5. Grading and excavation associated with construction of the Project would expose soils on the wastewater treatment facility site to wind and water erosion. Further, trenching along the roadways to install pipelines for the proposed collection and distribution system would lead to substantial soil exposure. The City's BMP requirements, as detailed in LIP Chapter 17, are briefly described in Section 4.7 under "Regulatory Setting." No mitigation beyond compliance with these measures is required.	Less than Significant	None	Less than Significant
Impact GEO-6. According to the geotechnical investigations conducted in the Project area, the wastewater treatment facility site and areas where pipelines would be constructed under roadways have only low to moderate potential to contain expansive soils. Recommendations in the geotechnical report are being incorporated into the design of facilities to reduce any expansion potential.	Less than Significant	None	Less than Significant
Impact GEO-7. Because the Project would eliminate existing Onsite Wastewater Disposal Systems and construct a new public sewer system, this impact is not applicable.	No Impact	None	No Impact
Hazards and Hazardous Materials			
Impact HM-1. Construction of the proposed Project would involve the use of materials that are generally regarded as hazardous, such as gasoline, diesel fuel, hydraulic fluids, paint, and other similar materials. The risks associated with the routine transport, use, and storage of these materials during construction are anticipated to be relatively small. With appropriate handling and disposal practices, there is relatively little potential for an accidental release of hazardous materials during construction, and the likelihood is small that workers and the public, including nearby schools, would be exposed to health hazards.	Potentially Significant	**MM HM-1:** An environmental training program shall be established to communicate environmental concerns and appropriate work practices, including spill prevention, emergency response measures, and proper best management practices implementation, to all field personnel associated with construction activities. The training program shall emphasize site-specific physical conditions to improve hazard prevention (e.g., identification of potentially hazardous substances) and shall include a review of all site-specific plans. A Hazardous Substance Control and Emergency Response Plan shall be prepared by the contractor. This plan shall be submitted to the City along with the grading permit application for each	Less than Significant

Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance after Mitigation
		structure, or with the encroachment permit application for construction of pipelines. The plan shall prescribe hazardous-materials handling procedures for reducing the potential for a spill during construction and shall include an emergency response program to ensure quick and safe cleanup of accidental spills. Furthermore, the plan shall identify areas where refueling and vehicle maintenance activities and storage of hazardous materials, if any, shall be permitted. These directions and requirements shall also be reiterated in the Project's Storm Water Pollution Prevention Plan (SWPPP). **MM HM-2:** Oil-absorbent material, tarps, and storage drums shall be used to contain and control any minor releases in construction areas. Emergency spill supplies and equipment shall be kept adjacent to all areas of work and in staging areas, and shall be clearly marked. Detailed information for responding to accidental spills and for handling any resulting hazardous materials shall be provided in the Project's Hazardous Substances Control and Emergency Response Plan. **MM HM-3:** During excavation and grading for the proposed Project, the contractor shall observe exposed soil for visual evidence of contamination. If visual contamination indicators are observed during excavation or grading activities, all work shall stop and an investigation shall be designed and performed to verify the presence and extent of contamination at the site. A qualified and approved environmental consultant shall perform the review and investigation. Results shall be reviewed and approved by LACFD or	

Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance after Mitigation
		the California Department of Toxic Substances Control (DTSC) prior to construction. The investigation shall include collecting samples for laboratory analysis and quantifying contaminant levels within the proposed excavation and surface disturbance areas. Subsurface investigation shall determine appropriate worker protection and hazardous material handling and disposal procedures appropriate for the subject site. **MM HM-4: For Project operations, t~~T~~he** City shall prepare a Hazardous Materials Business Plan for the wastewater treatment facility that would address handling and storage of all hazardous chemicals that would be used during the treatment process. The plan shall address containment, site layouts, and emergency response and notification procedures for a spill or release.	
Impact HM-2. The City is located within Fire Zone 4. All Project construction and operation of the proposed wastewater treatment system would be in compliance with the goals, policies, and implementation measures of the City's General Plan Safety Element; LCP; LACFD; Department of Public Works, Building and Safety Division; Fire Zone 4; and Very High Fire Hazard Severity Zone requirements	Less than Significant	None	Less than Significant
Impact HM-3. During construction, installation of pipelines along roadways could block access to nearby roadways for emergency vehicles. Implementation of the Traffic Control Plan would ensure that potential emergency vehicle access impacts during construction would be minimized	Less than Significant	None	Less than Significant
Hydrology and Water Quality			
Impact HWQ-1. During the construction period, excavation and grading activities would result in exposure of soil to runoff, potentially causing entrainment of sediment in the runoff. The potential for chemical releases is also present at most construction sites. The preparation and implementation of a project-specific	Less than Significant	None	Less than Significant

Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance after Mitigation
Storm Water Pollution Prevention Plan (SWPPP) would ensure that impacts to storm water quality are less than significant. Operation of the wastewater treatment plant and pump stations would not be expected to result in water quality impacts related to stormwater. The treatment facility site would be graded such that all stormwater runoff on site would be routed to a collection point from which it would be pumped back to the Headworks for treatment. Additionally, the Project would be operating under permits requiring the development and implementation of a sewer system management plan (SSMP) that includes, among other things, an emergency response plan to address pipeline breaks and overflows. Biosolids would be hauled by tanker truck to a permitted facility equipped to handle biosolids. Overflow or bypass of untreated wastewater potential at pump stations is remote because the treatment tanks would be designed with excess storage capacity and risk of leak or rupture would be minimized through proper design and daily maintenance/surveillance. Reuse water generated by the Project would comply with Title 22 requirements and the State's General Permit for Landscape Irrigation Uses of Municipal Recycled Water. Compliance with the State Water Resources Control Board (SWRCB) General Waste Discharge Requirements (WDRs) for Landscape Irrigation Uses of Municipal Recycled Water (Recycled Water General Permit) (Order No. 2009-0006-DWQ) and/or similar provisions included in a project-specific WDR would ensure the protection of surface and groundwater quality. Effects on groundwater related to the injection and/or percolation of recycled water into the Malibu Valley Groundwater Basin would decrease TDS groundwater concentrations with time, and would result in increased concentrations of nitrogen in the Civic Center Gravels, though this increase would be offset by decreases in nitrogen concentrations in the shallow alluvium. In general, the overall loading of nutrients to the groundwater basin would be reduced due to improved wastewater effluent treatment, and the direct discharges to groundwater would be limited to a few locations within the groundwater basin rather than dispersed throughout the basin. It is estimated that a 1:10 'fresh' groundwater to ocean water dilution would occur within 2 feet of the mixed groundwater-recycled water emerging from the ocean floor (RMC 2014b), and that assuming an initial ocean nitrate concentration of 1.5 mg/L			

Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance after Mitigation
and an injected nitrated concentration of 8 mg/L (which is conservative, given that the injected recycled water will be mixing with ambient groundwater, thereby lowering the nitrate concentration in the combined water dispersing to the ocean), ocean nitrate concentrations would increase a maximum of 8 percent to approximately 1.62 mg/L, assuming a 10 foot mixing depth.			
Impact HWQ-2. The Project would not result in the depletion of groundwater supplies. Analysis has determined that injection of treated effluent from the wastewater treatment facility has little to no impact on shallow groundwater elevations at the injection sites, and that these groundwater levels would remain at or below current levels. The results also indicate that, as OWDSs are removed from operation, shallow groundwater elevations decrease (drop) as a result of the transference of recharges from the shallow alluvium to the deeper Civic Center Gravels. At projected Civic Center Area buildout, ~~OWDS~~wastewater flows ~~to the groundwater basin~~ are expected to increase to 469,280 gpd. If these increased flows were discharged to the groundwater basin via OWDS (hypothetically speaking), this would result in ~~;~~ a 45 percent increase in flows to Malibu Creek and Lagoon. Therefore, by implementing the Project, the potential future impacts of additional groundwater flows to Malibu Creek and Lagoon will be reduced, ~~The Project would not construct any housing or habitable structures within the 100-year floodplain. The wastewater treatment facility site is outside the tsunami inundation zone identified by the City of Malibu (City of Malibu 2012), but the pump stations, injection wells and a large portion of the pipelines are within the tsunami inundation zone. However, because these structures are not habitable, and would, for the most part, be located underground, they would not subject humans to these hazards.~~	No Impact	None	No impact

Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance after Mitigation
Impact HWQ-3. The Project would alter the existing drainage patterns in the Project area as a result of construction of a new wastewater treatment plant, injection wells, and pump stations. New pipelines would be constructed in existing roadways and would not alter drainage patterns. Once operational, the wastewater treatment facility has been designed such that all runoff from storm events would be captured and routed back to the headworks of the facility for treatment, which would ensure compliance with SWMP requirements, LIP Chapter 17, and the City's MS4 Permit.	Less than Significant	None	Less than Significant
Impact HWQ-4. The Project would not construct any housing or habitable structures within the 100-year floodplain. The wastewater treatment plant site and Bluffs Park pump station would be outside the 100-year floodplain, but the Legacy Park pump station, two other future phase pump stations, and the injection well locations would be within the 100-year floodplain. At Legacy Park, the existing detention pond is expected to provide adequate capacity to address the potential for onsite flooding at the Legacy Park pump station site. In addition, pump stations would be relatively small, with the majority of the structure located underground. Only a vent, electrical panel, transformer, and backup generator would be above ground, and these features are small enough that they are not expected to impede or redirect flood flows. In order to ensure ongoing system operations in the event of a flood, above-ground pump station features would be mounted on concrete pedestals at elevations above the anticipated flood level.	Less than Significant	None	Less than Significant
Impact HWQ-5. The Project does not include any levees or dams nor is it located in a levee or dam failure inundation zone, so there would be no potential for impacts associated with levee or dam failure. Recycled water injected and/or percolated by the Project would flow unimpeded to the ocean within the underlying watershed and would not result in a risk of flooding.	No Impact	None	No Impact
Impact HWQ-6. The wastewater treatment facility site is outside the tsunami inundation zone identified by the City of Malibu (City of Malibu 2012), but the pump stations, injection wells and a large portion of the pipelines are within the tsunami inundation zone. However, because these structures are not habitable, and would, for the most part, be located underground, they would not subject humans to these hazards. Above-grade structures associated with the pump stations and injection well sites, including electrical panels, transformers and generators, could potentially be impacted	Potentially Significant	**MM HY-1:** The City will prepare and implement a Tsunami Response Plan for the Project that defines emergency response and coordination procedures. The Tsunami Response Plan shall contain significant information specific to actions that may be necessary related to receipt of a tsunami watch, warning, or as a result of an actual tsunami. The first priority of	Less than Significant

Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance after Mitigation
by tsunami flows and could pose a potentially significant impact.		emergency management response shall be the protection of life and property.	
Land Use			
Impact LU-1. Construction and operation of the proposed wastewater treatment facility, including associated facilities, would not affect the connectivity of surrounding land uses, as the treatment facility site is the location of an existing wastewater treatment plant and is separated from the nearest residences by Civic Center Way. Construction of pipelines could result in short-term temporary disruptions to access to surrounding uses.	Less than Significant	None	Less than Significant
Impact LU-2. The proposed Project would be consistent with relevant local objectives and policies, including the City of Malibu General Plan Land Use Element and the Transportation and Infrastructure Element. The proposed Project would not result in a significant physical impact on the environment due to an inconsistency with the City's General Plan, Zoning Code, Municipal Code, or LCP. In addition, the LCP amendment and zoning text amendment being prepared for the Project would make the Project consistent with all policies and requirements of the LCP and M.M.C.	Less than Significant	None	Less than Significant
Impact LU-3. There are no Habitat Conservation Plans or Natural Community Conservation Plans that are applicable to the Project area.	Less than Significant	None	Less than Significant
Noise			
Impact NV-1. Noise levels could be as loud as 89 dBA Leq during construction of the proposed pipeline network due to the use of heavy equipment such as excavators, and jack-and-bore auger drill. City and County Codes exempts construction activity, provided that it does not occur on weekdays between the hours of 7 p.m. and 7 a.m., between the hours of 5 p.m. and 8 a.m. on Saturday (City only), or at any time on Sundays or holidays. However, the County requires that mobile equipment not exceed a maximum threshold of 75 dBA at single-family residential land uses. Noise levels could exceed this noise threshold for a short period of time thereby exposing people to noise levels in excess of established County thresholds.	Potentially Significant (Construction in areas within County's Jurisdiction)	**MM NV-1:** The construction contractor shall use appropriate noise control measures to reduce construction noise levels to the extent feasible. Noise controls could include any of the following, as appropriate: • Construction hours shall be in compliance with City and County noise ordinances during construction within each respective jurisdictional boundary. • Best available noise-control techniques (including mufflers, intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds) shall be used for all equipment and trucks to minimize construction noise	Significant Unavoidable

Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance after Mitigation
		impacts. • If impact equipment (e.g., jackhammers and pavement breakers) is used during Project construction, hydraulically or electrically powered equipment shall be used wherever feasible to avoid the noise associated with compressed-air exhaust from pneumatically powered tools. However, where the use of pneumatically powered tools is unavoidable, an exhaust muffler on the compressed-air exhaust shall be used (a muffler can lower noise levels from the exhaust by up to about 10 dBA). External jackets on the tools themselves shall be used, where feasible, which could reduce noise by 5 dBA. Quieter procedures, such as drilling rather than impact equipment, shall be used whenever feasible. • Pile holes shall be pre-drilled wherever feasible to reduce potential noise and vibration impacts. • Stationary noise sources shall be located as far from sensitive receptors as feasible. If they must be located near receptors, adequate muffling (with enclosures where feasible and appropriate) shall be used to ensure that local noise ordinance limits are met to the extent feasible. Enclosure openings or venting shall face away from sensitive receptors. If any stationary equipment (e.g., ventilation fans, generators, dewatering pumps) is required, such equipment shall comply with the daytime and	

Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance after Mitigation
		nighttime noise limits specified in pertinent noise ordinances to the extent feasible. • Material stockpiles as well as maintenance/equipment staging and parking areas shall be located as far as feasible from residential and school receptors. • Proposed jack-and-bore pits shall be located as far from sensitive receptors as technically feasible. • A designated Project liaison shall be responsible for responding to noise complaints during the construction phases. The name and phone number of the liaison shall be conspicuously posted at construction areas and on all advance notifications. This person shall take steps to resolve complaints, including periodic noise monitoring if necessary. Results of noise monitoring shall be presented at regular meetings with the construction contractor, and the liaison shall coordinate with the construction contractor to modify, to the extent feasible, any construction activities that generate excessive noise levels. **MM NV-2**: All emergency generators shall be housed and muffled with acoustically rated enclosures to reduce noise levels to the greatest extent possible.	
Impact NV-2. Construction equipment used during pipeline construction would not be large enough to produce vibration that would exceed the County's threshold.	Less than Significant	None	Less than Significant
Impact NV-3. Noise-producing components of the proposed Project would be installed belowground, and noise-dampening materials would be provided on aboveground facilities, such as standby generators and pump stations, as needed. Furthermore,	Less than Significant	~~**MM NV-2:** All emergency generators shall be housed and muffled with acoustically rated enclosures to reduce noise levels to the greatest extent possible.~~ None	Less than Significant

Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance after Mitigation
the proposed Project would not result in a significant increase in traffic above existing volumes. Therefore, a permanent increase in the ambient noise level is not expected.			
Impact NV-4. Construction of the Project would result in temporary increases in noise levels near single-family residential land uses. The increase in noise levels during construction would range from 21 to 36 dB over existing ambient levels. Furthermore, periodic testing of the emergency power generators associated with the pump stations would cause temporary increases in noise levels at receivers located within the City.	Potentially Significant	See Mitigation Measure ~~MM-NV1~~ MM NV-2	Significant Unavoidable
Impact NV-5. The closest airport to the proposed Project is Santa Monica Municipal located approximately 13 miles to the east southeast of the proposed Project site. Therefore the proposed Project would not expose people to excessive noise associated with an airport.	No impact	None	Less than Significant
Impact NV-6. The proposed Project is not located within close proximity to any private air strips. Therefore the proposed Project would not expose people to excessive noise associated with a private airstrip.	Less than Significant	None	Less than Significant
Population and Housing			
Impact POP-1. On average, construction activities would require 30 to 35 workers on the Project site at any one time. Workers would commute to the Project site over an estimated 18month construction period for each phase of the Project, either from locations within the immediate area or in the surrounding communities. It is expected that few, if any, construction employees would relocate to the Project area. Operation of the proposed Project would require only two full-time employees, which would not result in a need for new homes or businesses.	Less than Significant	None	Less than Significant
Impact POP-2. Construction of the Project would not displace housing or persons. The new wastewater treatment facility is proposed to be sited ~~would be built~~ on a parcel currently in use by a private wastewater treatment plant and would be acquired by the ~~an existing~~ City ~~-owned parcel~~. The collection and conveyance system would be built generally within street rights-of-way and easements, and would not require the displacement of housing or persons.	Less than Significant	None	Less than Significant
Public Services			
Impact PS-1. Project construction is scheduled to commence in 2015 and last approximately 18 months. Project construction is	Less than Significant	None	Less than Significant

Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance after Mitigation
unlikely to result in increased demand for services and require new or altered police, fire, school, or library facilities to maintain acceptable service ratios, response times, or other performance objectives. The proposed Project would not directly result in an increased demand for public services due to increased residential or employee populations that would require the construction of new or altered facilities to maintain acceptable service ratios, response times, or other public facility performance objectives.			
Utilities			
Impact U-1. The wastewater treatment facility would be designed to meet waste discharge requirements established by the LARWQCB, which would consider water quality objectives established in the Basin Plan and Ocean Plan.	Less than Significant	None	Less than Significant
Impact U-2. The proposed Project involves the construction and operation of a new centralized wastewater treatment facility, the construction of which would result in potentially significant impacts, prior to mitigation, which include removal of protected walnut trees discussed in Sections 4.1 and 4.3, potential to encounter unknown archaeological or paleontological resources during construction discussed in Section 4.4, risk of seismic disruption and slope instability discussed in Section 4.5, routine handling and storage of hazardous materials discussed in Section 4.6, risk of inundation from a tsunami discussed in Section 4.7, and temporary noise impacts discussed in Section 4.9.	Less than Significant	See **MM BIO-3, 5, 7, 10, 11, 13**, and **14**; **MM AR-1** and **2; MM PR-1; MM GEO-1, 4, 5** and **7; MM HM-1** through **4; MM HY-1 and MM NV-1** and **2.**~~None~~	Less than Significant
Impact U-3. The proposed Project would not require the construction of new stormwater drainage facilities and would comply with City of Malibu regulations and guidelines pertaining to stormwater runoff, including requirements imposed by the construction general NPDES permit and Malibu LCP.	Less than Significant	None	Less than Significant
Impact U-4. Water use during the construction phase would be short term, and would cease with the completion of construction. Once operational, the proposed Project would treat a buildout wastewater flow of 507,000 gpd, with treated effluent disposal through landscape irrigation and by injecting surplus recycled water into the lower Civic Center Gravels of the Malibu Groundwater Basin to protect against seawater intrusion. Because the proposed Project would supply recycled water for landscape irrigation purposes, which would greatly exceed the amount of potable water consumed by restroom or laboratory facilities that would be constructed at the wastewater treatment facility, the	Less than Significant	None	Less than Significant

Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance after Mitigation
Project would not result in any substantial water consumption.			
Impact U-5. The proposed Project would provide additional wastewater treatment capacity in the Project area. It would not include components, such as new residential or commercial development, that would increase the amount of wastewater generated in the Project area.	Less than Significant	None	Less than Significant
Impact U-6. Solid waste generated by construction and operation of the proposed Project could be accommodated by the permitted capacity of existing solid waste disposal facilities.	Less than Significant	None	Less than Significant
Impact U-7. The proposed Project would comply with all federal, state, and local statutes related to solid waste, including AB 939.	Less than Significant	None	Less than Significant
Impact U-8. Construction of the proposed Project would require relatively minor amounts of energy, including electricity and fuel for construction equipment and worker vehicles, over the course of the approximate 18-month construction period. The increase in energy usage due to operation of the proposed Project is not expected to require additional off-site energy infrastructure or an increase in local or regional supplies to meet the increased demand.	Less than Significant	None	Less than Significant
Recreation			
Impact REC-1. Given the small number of workers and their limited opportunities to use nearby recreational facilities during their break times, it is not expected that local park and recreational facilities would experience a substantial increase in use or physical deterioration as a result of the Project during the approximate 19-month construction period. The proposed Project does not include a residential or commercial development component and, consequently, would not directly result in a substantial increase in residential or employee populations in the Project area that would increase the demand for recreational services and facilities.	No impact	None	No impact
Impact REC-2. Access to park and recreational facilities could be affected by Project construction due to temporary lane closures and construction-related traffic delays. However, a traffic control plan would be required and implemented to ensure that traffic flow along local streets would be maintained in both directions at all times during construction. Any disruptions in access would be temporary and short term.	Less than Significant	None	Less than Significant
Greenhouse Gas Emissions			

Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance after Mitigation
Impact GHG-1. The proposed Project's annual GHG emissions are estimated to be 1,132 MT of CO2e. These estimates reflect emissions from all construction and operation activities. ~~To put this number into perspective, statewide CO2e emissions for 2011 were estimated to be 448.11 million MT.~~These emissions are less than the SCAQMD proposed screening threshold of 3,000 MTons for commercial projects.	Less than Significant	None	Less than Significant
Impact GHG-2. The proposed Project would not frustrate any AB 32 Scoping Plan measures, nor be inconsistent in any way with the AB 32 goal of reducing state-wide GHG emissions. In addition, the proposed Project would further City of Malibu conservation policies, which have the co-benefit of reducing GHG emissions. As such, the proposed Project would not conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of GHGs.	Less than Significant	None	Less than Significant
Impact GHG-3. Sea level rise as a result of global climate change may have significant impacts on the shoreline infrastructure in the City of Malibu including some portions of the Project (pipelines, pump stations, and tanks along Malibu PCH and Malibu Lagoon) that are located close to the shoreline. The City is implementing an adaptive management approach to addressing sea level rise impacts on its infrastructure.	Less than Significant	None	Less than Significant
Transportation and Traffic			
Construction Impacts: Construction of the Project would result in temporary traffic impacts throughout the Civic Center area due to trucks bringing construction materials and equipment, as well as trucks hauling excavated dirt from the Project. In addition, during periods of pipeline installation, portions of roadway would be excavated and construction equipment would be present within the roadway resulting in temporary traffic disruptions. The Traffic Control Plan that would be prepared for the Project would ensure that these temporary traffic impacts would be less than significant.	Less than Significant	**MM TRANS -1**: To the greatest extent possible, the City shall coordinate the Traffic Control Plan and construction work of the proposed Project with any projects scheduled to be concurrently constructed in the Civic Center area or along PCH within 1-mile of the Civic Center area. If related projects are anticipated to be constructed concurrently within the Civic Center area, or along PCH within 1 mile of the Civic Center area, the City shall ~~communicate~~ provide the Traffic Control Plan to the related project's proponent or other responsible entity and receive additional input from the proponent or responsible entity on potential construction haul routes and timing. The Traffic Control	Less than Significant

Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance after Mitigation
		Plan will also be coordinated with school traffic patterns via consultation with the Santa Monica-Malibu Unified School District and Our Lady of Malibu representatives. Prior to finalization and approval by the City of the Traffic Control Plan and prior to the commencement of construction, the Traffic Control Plan shall be reviewed by LACFD and LASD.	
Operation Impacts: Operation of the Project would result in a negligible increase in vehicle trips to the Civic Center area. Employee trips, solids, screening, and grit removal, chemical delivery, and routine inspection would result in minor additional vehicle trips to the Civic Center Area. Maintenance of the proposed injection wells would require approximately 100 feet of one lane and on-street parking along Malibu Road to be closed for up to one month. This maintenance would be scheduled to minimize the length of time required to conduct this work and to avoid periods of high visitor activity. Accordingly, traffic impacts associated with operation of the Project would be less than significant.	Less than Significant	None	Less than Significant