EXECUTIVE SUMMARY

Introduction

The San Gorgonio Pass Water Agency (SGPWA) proposes to construct a groundwater recharge facility on a vacant, undeveloped property in the City of Beaumont, California. The project would increase recharge capabilities with the delivery of State Water Project (SWP) water, as well as other supplemental water sources via a proposed underground pipeline and service connection facility. The recharge facility would enable the SGPWA to replenish the groundwater basin and provide water supply for the ongoing and projected needs of the SGPWA's service area.

Purpose

The most heavily developed portion of the SGPWA's service area is the Beaumont Basin. Currently, the Beaumont Basin is experiencing an overdraft condition, which means that the amount of water withdrawn by pumping exceeds the average amount of water that naturally recharges the groundwater basin on an annual basis. The estimated hydrologic safe yield, which is the amount of groundwater that can be continuously withdrawn from the Beaumont Basin without adverse impact, is estimated at 6,100 acre-feet per year (AFY) (Boyle 2002). In 2007 and 2009, the annual precipitation was among the driest on record in Beaumont while 2010 was one of the wettest (SGPWA 2012). In 2011, the annual precipitation was below normal (SGPWA 2012). In 2010, the total production within the Beaumont Basin was 13,469 acre-feet (af) while in 2011, the total production was 13,908 af (SGPWA 2012), which means that the estimated exceedance of the hydrologic safe yield for 2010 was approximately 7,369 af and for 2011 was approximately 7,808 af. The cumulative overdraft of the Beaumont Basin since development of the region began in the 1920s is over 100,000 af (Albert A. Webb Associates 2008).

In 2003, Phase I of SWP's East Branch Extension (EBX) was completed, bringing raw SWP water into SGPWA's service area. However, the capacity of Phase I allows for a maximum of approximately 12,000 AFY of the SGPWA's Table A amount (i.e., amount of SWP water that SGPWA has contracted for) which is 17,300 AFY (SGPWA 2012). Based on fluctuating precipitation and supply conditions, SWP yearly distribution can differ from Table A amounts. For example, in 2011, the SGPWA was distributed approximately 10,000 af of SWP water (SGPWA 2012), although the SGPWA has capacity for 12,000 AFY, and it's full Table A amount is 17,300 AFY. Following completion of both Phase II of the EBX (estimated 2015), which would increase overall capacity to the region, and the project as proposed in this Draft EIR, the SGPWA would be able to obtain its full Table A amount of 17,300 AFY of SWP water. The proposed recharge facility could also provide capacity to receive water from the SWP under the Article 21 Water Program or other supplemental water such as exchange water. The Article 21 Program was established to allow the California Department of Water Resources to provide water to State Water Project contractors

(i.e., SGPWA) when water levels within the San Luis Reservoir in Northern California exceed certain water elevations. Furthermore, the proposed recharge facility could also provide recharge capacity for retail water agencies. The proposed recharge facility will allow SGPWA to receive the full Table A amount of SWP water as well as take advantage of wet years to receive more water to replenish the groundwater basin.

In 2008, the SGPWA evaluated six potential recharge sites within the Beaumont Basin. A recharge site would allow the SGPWA to recharge the groundwater basin with SWP water. Initially, SGPWA provided a detailed review of the Brookside South Recharge project that included an in-stream recharge facility within Noble Creek. The SGPWA decided not to proceed with the Brookside South Recharge project and is currently proposing a recharge facility southeast of Noble Creek.

This Draft Environmental Impact Report (EIR) provides project-level analysis of the environmental effects related to implementation of the Beaumont Avenue Recharge Facility and Pipeline project (project). The level of impact analysis in this Draft EIR corresponds to the degree of specificity deemed appropriate in accordance with CEQA Guidelines (Title 14, Cal. Code Regs., 15146). This document addresses the potentially significant adverse environmental effects that may be associated with the planning, construction, and operation of the project. The document also identifies appropriate and feasible mitigation measures and alternatives that may be adopted to significantly reduce or avoid these potential impacts.

Proposed Project

Project Location

The proposed project is located in both the City of Beaumont and the Cherry Valley area, an unincorporated portion of Riverside County. The project site encompasses a recharge facility, pipeline, and a service connection site. The recharge facility is located at the southwest corner of Beaumont Avenue and Brookside Avenue. The pipeline is proposed to extend north from the recharge facility to Brookside Avenue, east to Beaumont Avenue, north along Beaumont Avenue to Orchard Street, west along Orchard Street to the west side of the Mountain View Channel, and south to the proposed service connection facility. The service connection facility site is located south of Orchard Street and immediately west of Mountain View Channel. Additionally, there would be a potential that excavation activities associated with construction of the project would require the depositing of excess soil at up to three locations: the southern end of the recharge facility site; an offsite triangular parcel located south of Brookside Avenue, north of Noble Creek, and east of the Mountain View Channel; and the service connection site.

Project Characteristics

Recharge Facility

The recharge facility would consist of a series of five tiered basins, each separated by berms. The facility would have raised embankments along its perimeter so that a portion of the basins will be above the current ground elevation and a portion of the basins will be below the current ground elevation. A maximum 3:1 slope would be used for the interior basin portions of the facility, while 3:1 cut/fill slopes would be used for the exterior perimeter of the facility. The raised embankments would extend a maximum of approximately 9.5 feet above the surrounding grade along the majority of Beaumont Avenue. The southern end of the embankment adjacent to Beaumont Avenue would extend approximately 14 feet above the existing surrounding grade. The embankment along the southern property line will raise approximately 15.5 feet above the existing surrounding grade. The raised embankment along the western property line will be up to 6.5 feet above the existing surrounding grade. The embankment along the northern portion of the recharge facility will raise approximately 9.5 to 11 feet adjacent to three middle basins within the recharge facility and the embankment adjacent to the northern basin will range from 10.5 to -11.2 feet compared to the surrounding grade.

The recharge facility has been designed for an infiltration rate of two feet per day and to accommodate a maximum flow rate of 20 cubic feet per second (cfs). With a capacity of 20 cfs, the normal operation of the facility would allow recharge of 3,000 AFY to 4,000 AFY because the existing Beaumont Cherry Valley Water District's recharge basins located northeast of the proposed recharge basin has a current capacity of approximately 14,000 AFY. The proposed recharge basin would be operating during wet periods of the year when the SGPWA can take advantage of surplus water, and when it needs to import its full Table A amount. However, in a very wet year when surplus water is available through the California Department of Water Resources Article 21 Program and exchanges, the proposed recharge facility could have a capacity up to a maximum of 14,500 AFY.

The floor of the basin in the northeast portion of the facility would be approximately 40 to 45 feet higher in elevation than the floor of the basin in the southwest portion of the facility. Emergency spillways would be placed on the embankments of each basin and directed into the adjacent basin. The southernmost basin would have a spillway draining to the west and an emergency outflow swale to the south that would convey the emergency runoff south to Mountain View Avenue. The proposed recharge facility site would include an onsite polyvinyl chloride (PVC) pipe distribution system.

Each basin would have a maximum ponding depth of 5.5 feet and a minimum freeboard of 1.5 feet from water surface to the basin rim. Maintenance roads would be provided along both the perimeter of the facility and between each of the basins. The perimeter maintenance road would be 20 feet wide, while the roads between the basins will be 15 feet and the ramps to the floor of the basins will be 12 feet. These roads would be engineered to prevent erosion and would be slightly angled towards

the basins to allow for drainage into the basins. Site access is proposed along Brookside Avenue and from Mountain View Avenue.

The recharge facility is proposed with berms that would prevent stormwater flows from entering the basins from outside of the recharge facility. The outlet structure located towards the southwesterly corner of the recharge facility would only be used in an unusual event that the basins must be quickly drained.

Periodic maintenance activities of the recharge facility would be required once the basins are operational. If the recharge basins continue to infiltrate at an acceptable rate, the time between maintenance activities would be extended. It is anticipated that each recharge basin may require servicing on an annual basis. Maintenance activities would involve temporarily taking an individual basin out of commission, allowing the basin to thoroughly dry over several weeks, re-grading and ripping the basin bottom with a dozer, and, if necessary, re-grading and tracking the basin slopes, although this final step is not expected to be regularly required. Each basin would take approximately one day to grade, rip, and track. Since SGPWA has plans to temporarily take the pipeline offline every year to perform mandatory annual maintenance activities, it is also possible that the recharge facility would be shut down during this period, with each basin being serviced during the shut down period.

The proposed recharge facility would include landscaping along its perimeter. To provide irrigation water for landscaping, an irrigation well is proposed. The well is proposed to include an electric pump that would include an electrical line to the recharge basin site and have a capacity to pump a maximum of 100 gallons per minute of non-potable water. A storage pressure vessel may be located next to the well to accommodate a small volume of irrigation water.

Pipeline

A 24-inch pipeline is proposed to extend east from the recharge facility along Brookside Avenue for approximately 180 linear feet, along Beaumont Avenue for approximately 5,600 linear feet, and west along Orchard Street for approximately 1,400 feet toward the service connection facility. The pipeline is planned to be located within the southern side of Brookside Avenue (eastbound travel lane), within the western side of the Beaumont Avenue centerline (southbound traffic lane) and the southern side of the Orchard Street centerline (eastbound traffic lane). The pipeline would transfer SWP water from the service connection site to the recharge facility for groundwater recharge. The pipeline has been designed to convey a flow rate of 20 cfs.

Service Connection

The service connection facility would convey SWP water from the existing 36-inch East Branch Extension/Noble Creek pipeline located at the intersection of Orchard Street and Mountain View Avenue to the pipeline and ultimately downstream to the recharge facility. A pipe outlet, not to

exceed 24-inch diameter, would be extended from the service connection facility to the 24-inch pipeline along Orchard Street. While up to half of the service connection site could be disturbed during construction of the project, the service connection facility itself would disturb a smaller, approximately 120-foot by 110-foot portion (0.3 acre) representing less than 10 percent of the overall site. The service connection site would consist of a precast concrete control building and various below- and above-grade pipelines and ancillary infrastructure. Site access would be provided by a driveway from Orchard Street.

Offsite Triangular Parcel

The offsite triangular parcel located northwest of the recharge facility site on the north side of Noble Creek could potentially be used, along with three other locations, as a staging area during construction of the project. Additionally, this parcel could potentially be used for depositing excess excavated soil as a result of excavation of the pipeline.

Project Objectives

Implementation of the project is needed to meet the following SGPWA objectives:

- To enable the Agency to deliver its entire Table A amount of water from the State Water Project.
- To enable the Agency to purchase Article 21 water or other supplemental water sources that become available over and above the Agency's Table A water.
- To provide a regional recharge facility that would be available to all retail water agencies.
- To augment regional storage capacity.
- To provide water supply for the ongoing and projected needs of the SGPWA's service area.

Applicability of City and County Land Use Plans, Policies, and Regulations

According to California Government Code Section 53091(d) and 53091 (e), as a municipal water storage/recharge facility, the project would be exempt from the land use policies and zoning ordinances of a county or city, including the provisions contained in the City of Beaumont General Plan and Zoning Ordinance, as well as the County of Riverside General Plan and Zoning Ordinance.

In accordance with Sections 53091(d) and 53091(e) of the California Government Code, the proposed recharge facility, pipeline, and service connection facility, and offsite triangular parcel are exempt from the provisions of the City of Beaumont and County of Riverside's Land Use Plan and Zoning Ordinance. Although the proposed project is exempt from City and County plans and ordinances, the SGPWA has chosen to provide an analysis of the project's consistency with those plans and zoning ordinance, and in some instances, to use them as thresholds for determining the project's potential environmental impacts.

Approvals

The proposed recharge facility and pipeline project will require approvals from the lead agency, San Gorgonio Pass Water Agency (approval of the project and approval of construction contracts). In addition, the SGPWA will be required to obtain encroachment permits for the proposed project. The encroachment permits require approvals from other agencies including Riverside County Flood Control and Water Conservation District (approval of an encroachment permit for pipeline construction under the Mountain View Channel and Noble Creek), Riverside County Transportation Department (approval of an encroachment permit for the pipeline in Beaumont Avenue and Orchard Street), and the City of Beaumont (approval of an encroachment permit for pipeline construction in Brookside Avenue).

Areas of Controversy/Issues To Be Resolved

Section 15123(b)(3) of the CEQA Guidelines requires that an EIR contain issues to be resolved, which includes the choice among alternatives and whether or how to mitigate significant impacts. The major issues to be resolved within the project include the decisions by the Lead Agency as to whether:

- The Draft EIR adequately describes the environmental impacts of the project;
- The recommended mitigation measures should be adopted or modified; and/or
- Additional mitigation measures need to be applied to the project.

Table ES-1 summarizes the detailed discussion contained in Section 3, Environmental Impact Analysis, of this Draft EIR.

Alternatives to the Proposed Project

Section 15126.6(a) of the State CEQA Guidelines requires that an EIR, "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."

This following discussion focuses upon the alternatives to the proposed project with the potential of avoiding or substantially lessening any significant impacts associated with implementation, even if these alternatives would impede attainment of project objectives or prove more costly. These alternatives could result in new impacts that would not result from implementation of the proposed project. This Draft EIR evaluates the following three alternatives:

No Project Alternative

Under the No Project Alternative (Alternative 1), the proposed recharge facility, pipeline, and service connection facility would not be constructed. The recharge facility site and the service connection site would remain vacant and undeveloped, as they currently are under existing conditions. Since the recharge basins would not be constructed, the associated pipeline along Beaumont Avenue and Orchard Street and the service connection facility connecting this pipeline to the existing EBX pipeline, would not be required. The proposed groundwater recharge operations resulting from the project would not occur.

Reduced Footprint/Alternate Site Location Alternative

This alternative is based on parameters identified for the Brookside South site in the "Evaluation of Potential Recharge Sites for San Gorgonio Pass Water Agency" prepared by Albert A. Webb Associates in 2008. Under the Reduced Footprint/Alternate Site Location Alternative (Alternative 2), the recharge facility would be constructed on 18.2 acres downstream of the confluence of Noble Creek and Mountain View Channel, totaling approximately 6,400 feet long. Alternative 2 involves using the Noble Creek stream channel south of Brookside Avenue to impound and recharge SWP water during the non-storm season. This Alternative consists of constructing multiple earthen berms within and perpendicular to Noble Creek. The berms would create shallow impoundments that would cover the channel bottom and serve as temporary barriers, causing ponding of the released SWP water during the non-storm season. The berms would slow flows and allow the SWP water to form shallow ponds. The ponded water would then percolate into the channel bottom, migrate through the vadose zone, and ultimately recharge the main water table of the Beaumont Basin. Since these berms would be constructed within Noble Creek, which serves as flood control facility during the storm season, Alternative 2 would be constructed and removed on an annual basis. The estimated recharge potential of Alternative 2 is 5,700 AFY.

Because of the adjacent location of the Alternative 2 site, the pipeline length would generally remain the same as under the proposed project. The service connection facility would be constructed as proposed without any modifications.

Secondary Alternate Site Location Alternative

This alternative is based on parameters identified for the Noble Creek Meadows site in the "Evaluation of Potential Recharge Sites for San Gorgonio Pass Water Agency" prepared by Albert A. Webb Associates in 2008 as well as revised assumptions regarding the number of recharge days and the recharge capability of the site in terms of acre-feet per day. Under the Secondary Alternate Site Location Alternative (Alternative 3), the recharge facility would be constructed on the 101-acre site located north of Oak Valley Parkway, east and south of Noble Creek, and west of Mountain View Avenue. The Alternative 3 site includes 101 acres, 40.4 acres available for spreading, and 36,400 AFY of estimated recharge potential. However, based on the presence of the approximately 200-foot wide Southern California utility easement, as well as irregular terrain, on the southern portion of this

site, this alternative assumes the construction of a recharge facility of the same size as the proposed project (e.g., +/-44 acres, 20 acres available for spreading, 3,000 to 4,000 AFY of estimated recharge during normal operations and a capacity of up to 14,500 AFY) on the northern half of the Alternative 3 site.

Due to the more southwesterly location of the Alternative 3 site, the pipeline length would be increased approximately 1,250 feet as compared to the proposed project. The service connection facility would be constructed as proposed without any modifications.

Environmentally Superior Alternative

Each of the three alternatives would have a reduction of at least one environmental impact relative to the proposed project. As previously addressed, if the No Project Alternative is the environmentally superior alternative, which is the case with the conclusions in this alternatives analysis, the EIR must also identify another environmentally superior alternative among the remaining alternatives.

Based on a comparison of the two build alternatives (Alternatives 2 and 3), impacts associated with air quality, cultural resources, greenhouse gas emissions, noise, and traffic would be less under Alternative 2 compared to Alternative 3. Impacts associated with geology and soils, and hazards and hazardous materials under Alternative 2 would be similar to Alternative 3. Impacts associated with biological resources and hydrology and water quality would be greater under Alternative 2 compared to Alternative 3. Overall, based on the above evaluations, the Reduced Footprint/Alternate Site Alternative (Alternative 2) is considered the environmentally superior alternative.

Review of the Draft EIR

Upon completion of this Draft EIR, the SGPWA prepared and filed a Notice of Completion (NOC) with the California Office of Planning and Research/State Clearinghouse to begin the public review period (Public Resources Code, Section 21161). Concurrent with the NOC, the SGPWA distributed a Notice of Availability (NOA) in accordance with Section 15087 of the CEQA Guidelines. The NOA was mailed to the organizations and individuals who previously requested such a notice in writing. This Draft EIR was distributed to responsible and trustee agencies, other affected agencies, surrounding cities and municipalities, and all interested parties requesting a copy of this Draft EIR in accordance with Public Resources Code, Section 21092(b)(3). During the public review period, this Draft EIR, including the appendices, is available for review at the following locations:

San Gorgonio Pass Water Agency
1210 Beaumont Avenue
Beaumont, CA 92223
Monday through Friday: 7:30 a.m. to 4:30 p.m.
Saturday and Sunday: Closed

Beaumont Library District
125 E Eighth Street
Beaumont, CA 92223
Monday, Friday, and Saturday: 10 a.m. to 6 p.m.
Tuesday and Thursday: 10 a.m. to 8 p.m.
Sunday: 1 p.m to 6 p.m.
Wednesday: Closed

In addition, the Draft EIR, including the appendices, is available for review at the following SGPWA website.

http://www.sgpwa.com/reports.asp

Agencies, organizations, individuals, and all other interested parties not previously contacted, or who did not respond to the NOP, currently have the opportunity to comment on this Draft EIR during the 45-day public review period. Written comments on this Draft EIR should be addressed to:

Jeff Davis, P.E., General Manager
San Gorgonio Pass Water Agency
1210 Beaumont Avenue
Beaumont, CA 92223

Comments may also be sent by email to Jeff Davis at:

Email: JDavis@sgpwa.com

Upon completion of the public review period, written responses to all significant environmental issues raised will be prepared and made available for review at least 10 days prior to the public hearing on the project before the SGPWA, at which the certification of the Final EIR will be considered. Comments received and the responses to comments will be included as part of the record for consideration by decision-makers for the project.

Summary of Impacts and Mitigation Measures

Table ES-1 summarizes the potential environmental effects of the proposed project, the recommended mitigation measures, if applicable, and the level of significance after mitigation. Per CEQA Section 15093, should the project be approved as proposed, any impact noted in the summary as "significant" after mitigation would require the adoption of a statement of overriding considerations. However, as shown in Table ES-1, the proposed project would not result in any significant and unavoidable adverse impacts. Therefore, a statement of overriding considerations for the proposed project is not required.

Table ES-1: Executive Summary of Impacts and Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
Section 3.1 - Air Quality		
Impact AIR-1: The project could conflict with or obstruct implementation of the applicable air quality plan. *(Significant Impact)*	**MM AIR-1.** During construction of the recharge basin, the construction contractor can use the construction equipment assumed in this analysis and the two scrapers shall be equipped with a Tier 3 level engine capable of achieving a NO_X emission rate of 2.7 grams per horsepower-hour. Based on the peak hours per day of construction and horse-power as reflected in Table 3.1-8 of this Draft EIR, the emission reduction rate would reduce regional emissions of NO_X by the project to below 100 pounds per day. If the construction contractor chooses an alternative mix of construction equipment, the construction contractor shall demonstrate through modeling that potential construction emissions do not exceed the regional or local significance thresholds. If the contractor cannot demonstrate that emissions would be below 100 pounds per day, the contractor will not be allowed to use the alternative mix of construction equipment. **MM AIR-2.** Under unforeseen conditions, if there is an overlap of construction phases due to delays in design or weather, the construction contractor shall demonstrate through modeling that potential construction emissions do not exceed the regional significance thresholds. If the contractor cannot demonstrate that emissions would be below the regional significance thresholds, the contractor will not be allowed to use the alternative mix of construction equipment.	Less than Significant Impact with Mitigation.
Impact AIR-2: The project would not violate an air quality standard or contribute substantially to an existing or projected air quality violation. *(Less than Significant Impact)*	No mitigations are required.	Less than Significant Impact.

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
Impact AIR-3: The project could result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors). *(Significant Impact)*	Mitigation Measures AIR-1 and AIR-2 are required to reduce project's regional construction emissions of NO_X to less than significant levels.	Less than Significant with Mitigation.
Impact AIR-4: The project would not expose sensitive receptors to substantial pollutant concentrations. *(Less than Significant Impact)*	No mitigations are required.	Less than Significant Impact.
Impact AIR-5: The project would not create objectionable odors affecting a substantial number of people. *(Less than Significant Impact)*	No mitigations are required.	Less than Significant Impact.
Section 3.2 - Biological Resources		
Impact BIO-1: The project could have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service. *(Significant Impact)*	**MM BIO-1.** A pre-construction survey shall be conducted in accordance with the MSHCP guidelines. The survey shall be conducted by a qualified biologist within 30-days of any vegetation removal or ground disturbing activities on the project sites to ensure that no nesting BUOW occur within the sites. If BUOW are observed on any of the project sites during the pre-construction survey, MM BIO-2 shall be implemented. **MM BIO-2.** If BUOW are observed on any of the project sites during the pre-construction survey, they shall be passively relocated in accordance with the MSHCP guidelines. If BUOW are occupying a burrow between March and August, it shall be considered an active nest, unless otherwise determined by a qualified biologist, and passive relocation shall be delayed until September, or until the nestlings have fledged the nest. **MM BIO-3.** Prior to any soil storage activities within the offsite triangular parcel located north of Noble Creek, east of Mountain View Channel, and south of Brookside Avenue and the construction activities within the northern portion of the proposed recharge facility, the occupied habitat of the Los Angeles Pocket Mouse on	Less than Significant with Mitigation.

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
	the triangular parcel and along Noble Creek (i.e., 0.4-acre area) shall be flagged by a qualified biologist at least 15 days prior to any construction activities. No construction activities including soil storage or staging of construction materials, equipment, or vehicles shall occur within the flagged areas. **MM BIO-4.** Within maintained areas, all excavated, steep-walled holes or trenches more than two feet deep shall be either covered at the end of each construction day with plywood or one or more escape ramps constructed of earth fill or wooden planks shall be placed to prevent entrapment of LAPM during project construction. The ramps shall be located at no greater than 100-foot intervals, contain slopes less than 45 percent, and be at least one-foot wide. **MM BIO-5.** All trenches and holes shall be inspected for entrapped wildlife each morning prior to the onset of project construction. Before holes or trenches are filled, they shall be thoroughly inspected for entrapped animals. Any animals discovered during these inspections shall be removed from the trench or hole by the project biologist and released. **MM BIO-6.** Any pipes, poles, culverts, or similar construction materials with a diameter of 1.5 inches or greater stored overnight at the proposed recharge facility site that are within 200 feet of occupied LAPM habitat shall be thoroughly inspected for the presence of LAPM before the materials are subsequently buried, capped, or otherwise used or moved. Unburied pipes laid in trenches overnight shall be capped. If LAPM are discovered inside a pipe, that section of pipe shall not be moved until the project biologist has been consulted. If necessary and under the direct supervision of the biologist, the pipe may be moved only once to remove it from the path of construction activities until the animal has been removed and released. **MM BIO-7.** The maintenance of equipment; dispensing of fuel, oil, or coolant; and all other similar construction activities shall be restricted to designated staging areas located outside of Noble Creek to prevent the release of any hazardous substances into the drainage. Any accidental spills shall be immediately contained and properly remediated according to local, State, and federal regulations.	

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
	MM BIO-8. No pets shall be allowed on and adjacent to environmentally sensitive areas. **MM BIO-9.** Rodenticides, herbicides, insecticides, or other chemicals that could potentially harm sensitive species shall only be used by a qualified applicator. Chemical application shall not be applied in any areas of occupied LAPM habitat. **MM BIO-10.** Trash shall be collected and stored so that it is inaccessible to scavengers (i.e., crows, raccoons, and coyotes) and shall be removed daily so as not to attract potential LAPM predators. **MM BIO-11.** No nighttime construction or maintenance activities shall occur. Nighttime shall be defined as when the sun sets below the horizon. **MM BIO-12.** A pre-construction survey shall be conducted by a qualified biologist within 30-days of any vegetation removal or ground disturbing activities on the project sites to ensure that no nesting birds occur within the sites. This survey shall occur each year prior to the construction of the recharge basin berms, and may coincide with the mandatory BUOW pre-construction survey outlined in MM BIO-1. If nesting birds are observed on any of the project sites during the pre-construction survey, MM BIO-13 and MM BIO-14 shall be implemented. **MM BIO-13.** If nesting birds are present within the project footprint, they shall be avoided until the nesting activities are complete, as determined by a qualified biologist. In the event that nesting birds are observed during the pre-construction survey, a buffer area shall be established around the nest. The buffer area shall be no less than 200 feet around any active nest and shall be established by a qualified biologist based on the specific avian species and type of disturbance in the area. Construction activities may occur within the buffer area at the discretion of a qualified biologist. All construction activities with the potential to cause a nest failure shall be prohibited from the area until the nestlings have fledged.	

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
	MM BIO-14. A qualified biologist shall be present during all vegetation removal and ground disturbing activities. The nest monitoring will continue during construction activities until all nesting activities have ceased.	
Impact BIO-2: The project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service. *(Less than Significant Impact)*	No mitigation measures are required.	Less than Significant Impact.
Impact BIO-3: The project would not have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. *(No Impact)*	No mitigation measures are required.	No Impact.
Impact BIO-4: The project could interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites. *(Significant Impact)*	Implementation of Mitigation Measures BIO-12 through BIO-14 are required.	Less than Significant with Mitigation
Impact BIO-5: The project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. *(No Impact)*	No mitigation measures are required.	No Impact.
Section 3.3 - Cultural Resources		
Impact CUL-1: The project could potentially cause a substantial adverse change in the significance of a historical resource as defined in §15064.5. *(Significant Impact)*	**MM CUL-1.** Prior to the issuance of grading permits, a Project Archaeologist approved by the County of Riverside for portions of the project sites located within the jurisdiction of the County of Riverside and the City of Beaumont for the portions of the sites	Less than Significant with Mitigation

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
	located within the jurisdiction of the City of Beaumont shall initiate and supervise cultural resource mitigation monitoring during project-related earthmoving activities in the project area, subject to certain constraints found in Mitigation Measure CUL-2. **MM CUL-2.** The following monitoring measures that provide a framework for monitoring shall be followed: a) All earthmoving activities shall be monitored by the approved Project Archaeologist or his/her designated representative. Monitoring shall begin along the pipeline segments once two feet of surface fill has been removed. b) Once 50 percent of the earth to be moved has been examined by the approved Project Archaeologist, the Project Archaeologist may, at his or her discretion, terminate monitoring if and only if no buried cultural resources have been detected. c) If buried cultural resources are detected during monitoring, monitoring must continue until 100 percent of virgin earth within the study area has been disturbed and inspected by the Project Archaeologist or his/her designated representative. d) Earthmoving activities shall cease in the immediate area of a potential cultural artifact find as delineated by the Project Archaeologist or his/her designated representative. Such activities shall be permitted to continue in other areas while the particular find(s) is investigated. e) If cultural artifacts are uncovered during earthmoving activities, the resources shall be examined by a professional archaeologist subject to Mitigation Measures CUL-1 and CUL-2, then curated in a museum facility chosen by the County of Riverside. A mitigation monitoring report shall accompany the artifacts once they are donated to the museum facility.	
Impact CUL-2: The project could potentially cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5. *(Significant Impact)*	Mitigation Measures CUL-1 and CUL-2 are required.	Less than Significant with Mitigation

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
Impact CUL-3: The project could potentially directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. *(Significant Impact)*	**MM CUL-3.** If grading and excavation plans show that a depth of 10 feet could be reached, a County of Riverside-qualified Project Paleontologist shall develop a mitigation monitoring program to reduce any potential impacts. If the paleontological monitor finds that underlying soils are conducive to the preservation of fossil resources, then Mitigation Measures CUL-4 through CUL-7 shall apply. **MM CUL-4.** Excavation monitoring in areas identified as likely to contain paleontologic resources shall occur. Paleontologic monitors shall be equipped to salvage fossils, as they are unearthed, to avoid construction delays, and to remove samples of sediments likely to contain the remains of small fossil invertebrates and vertebrates. Monitors shall be empowered to temporarily halt or divert construction activities to allow for the removal of abundant or large specimens. **MM CUL-5.** Preparation of recovered specimens to a point of identification and permanent preservation, including washing of sediments to recover small invertebrates and vertebrates, shall occur. Preparation and stabilization of all recovered fossils shall be deemed necessary to fully reduce impacts to significant paleontological resources. **MM CUL-6.** Identification and curation of specimens into an established, accredited museum repository with permanent retrievable paleontologic storage shall occur. These procedures shall be deemed necessary steps in effective paleontologic mitigation and CEQA compliance. Prior to the initiation of any mitigation activities, the paleontologist shall have a written repository agreement in writing. Mitigation of impacts shall not be deemed complete until such curation into a museum repository has been fully completed and documented.	Less than Significant with Mitigation

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
	MM CUL-7. The paleontologists shall prepare a report of findings with an appended itemized inventory of specimens. The report and inventory, when submitted to the appropriate lead agency along with confirmation of the curation of recovered specimens into an established, accredited museum repository, shall signify completion of the mitigation program to reduce impacts to significant paleontologic resources.	
Impact CUL-4: The project would not disturb any human remains, including those interred outside of formal cemeteries. *(Less than Significant Impact)*	No mitigation measures are required.	Less than Significant Impact.
Section 3.4 - Geology and Soils		
Impact GEO-1: The project would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving: i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. *(Less than Significant Impact)*	No mitigation measures are required.	Less than Significant Impact.
Impact GEO-2: The project could expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving: ii) Strong seismic ground shaking. *(Significant Impact)*	**MM GEO-1:** The prefabricated service connection building shall be founded on dense, stable soils. The upper 12 inches of soils below the footing sub-grade shall be scarified and recompacted to a minimum of 90 percent of laboratory maximum dry density and within ±3 percent of optimum moisture density. Such scarification and recompaction shall extend horizontally outside the structure footprint to a distance of at least three feet. **MM GEO-2:** Jack and bore pit excavations to receive backfill shall be free of trash, debris, or other unsatisfactory materials at the time of backfill placement. The bottoms of the excavations shall be scarified to a depth of at least 12 inches where possible. The	Less than Significant with Mitigation.

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
	scarified soils shall be brought to near-optimum moisture content and compacted to at least 90 percent of the laboratory maximum dry density to produce a firm and unyielding surface. Fill shall then be placed on the compacted soils in loose lifts of eight inches or less, moisture conditioned to within ±3 percent of optimum, and compacted to at least 90 percent of the laboratory maximum dry density determined by the ASTM D1557 test method. The project contractor shall select the equipment and processes to be used to achieve the specified density without damage to adjacent ground, facilities, utilities, and completed work. **MM GEO-3:** Pipe design generally requires a granular material with a Sand Equivalent greater than 30. Bedding material for the pipes shall be free from oversized particles (greater than one inch). Migration of fines from the surrounding native and/or fill soils shall be considered in selecting the gradation of any imported bedding material. Pipe bedding material shall satisfy the following criteria: D15 < 2.5 mm (0.098-inch) and D50 < 19.0 mm (0.75-inch) Where D15 and D50 represent particle sizes of the bedding material corresponding to 15 percent and 50 percent passing by weight, respectively. **MM GEO-4:** Trench excavations to receive backfill shall be free of trash, debris, or other unsatisfactory materials at the time of backfill placement. **MM GEO-5:** Trench backfill shall be compacted to at least 90 percent of the laboratory maximum dry density as per ASTM D1557 test method or as required by the local agency standards. At least the upper one foot of trench backfill underlying pavement shall be compacted to at least 95 percent of the laboratory maximum dry density as per ASTM D1557 test method. **MM GEO-6:** Particles larger than one inch shall not be placed within 12 inches of the pavement sub-grade. No more than 30 percent of the backfill volume shall be larger than 0.75 inch in the largest dimension. Gravel shall be well mixed with finer soil. Rocks larger than three inches in the largest dimension shall not be placed as trench backfill.	

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
	MM GEO-7: Trench backfill shall be compacted by mechanical methods, such as sheepsfoot, vibrating, or pneumatic rollers or mechanical tampers, to achieve the density specified in the 2013 Geotechnical Investigation Report. The backfill materials shall be brought to within ±3 percent of optimum moisture content then placed in horizontal layers. The thickness of uncompacted layers shall not exceed eight inches. Each layer shall be evenly spread, moistened, or dried as necessary, and then tamped or rolled until the specified density has been achieved. **MM GEO-8:** Trench backfill shall not be placed, spread, or rolled during unfavorable weather conditions. When the work is interrupted by heavy rain, fill operations shall not resume until field tests by the project engineer indicate that the moisture content and density of the fill are in compliance with project specifications. **MM GEO-9:** The prefabricated service connection building and pipeline shall be fitted with flexible couplings, automatic shut-off valves, or other similar measures. **MM GEO-10.** Lightweight structures such as the prefabricated service connection building shall be supported on continuous (strip) and/or isolated spread footings. Continuous and isolated spread footings shall be at least 12-inches wide. The depth of embedment below lowest adjacent soil grade shall be at least 12 inches. Footings shall be founded on at least 12 inches of scarified and compacted soil. For shallow spread footings founded on scarified and compacted soil, an allowable net bearing capacity of 1,200 pounds per square foot (psf), plus 300 psf for each additional foot of depth, shall be used. The maximum allowable bearing capacity shall be limited to 2,500 psf. **MM GEO-11.** Installation of the pipeline shall adhere to the required soil parameters for the pipeline as established in the California Building Code and identified in the 2013 Geotechnical Investigation Report.	

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
Impact GEO-3: The project would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving: iii) Seismic-related ground failure, including liquefaction. *(Less than Significant Impact)*	No mitigation measures are required.	Less than Significant.
Impact GEO-4: The project would not be located on a geologic unit or soil that is unstable, or that could become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse. *(Less than Significant Impact)*	No mitigation measures are required.	Less than Significant.
Section 3.5 - Greenhouse Gas Emissions		
Impact GHG-1: The project would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment. *(Less than Significant Impact)*	No mitigation measures are required.	Less than Significant Impact.
Impact GHG-2: The project would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases. *(Less than Significant Impact)*	No mitigation measures are required.	Less than Significant Impact.
Section 3.6 - Hazards and Hazardous Materials		
Impact HAZ-1: The project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. *(Less than Significant Impact)*	No mitigation measures are required.	Less than Significant Impact.

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
Impact HAZ-2: The project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. *(Less than Significant Impact)*	No mitigation measures are required.	Less than Significant Impact.
Impact HAZ-3: The project would not be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would not create a significant hazard to the public or the environment. *(Less than Significant Impact)*	No mitigation measures are required.	Less than Significant Impact.
Section 3.7 - Hydrology and Water Quality		
Impact HYD-1: The project would not place within a 100-year flood hazard area structures which would impede or redirect flood flows. *(Less than Significant Impact)*	No mitigation measures are required.	Less than Significant Impact.
Impact HYD-2: The project would not expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam. *(Less than Significant Impact)*	No mitigation measures are required.	Less than Significant Impact.
Section 3.8 - Noise		
Impact NOI-1: The project would not result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. *(Significant Impact)*	**MM NOI-1.** The pump associated with the proposed irrigation well shall be located a minimum of 150 feet from the southern property line, 250 feet from the western property line, and 110 feet from the eastern property line if the pump has no attenuation. If the irrigation pump is located closer to the existing property lines than identified above, the irrigation pump shall be housed in a structure that adequately attenuates noise levels so that the noise levels do not exceed the City of Beaumont noise regulations	Less than Significant with Mitigation

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
Impact NOI-2: The project would not result in expose persons to or generation of excessive groundborne vibration or groundborne noise levels. *(Less than Significant Impact)*	No mitigation measures are required.	Less than Significant Impact.
Impact NOI-3: The project would not result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project. *(Significant Impact)*	Implementation of Mitigation Measure NOI-1 is required.	Less than Significant Impact.
Impact NOI-4: The project would not result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project. *(Less than Significant Impact)*	No mitigation measures are required.	Less than Significant Impact.
Section 3.9 - Transportation and Traffic		
Impact TRANS-1: The project could conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit. *(Significant Impact)*	**MM TRANS-1.** To reduce potential operational impacts during pipeline construction, the following measures shall be implemented depending on whether the two-traffic lanes scenario or the single-traffic lane scenario is implemented. **Two-Traffic Lanes Scenario** • Temporary "All-Way STOP" signs at each of the currently signalized adjacent intersections shall be required. **Single-Traffic Lanes Scenario** • Temporary "All-Way STOP" signs at each currently signalized adjacent intersection shall be required. In addition, the project contractor shall utilize a "flagman" to direct one-way traffic, ensure adequate traffic flow, and avoid traffic flow conflicts.	Less than Significant with Mitigation.
Impact TRANS-2: The project would not conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways. *(Less than Significant Impact)*	No mitigation measures are required.	Less than Significant Impact.