This section provides a brief summary of the proposed Carbon Canyon Dam Sewer Pipeline Project (project) and the information presented within this document.

PURPOSE

The California Environmental Quality Act (CEQA) requires all state and local government agencies to consider the environmental consequences of the proposed project prepared by the Orange County Sanitation District (OCSD) over which it has discretionary authority. The purpose of this Environmental Impact Report (EIR) is to assess the environmental impacts of the proposed project pursuant to CEQA (Public Resources Code 21000-21178), as amended, and the California State *CEQA Guidelines* (Title 14, California Code of Regulations, Section 15000 *et. Seq.*), as amended.

An EIR is not supposed to recommend either approval or denial of a project. Rather, the purpose of an EIR is to disclose information about the potential environmental effects of the project to the public and agency decision-makers. This EIR is an informational document that describes the significant effects, and discusses reasonable alternatives to the proposed project to avoid, reduce or minimize environmental impacts. OCSD will consider the information in this document in making an informed decision regarding the approval, conditions of approval, or denial of the project.

PROJECT SUMMARY

OCSD has proposed to construct a new 5,145-foot sewer pipeline in the City of Brea (refer to Exhibit 3.0-1, *Regional Location and* Exhibit 3.0-2, *Local Vicinity*). The 27-inch pipeline would begin at the existing Carbon Canyon Pump Station in Carbon Canyon Regional Park and would tie-into the existing Carbon Canyon Interceptor at the intersection of Rose Drive and Vesuvius Drive (refer to Exhibit 3.0-3, *Proposed Sewer Alignment and Photograph Location Map*).

As part of the project, OCSD is considering upsizing the pipe, which would allow it to serve portions of unincorporated Los Angeles County and the City of Chino Hills in San Bernardino County that are in the Carbon Canyon sewer tributary. The Expanded Service Area Option would provide capacity to serve:

- A proposed 2,614-acre portion of the Aera Master Planned Community (located within unincorporated Los Angeles County);
- A 981-acre portion of the Firestone Boy Scout Camp (located within unincorporated Los Angeles County); and
- The 80-acre Sleepy Hollow Estates development (located within the City of Chino Hills in San Bernardino County).

This option would increase the tributary area the pipeline would serve by a total of approximately 3,675 acres. The proposed additional service areas are located immediately north of the existing OCSD service area boundary (refer to Exhibit 3.0-5, *Proposed Project and Expanded Service Area Alternative*). The Expanded Service Area Option is an increase in the pipe size from 27 inches to a minimum of 30 inches. A pipe size of up to 36 inches may be required to accommodate flows but would not increase capacity beyond that described in Table 3.0-1, *Projected Wastewater Service Demand*.

The need for the project is due to existing and planned development in the region tributary to the Carbon Canyon Pump Station. This pump station is too small to adequately service current and projected future wastewater flows. OCSD frequently operates both pumps at the pump station to equalize the influent flow. The original design of this pump station was to use one pump regularly and the second pump as a stand-by pump for emergencies.

The objective of the project is to install a gravity sewer pipeline so that OCSD can service existing and proposed wastewater flows and abandon the pump station and force mains. By eliminating this pump station, the OCSD would avoid the cost of having to upgrade the station, and also eliminate its ongoing operational and maintenance costs. The project's specific goals and objectives are as follows:

- To increase sewer pipeline capacity to accommodate future wastewater flows from existing and proposed developments in the Carbon Canyon sewer tributary;
- To provide capacity for expansion of OCSD's service area boundary in the Carbon Canyon sewer tributary;
- To eliminate the need to upgrade the Carbon Canyon Pump Station;
- To eliminate the need to maintain and operate the pump station; and
- To allow for the abandonment of the pump station.

SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Table 1.0-1, *Impacts and Mitigation Measures*, which is located at the end of this section, provides a summary of the potential environmental impacts and mitigation measures associated with the proposed Project. The level of significance of each impact before and after the incorporation of the mitigation measures is also included.

SIGNIFICANT UNAVOIDABLE ADVERSE ENVIRONMENTAL IMPACTS

Section 15126.2(b) of the State CEQA Guidelines requires an EIR to describe any significant impacts, including those that can be mitigated but not reduced to a level of less than significant. Section 4.0 of this document provides an evaluation of the potential environmental impacts of the proposed Project and recommends mitigation measures to reduce impacts to a less-than significant level, where feasible. As described in these sections, the proposed Project would result in significant and unavoidable adverse environmental impacts related to:

• Growth inducement as a result of removing an obstacle to growth (i.e. the Carbon Canyon Pump Station) and providing a larger pipe to accommodate growth in the tributary area of the Expanded Service Area Option. Note that this impact is discussed in Section 4.8, *Population and Housing* and Section 5.0, *Long-Term Implications of the Proposed Project*.

MITIGATION MONITORING AND REPORTING PROGRAM

CEQA requires public agencies to adopt a mitigation monitoring and reporting program for the purpose of ensuring the implementation of those mitigation measures adopted or made as a

condition of project approval in order to reduce or avoid significant environmental effects identified in the EIR. A mitigation monitoring and reporting program that incorporates the mitigation measures set forth in this document will be adopted concurrent with the adoption of findings and prior to approval of the proposed Project.

EVALUATION OF ALTERNATIVES

Section 6.0 of this EIR describes and evaluates alternatives to the proposed Project in accordance with Section 15126.6 of the California State CEQA Guidelines. The alternatives considered in this EIR are the following:

- No Project Alternative;
- Alternative Alignment 1 Alternative;
- Alternative Alignment 2 Alternative; and
- Smaller Sewer Pipe Alternative.

Based on the analysis in Section 6.0, Alternative 2, the Smaller Sewer Pipe Alternative is considered the environmentally superior alternative.

AREAS OF CONTROVERSY AND ISSUES TO BE RESOLVED

The Agency submitted the Notice of Preparation (NOP) for this EIR to various public agencies, the public, and to the California Office of Planning and Research on September 22, 2004. The NOP is included in Appendix A. The purpose of the NOP was to solicit comments from public agencies and the public in order to identify issues that should be addressed in the EIR. The public review period for the NOP ended on October 22, 2004. The following respondents provided written comments on the NOP (in chronological order):

- State of California, Governor's Office of Planning and Research, State Clearing House and Planning Unit;
- The City of Fullerton;
- The South Coast Air Quality Management District;
- The Native American Heritage Commission;
- Aera Energy LLC;
- Hills For Everyone;
- The Metropolitan Water District of Southern California;
- State of California, Department of Fish and Game; and
- State of California, Department of Toxic Substances Control;

The written comments letters are included in Appendix A.

As a result of the NOP process, one area of controversy has been noted:

 Hills For Everyone included a letter noting concerns about potential growth inducement from the increased sewer pipe size. The letter states that the projected wastewater flows from the areas tributary to the project appear to be too high based on the City of Brea Hillside Zoning Ordinance's allowable densities. In addition, the letter suggests that the project might be overly ambitious and could facilitate growth in the area.

Response: Growth inducing impacts from the proposed project are examined in detail in Section 4.8

Population and Housing and Section 5.0 Long Term Implications of the Proposed Project. Note that any proposals for new development in the area tributary to the project would be required to under go separate environmental review.

SUMMARY OF IMPACTS AND MITIGATION MEASURES

The following table is a summary of the impacts of the project and the applicable mitigation measures.

TABLE 1.0-1IMPACTS AND MITIGATION MEASURES

ІМРАСТ	MITIGATION MEASURE
4.1 Land Use and Relevant Planning	
Impact 4.1(a) The proposed project consists of an underground sewage pipeline. No established community exists within the boundaries of the subject site. In addition, project components would not have any impact on general plan designations or zoning classifications. Therefore, no impacts are anticipated to occur.	<u>4.1(a)</u> Mitigation measures would not be required. Existing regulations and standard procedures provide adequate mitigation to prevent potential impacts.
Impact 4.1(b) The proposed project would traverse lands that are included within the Carbon Canyon Specific Plan, City of Brea General Plan, and County of Orange General Plan. The project would be an underground facility and would not require any zoning changes or general plan amendments. Implementation of the proposed project would not conflict with applicable land use plans, policies, or regulations. The proposed project would not change any land use designations in either the City of Brea or in unincorporated County of Orange. The proposed project would bring sewer service to the Aera Energy/Brea Central property in the City of Brea and so would facilitate the residential development of the property. However, the Aera Energy/Brea Central property in question has already been designated for single-family residential development, and extending sewer infrastructure is consistent with this designation. Aside from the Aera Energy Brea Central development, the proposed project would not extend sewer service beyond the areas already served by OCSD. Moreover, any proposals to extend service in order to accommodate future development projects upstream from the proposed Expanded Service Area Option would require separate environmental review. Additionally, note that the proposed Aera Energy Master Planned Community is currently undergoing separate environmental review, which would include discussion of potential impacts to land use and	4.1(b) Mitigation measures would not be required. Existing regulations and standard procedures provide adequate mitigation to prevent potential impacts.

IMPACT	MITIGATION MEASURE
relevant planning.	
Impact 4.1(c)	4.1(c)
The proposed project site does not exist within a	Mitigation measures would not be required. Existing
habitat conservation plan or natural community	regulations and standard procedures provide
conservation plan.	adequate mitigation to prevent potential impacts.
4.2 Geology, Soils, and Seismicity	
Impact 4.2(a)	4.2(a)
The project site is located within the seismically	Mitigation measures would not be required. Existing
active southern California region and would likely be	regulations and standard procedures within the
subjected to ground shaking, thus exposing the	regulatory structure provide adequate mitigation to
proposed facilities to seismic hazards. However, no	prevent potential impacts.
faults are known to traverse the proposed pipeline	
alignment. As such, impacts in regard to fault	
rupture are not anticipated to be significant.	
Impact 4.2(b)	<u>4.2(b)</u>
The proposed project would be subjected to strong	Mitigation measures would not be required. Existing
seismic ground shaking over its lifetime. However,	regulations and standard procedures provide
as proposed, the project consists of the installation	adequate mitigation to prevent potential impacts.
of a gravity feed sewer pipeline. This pipeline would	
be designed to accommodate total and differential	
settlement, and would be constructed in	
conformance with the latest version of the Uniform	
Building Code. As proposed the only structures that	
would be impacted by seismic shaking would be the	
pipeline itself, which would not be considered significant. There are no other habitable structures	
proposed with this project.	
Impact 4.2(c)	Mitigation 4.2(c) (GEO-1)
As indicated by the geotechnical investigation, total	The proposed sewer main shall be designed to
and differential settlement would be within tolerable	accommodate up to two inches of vertical differential
limits for the proposed gravity fed sewer main.	settlement in the vicinity of the Pump Station,
Regarding seismically induced settlement, the	through the use of flexible joints. These joints shall
preliminary geotechnical investigation identified a	provide the pipeline with at least two inches of
potentially liquefiable soil layer adjacent to the	differential settlement over a horizontal distance of
existing pump station. This is a potentially significant	forty-feet (40').
impact that would require mitigation. Estimated	
settlement of 3.5 inches could occur if groundwater	
levels rose 40 feet at the same time as a seismic	
event; the likelihood of this is quite low.	
Impact 4.2(d)	<u>4.2(d)</u>
There are no identified landslides located within the	Mitigation measures would not be required. Existing
project site. In addition, the proposed project	regulations and standard procedures provide
involves the construction of a gravity fed sewer	adequate mitigation to prevent potential impacts.
pipeline, which would be below existing ground. The	
occurrence of landslide may impact this pipeline,	
however the likelihood of this is low and the rock	
units that the pipeline would be located within are	
not very susceptible to earth movements of this	
type. Based on these conditions, impacts associated	
with landslides would be considered less than	
significant.	

ІМРАСТ	MITIGATION MEASURE
Impact 4.2(e) Ongoing project operations of a gravity fed sewer line are not anticipated to result in soil erosion or the loss of topsoil. Areas graded for the pipeline would either be revegetated (if native), landscaped, and/or repaved with decomposed granite. The operational phase of the proposed project is anticipated to result in less than significant impacts. However, construction of the proposed project would require the temporary removal of vegetation and excavation of subgrade soils, which would temporarily increase the potential for soil loss due to wind and water erosion. This is a potentially significant impact that would require mitigation measures.	 Mitigation 4.2(e) (GEO-2) Concurrent with grading permit application, the Applicant shall submit an Erosion Control Plan for review and approval by the Orange County Sanitation District. The Erosion Control Plan shall reflect applicable Specific Plan policies and OCSD requirements, as well as current County of Orange NPDES permit requirements. The Erosion Control Plan shall include, but not be limited to, the following: Erosion potential within graded areas shall be reduced and controlled by utilizing rapid development planting techniques (e.g. hydro seeding) slope terracing, replacement with cohesive soils not subject to erosion, and/or the construction of slope drainage improvements; Interim erosion control measures during construction, including temporary desilting basins and interceptor dikes shall be
	 implemented to minimize sedimentation; All landscape and/or grading plans shall include provisions for temporary erosion control on all graded sites which are scheduled to remain unimproved during the winter/rainy months; and County of Orange NPDES, SWPPP, and BMP
	requirements.
Impact 4.2(f) Regarding seismically induced settlement, the preliminary geotechnical investigation identified a potentially liquefiable soil layer adjacent to the	Mitigation 4.2(f) (GEO-3) The following mitigation measures shall be adhered to during project implementation:
existing pump station. This is a potentially significant impact that would require mitigation. Estimated settlement of 3.5 inches could occur if groundwater levels rose 40 feet at the same time as a seismic event; the likelihood of this is quite low.	• The proposed sewer main shall be designed to accommodate up to two inches of vertical differential settlement in the vicinity of the Pump Station, through the use of flexible joints. These joints shall provide the pipeline with at least two inches of differential settlement over a horizontal distance of forty-feet (40').
	 Utility trenches can be backfilled with the onsite material, provided it is free of debris and/or significant organic material.
	 Underlying subgrade soils must be prepared in such a manner that a uniform response to the applied loads is achieved.
	• All temporary excavations should be performed in accordance with project plans, specifications, and all OSHA requirements.

IMPACT	MITIGATION MEASURE
Impact 4.2(g) As indicated in the preliminary geotechnical report, the onsite alluvial soil and bedrock deposits are expected to exhibit a low to medium expansion potential. Potential impacts regarding expansive soils are considered to be less than significant with regard to the proposed project.	4.2(g) Mitigation measures would not be required. Existing regulations and standard procedures provide adequate mitigation to prevent potential impacts.
Impact 4.2(h) The Project proposes the construction of a gravity fed sewer pipeline. The use of septic tanks and alternative wastewater disposal systems are not proposed as part of this project. Therefore, no impacts would occur in this regard.	<u>4.2(h)</u> Mitigation measures would not be required. Existing regulations and standard procedures provide adequate mitigation to prevent potential impacts.
4.3 Hydrology and Water Quality	
Impact 4.3(a) During the construction phase and following construction, prior to the establishment of ground cover, the potential for soil erosion, siltation, and sedimentation would be the greatest. The contractor would be required to comply with the requirements of the California Regional Water Quality Control Board (RWQCB). Under the RWQCB General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit, 99-08-DWQ), a project that involves the disturbance of more than one acre necessitates the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). The proposed Expanded Service Area Option would result in the same environmental impacts on hydrology and water quality. As the primary	Mitigation 4.3(a) (HWQ-1) Orange County Sanitation District must comply with the existing California State Water Resources Control Board (SWRCB) General Construction Activity Storm Water Permit No. CAS000002 (general permit), for discharges of storm water associated with construction. This includes the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP), identification and implementation of a Best Management Practices (BMPs), and completion of Monitoring Program (MP) by the Contractor.
difference between the proposed project and this option would be an increase in pipeline size from 27 to 30 inches, any increase in direct impacts is anticipated to be nominal. Refer to the hydrology and water quality impact discussion above for the proposed project.	4.2/b)
Impact 4.3(b) The proposed project site is situated in an undeveloped area and would not have the potential to substantially deplete groundwater supplies or interfere with groundwater recharge. The project would not have the capacity to increase the amount of water consumed regionally through increased withdrawals from groundwater sources. Therefore, no impacts are anticipated to occur.	4.3(b) Mitigation measures would not be required. Existing regulations and standard procedures provide adequate mitigation to prevent potential impacts.

ІМРАСТ	MITIGATION MEASURE
Impact 4.3(c) The implementation of the proposed project does not have the capability to alter the existing drainage pattern of the area or any related stream or river because once completed the entire facility would be underground. The installation of a 27-inch diameter pipeline would not significantly alter surface water absorption rates. Project implementation would not involve the installation of impenetrable surfaces. Based on this, the proposed project is not anticipated to cause changes in drainage patterns.	<u>4.3(c)</u> Mitigation measures would not be required. Existing regulations and standard procedures provide adequate mitigation to prevent potential impacts.
Impact 4.3(d) The implementation of the proposed project does not have the capability to alter the existing drainage pattern of the area or any related stream or river because once completed the entire facility would be underground. The installation of a 27-inch diameter pipeline would not significantly alter surface runoff in a manner that would increase the potential for flooding.	<u>4.3(d)</u> Mitigation measures would not be required. Existing regulations and standard procedures provide adequate mitigation to prevent potential impacts.
Impact 4.3(e) During the construction phase and following construction, prior to the establishment of ground cover, the potential for runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff is greatest. The contractor would be required to comply with the requirements of the California Regional Water Quality Control Board (RWQCB). Under the RWQCB General Permit for Discharges of Storm Water Associated with Construction Activity (<u>Construction General Permit, 99-08-DWQ</u>), a project that involves the disturbance of more than one acre necessitates the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP).	Mitigation 4.3(a) Refer to Mitigation 4.3(a)
The proposed Expanded Service Area Option would result in the same environmental impacts on hydrology and water quality. As the primary difference between the proposed project and this option would be an increase in pipeline size from 27 to 30 inches, any increase in direct impacts is anticipated to be nominal. Refer to the hydrology and water quality impact discussion above for the proposed project.	

ІМРАСТ	MITIGATION MEASURE
Impact 4.3(f) Once construction is completed, the proposed project would have a minimal probability of degrading surface water quality. Based on the fact that the proposed project is an underground sewer pipeline subject to periodic monitoring, the likelihood of pipeline failure generating hazardous conditions is negligible. In addition, the pipeline would be constructed in accordance with standard design/construction practices. Therefore, the project is not anticipated to result in significant impacts to water quality.	4.3(f) Mitigation measures would not be required. Existing regulations and standard procedures provide adequate mitigation to prevent potential impacts.
Impact 4.3(g) The proposed project does not involve any housing components, and therefore would not place housing in any 100-year flood hazard areas. No impacts would occur in this regard.	4.3(g) Mitigation measures would not be required. Existing regulations and standard procedures provide adequate mitigation to prevent potential impacts.
Impact 4.3(h) The proposed project itself would not expose people are structures to flood hazards, as the project involves the implementation of an underground sewer pipeline. Although the proposed project would trench and tunnel in the vicinity of an earthen flood control dam (Carbon Canyon Dam) the trenching and tunneling operations are located within areas that would not compromise the geotechnical strength of the dam and additionally are of such a scale as to not compromise the geologic stability of the dam.	4.3(h) Mitigation measures would not be required. Existing regulations and standard procedures provide adequate mitigation to prevent potential impacts.
Impact 4.3(i) Due to the location and nature of the proposed project, in northeastern Orange County, well removed from the Pacific Ocean and other large bodies of water, the potential for inundation by seiche, tsunami, or mudflow is not anticipated.	4.3(i) Mitigation measures would not be required. Existing regulations and standard procedures provide adequate mitigation to prevent potential impacts.
4.4 Air Quality	
Impact 4.4(a) Pollutants associated with sewage transmission projects typically result from operation of internal combustion driven pump stations and result in stationary source impacts. However, as pump stations are not proposed as part of the project, no stationary source impacts would occur. Maintenance associated with the proposed sewage facilities does not have the capacity to generate significant vehicular trips, and the project itself would not have the potential to induce growth beyond the estimates within the AQMP. Project construction would involve demolition, site grading, excavation, and micro-tunneling activities.	 Mitigation 4.4(a) (AQ-1) During clearing, grading, earth moving, or excavation operations, excessive fugitive dust emissions shall be controlled by regular water or other dust preventive measures using the following procedures, as specified in the SCAQMD Rule 403. On-site vehicle speed shall be limited to 25 miles per hour. All material excavated or graded would be sufficiently watered to prevent excessive amounts of dust. Watering would occur at least twice daily with complete coverage, preferable in the late morning and after work is done for the day.

IMPACT	MITIGATION MEASURE
Temporary construction related air quality impacts would include: particulate (fugitive dust and PM ₁₀) emissions; off-site air pollutant emissions at the power plant(s) serving the site; exhaust emissions and potential odors from the construction	• All material transported on-site or off-site would be either sufficiently watered or securely covered to prevent excessive amounts of dust.
equipment; and exhaust emissions from the motor vehicles of the construction crew. These would be potentially significant impacts that require the mitigation measures outlined in the mitigation section to follow.	• The area disturbed by clearing, grading, earth moving, or excavation operations would be minimized so as to prevent excessive amounts of dust.
	• These control techniques would be indicated in project specifications. Compliance with the measure would be subject to periodic site inspections by the City.
	• Visible dust beyond the property line emanating from the project would be prevented to the maximum extent feasible.
	<u>Mitigation 4.4(a) (AQ-2)</u> All trucks that are to haul excavated or graded material on-site shall comply with State Vehicle Code Section 23114, with special attention to Sections 23114(b)(F), (e)(4) as amended, regarding the prevention of such material spilling onto public streets and roads.
	Mitigation 4.4(a) (AQ-3) Ozone precursor emissions from construction equipment vehicles shall be controlled by maintaining equipment engines in good condition and proper tune per manufacturer's specifications, to the satisfaction of the City Engineer. Compliance with this measure would be subject to periodic inspections of construction equipment vehicles by the City.
Impact 4.4(b) The project site is located in the South Coast Air Basin (SCAB), which currently has a non-attainment status for State and Federal ozone, carbon monoxide, and PM_{10} standards. Implementation of the proposed project would result in construction related air quality impacts from grading activities, excavation, demolition (fugitive dust and PM_{10}) and construction equipment exhaust.	Mitigation 4.4(b) Refer to Mitigation 4.4(a)
Impact 4.4(c) Short-term impacts on air quality would occur during the grading and construction activities required to install the pipeline and related access roads. These temporary impacts would include:	<u>Mitigation 4.4(c)</u> Refer to Mitigation 4.4(a)
 Particulate (fugitive dust) emissions from clearing and grading activities; 	

ІМРАСТ	MITIGATION MEASURE
Off-site air pollutant emissions at the power plant serving the construction site, while temporary power lines and/or portable generators may be needed to operate construction equipment and provide lighting;	
• Exhaust emissions and potential odors from construction equipment used on the construction site as well as the vehicles used to transport materials to and from the site; and	
• Exhaust emissions from the motor vehicles of the construction crew.	
Construction-related emissions would fall below SCAQMD emission thresholds, after implementing recommended mitigation measures. The Applicant/contractor would implement standard dust control measures during construction, in accordance with SCAQMD requirements, which would further reduce emissions (refer to recommended mitigation measures). Note that project's construction-related emissions would be relatively short-term in duration. Thus, a less than significant impact would occur in this regard.	
Impact 4.4(d) Land uses considered sensitive receptors include residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes. Implementation of the proposed project would result in impacts from increased dust (particulate) levels due to grading activities and air pollution emissions from construction activity.	Mitigation 4.4(d) Refer to Mitigation 4.4(a)
Project implementation could expose residences, which are less than 600 feet away, to pollutant concentrations. Such residents include the single- family residences at Rose Drive and Vesuvius Drive and the southern terminus of the proposed project. This is a potentially significant impact that requires the mitigation measures outlined in the mitigation section.	
Impact 4.4(e) The purpose of the Draft Odor Assessment and Odor Control Plan that is included in the Preliminary Design Report for the project is to summarize the data collection and analysis and assessment of the odor potential during the construction and odor mitigation measures for the OCSD Carbon Canyon Dam Sewer Pipeline Project. The existing Carbon Canyon Pump Station (CCPS) is located in Carbon	Mitigation 4.4(e) (AQ-4) The odor assessment and control plan for construction shall include the following assessment methods when work is occurring in the manhole immediately upstream of the Carbon Canyon Pump Station (CCPS) wet well, the CCPS wet well is being cleaned out, the force mains are being purged and flushed out prior to being abandoned, and when the connection is made at the downstream end of the

ІМРАСТ	MITIGATION MEASURE
Canyon Regional Park near the park entrance and	project:
visitor parking lots.	
 The only potential for odors above current levels could occur during the following activities: Construction of the tie-in to the sewer manhole at Rose Drive and Vesuvius Drive. 	 Continually monitor and record the hydrogen sulfide concentration at the bottom of the manhole immediately upstream of the CCPS wet well or the manhole at the point of connection in Rose Drive and Vesuvius Drive.
 Construction of the tie-in to the sewer manhole just upstream of the existing Carbon Canyon Pump station (CCPS) to make the diversion into the new gravity sewer. 	• Monitor and record the ambient air in the vicinity of the CCPS near the visitor parking lot and visitor center and near the closest residence at the intersection of Rose Drive and Vesuvius Drive.
• Clean-out of the existing CCPS wet well and abandonment of the pump station.	 The specifications shall require the contractor to use an Odalog gas monitor for manhole hydrogen sulfide monitoring and a low range
 Potential odor releasing activities. In anticipation of the construction, data on 	Odalog [™] for the ambient air monitoring. The ambient air monitor shall be installed in a tree at "nose" level.
wastewater sulfides, sewer (manhole) hydrogen sulfide concentration, and ambient outside air hydrogen sulfide concentration were measured. Two locations were recommended for field data collection:	If the hydrogen sulfide concentration indicates possible odor problems, the contractor may take one or more of the following actions to prevent an odor problem:
Existing Carbon Canyon Pump Station (CCPS); and	• Stop work until concentrations decrease or wind conditions change.
 Proposed connection to OCSD trunk sewer at Rose Drive and Vesuvius Drive. 	• Stop work for the remainder of the day and request the injection of sodium hydroxide into an upstream manhole.
	• Install facilities to feed ferrous chloride into the wastewater system upstream of CCPS to reduce odors at the CCPS and the discharge end of the force mains and operate the facilities as needed. Ferrous chloride shall be contained and secure.
	 Install facilities to feed Bioxide into the CCPS wet well to reduce sulfide buildup in the force mains thereby reducing odor at the point of connection in Rose Drive and Vesuvius Drive and operate the facilities as needed. Bioxide[™] is a relatively innocuous chemical (calcium nitrate – a good grade of fertilizer) and is easier to handle than ferrous chloride.
	• Enclose the work area in a temporary structure and exhaust and treat the air with granular activated carbon. This system be permitted by the South Coast Air Quality Management

IMPACT	MITIGATION MEASURE District. The contractor shall be required to secure such a permit. Should the contractor use such a system, it is important the contractor be prohibited from using caustic impregnated granular activated carbon, as this type of carbon is subject to bed fires because of its low ignition temperature.
	The "action limits" shall be tentatively set at those indicated below. If there are odor complaints, or if the inspectors can detect odor in the Regional Park or at the sidewalk adjacent to the residences at the intersection of Rose Dr. and Vesuvius Dr., the "action limits" shall be adjusted downward as needed to mitigate the odors.
	The proposed action limits are:
	 Hydrogen sulfide concentrations at the manhole bases above 25 parts per million volume (ppmv).
	• Hydrogen sulfide concentration at the sidewalk near the residences or in the Regional Park within 50 feet of the construction area above 10 parts per billion volume (ppbv).
	Note: This is well above the reported detection threshold of 0.5 ppbv (someone detects some odor) and about twice the recognition threshold (the individual recognizes that is the odor of rotten eggs) of about 4.7 ppbv. The 10 ppbv action level is reasonable.
4.5 Noise	
Impact 4.5(a) The proposed project would create short-term construction noise that has the potential to temporarily exceed the City of Brea's 65-dBA CNEL exterior noise standard. Noise generated by construction equipment, including trucks, excavators, and other associated equipment can reach high levels of noise. This is a potentially	Mitigation 4.5(a) (N-1) Construction activities shall comply with Chapter 7B of the City of Brea Municipal Code (Noise Control). Construction is permitted only between the hours of 7:00 a.m. and 7:00 p.m., Monday through Saturday (except legal holidays). Mitigation 4.5(a) (N-2) Driver to the incurrence of grading permits, the grading
significant impact that would require mitigation measures. The proposed Expanded Service Area Option would	Prior to the issuance of grading permits, the grading plan shall be reviewed and approved by OCSD to ensure that the following notes have been added to the grading plans:
result in the same environmental impacts in regards to noise. As the primary difference between the proposed project and this option would be an increase in pipeline size from 27 to a minimum of 30 inches, increase in direct impacts would be nominal.	 During construction and stockpiling, vehicle staging areas and stationary equipment shall be located as far as practical from noise sensitive receptors, to the satisfaction of the City Building Official.

INDACT	
IMPACT	MITIGATION MEASURE
	Mitigation 4.5(a) (N-3) Should the project require off-site import/export of fill material during construction, trucks shall utilize a route that is least disruptive to sensitive receptors, subject to review and approval by the OCSD.
	Mitigation 4.5(a) (N-4) Prior to commencement of any construction and grading activity, OCSD shall notify all residents within 300 feet of the project of the expected duration of and times of construction activities. A contact name and 24-hour telephone number shall be identified OCSD to address any problems that arise. Said list and contact name and phone number shall be submitted to OCSD prior to the issuance of a grading permit.
Impact 4.5(b) Excavation, micro-tunneling and back-filling required for proposed project implementation are not anticipated to generate excessive groundborne vibrations or noise levels. Groundborne noise vibration and noise impacts would be less than significant, because the project site is located within a regional park and undeveloped area and construction activities would be temporary.	4.5(b) Mitigation measures are not required. Existing regulations and standard procedures provide adequate mitigation to prevent potential impacts.
Impact 4.5(c) As the project proposes to implement an underground sewer line, no long-term operational impacts on ambient noise in the project vicinity are anticipated.	4.5(c) Mitigation measures are not required. Existing regulations and standard procedures provide adequate mitigation to prevent potential impacts.
Impact 4.5(d) The proposed project would create short-term construction noise that has the potential to temporarily exceed the City of Brea's 65-dBA CNEL exterior noise standard. Noise generated by construction equipment, including trucks, excavators, and other associated equipment can reach high levels of noise. This is a potentially significant impact that would require mitigation measures.	Mitigation 4.5(d) Refer to Mitigation 4.5(a)
The proposed Expanded Service Area Option would result in the same environmental impacts in regards to noise. As the primary difference between the proposed project and this option would be an increase in pipeline size from 27 to a minimum of 30 inches, any increase in direct impacts would be nominal.	
Impact 4.5(e) The proposed project is not located within two miles of a public airport or public use airport. No impacts would occur.	<u>4.5(e)</u> Mitigation measures would not be required. Existing regulations and standard procedures provide adequate mitigation to prevent potential impacts.

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Impact 4.5(f)	4.5(f)
The proposed project is not located within two miles	Mitigation measures would not be required. Existing
of a private airstrip. No impacts would occur.	regulations and standard procedures provide
	adequate mitigation to prevent potential impacts.
4.6 Cultural Resources	
Impact 4.6(a)	<u>4.6(a)</u>
No structures exist within the proposed project site	Mitigation measures would not be required. Existing
boundaries. As such, no impacts are anticipated to	regulations and standard procedures provide
historic resources.	adequate mitigation to prevent potential impacts.
Impact 4.6(b)	Mitigation 4.6(b) (CR-1)
Because much of the proposed pipeline alignment	Archaeological monitoring shall be required during
traverses undisturbed areas, the project has the	any grading, grubbing, trenching, excavations,
potential to impact archaeological resources. The	and/or other earth-moving activities in the
present study was unable to ascertain the continued	northeastern portion of the project area.
presence of Site 30-120002 within the northeastern	
area of the project site because of the dense ground	
cover. To properly identify and evaluate potential "historical resources" that may be affected by the	
proposed project, additional inspection would be	
necessary during or after the removal of ground	
cover.	
cover.	
The proposed Expanded Service Area Option would	
result in the same environmental impacts in regards	
to cultural resources. As the primary difference	
between the proposed project and this option would	
be an increase in pipeline size from 27 to a	
minimum of 30 inches, any increase in direct	
impacts is anticipated to be nominal.	
Impact 4.6(c)	Mitigation 4.6(c) (CR-2a)
Because much of the proposed pipeline alignment	The excavation of areas identified as likely to
traverses undisturbed areas, the project has the	contain paleontologic resources shall be monitored
potential to impact paleontological resources. Based	by a qualified paleontological monitor. Monitoring
on the study results presented above, the proposed	shall be done on all undisturbed subsurface areas
project's potential impact on paleontological	with bedrock, older alluvium, and alluvium which
resources on portions of the project area is	might be present below the surface. The monitor
determined to be high. Therefore, monitoring of	shall be prepared to quickly salvage fossils as they
earth-moving activities for paleontological resources during excavation and grading of these areas and a	are unearthed to avoid construction delays. The monitor shall also remove samples of sediments,
program to mitigate impacts on the resources that	which are likely to contain the remains of small fossil
might be exposed or unearthed during all such	invertebrates and vertebrates. OCSD will halt or
excavation is recommended.	divert grading equipment to allow for removal of
	abundant or large specimens.
	Mitigation 4.6(c) (CR-2b)
	Collected samples of sediments shall be washed to
	recover small invertebrate and vertebrate fossils.
	Recovered specimens shall be prepared so that
	they can be identified and permanently preserved.
	Mitigation 4.6(c) (CR-2c)
	Specimens shall be identified and curated and

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	Mitigation 4.6(c) (CR-2d) A report of findings, including an itemized inventory of recovered specimens, shall be prepared upon completion of the steps outlined above. The report shall include a discussion of the significance of all recovered specimens. The report and inventory, when submitted to the Orange County Sanitation District, would signify completion of the program to mitigate impacts on paleontological resources.
Impact 4.6(d) There are no known formal or informal gravesites containing human remains within the limits of the subject site. Future construction activities within the project area could, however, potentially result in the discovery of unknown, as yet undiscovered human remains.	Mitigation 4.6(d) (CR-3) If human remains are discovered during any activities that involve subsurface ground disturbance, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie human remains until the Orange County Coroner has been informed and has determined that no investigation of the cause of death is required, and if the remains are of Native American origin, the Native American Heritage Commission is contacted within 24 hours of the discovery, and the descendants from the deceased native Americans have made a recommendation to the landowner or the project proponent, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in California Public Resources Code Section 5097.98.
4.7 Aesthetics, Light, and Glare	
Impact 4.7(a) Upon completion of construction, the sewer pipeline would be entirely below ground surface. Therefore, no significant long-term aesthetic impacts are anticipated on scenic vistas during project operation. The project proposes to provide vehicular access to the manholes for maintenance purposes in the segment of the alignment between the existing pump station and the beginning of the micro-tunnel section. The aggregate base access road would be limited to 15 feet in width and would not affect a scenic vista.	Mitigation 4.7(a) (ALG-1)Vegetated areas disturbed by pipeline construction activities shall be rehabilitated following completion of construction. Rehabilitation activities shall include replanting shrubs and plants that were removed for construction activities and reseeding areas with native vegetation.Mitigation 4.7(a) (ALG-2) Native vegetation shall be designed by a landscape architect as approved by OCSD.
However, during the construction phase of the proposed project (which includes abandonment of existing facilities), construction equipment would be utilized for trenching, pipe installation, micro- tunneling and trench covering. Trenching and micro- tunneling operations would temporarily disturb surrounding vegetation, thus potentially creating a visual disturbance. Vegetated areas disturbed by	

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pipeline construction activities would be rehabilitated following completion of construction. Rehabilitation activities would include replanting shrubs and plants removed for construction activities and reseeding areas with native vegetation.	
Impact 4.7(b) No state scenic highways exist within the project vicinity. No impacts are anticipated in this regard. Implementation of the proposed project would necessitate the removal of vegetation, which, if it could not be replaced, could degrade or otherwise change the visual character or quality of the site and its surroundings during long-term operation. In addition, construction of project improvements may create temporary aesthetic nuisances; exposed surfaces, construction debris, equipment and truck traffic may temporarily impact views of the site. The	 <u>4.7(b)</u> Mitigation measures would not be required. Existing regulations and standard procedures provide adequate mitigation to prevent potential impacts. <u>Mitigation 4.7(c)</u> Refer to Mitigation 4.7(a)
access road along the alignment between the existing pump station and the micro-tunnel segment would alter the aesthetic character of the area without mitigation.	4.7(d)
Implementation of the proposed project would not require nighttime construction and on-site construction equipment would not create a substantial source of daytime light or glare. In addition, because the pipeline would be underground there would be no lighting or glare that would affect day or nighttime views in the area during long-term project operation. Impacts in this regard would not be significant.	Mitigation measures are not required. Existing regulations and standard procedures provide adequate mitigation to prevent potential impacts.
4.8 Population and Housing	
Impact 4.8(a) Although the proposed project (including the Expanded Service Area Option) is consistent with the land use and planning policies and objectives identified in the of the City of Brea General Plan, the City of Chino Hills General Plan, and the County of Los Angeles General Plan, it nonetheless could potentially induce population growth by removing an obstacle to growth (i.e. the Carbon Canyon Pump Station). This would be a potentially significant growth-inducing impact of the project on population and housing for which mitigation no would be available. Therefore, it would a significant and unavoidable impact of the project.	4.8(a) No mitigation measures are available for the significant and unavoidable impact of potentially growth inducing impacts that could result from removing an obstacle to growth (i.e. the Carbon Canyon Pump Station).
The City of Brea General Plan EIR, the City of Chino Hills General Plan EIR, and the County of Los	

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Angeles General Plan EIR have all identified various potentially significant impacts that could result from future population growth. Potential impacts due to growth inducement may occur in regards to aesthetics, air quality, biological resources, cultural resources, geology, soils and seismicity, hazards and hazardous materials, hydrology and water quality, land use, noise, public services, recreation, transportation and traffic, and utilities and service systems. Future project-specific environmental analysis would be required for new development proposals.	
Any specific analysis of impacts of the proposed project in relation to those identified in the applicable General Plan EIRs is speculative. Section § 15145 of the <i>CEQA Guidelines</i> states, "[i]f, after thorough investigation, a Lead Agency finds that a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impact."	
Impact 4.8(b) The proposed project site does not contain any housing units. Therefore, no housing would be displaced by the proposed project. Impact 4.8(c)	 <u>4.8(b)</u> Mitigation measures would not be required. Existing regulations and standard procedures provide adequate mitigation to prevent potential impacts. 4.8(c)
The proposed project is an underground sewage pipeline in a park and private land currently used for interim agriculture. No persons will be displaced by this project, and therefore no impacts would occur in this regard.	Mitigation measures would not be required. Existing regulations and standard procedures provide adequate mitigation to prevent potential impacts.
4.9 Biological Resources	
Impact 4.9(a) Special Status Plants: Only one special status plant, the southern California black walnut (<i>Juglans californica</i>), was observed on the project site. This species is a CNPS List 4 species, which is a species of limited distribution. This species is endemic to southwestern California, from Santa Barbara to San Diego County, and inland to western San Bernardino and Riverside counties. On the project site, it is scattered within the annual grassland. These trees would be avoided, therefore impacts on candidate, sensitive, or special status	Mitigation 4.9(a) (B-1) Prior to construction, a qualified biologist shall survey the project site and visibly mark any California black walnut (<i>Juglans californica</i>) tree(s) within 500 feet of the pipeline alignment. These trees shall be avoided during construction activities. If avoidance is not possible, the trees shall be replaced at a ratio of no less than 1:1. All tree replacement shall be coordinated with the CDFG and a monitoring plan that identifies survival rates shall be developed.
plant species would be reduced to a level of less than significant with this mitigation incorporated. Eight candidate, sensitive, or special-status wildlife species were observed during wildlife surveys. Seven were observed within the study area and one was observed within the project vicinity.	Mitigation 4.9(a) (B-2) If construction occurs during the raptor-nesting season (February 1 to June 30), a raptor nesting survey shall be conducted approximately seven days prior to commencement of construction to confirm the absence of nests within the proposed

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Raptors: A total of six raptor species were observed in the study area; other raptors are known to occur in the study area, but were not observed during the biological resources surveys. This is a potentially significant impact that would require	nesting raptors are present, construction activities within 500 feet of the nest shall be limited to activities whose noise levels are no greater than 60dba during nesting season.
mitigation. Coastal California Gnatcatcher: Although the gnatcatcher is absent from the proposed pipeline alignment and immediate vicinity in 2003, a preconstruction survey would be conducted to determine the location of any gnatcatchers within the pipeline route, or within 500 feet of the proposed pipeline route if construction would occur during the nesting season (between March 15 and August 15). This is a potentially significant impact that would require mitigation.	Mitigation 4.9(a) (B-3) A preconstruction survey shall be conducted to determine the location of any gnatcatchers within the proposed alignment or within 500 feet of the proposed pipeline if construction would occur during the nesting season (between March 15 and August 15). If gnatcatchers are present construction activities within 500 feet of the area of gnatcatcher activity shall be limited to activities that produce noise levels no greater than 60dba during nesting season.
Least Bell's Vireo At least six least Bell's vireo territories occur in the basin within Carbon Canyon Regional Park (i.e., the riparian area upstream of the dam), but only three observations of vireos were made within the study area. The habitat within the study area (i.e., pipeline route and 500-foot buffer area) is therefore considered occupied, even though nesting within the survey area was not documented. This is a potentially significant impact that would require mitigation.	Mitigation 4.9(a) (B-4) A preconstruction survey shall be conducted to determine the location of any least Bell's vireo within the proposed alignment or within 500 feet of the proposed pipeline if construction would occur during the nesting season (between March 15 and September 15). If vireos are present within the 500-foot buffer area, construction activities within 500 feet of the area of vireo activity shall be limited to activities that produce noise levels no greater than 60dba during nesting season.
Impact 4.9(b) The project site contains seven vegetation types (Refer to Exhibit 4.9-1). Of the vegetation types located on the project site, only 5.76 acres of riparian habitat are regulated by the CDFG and / or the USFWS. Only .05 acres of the 5.76 acres would be permanently impacted by the proposed project.	Mitigation 4.9(b)(B-5a) Prior to construction activities the Orange County Sanitation District shall consult with the CDFG to determine the appropriate mitigation (contribution to a mitigation bank or dedication of land) for impacts to riparian habitat. Riparian habitat impacted by the proposed project shall be replaced at a ratio of no less than 1:1.
In addition to impacts to riparian habitat, impacts to both waters of the State and waters of the U.S. would occur.	Mitigation 4.9(b)(B-5b) Prior to construction activities the Orange County Sanitation District shall obtain a 1602 Streambed Alteration Agreement (SAA) from the California Department of Fish and Game. Impacts to lands of jurisdiction shall be mitigated by the dedication of replacement habitat at a ratio of no less than 1:1.
	Mitigation 4.9(b)(B-5c) Prior to construction activities the Orange County Sanitation District shall obtain a 404 permit from the ACOE. Impacts to "waters of the U.S." shall be mitigated by the dedication of replacement habitat at a ratio or no less than 1:1.

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Impact 4.9(c) An area must exhibit all three (3) of the wetland parameters described in the <i>Corps Wetland</i> <i>Delineation Manual</i> to be considered a jurisdictional wetland. Based on the results of the field investigations, no portion of the project site contained all three parameters. Based on the site conditions, no jurisdictional wetlands are present. Therefore, no impacts to federally protected wetlands would occur as a result of the proposed project.	<u>4.9(c)</u> Mitigation measures would not be required. Existing regulations and standard procedures provide adequate mitigation to prevent potential impacts.
Impact 4.9(d) As indicated in the Vegetation and Wildlife Corridors Map of the <i>City of Brea General Plan</i> Open Space and Conservation Element, a wildlife corridor exists at the northernmost extent of the project area. Project construction has the potential to interfere with localized wildlife movement within the vicinity of the project. Long-term impacts would be limited to the aggregate base access roads. Therefore, impacts on the movement of fish and wildlife would be less than significant.	4.9(d) Mitigation measures would not be required. Existing regulations and standard procedures provide adequate mitigation to prevent potential impacts.
Impact 4.9(e) No local policies or ordinances protecting biological resources exist within the boundaries of the project site. Thus, impacts in this regard would not occur.	4.9(e) Mitigation measures would not be required. Existing regulations and standard procedures provide adequate mitigation to prevent potential impacts.
Impact 4.9(f) The project area is not located within a habitat conservation plan, natural community conservation plan or other approved local, regional or State habitat conservation plan. Thus, impacts in this regard would not occur.	4.9(f) Mitigation measures would not be required. Existing regulations and standard procedures provide adequate mitigation to prevent potential impacts.
4.10 Traffic	
Impact 4.10(a) A minor temporary increase in vehicular trips would occur as a result of the construction activity for the proposed project. The proposed pipeline tie-in would occur within Rose Drive right-of-way, where an OCSD sewer pipeline currently exists. Implementation of this pipeline tie-in would cause a temporary disruption of traffic along Rose Drive due to pipeline construction. Additionally, subsequent to construction, periodic maintenance would occur, but would be negligible based on the number of trips to and from the project site required for maintenance.	 Mitigation 4.10(a) (T-1) Concurrent with grading permit applications, OCSD shall submit a Traffic Control Plan for review and approval by the City of Brea Engineer. The Traffic Control Plan shall include, but not be limited to, the following: Using flagmen and signage to alert motorists and pedestrians; Providing advance notice posted on Rose Drive and Vesuvius Drive; Limiting the hours of construction per City
	 Maintaining one through lane in each direction on Rose Drive during peak hours;

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Impact 4.10(b) A minor temporary increase in vehicular trips would occur as a result of the construction activity for the proposed project, and therefore may result in an LOS standard being exceeded.	Mitigation 4.10(b) Refer to Mitigation 4.10(a)
Impact 4.10(c) Because of the nature and scope of the proposed project, project implementation would not have the capacity change to air traffic patterns. No impacts would occur.	4.10(c) Mitigation measures would not be required. Existing regulations and standard procedures provide adequate mitigation to prevent potential impacts.
Impact 4.10(d) Implementation of the proposed project would cause a temporary disruption of traffic along Rose Drive due to pipeline construction. Construction may cause traffic congestion, delays, and associated effects due to lane closures, detours, and slower speeds in construction zones. Mitigation would reduce short-term impacts on traffic from construction-related activities to a level of less than significant.	<u>Mitigation 4.10(d)</u> Refer to Mitigation 4.10(a)
Impact 4.10(e) As stated above, implementation of the proposed project would cause a temporary disruption of traffic along Rose Drive due to pipeline construction. Construction may disrupt emergency access due to lane closures, detours, and slower speeds in construction zones.	<u>Mitigation 4.10(e)</u> Refer to Mitigation 4.10(a)
Impact 4.10(f) During construction, the personal vehicles of construction personnel may be parked within the west lot of the Carbon Canyon Regional Park. The number of vehicles would be minimal and such parking would cease after the construction phase of the project. Additionally, project construction operations would occur during the weekdays. The Carbon Canyon Regional Park is busier on the weekends, therefore construction operations would occur during periods of least use within the park. Other areas of project construction would be on open space, therefore construction personnel would park in these areas. Based on this, less than significant impacts would occur with respect to parking.	4.10(f) Mitigation measures would not be required. Existing regulations and standard procedures provide adequate mitigation to prevent potential impacts.
Impact 4.10(g) Due to the scope and nature of the proposed project, no conflicts with adopted policies, plans, or programs supporting alternative transportation are anticipated.	4.10(g) Mitigation measures would not be required. Existing regulations and standard procedures provide adequate mitigation to prevent potential impacts.