TO: MICHAEL S. LEBRUN MSL
GENERAL MANAGER

FROM: PETER V. SEVCIK
DISTRICT ENGINEER

DATE: JUNE 16, 2011

AGENDA ITEM
D-2
JUNE 22, 2011

SOUTHLAND WASTEWATER TREATMENT FACILITY IMPROVEMENTS DRAFT ENVIRONMENTAL IMPACT REPORT

ITEM

Receive Southland Wastewater Treatment Facility Improvements Draft Environmental Impact Report [RECEIVE REPORT].

BACKGROUND

Doug Wood and Associates Inc. (DWA) has completed the Draft Environmental Impact Report (EIR) for the Southland Wastewater Treatment Facility (WWTF) Improvement Project. The document is ready for circulation for the 45 calendar day review period. Once the District receives comments on the Draft EIR, DWA will prepare a response to any comments the District received and proceed with preparation of the Final EIR.

FISCAL IMPACT

The Board previously retained Doug Wood & Associates Inc. to prepare the EIR and to assist in the processing of the EIR. In addition, previously budgeted staff time and engineering consulting cost were used to review and assist in the preparation of the Draft EIR.

RECOMMENDATION

Staff recommends that the Board receive and file the report.

ATTACHMENTS

- Draft EIR for Southland Wastewater Treatment Facilities Improvements

NIPOMO COMMUNITY SERVICES DISTRICT SOUTHLAND WASTEWATER TREATMENT FACILITIES IMPROVEMENTS

Draft Environmental Impact Report

State Clearinghouse No. 2009051120

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June, 2011

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B. Engineering Studies

- **2010 Urban Water Management Plan; May 19, 2011.**
- **Nipomo Community Services District, Southland Wastewater Treatment Facility Master Plan; January, 2009.**
- **Nipomo Community Services District, Southland Wastewater Treatment Facility Master Plan Amendment; August 6, 2010.**
- **Nipomo Community Services District, Preliminary Screening Evaluation of Southland Wastewater Treatment Facility Disposal Alternatives; January, 2009.**

C. Hydrogeologic Assessments

- **Hydrologic Characterization, Southland Wastewater Treatment Facility, Nipomo, California; July 17, 2007.**
- **Task 4 – Technical Memorandum, Nipomo Creek Water Quality Sampling Program, Phase 2 – Hydrogeologic Investigation of the Southland WWTF; December 20, 2007.**

- **Task 1 – Technical Memorandum (Revised), Feasibility Level Exploration Program for New Percolation Pond Sites, Phase 2 – Hydrogeologic Investigation of the Southland WWTF; February 21, 2008.**

- **Task 2 – Technical Memorandum (Revised), Assessment of Potential for Extracting Discharge Water From Beneath the Southland Wastewater Treatment Facility, Phase 2 – Hydrogeologic Investigation of the Southland WWTF; February 21, 2008.**

- **Supplemental Groundwater Modeling Analysis; June 30, 2008.**

- **Hydrogeologic and Geotechnical Assessment of APN 090-311-001, Nipomo, California; July, 2008.**

- **Hydrogeologic Assessment, Kaminaka Property, Nipomo, California; June 8, 2009.**

- **Final Report, Hydrogeologic Assessment of the Pasquini Property, Nipomo, California; July, 2010.**

- **Supplemental Groundwater Modeling for the Hydrogeologic Assessment of the Pasquini Property, Nipomo, California; September 7, 2010.**

D. Biological Resources Survey Reports

- **Final Biological Resources Survey Report for the Nipomo Community Services District Southland Wastewater Treatment Facility Expansion Project; August 2, 2010.**

- **Protocol-level California Red-Legged Frog Survey Report for the NCSD Wastewater Treatment Facility Expansion Project; June, 2010.**

E. Cultural Resources Assessment

- **Results of Archival Records Search and Phase One Archaeological Surface Survey for the Nipomo Community Services District Southland Wastewater Treatment Facilities Improvement Project, San Luis Obispo County, CA; November 22, 2010.**

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I. INTRODUCTION AND PURPOSE

A. ENVIRONMENTAL PROCEDURES AND FORMAT

This Environmental Impact Report (EIR) has been prepared to evaluate the potential environmental impacts of the proposed Southland Wastewater Treatment Facilities Improvements (to be referred to herein as the "Southland WWTF Improvements" or "proposed improvements"). The Nipomo Community Services District encompasses approximately seven square miles southeast of the City of Arroyo Grande within the southern portion of San Luis Obispo County.

The proposed project involves the installation of improved treatment facilities and the phasing of additional facilities necessary to upgrade and expand the wastewater treatment capabilities of the existing Southland Wastewater Treatment Facility. These proposed wastewater treatment facilities involve three basic elements: 1) the upgrading of existing wastewater treatment facilities at the Southland WWTF within Phase I of the proposed project which will improve the treatment capability of the plant but will not increase the existing treatment capacity of the facility; 2) the provision of additional facilities at the Southland WWTF for wastewater treatment and 3) additional areas to be devoted to off-site disposal of treated effluent, both of which will occur within Phases II and III of the proposed project. These improvements will expand the treatment capacity of the Southland WWTF and/or develop off-site disposal options. Proposed improvements to the WWTF will increase the ultimate treatment capacity to a maximum flow of 1.8 million gallons per day from its current capacity of 0.9 million gallons per day. Improvements to the wastewater treatment facility would be accomplished in three phases (see Section III Project Description for additional details concerning the proposed project).

This Environmental Impact Report (EIR) has been prepared in accordance with the California Environmental Quality Act of 1970 (CEQA) as amended (Public Resources Code Section 21000, et. seq.). An Initial Study for the project was prepared by the Nipomo Community Services District (or "District"), which is acting as the Lead Agency for the proposed project, and a Notice of Preparation (NOP) for an EIR was distributed to local Responsible and Trustee Agencies and other interested parties between May 29, 2009 and June 29, 2009. The objective of distributing the NOP was to identify and determine the full range and scope of environmental issues of concern so that these issues may be fully examined in the EIR. Comments received during the NOP distribution process regarding potentially significant environmental impacts have been addressed in Section V. Environmental Analysis of this Draft EIR. The Initial Study, Notice of Preparation and comments resulting from their distribution are contained within Appendix A to this EIR. In addition, a Public Scoping Meeting was held on June 10, 2009 during the regularly-scheduled public hearing of the Nipomo Community Service District Board of Directors. The purpose of the Scoping Meeting was to provide the opportunity for any person, organization or agency to express concerns about the impacts of the proposed project that should be discussed and analyzed within the Draft

Environmental Impact Report. Pursuant to Section 15082(c)(1) of the State CEQA Guidelines, "…for projects of statewide, regional or areawide significance, the Lead Agency shall conduct at least one scoping meeting." There were no public or agency comments at this Scoping Meeting. The public notice and minutes for the Scoping Meeting are included within Technical Appendix A to this EIR.

This EIR is intended to address all of the impacts, mitigation measures, project alternatives, etc. associated with the proposed project. This EIR will be subject to full public and agency review prior to consideration of the proposed project by the Nipomo Community Services District.

This Draft EIR begins with Section I. Introduction and Purpose, which provides an introductory discussion of the purpose and scope of the document. Section II. EIR Summary/Mitigation Monitoring Program summarizes the project impacts and mitigation measures, as subsequently described in detail within Section V. Environmental Analysis. Section II also contains the State-mandated Mitigation Monitoring Program (pursuant to Section 21081.6 of the *Public Resources Code*). Section III. Project Description, provides a description of the pertinent aspects of the proposed project and related permits and approvals. This section also discusses pertinent aspects of the project's background history and identifies the objectives of the proposed project. Section IV. Environmental Setting, provides an overview description of existing environmental conditions of the project site and the surrounding area.

Issues identified within the Initial Study are addressed in detail in Section V. Environmental Analysis. The environmental factors which require evaluation, based upon the issues identified within the Initial Study in combination with comments received during circulation of the Notice of Preparation include: land use and planning, population and housing, water/wastewater, biological resources, aesthetics, cultural resources, geology, hazards and hazardous materials, public services and utilities, traffic, noise and air quality. The discussion of each issue within Section V. Environmental Analysis begins with a description of the existing environmental conditions followed by an identification of any pertinent thresholds of environmental significance. The nature and extent of impacts related to the proposed project are then identified. The EIR then determines whether the project impacts are significant or insignificant pursuant to the previously-identified thresholds of significance. Where applicable, the analyses of project impacts within the EIR are presented in relation to the two basic project elements, those being wastewater treatment and disposal. Any regional or cumulative implications of the proposed project are also identified. Indirect or secondary impacts of the proposed project are discussed. For many environmental impacts, mitigation measures are provided in order to reduce potential environmental impacts to a level of insignificance. This analysis then identifies those residual impacts which remain significant in spite of any proposed mitigation measures. Those impacts that are not capable of being reduced to an insignificant level with mitigation measures are identified as significant, unavoidable adverse impacts (Class I Impact). Remaining project impacts will be categorized as potentially significant, but mitigated to an insignificant level (Class II Impact), non-significant (Class III Impact) or beneficial (Class IV Impact).

The significant adverse impacts which remain after implementation of proposed mitigation measures are summarized in Section VI. Unavoidable Adverse Impacts. Section VII. Growth Inducing Impacts of the Proposed Action discusses to what extent, if any, the proposed project will facilitate development within the areas served by the additional wastewater treatment and disposal. Section VIII. Alternatives to the Proposed Project, provides a discussion of potential project alternatives which may be capable of reducing or eliminating the project-related adverse impacts. Project alternatives are also analyzed in terms of their ability to meet the objectives of the proposed project. Section IX. Organizations and Persons Consulted and Section X. References provide sources of information contained within the remainder of this Draft EIR. Several of the analyses of project impacts and mitigations are based upon technical reports and information, copies of which are provided as Technical Appendices to this document.

Several land use and planning documents prepared by various agencies have been utilized within this analysis and are incorporated by reference into this EIR. These documents include: the Southland Wastewater Treatment Facility Master Plan (dated January, 2009); the Preliminary Screening Evaluation of the Southland Wastewater Treatment Disposal Alternatives (dated January, 2009) and several hydrogeologic and geotechnical assessments all of which have been prepared by Fugro West Inc. including: the Hydrogeologic Characterization of the Southland Wastewater Treatment Facility, dated July, 2007; Task 4 Technical Memorandum, Nipomo Creek Water Quality Sampling Program, dated December 20, 2007; Task 1 Technical Memorandum, Feasibility Level Exploration Program for New Percolation Pond Sites, dated February 21, 2008; Task 2 Technical Memorandum, Assessment of Potential for Extracting Discharge Water from Beneath the Southland Wastewater Treatment Facility, dated February 21, 2008; Supplemental Groundwater Modeling Analysis, dated June 30, 2008; Hydrogeologic and Geotechnical Assessment of APN 090-311-001, dated July, 2008; Hydrogeologic Assessment, Kaminaka Property, dated June, 2009; Hydrologic Assessment, Pasquini Property, dated July, 2010; the South County Area Plan (Inland); the various Elements of the County of San Luis Obispo General Plan including Land Use and Circulation Element; the County Growth Management Ordinance and various environmental and scientific analyses prepared for projects throughout the Nipomo area as listed in Section X. References of this document.

The proposed project will be analyzed within this EIR in accordance with Sections 15160 through 15168 of the CEQA Guidelines. Phase I of the proposed project will be examined as a Project EIR, which according to Section 15161, "examines the environmental impacts of a specific development project." This approach is viable given the level of detail within currently-prepared project plans. Phases II and III of the proposed project will be examined as a Program EIR which, according to Section 15168, is where an EIR is "prepared on a series of proposed actions that can be characterized as one large project" which are "related either geographically or as logical parts in the chain of contemplated actions." The approach involves a more general analysis of subsequent project phases within the EIR but allows for subsequent analyses of these later project phases when additional project information is available.

This Draft EIR will provide a full and fair discussion of the potential environmental impacts of the proposed Nipomo Community Services District Southland Wastewater Treatment Facilities Improvements. In preparing this EIR, the Nipomo Community Services District decision-makers, staff and members of the public will be fully informed as to the impacts, mitigation measures and reasonable alternatives associated with the proposed project. In accordance with Section 15021 of the State CEQA Guidelines, this EIR is intended to enable the Nipomo Community Services District, as Lead Agency, to evaluate these environmental impacts, mitigation measures and project alternatives in their consideration of the project proposal. The Lead Agency has an obligation to balance possible adverse effects of the project against a variety of public objectives and benefits, including economic, environmental and social factors, in determining whether the proposed project is acceptable and approved for development.

Pursuant to California *Public Resources Code* 21082.1, the Nipomo Community Services District has independently reviewed and analyzed the information contained in this Environmental Impact Report prior to its distribution as a Draft EIR. The conclusions and discussions contained herein reflect the independent judgment of the District as to those issues at the time of publication.

B. CEQA TOPICS LOCATION

TOPIC	LOCATION
Environmental Procedures and Format	Section I
EIR Summary	Section II
Mitigation Monitoring Program	Section II
Project Description	Section III
Environmental Setting	Sections IV and V
Impact Analysis	Section V
Cumulative Impacts Analysis	Section V
Mitigation Measures	Section V
Unavoidable Adverse Impacts	Sections V and VI
Alternatives to the Proposed Project	Section VII
Growth Inducing Impacts	Section VIII
Organizations and Persons Consulted	Section IX
References	Section X

C. EFFECTS FOUND NOT TO BE SIGNIFICANT

The Initial Study prepared by the Nipomo Community Services District in combination with comments received during circulation of the Notice of Preparation determined that potentially significant environmental effects occurred in the areas of: land use and planning, population and housing, water/wastewater, biological resources, aesthetics, cultural resources, geology, hazards and hazardous materials, public services and utilities, traffic, noise and air quality. As a result of the analyses within the Initial Study, potential impacts were determined to be insignificant in the areas of energy and mineral resources and recreation. Unlike the other environmental issues noted above, these issues are not discussed further in the EIR.

II. EIR SUMMARY/MITIGATION MONITORING PROGRAM

A. EIR SUMMARY

1. Project Summary

The Nipomo Community Services District encompasses approximately seven square miles southeast of the City of Arroyo Grande within the southern portion of San Luis Obispo County. The Southland Wastewater Treatment Facility is located immediately south of the intersection of South Frontage Road and Southland Street. Proposed disposal sites will be located (at a precise location to be determined at a later date) on the Nipomo Mesa within five miles of the Southland Wastewater Treatment Facility.

The proposed project involves the installation of improved treatment facilities and the phasing of additional facilities necessary to upgrade and expand the wastewater treatment capabilities of the existing Southland Wastewater Treatment Facility. These proposed wastewater treatment facilities involve three basic elements: 1) the upgrading of existing wastewater treatment facilities at the Southland WWTF within Phase I of the proposed project which will improve the treatment capability of the plant but will not increase its existing treatment capacity; 2) the provision of additional facilities at the Southland WWTF for wastewater treatment and 3) additional areas to be devoted to off-site disposal of treated effluent, both of which will occur within Phases II and III of the proposed project. These improvements will expand the treatment capacity of the Southland WWTF and/or develop off-site disposal options.

Specific improvements to the Southland Wastewater Treatment Facility include: 1) replacement of the existing influent lift station; 2) provision of headworks improvements in order to enhance effluent screening and grit removal; 3) phased reconstruction of two of the four existing treatment ponds with extended aeration capabilities (a Biolac wave oxidation system); 4) phased construction of three secondary clarifiers with an RAS/WAS pumping system for the circulation of "return activated sludge" (RAS) and "waste activated sludge" (WAS); 5) installation of a sludge thickening system; 6) replacement of the two existing unlined sludge drying beds with concrete-lined drying beds and 7) provision of associated ancillary equipment, support buildings and facilities, piping, structural, site work, electrical and instrumentation improvements throughout the WWTF property.

Proposed improvements to the WWTF will increase the ultimate treatment capacity to a maximum flow of 1.8 million gallons per day from its current capacity of 0.9 million gallons per day. Improvements to the wastewater treatment facility would be accomplished in three phases. Phase I improvements will be designed to improve water quality but not expand the current 0.9 million gallons per day (mgd) capacity. Phase II improvements will expand plant capacity to 1.28 mgd with Phase III improvements resulting in an increase to the plant's ultimate capacity of 1.80 mgd. This increased

treatment capacity is intended to serve both existing and future wastewater treatment demands generated within the Southland WWTF service area of the Nipomo Community Services District. Future capacity requirements are based on buildout demand estimates. Buildout within the WWTF service area is based upon the Land Use and Circulation Elements of the San Luis Obispo County General Plan (revised June 23, 2006). Treatment plant expansion during Phases II and III of the proposed project will be based upon influent flow volumes as required by state regulatory agencies.

Either during or after Phase I of construction is completed, the Nipomo Community Services District will need to expand their treated effluent disposal capabilities in order to accommodate future wastewater flows. These expanded treated effluent disposal facilities involve two elements: the potential provision of two additional percolation ponds at the existing Southland Wastewater Treatment Facility and construction of one or multiple off-site re-use or percolation facilities.

The additional on-site percolation facilities would be constructed on approximately ten acres adjacent to the existing wastewater treatment ponds. These percolation basins will measure approximately 110 feet by 650 feet with a depth of approximately five feet. These basins will be located within the District property southwest of the existing infiltration basins. The basins would be similar in design to the existing basins and would be unlined in order to facilitate the percolation/disposal of treated effluent.

The District has also evaluated several locations for off-site disposal and/or reuse of remaining effluent after treatment and storage at the Southland Wastewater Treatment Facility. Potential disposal/reuse methods that were the subject of these investigations included discharge into percolation ponds, discharge into subsurface disposal systems, surface irrigation of either agricultural or recreation/open space areas, or deep percolation. As a result of these investigations, three separate locations for off-site effluent disposal/reuse were selected for evaluation in this Draft EIR. One option involves the provision of percolation facilities at Kaminaka Property with a second option being the reuse of treated effluent for irrigation of areas south of the existing Southland Wastewater Treatment Facility. A third disposal option involves the reuse of treated effluent for irrigation at Blacklake Golf Course, Nipomo Community Park and possibly the Kaminaka Property.

The proposed project will be constructed within three phases. Phase I will involve construction of upgraded treatment facilities at the Southland WWTF. Phase I upgrades to the treatment plant are estimated to require a total of twelve to eighteen months. Phase II will involve construction of treatment plant improvements as well as the off-site transmission mains and disposal area(s). Construction of transmission mains and the proposed disposal site will require six to twelve months depending on its location. Phase III involves construction of additional treatment plant improvements which is anticipated to require six to twelve months. Phase I is anticipated to begin in 2011. The timing of Phases II and III is dependent upon the rate of growth in the District's Southland WWTF

wastewater treatment service area. Several of these construction activities may be performed concurrently. Phase I improvements will be constructed within the existing Southland WWTF while Phases II and III may include construction of off-site improvements if treated effluent cannot be fully disposed of on-site.

The proposed Nipomo Community Services District Southland Wastewater Treatment Facilities Improvements Project involves a series of approvals and discretionary actions by the Nipomo Community Services District, as Lead Agency, and other involved regulatory agencies. The proposed project involves the following approvals by the Nipomo Community Services District: 1) certification of the Final Environmental Impact Report; 2) approval of the Mitigation Monitoring Program and 3) review and approval of detailed plans for pipelines, upgraded treatment facilities, percolation ponds and any other infrastructure for the proposed wastewater treatment facilities improvements.

The proposed project may also require the following approvals by other involved regulatory agencies including: 1) Section 404 Permits under the Clean Water Act from the U.S. Army Corps of Engineers, which regulates the discharge of dredged and/or fill material into the "waters of the United States"; 2) Public Resources Code Sections 1601-1603 Streambed Alteration Agreements from the State of California, Department of Fish and Game, which regulates all diversions, obstructions or changes in the natural flow or bed, channel or bank of any river, stream or lake which supports fish or wildlife; 3) a National Pollution Discharge Elimination System (NPDES) permit to comply with Section 401 of the Clean Water Act from the State Water Quality Control Board; 4) a Section 401 Water Quality Certification and a General Permit for Storm Water Discharges Associated with Construction Activities from the Central Coast Regional Water Quality Control Board; 5) a new Waste Discharge Order issued by the Central Coast Regional Water Quality Control Board; 6) a Section 7 Consultation or Section 10(a) Permit from the United States Fish and Wildlife Service which allows the "taking" of an endangered species; 7) easements secured from landowners in the Nipomo area or other entities for right-of-way and construction and 8) any necessary construction and/or encroachment permits from the County of San Luis Obispo for equipment staging and construction operations.

2. Summary of Impacts and Mitigation Measures

The following summary of potential project impacts and proposed mitigation measures is arranged pursuant to the issues identified in the Initial Study and discussed in Section V. Environmental Analysis of this EIR (see Table 2, Summary of Impacts and Mitigation Measures). This table also identifies the residual impacts which remain significant after implementation of the proposed project mitigation measures. These residual impacts are classified according to the following criteria:

- Class I Impact - Significant and unavoidable adverse impacts that cannot be mitigated to a level of insignificance. Although mitigation measures may be proposed, these measures are not sufficient to reduce project impacts to a level of insignificance.

- Class II Impacts - Potentially significant adverse impacts which can be reduced to a level of insignificance or avoided entirely with the implementation of proposed mitigation measures.

- Class III Impacts - Adverse impacts which are found not to be significant.

- Class IV Impacts - Project impacts which are considered to be positive or of benefit to the site or the adjacent environment.

These residual impacts are also summarized by environmental topic in Table 1, "Summary of Residual Impacts After Mitigation" below.

TABLE 1
SUMMARY OF RESIDUAL IMPACTS AFTER MITIGATION

ISSUE	Class I	Class II	Class III	Class IV
A. Land Use and Planning	X	X		
B. Population and Housing	X		X	
C. Water/Wastewater		X		X
D. Biological Resources		X	X	X
E. Aesthetics		X	X	
F. Cultural Resources		X		
G. Geology		X	X	
H. Hazards and Hazardous Materials		X	X	
I. Public Services and Utilities		X		
J. Traffic		X	X	
K. Noise		X		
L. Air Quality		X		

TABLE 2
SUMMARY OF IMPACTS AND MITIGATION MEASURES

DESCRIPTION OF POTENTIAL IMPACT	MITIGATION MEASURE	RESIDUAL IMPACTS
A. LAND USE AND PLANNING		
A-1. The proposed project could directly impact land uses in areas adjacent to short-term project construction activities particularly areas containing agricultural farmland. These impacts are considered to be potentially significant, but mitigable.	**A-1:** For any construction staging or storage proposed on agricultural farmland, permanent impacts to soil resources can be avoided with the following measures • A geotextile membrane shall be placed on top of native soils prior to the placement of any stockpile, fill, base materials or construction materials • Upon completion of the project, native soil will be replaced to its previous condition in terms of soil texture, water holding capacity and soil permeability • All excavated soils will be stockpiled during construction in a manner that protects the soils' physical, chemical and biological characteristics. Biologically active topsoil (A horizon) shall be segregated from deeper soils during construction and replaced in a similar manner upon completion of construction • At the conclusion of construction, soils will be replaced in a manner that mimics the pre-construction characteristics of the soils, including compacting the soils to the same soil permeability, soil texture and available water holding capacity **A-2:** Project construction shall be coordinated with property owners and any farm lessee/operators. Impacts to agricultural use of the property can be avoided or minimized with the following measures • All proposed wastewater transmission and disposal systems shall be located in order to avoid damaging buried irrigation lines, wells, risers and other agricultural infrastructure based upon visual interpretation or existing mapping or recordation. • Early notice of any planned closures or detours on existing roadways either within the fields or along existing paved roads with regular updates about forthcoming	Mitigation Measures A-1 and A-2 will reduce potentially significant temporary or permanent impacts to agricultural lands to an insignificant level (Class II Impact).

DESCRIPTION OF POTENTIAL IMPACT	MITIGATION MEASURE	RESIDUAL IMPACTS
	closures or detours shall be provided to area agricultural producers and posted on local roadways so that adequate planning can be made for the movement of agricultural goods, personnel and residential commuters.	
A-2. The proposed project may potentially indirectly induce changes in land use as a result of the reduction or elimination of a potential constraint upon development within areas served by the additional sewer service provided by the proposed project. The proposed project will not, however, directly cause a change in any San Luis Obispo County land use designations or zoning or an increase in the intensity of currently-designated land uses within the District.	No mitigation measures are proposed.	The proposed project's potential long-term and cumulative land use and planning impacts resulting from the elimination of a constraint upon future development of areas served by the additional sewer service provided by the proposed project are considered to be significant impacts which cannot be reduced to an insignificant level. These significant, unavoidable adverse impacts will require the adoption of a Statement of Overriding Considerations by the Lead Agency (Class I Impact).

B. POPULATION AND HOUSING

B-1. The proposed project may potentially result in the demand for new housing due to the need for labor during project construction. However, the proposed project will not directly induce population or housing growth in the area.	No mitigation measures are proposed.	Potential impacts related to increased housing demand associated with project construction activities are considered to be less than significant (Class III Impact).
B-2. The proposed project may potentially indirectly induce a substantial growth in population as a result of the reduction or elimination of a potential constraint upon development within areas served by the increased sewer service provided by the proposed project. The proposed project will not, however,	No mitigation measures are proposed.	The proposed project's potential long-term and cumulative population and housing impacts resulting from the elimination of a constraint upon future development of areas served by the additional sewer service provided by the proposed project are considered to be significant impacts which cannot be

DESCRIPTION OF POTENTIAL IMPACT	MITIGATION MEASURE	RESIDUAL IMPACTS
directly generate any new population or housing.		reduced to an insignificant level. These significant, unavoidable adverse impacts will require the adoption of a Statement of Overriding Considerations by the Lead Agency (Class I Impact).

C. WATER

C-1. The proposed project may potentially result in the creation of wastewater treatment or disposal facilities that are not capable of meeting future treatment demands. However, proposed improvements to the Southland WWTF will increase the treatment capabilities of the plant through reduced BOD, TSS and total Nitrogen to acceptable levels as well as an increase in the capacity of the plant to 1.8 million gallons per day from its current capacity of 0.9 million gallons per day. The proposed project will also provide additional areas devoted to the on and off-site disposal of treated effluent from the Southland WWTF.	No mitigation measures are proposed.	Potential impacts related to increased and improved wastewater treatment and disposal capacity are considered to be beneficial (Class IV Impact).
C-2. The proposed project may potentially result in an increase in the treated effluent mound that is located beneath the Southland WWTF. However, the proposed project will provide additional on-site percolation capability in order to properly manage the treated effluent mound beneath the wastewater treatment facility..	No mitigation measures are proposed.	Potential impacts related to the management of the treated effluent mound beneath the Southland WWTF are considered to be beneficial (Class IV Impact).

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C-3. The proposed project may potentially result in a depletion of available groundwater supplies. However, the proposed method of treated effluent disposal does not require any dilution of treated effluent utilizing potable water or any other withdrawal of existing groundwater supplies in order to assist in effluent disposal. The proposed project will only augment existing and future groundwater supplies	No mitigation measures are proposed.	Potential impacts related to preservation of available groundwater supplies are considered to be beneficial (Class IV Impact).
C-4. The proposed project may potentially result in a degradation of groundwater quality or violation of water quality standards. However, treated effluent from the Southland WWTF and the treated effluent mound beneath the plant do not currently impact surface water quality in Nipomo Creek and will not degrade water quality in Nipomo Creek in the future. The proposed project will provide enhanced wastewater treatment technology and improved off-site treated effluent disposal. The utilization of a Biolac wave oxidation will improve the water quality of treated effluent generated by the wastewater treatment facility. The provision of concrete-lined sludge drying beds will further protect groundwater resources.	No mitigation measures are proposed.	Potential impacts related to maintenance of groundwater quality are considered to be beneficial (Class IV Impact).
C-5. The proposed project could result in the degradation of surface water quality as the result	**C-1:** The Nipomo Community Services District shall develop a Stormwater Pollution Prevention Plan (SWPPP) that will include Best Management Practices (BMPs) to prevent the discharge of	Mitigation Measures C-1 and C-2 will reduce potentially significant impacts related to the

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of construction-related spills or short-term landform alteration. These impacts are considered to be potentially significant, but mitigable.	construction materials, contaminants, washings, concrete, fuels, and oils. The SWPPP will be available on the construction site pursuant to State regulations. BMPs should include the following measures: • Properly maintain (off-site) all construction vehicles and equipment that enter a construction area in order to prevent leaks of fuel, oil, and other vehicle fluids. • Conduct equipment and vehicle fueling off-site. If refueling is required at a construction site, it will be done within a bermed area with an impervious surface to collect spilled fluids. • Prepare a Spill Prevention/Spill Response Plan for the site that includes training, equipment and procedures to address spills from equipment, stored fluids and other materials including disposal of spilled material and materials used for clean up of contaminated soils and materials. • Place all stored fuel, lubricants, paints, and other construction liquids in secured and covered containers within a bermed area. • Conduct any mixing and storage of concrete or other construction materials in contained areas. • Insure that all equipment washing and major maintenance is prohibited at a construction site except in bermed areas. • Remove all refuse and excess material from a construction site as soon as possible. • Channelize storm water to avoid construction equipment and materials and to avoid the diversion of runoff into existing drainages. **C-2:** In compliance with the San Luis Obispo County Land Use Ordinance, the District shall prepare an Erosion and Sedimentation Control Plan outlining measures to address both temporary (i.e. site disturbance, stockpiling and construction activities) and final (post-construction) methods for stabilizing exposed soils, minimizing the potential for erosion and sedimentation as well as maintaining off-site water quality. These measures shall include, but may not be limited to: • The use, if necessary, of silt fencing, straw bales or sandbags in order to reduce the potential for erosion from disturbed soils and	potential degradation of surface water quality due to construction-related spills or short-term landform alteration to an insignificant level (Class II Impact).

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	• Implementation of other methods for stabilizing disturbed soils and minimizing soil loss from the construction site.	
C-6. The proposed project could directly impact the Coastal Aqueduct Pipeline and the existing fiber optic communications cable.	**C-3.** Any areas proposed for future project improvements containing the Coastal Aqueduct Pipeline and/or the State Water Project fiber optic communications cable shall be surveyed in order to clearly delineate the extent of the State Department of Water Resources right-of-way. No excavation or test drilling within these areas shall be conducted without prior approval of the Department of Water Resources (DWR) or the Central Coast Water Authority (CCWA). No proposed structures or grading that may limit DWR or CCWA access to the Coastal Aqueduct easement shall occur without prior DWR approval.	Mitigation Measure C-3 will reduce potentially significant impacts to the Coastal Aqueduct Pipeline and existing fiber optic communications cable due to project construction to an insignificant level (Class II Impact).

D. BIOLOGICAL RESOURCES

D-1. Construction activities within the proposed pipeline alignments, wastewater treatment facilities improvements, disposal site options and associated facilities may potentially adversely affect non-listed wildlife occupying adjacent habitats within existing wildlife migration corridors. However, impacts due to project construction upon non-listed wildlife species are considered short-term and less than significant. Impacts to existing wildlife movement corridors are considered to be less than significant.	No mitigation measures are proposed.	Potential impacts upon non-listed wildlife species and wildlife migration corridors are considered to be less than significant (Class III Impact).
D-2. Construction activities within the proposed pipeline alignments, wastewater treatment facilities improvements, disposal site options and associated facilities could adversely affect nesting activities of protected migratory birds and	**D-1:** All construction operations shall be conducted prior to, or after, the nesting season (February 15 to September 15) in order to avoid any potential impacts to nesting birds. This shall include any necessary vegetation and/or tree removals which could disrupt nesting birds. Therefore, construction activities should be conducted between September 15 and February 15 to the extent feasible.	Mitigation Measure D-1 will reduce potentially significant impacts related to nesting activities of protected migratory birds and raptors to an insignificant level (Class II Impact).

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raptors. These impacts are considered to be potentially significant, but mitigable.	If the above measure is not feasible, pre-construction surveys shall be conducted by a qualified biologist two weeks prior to the initiation of construction activities initiated between February 15 and September 15 in order to identify potential bird nesting sites. • If active nest sites of common bird species protected under the Migratory Bird Treaty Act (e.g., Northern mockingbird, House finch, etc.) and Fish and Game Code Sections 3503 and 3503.5 are observed within 300 feet of construction activities, then the project shall be modified and/or delayed as necessary to avoid direct take of the identified nests, eggs and/or young. • If active nest sites of raptors and/or species of special concern are observed within the vicinity of Southland WWTF, construction shall be avoided or terminated until the California Department of Fish and Game is contacted and an appropriate buffer zone around the nest site is established. Construction activities in the buffer zone shall be prohibited until the young have fledged the nest or the nest is abandoned.	
D-3. Construction activities could adversely affect special-status terrestrial wildlife species potentially occurring in the project area. These impacts are considered to be potentially significant, but mitigable.	**D-2:** All equipment staging and construction crew parking areas shall be located within pre-designated staging areas identified on construction plans which avoid identified sensitive habitats as determined by a qualified biological monitor. This shall include pre-designation of all staging areas for construction of all pipeline improvements. Additionally, all construction access routes shall be established in previously disturbed areas and/or existing roadways. **D-3:** Exclusionary fencing will be erected at the boundaries of the construction areas to avoid equipment and human intrusion into adjacent habitats with emphasis on protection of areas containing special-status species. The exact location of exclusionary fencing for each construction area shall be determined by a qualified biological monitor. The fencing shall remain in place throughout the construction phase for each individual project component. **D-4:** A qualified biological monitor shall conduct a worker orientation for all construction contractors (site supervisors, equipment operators and laborers) which emphasizes the presence and identification of areas containing special-status	Mitigation Measures D-2 through D-10 will reduce potentially significant impacts associated with special-status terrestrial wildlife species to an insignificant level (Class II Impact).

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	species, their habitat requirements and applicable regulatory policies and provisions regarding their protection and measures being implemented to avoid and/or minimize impacts. **D-5:** If nighttime construction activities are warranted, all equipment lighting shall be shielded away from adjacent wildlife habitat areas and the open sky in order to minimize lighting/glare impacts of wildlife while still providing safe working conditions for construction personnel. **D-6:** A dust control program during the construction phase of the project shall be implemented to minimize dust impacts to adjacent vegetation communities and associated special-status species (see Section V.J. Air Quality). **D-7:** A qualified biologist shall conduct a pre-activity survey to determine presence or absence of California horned lizard within the Southland WWTF and the Kaminaka Property. Surveys shall only be required during the active period of California horned lizards (generally April through September). If California horned lizards are identified adjacent to and/or within work areas, hand rakes or an equivalent method shall be utilized by the biologist in order to scarify the ground surface and encourage the horned lizards (and other wildlife) to vacate the immediate area prior to construction. Alternatively, drift fences shall be used to capture horned lizards. As necessary, the qualified biologist shall physically relocate any California horned lizards to suitable habitat located outside the construction zone(s). **D-8:** A qualified biologist shall conduct pre-construction survey(s) within one week of ground-disturbing activities to determine presence/absence of active badger dens within 100-feet of project activities at the WWTF (including 10-acre expansion area) and the Kaminaka Property. If no evidence of badger presence is detected, no further mitigation is required. The following measures shall be implemented if active badger dens are detected during pre-construction surveys: • The entrance to the den and an area of approximately one square meter in front of entrance (i.e., den apron) shall be smoothed with a flat-head shovel or equivalent. Diatomaceous earth shall be placed on the smoothed areas. Check the next three consecutive mornings for badger	

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	tracks. If no tracks are observed, assume that the den is no longer occupied. However, to ensure no loss of badgers, hand excavate the den completely, then backfill to prevent re-occupation. • If tracks are observed in the diatomaceous earth during any of the three mornings, progressively block the entrance, using soil and other nearby materials (woody debris, etc.) Render the entrance progressively more difficult to enter and exit over the following three days. Then, to assure no loss of badgers, hand excavate the den completely and backfill to prevent re-occupation. • The above American badger protocols shall be implemented for dens at or near the Southland WWTF including the 10-acre percolation pond expansion area and within the Kaminaka Property. Dens identified near the equipment access routes shall be marked and carefully avoided during all construction activities. Verification of occupancy is not necessary if such dens can be avoided. **D-9:** A qualified biological monitor shall be on-site during all vegetation clearing and shall periodically monitor the project area during construction activities in order to inspect protective fencing, equipment staging areas and to physically relocate or remove any special-status wildlife species entering the construction zone or identified during brush clearing and excavation(e.g., California horned lizard, Silvery legless lizard, etc.). All special-status species shall be relocated to suitable habitat located outside the construction zone by the qualified biologist. Exact procedures and protocols for relocating shall be based upon pre-project consultation with California Department of Fish and Game. **D-10:** Nesting bird surveys shall be conducted between February 15 and September 15 to identify nest sites of special-status bird species including Loggerhead shrike, California horned lark, Northern harrier, Cooper's hawk, White-tailed kite and Tricolored blackbird.	
D-4. Construction activities could adversely affect semi-aquatic special-status species within the existing	**D-11:** Site disturbance and construction activities shall not occur during the rainy season (October 15 to April 15) within 300 feet of any areas containing suitable breeding habitat of the Western	Mitigation Measures D-11 through D-15 will reduce potentially significant impacts associated with

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percolation ponds at the Southland WWTF and agricultural stock ponds located within the proposed pipeline alignments. These impacts are considered to be potentially significant, but mitigable.	spadefoot toad in order to protect migrating and/or breeding of this species which typically initiates surface movements from burrows following first rains of fall. No construction activities shall occur in these areas during or immediately following a rain event or if water is ponding within these areas. If the above measure is not feasible, pre-construction surveys for Western spadefoot toad shall be conducted by a qualified biologist within all portions of the project site containing suitable breeding habitat. This shall include an evaluation of all previously documented occupied areas and a reconnaissance-level survey of the remaining natural areas. Surveys shall be conducted when the Western spadefoot toad can be detected (i.e., during substantial rain events which have potential to result in ponding on-site [0.5-inches of rain or greater]). This shall include both night and day surveys to detect all life stages of the Western spadefoot toad. • All Western spadefoot adults, tadpoles, and egg masses encountered shall be collected and released into pre-designated percolation pond(s) containing water within the Southland WWTF as approved by CDFG. • The qualified biologist shall continue to monitor the relocation sites on a periodic basis throughout the breeding period (i.e., every two weeks) to document success of relocation efforts. Further, final survey and monitoring data will be provided to CDFG in a written report. **D-12:** A qualified biological monitor shall conduct a worker orientation which emphasizes the presence of semi-aquatic, special-status species within the project area (e.g., Western spadefoot toad, California red-legged frog, etc.), their habitat requirements, applicable regulatory policies and provisions regarding their protection and measures being implemented to avoid and/or minimize impacts. **D-13:** All work areas within 100 feet of the existing Southland WWTF percolation ponds and/or existing agricultural stock ponds southwest of the WWTF shall be surveyed by a qualified biologist each day prior to the initiation of construction activities. As necessary, the qualified biologist shall physically relocate semi-aquatic, special-status species (e.g., Western spadefoot	special-status semi-aquatic species to an insignificant level (Class II Impact).

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	toad, Southwestern pond turtle, etc.) and common semi-aquatic species (e.g., Western toad, Pacific chorus frog, etc.) to suitable habitat areas located outside the construction zone(s). Exact procedures and protocols for relocation of the special-status species shall be based upon pre-project consultation with the California Department of Fish and Game. In the event California red-legged frog (CRLF) is identified in a work area, all work shall cease until the CRLF has safely vacated the work area. At no time shall any CRLF be relocated and/or affected by project operations without prior approval from the U.S. Fish and Wildlife Service. **D-14:** Prior to commencing construction, NCSD shall prepare the following plans and agency permit applications, and shall implement all plans prior to, during and immediately following construction activities. • In compliance with the San Luis Obispo County Land Use Ordinance, the District shall prepare an Erosion and Sedimentation Control Plan (ESCP) outlining the measures to address both temporary (i.e., site disturbance and stock piling) and final (i.e., post-construction) methods for stabilizing soil and minimizing soil loss from the proposed project site. All applicable measures shall be included on final construction plans and adhered to throughout the project. • All project operations shall comply with the requirements under the General Construction Storm Water General Permit, issued by the State Water Resources Control Board. Such requirements will include preparation of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP shall include provisions for the installation and maintenance of Best Management Practices to reduce the potential for erosion of disturbed soils at the project site. • A Spill Contingency Plan (SCP) shall be prepared outlining measures to prevent the release of petroleum and hazardous materials including containment methods for emergency clean-up operations. Prevention measures shall include, but not be limited to, identification of appropriate fueling areas away from sensitive habitat areas such as swales and/or drainages, a	

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	maintenance schedule for equipment and a list of appropriate containment and spill response materials to be stored on-site. All vehicles shall be staged only in appropriately marked and protected areas and at no time shall any cleaning and/or refueling of equipment be allowed upslope and/or within the vicinity of any drainages and/or wetland habitat areas, including agricultural stock ponds. If an accidental spill of a hazardous or toxic material occurs, the Regional Water Quality Control Board (RWQCB), the California Department of Fish and Game and California Department of Toxic Substances (CDTS) shall be notified. **D-15:** Spill containment equipment shall be available on-site during all construction activities. As necessary, this shall include placement of individual spill response trailers at each active work area during project operations.	
D-5. The proposed project could result in long-term impacts to the large Coast live oak and Eucalyptus trees located along the proposed pipeline alignments located on Orchard Avenue and Pomeroy Road. These trees may represent potential habitat for Monarch butterflies or nesting raptors. These impacts are considered to be potentially significant, but mitigable.	**D-16:** The proposed pipeline alignments shall be aligned to avoid impacting the root systems of large eucalyptus trees located on Orchard Avenue, Pomeroy Road and Willow Road. The precise location of these pipelines shall be reviewed by a qualified arborist to insure avoidance of or minimize impacts to the root systems of large trees throughout pipeline alignment at these locations.	Mitigation Measure D-16 will reduce potentially significant impacts to large eucalyptus trees located on Orchard Avenue and Pomeroy Road to an insignificant level (Class II Impact).
D-6. Long-term impacts associated with the potential generation of silt and sedimentation along the proposed pipeline alignments, wastewater treatment facilities improvements, disposal site options and associated facilities could result in adverse effects to adjacent habitat areas and associated special-status wildlife	**D-17**: An Erosion and Sedimentation Control Plan shall be prepared which includes provision for stabilizing construction sites and pipeline alignments and monitoring. As necessary, this plan shall include the following: • Implementation of standard Best Management Practices (e.g., hydroseeding, wattles, and earthen swales, etc.) along the recontoured sites and erosion control monitoring during subsequent rainy seasons to insure that previously disturbed areas are stabilized. • Installation of long-term drainage devices	Mitigation Measure D-17 will reduce potentially significant long-term impacts associated with the generation of silt and sedimentation to an insignificant level (Class II Impact).

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species. These impacts are considered to be potentially significant, but mitigable.	at all construction areas including, as necessary, catchment basins, culverts with down-drains and storm flow energy dissipating devices (riprap or diffusers).	
D-7. Operation and maintenance activities of the Southland WWTF and the off-site disposal options could result in long-term adverse impacts to special-status wildlife species. These impacts are considered to be potentially significant, but mitigable.	**D-18:** A special-status species orientation program shall be provided to all WWTF facility workers (site supervisors, equipment operators and laborers) which emphasizes the presence of special-status species within the facility, identification, their habitat requirements, applicable regulatory policies and provisions regarding their protection and measures being implemented to avoid and/or minimize impacts. Permanent placards with relevant special-status species information shall be posted in all employee break areas and other facility locations as deemed necessary by NCSD management. The orientation program shall be repeated annually for all staff and on an as needed basis for all new employees.	Mitigation Measures D-18 through D-20 will reduce potentially significant impacts associated with long-term facilities operations and maintenance activities to an insignificant level (Class II Impact).
	D-19: Percolation basin maintenance activities including scarification of pond bottoms with heavy equipment and weed abatement of pond berms shall not be conducted between January 1 and March 31 to avoid the primary breeding period for the Western spadefoot toad. If the above measure is deemed infeasible between January 1 and March 31 due to a temporary increase in wastewater treatment demand and/or other emergency circumstances, then the following measures shall be implemented: All ponds proposed for maintenance shall be allowed to dry entirely with no standing water prior to scarification and/or weed abatement. • A combined one day/night survey shall be conducted by a qualified biologist for Western spadefoot toad 24 hours prior to the proposed maintenance activity. The combined survey shall focus upon the pond bottoms and banks of all basins proposed for maintenance. Surveys shall be repeated, as necessary, to account for multiple maintenance activities within the Jan. 1 to March 31 breeding season. • All Western spadefoot toad adults and metamorphs encountered during the combined day/night surveys shall be collected and released into other pre-designated percolation pond(s) containing water within the Southland WWTF as	Potential impacts related to the provision of additional habitat for the Western spadefoot toad are considered to be beneficial (Class IV Impact).

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	approved by CDFG. The qualified biologist shall continue to monitor the relocation sites on a periodic basis throughout the breeding period to document success of relocation efforts. Further, final survey and monitoring data will be provided to CDFG in a written report at the end of each breeding season. **D-20:** Employees shall be directed to temporarily halt maintenance activities within areas containing special-status species until the animals have vacated the immediate area.	

E. AESTHETICS

E-1. Project construction may potentially result in the short-term alteration of views from adjacent areas. While highly visible, impacts to views in surrounding areas are temporary in nature.	No mitigation measures are proposed.	Potential impacts related to the visual impacts associated with project construction are considered to be less than significant (Class III Impact).
E-2. Project infrastructure facilities could degrade views from adjacent areas. These impacts are considered to be potentially significant, but mitigable.	**E-1:** Prior to project construction, a Landscape Screening Plan shall be prepared for the District which provides landscaped screening consisting of trees and/or shrubs adjacent to proposed booster stations, the control/electrical and storage buildings at the Southland WWTF or any other above ground structure. Trees or shrubs will be provided which will reach six (6) feet surrounding these facilities without sacrificing safety considerations within two years of construction of these facilities. **E-2:** Prior to project construction, a Landscape Maintenance Plan shall be prepared which provides a program for growing and maintaining the proposed vegetative screens so that they achieve the two-year growth plan for vegetation. The plan shall also identify the long range maintenance and vegetative requirements to insure that said screening will be maintained for 5 years, including replacement of any trees or shrubs which may die. **E-3:** Prior to their construction, a color board will be provided which identifies the exterior colors and materials to be utilized on proposed pump	Mitigation Measures E-1 through E-3 will reduce potentially significant aesthetic impacts associated with views of project facilities to an insignificant level (Class II Impact).

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	stations, buildings at the Southland WWTF or any other above ground structure. The colors and materials selected will involve muted tones which match or are comparable with the colors found in the surrounding areas.	
E-3. Long-term project operations could result in the generation of light and glare into surrounding areas. These impacts are considered to be potentially significant, but mitigable.	**E-4:** Prior to project construction, an Exterior Lighting Plan shall be prepared for the District which indicates the height, location and intensity of all proposed exterior lighting. All light fixtures shall be shielded so that neither the lamp nor the reflective interior surface is visible from beyond 50 feet of project facilities. All light poles, fixtures and hoods shall be dark (non-reflective) colored. All exterior lighting sources shall be low-level adjusted so that light is directed downward. Security lighting shall be shielded so as not to create glare when viewed from adjacent properties with lighting heights no more than is absolutely necessary. All project lighting shall not be obtrusive to travelers along any adjacent roadways.	Mitigation Measure E-4 will reduce potentially significant visual impacts due to the generation of light and glare to an insignificant level (Class II Impact).

F. CULTURAL RESOURCES

F-1. Project construction could disturb or materially alter areas containing prehistoric cultural resources which may be related to an identified prehistoric site. These impacts are considered to be potentially significant, but mitigable.	**F-1:** Prehistoric cultural resource monitoring shall accompany any construction trenching and excavation within the WWTF site and along a 100 meter area on the south side of Southland Street directly south of 641 Southland Street. A Prehistoric Cultural Resource Monitoring Plan shall be developed and approved by the County of San Luis Obispo which will include project review, a pre-construction archeological workshop, Chumash involvement, networking with all involved members of the project and the production of a final monitoring report.	Mitigation Measure F-1 will reduce potentially significant impacts related to the disturbance or alteration of prehistoric cultural resources to an insignificant level (Class II Impact).
F-2. Project construction could disturb or materially alter areas containing historic cultural resources. These impacts are considered to be potentially significant, but mitigable.	**F-2:** Historic cultural resource monitoring shall accompany construction trenching and excavation along Pomeroy Road in the vicinity of Nipomo Regional Park in the event that the Kaminaka Property is utilized as a treated effluent disposal facility. An Historic Cultural Resource Monitoring Plan shall be developed and approved by the County of San Luis Obispo which will include project review, networking with all involved members of the project and production of a final monitoring report. **F-3:** In the event that the agricultural lands southeast of the WWTF are utilized as a treated effluent disposal facility, subsurface testing is	Mitigation Measures F-2 and F-3 will reduce potentially significant impacts related to the disturbance or alteration of historic cultural resources to an insignificant level (Class II Impact).

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	required to confirm the lack of cultural resources.	
F-3. Project grading and construction could result in the discovery of currently-unknown cultural resources. These impacts are considered to be potentially significant, but mitigable.	**F-4:** An archaeological workshop shall be conducted by a qualified archaeologist at the pre-construction meeting for construction personnel to educate them about what types of cultural material may be encountered during construction grading and excavation. A procedure for notification of accidental discovery and communication network shall be developed so that if any suspected cultural materials are unearthed, they can be quickly examined and evaluated by a qualified archaeologist and appropriate recommendations can be made. **F-5:** During any grading or excavation associated with the project, if any cultural materials are unearthed, work in that area shall be halted until all cultural materials can be examined by a qualified archaeologist and appropriate recommendations made pursuant to County Land Use Ordinance Section 22.0.	Mitigation Measures F-4 and F-5 will reduce potentially significant impacts related to the discovery of currently-unknown cultural resources during project construction to an insignificant level (Class II Impact).

G. GEOLOGY

G-1. The proposed project could expose project facilities to potential substantial adverse effects, including the risk of loss, involving strong seismic ground shaking and associated ground failure, including liquefaction. These impacts are considered to be potentially significant, but mitigable.	**G-1:** The design of any proposed surface percolation ponds shall include an evaluation of potentially-liquefiable near surface soils below pond slopes so that proper site preparation involving removal of these soils can, if necessary, occur.	Mitigation Measure G-1 will reduce potentially significant impacts associated with the increased risk of liquefaction to an insignificant level (Class II Impact). Potential impacts related to exposure of facilities to seismic ground shaking are considered to be less than significant (Class III Impact).
G-2. The proposed project may potentially increase the risk of landslides. Since none of the proposed project facilities are located within one-half mile of the Nipomo Mesa bluffs, the potential for landslides due to the proposed project facilities is low.	No mitigation measures are proposed.	Potential impacts related to the risk of landslides are considered to be less than significant (Class III Impact).
G-3. The proposed project	**G-2:** The following shall be included in Final	Mitigation Measure G-2

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could result in substantial soil erosion or the loss of topsoil into the local drainages. These impacts are considered to be potentially significant, but mitigable.	Grading and Drainage Plans to prevent erosion induced siltation of on-site and off-site drainages: • A prohibition against grading during the rainy season (November 1-April 15) unless erosion control measures found adequate by the District are implemented. • Methods for revegetation of disturbed soils for long-term stabilization.	will reduce potentially significant impacts associated with erosion induced siltation of into local drainages to an insignificant level (Class II Impact).
G-4. The proposed project may potentially be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project and could potentially result in lateral spreading, subsidence, liquefaction, or collapse. However, several design measures are required by the State of California Uniform Building Code to minimize potential earthquake shaking impacts.	No mitigation measures are proposed.	Potential impacts related to locating the project on an unstable geologic unit or unstable soils are considered to be less than significant (Class III Impact).
G-5. The proposed project may potentially result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state and that is delineated on a local general plan, specific plan or other land use plan. However, the Nipomo Mesa is designated as an area of undetermined mineral resource significance with no active mining claims located in this area.	No mitigation measures are proposed.	Potential impacts related to the loss of a known mineral resource are considered to be less than significant (Class III Impact).

H. HAZARDS AND HAZARDOUS MATERIALS

H-1. The proposed project could result in the accidental release of hazardous materials as a result of a potential construction-related spill of petroleum products or other	**H-1**: The Nipomo Community Services District shall develop a Stormwater Pollution Prevention Plan (SWPPP) that will include Best Management Practices (BMPs) to prevent the discharge of construction materials, contaminants, washings, concrete, fuels, and oils. The SWPPP will be available on the construction site pursuant to State	Mitigation Measures H-1 and H-2 will reduce potentially significant hazards and hazardous materials impacts associated with the accidental release of hazardous materials

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contaminants. These impacts are considered to be potentially significant, but mitigable.	regulations. BMPs should include the following measures: • Properly maintain (off-site) all construction vehicles and equipment that enter a construction area in order to prevent leaks of fuel, oil, and other vehicle fluids. • Conduct equipment and vehicle fueling off-site. If refueling is required at a construction site, it will be done within a bermed area with an impervious surface to collect spilled fluids. • Prepare a Spill Prevention/Spill Response Plan for the site that includes training, equipment and procedures to address spills from equipment, stored fluids and other materials including disposal of spilled material and materials used for clean up of contaminated soils and materials. • Place all stored fuel, lubricants, paints, and other construction liquids in secured and covered containers within a bermed area. • Conduct any mixing and storage of concrete or other construction materials in contained areas. • Insure that all equipment washing and major maintenance is prohibited at a construction site except in bermed areas. • Remove all refuse and excess material from a construction site as soon as possible. • Channelize storm water to avoid construction equipment and materials and to avoid the diversion of runoff into existing drainages. **H-2**: All project construction activities shall adhere to the standards and requirements of the State Department of Public Health (DPH), Toxic Substance Control Division; the County of San Luis Obispo, Public Health Department, Environmental Health Division and other supporting agencies including the Regional Water Quality Control Board and the San Luis Obispo Air Pollution Control District.	during project construction to an insignificant level (Class II Impact).

I. PUBLIC SERVICES AND UTILITIES

I-1. The proposed project may potentially generate the demand for increased law enforcement and fire protection services. However, the proposed	No mitigation measures are proposed.	Potential impacts related to law enforcement and fire protection services are considered to be less than significant (Class III Impact).

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project will not directly induce or generate any new population or housing or generate any increased demands for law enforcement or fire protection/emergency services.		
I-2. The proposed project may potentially impact existing educational services. However, the proposed project will not directly generate any population growth or land uses that create the need for increased educational services from the Lucia Mar Unified School District.	No mitigation measures are proposed.	Potential impacts related to educational services are considered to be less than significant (Class III Impact).
I-3. The proposed project could result in impacts upon existing utilities and services. These impacts are considered to be potentially significant, but mitigable.	**I-1:** The District shall, if feasible and cost-effective, pursue methods of disposal of biosolids involving land application and/or composting at a regional composting facility.	Mitigation Measure I-1 will reduce potentially significant solid waste impacts associated with the increased generation of biosolids to an insignificant level (Class II Impact).
	I-2: The District shall investigate the feasibility and cost-effectiveness of the use of solar power or other alternative energy sources to power wastewater treatment or other project facilities.	Mitigation Measure I-2 will reduce impacts associated with project energy consumption to an insignificant level (Class II Impact). Potential impacts related to provision of off-site percolation ponds, increased percolation of wastewater which provides an additional source of water supply into the groundwater basin and improves the efficiency and reliability of the operations of the NCSD wastewater treatment and disposal system resulting from the proposed project are considered to represent a beneficial impact (Class IV Impact).

DESCRIPTION OF POTENTIAL IMPACT	MITIGATION MEASURE	RESIDUAL IMPACTS

J. TRAFFIC

J-1. The proposed project will generate additional traffic during project construction, which may potentially result in traffic congestion or unacceptable levels of service on an adjacent roadway or intersection. However, the proposed project will only generate a minor amount of traffic during construction activities. Regional traffic flows will not be affected by the long-term operation of project facilities.	No mitigation measures are proposed.	Potential impacts related to construction-related traffic generation are considered to be less than significant (Class III Impact).
J-2. Project construction activities could result in the diversion of traffic creating an unacceptable level of service, insufficient parking, blocking or impeding access to adjacent properties or result in hazards to bicyclists, equestrians and/or pedestrians. These impacts are considered to be potentially significant, but mitigable.	**J-1:** All project construction sites accessing onto or occurring adjacent to public roadways shall provide adequate signage, barriers and, if necessary, flagmen in order to insure the safe diversion of traffic, bicyclists, equestrians and/or pedestrians. These measures shall also insure continued access from adjacent properties to local roadways.	Mitigation Measure J-1 will reduce potentially significant impacts related to the diversion of traffic, potential hazards to pedestrians, equestrians and/or bicyclists and impeding access to adjacent properties to an insignificant level (Class II Impact). Potential impacts related to the loss of parking are considered to be less than significant (Class III Impact).

K. NOISE

K-1. The proposed project will generate construction noise which could impact surrounding areas containing noise sensitive uses. These impacts are considered to be potentially significant, but mitigable.	**K-1:** All project construction activities shall comply with the County of San Luis Obispo Noise Ordinance Section 22.06.042(d) which limits noise-generating construction activities to the hours between 7:00 a.m. and 9:00 p.m. on weekdays and 8:00 a.m. and 5:00 p.m. on Saturdays and Sundays. **K-2:** All construction equipment utilizing combustion engines shall be equipped with "critical" grade (rather than "stock" grade) noise mufflers that are in good condition. Noise level reductions with the use of "critical" grade mufflers can be as high as 5 dBA. Back up "beepers" will	Mitigation Measures K-1 and K-2 will reduce potentially significant impacts related to the generation of short-term construction noise to an insignificant level (Class II Impact).

DESCRIPTION OF POTENTIAL IMPACT	MITIGATION MEASURE	RESIDUAL IMPACTS
	also be tuned to insure lowest possible noise levels.	
K-2. The proposed project could generate increased noise levels due to long-term project operations. These impacts are considered to be potentially significant, but mitigable.	**K-3:** Stationary noise sources that exceed 60 dBA (i.e. pump stations and other project facilities) shall be located at least 300 feet from any occupied residential dwellings unless noise-reducing engine housing enclosures or other appropriate noise screens are provided in order to insure that exterior noise levels do not exceed 60 CNEL.	Mitigation Measure K-3 will reduce potentially significant noise impacts associated with long-term project operations to an insignificant level (Class II Impact).

L. AIR QUALITY

L-1. The proposed project could result in the generation of air pollutants during project construction activities. These impacts are considered to be potentially significant, but mitigable.	**L-1:** Water trucks or sprinkler systems shall be used in sufficient quantities to prevent airborne dust from leaving any construction site. Increased watering frequency will be required whenever wind speeds exceed 15 mph. Reclaimed water, if available, shall be used for dust control and other construction-related purposes during project construction. **L-2:** All dirt stock-pile areas shall be sprayed daily as needed. **L-3:** Exposed ground areas that are planned to be reworked at dates greater than one month shall be sown with a fast-germinating native grass seed and watered until vegetation is established. **L-4:** All disturbed soil areas not subject to revegetation shall be stabilized using approved chemical soil binders, jute netting or other methods approved by the APCD. **L-5:** All roadways, driveways, etc. to be paved or repaved shall be completed as soon as possible. In the event that prompt paving is not possible, seeding or soil binders shall be utilized. **L-6:** Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface at a construction site. **L-7:** All trucks hauling dirt, sand, soil or other loose materials shall be covered or maintain at least two feet of freeboard. **L-8:** Where vehicles enter and exit unpaved roads onto streets, wheel washers or gravel pads shall be installed or trucks and equipment will be washed when leaving the site.	Mitigation Measures L-1 through L-15 will reduce potentially significant air quality impacts associated with project construction to an insignificant level (Class II Impact).

DESCRIPTION OF POTENTIAL IMPACT	MITIGATION MEASURE	RESIDUAL IMPACTS
	L-9: Streets shall be swept at the end of each day if visible soil material is carried onto adjacent paved roads. Water sweepers with reclaimed water shall be used where possible. **L-10:** All material excavated or graded shall be sufficiently watered to prevent excessive amounts of dust. Watering shall occur at least twice a day with complete coverage, preferably in the late morning and after work is done for the day. **L-11:** All PM10 mitigation measures required must be included on any project plans. The contractor shall designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of particulate matter off site. Their duties shall include holidays and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the APCD prior to construction. **L-12:** All construction equipment shall be properly maintained and tuned according to manufacturer's specifications. **L-13:** All off-road and portable, diesel-powered equipment, including, but not limited to, bulldozers, grading, cranes, loaders, scrapers, backhoes, generator sets, compressors or auxiliary power units, shall be fueled exclusively with CARB motor vehicles diesel fuel. Such equipment shall be stored within a fenced enclosure during non-working hours in order to minimize potential vandalism. **L-14:** Where possible, diesel powered equipment shall be replaced with gasoline, electrical, CNG or LPG powered equipment. **L-15:** Prior to any project grading, a geologic analysis will be performed in order to determine if asbestos-bearing serpentine rock is present. If naturally occurring asbestos is found at the project site, an Asbestos Health and Safety Program and an Asbestos Dust Control Plan will be submitted to the Air Pollution Control District for review and approval prior to project grading.	
L-2. The proposed project could generate pollutants associated with long-term	**L-16:** The daily pumping operations at the Southland WWTF for the proposed project shall utilize electric-powered pumps; diesel pumps shall	Mitigation Measures L-16 and L-17 will reduce potentially significant air

DESCRIPTION OF POTENTIAL IMPACT	MITIGATION MEASURE	RESIDUAL IMPACTS
project operations. These impacts are considered to be potentially significant, but mitigable.	be provided for backup (standby) operation to be used only on an emergency basis during power outages or equipment breakdown. **L-17:** The District shall investigate the feasibility and cost-effectiveness of the use of solar power or other alternative energy sources to power wastewater treatment or other project facilities. This analysis shall assess the existing technologies and tradeoffs in order to determine the feasibility of alternate energy sources including solar power. This assessment will be based upon cost constraints, reliability, space requirements and other implementation factors.	quality impacts related to pollutant generation associated with long-term project operations to an insignificant level (Class II Impact).

B. MITIGATION MONITORING PROGRAM

Provided on the following pages is a listing of the proposed mitigation measures associated with the proposed Southland Wastewater Treatment Facilities Improvements Project (see Table 3, Mitigation Monitoring Program). Following each mitigation measure is an indication of the action involved with enforcement or implementation of the mitigation measure (i.e. "Specific Action"), the timing of implementation (i.e. "Mitigation Milestone") and the Responsible Monitoring Party. This Mitigation Monitoring Program is intended to follow the State CEQA Guidelines which require a monitoring program to insure the implementation of these mitigation measures.

Prior to issuance of construction permits, the Nipomo Community Services District, as Lead Agency, shall provide an environmental monitor for all impacts requiring environmental mitigation in order to insure compliance with mitigation measures in the EIR. The environmental monitor shall be under contract to the District. The monitor will prepare a working monitoring plan that reflects the District-approved environmental mitigation measures/ conditions of approval. This plan will include (1) goals, responsibilities, authorities and procedures for verifying compliance with environmental mitigations; (2) lines of communication and reporting methods; (3) regular reporting of compliance; (4) construction crew training regarding environmental sensitivities; (5) authority to stop work and (6) actions to be taken in the event of non-compliance.

Environmental monitoring will be conducted throughout all stages of project design and construction in order to minimize impacts to resources and to verify implementation of mitigation measures contained within the Final Environmental Impact Report. This Monitor will: a) prepare/receive project mitigation plans; b) maintain copies of all non-compliance reports and environmental monitoring reports and c) report to the District on the status of the project's compliance with mitigation requirements. In certain instances, implementation of mitigation measures require monitoring by a specialized expert/monitor (biologist, archaeologist, etc.) depending upon the nature of the measure. Monitors will evaluate various project plans and construction activities in order to establish and maintain an ongoing level of compliance with mitigation measures. Any activity that may cause an unanticipated negative environmental effect will be immediately brought to the attention of the District by the monitor. The monitor also has the ability to halt specific work during project construction in a situation of clear non-compliance to environmental specifications which could result in an immediate and unnecessary environmental impact. These environmental monitoring procedures are intended to insure that the proposed project fully complies with the mitigation measures set forth in the Final Environmental Impact Report.

TABLE 3
MITIGATION MONITORING PROGRAM

MITIGATION MEASURE	SPECIFIC ACTION	MITIGATION MILESTONE	RESPONSIBLE MONITORING PARTY
A. LAND USE AND PLANNING			
A-1: For any construction staging or storage proposed on agricultural farmland, permanent impacts to soil resources can be avoided with the following measures • A geotextile membrane shall be placed on top of native soils prior to the placement of any stockpile, fill, base materials or construction materials • Upon completion of the project, native soil will be replaced to its previous condition in terms of soil texture, water holding capacity and soil permeability • All excavated soils will be stockpiled during construction in a manner that protects the soils' physical, chemical and biological characteristics. Biologically active topsoil (A horizon) shall be segregated from deeper soils during construction and replaced in a similar manner upon completion of construction • At the conclusion of construction, soils will be replaced in a manner that mimics the pre-construction characteristics of the soils, including compacting the soils to the same soil permeability, soil texture and available water holding capacity	Avoid impacts to agricultural soils	During project construction	Nipomo Community Services District
A-2: Project construction shall be coordinated with property owners and any farm lessee/operators. Impacts to agricultural use of the property can be avoided or minimized with the following measures • All proposed wastewater transmission and disposal systems shall be located in order to avoid damaging buried irrigation lines, wells, risers and other agricultural infrastructure based upon visual inspection or existing mapping or recordation. • Early notice of any planned closures or detours on existing roadways either within the fields or along existing paved roads with regular updates about forthcoming	Coordinate with property owners, lessee/ operators	During project construction	Nipomo Community Services District

MITIGATION MEASURE	SPECIFIC ACTION	MITIGATION MILESTONE	RESPONSIBLE MONITORING PARTY
closures or detours shall be provided to area agricultural producers and posted on local roadways so that adequate planning can be made for the movement of agricultural goods, personnel and residential commuters.			

B. POPULATION AND HOUSING

No mitigation measures are proposed.	--	--	--

C. WATER

C-1: The Nipomo Community Services District shall develop a Stormwater Pollution Prevention Plan (SWPPP) that will include Best Management Practices (BMPs) to prevent the discharge of construction materials, contaminants, washings, concrete, fuels, and oils. The SWPPP will be available on the construction site pursuant to State regulations. BMPs should include the following measures: • Properly maintain (off-site) all construction vehicles and equipment that enter a construction area in order to prevent leaks of fuel, oil, and other vehicle fluids. • Conduct equipment and vehicle fueling off-site. If refueling is required at a construction site, it will be done within a bermed area with an impervious surface to collect spilled fluids. • Prepare a Spill Prevention/Spill Response Plan for the site that includes training, equipment and procedures to address spills from equipment, stored fluids and other materials including disposal of spilled material and materials used for clean up of contaminated soils and materials. • Place all stored fuel, lubricants, paints, and other construction liquids in secured and covered containers within a bermed area. • Conduct any mixing and storage of concrete or other construction materials in contained areas. • Insure that all equipment washing and major maintenance is prohibited at a construction site except in bermed areas. • Remove all refuse and excess material from a construction site as soon as possible.	Develop a stormwater Pollution Prevention Plan	Prior to project construction	Nipomo Community Services District

MITIGATION MEASURE	SPECIFIC ACTION	MITIGATION MILESTONE	RESPONSIBLE MONITORING PARTY
• Channelize storm water to avoid construction equipment and materials and to avoid the diversion of runoff into existing drainages.			
C-2: In compliance with the San Luis Obispo County Land Use Ordinance, the District shall prepare an Erosion and Sedimentation Control Plan outlining measures to address both temporary (i.e. site disturbance, stockpiling and construction activities) and final (post-construction) methods for stabilizing exposed soils, minimizing the potential for erosion and sedimentation as well as maintaining off-site water quality. These measures shall include, but may not be limited to: • The use, if necessary, of silt fencing, straw bales or sandbags in order to reduce the potential for erosion from disturbed soils and • Implementation of other methods for stabilizing disturbed soils and minimizing soil loss from the construction site.	Prepare an Erosion and Sedimentation Control Plan	Prior to project construction	Nipomo Community Services District
C-3. Any areas proposed for future project improvements containing the Coastal Aqueduct Pipeline and/or the State Water Project fiber optic communications cable shall be surveyed in order to clearly delineate the extent of the State Department of Water Resources right-of-way. No excavation or test drilling within these areas shall be conducted without prior approval of the Department of Water Resources (DWR) or the Central Coast Water Authority (CCWA). No proposed structures or grading that may limit DWR or CCWA access to the Coastal Aqueduct easement shall occur without prior DWR approval.	Survey DWR right-of-way and secure necessary approvals	Prior to project construction	Nipomo Community Services District

D. BIOLOGICAL RESOURCES

D-1: All construction operations shall be conducted prior to, or after, the nesting season (February 15 to September 15) in order to avoid any potential impacts to nesting birds. This shall include any necessary vegetation and/or tree removals which could disrupt nesting birds. Therefore, construction activities should be conducted between September 15 and February 15 to the extent feasible.	Avoid bird nesting season or conduct pre-construction surveys	Prior to project construction	Nipomo Community Services District and California Department of Fish and Game

MITIGATION MEASURE	SPECIFIC ACTION	MITIGATION MILESTONE	RESPONSIBLE MONITORING PARTY
If the above measure is not feasible, pre-construction surveys shall be conducted by a qualified biologist two weeks prior to the initiation of construction activities initiated between February 15 and September 15 in order to identify potential bird nesting sites. • If active nest sites of common bird species protected under the Migratory Bird Treaty Act (e.g., Northern mockingbird, House finch, etc.) and Fish and Game Code Sections 3503 and 3503.5 are observed within 300 feet of construction activities, then the project shall be modified and/or delayed as necessary to avoid direct take of the identified nests, eggs and/or young. • If active nest sites of raptors and/or species of special concern are observed within the vicinity of Southland WWTF, construction shall be avoided or terminated until the California Department of Fish and Game is contacted and an appropriate buffer zone around the nest site is established. Construction activities in the buffer zone shall be prohibited until the young have fledged the nest or the nest is abandoned.			
D-2: All equipment staging and construction crew parking areas shall be located within pre-designated staging areas identified on construction plans which avoid identified sensitive habitats as determined by a qualified biological monitor. This shall include pre-designation of all staging areas for construction of all pipeline improvements. Additionally, all construction access routes shall be established in previously disturbed areas and/or existing roadways.	Locate equipment staging and construction areas away from sensitive habitats	During project construction	Nipomo Community Services District
D-3: Exclusionary fencing will be erected at the boundaries of the construction areas to avoid equipment and human intrusion into adjacent habitats with emphasis on protection of areas containing special-status species. The exact location of exclusionary fencing for each construction area shall be determined by a qualified biological monitor. The fencing shall remain in place throughout the construction phase for each individual project component.	Provide exclusionary fencing	During project construction	Nipomo Community Services District
D-4: A qualified biological monitor shall conduct a worker orientation for all construction contractors	Conduct worker orientation	Prior to and during project	Nipomo Community Services District

MITIGATION MEASURE	SPECIFIC ACTION	MITIGATION MILESTONE	RESPONSIBLE MONITORING PARTY
(site supervisors, equipment operators and laborers) which emphasizes the presence and identification of areas containing special-status species, their habitat requirements and applicable regulatory policies and provisions regarding their protection and measures being implemented to avoid and/or minimize impacts.		construction	
D-5: If nighttime construction activities are warranted, all equipment lighting shall be shielded away from adjacent wildlife habitat areas and the open sky in order to minimize lighting/glare impacts of wildlife while still providing safe working conditions for construction personnel.	Shield nighttime lighting from adjacent wildlife habitat areas	During project construction	Nipomo Community Services District
D-6: A dust control program during the construction phase of the project shall be implemented to minimize dust impacts to adjacent vegetation communities and associated special-status species.	Implement dust control program	During project construction	Nipomo Community Services District
D-7: A qualified biologist shall conduct a pre-activity survey to determine presence or absence of California horned lizard within the Southland WWTF and the Kaminaka Property. Surveys shall only be required during the active period of California horned lizards (generally April through September). If California horned lizards are identified adjacent to and/or within work areas, hand rakes or an equivalent method shall be utilized by the biologist in order to scarify the ground surface and encourage the horned lizards (and other wildlife) to vacate the immediate area prior to construction. Alternatively, drift fences shall be used to capture horned lizards. As necessary, the qualified biologist shall physically relocate any California horned lizards to suitable habitat located outside the construction zone(s).	Conduct surveys to determine presence or absence of California horned lizard	Prior to project construction	Nipomo Community Services District
D-8: A qualified biologist shall conduct pre-construction survey(s) within one week of ground-disturbing activities to determine presence/absence of active badger dens within 100-feet of project activities at the WWTF (including 10-acre expansion area) and the Kaminaka Property. If no evidence of badger presence is detected, no further mitigation is required. The following measures shall be implemented if active badger dens are detected during pre-construction surveys: • The entrance to the den and an area of	Conduct pre-construction surveys	Prior to project construction	Nipomo Community Services District

MITIGATION MEASURE	SPECIFIC ACTION	MITIGATION MILESTONE	RESPONSIBLE MONITORING PARTY
approximately one square meter in front of entrance (i.e., den apron) shall be smoothed with a flat-head shovel or equivalent. Diatomaceous earth shall be placed on the smoothed areas. Check the next three consecutive mornings for badger tracks. If no tracks are observed, assume that the den is no longer occupied. However, to ensure no loss of badgers, hand excavate the den completely, then backfill to prevent re-occupation. • If tracks are observed in the diatomaceous earth during any of the three mornings, progressively block the entrance, using soil and other nearby materials (woody debris, etc.) Render the entrance progressively more difficult to enter and exit over the following three days. Then, to assure no loss of badgers, hand excavate the den completely and backfill to prevent re-occupation. • The above American badger protocols shall be implemented for dens at or near the Southland WWTF including the 10-acre percolation pond expansion area and within the Kaminaka Property. Dens identified near the equipment access routes shall be marked and carefully avoided during all construction activities. Verification of occupancy is not necessary if such dens can be avoided.			
D-9: A qualified biological monitor shall be on-site during all vegetation clearing and shall periodically monitor the project area during construction activities in order to inspect protective fencing, equipment staging areas and to physically relocate or remove any special-status wildlife species entering the construction zone or identified during brush clearing excavation (e.g., California horned lizard, Silvery legless lizard, etc.). All special-status species shall be relocated to suitable habitat located outside the construction zone by the qualified biologist. Exact procedures and protocols for relocating shall be based upon pre-project consultation with California Department of Fish and Game.	Monitor vegetation clearing and construction	During project construction	Nipomo Community Services District and California Department of Fish and Game
D-10: Nesting bird surveys shall be conducted	Conduct nesting	Prior to and	Nipomo Community

MITIGATION MEASURE	SPECIFIC ACTION	MITIGATION MILESTONE	RESPONSIBLE MONITORING PARTY
between February 15 and September 15 to identify nest sites of special-status bird species including Loggerhead shrike, California horned lark, Northern harrier, Cooper's hawk, White-tailed kite and Tricolored blackbird.	bird surveys	during project construction	Services District
D-11: Site disturbance and construction activities shall not occur during the rainy season (October 15 to April 15) within 300 feet of any areas containing suitable breeding habitat of the Western spadefoot toad in order to protect migrating and/or breeding of this species which typically initiates surface movements from burrows following first rains of fall. No construction activities shall occur in these areas during or immediately following a rain event or if water is ponding within these areas. If the above measure is not feasible, pre-construction surveys for Western spadefoot toad shall be conducted by a qualified biologist within all portions of the project site containing suitable breeding habitat. This shall include an evaluation of all previously documented occupied areas and a reconnaissance-level survey of the remaining natural areas. Surveys shall be conducted when the Western spadefoot toad can be detected (i.e., during substantial rain events which have potential to result in ponding on-site [0.5-inches of rain or greater]). This shall include both night and day surveys to detect all life stages of the Western spadefoot toad. • All Western spadefoot adults, tadpoles, and egg masses encountered shall be collected and released into pre-designated percolation pond(s) containing water within the Southland WWTF as approved by CDFG. • The qualified biologist shall continue to monitor the relocation sites on a periodic basis throughout the breeding period (i.e., every two weeks) to document success of relocation efforts. Further, final survey and monitoring data will be provided to CDFG in a written report.	Avoid site disturbance and construction activities during rainy season	During project construction	Nipomo Community Services District
D-12: A qualified biological monitor shall conduct a worker orientation which emphasizes the presence of semi-aquatic, special-status species within the project area (e.g., Western spadefoot toad, California red-legged frog, etc.), their habitat	Conduct worker orientation	Prior to and during project construction	Nipomo Community Services District

MITIGATION MEASURE	SPECIFIC ACTION	MITIGATION MILESTONE	RESPONSIBLE MONITORING PARTY
requirements, applicable regulatory policies and provisions regarding their protection and measures being implemented to avoid and/or minimize impacts.			
D-13: All work areas within 100 feet of the existing Southland WWTF percolation ponds and/or existing agricultural stock ponds southwest of the WWTF shall be surveyed by a qualified biologist each day prior to the initiation of construction activities. As necessary, the qualified biologist shall physically relocate semi-aquatic, special-status species (e.g., Western spadefoot toad, Southwestern pond turtle, etc.) and common semi-aquatic species (e.g., Western toad, Pacific chorus frog, etc.) to suitable habitat areas located outside the construction zone(s). Exact procedures and protocols for relocation of the special-status species shall be based upon pre-project consultation with the California Department of Fish and Game. In the event California red-legged frog (CRLF) is identified in a work area, all work shall cease until the CRLF has safely vacated the work area. At no time shall any CRLF be relocated and/or affected by project operations without prior approval from the U.S. Fish and Wildlife Service.	Survey work in areas adjacent to special-status species habitats	Prior to and during project construction	Nipomo Community Services District and California Department of Fish and Game
D-14: Prior to commencing construction, NCSD shall prepare the following plans and agency permit applications, and shall implement all plans prior to, during and immediately following construction activities. • In compliance with the San Luis Obispo County Land Use Ordinance, the District shall prepare an Erosion and Sedimentation Control Plan (ESCP) outlining the measures to address both temporary (i.e., site disturbance and stock piling) and final (i.e., post-construction) methods for stabilizing soil and minimizing soil loss from the proposed project site. All applicable measures shall be included on final construction plans and adhered to throughout the project. • All project operations shall comply with the requirements under the General Construction Storm Water General Permit, issued by the State Water Resources Control Board. Such requirements will include	Prepare plans and agency permit applications	During project construction	Nipomo Community Services District, Regional Water Quality Control Board, California Department of Fish and Game and California Department of Toxic Substances

MITIGATION MEASURE	SPECIFIC ACTION	MITIGATION MILESTONE	RESPONSIBLE MONITORING PARTY
preparation of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP shall include provisions for the installation and maintenance of Best Management Practices to reduce the potential for erosion of disturbed soils at the project site. • A Spill Contingency Plan (SCP) shall be prepared outlining measures to prevent the release of petroleum and hazardous materials including containment methods for emergency clean-up operations. Prevention measures shall include, but not be limited to, identification of appropriate fueling areas away from sensitive habitat areas such as swales and/or drainages, a maintenance schedule for equipment and a list of appropriate containment and spill response materials to be stored on-site. All vehicles shall be staged only in appropriately marked and protected areas and at no time shall any cleaning and/or refueling of equipment be allowed upslope and/or within the vicinity of any drainages and/or wetland habitat areas, including agricultural stock ponds. If an accidental spill of a hazardous or toxic material occurs, the Regional Water Quality Control Board (RWQCB), the California Department of Fish and Game and California Department of Toxic Substances (CDTS) shall be notified.			
D-15: Spill containment equipment shall be available on-site during all construction activities. As necessary, this shall include placement of individual spill response trailers at each active work area during project operations.	Make spill equipment available during construction activities	During project construction	Nipomo Community Services District
D-16: The proposed pipeline alignments shall be aligned to avoid impacting the root systems of large eucalyptus trees located on Orchard Avenue, Pomeroy Road and Willow Road. The precise location of these pipelines shall be reviewed by a qualified arborist to insure avoidance of or minimize impacts to the root systems of large trees throughout pipeline alignment at these locations.	Avoid root systems of eucalyptus trees	During project construction	Nipomo Community Services District
D-17: An Erosion and Sedimentation Control Plan shall be prepared which includes provision for stabilizing construction sites and pipeline	Prepare Erosion and Sedimentation	Prior to project construction	Nipomo Community Services District

MITIGATION MEASURE	SPECIFIC ACTION	MITIGATION MILESTONE	RESPONSIBLE MONITORING PARTY
alignments and monitoring. As necessary, this plan shall include the following: • Implementation of standard Best Management Practices (e.g., hydroseeding, wattles, and earthen swales, etc.) along the recontoured sites and erosion control monitoring during subsequent rainy seasons to insure that previously disturbed areas are stabilized. • Installation of long-term drainage devices at all construction areas including, as necessary, catchment basins, culverts with down-drains and storm flow energy dissipating devices (riprap or diffusers).	Control Plan		
D-18: A special-status species orientation program shall be provided to all WWTF facility workers (site supervisors, equipment operators and laborers) which emphasizes the presence of special-status species within the facility, identification, their habitat requirements, applicable regulatory policies and provisions regarding their protection and measures being implemented to avoid and/or minimize impacts. Permanent placards with relevant special-status species information shall be posted in all employee break areas and other facility locations as deemed necessary by NCSD management. The orientation program shall be repeated annually for all staff and on an as needed basis for all new employees.	Conduct special-status orientation program	During project operations	Nipomo Community Services District
D-19: Percolation basin maintenance activities including scarification of pond bottoms with heavy equipment and weed abatement of pond berms shall not be conducted between January 1 and March 31 to avoid the primary breeding period for the Western spadefoot toad. If the above measure is deemed infeasible between January 1 and March 31 due to a temporary increase in wastewater treatment demand and/or other emergency circumstances, then the following measures shall be implemented: • All ponds proposed for maintenance shall be allowed to dry entirely with no standing water prior to scarification and/or weed abatement. • A combined one day/night survey shall be	Avoid percolation basin maintenance between January 1 and March 31	During project operations	Nipomo Community Services District

MITIGATION MEASURE	SPECIFIC ACTION	MITIGATION MILESTONE	RESPONSIBLE MONITORING PARTY
conducted by a qualified biologist for Western spadefoot toad 24 hours prior to the proposed maintenance activity. The combined survey shall focus upon the pond bottoms and banks of all basins proposed for maintenance. Surveys shall be repeated, as necessary, to account for multiple maintenance activities within the Jan. 1 to March 31 breeding season. • All Western spadefoot toad adults and metamorphs encountered during the combined day/night surveys shall be collected and released into other pre-designated percolation pond(s) containing water within the Southland WWTF as approved by CDFG. • The qualified biologist shall continue to monitor the relocation sites on a periodic basis throughout the breeding period to document success of relocation efforts. Further, final survey and monitoring data will be provided to CDFG in a written report at the end of each breeding season. **D-20:** Employees shall be directed to temporarily halt maintenance activities within areas containing special-status species until the animals have vacated the immediate area.	Redirect maintenance activities within areas containing special-status species	During project operations	Nipomo Community Services District

E. AESTHETICS

E-1: Prior to project construction, a Landscape Screening Plan shall be prepared for the District which provides landscaped screening consisting of trees and/or shrubs adjacent to proposed booster stations, the control/electrical and storage buildings at the Southland WWTF or any other above ground structure. Trees or shrubs will be provided which will reach six (6) feet surrounding these facilities without sacrificing safety considerations within two years of construction of these facilities.	Prepare Landscape Screening Plan	Prior to project construction	Nipomo Community Services District
E-2: Prior to project construction, a Landscape Maintenance Plan shall be prepared which provides a program for growing and maintaining the proposed vegetative screens so that they achieve the two-year growth plan for vegetation. The plan shall	Prepare Landscape Maintenance Plan	Prior to project construction	Nipomo Community Services District

MITIGATION MEASURE	SPECIFIC ACTION	MITIGATION MILESTONE	RESPONSIBLE MONITORING PARTY
also identify the long range maintenance and vegetative requirements to insure that said screening will be maintained for 5 years, including replacement of any trees or shrubs which may die.			
E-3: Prior to their construction, a color board will be provided which identifies the exterior colors and materials to be utilized on proposed pump stations, buildings at the Southland WWTF or any other above ground structure. The colors and materials selected will involve muted tones which match or are comparable with the colors found in the surrounding areas.	Select colors and materials with muted tones for pump stations, buildings at the Southland WWTF or any other above ground structure	Prior to project construction	Nipomo Community Services District
E-4: Prior to project construction, an Exterior Lighting Plan shall be prepared for the District which indicates the height, location and intensity of all proposed exterior lighting. All light fixtures shall be shielded so that neither the lamp nor the reflective interior surface is visible from beyond 50 feet of project facilities. All light poles, fixtures and hoods shall be dark (non-reflective) colored. All exterior lighting sources shall be low-level adjusted so that light is directed downward. Security lighting shall be shielded so as not to create glare when viewed from adjacent properties with lighting heights no more than is absolutely necessary. All project lighting shall not be obtrusive to travelers along any adjacent roadways.	Prepare Exterior Lighting Plan	Prior to project construction	Nipomo Community Services District

F. CULTURAL RESOURCES

F-1: Prehistoric cultural resource monitoring shall accompany any construction trenching and excavation within the WWTF site and along a 100 meter area on the south side of Southland Street directly south of 641 Southland Street. A Prehistoric Cultural Resource Monitoring Plan shall be developed and approved by the County of San Luis Obispo which will include project review, a pre-construction archeological workshop, Chumash involvement, networking with all involved members of the project and the production of a final monitoring report.	Monitor construction trenching and excavation within the WWTF site and adjacent to Southland Street	During project construction	Nipomo Community Services District
F-2: Historic cultural resource monitoring shall accompany construction trenching and excavation along Pomeroy Road in the vicinity of Nipomo Regional Park in the event that the Kaminaka	Conduct cultural resource monitoring	During project construction	Nipomo Community Services District

MITIGATION MEASURE	SPECIFIC ACTION	MITIGATION MILESTONE	RESPONSIBLE MONITORING PARTY
Property is utilized as a treated effluent disposal facility. An Historic Cultural Resource Monitoring Plan shall be developed and approved by the County of San Luis Obispo which will include project review, networking with all involved members of the project and production of a final monitoring report.			
F-3: In the event that the agricultural lands southeast of the WWTF are utilized as a treated effluent disposal facility, subsurface testing is required to confirm the lack of cultural resources.	Conduct subsurface testing	Prior to project construction	Nipomo Community Services District
F-4: An archaeological workshop shall be conducted by a qualified archaeologist at the pre-construction meeting for construction personnel to educate them about what types of cultural material may be encountered during construction grading and excavation. A procedure for notification of accidental discovery and communication network shall be developed so that if any suspected cultural materials are unearthed, they can be quickly examined and evaluated by a qualified archaeologist and appropriate recommendations can be made.	Conduct archaeological workshop for construction personnel	Prior to and during project construction	Nipomo Community Services District
F-5: During any grading or excavation associated with the project, if any cultural materials are unearthed, work in that area shall be halted until all cultural materials can be examined by a qualified archaeologist and appropriate recommendations made pursuant to County Land Use Ordinance Section 22.0.	Halt construction if cultural materials are unearthed	During project construction	Nipomo Community Services District

G. GEOLOGY

G-1: The design of any proposed surface percolation ponds shall include an evaluation of potentially-liquefiable near surface soils below pond slopes so that proper site preparation involving removal of these soils can, if necessary, occur.	Evaluate potentially liquefiable soils	Prior to project construction	Nipomo Community Services District
G-2: The following shall be included in Final Grading and Drainage Plans to prevent erosion induced siltation of on-site and off-site drainages: • A prohibition against grading during the rainy season (November 1-April 15) unless erosion control measures found adequate by the District are implemented. • Methods for revegetation of disturbed soils for long-term stabilization.	Include measures to prevent erosion induced siltation on Final Grading and Drainage Plans	Prior to project construction	Nipomo Community Services District

MITIGATION MEASURE	SPECIFIC ACTION	MITIGATION MILESTONE	RESPONSIBLE MONITORING PARTY

H. HAZARDS AND HAZARDOUS MATERIALS

H-1: The Nipomo Community Services District shall develop a Stormwater Pollution Prevention Plan (SWPPP) that will include Best Management Practices (BMPs) to prevent the discharge of construction materials, contaminants, washings, concrete, fuels, and oils. The SWPPP will be available on the construction site pursuant to State regulations. BMPs should include the following measures: • Properly maintain (off-site) all construction vehicles and equipment that enter a construction area in order to prevent leaks of fuel, oil, and other vehicle fluids. • Conduct equipment and vehicle fueling off-site. If refueling is required at a construction site, it will be done within a bermed area with an impervious surface to collect spilled fluids. • Prepare a Spill Prevention/Spill Response Plan for the site that includes training, equipment and procedures to address spills from equipment, stored fluids and other materials including disposal of spilled material and materials used for clean up of contaminated soils and materials. • Place all stored fuel, lubricants, paints, and other construction liquids in secured and covered containers within a bermed area. • Conduct any mixing and storage of concrete or other construction materials in contained areas. • Insure that all equipment washing and major maintenance is prohibited at a construction site except in bermed areas. • Remove all refuse and excess material from a construction site as soon as possible. • Channelize storm water to avoid construction equipment and materials and to avoid the diversion of runoff into existing drainages.	Prepare stormwater Pollution Prevention Plan	Prior to project construction	Nipomo Community Services District
H-2: All project construction activities shall adhere to the standards and requirements of the State Department of Public Health (DPH), Toxic Substance Control Division; the County of San Luis Obispo, Public Health Department, Environmental Health	Adhere to State and local standards and requirements	During project construction	Nipomo Community Services District, State Department of Health Services, County of San Luis

MITIGATION MEASURE	SPECIFIC ACTION	MITIGATION MILESTONE	RESPONSIBLE MONITORING PARTY
Division and other supporting agencies including the Regional Water Quality Control Board and the San Luis Obispo Air Pollution Control District.			Obispo, Regional Water Quality Control Board and Air Pollution Control District

I. PUBLIC SERVICES AND UTILITIES

I-1: The District shall, if feasible and cost-effective, pursue methods of disposal of biosolids involving land application and/or composting at a regional composting facility.	Pursue cost-effective methods of biosolids disposal	Prior to project construction	Nipomo Community Services District
I-2: The District shall investigate the feasibility and cost-effectiveness of the use of solar power or other alternative energy sources to power wastewater treatment or other project facilities.	Investigate the use of solar power or other alternative energy sources	Prior to project operations	Nipomo Community Services District

J. TRAFFIC

J-1: All project construction sites accessing onto or occurring adjacent to public roadways shall provide adequate signage, barriers and, if necessary, flagmen in order to insure the safe diversion of traffic, bicyclists, equestrians and/or pedestrians. These measures shall also insure continued access from adjacent properties to local roadways.	Provide adequate signage, barriers and flagmen	During project construction	Nipomo Community Services District

K. NOISE

K-1: All project construction activities shall comply with the County of San Luis Obispo Noise Ordinance Section 22.06.042(d) which limits noise-generating construction activities to the hours between 7:00 a.m. and 9:00 p.m. on weekdays and 8:00 a.m. and 5:00 p.m. on Saturdays and Sundays.	Comply with County Noise Ordinance	During project construction	Nipomo Community Services District
K-2: All construction equipment utilizing combustion engines shall be equipped with "critical" grade (rather than "stock" grade) noise mufflers that are in good condition. Noise level reductions with the use of "critical" grade mufflers can be as high as 5 dBA. Back up "beepers" will also be tuned to insure lowest possible noise levels.	Use critical grade mufflers	During project construction	Nipomo Community Services District
K-3: Stationary noise sources that exceed 60 dBA (i.e. pump stations and other project facilities) shall be located at least 300 feet from any occupied	Locate stationary noise sources away from	During project construction	Nipomo Community Services District

MITIGATION MEASURE	SPECIFIC ACTION	MITIGATION MILESTONE	RESPONSIBLE MONITORING PARTY
residential dwellings unless noise-reducing engine housing enclosures or other appropriate noise screens are provided in order to insure that exterior noise levels do not exceed 60 CNEL.	residential dwellings or provide enclosures		

L. AIR QUALITY

L-1: Water trucks or sprinkler systems shall be used in sufficient quantities to prevent airborne dust from leaving any construction site. Increased watering frequency will be required whenever wind speeds exceed 15 mph. Reclaimed water, if available, shall be used for dust control and other construction-related purposes during project construction.	Use water trucks or sprinkler systems for dust control	During project construction	Nipomo Community Services District and Air Pollution Control District
L-2: All dirt stock-pile areas shall be sprayed daily as needed.	Spray dirt stock-pile areas	During project construction	Nipomo Community Services District and Air Pollution Control District
L-3: Exposed ground areas that are planned to be reworked at dates greater than one month shall be sown with a fast-germinating native grass seed and watered until vegetation is established.	Plant exposed ground areas	During project construction	Nipomo Community Services District and Air Pollution Control District
L-4: All disturbed soil areas not subject to revegetation shall be stabilized using approved chemical soil binders, jute netting or other methods approved by the APCD.	Use soil stabilizers in disturbed soil areas	During project construction	Nipomo Community Services District and Air Pollution Control District
L-5: All roadways, driveways, etc. to be paved or repaved shall be completed as soon as possible. If prompt paving is not possible, seeding or soil binders shall be utilized.	Pave or repave roadways, driveways, etc. as soon as possible	During project construction	Nipomo Community Services District and Air Pollution Control District
L-6: Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface at a construction site.	Restrict construction vehicle speed	During project construction	Nipomo Community Services District and Air Pollution Control District
L-7: All trucks hauling dirt, sand, soil or other loose materials shall be covered or maintain at least two feet of freeboard.	Cover trucks hauling dirt, sand, soil or other loose materials	During project construction	Nipomo Community Services District and Air Pollution Control District
L-8: Where vehicles enter and exit unpaved roads onto streets, wheel washers or gravel pads shall be installed or trucks and equipment will be washed	Utilize wheel washers or gravel pads	During project construction	Nipomo Community Services District and Air Pollution Control

MITIGATION MEASURE	SPECIFIC ACTION	MITIGATION MILESTONE	RESPONSIBLE MONITORING PARTY
when leaving the site.			District
L-9: Streets shall be swept at the end of each day if visible soil material is carried onto adjacent paved roads. Water sweepers with reclaimed water shall be used where possible.	Sweep streets daily	During project construction	Nipomo Community Services District and Air Pollution Control District
L-10: All material excavated or graded shall be sufficiently watered to prevent excessive amounts of dust. Watering shall occur at least twice a day with complete coverage, preferably in the late morning and after work is done for the day.	Water excavated or graded material	During project construction	Nipomo Community Services District and Air Pollution Control District
L-11: All PM10 mitigation measures required must be included on any project plans. The contractor shall designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of particulate matter off site. Their duties shall include holidays and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the APCD prior to construction.	Include PM10 measures on any project plans	During project construction	Nipomo Community Services District and Air Pollution Control District
L-12: All construction equipment shall be properly maintained and tuned according to manufacturer's specifications.	Properly maintain and tune construction equipment	During project construction	Nipomo Community Services District and Air Pollution Control District
L-13: All off-road and portable, diesel-powered equipment, including, but not limited to, bulldozers, grading, cranes, loaders, scrapers, backhoes, generator sets, compressors or auxiliary power units, shall be fueled exclusively with CARB motor vehicles diesel fuel. Such equipment shall be stored within a fenced enclosure during non-working hours in order to minimize potential vandalism.	Use CARB diesel fuel	During project construction	Nipomo Community Services District and Air Pollution Control District
L-14: Where possible, diesel powered equipment shall be replaced with gasoline, electrical, CNG or LPG powered equipment.	Replace diesel equipment where possible	During project construction	Nipomo Community Services District and Air Pollution Control District
L-15: Prior to any project grading, a geologic analysis will be performed in order to determine if asbestos-bearing serpentine rock is present. If naturally occurring asbestos is found at the project site, an Asbestos Health and Safety Program and an Asbestos Dust Control Plan will be submitted to the	Prepare analysis to determine presence of asbestos-bearing soils	Prior to project construction	Nipomo Community Services District and Air Pollution Control District

MITIGATION MEASURE	SPECIFIC ACTION	MITIGATION MILESTONE	RESPONSIBLE MONITORING PARTY
Air Pollution Control District for review and approval prior to project grading.			
L-16: The daily pumping operations at the Southland WWTF for the proposed project shall utilize electric-powered pumps; diesel pumps shall be provided for backup (standby) operation to be used only on an emergency basis during power outages or equipment breakdown.	Utilize electric-powered pumps	During project operations	Nipomo Community Services District
L-17: The District shall investigate the feasibility and cost-effectiveness of the use of solar power or other alternative energy sources to power wastewater treatment or other project facilities. This analysis shall assess the existing technologies and tradeoffs in order to determine the feasibility of alternate energy sources including solar power. This assessment will be based upon cost constraints, reliability, space requirements and other implementation factors.	Investigate use of solar power or other alternative energy sources	Prior to project operations	Nipomo Community Services District

TABLE 4
MITIGATION MEASURES BY PROJECT PHASE

Mitigation Measures	Phases		
	I	II	III
Land Use and Planning			
A-1		x	x
A-2		x	x
Water/Wastewater			
C-1	x	x	x
C-2	x	x	x
C-3	x	x	x
Biological Resources			
D-1	x	x	x
D-2	x	x	x
D-3	x	x	x
D-4	x	x	x
D-5	x	x	x
D-6	x	x	x
D-7	x	x	x
D-8	x	x	x
D-9	x	x	x
D-10	x	x	x
D-11	x	x	x
D-12	x	x	x
D-13	x	x	x
D-14	x	x	x
D-15	x	x	x
D-16		x	
D-17	x	x	x
D-18	x	x	x
D-19	x	x	x
D-20	x	x	x
D-21	x	x	x
Aesthetics			
E-1	x	x	x
E-2	x	x	x
E-3	x	x	x
E-4	x	x	x
Cultural Resources			
F-1	x	x	x
F-2		x	x
F-3		x	x
F-4	x	x	x
F-5	x	x	x
Geology			
G-1	x	x	x
G-2	x	x	x

Hazards and Hazardous Materials			
H-1	x	x	x
H-2	x	x	x
Public Services and Utilities			
I-1	x		
I-2	x	x	x
Traffic			
J-1		x	x
Noise			
K-1	x	x	x
K-2	x	x	x
K-3	x	x	x
Air Quality			
L-1	x	x	x
L-2	x	x	x
L-3	x	x	x
L-4	x	x	x
L-5	x	x	x
L-6	x	x	x
L-7		x	x
L-8		x	x
L-9		x	x
L-10	x	x	x
L-11	x	x	x
L-12	x	x	x
L-13	x	x	x
L-14	x	x	x
L-15	x	x	x
L-16	x	x	x
L-17	x	x	x

C. ISSUES RAISED BY AGENCIES AND PUBLIC

An Initial Study of the project was prepared by the Nipomo Community Services District and a Notice of Preparation (NOP) for an EIR was distributed to local Responsible and Trustee Agencies, the State Clearinghouse, involved local groups and members of the public between May 29, 2009 and June 29, 2009. The objective of distributing the NOP was to identify and determine the full range and scope of environmental issues of concern on the proposed project so that these issues may be examined in the EIR. Comments received during the NOP distribution regarding potentially significant environmental impacts have been, where applicable to this EIR, addressed in Section V. Environmental Analysis of this EIR. The Initial Study and Notice of Preparation are contained in Technical Appendix A of this EIR.

Issues identified within the Initial Study are discussed in detail with Section V. Environmental Analysis. The environmental factors which require evaluation based upon

the issues identified within the Initial Study include: Land Use and Planning, Population and Housing, Water, Biological Resources, Aesthetics, Cultural Resources, Geology, Hazards and Hazardous Materials, Public Services and Utilities, Traffic, Noise and Air Quality.

Issues or concerns raised in response to the Notice of Preparation are listed below (see Table 4, Reponses to Notice of Preparation) accompanied by an indication of the source and date of the comment received. Comments received in response to the Notice of Preparation are contained in Technical Appendix A of this EIR. A Public Scoping Meeting was held on June 10, 2009. No public or agency comments were received at that time.

TABLE 5
RESPONSES TO NOTICE OF PREPARATION/SCOPING MEETING

Notice of Preparation Respondent	Date	Issues/ Concerns
Governor's Office of Planning and Research	May 29, 2009	• Notice of Preparation distribution letter
County of San Luis Obispo, Department of Agriculture/Measurement Standards	June 10, 2009	• Environmental information • Permit conditions • Project alternatives
State of California, Water Resources Control Board	June 25, 2009	• Clean Water State Revolving Fund • State and Federal funding requirements
Native American Heritage Commission	June 4, 2009	• Records survey and archaeological inventory required • Contact Native American Heritage Commission • Provisions for accidental discovery of cultural resources or human remains
State Water Project Operations Support Office	June 11, 2009	• Conduct surveys to determine location of California Aqueduct pipeline
California Department of Health	June 4, 2009	• Determine location of existing wells • Adhere to Title 22 water quality requirements

D. ISSUES TO BE RESOLVED

The following issues related to proposed project facilities remains to be resolved.

1. Implementation of proposed design-related mitigation measures that are identified within the EIR. Mitigation measures which amend any proposed project design or construction procedures are recommended within the EIR in order to reduce potentially significant project impacts. These proposed design-related mitigation measures are discussed in detail throughout Section V. Environmental Analysis of this EIR.

2. The precise location of the proposed treated effluent disposal sites must be determined. As discussed in Section III.D. Project Characteristics, the District has also evaluated several locations for off-site disposal and/or reuse of remaining effluent after treatment, storage, and partial disposal at the Southland Wastewater Treatment Facility. Potential disposal/reuse methods that were the subject of these investigations included discharge into percolation ponds, discharge into subsurface disposal systems, surface irrigation of either agricultural or recreation/open space areas or deep percolation as a part of Phase II project improvements. As a result of these investigations, three separate locations for off-site effluent disposal/reuse were selected for further evaluation in this EIR. One option involves the provision of percolation facilities at Kaminaka Property with a second option being the reuse of treated effluent for irrigation of areas south of the existing Southland Wastewater Treatment Facility. A third disposal option involves the reuse of treated effluent for irrigation at Blacklake Golf Course, Nipomo Community Park and possibly the Kaminaka Property.

III. PROJECT DESCRIPTION

A. PROJECT BACKGROUND

The Nipomo Community Services District (NCSD or the District) was formed in 1965 and currently provides water, wastewater, street lighting, solid waste disposal and limited drainage services to approximately 12,000 residents of the Nipomo area. The Nipomo Community Services District is a California Community Services District organized pursuant to Government Code Sections 61000 et. seq. The NCSD's service area overlies the southern portion of the Nipomo area within the unincorporated portion of San Luis Obispo County. The Nipomo Community Services District's authority does not include legislative or executive powers over zoning or land use.

The Nipomo Community Services District owns and operates the Southland Wastewater Treatment Facility (WWTF). This facility treats a combination of domestic and commercial wastewater from the community of Nipomo (excluding the Blacklake development which has an independent treatment system). The Southland WWTF has a permitted capacity of 900,000 gallons per day (gpd) based on its maximum monthly flow. Average annual flow is approximately 570,000 gallons per day with a maximum recorded monthly flow rate of approximately 613,000 gallons per day.

On February 7, 2006, the District received a Notice of Violation from the Regional Water Quality Control Board (RWQCB) for several effluent water quality violations reported during 2005 related to the treatment capability of the Southland WWTF. In response to this notice, the District prepared an Action Plan (dated May, 2006), a Technical Memorandum (dated July, 2006) and a Draft Wastewater Treatment Facility Master Plan (revised February 19, 2007). These research efforts were intended to evaluate existing and future wastewater treatment demands of the Southland WWTF, identify required improvements to meet these demands and develop a capital improvements program to assist the District in planning and financing these facilities. The Draft Wastewater Treatment Master Plan addressed plans to upgrade the plant from 0.9 to 1.8 million gallons per day (MGD) on a maximum month basis. The Master Plan also recommended installing new influent screens, grit removal equipment, an extended aeration treatment system and clarification equipment in order to improve effluent quality and provide capacity for future demands.

During the planning for the wastewater treatment facility expansion, the District reviewed available groundwater records in order to gain a more thorough understanding of how the treated effluent percolation ponds at the Southland WWTF were functioning. The District's analysis indicated that an aquitard (i.e. groundwater barrier) located 60 to 140 feet below the ground surface was preventing the mound of treated effluent from readily percolating down to the deeper aquifer. Salinity measurements in Nipomo Creek and groundwater modeling studies indicate that treated plant effluent is partially draining to the northeast, toward Nipomo Creek. The Creek is currently listed as an impaired water

body in the Central Coast Regional Water Quality Control Board (RWQCB) Basin Plan due to upstream factors beyond the control of the District.

In response, the District has prepared several hydrogeologic studies in order to evaluate the feasibility of a variety of treated effluent disposal methods that would be required with an expansion of the existing wastewater treatment plant facilities within Phases II and III of the proposed project.

These planning and design efforts have resulted in the completion of the Southland Wastewater Treatment Facility Master Plan dated June 3, 2010 which addressed required wastewater treatment facility improvements and the Preliminary Screening Evaluation of Southland Wastewater Treatment Disposal Alternatives dated January, 2009 which analyzed a total of ten disposal locations and reuse sites, several of which could accommodate multiple disposal methods (i.e. percolation basins, subsurface systems, etc.). The District may elect to implement any combination of these reuse and disposal facilities.

Information in these studies provide the basis for the description of the proposed project within this section and the impact assessments contained within Section V. Environmental Analysis of this EIR.

B. PROJECT OBJECTIVES

The basic objective of the proposed Nipomo Community Services District Southland Wastewater Treatment Facilities Improvements project is to provide improved wastewater treatment (Phase I of the proposed project) and to construct additional treatment and disposal facilities (Phases II and III of the proposed project) necessary to serve both existing and future wastewater treatment and disposal demands generated within the Southland WWTF service area of the Nipomo Community Services District consistent with the South County Area Plan (revised 1994). In so doing, the proposed project will also:

1. Provide reliable, high quality and cost effective wastewater treatment and disposal capacity and services to existing and future customers within the District's Town Sewer Service Area.

2. Respond to and remedy water quality violations associated with prior and current operations of the Southland Wastewater Treatment Facility.

3. Improve the water quality of treated wastewater to comply with current and projected State Waste Discharge Order requirements and to minimize adverse impacts upon Nipomo Mesa groundwater.

4. Manage the height and volume of the subsurface mound of treated wastewater under the Southland percolation basins and the resultant discharge of groundwater into Nipomo Creek over an annual period.

5. Assist in resolving the Nipomo Mesa water supply deficit by promoting the beneficial use of the treated wastewater to either offset current Nipomo Mesa non-potable water usage and/or, where feasible, to augment productive Nipomo Mesa groundwater aquifers.

6. To the extent feasible, minimize use of additional fossil fuels by offsetting project-related increased power utilization with a more sustainable energy source.

7. Improve the efficiency and reliability of operations of the Southland Wastewater Treatment Facility.

C. PROJECT LOCATION

The Nipomo Community Services District encompasses approximately seven square miles southeast of the City of Arroyo Grande within the southern portion of San Luis Obispo County (see Figure 1, Regional Map). The Southland Wastewater Treatment Facility is located immediately south of the intersection of South Frontage Road and Southland Street. Proposed disposal sites will be located (at a precise location to be determined at a later date) on the Nipomo Mesa within five miles of the Southland Wastewater Treatment Facility (see Figure 2, Vicinity Map and Figure 3, Aerial Photograph).

D. PROJECT CHARACTERISTICS

The proposed project involves the installation of improved treatment facilities and the phasing of additional facilities necessary to upgrade and expand the wastewater treatment capabilities of the existing Southland Wastewater Treatment Facility. These proposed wastewater treatment facilities involve three basic elements: 1) the upgrading of existing wastewater treatment facilities at the Southland WWTF within Phase I of the proposed project which will improve the treatment capability of the plant but will not increase its existing treatment capacity; 2) the provision of additional facilities at the Southland WWTF for wastewater treatment and 3) additional areas to be devoted to off-site disposal of treated effluent, both of which will occur within Phases II and III of the proposed project. These improvements will expand the treatment capacity of the Southland WWTF and/or develop off-site disposal options.

FIGURE 1
Regional Map

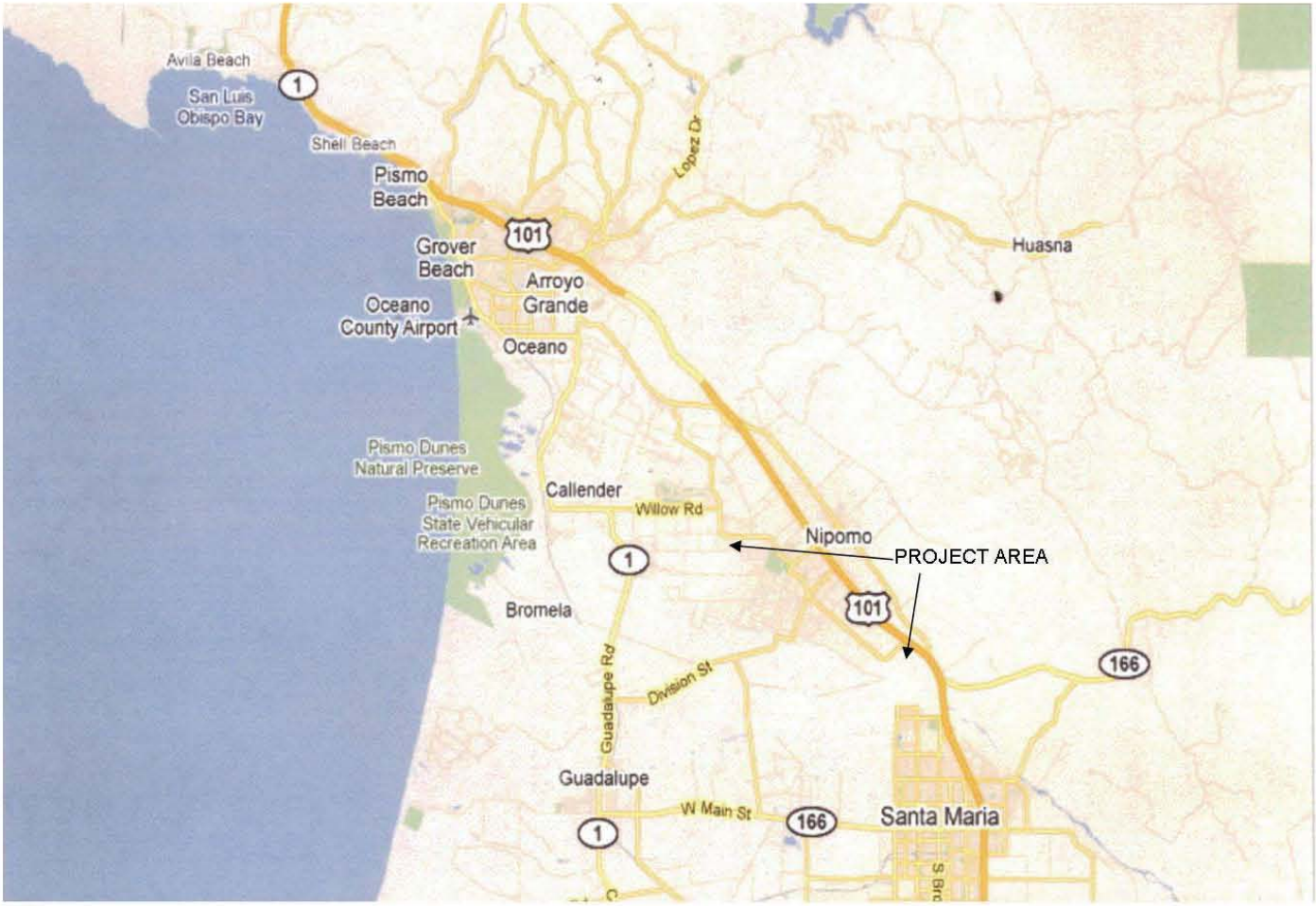


FIGURE 2
Vicinity Map

FIGURE 3
Aerial Photograph

Treatment

The existing Southland Wastewater Treatment Facility (WWTF) treats a combination of residential and commercial wastewater utilizing four aeration ponds and eight on-site percolation basins. It currently has an average annual flow of 571,000 gallons per day (gpd). Average annual flow is the flow rate averaged over the course of one year and is considered to represent the base flow for the WWTF. The existing wastewater treatment facility also has an average wet weather flow (average daily flows in wet weather months) of 570,000 gpd and a maximum month flow (average daily flow during the maximum month of the year) of 613,000 gpd. The permitted capacity of 900,000 gpd is based on the maximum month flow. The existing wastewater treatment facility also has a peak daily flow rate of 903,000 gpd and a peak hourly rate (as extended over an entire day) of 1,650,000 gpd. This latter value provides the basis for the determination of maximum existing flow conditions and the calculation of peaking factors used to project future flow conditions. These existing flow rates are based upon the collection and analysis of two years of historical flow data (September, 2007 through August, 2009).

Based upon a comparison of rainfall totals and monthly wastewater flows, there appears to be an insignificant amount of infiltration from groundwater entering the sewer system through defective pipes, pipe joints, or manhole walls. Based upon a comparison wet weather and dry weather flows, inflow from water discharged into the sewer system from man-made improvements (roofs, foundation drains, catch basins, etc.) is also not a significant contributor to wastewater flows.

Proposed improvements to the WWTF will increase the ultimate treatment capacity to a maximum flow of 1.8 million gallons per day from its current capacity of 0.9 million gallons per day with a maximum month flow of 1.79 million gallons per day. Improvements to the wastewater treatment facility would be accomplished in three phases. Phase I improvements will be designed to improve effluent water quality but not expand the current 0.9 million gallons per day (mgd) capacity. Phase II improvements will expand plant capacity to 1.28 mgd with Phase III improvements resulting in an increase to the plant's ultimate capacity of 1.80 mgd. This increased treatment capacity is intended to serve both existing and future wastewater treatment demands generated within the Southland WWTF service area of the Nipomo Community Services District. Future capacity requirements are based on buildout demand estimates. Buildout within the WWTF service area is based upon the Land Use and Circulation Elements of the San Luis Obispo County General Plan (revised June 23, 2006).

Specific improvements to the Southland Wastewater Treatment Facility include: 1) replacement of the existing influent lift station; 2) provision of headworks improvements in order to enhance effluent screening and grit removal; 3) phased reconstruction of two of the four existing treatment ponds with extended aeration capabilities (a Biolac wave oxidation system); 4) phased construction of three secondary clarifiers with an

RAS/WAS pumping system for the circulation of "return activated sludge" (RAS) and "waste activated sludge" (WAS); 5) installation of a sludge thickening system; 6) replacement of the two existing unlined sludge drying beds with concrete-lined drying beds and 7) provision of associated ancillary equipment, support buildings and facilities, piping, structural, site work, electrical and instrumentation improvements throughout the WWTF property (see Figure 4 Conceptual Wastewater Treatment Plan and Figures 5A-G, Southland WWTF Improvements).

1) Influent Lift Station Replacement (see Figure 5A)-

The existing influent lift station requires improvements in order to handle future wastewater flows. Previously-conducted analyses have indicated that the existing pumps lack the capacity to handle future peak flows while the existing wet well is undersized for efficient and reliable performance. It is proposed to demolish the existing lift station and construct a replacement wet well, provide a new flow-metering manhole and install three new pumps at the influent pump station in order to meet future (year 2030) projected wastewater treatment demands.

2) Provision of Headworks Improvements (see Figure 5B)-

Headworks improvements are intended to improve effluent quality, minimize inorganic content in secondary sludge, reduce plant maintenance requirements and reduce wear on plant equipment. Two parallel screens will be constructed for fine materials screening followed by two vortex grit removal systems.

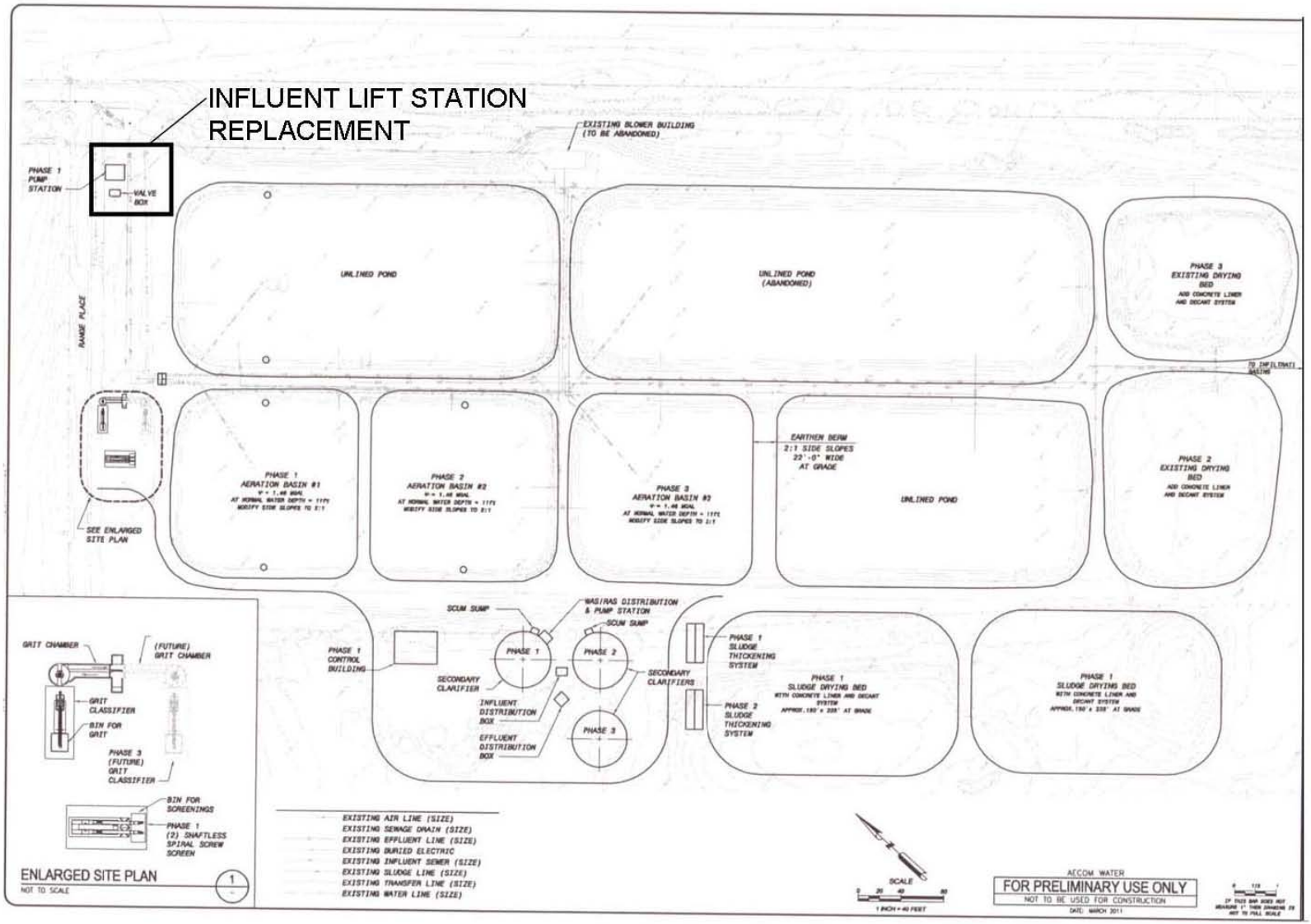
3) Aeration Basin Reconstruction (see Figure 5C)-

Aeration basin reconstruction involving the facilities noted above will utilize an extended aeration process (such as the Parkson Biolac Wave Oxidation System) that utilizes a long solids retention time (SRT) (compared with conventional activated sludge) and moving aeration chains to reduce Biological Oxygen Demand (BOD), Total Suspended Solids (TSS) concentrations and total Nitrogen to acceptable levels. This system will significantly improve the treatment capability of the Southland WWTF. The extended SRT increases the stability of the system to better accommodate fluctuating demands. Airflow to aeration hoses and diffusers is controlled to create a wave of aerobic and anoxic zones, resulting in alternating nitrification and denitrification. Multiple fine-bubble diffusers are mounted on the flexible air tubing suspended across the pond. A primary advantage to this treatment method is the higher level of treatment and lower capital and operating costs relative to other comparable technologies. This system can be retrofitted into the existing ponds with earthwork and piping modifications. To handle the future projected flow rates, earthen berms will be installed within two of the existing treatment ponds to create three cells to be ultimately converted to Biolac systems. Aeration Basin #2 will serve as an emergency holding basin upon completion of Phase I of project construction. With construction of Phase II project facilities, the need for an

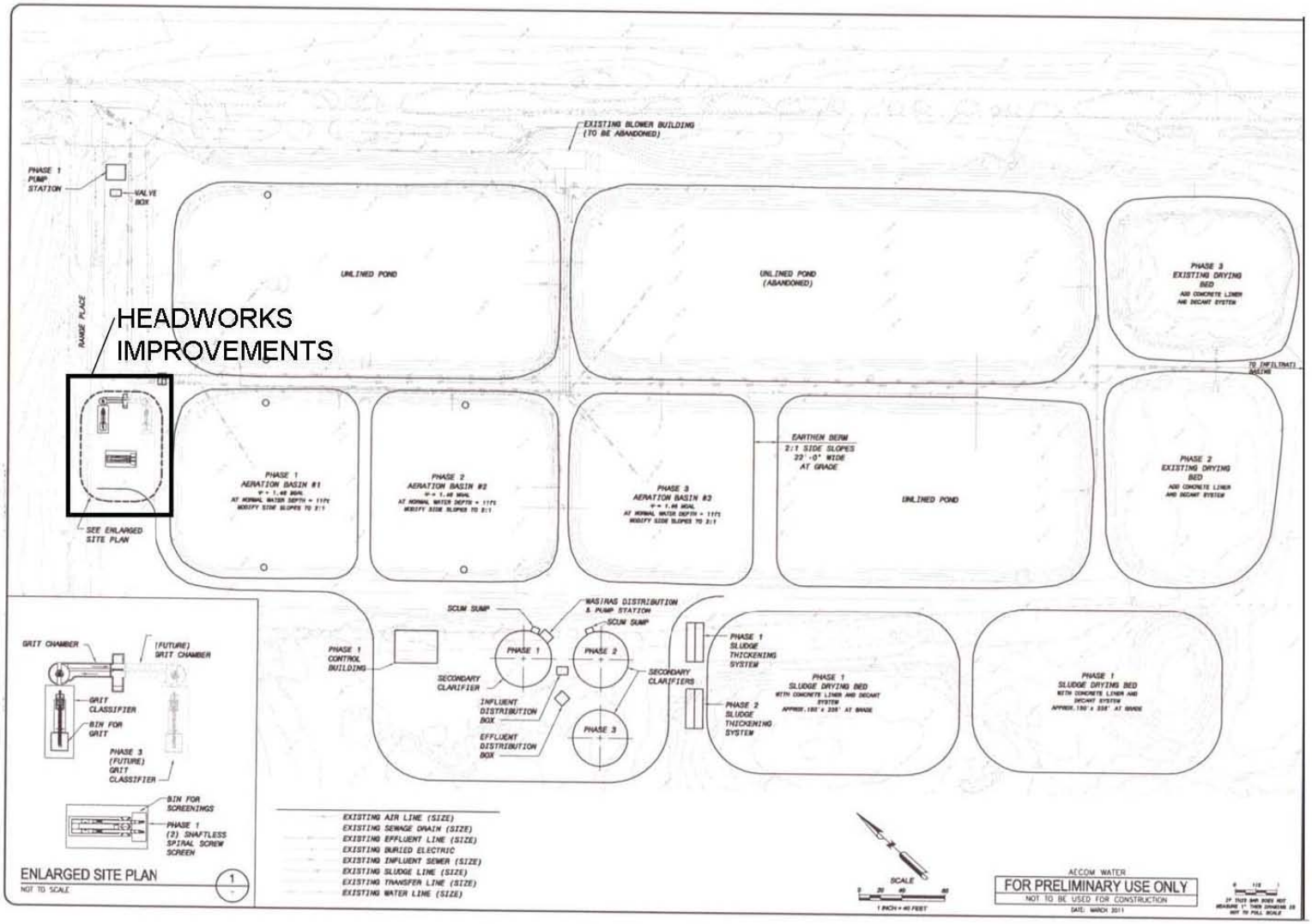
FIGURE 4
Southland WWTF Improvements

Southland WWTF

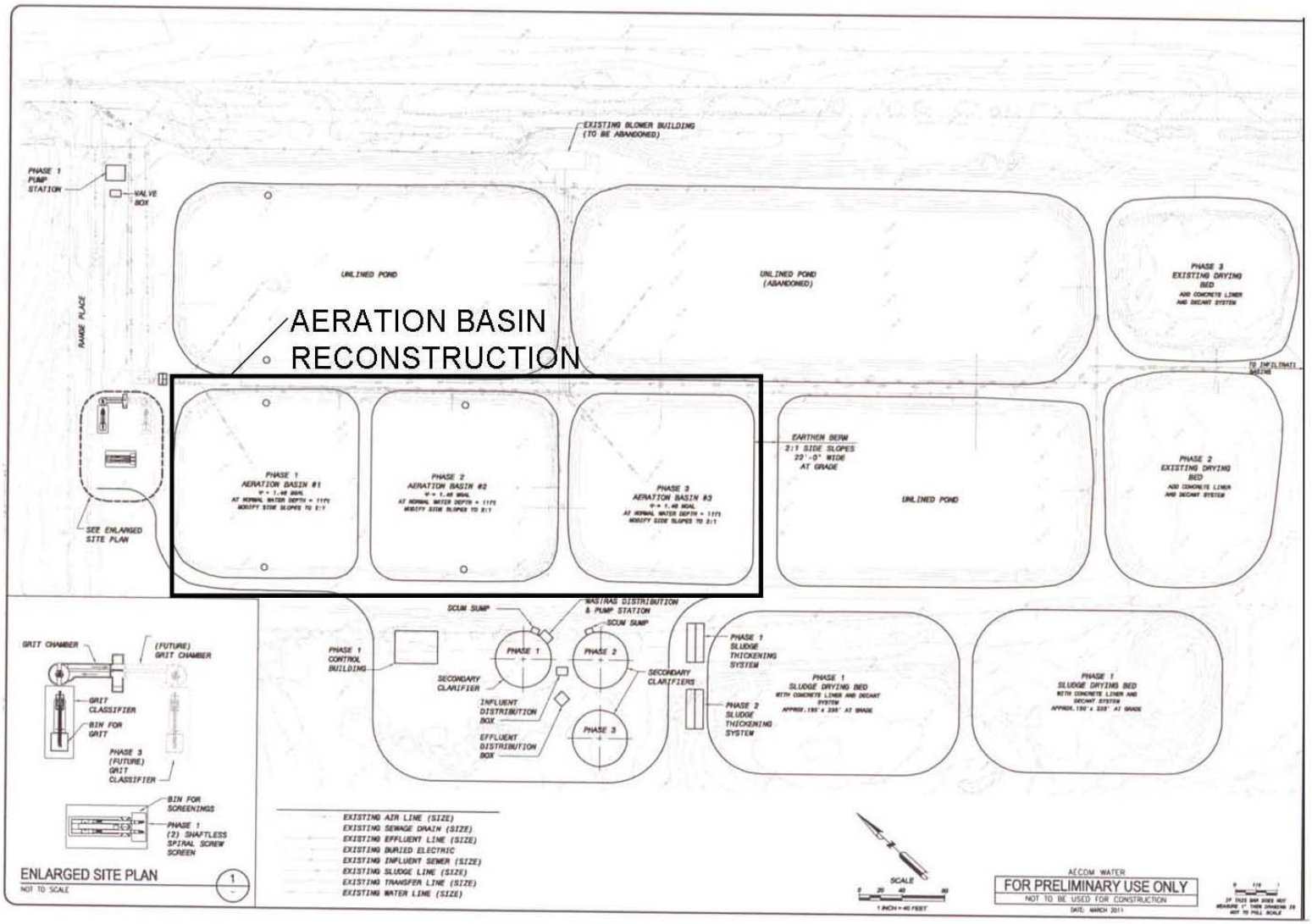
Disposal Areas



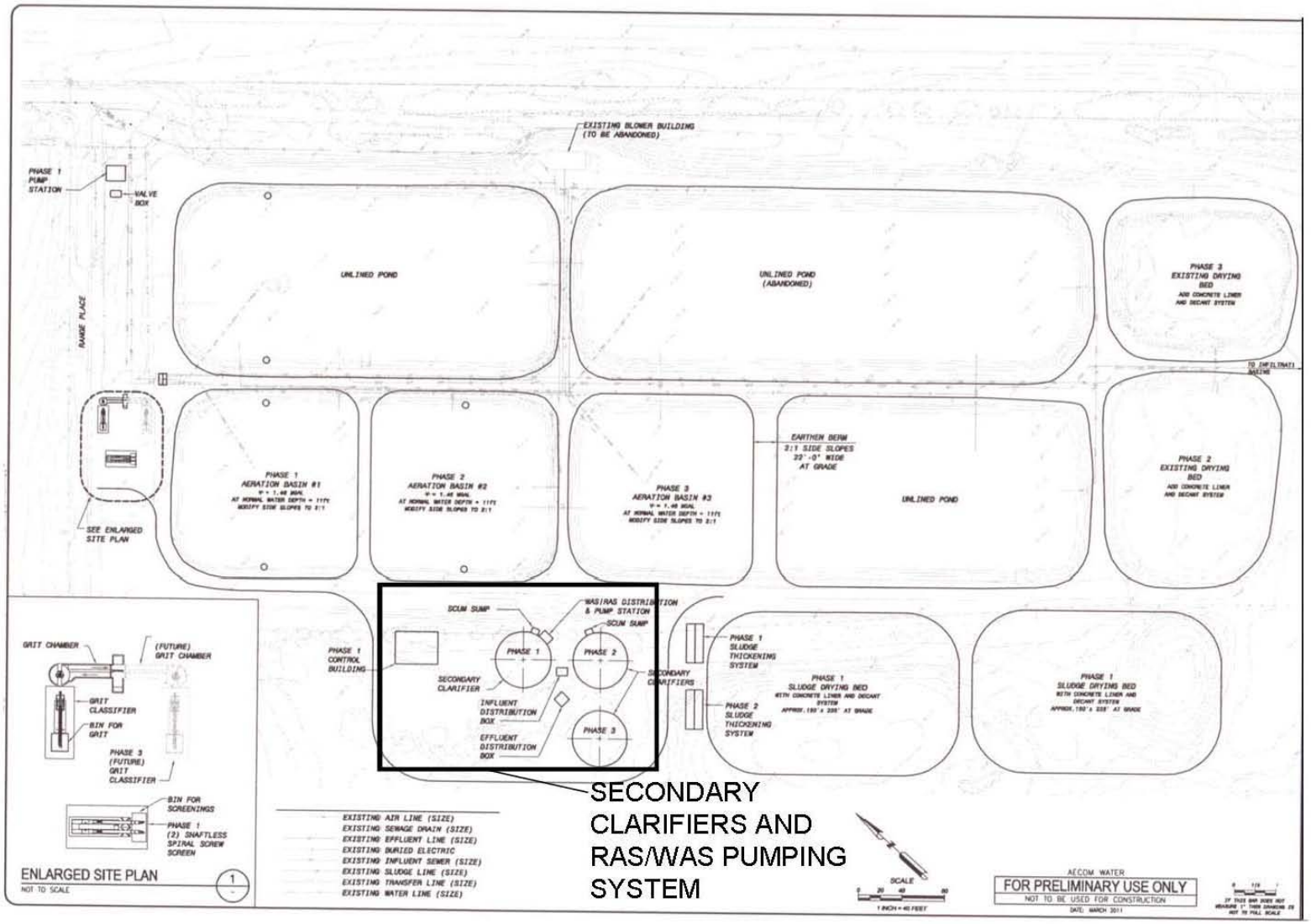
NCSD Southland Wastewater Treatment Facilities Improvements

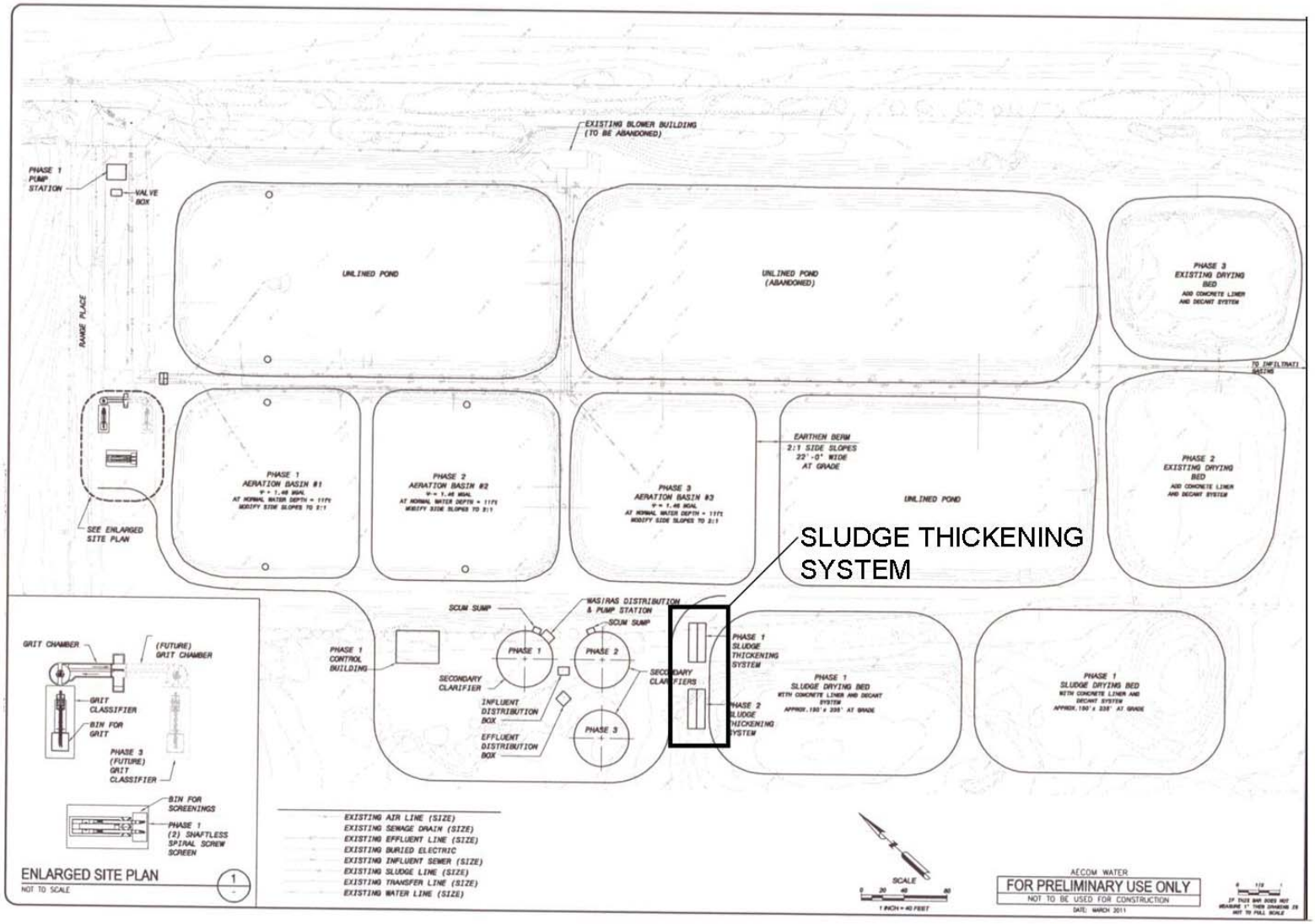


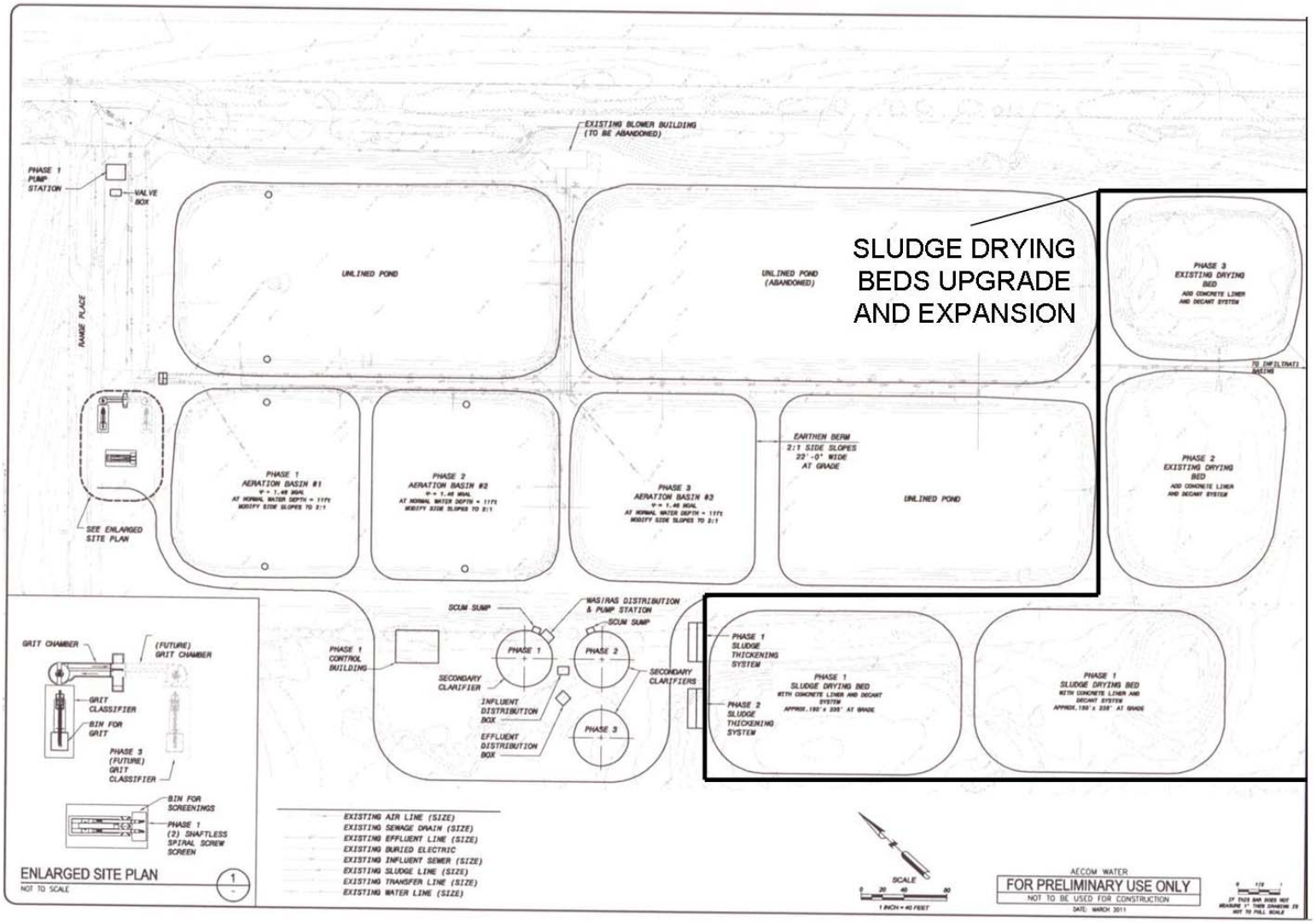
NCSD Southland Wastewater Treatment Facilities Improvements



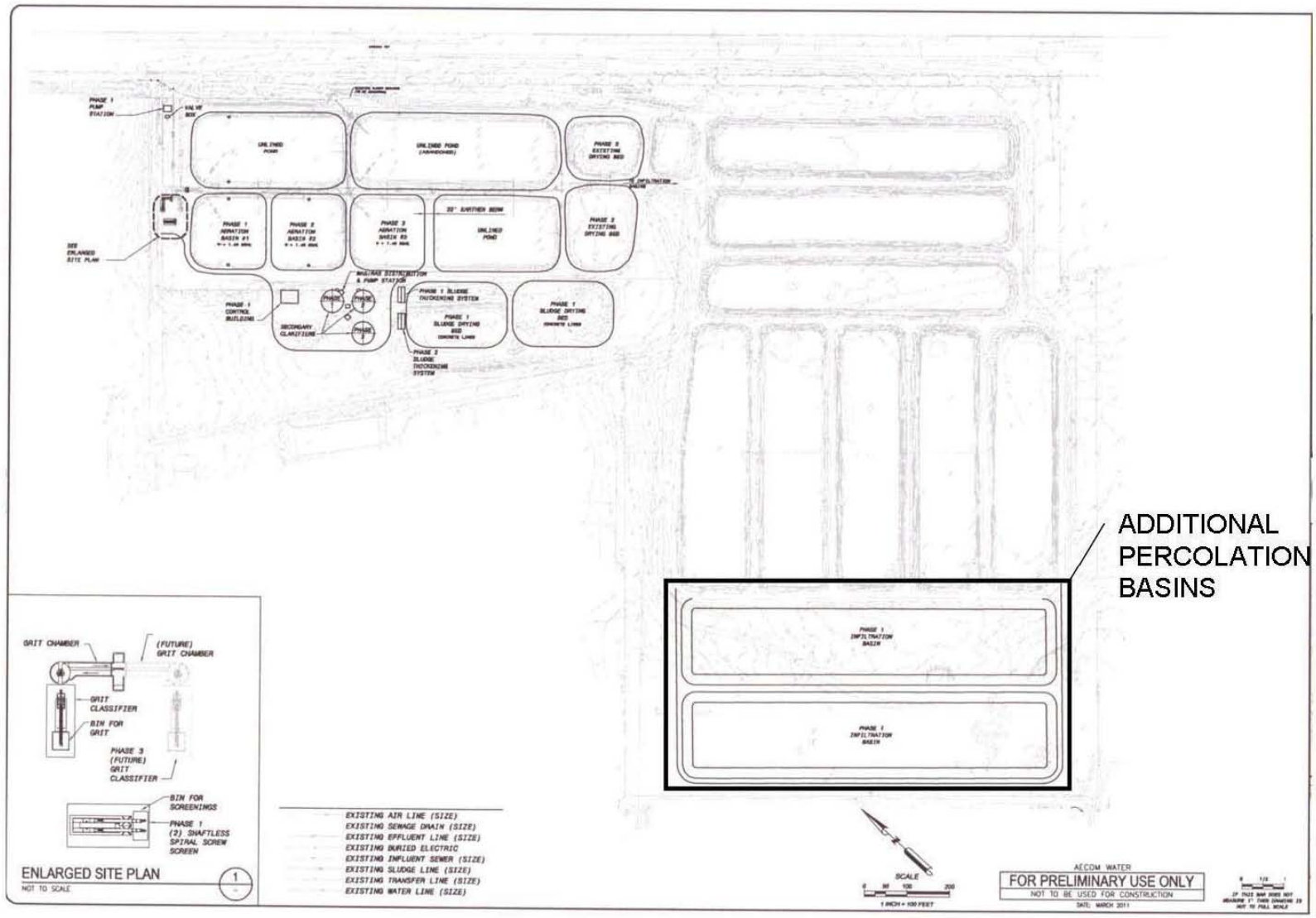
NCSD Southland Wastewater Treatment Facilities Improvements







NCSD Southland Wastewater Treatment Facilities Improvements



emergency holding basin will have been eliminated.

4) Secondary Clarifiers and RAS/WAS Pumping System (see Figure 5D)-

Three circular (55-foot diameter) secondary clarifiers will provide settling to further reduce the concentration of the total suspended solids concentration in the effluent. This settled sludge will be returned to the aeration basins noted in Item 3 above as "return activated sludge" (RAS) for enhanced biological treatment. The remaining "waste activated sludge" (WAS) will be forwarded to the sludge thickener (Item 6 below). A RAS/WAS pump station will convey the sludge to these two locations.

5) Sludge Thickening System (see Figure 5E)-

Waste activated sludge will be pumped from the RAS/WAS pump station to the sludge thickener which will dewater the sludge from approximately 1% solids to 5-7% solids. The thickener will be either a rotary drum or gravity belt thickener. Water drained or pressed from the sludge will be transferred via site piping back to the plant headworks. Dewatered sludge will be transferred through a separate piping system to the drying beds.

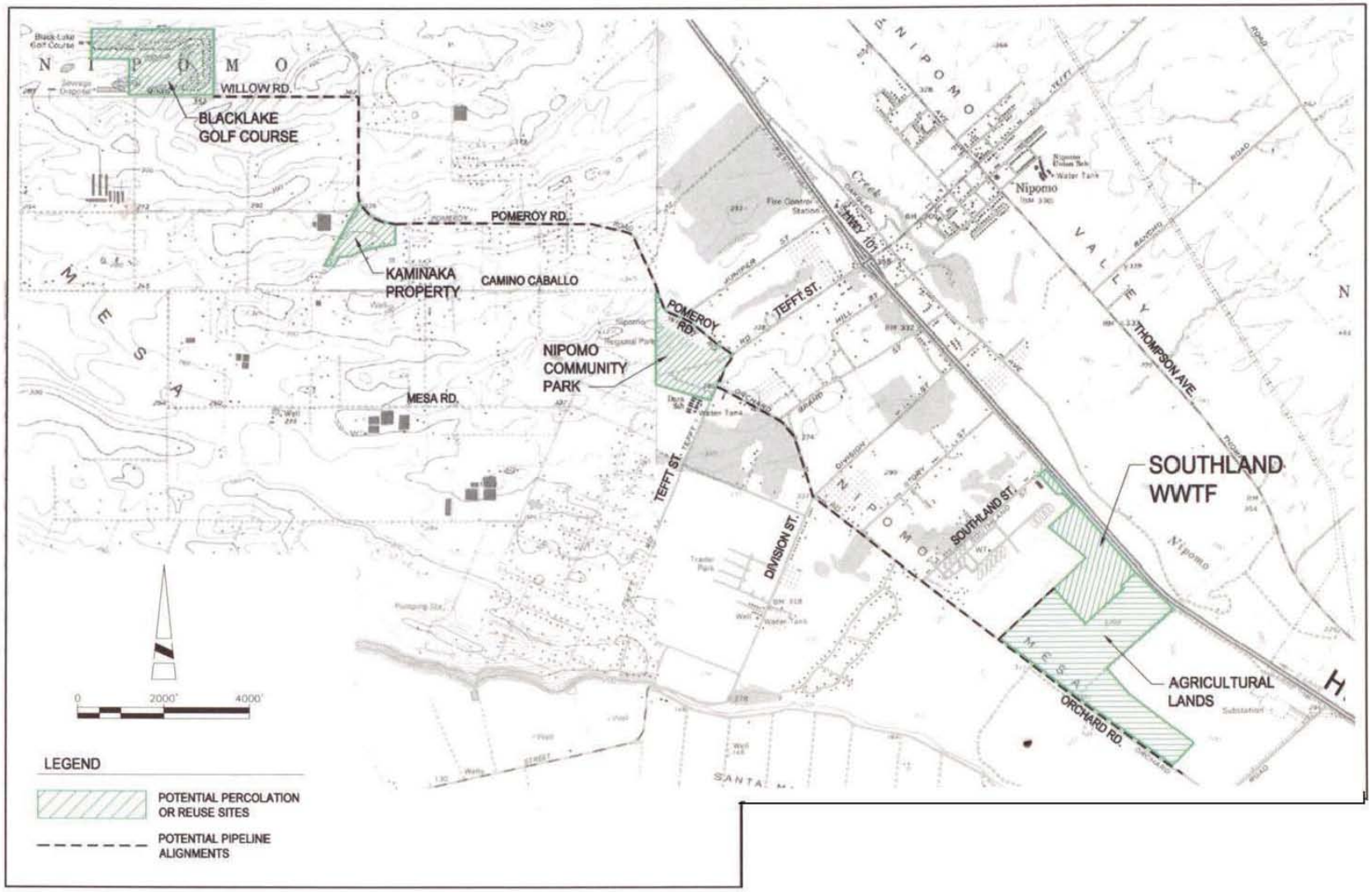
6) Sludge Drying Beds Upgrade and Expansion (see Figure 5F)-

There are two existing sludge drying beds currently utilized by the District. Within Phase I of the proposed project, two new lined sludge drying beds will be constructed while ceasing use of the existing sludge drying bed at that time. Within Phase II, one of the existing beds will be lined and placed back into service. Within Phase III, the remaining existing bed will be lined and placed back into service. Decanted water will be pumped to the facility headworks (item 2 above) for treatment. The concrete liners will protect groundwater quality and will allow the opportunity for more effective and efficient drying and disposal operations.

Disposal

Either during or after Phase I of construction is completed, the Nipomo Community Services District will need to expand their treated effluent disposal capabilities in order to accommodate future wastewater flows. These expanded treated effluent disposal facilities involve two elements: the provision of two additional percolation basins at the existing Southland Wastewater Treatment Facility (see Figure 5G) and/or the construction of one or multiple off-site re-use or percolation facilities.

FIGURE 6
Proposed Effluent Disposal Site Options



NCSD Southland Wastewater Treatment Facilities Improvements

The additional on-site percolation facilities would be constructed on approximately ten acres adjacent to the existing wastewater treatment ponds (see Figure 6, Proposed Effluent Site Disposal Options).These percolation basins will measure approximately 110 feet by 650 feet with a depth of approximately five feet. These basins will be located within the District property southwest of the existing infiltration basins. The basins would not be lined and would be managed to enhance percolation similar to the existing disposal basins.

According to the NCSD, the District continues to develop its model of on-site effluent disposal in order to improve their understanding and management of on-site disposal of treated effluent. Current modeling indicates that on-site disposal of treated effluent is viable for at least fifteen years of average to above average growth in the service area. The District expects that off-site disposal of treated effluent may be required as part of the expansion of the WWTF within Phases II and III of the proposed project.

Recently-completed hydrogeologic investigations (July, 2007 and June, 2008) indicate that the treated effluent mound under the disposal basins is approximately 35-feet below the surface at an average plant effluent discharge rate of 0.57 million gallons per day (MGD). The District has developed a model for predicting percolation at the facility. The model is being updated to include two additional on-site percolation basins which are currently part of the proposed project. These proposed percolation basins will provide additional on-site percolation capability in order to properly manage the treated effluent mound beneath the wastewater treatment facility. Given the future plans to expand the WWTF (Phases II and III), additional study is required to more precisely determine the maximum amount of treated effluent that can be percolated into the soil at the Southland WWTF site. The proposed Phase I project improvements will upgrade the treatment capability of the WWTF but will not change the treatment facility's capacity. Phases II and III will expand treatment facility capacity and may develop off-site disposal options. As such, the determination of on-site treated effluent percolation limits at the Southland WWTF will not be an issue until Phase II of project construction. At that point, additional disposal capacity and disposal methods at the WWTF will be determined. The Nipomo Community Services District recognizes the importance of managing treated effluent disposal. The District has been working with the RWQCB staff during their investigation of other on-site wastewater treatment approaches and off-site disposal alternatives.

The District has also evaluated several locations for off-site disposal and/or reuse of remaining effluent after treatment, storage, and partial disposal at the Southland Wastewater Treatment Facility. Potential disposal/reuse methods that were the subject of these investigations included discharge into percolation ponds, discharge into subsurface disposal systems, surface irrigation of either agricultural or recreation/open space areas or deep percolation as a part of Phase II project improvements. As a result of these investigations, three separate locations for off-site effluent disposal/reuse were selected for further evaluation in this EIR. One option involves the provision of percolation facilities at Kaminaka Property with a second option being the reuse of treated effluent for irrigation of areas south of the existing Southland Wastewater Treatment Facility. A

third disposal option involves the reuse of treated effluent for irrigation at Blacklake Golf Course, Nipomo Community Park and possibly the Kaminaka Property (see Figure 6, Proposed Effluent Disposal Site Options).

The Kaminaka Property consists of 40 acres of agricultural land bounded by Pomeroy Road and Calle Fresa (see Figure 6, Potential Effluent Disposal Sites). Treated effluent would be transmitted via an appropriately sized pipeline approximately 24,000 linear feet from the wastewater treatment facility and along Orchard Road to a suitable location on the Kaminaka Property. Percolation at this location would occur via a subsurface percolation system. Approximately 24 acres of land would be utilized for percolation area and access roads. Construction and operation of this percolation facility would require its acquisition by the District or by securing a land lease and an easement from the property owner.

The second effluent disposal option involves the irrigation of the agricultural lands on areas within the Nipomo Mesa southeast of the Southland Wastewater Treatment Facility. Enhanced treatment of wastewater may be required with this disposal option. Treated effluent would be transmitted via an appropriately sized pipeline an estimated maximum of 5,000 linear feet to areas generally within one mile of the wastewater treatment facility (see Figure 6, Potential Effluent Disposal Sites). This effluent would be supplied to the future customers and applied to crops via surface or shallow buried pipelines. Property owners would be required to provide their own on-site pumping and distribution facilities in order to utilize the effluent for irrigation purposes. Storage facilities at this location may also be required. The quantity of land to be utilized will depend on the type of crop and available area. Long-term contracts would be established between the District and the property owner(s) which would specify the terms of water delivery. Property acquisition and/or easements for pipelines and support facilities may also be required.

The third effluent disposal option involves increased treatment of wastewater at the Southland WWTF and pumping of treated effluent to customers seeking water for landscape irrigation. Upgrades to the Southland WWTF will be necessary in order to produce a higher quality of treated effluent suitable for reuse for irrigation. These additional upgrades would consist of either: a) additional treatment (i.e. filtration and disinfection) of the treated effluent or b) expansion of the existing percolation basins in order to accommodate increased flows, followed by extraction and additional treatment of water extracted from the perched aquifer. The first approach will require installation of a tertiary filtration system followed by disinfection. The second approach will require pH adjustment and possible disinfection of water from the perched aquifer in order to insure compliance with Title 22 pathogen requirements. Treated effluent would then be pumped to the Blacklake Golf Course and Nipomo Community Park for surface irrigation. Treated effluent would be transmitted via an appropriately sized pipeline an estimated maximum distance of 36,500 linear feet of approximately seven miles from the Southland WWTF past the Nipomo Community Park ultimately leading to the Blacklake Golf Course. At the present time, the Blacklake Golf Course uses approximately 100,000 gallons per day (gpd) of unmixed treated secondary effluent from the Blacklake

Wastewater Treatment Plant and could apply an additional 100,000 gpd of the same quality effluent if it were available. Assuming treated effluent from the upgraded Southland WWTF is filtered and disinfected as currently proposed, the golf course could accept significantly more treated effluent for irrigation purposes. Assuming expansion of irrigation with treated effluent to all 27 golf course fairways, it is estimated that as much as 900,000 gpd could be utilized during the irrigation season. Nipomo Community Park is estimated to be capable of accepting approximately 100,000 to 245,000 gpd to irrigate approximately 90 acres. The Kaminaka Property may be considered as an additional treated effluent disposal area within this option. Depending upon the percolation capacity at the Kaminaka Property as well as the market and demand for treated effluent as an irrigation supply, the District may elect to utilize one or more of these facilities in order to accommodate increased treated effluent disposal needs in the future. Customers accepting this treated effluent for irrigation purposes would be required to provide their own on-site pumping and distribution system as well as additional wet weather storage. Wet weather storage may be achieved by on- or off-site percolation. Property acquisition and/or easements for pipelines and support facilities may also be required.

E. PROJECT PHASING

The proposed wastewater treatment improvements will be constructed in three phases as indicated in the table below. Phase I improvements will be constructed within the existing Southland WWTF while Phases II and III may include off-site improvements those being construction of off-site surface or subsurface percolation facilities or reuse via landscape or agricultural irrigation if treated effluent cannot be fully disposed of on-site. No property will be acquired or added to the existing NCSD facilities. Phase I of the proposed project is currently funded and the District is proceeding with detailed project design while construction of Phases II and III will be timed to meet growth within the District's Southland WWTF wastewater treatment service area. Project facilities noted below are illustrated in Figures 5A through 5G, Southland WWTF Improvements.

TABLE 6
PHASE I IMPROVEMENTS

Major System Component	Notes
Influent lift station	Install new wetwell, designed for future phasing: • New flow monitoring manhole and associated instrumentation • Two screw centrifugal pumps with associated valves, piping, and controls
Shaftless screw screens	Two will be installed and can handle future flows.
Vortex grit removal system & screw classifier	One will be installed with a configuration that is compatible with a second future grit chamber and classifier.
Biolac System	Regrade side slopes in one existing pond (Pond 1) to 2:1 side slopes. Install earthen berm in existing Pond 1to create two basins: • New plastic liner in two basins (Aeration Basins #1 & #2) • Air piping and air headers for two basins (Aeration Basins #1 & #2)

	• Controls for two basins (Aeration Basins #1 & #2) • Three blowers • Aeration equipment in one basin (Aeration Basin #1)
Secondary Clarifiers	Construct one or two 55-foot diameter secondary clarifier(s): • RAS/WAS pump station designed for future phases • Distribution boxes designed for future phases.
Sludge Thickening System	Install one 0.5 meter rotary drum or gravity belt thickener.
Sludge Drying Beds	Construct two new drying beds with concrete liners.
On-site Percolation Basins	Construction of two on-site percolation basins.

TABLE 7_
PHASE II IMPROVEMENTS

Major System Component	**Notes**
Influent Lift Station	Install one screw-centrifugal pump and associated valves, piping, and controls (for total of three pumps).
Biolac System	Install one additional blower and aeration equipment in second basin (Aeration Basin #2)
Secondary Clarifiers	Install one 55-foot diameter secondary clarifier (if not installed in Phase I).
Sludge Thickening System	Install one 0.5 meter rotary drum or gravity belt thickener.
Sludge Drying Beds	Install concrete liners in one existing drying bed.
Off-Site Re-use or Percolation Ponds	Construction of off-site surface or subsurface percolation facilities or reuse via landscape or agricultural irrigation.

TABLE 8_
PHASE III IMPROVEMENTS

Major System Component	**Notes**
Influent Lift Station	Install one screw-centrifugal pump and associated valves, piping, and controls (for total of three pumps).
Vortex Grit Removal System & Screw Clarifier	Install one vortex grit removal system and clarifier adjacent to existing clarifier.
Biolac System	Regrade side slopes in one existing primary pond (Pond 2) to 2:1 side slopes Install earthen berm in existing Pond 4 to create two basins: • New plastic liner in one basin (Aeration Basin #3) • Air piping and air headers for one basin • Controls for one basin • Aeration equipment in one basin (Aeration Basin #3).
Secondary Clarifiers	Construct one 55-foot diameter secondary clarifier (if not installed in Phase I). Install one additional pump in RAS/WAS pump station.
Sludge Drying Beds	Install concrete liners in one existing drying bed.
Off-Site Re-use or Percolation Ponds	Construction of off-site surface or subsurface percolation facilities or reuse via landscape or agricultural irrigation.

Phase I improvements will improve treatment but will not expand the plant's current capacity. The proposed increases in treatment capacity will be timed to meet population

growth and increased wastewater treatment demand within the District's Southland WWTF wastewater treatment service area. The timing (or "trigger point") for Phase II improvements is when the plant reaches 80% of its Phase I capacity or approximately 0.7 mgd and the precise location of the proposed off-site treated effluent disposal facilities is determined. The timing for provision of Phase III improvements is based upon a treatment level corresponding to 80% of the three aeration basins or approximately 1.4 mgd.

F. REQUIRED PERMITS AND APPROVALS

The proposed Nipomo Community Services District Wastewater Treatment Facilities Improvements project involves a series of approvals and discretionary actions by the Nipomo Community Services District, as Lead Agency, and other involved regulatory agencies. The proposed project involves the following approvals by the Nipomo Community Services District:

1. Certification of environmental documentation for the proposed Nipomo Community Services District Wastewater Treatment Facilities Improvements project.

2. Approval of the Mitigation Monitoring Program for the Nipomo Community Services District Wastewater Treatment Facilities Improvements project.

3. Review and approval of detailed plans for pipelines, upgraded treatment facilities, percolation ponds and any other infrastructure for the proposed wastewater treatment facilities improvements.

The proposed Nipomo Community Services District Wastewater Treatment Facilities project may also require the following approvals by other involved regulatory agencies including:

4. Section 404 Permits under the Clean Water Act from the U.S. Army Corps of Engineers, which regulates the discharge of dredged and/or fill material into the "waters of the United States."

5. Public Resources Code Sections 1601-1603 Streambed Alteration Agreements from the State of California, Department of Fish and Game, which regulates all diversions, obstructions or changes in the natural flow of a bed, channel or bank of any river, stream or lake which supports fish or wildlife.

6. A National Pollution Discharge Elimination System (NPDES) permit to comply with Section 401 of the Clean Water Act from the State Water Quality Control Board.

7. A Section 401 Water Quality Certification and a General Permit for Storm Water

Discharges Associated with Construction Activities from the Central Coast Regional Water Quality Control Board.

8. A new Waste Discharge Order issued by the Central Coast Regional Water Quality Control Board.

9. A Section 7 Consultation or Section 10(a) Permit from the United States Fish and Wildlife Service which allows the "taking" of an endangered species.

10. Easements secured from landowners in the Nipomo area or other entities for right-of-way and construction.

11. Any necessary construction and/or encroachment permits from the County of San Luis Obispo for equipment staging and construction operations.

G. PROJECT TIMING

The proposed project will be constructed within three phases. Phase I will involve construction of upgraded treatment facilities at the Southland WWTF. Phase I upgrades to the treatment plant are estimated to require a total of twelve to eighteen months. Phase II will involve construction of treatment plant improvements as well as the off-site transmission mains and disposal area(s). Construction of transmission mains and the proposed disposal site will require six to twelve months depending on its location. Phase III involves construction of additional treatment plant improvements which is anticipated to require six to twelve months. Phase I is anticipated to begin in 2011. The timing of Phases II and III is dependent upon the rate of growth in the Southland WWTF service area. Several of these construction activities may be performed concurrently (see Table 9, Project Timing).

TABLE 9
Project Timing

Project Phases	Proposed Facilities	Southland WWTF Capacity	Duration of Construction
I	Southland WWTF Upgrades	0.9 MGD	12-18 months
II	Southland WWTF Improvements and Off-site Disposal Areas	1.28 MGD	6-12 months
III	Southland WWTF Improvements and Off-site Disposal Areas	1.80 MGD	6-12 months

H. PROGRAM EIR

As discussed in Section I, Introduction and Purpose, the proposed project will be analyzed within this EIR in accordance with Section 15168, Program EIR where an EIR is "prepared on a series of proposed actions that can be characterized as one large project" which are "related either geographically or as logical parts in the chain of contemplated actions." The approach involves analysis of all project phases within the Program EIR but allows for subsequent analyses of later project phases when additional project information is available.

The currently proposed Phase I improvements noted above which involve upgrades to the Southland WWTF will improve the quality of treated effluent from the plant but will not expand the plant's current capacity. These Phase I improvements have reached a detailed design stage whereby no additional revisions to the design of improvements are anticipated to be necessary. As such, the proposed Phase I project improvements will not require any additional CEQA analysis beyond that contained within this Program EIR.

The proposed Phase II and Phase III project improvements involve off-site improvements including construction of off-site surface or subsurface percolation facilities or reuse via landscape or agricultural irrigation. These proposed improvements have not reached the same level of design detail as the Phase I project improvements. In addition, the precise location(s) of the off-site disposal facilities have yet to be determined. Once additional detailed designs for these later project phases are available, additional, more detailed CEQA analysis for these subsequent project phases may be necessary. These future analyses may be in the form of a Subsequent or Addendum EIR or a Mitigated Negative Declaration.

IV. ENVIRONMENTAL SETTING

A. EXISTING CONDITIONS

The Nipomo Community Services District encompasses approximately seven square miles extending southeast from the City of Arroyo Grande to include the southern and central portions of the area known as the Nipomo Mesa within south San Luis Obispo County (see Figure 1, Regional Map and Figure 2, Vicinity Map).

The Nipomo Mesa encompasses a relatively level bluff or mesa with slope gradients between zero and five percent with a surface elevation of approximately 300 feet above mean sea level. Elevation changes are due to smoothly eroded hills and shallow linear valleys. The project area west of Highway 101 is characterized by open flat areas, linear drainages and hilly knolls while areas east of Highway 101 contain open flat areas, linear valleys and hillsides. Surface elevations across the mesa gently decrease from east to west consistent with the coastal plain in the surrounding area.

The project area is located within the seismically-active Central Coast region. Should a major earthquake occur in the area, significant groundshaking is expected to occur. The San Andreas fault is considered the most likely to generate a major earthquake in the region in the near future. Such an earthquake is expected to produce moderate to strong ground shaking in the area. The Nipomo Mesa is underlain by massive sand dune deposits whose thickness ranges from 150 to 250 feet in depth at certain locations.

Portions of the Nipomo Mesa are located within the Nipomo Creek watershed area which ultimately drains to the Santa Maria River. The Nipomo Creek watershed encompasses approximately 16,318 acres. Drainage in the area is conveyed by streets and underground pipes in developed areas and via sheet flow in undeveloped areas.

The project area contains eight generalized habitat classifications: coyote brush, non-native grassland, agricultural, eucalyptus, ruderal (disturbed), Coast live oak, ornamental and developed. A total of 35 special-status plant species and 38 special-status wildlife species have the potential to occur within the project area.

The Nipomo Mesa contains a variety of land uses including low and medium density residential uses, agricultural farmlands, commercial uses, institutional uses such as schools, churches, etc. and utility facilities.

Primary access to the project area is provided via State Highway 101. The local circulation system serving the Nipomo Mesa includes Tefft Street, Thompson Avenue, Southland Street, Orchard Road, North and South Frontage Road, Joshua Street, Willow Road, Pomeroy Road and Hetrick Avenue. With the exception of the four lanes on Tefft Street, all of these local roadways are two lane paved roads.

Ambient noise levels in the project area range from the low-30 to mid-60 dBA. Noise sources include traffic on Highway 101, automobile and truck traffic on local roadways, occasional small aircraft and other less obtrusive man-related noise sources.

The climate of the project area can be generally characterized as Mediterranean, with warm, dry summers and cooler, relatively damp winters. Inland areas are characterized by a wide range of temperature conditions. Maximum summertime temperatures generally reach over 100 degrees whereas minimum winter temperatures can range down to the low 20's.

Law enforcement services for the Nipomo area are provided by the County of San Luis Obispo, Sheriff's Department from their Oceano Substation located at 1681 Front Street in Oceano. Fire protection and emergency response services for the Nipomo area are currently provided by Cal Fire. The Nipomo Station 20, located at 450 Pioneer Street in Nipomo (at the corner of Oak Glen and Pioneer Streets near Tefft Street) and the Nipomo Mesa Station 22 located at 2391 Willow Road would be the first stations to participate in any fire or emergency response to the project area. Both stations are equipped with two Type I fire engines while the Nipomo Station 20 also has one Schedule B wildland fire engine (used during the dry season), one rescue engine, one battalion chief vehicle and one utility vehicle for both fire-fighting and personnel transport. Cal Fire also has a hazardous materials specialist.

The Nipomo area is situated within the service boundaries of the Southern California Gas Company for natural gas service and Pacific Gas and Electric Company (PG&E) for electrical service. Existing underground natural gas and electrical mains are located throughout the project area which provide utility services to developed land uses. A PG&E electric substation is located adjacent to Joshua Street near Highway 101. The project area is located within the Nipomo Community Services District which provides wastewater treatment, water supply, storm drainage, retention basins and lighting services in the Nipomo area.

The Nipomo area contains more square meters of light density cultural deposits than any other area in southern San Luis Obispo County. Surveys conducted throughout the Nipomo Mesa have recorded many archaeological sites along the edge of the mesa but very few in the interior. Numerous archaeological sites and artifacts have been noted in areas adjacent to Highway 101. Records checks identified and walkover surveys confirmed the location of 26 archeological sites within the project area.

B. CUMULATIVE PROJECTS

Cumulative impacts of the proposed project are assessed throughout Section V. Environmental Analysis of this EIR within the discussions of various issue areas. Cumulative impacts are defined as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." The cumulative impacts from several projects are the changes in the environment which result from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time (Section 15355 of the State CEQA Guidelines).

The analysis of cumulative impacts within each issue area in Section V. Environmental Analysis is based upon future long-term projects within the South County Planning Area Land Use Planning Area. The following listing of cumulative projects is based upon data provided by the County of San Luis Obispo Planning and Buildings Department as of March 17, 2011. These cumulative projects are listed by those that have been approved, those that are proposed, pending future approval and those under construction.

- ***Approved Projects***

Shapiro. A Vesting Tentative Tract Map (Tract 2611) and Conditional Use Permit to allow a mixed-use planned development consisting of the subdivision of an existing 5.2 acre parcel into nine parcels ranging in size from 8,307 square feet to 1.32 acres as well as development of approximately 12,000 square feet of office space, approximately 44,000 square feet of retail space, 4,500 square feet of restaurant space and 51 multi-family residential units. The proposed project will result in the disturbance of approximately four acres of the 5.2 acre parcel. The proposed project is within the Commercial Retail land use category and is located at 170 South Frontage Road at the southwest corner of Hill Street and South Frontage Road.

LanDev LLC. A Tentative Tract Map to subdivide five parcels totaling 19.1 acres into 24 lots ranging in size from 0.2 to 5.0 acres and a Conditional Use Permit for a mixed use development including: a three-story, 112-unit, 97,600-square foot assisted living/memory support facility: a 16,000-square foot themed restaurant and conference facility and 130,000 square feet of retail, office and professional buildings. The proposed project includes improvements to Mary Avenue, Magenta Avenue and Juniper Street and the construction of 733 parking spaces and two stormwater retention basins resulting in the disturbance of approximately 21 acres. The proposed project is located on the southeastern side of Juniper Street approximately 90 feet west of North Frontage Road.

Nipomo Center. A Vesting Tentative Tract Map (Tract 2312) and Conditional Use Permit to subdivide an existing 10.98 acre parcel into 59 residential parcels ranging in size from 0.03 to 0.12 acres and ten commercial parcels ranging in size from 0.21 to 0.84 acres. The proposal includes 59 duplex, triplex and fourplex residential units and 75,868 square feet of commercial space in two phases of development. The proposed project also includes improvements to Hill Street and Grande Avenue as well as a 0.67 acre drainage basin, a 0.43 acre open space parcel and an on-site frontage road resulting in the disturbance of the entire 10.98 acre parcel. The proposed project is within the Commercial Retail land use category and is located between Hill Street and Grande Avenue, west of Highway 101.

Gray Trust. A planned development involving a subdivision of a 3.8-acre parcel into 39 lots ranging in size from 2,600 to 5,280 square feet and construction of 38 single-family residences as well as an on-site park, an underground detention basin and three on-site roads resulting in the disturbance of the entire 3.8 acre parcel. The project site is located within the Residential Multi-Family land use category and is located at the northeast corner of Grande Avenue and Blume Street.

Chestnut Villas, LLC. A Vesting Tentative Tract Map and Conditional Use Permit to subdivide an existing 1.14 acre lot into 16 parcels ranging in size from 1,155 square feet to 4,931 square feet. The project includes both commercial lease space on the street level and residential units on the second and third level of the development as well as improvements to Thompson Road and Chestnut Street resulting in the disturbance of the entire 1.14 acre parcel. The proposed project is within the Commercial Retail land use category and is located at 186 North Thompson Road, approximately 520 feet north of the Thompson Road/Tefft Street intersection.

Marinai. A Conditional Use Permit to allow a three-story 71-unit motel in two buildings with a total of 38,500 square feet of floor area resulting in the disturbance of the entire 1.2 acre parcel. The proposed project is within the Commercial Retail land use category and is located at 549 Hill Street approximately 300 feet west of South Frontage Road.

Yettman. A Tract Map and Conditional Use Permit to subdivide an existing 1.14 acre parcel into a planned development of eight 1,500 square foot parcels in order to construct eight detached multi-family residences and to provide one 35,000 square foot open space lot . The proposed project is within the Residential Multi-Family land use category and is located at 365 Butterfly Lane, 200 feet southeast of Grande Avenue.

Holloway. A Vesting Tentative Tract Map and Conditional Use Permit for a cluster subdivision of an existing 20.3 acre parcel into 18 half-acre residential parcels, one 10.4 acre open space parcel and an on-site road resulting in the disturbance of approximately ten acres of the 20.3 acre parcel. The proposed project is within the Residential Suburban land use category and is located at 561 South Oakglen Avenue southeast of the intersection with Amado Road.

Allshouse. A Vesting Tentative Tract Map and Conditional Use Permit to subdivide an existing 1.19 acre parcel into fifteen residential condominium parcels ranging in size from approximately 1,000 to 1,200 square feet, one 0.30 acre parcel to accommodate an existing four-unit apartment building and the provision of one 0.47 acre parcel for recreation, parking and drainage purposes as well as improvements to Avenida de Amigos and Grande Avenue.. The 15 single family residences will range in size from 1,189 to 1,330 square feet. The project site is within the Residential Multi-Family land use category and is located on the southwest corner of the intersection of Avenida de Amigos and Grande Avenue.

Vista Roble, LLC. A Vesting Tentative Tract Map and Conditional Use Permit to subdivide four existing parcels totaling 1.57 acres into three 619 square foot residential parcels, a 15,516 square foot common area parcel for residential development and four commercial/retail parcels. The three residential units will be 912 square feet each and the four commercial structures will range in size from 400 to 5,237 square feet. The project site is located on the southwestern corner of Tefft Street and Thompson Road.

Nipomo Hills. A 900 dwelling unit low income housing project located on East Knotts Street.

- ***Proposed Projects Pending Approval***

Crystal Oaks Specific Plan. The South County Area Plan identifies the Canada Ranch property as an urban expansion area for a combination of commercial service, commercial retail and residential uses. Development of the site must be preceded by preparation of a Specific Plan. The South County Area Plan identifies the Canada Ranch Specific Plan area on both the west and east sides of Highway 101, however, only the portion west of Highway 101, approximately 288 acres, is the subject of the currently-proposed Specific Plan. The Specific Plan for the western portion of the Canada Ranch (commonly referred to a Crystal Oaks Specific Plan) will be prepared under the guidance of the County. The project site is located northwest of Sandydale Drive, west of Highway 101 and the North Frontage Road and south of the proposed Willow Road extension and interchange.

Vista Grande. A Vesting Tentative Tract Map and Conditional Use Permit to subdivide an existing 1.14 acre parcel into eighteen residential parcels ranging in size from approximately 765 to 1,509 square feet and the construction of 18 single family residences ranging in size from 1,348 to 1,635 square feet and the provision of one parcel for recreation, parking and drainage purposes as well as improvements to Avenida de Amigos and Grande Avenue resulting in the disturbance of the entire 1.14 acre parcel. The project site is within the Residential Multi-Family land use category and is located at the southeast corner of Avenida de Amigos and Grande Avenue, approximately 200 feet west of South Frontage Road.

Promesa. Promesa LLC Tract Map involves ten five acre lots.

South and North Oak Glen Specific Plan. No project description as of March, 2011.

Cypress Ridge II. A Vesting Tentative Tract Map and Conditional Use Permit to subdivide an existing 60-acre site into 21 lots and 37 acres of open space. The proposed project is within the Rural Residential land use category.

Jack Ready Park. An amendment to the South County (Inland) Area Plan of the Land Use Element to change the land use category on approximately 30 acres from Agriculture to Public Facilities was approved in 2010. A Conditional Use Permit for the construction of a new community park focusing on universal accessibility will be considered by the County Planning Commission in 2011.

ConocoPhillips. An application to modify Conditions of Approval applied to Development Plan D890287D to allow refinery operations to be conducted at a maximuim of 48,950 barrels per day.

Laetitia Agricultural Cluster Subdivision. A Vesting Tentative Tract Map and Conditional Use Permit to subdivide portions of the 1,910 acre Laetitia property into 102 single-family one-acre home sites, a Ranch Headquarters/Community/ Homeowners Association Facility and four open space lots. The applicant intends to file a Conditional Use Permit application in the future to also permit the operation of a Dude Ranch on the project site.

The 1,910 acre Laetitia project site is located approximately two miles north of the community of Nipomo adjacent to Highway 101 within unincorporated San Luis Obispo County. Approximately 76 acres of the project site are located on the west side of Highway 101, while the remaining 1,834 acres are located on the east side of the highway. Primary access to the project site east of the highway is provided by an existing driveway entrance at Highway 101, where visitors access the existing tasting room and winery. Primary access to the project site west of the highway is provided via the Los Berros Road interchange and Thompson Road. All proposed development will be located on the east side of Highway 101. The current vineyard agricultural use will continue on the 76 acre parcel located west of the highway.

Brushpopper's Riding Club. A Conditional Use Permit for a riding area, warm-up arena, parking and attendant facilities located at 2285 Fowler Lane in Nipomo east of Highway 1.

Community Health Centers of the Central Coast. A Conditional Use Permit for a proposed 15,000 square foot addition to an existing medical clinic. The existing clinic

will be converted to administrative offices. The project site is located at 150 N. Tejas Place.

- ***Projects under Construction***

691 W. Tefft LLC. A Conditional Use Permit and Vesting Tentative Tract Map to allow a condominium subdivision of an existing 2.85-acre parcel into six parcels ranging from .14 to 1.04 acres in size and twenty residential condominium units. The individually-owned residential live/work units will vary in size from 1,018 to 2,644 square feet. This project is a revision to an approved mixed-use planned development including retail, office and residential uses approved by the Planning Commission in August, 2005. The proposed project is within the Commercial Retail land use category and is located at 691 West Tefft Street approximately 0.25 miles west of Highway 101.

Luis Conditional Use Permit. A Conditional Use Permit to allow a 52 unit affordable housing project. The proposed project is within the Residential Multi-Family land use category and is located 750 Grande Street.

V. ENVIRONMENTAL ANALYSIS

An Initial Study for the proposed Southland Wastewater Treatment Facilities Improvements project was prepared by the Nipomo Community Services District and was circulated between May 29, 2009 and June 29, 2009 with the Notice of Preparation (NOP) for this EIR. The Initial Study identified issue areas which in combination with comments received during the circulation of the NOP have resulted in the evaluation of the following issues in this EIR.

- Land Use and Planning
- Population and Housing
- Water/Wastewater
- Biological Resources
- Aesthetics
- Cultural Resources
- Geology
- Hazards and Hazardous Materials
- Utilities and Service Systems
- Traffic
- Noise
- Air Quality

The discussion of each environmental issue within this section adheres to the following format:

1. Existing Conditions - The existing environment within and in the vicinity of the project site is discussed from both a local and regional perspective.

2. Thresholds of Significance - Any pertinent thresholds of significance as identified by CEQA or other relevant standards are noted.

3. Project Impacts - The nature and extent of project impacts relative to the issue areas noted above are analyzed. These analyses address direct (or primary) effects of the proposed project as well as its indirect (or secondary) effects. Where applicable, impacts are identified as short- or long-term. The extent of these impacts associated with the proposed project are discussed. This section will also designate all impacts as significant, potentially significant but mitigable, insignificant or beneficial pursuant to the previously identified thresholds of significance.

4. Cumulative Impacts - The analysis of regional or cumulative impacts within each issue area involves an identification of those incremental impacts of the project that are added to other closely related past, present, and reasonably foreseeable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time. The analysis of cumulative

impacts within each resource issue is based upon the South County Area Plan, a listing of cumulative or long-term planning projects (as of July, 2010) that have been approved, are proposed or under construction (as provided by the County Department of Planning and Building) and recent estimates of future growth within the Nipomo Community Services District current and future service areas (see Section IV.B. Cumulative Projects).

5. Mitigation Measures – For many environmental issues, mitigation measures are provided in order to reduce potential environmental impacts to a level of insignificance. Measures to reduce or eliminate project impacts are provided with an identification of the timing of and the responsibility for implementation of these measures.

6. Residual Impacts - After evaluation of the identified project impacts, proposed mitigation measures and cumulative impacts, the residual (or remaining) significant impacts are identified.

   Within these analyses, the residual impacts are classified according to the following criteria:

- Class I Impact - Significant adverse impacts that cannot be mitigated to a level of insignificance. Although mitigation measures may be proposed, these measures are not sufficient to reduce project impacts to a level of insignificance. These significant, unavoidable adverse impacts require the adoption of a Statement of Overriding Considerations by the Nipomo Community Services District, as Lead Agency, if the proposed project is approved.

- Class II Impacts - Potentially significant adverse impacts which can be reduced to a level of insignificance or avoided entirely with the implementation of proposed mitigation measures.

- Class III Impacts - Adverse impacts which are found not to be significant.

- Class IV Impacts - Project impacts which are considered to be positive or of benefit to the site or the adjacent environment.

A. LAND USE AND PLANNING

1. Existing Conditions

The proposed project area contains a variety of land uses including residential, commercial, light industrial, recreation, agriculture and open space uses. The central, more urban portion of the Nipomo Community Services District sewer service area (see Figure 7, Future Wastewater Service Area) contains a variety of developed single and multi-family residential, commercial, office/professional and recreational uses located both north and south of Tefft Street and on each side of U.S. Highway 101. Areas outside the central portion of the NCSD sewer service area are devoted primarily to low and medium density residential uses, scattered residences within or adjacent to agricultural farmlands, recreation, public facilities and open space uses. The precise extent of these various land uses and their estimated current wastewater production is listed in Table 10, Existing Wastewater Service Area below

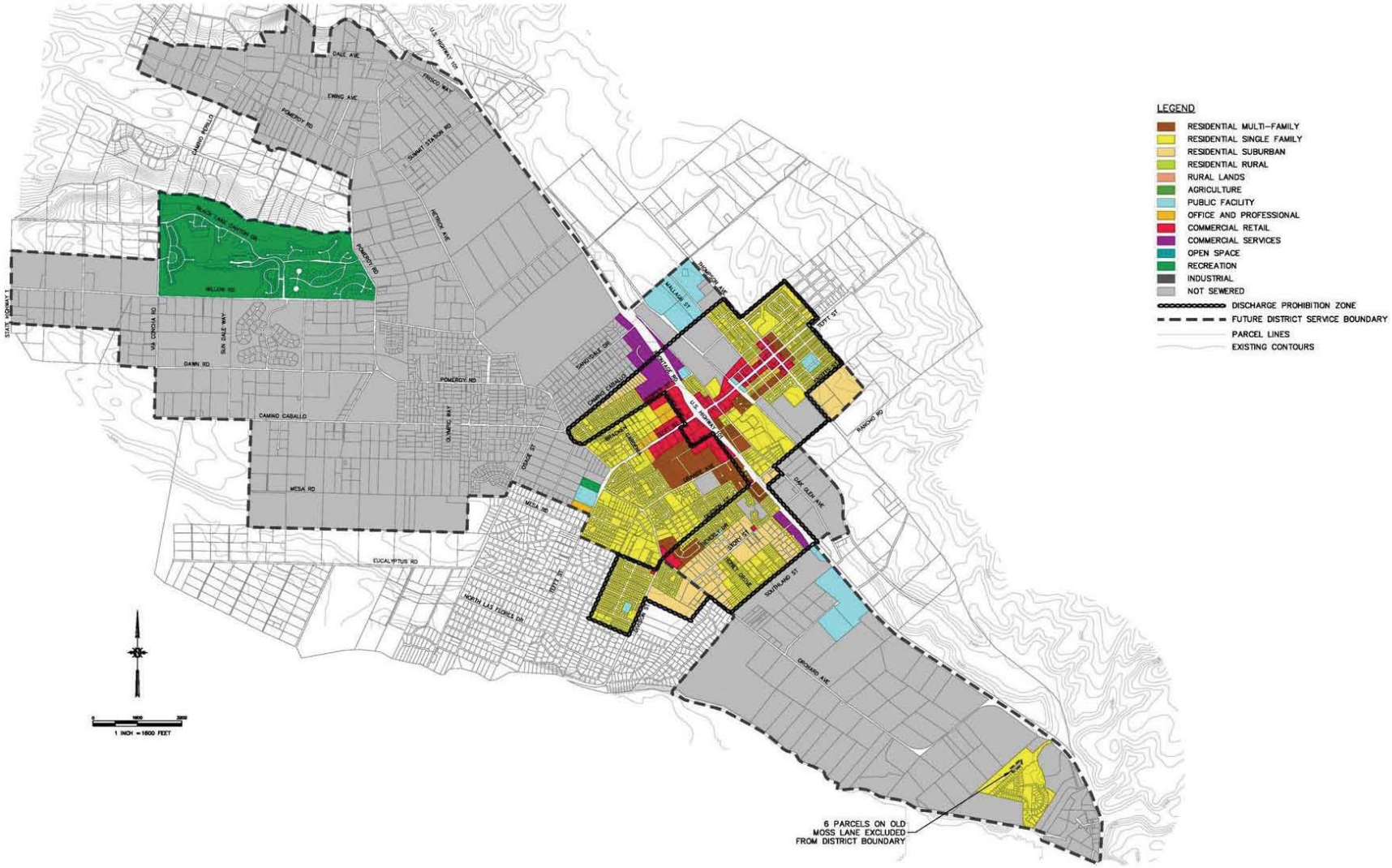
TABLE 10
EXISTING WASTEWATER SERVICE AREA

Land Use Designation	Acres	Estimated Wastewater Production (MGD)
Residential Multi-Family	126	0.152
Residential Single Family	689	0.408
Residential Suburban	139	0.002
Agricultural	11	0
Public Facilities	95	0.013
Office/Professional	31	0.002
Commercial Retail	121	0.049
Commercial Services	47	0.006
Open Space	11	0
Recreation	5	0
TOTAL	1275	0.632

Source: NCSD, Technical Memorandum Phase I, Water Demand and Sewer Load Projections, January 3, 2007.

The County of San Luis Obispo General Plan governs the development of unincorporated land within the South County Planning Area. The South County area is comprised of the San Luis Bay and South County Land Use Planning Areas. The cities of Arroyo Grande, Pismo Beach and Grover Beach and the unincorporated communities of Nipomo and Oceano are located in this area. The Nipomo Mesa area is also unincorporated and lies within the South County Planning Area. It is the stated intent of the South County Area

FIGURE 7
Future Sewer Service Area



Plan to focus future development within urban areas and provide buffers between developed and rural areas in order to maintain the character of the area.

While the Nipomo Community Services District may provide the County with input regarding land use decisions, it does not have any authority over land use entitlements. Development projects within the septic tank prohibition zone boundaries of the Nipomo Community Services District (NCSD) are sometimes approved by the County contingent upon receiving sewer services from a community wastewater system such as the NCSD. The General Plan identifies the type and intensity of development allowed in each of several land use categories for Nipomo and other unincorporated areas.

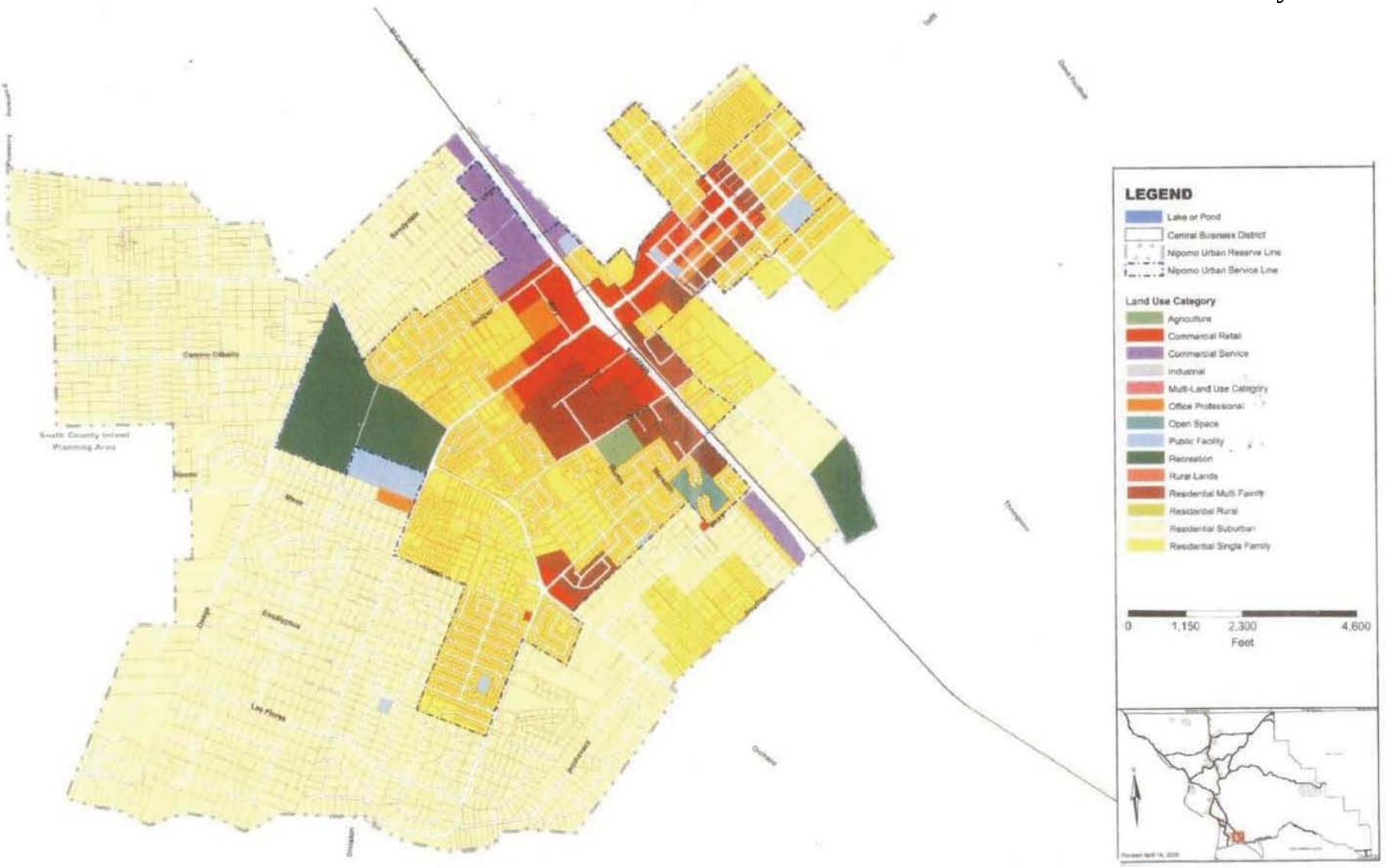
The following is a description of the land use categories/zoning within the County of San Luis Obispo, South County Area Plan to manage and direct development and growth (see Figure 8, South County Area Plan). It should be recognized that the Nipomo Community Services District does not have authority (police power) to approve or deny development that requires parcel maps, tentative maps and/or General Plan Amendments, however, the provision of public services such as sewer does increase the likelihood that an area may be developed particularly if the proposed development is within the District's boundaries and is consistent within the County's General Plan policies.

- ***Agriculture***

This land use category designates areas that have existing or potential agricultural production or capability. Agriculture has been and still is the most widespread use of land in the South County Planning Area. Minimum parcel sizes for agriculturally zoned areas range from 20 acres to 320 acres, depending on the method used to calculate the parcel size. Three factors are identified in the County Land Use Ordinance to determine maximum parcel sizes for agriculturally zoned areas, including their existing use, land capability and agriculture preserve status. Each method has "tests" that determine the minimum parcel size for an area zoned Agriculture.

Many Agricultural Preserves established under the Williamson Act exist in the Nipomo Area. The Williamson Act allows local jurisdictions to establish agricultural preserves consisting of existing agricultural or other vacant lands. The property enters into a long term agreement to retain their property in agricultural use rather than converting the land to another more intensive use. In exchange, the property owner receives a property tax assessment based on the agricultural uses and not a higher rate based upon the "land's highest and best use." Withdrawal from a Williamson Act agreement can occur if the property gives the involved jurisdiction notice of Non-Renewal. After providing this notice, the land generally remains in a preserve status for a minimum of 10 years. Approximately 33,000 acres of land are under Williamson contract in the Nipomo Mesa and Nipomo Valley areas.

FIGURE 8
South County Area Plan



- ***Residential Rural***

This land use designation provides for estate-sized residential lots or small farms of five acres or larger. These areas are generally unsuitable for commercial agriculture because of topography, small property size, broken ownership patterns and prior residential commitments. Many of the rural residential areas are undeveloped and often lack adequate circulation or trail improvements.

Properties in the Residential Rural zoning category can achieve a minimum parcel size ranging from five to 20 acres depending upon the circumstances of a particular parcel. Several tests are applied to calculate the minimum parcel size for an area, including remoteness, fire/hazard response time, access and slope.

- ***Residential Suburban***

This land use designation allows for single-family residential development on estate-sized lots in a semi-rural, suburban setting within the urban and village areas or in older existing rural subdivisions. This zoning category encourages clustering of allowed densities where there are open space resources or sensitive habitats.

Lots in the Residential Suburban zoning category have minimum parcel sizes ranging from one to five acres depending upon the circumstances of a particular parcel. Two tests that are applied to calculate the minimum parcel size involve a slope test and a water and sewer test.

- ***Recreation***

This land use designation identifies areas having recreational potential where private or public development of recreational uses can be encouraged when not in conflict with surrounding rural and agricultural uses. This zoning category also allows for resort-oriented development that can integrate residential uses into the development pattern. An example of this zoning category in the Nipomo area is the Black Lake Golf Course development that was completed under a Specific Plan approved by the County in 1983.

- ***Rural Lands***

This land use category encourages rural development at very low densities within areas having limited agricultural capability with the purpose of preserving open space, watersheds and sensitive habitat areas.

The minimum parcel size for new lots in the Rural Lands category is based upon site features including remoteness, fire/hazard response time, access and slope. The minimum parcel size ranges from 20 to 320 acres depending upon the circumstances of a particular site. Several tests are applied to determine the minimum parcel size for a location, including remoteness, fire/hazard response time, access and slope.

- ***Residential Single Family***

The Residential Single Family zoning category provides for single-family homes on urban-sized lots of less than one acre and mobile home developments in communities with full urban services. Minimum parcel size is based upon the type of public road serving the property, topography, terrain and the type of sewer service. The minimum parcel size in the Residential Single Family zoning category ranges from 5,000 square feet to one acre depending upon the circumstances of a particular site.

- ***Residential Multi-Family***

This land use category designates areas for residential development with a wide range of densities and housing types including single-family dwellings, multi-family dwellings and mobilehome developments in order to efficiently provide higher density residential development to community utilities and facilities as well as site characteristics and to locate higher residential densities in close proximity to commercial areas and community services and facilities. These areas are generally located within an urban or village reserve line, within an urban service designation or within areas having close proximity to a downtown or neighborhood commercial use where urban infrastructure, circulation and neighborhood and community facilities are capable of handling high density residential development. Development densities range from one to 38 dwelling units per acre or within mobilehome parks with a density of eight units per acre.

- ***Public Facilities***

The Public Facilities category is applied to lands owned by public agencies for uses that benefit the public. This designation covers areas with existing public or quasi-public facilities and uses or publicly-owned lands intended for development with public facilities. These include facilities devoted to the transmission, treatment and distribution of water supplies; collection treatment and disposal of wastewater; storage and service of vehicles and equipment utilized by public agencies as wells as schools, libraries and other education facilities.

- ***Office/Professional***

This land use category provides for office and professional development in community centers and civic areas and allows for public and quasi-public uses which are compatible with a centralized urban location or a transitional area. The Office and Professional designation establishes areas for the conduct of business that will minimize conflicts and adverse impacts on other land uses and encourages conversion and renovation of historic or architecturally significant buildings when located in office and professional areas. This designation is generally found in areas possessing primary access to arterial or collector streets thereby avoiding the use of local residential streets.

- ***Commercial Retail***

The Commercial Retail category provides centralized locations for stores, offices, service establishments offering a wide range of commodities and services that are scaled to meet neighborhood and community general shopping needs. These uses are generally located within a centralized business district, areas for visitor-serving commercial facilities for highway traveler services and uses associated with tourists and vacationers or for neighborhood commercial areas devoted to retail and service commercial establishments necessary to meet daily shopping needs of residential areas.

- ***Commercial Service***

This land use category provides for commercial and industrial services and light manufacturing where they do not adversely affect surrounding properties. The minimum parcel size for this land use designation depends on whether the site has community water and sewer service or is served by an individual well and septic system. Minimum parcel size ranges from 6,000 square feet to 2.5 acres depending on whether the location has community water and sewer or an individual well and septic tank.

- ***Open Space***

The Open Space category is applied to lands in public fee ownership or private lands where an open space agreement or easement has been executed between the property owner and the County or other appropriate agency or entity. The open space designation may be applied to public or private lands with public easements including the undeveloped portions of State or local park properties. Areas designated as open space may contain natural features such as unique topography, vegetation or stream courses without a quality or extent sufficient to apply a Sensitive Resource Area combining designation.

Legislative Authority of NCSD

The Nipomo Community Services District is a California Community Services District organized pursuant to Government Code Sections 61000 et seq. The NCSD's service area overlies the southern portion of the Nipomo Mesa within the unincorporated portion of San Luis Obispo County. The powers of special districts such as the NCSD are limited solely to those conferred by the Legislature.

The NCSD's powers do not include legislative and executive powers over zoning and land use. Zoning and land use authority for the unincorporated area of the County is designated to the County and to a limited extent the San Luis Obispo Local Agency Formation Commission.

The California Constitution specifically grants the power to regulate land use to the County of San Luis Obispo. Article XI, Section 7 states:

> "A county or city may make and enforce within its limits all local, police, sanitary and other ordinances and regulations not in conflict with general laws."

Pursuant to the "police power" set forth in the State Constitution and the statutory legislation adopted by the California Legislature, the County of San Luis Obispo regulates land use development (growth) in the unincorporated areas of the County, including land within the NCSD and the NCSD's Sphere of Influence. County regulations that govern land use and development include the County's General Plan and the South County Area Plan (including the land use element, the housing element and the regional housing needs allocation), the County's Growth Management Ordinances and the County's Resource Management System. The NCSD can only implement project mitigation measures that are within the NCSD's expressed and implied powers, which exclude land use and development.

The only other governmental agency with authority over land use matters in the unincorporated County is the San Luis Obispo Local Agency Formation Commission (LAFCO). The importance of local agencies such as the NCSD to extend governmental services is recognized by the California Legislature in enacting the Cortese/Knox/Hertzberg Local Government Reorganization Act of 2000. Government Code Section 56001 states:

> "…the logical formation and determination of local agency boundaries is an important factor in promoting orderly development and in balancing that development with sometimes competing state interests of discouraging urban sprawl, preserving open-space and prime agricultural lands, and efficiently extending government services."

Pursuant to Cortese/Knox/Hertzberg Local Government Reorganization Act of 2000, LAFCO updated the NCSD's Sphere of Influence and completed a Municipal Service Review in 2004. A sphere of influence is defined by the Government Code as "a plan for the probable physical boundary and service area of a local agency or municipality." A sphere of influence is generally considered to be a twenty (20) year growth boundary for a local agency such as the NCSD. LAFCO, in recognition of its authority and in order to promote orderly development within the NCSD's Sphere of Influence related to wastewater treatment, established conditions for annexations of territories within the NCSD's Sphere of Influence.

In July, 2010, the San Luis Obispo Local Agency Formation Commission updated the Sphere of Influence areas as well as the Municipal Service Review of the Nipomo Community Services District. These actions included adoption of Conditions of Approval relative to the provision of water supply and wastewater treatment services. Included in the consideration of these matters was a Memorandum of Agreement (MOA) between the Nipomo Community Services District (NCSD) and the County of San Luis

Obispo regarding the NCSD's Sphere of Influence. The MOA was modified at that time to include additional details concerning the District's plan to serve the Sphere of Influence areas and common agreements between the County and the District. The MOA and attached Conditions of Approval indicates which Sphere of Influence areas will receive sewer service in the future, those being Sphere of Influence Area 1 (if the Urban Reserve Line is extended into that area), Sphere of Influence Areas 2, 3, 4 (only to the area south of Southland Street identified as the Southland Specific Plan Area in the South County Area Plan and areas designated Residential Suburban) and Sphere of Influence Area 5 (to areas designated Residential except areas designated Residential Suburban). The NCSD does not intend to extend sewer service into the remaining portions of Sphere of Influence Areas 4, 5 as well as all of Sphere of Influence 6 (Woodlands), 7 and 8 unless authorized by a County General Plan Amendment and approval by LAFCO (see Figure 9, Sphere of Influence Areas).

2. Thresholds of Significance

The proposed project would represent a significant land use impact if it were to disrupt an established community or conflict with adopted environmental plans or adjacent land uses. The proposed project would also be considered to have a significant impact if it induced growth or affected the development potential of adjacent properties.

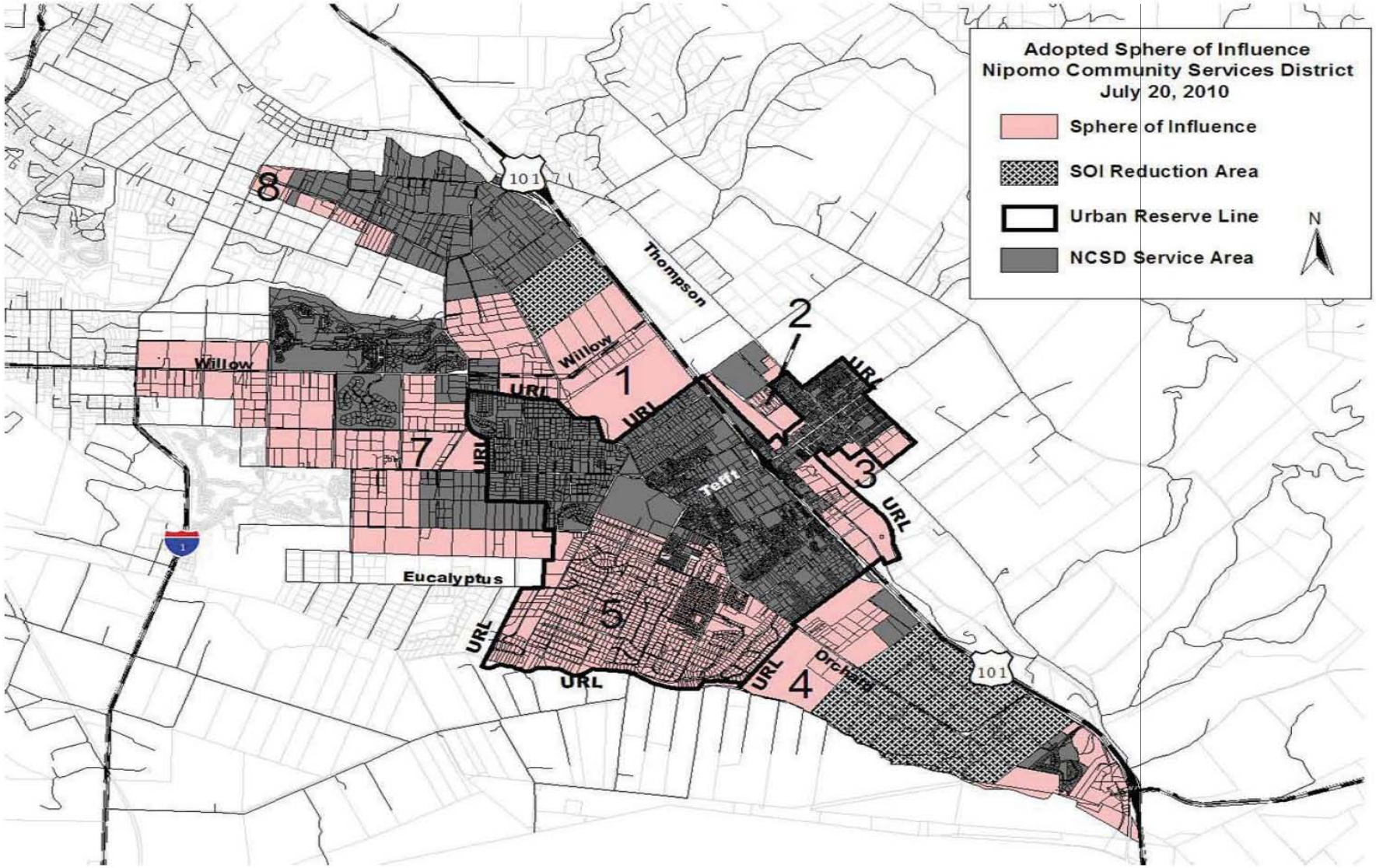
3. Project Impacts

Impact A-1. *The proposed project could directly impact land uses in areas adjacent to short-term project construction activities particularly areas containing agricultural farmland. .These impacts are considered to be potentially significant, but mitigable.*

The proposed project is not expected to directly impact any existing land uses in areas involving short-term project construction activities or long-term project operations with the possible exception of construction on agricultural farmlands.

The areas through which the proposed wastewater treatment facilities improvements, disposal site options, pipeline extensions and associated facilities are located lie within a variety of land uses including residential, commercial, agricultural and recreation facilities. The proposed project may represent a short-term conflict with existing agricultural uses during project construction activities. Excavation and grading of soils within agricultural farmlands could significantly impact soil resources at all three of the candidate disposal sites, those involving the Kaminaka Property and the agricultural lands southeast of the Southland WWTF. The County Agricultural Commissioner's Office recommends the following measures during construction of any project facilities within areas containing agricultural farmlands: the placement of a geotextile membrane on native soils prior to the stockpiling of fill or other stockpiled materials, replacement of native soils to their previous condition, stockpiling of soils in a manner that protects their physical, chemical and biological characteristics, avoidance of existing pipelines, wells and other agricultural infrastructure and provision of early notice of any road closures or

FIGURE 9
Sphere of Influence Areas



NCSD Southland Wastewater Treatment Facilities Improvements

detours which may impact ongoing agricultural operations and residential commuters (see "Mitigation Measures"). With implementation of these mitigation measures, direct impacts upon agricultural lands during project construction are considered potentially significant but mitigable.

Throughout Section V. Environmental Analysis of this document, all other direct impacts of the project upon biological, cultural, visual, geologic resources and water/wastewater as well as impacts related to both short- and long-term traffic, noise and air quality impacts have either been reduced to an insignificant level or have been determined to be less than significant.

The proposed project does not require any amendments to the South County Area Plan or any other Elements of the County General Plan and does not require any changes to existing zoning. The proposed project would not directly conflict with any environmental plans or policies adopted by agencies with jurisdiction over the project area. Environmental plans which apply to the project area include the South County Area Plan and other Elements of the County General Plan, the Clean Air Plan (Air Pollution Control District), the Water Quality Control Plan – Basin Plan (Regional Water Quality Control Board) and the Regional Transportation Plan (San Luis Obispo Council of Governments). Since the proposed project would represent a reduction or elimination of a potential constraint upon future development within these areas to be served by the additional sewer service, it may indirectly conflict with these environmental plans and policies (see Impact A-2 below).

Impact A-2. *The proposed project may potentially indirectly induce changes in land use as a result of the reduction or elimination of a potential constraint upon development within areas served by the additional sewer service provided by the proposed project. The proposed project will not, however, directly cause a change in any San Luis Obispo County land use designations or zoning or an increase in the intensity of currently-designated land uses within the District.*

The proposed project will not directly cause a change in any San Luis Obispo County land use designations or zoning or an increase in the intensity of currently-designated land uses within the District. The proposed project does, however, involve the provision of additional sewer service thereby reducing or eliminating a potential constraint to future development within areas to be served by this additional wastewater treatment and disposal capability. This additional sewer service will be used to serve existing and new development within the South County Planning Area. The proposed project involves the provision of additional facilities necessary to expand the wastewater treatment capabilities of the existing Southland Wastewater Treatment Facilities (WWTF). The proposed project involves two basic elements related to the provision of additional facilities for both wastewater treatment and disposal. These proposed improvements will increase the treatment capacity of the Southland WWTF from its current capacity of 0.9 million gallons per day to 1.8 million gallons per day. However, Phase I of the proposed project will improve the treatment capability of the plant but will not increase its existing

treatment capacity. Phases II and III project improvements will expand the treatment capacity of the Southland WWTF and/or develop off-site disposal options. Any increase in treatment capacity will be timed to meet growth within the District's Southland WWTF wastewater treatment service area.

In order to determine the additional amount of development that could be served by this additional sewer service, a breakdown of land uses (as designated by the South County Area Plan) within the existing NCSD sewer service area must be identified. The Nipomo Community Services District, within the December, 2007 District Water and Sewer Master Plan evaluated six future (year 2030) wastewater production scenarios, three of which were based upon assumed water use rates and three of which were based upon observed water use rates within fiscal year 2005-2006. Within these two categories, three land use scenarios were evaluated: existing land uses, existing land uses plus proposed land use amendments and existing land uses within a high density land use scenario. Table 11, Future Wastewater Production Estimates provides a breakdown of land uses within the NCSD service area and wastewater generation estimates associated with these six future (year 2030) wastewater production scenarios. As indicated therein, the maximum (or "worst-case") total number of acres served by the proposed wastewater treatment facilities improvements involve the high density land use assumption (wastewater production scenarios 3 and 6) and total 2,491 acres with a maximum ("worst-case") production of 1.80 MGD (million gallons) per day.

TABLE 11
FUTURE WASTEWATER PRODUCTION ESTIMATES

	Scenario 1		Scenario 2		Scenario 3		Scenario 4		Scenario 5		Scenario 6	
Land Use Designations	**Total Area Served**	**Estimated Wastewater Production in Year 2030**	**Total Area Served**	**Estimated Wastewater Production in Year 2030**	**Total Area Served**	**Estimated Wastewater Production in Year 2030**	**Total Area Served**	**Estimated Wastewater Production in Year 2030**	**Total Area Served**	**Estimated Wastewater Production in Year 2030**	**Total Area Served**	**Estimated Wastewater Production in Year 2030**
	ac	**MGD**	**ac**	**MGD**	**ac**	**MGD**	**ac**	**MGD**	**ac**	**MGD**	**ac**	**MGD**
Residential Land Uses												
REC	5	0.000	5	0.000	5	0.000	5	0.000	5	0.000	5	0.000
RR	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000
RSF	888	0.859	914	0.833	1310	1.061	888	0.706	914	0.684	1,310	0.872
RS	270	0.095	455	0.151	455	0.135	270	0.077	455	0.122	455	0.108
RL	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000
RMF	126	0.222	166	0.292	166	0.292	126	0.332	166	0.437	166	0.437
Non-Residential Land Uses												
AG	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000
OP	31	0.006	31	0.006	31	0.006	31	0.006	31	0.005	31	0.005
CR	128	0.142	212	0.212	212	0.212	128	0.129	212	0.194	212	0.194
CS	67	0.018	141	0.035	141	0.035	67	0.017	141	0.032	141	0.032
IND (1)	4	0.002	12	0.004	12	0.004	4	0.002	12	0.004	12	0.004
OS	0	0.000	61	0.000	61	0.000	0	0.000	61	0.000	61	0.000
PF	22	0.010	22	0.008	22	0.008	22	0.009	22	0.007	22	0.007
High School	76	0.036	76	0.036	76	0.036	76	0.006	76	0.006	76	0.006
Total Use	1,617	1.390	2,095	1.578	2,491	1.789	1,617	1.283	2,095	1.492	2,491	1.666

Scenario 1 – Assumed water use rates, Existing land uses
Scenario 2 – Assumed water use rates, Existing land uses plus proposed land use amendment
Scenario 3 – Assumed water use rates, High Density land uses
Scenario 4 – Observed water use rates, Existing land uses
Scenario 5 – Observed water use rates, Existing land uses plus proposed land use amendment
Scenario 6 – Observed water use rates, High Density land uses

Table 12, Net Increase in Future Wastewater Production lists the maximum projected future wastewater production scenario (scenario 3 – Assumed water use rates within a high density land use scenario) and deducts from these totals, the existing number of acres and wastewater production from the existing wastewater service area (see Table 10, Existing Wastewater Service Area).

TABLE 12
NET INCREASE IN FUTURE WASTEWATER PRODUCTION

	EXISTING		FUTURE		NET INCREASE	
Land Use Designation	**Existing # of Acres**	**Existing Wastewater Production (MGD)**	**Future # of Acres**	**Future Wastewater Production (MGD)**	**Increased # of Acres**	**Increased Wastewater Production (MGD)**
RMF	126	0.152	166	0.292	40	0.140
RSF	689	0.408	1,310	1.061	621	0.653
RS	139	0.002	455	0.135	316	0.133
AG	11	0	0	0	(-11)	0
PF	95	0.013	110	0.048	15	0.035
OP	31	0.002	31	0.006	0	0.004
CR	121	0.049	212	0.212	91	0.163
CS	47	0.006	141	0.35	94	0.029
OS	11	0	61	0	50	0
REC	5	0	5	0	0	0
TOTAL	**1,275**	**0.632**	**2,491**	**1.789**	**1,216**	**1.157**

As indicated above, the future, maximum ("worst case") increase in areas to be served and wastewater generated to the proposed wastewater treatment facilities improvements is 1,216 total acres and 1.157 million gallons of wastewater per day.

Although the proposed project would not directly result in a change in zoning or an increase in the intensity of currently-designated land uses, the proposed project would not only represent a reduction or elimination of a potential constraint upon future development within areas served by additional sewer service but also has the potential to hasten the conversion of areas to more intense urbanized uses over those land uses currently allowed by the South County Area Plan. It should be noted that a Final EIR for the South County Area Plan was certified by the County of San Luis Obispo. Any increase in density or change of land use to the South County Area Plan within the area to be served by the additional sewer service will, however, first require a General Plan Amendment and zone change. A General Plan Amendment would study a variety of land use and environmental issues before being approved or denied including community character and compatibility, existing land use policies, traffic and circulation impacts, the provision of public services, etc. It should also be noted that in response to population increases in Nipomo since 1990 and the impacts of this growth upon existing groundwater supplies, the County Board of Supervisors declared a Level of Severity III

for the Nipomo Mesa Water Conservation Area which is the highest severity level in the County General Plan's Resource Management System. In 2006, the County Board of Supervisors passed Ordinance 3090 which limits the ability to amend the County General Plan for non-agricultural land uses. Any proposed amendments for non-agricultural land uses which results in increased water consumption must have a supplemental water allocation and pay a supplemental water development fee.

This process also involves significant public involvement and the implementation of the California Environmental Quality Act (per CEQA). Any future development within areas served by the additional sewer service would also require a number of additional approvals including approval of a Specific Plan, conditional use permit or tract map by the County of San Luis Obispo. These future discretionary approvals will require the preparation and certification of additional environmental documentation (pursuant to CEQA) to address the potential land use and planning impacts of these future approvals.

The proposed project has the potential to foster growth or changes in land uses in areas served by the additional sewer service particularly involving the conversion of agricultural lands. Potential growth-inducement involves a variety of factors including: removal of any impediments to growth such as the extension of roadways or utilities; the creation of development pressures in surrounding areas, particularly existing agricultural lands; growth-inducing impacts upon community services and the establishment of any precedent-setting effects upon parcels within the South County/Nipomo Mesa area.

Any reduction or elimination of a constraint to development (such as the provision of additional sewer service) can potentially hasten the conversion of vacant or existing agricultural lands, agricultural preserves or areas containing prime agricultural soils to developed uses. Any development in areas served by this additional sewer service beyond the uses currently allowed by the South County Area Plan will require approvals from the County of San Luis Obispo as discussed above.

Without any mitigation measures available to eliminate the potential for changes in land use, the potential long-term land use and planning impacts associated with the elimination of the constraint of available sewer service are considered to be a significant adverse impact which cannot be reduced to an insignificant level.

4. Cumulative Impacts

The proposed project may result in the reduction or elimination of a potential constraint upon the development of other cumulative projects in the area (see Section IV.B. Cumulative Projects). As such, the proposed project represents a potential contributor to the development of more urbanized uses in the areas served by the increased sewer service provided by the proposed project. As discussed above, the proposed project will indirectly impact land use patterns and changes in the area to a significant level. This impact upon land use and planning is considered to represent a significant, unavoidable adverse cumulative impact.

5. Mitigation Measures

A-1: For any construction staging or storage proposed on agricultural farmland, permanent impacts to soil resources can be avoided with the following measures

- A geotextile membrane shall be placed on top of native soils prior to the placement of any stockpile, fill, base materials or construction materials

- Upon completion of the project, native soil will be replaced to its previous condition in terms of soil texture, water holding capacity and soil permeability

- All excavated soils will be stockpiled during construction in a manner that protects the soils' physical, chemical and biological characteristics. Biologically active topsoil (A horizon) shall be segregated from deeper soils during construction and replaced in a similar manner upon completion of construction

- At the conclusion of construction, soils will be replaced in a manner that mimics the pre-construction characteristics of the soils, including compacting the soils to the same soil permeability, soil texture and available water holding capacity

A-2: Project construction shall be coordinated with property owners and any farm lessee/operators. Impacts to agricultural use of the property can be avoided or minimized with the following measures

- All proposed wastewater transmission and disposal systems shall be located in order to avoid damaging buried irrigation lines, wells, risers and other agricultural infrastructure based upon existing mapping or recordation.

- Early notice of any planned closures or detours on existing roadways either within the fields or along existing paved roads with regular updates about forthcoming closures or detours shall be provided to area agricultural producers and posted on local roadways so that adequate planning can be made for the movement of agricultural goods, personnel and residential commuters.

6. Residual Impacts

The proposed project's potential long-term and cumulative land use and planning impacts resulting from the elimination of a constraint upon future development of areas served by the sewer service provided by the proposed project are considered to be significant impacts which cannot be reduced to an insignificant level. These significant, unavoidable adverse impacts will require the adoption of a Statement of Overriding Considerations by the Lead Agency (Class I Impact).

Mitigation Measures A-1 and A-2 will reduce potentially significant temporary or permanent impacts to agricultural lands to an insignificant level (Class II Impact).

B. POPULATION AND HOUSING

1. Existing Conditions

According to the 2000 Census, the Nipomo urban area, which extends beyond the NCSD service boundaries, supports a total of 12,626 residents with 4,146 dwelling units. Over the last 20 years, Nipomo's population has increased by approximately 7,379 people or 140%, an annual growth rate of 7.0% (see Table 13, Historic and Projected Population Growth). From 1980 to 1990, the community of Nipomo increased by 1,862, a 35.5% increase, an annual growth rate of 3.55%. In the 1990's, Nipomo's population increased 5,517 residents, a 10-year growth rate of 77.6%. Annual population growth rate for that decade averaged 7.76%.

As noted below, the San Luis Obispo Council of Governments (SLOCOG) projects a slower growth rate for the urban areas of Nipomo (a portion of which lies outside the District boundaries), 13% between 2000 and 2010 (or 1.3% per year) and 11% between 2010 and 2020 (or 1.1% per year).

TABLE 13
HISTORIC AND PROJECTED POPULATION GROWTH

	1980	1990	2000	2010	2020
Population	5,247	7,109	12,626	14,006	17,754
10-Year Increase	---	1,862	5,517	1,380	3,748
10-Year % Increase		36%	78%	13%	11%

The Nipomo Community Services District currently serves approximately 12,150 people within its service boundaries, compared to approximately 5,700 customers in 1990. Future development within the NCSD is estimated to increase to 17,754 customers by the year 2020. Future population projections for the NCSD Sphere of Influence are estimated at 4,104 additional residents between the years 2000 and 2020.

The NCSD Urban Water Management Plan 2010 Update provides a range of population projections for the NCSD service area assuming: (a) population increases are consistent with the 2.3 percent annual limitation on residential dwelling units set by the County Growth Management Ordinance; (b) population increases are based upon June, 2009 SLOCOG projections for the Nipomo area and (c) population estimates are based upon the 2009 zoning within the NCSD service area (see Table 14, NCSD Population Projections).

TABLE 14
NCSD POPULATION PROJECTIONS

	2010	2015	2020	2025	2030
Estimated Population Served Within NCSD	10,815	11,651	12,367	13,127	14,003
Annual Growth Rate	1.8%	1.5%	1.2%	1.2%	1.3%

In October, 1990, the San Luis Obispo County Board of Supervisors adopted Title 26, Growth Management Ordinance, specifying that the maximum annual rate of growth shall not exceed a 2.3 percent increase per year in the number of residential dwelling units in the unincorporated portion of the County. The San Luis Obispo County Growth Management Ordinance has kept overall unincorporated county growth below 2.3 percent per year, but has identified concentrated growth in certain communities, including Nipomo. As indicated in Table 15, Dwelling Unit Totals (1990-2007), the average annual percentage increase in dwelling units in Nipomo from 1990 through 2007 was 6.01 percent, the highest average annual percent increase in housing of any community or planning area in the County.

TABLE 15
DWELLING UNIT TOTALS (1990-2007)

Dwelling Units 1990	Dwelling Units 2007	New Dwelling Units 1990-2007	Percentage Increase	Average Annual Percentage Increase
2,386	4,969	2,583	108.26	6.01

In January, 2000, the San Luis Obispo County Board of Supervisors adopted, via emergency ordinance, a community-specific growth rate for the Nipomo Mesa of 2.3 percent per year, limiting residential construction permits for non-exempt buildings issued each year. In August, 2005, the County lowered the growth cap in the Nipomo Planning Area to 1.8 percent based on a concern over water resources. However, once supplemental water is acquired, it is anticipated that the County will return the stated community-specific growth rate for the Nipomo Mesa to 2.3 percent. Historic growth rates have been higher than 2.3 percent. The average annual percent increase in housing from 1990 to 2004 in the Nipomo Planning Area was 4.86 percent; the growth in housing between 2004 through 2007 was 6.82 percent. Future growth in housing may be greater than 2.3 percent due to existing and proposed exemptions from the Growth Management Ordinance.

2. Thresholds of Significance

The proposed project would represent a significant population and housing impact if it displaces a large number of people, conflicts with existing County land use or zoning policies or if it induces a substantial growth or concentration of population.

3. Project Impacts

Impact B-1. *The proposed project may potentially result in the demand for new housing due to the need for labor during project construction. However, the proposed project will not directly induce population or housing growth in the area.*

The proposed wastewater treatment facilities improvements project will not directly induce population or housing growth in the area.

Construction activities associated with the proposed project are estimated to generate a maximum total of 63 employees during project construction. It is anticipated that many of these employees will reside locally thereby not generating any demand for temporary housing. Those employees residing outside the area will find temporary accommodations in hotels and motels in the area or in short-term rental housing. The general availability of temporary housing in the area is expected to accommodate these workers with no substantial displacement of people or significant affect upon the available housing inventory. As a result, the construction phase of the proposed project will not create the demand for additional new housing. Therefore, the potential for creation of demands for new housing as a result of project construction represents a less than significant impact.

Impact B-2. *The proposed project may potentially indirectly induce a substantial growth in population as a result of the reduction or elimination of a potential constraint upon development within areas served by the increased sewer service provided by the proposed project. The proposed project will not, however, directly generate any new population or housing.*

The proposed project will not directly generate any new population or housing. The proposed project does, however, involve the provision of additional sewer service thereby reducing or eliminating a potential constraint to future development within areas to be served by this additional wastewater treatment and disposal capability. This additional sewer service could be used to serve existing and new development within the South County Planning Area. The proposed project involves the provision of additional facilities necessary to expand the wastewater treatment capabilities of the existing Southland Wastewater Treatment Facilities (WWTF). The proposed project involves two basic elements related to the provision of additional facilities for both wastewater treatment and disposal. These proposed improvements will increase the treatment capacity of the Southland WWTF from its current capacity of 0.9 million gallons per day to 1.8 million gallons per day. However, Phase I of the proposed project will improve the treatment capability of the plant but will not increase its existing treatment capacity.

Phases II and III project improvements will expand the treatment capacity of the Southland WWTF and/or develop off-site disposal options. Any increase in treatment capacity will be timed to meet population growth and increased wastewater treatment demand within the District's wastewater treatment service area.

As discussed in Section V.A. Land Use and Planning, additional residential, commercial, office/professional and public facilities uses will be served by this additional sewer service (see Table 8, Net Increase in Future Wastewater Production). Provided below (see Table 16, Additional Population and Housing) is a listing of the additional number of acres of various land uses to be served by this additional service capability and an estimate of the additional number of dwelling units and population to be served by the proposed project. As indicated therein, the proposed wastewater treatment facilities improvements project is estimated to serve a maximum ("worst case") total of 2,457 dwelling units on 977 acres. Based upon a population generation factor of 2.74 persons per dwelling unit, this additional development would generate an additional 6,732 residents.

TABLE 16
ADDITIONAL POPULATION AND HOUSING

Land Use	No. of Acres	No. of Dwelling Units	Population[(1)]
Residential Suburban	316	316	866
Residential Single Family	621	621	1701
Residential Multi-Family	40	1,520	4,165
TOTAL	**977**	**2,457**	**6,732**

(1) 2.74 persons per dwelling unit

The proposed project could represent a reduction or elimination of a potential constraint upon future development within areas to be served by this additional sewer service. However, any increase in residential density beyond that allowed by the South County Area Plan and the resultant increase in population and housing will first require a General Plan Amendment and zone changes as well as other subsequent approvals by the County of San Luis Obispo such as a Specific Plan, conditional use permit or tract map. These future discretionary approvals will require preparation and certification of additional environmental documentation (CEQA) to address the potential population and housing impacts of these future approvals. While the Nipomo Community Services District may provide the County with input regarding land use decisions, it does not have any authority over land use entitlements. Development projects within the boundaries of the Nipomo Community Services District or its Sphere of Influence are approved by the County contingent upon receiving wastewater treatment and disposal services from a community services district such as the NCSD.

As previously discussed, the Nipomo Community Services District is a California Community Services District organized pursuant to Government Code Sections 61000 et. seq. The NCSD's service area overlies the southern portion of the Nipomo area within the unincorporated portion of San Luis Obispo County. Pursuant to the Government Code, the NCSD provides wastewater treatment and disposal services to its residents, similar to a municipal sanitation district. The Nipomo Community Services District's authority does not include legislative or executive powers over zoning or land use. (Further details concerning the legislative authority of the Nipomo Community Services District can be found in Section V.A. Land Use and Planning).

Without any mitigation measures available to eliminate this potential increase in population and housing, the potential long-term population and housing impacts associated with elimination of the constraint of available wastewater treatment and disposal capability is considered to be a significant adverse impact which cannot be reduced to an insignificant level.

4. Cumulative Impacts

The proposed project may result in the reduction or elimination of a potential constraint upon the development of other cumulative projects in the area (see Section IV.B. Cumulative Projects). As such, the proposed project will represent a potential contributor to increased population and housing as a result of the development of more urbanized uses in the areas served by the additional sewer service capability provided by the proposed project. As discussed above, the proposed project will indirectly impact population and housing in the area to a significant level. This cumulative impact upon population and housing is considered to represent a significant, unavoidable adverse cumulative impact.

5. Mitigation Measures

No mitigation measures are proposed.

6. Residual Impacts

The proposed project's potential long-term and cumulative population and housing impacts resulting from the elimination of a constraint upon future development of areas served by the additional sewer service provided by the proposed project are considered to be significant impacts which cannot be reduced to an insignificant level. These significant, unavoidable adverse impacts will require the adoption of a Statement of Overriding Considerations by the Lead Agency (Class I Impact).

Potential impacts related to increased housing demand associated with project construction activities are considered to be less than significant (Class III Impact).

C. WATER/WASTEWATER

The following analysis of water/wastewater is based upon the "2010 Urban Water Management Plan" prepared by Water Systems Consulting, Inc. dated May 19, 2011, as well as the "Nipomo Community Services District, Southland Wastewater Treatment Facility Master Plan" dated January, 2009, the "Nipomo Community Services District Southland Wastewater Treatment Facility Master Plan Amendment" dated August 6, 2010 and the "Nipomo Community Services District, Preliminary Screening Evaluation of Southland Wastewater Treatment Facility Disposal Alternatives" dated January, 2009, both of which were prepared by AECOM. These documents are included in their entirety in Technical Appendix B of this document.

In addition, this analysis is also based upon the following hydrogeologic studies: "Hydrologic Characterization, Southland Wastewater Treatment Facility, Nipomo, California" dated July 17, 2007; "Task 4 – Technical Memorandum, Nipomo Creek Water Quality Sampling Program, Phase 2 – Hydrogeologic Investigation of the Southland WWTF" dated December 20, 2007; "Task 1 – Technical Memorandum (Revised), Feasibility Level Exploration Program for New Percolation Pond Sites, Phase 2 – Hydrogeologic Investigation of the Southland WWTF" dated February 21, 2008; "Task 2 – Technical Memorandum (Revised), Assessment of Potential for Extracting Discharge Water From Beneath the Southland Wastewater Treatment Facility, Phase 2 – Hydrogeologic Investigation of the Southland WWTF" dated February 21, 2008; "Supplemental Groundwater Modeling Analysis" dated June 30, 2008; "Hydrogeologic and Geotechnical Assessment of APN 090-311-001, Nipomo, California" dated July, 2008; "Hydrogeologic Assessment, Kaminaka Property, Nipomo, California" dated June 8, 2009; "Final Report, Hydrogeologic Assessment of the Pasquini Property, Nipomo, California" dated July, 2010 and "Supplemental Groundwater Modeling for the Hydrogeologic Assessment of the Pasquini Property, Nipomo, California" dated September 7, 2010, all of which were prepared by Fugro West, Inc. These documents are included in their entirety in Technical Appendix C of this document.

1. Existing Conditions

- ***Regional Hydrogeology***

The project area is located within the Nipomo Mesa which forms a transition area between the Coast Ranges to the northeast and the Transverse Ranges to the south. The groundwater basin beneath the Mesa is filled with up to 15,000 feet of marine and non-marine sediments overlying sedimentary rocks. The sediments immediately underlying the Nipomo Mesa typically consist of dune sand deposits. These deposits form a triangular area approximately four miles wide at the coastline and extends inland approximately twelve miles to immediately east of Highway 101. These wind-blown sediments have been stabilized by vegetation and are present over most of the Nipomo Mesa. These dune deposits range in thickness between 150 and 250 feet and are highly

permeable which significantly reduces runoff. Groundwater production from these sediments is, according to the hydrogeologist, of relatively minor significance.

- ***Groundwater***

The older sand dune deposits of the Nipomo Mesa contain limited amounts of groundwater with the primary (or deep) aquifer underlying the Paso Robles Formation. The clay layers within the older sand dune deposits can divert laterally some of the shallow groundwater within portions of the Nipomo Mesa creating such features as Black Lake and little Oso Flaco Lake. These perched zones of saturation are interlayered throughout the dune sand deposits. Vertical movement of groundwater or applied water from percolation ponds is restricted in these areas by these discontinuous layers of lower permeability materials or aquitards which create these perched water layers. These localized zones of perched water within the older dune sands are not present continuously throughout the mesa. The western portion of the Nipomo Mesa is generally thought to comprise a single, unconfined aquifer. The vertical restriction of flows can form a series of shallow aquifers. As such, these perched water layers are considered to represent a minor source of groundwater to existing wells.

Groundwater levels within the shallow dune sand deposits exhibit a high degree of variability due to the perched and localized nature of the aquifers, the extent of which are highly dependent upon the thickness and lateral extent of the aquifer. The deeper, primary aquifer underlying the Nipomo Mesa lies within the Paso Robles Formation. Its groundwater flow is westward toward the Pacific Ocean. Some pumping depressions in the deep aquifer are present which have an overriding influence upon localized groundwater flow. Groundwater flow under the Nipomo Mesa is also affected by the presence of faults. The Santa Maria River Fault, located to the west of the project area and the Wilmer Avenue Fault to the east can act as a barrier or partial barrier to groundwater flows and result in discontinuous groundwater levels.

- ***Water Quality***

Water quality samples from the primary (deep) aquifer were obtained from two existing wells in 2009. Review of water samples from the private Kaminaka well, located approximately three miles northwest of the Southland WWTF and the District's Olympic well, located approximately 0.4 miles east of the Southland WWTF indicate that the deep aquifer has a calcium bicarbonate chemical character with a total dissolved solids concentration ranging from 450 to 510 milligrams per liter (mg/l). The water quality of these two wells, are similar and, therefore, considered to be a representative sample of water quality in the deep aquifer.

Water quality data for the three monitoring wells at the Southland WWTF indicate that groundwater quality in the shallow aquifer at this location has been affected by the discharge of effluent from the treatment facility, particularly with respect to total dissolved solids, chloride, sodium and boron. Based upon this data, the water quality of

the shallow aquifer underlying the Southland WWTF, according to the hydrogeologist, is highly similar to that of effluent from the WWTF.

Water quality samples were also taken from soil borings performed at the Pasquini Property, located approximately 0.85 miles southwest of the Southland WWTF and near the southern end of the Nipomo Mesa. These samples indicate that the underlying groundwater within the shallow aquifer at this location is of calcium sulfate to calcium bicarbonate in character with a total dissolved solids concentration of 660 mg/l.

- ***Wastewater Treatment***

The Nipomo Community Services District owns and operates the Southland Wastewater Treatment Facility (WWTF). This facility treats a combination of domestic and commercial wastewater from the community of Nipomo (excluding the Blacklake development which has an independent treatment system) utilizing four aeration ponds and eight on-site percolation basins. It currently has an average annual flow of 571,000 gallons per day (gpd). Average annual flow is the flow rate averaged over the course of one year and is considered to represent the base flow for the WWTF. The existing wastewater treatment facility also has an average wet weather flow (average daily flows in wet weather months) of 570,000 gpd and a maximum month flow (average daily flow during the maximum month of the year) of 613,000 gpd. The Southland WWTF has a permitted capacity of 900,000 gpd which is based on the maximum month flow. The existing wastewater treatment facility also has a peak daily flow rate of 903,000 gpd and a peak hourly rate (as extended over an entire day) of 1,650,000 gpd. This latter value provides the basis for the determination of maximum existing flow conditions and the calculation of peaking factors used to project future flow conditions. These existing flow rates are based upon the collection and analysis of two years of historical flow data (September, 2007 through August, 2009).

The NCSD operates two wastewater treatment facilities. The Blacklake Wastewater Treatment Plant collects and treats water from the Blacklake water system. The Southland WWTF collects and treats water from the remainder of the District and some properties outside of the NCSD boundary. Table 17, Wastewater Collection and Recycling shows the amount of wastewater collected from both facilities and the amount that is recycled both currently (from 2005) and in the future (to 2030). A portion of the Nipomo community utilizes septic systems. The Blacklake system treats water through secondary treatment and recycles the water in the Blacklake golf course water hazards. From the water hazards, water is extracted as necessary to irrigate the 27-hole golf course. The Southland WWTF provides secondary treatment utilizing the aeration ponds and percolation basins noted above. The treated effluent that percolates into the ground is intended to recharge the groundwater basin.

TABLE 17
WASTEWATER COLLECTION AND RECYCLING

Wastewater Collection and Treatment System	2005	2010	2015	2020	2025	2030
Southland Wastewater Treatment Facility Average Annual Flow (afy)	661	818	1,086	1,344	1,613	1,870
Blacklake (afy)	71	71	71	71	71	71
Quantity that meets recycled water standard (afy)	71	71	71	71	71	71

On February 7, 2006, the District received a Notice of Violation from the Regional Water Quality Control Board (RWQCB) for several effluent water quality violations reported during 2005 related to the treatment capability of the Southland WWTF. In response to this notice, the District prepared an Action Plan (dated May, 2006), a Technical Memorandum (dated July, 2006) and a Draft Wastewater Treatment Facility Master Plan (revised February 19, 2007). These research efforts were intended to evaluate existing and future wastewater treatment demands of the Southland WWTF, identify required improvements to meet these demands and develop a capital improvements program to assist the District in planning and financing these facilities. The Draft Wastewater Treatment Master Plan addressed plans to upgrade the plant from 0.9 to 1.8 million gallons per day (MGD) on a maximum month basis. The Master Plan also recommended installing new influent screens, grit removal equipment, an extended aeration treatment system and clarification equipment in order to improve effluent quality and provide capacity for future demands.

During the planning for the wastewater treatment facility expansion, the District reviewed available groundwater records and determined that a perched mound of treated effluent was beneath the existing treated effluent percolation ponds at the Southland WWTF. An aquitard (i.e. groundwater barrier) located 60 to 140 feet below the ground surface was preventing the mound of treated effluent from percolating down to the deeper aquifer. Recently-completed hydrogeologic investigations (July, 2007 and June, 2008) indicate that the treated effluent mound under the disposal basins is approximately 35-feet below the surface at an average plant effluent discharge rate of 0.57 million gallons per day (MGD). The District has developed a model for predicting percolation at the facility. The model is being updated to include additional on-site percolation basins. Salinity measurements in Nipomo Creek and groundwater modeling studies indicate that treated effluent is partially draining to the northeast, toward Nipomo Creek. A portion of the treated effluent disposed of at Southland WWTF currently migrates underground approximately 1,000 to 2,000 feet prior to reaching Nipomo Creek. This subsurface migration provides additional filtration of this treated effluent. The District's model estimates up to 35% of the treated effluent disposed at the Southland Facility migrates east to Nipomo Creek while the remainder migrates southwest. Eventually, all treated effluent which does not evaporate or get consumed by plants, replenishes the regional groundwater basin (Santa Maria Groundwater Basin).

The Nipomo Creek is currently listed as an impaired water body in the Central Coast Regional Water Quality Control Board (RWQCB) Basin Plan. However, this listing is due to upstream factors which are beyond the control of the District. The District has been working with the RWQCB staff during their investigation of other on-site wastewater treatment approaches and off-site disposal alternatives. Guidance from the Regional Board regarding discharge requirements for the Southland Wastewater Treatment Facility indicates that alternative disposal or reuse options will need to be investigated.

In response, the District has prepared several hydrogeologic studies in order to evaluate the feasibility of a variety of treated effluent disposal methods that would be required with an expansion of the existing wastewater treatment plant facilities.

These planning and design efforts have resulted in the completion of the Southland Wastewater Treatment Facility Master Plan dated June 3, 2010 which addressed required wastewater treatment facility improvements and the Preliminary Screening Evaluation of Southland Wastewater Treatment Disposal Alternatives dated January, 2009 which analyzed a total of ten disposal locations and reuse sites, several of which could accommodate multiple disposal methods (i.e. percolation basins, subsurface systems, etc.). The District may elect to implement any combination of these reuse and disposal facilities.

Information in these studies provide the basis for the proposed project which is the subject of this EIR.

The Department of Water Resources' (DWR) Coastal Aqueduct Pipeline (CAPL), part of the State Water Project, runs under the Southland Wastewater Treatment Facility. This 42 inch water transmission main is located approximately 16 feet underground as it traverses under the Southland WWTF. The Central Coast Water Authority (CCWA) is the operator of the project. This portion of the State Water Project pipeline system extends as far south as Lake Cachuma in Santa Barbara County. The State Water Project also maintains a fiber optic communications cable within the waterline easement.

2. Thresholds of Significance

Water or wastewater-related impacts would be considered significant if the proposed project resulted in:

- Wastewater treatment and disposal facilities that are not capable of meeting existing or future treatment demands.
- An increase in the treated effluent mound that exists beneath the Southland Wastewater Treatment Facility.
- A substantial depletion of available groundwater supplies.

- A substantial degradation of groundwater quality or a violation of water quality standards.
- Degradation of surface water quality during project construction as a result of construction-related spills or short-term landform alteration.

3. Project Impacts

Impact C-1. The proposed project may potentially result in the creation of wastewater treatment or disposal facilities that are not capable of meeting future treatment demands. However, proposed improvements to the Southland WWTF will increase the treatment capabilities of the plant through reduced BOD, TSS and total Nitrogen to acceptable levels as well as an increase in the capacity of the plant to a maximum flow of 1.8 million gallons per day from its current capacity of 0.9 million gallons per day. The proposed project will also provide additional areas devoted to the on and off-site disposal of treated effluent from the Southland WWTF.

Proposed improvements to the Southland WWTF will increase the treatment capacity to a maximum flow of 1.8 million gallons per day from its current capacity of 0.9 million gallons per day. Improvements to the wastewater treatment facility would be accomplished in three phases. Phase I improvements will be designed to improve treatment but not expand the current 0.9 million gallons per day (mgd) capacity. These improvements will reduce Biological Oxygen Demand (BOD), Total Suspended Solids (TSS) and total Nitrogen to acceptable levels. Phase II improvements will expand plant capacity to 1.28 mgd with Phase III improvements resulting in an increase to the plant's ultimate capacity of 1.8 mgd. Phase I of the proposed project will improve the treatment capability of the plant but will not increase its existing treatment capacity. Phases II and III improvements will expand the treatment capacity of the Southland WWTF and/or develop off-site disposal options. Any increase in treatment capacity will be timed to meet growth within the District's Southland WWTF wastewater treatment service area. This increased treatment capacity is intended to serve both the existing and future wastewater treatment demands generated within the Southland WWTF service area of Nipomo Community Services District. Future capacity requirements are based on buildout flow rate estimates up through the year 2030. Buildout within the WWTF service area is based upon the Land Use and Circulation Elements of the San Luis Obispo County General Plan (revised June 23, 2006). As such, the proposed project will result in a doubling of the treatment capacity of the Southland WWTF.

The proposed project may also provide additional areas devoted to the off-site disposal of treated effluent from the Southland WWTF. These expanded treated effluent disposal facilities involve two elements: the potential provision of two additional percolation ponds at the existing Southland WWTF and construction of one or multiple re-use or percolation facilities. The three disposal options involve the provision of percolation facilities at the 40 acre Kaminaka Property, re-use of treated effluent for irrigation of areas south of the existing Southland WWTF or re-use of treated effluent for irrigation at

the Blacklake Golf Course, Nipomo Community Park and possibly the Kaminaka Property. These additional treated effluent disposal facilities are intended to provide the additional disposal capacity at the Southland WWTF. This additional disposal capacity will occur at these additional treated effluent disposal facilities, the provision of which will be timed to meet growth within the District's wastewater service area.

Given this additional and improved wastewater treatment and treated effluent disposal capacity, the proposed project will provide a beneficial impact as related to future wastewater treatment and disposal capacity of the Southland WWTF.

Impact C-2. *The proposed project may potentially result in an increase in the treated effluent mound that is located beneath the Southland WWTF. However, the proposed project will provide additional on-site percolation capability in order to properly manage the treated effluent mound beneath the wastewater treatment facility.*

Recently-completed hydrogeologic investigations (July, 2007 and June, 2008) indicate that the treated effluent mound under the disposal basins is approximately 35-feet below the surface at an average plant effluent discharge rate of 0.57 million gallons per day (MGD). The District has developed a model for predicting percolation at the facility. The model is being updated to include two additional on-site percolation basins which are currently part of the proposed project. These proposed percolation basins will provide additional on-site percolation capability in order to properly manage the treated effluent mound beneath the wastewater treatment facility. Given the future plans to expand the WWTF (Phases II and III), additional study is required to more precisely determine the maximum amount of treated effluent that can be percolated into the soil at the Southland WWTF site. The proposed Phase I project improvements will upgrade the treatment capability of the WWTF but will not change the treatment facility's capacity. Phases II and III will expand treatment facility capacity and may develop off-site disposal options. As such, the determination of on-site treated effluent percolation limits at the Southland WWTF will not be an issue until Phase II of project construction. At that point, additional disposal capacity and disposal methods at the WWTF will be determined. The Nipomo Community Services District recognizes the importance of managing treated effluent disposal. The District has been working with the RWQCB staff during their investigation of on-site wastewater treatment approaches and off-site disposal alternatives.

The proposed project will provide additional on-site percolation capability in order to properly manage the treated effluent mound beneath the wastewater treatment facility, thereby resulting in a beneficial impact.

Impact C-3. *The proposed project may potentially result in a depletion of available groundwater supplies. However, the proposed method of treated effluent disposal does not require any dilution of treated effluent utilizing potable water or any other withdrawal of existing groundwater supplies in order to assist in effluent disposal. The proposed project will only augment existing and future groundwater supplies.*

All three of the proposed treated effluent disposal options involve the percolation of treated effluent thereby providing an additional source of groundwater supplies for the Nipomo Mesa Management Area groundwater table. This method of treated effluent disposal does not require any dilution of treated effluent utilizing potable water or any other withdrawal of groundwater in order to assist in effluent disposal. All future wastewater treatment will occur at the Southland WWTF. Proposed wastewater treatment will not involve any additional underground percolation and filtration followed by extraction of filtered effluent. This latter method could deplete existing and future groundwater supplies. Since the proposed project will augment existing and future groundwater supplies, the proposed project will provide a beneficial impact as related to the preservation of available groundwater supplies.

Impact C-4. *The proposed project may potentially result in a degradation of groundwater quality or violation of water quality standards. However, treated effluent from the Southland WWTF and the treated effluent mound beneath the plant do not currently impact surface water quality in Nipomo Creek and will not degrade water quality in Nipomo Creek in the future. The proposed project will provide enhanced wastewater treatment technology and improved off-site treated effluent disposal. The utilization of a Biolac wave oxidation will improve the water quality of treated effluent generated by the wastewater treatment facility. The provision of concrete-lined sludge drying beds will further protect groundwater resources.*

A portion of the treated effluent disposed of at Southland WWTF currently migrates underground approximately 1,000 to 2,000 feet prior to reaching Nipomo Creek. This subsurface migration provides additional filtration of this treated effluent. The District's model estimates up to 35% of the treated effluent disposed at the Southland Facility migrates east to Nipomo Creek while the remainder migrates southwest. Eventually, all treated effluent which does not evaporate or get consumed by plants, replenishes the regional groundwater basin (Santa Maria Groundwater Basin). As previously noted recently completed hydrogeologic investigations indicate that the treated effluent mound under the disposal basins is approximately 35-feet below the surface at an average plant effluent discharge rate of 0.57 million gallons per day (MGD). The District has developed a model for predicting percolation at the facility. The model is being updated to include two additional on-site percolation basins which are currently part of the proposed project. These proposed percolation basins will provide additional on-site percolation capability. As a result, this limitation may be increased at a future date due to the recent availability of additional field data and the possible addition of nitrate treatment at the Southland WWTF. Nipomo Creek is currently listed as an impaired water body in the Regional Water Quality Control Board (RWQCB) Basin Plan. However, this listing is due to upstream factors which are beyond the control of the District. The proposed project improvements at the Southland WWTF will provide enhanced wastewater treatment technology which will reduce the Biological Oxygen Demand (BOD) and Total Suspended Solids (TSS) levels within future treated effluent. Although the current operations of the WWTF do not consistently meet treated effluent limits for these two elements, they are readily filtered out during underground

percolation. As such, treated effluent from the WWTF and the treated effluent mound beneath the plant do not currently impact surface water quality at Nipomo Creek and will not degrade water quality in Nipomo Creek in the future. No additional water quality impacts upon Nipomo Creek are anticipated.

The proposed project will provide enhanced wastewater treatment technology and improved treated effluent disposal. The utilization of a Biolac wave oxidation will significantly improve the water quality of treated effluent and the treatment capability of the Southland WWTF. This technology will reduce Biological Oxygen Demand (BOD), Total Suspended Solids (TSS) and total Nitrogen to acceptable levels. The provision of concrete-lined sludge drying beds are intended to further protect groundwater resources. In addition, surface or subsurface percolation of treated effluent as proposed at all of the disposal options will allow for natural percolation of treated effluent through the geological surface or vadose zone which allows for increased biological treatment and filtration. This approach results in enhanced quality of treated effluent which will be utilized to augment existing and future groundwater supplies.

Impact C-5. *The proposed project could result in the degradation of surface water quality as the result of construction-related spills or short-term landform alteration. . These impacts are considered to be potentially significant, but mitigable.*

Concrete work and use of fuels and lubricants associated with the construction equipment could affect water quality in the event that an accidental spill occurred during construction and was washed into nearby drainages. Under the authority of the Clean Water Act, the Federal Environmental Protection Agency created the National Pollutant Discharge Elimination System (NPDES) to control the amount and concentration of pollutants in urban stormwater runoff which ultimately drain into the ocean, coastal wetlands or other surface waters. These regulations require that discharges of stormwater from construction activity of five acres or more be regulated thereby requiring a NPDES permit. These potentially significant impacts can be mitigated with the development of a Stormwater Pollution Prevention Plan which requires provision of control measures at points of drainage discharge (see "Mitigation Measures.) Implementation of these measures will result in potentially significant, but mitigable impacts.

The proposed wastewater treatment and disposal facilities will also result in short-term landform alteration during project construction which could potentially alter the composition of surface runoff. Project construction activities may temporarily alter the composition of surface runoff through the grading of ground surfaces. This runoff could, without proper mitigation, contribute to the incremental degradation of off-site water quality. Erosion of graded areas and discharge of sediment to off-site areas will occur if exposed soils are not stabilized, or if adequate detention or erosion control measures are not implemented. These potentially significant impacts can be mitigated through the use of Best Management Practices, erosion control devices and other methods for stabilizing disturbed soils which will result in potentially significant but mitigable impacts.

Impact C-6. *The proposed project could directly impact the Coastal Aqueduct Pipeline and the existing fiber optic communications cable. These impacts are considered to be potentially significant, but mitigable.*

The Department of Water Resources' (DWR) Coastal Aqueduct Pipeline, part of the State Water Project, runs under the Southland Wastewater Treatment Facility. This 42 inch water transmission main is located approximately 16 feet underground as it traverses under the Southland WWTF. The Central Coast Water Authority (CCWA) is the operator of the project. This portion of the State Water Project pipeline system extends as far south as Lake Cachuma in Santa Barbara County. The State Water Project also maintains a fiber optic communications cable within the waterline easement which is located approximately 18 feet underground.

Project construction activities may potentially sever or impair these existing underground facilities. The potential for this occurrence is reduced given the depth of these underground lines. These potentially significant impacts can be mitigated through provision of a clear delineation of the extent of the State Department of Water Resources right-of-way and securing the required approvals from the DWR and the CCWA. These actions will result in potentially significant but mitigable impacts.

4. Cumulative Impacts

The proposed project will not directly cause a change in the San Luis Obispo County land use designation or zoning or an increase in the intensity of currently-designated land uses. The proposed project involves the provision of additional sewer service thereby reducing or eliminating a potential constraint to future development within areas to be served by this additional service capability. This additional sewer service will be used to serve existing and new development within the South County Planning Area. The proposed project involves the provision of additional facilities necessary to expand the wastewater treatment capabilities of the existing Southland Wastewater Treatment Facilities (WWTF). The proposed project involves two basic elements related to the provision of additional facilities for both wastewater treatment and disposal. These proposed improvements will increase the treatment capacity of the Southland WWTF from its current capacity of 0.9 million gallons per day to 1.8 million gallons per day and will provide additional areas devoted to the off-site disposal of treated-effluent from the Southland WWTF.

Within the cumulative development scenario, cumulative projects in the area (see Section IV.B. Cumulative Projects) would generate additional demands for wastewater treatment and disposal. However, since the proposed project will provide additional wastewater treatment and treated effluent disposal capacity to serve this new development, the proposed project will provide a beneficial impact as related to future cumulative wastewater treatment and disposal capacity of the Southland WWTF.

Several of the proposed treated effluent disposal options involve the percolation of treated effluent thereby providing an additional source of groundwater supplies for the Nipomo Mesa Management Area groundwater table. This method of treated effluent disposal does not require any dilution of treated effluent utilizing potable water or any other withdrawal of groundwater in order to assist in effluent disposal. Since the proposed project will only augment existing and future groundwater supplies, the proposed project will provide a beneficial cumulative impact as related to the preservation of available groundwater supplies.

The proposed project will also provide enhanced wastewater treatment technology and improved off-site treated effluent disposal. The utilization of a Biolac wave oxidation will improve the water quality of treated effluent generated by the wastewater treatment facility. In addition, surface or subsurface percolation of treated effluent as proposed at all of the disposal options will allow for natural percolation of treated effluent through the geological surface or vadose zone which allows for increased biological treatment and filtration. This approach results in enhanced quality of treated effluent which will be utilized to augment existing and future groundwater supplies, thereby resulting in a beneficial impact upon groundwater quality.

Provision of additional wastewater treatment and disposal capacity supplies to the Nipomo area as a result of the proposed project is considered to represent beneficial cumulative impacts to this area as related to future wastewater treatment and disposal capacity at the Southland WWTF, percolation of available groundwater supplies and the maintenance or replenishment of groundwater quality.

5. Mitigation Measures

The following measures address Impact C-5, potential violation of water quality standards as a result of a spill of petroleum products or other contaminants during construction activities or short-term landform alteration.

C-1: The Nipomo Community Services District shall develop a Stormwater Pollution Prevention Plan (SWPPP) that will include Best Management Practices (BMPs) to prevent the discharge of construction materials, contaminants, washings, concrete, fuels, and oils. The SWPPP will be available on the construction site pursuant to State regulations. BMPs should include the following measures:

- Properly maintain (off-site) all construction vehicles and equipment that enter a construction area in order to prevent leaks of fuel, oil, and other vehicle fluids.
- Conduct equipment and vehicle fueling off-site. If refueling is required at a construction site, it will be done within a bermed area with an impervious surface to collect spilled fluids.

- Prepare a Spill Prevention/Spill Response Plan for the site that includes training, equipment and procedures to address spills from equipment, stored fluids and other materials including disposal of spilled material and materials used for clean up of contaminated soils and materials.
- Place all stored fuel, lubricants, paints, and other construction liquids in secured and covered containers within a bermed area.
- Conduct any mixing and storage of concrete or other construction materials in contained areas.
- Insure that all equipment washing and major maintenance is prohibited at a construction site except in bermed areas.
- Remove all refuse and excess material from a construction site as soon as possible.
- Channelize storm water to avoid construction equipment and materials and to avoid the diversion of runoff into existing drainages.

C-2: In compliance with the San Luis Obispo County Land Use Ordinance, the District shall prepare an Erosion and Sedimentation Control Plan outlining measures to address both temporary (i.e. site disturbance, stockpiling and construction activities) and final (post-construction) methods for stabilizing exposed soils, minimizing the potential for erosion and sedimentation as well as maintaining off-site water quality. These measures shall include, but may not be limited to:

- The use, if necessary, of silt fencing, straw bales or sandbags in order to reduce the potential for erosion from disturbed soils and
- Implementation of other methods for stabilizing disturbed soils and minimizing soil loss from the construction site.

C-3: Any areas proposed for future project improvements containing the Coastal Aqueduct Pipeline and/or the State Water Project fiber optic communications cable shall be surveyed in order to clearly delineate the extent of the State Department of Water Resources right-of-way. No excavation or test drilling within these areas shall be conducted without prior approval of the Department of Water Resources (DWR) or the Central Coast Water Authority (CCWA). No proposed structures or grading that may limit DWR or CCWA access to the Coastal Aqueduct easement shall occur without prior DWR approval.

6. Residual Impacts

Mitigation Measures C-1 and C-2 will reduce potentially significant impacts related to the potential degradation of surface water quality due to construction-related spills or short-term landform alteration to an insignificant level (Class II Impact).

Mitigation Measure C-3 will reduce potentially significant impacts to the Coastal Aqueduct Pipeline and existing fiber optic communications cable due to project construction to an insignificant level (Class II Impact).

Potential impacts related to the management of the treated effluent mound beneath the Southland WWTF, the increased and improved wastewater treatment and disposal capacity of the Southland WWTF, preservation of available groundwater supplies, and maintenance of groundwater quality are considered to be beneficial (Class IV Impact).

D. BIOLOGICAL RESOURCES

The following analysis of biological resources is based upon the "Final Biological Resources Survey Report for the Nipomo Community Services District Southland Wastewater Treatment Facility Expansion Project" prepared by Padre Associates, Inc. dated August 2, 2010 and "Protocol-level California Red-Legged Frog Survey Report for the NCSD Wastewater Treatment Facility Expansion Project" prepared by Padre Associates, Inc. dated June, 2010. These analyses are included in their entirety in Technical Appendix D of this document.

1. Existing Conditions

- ***Vegetation***

A total of 91 vascular plant species were identified within the proposed project area based on the results of the botanical field surveys. Overall, identified plant species consisted of 43 (47 percent) native taxa and 48 (53 percent) non-native naturalized taxa. The percentage of non-native taxa is greater than for the State as a whole (17.4 percent), reflecting the relatively high level of disturbance associated with existing land uses, primarily agriculture and urban development.

The project area encompasses eight generalized habitat classifications: Non-native Grassland, Coyote Brush Series, Agricultural, Eucalyptus, Coast Live Oak Series, Ornamental, Ruderal (disturbed) and Developed habitats. The general location of these communities within the project area is depicted in Figure 10, Plant Community Map – South, Figure 11, Plant Community Map – Central and Figure 12, Plant Community Map – North. Provided below is a description of each of the plant communities occurring within the project area:

Non-native Grassland. Non-native Grassland habitat within the project area is located in areas of previous disturbance or construction activities, as well as maintenance activities such as mowing. The vegetation is comprised of non-native, perennial and annual grasses and weedy species typical of disturbed grassland areas. The dominant plant species within this habitat type is veldt grass. Also, present is rip-gut brome, red brome, foxtail fescue, hare barley, redstem filaree and telegraph weed. Within topographical depressions, additional plant species include miniature lupine, yellow bush lupine, deerweed and miniature suncup.

Coyote Brush Series. This community is dominated by coyote brush with frequent occurrences of California sagebrush. In addition, ruderal species such as black mustard and veldt grass are intermingled within the coyote brush habitat. This community is present in scattered locations on the Nipomo Mesa including the southern boundary of the Kaminaka Property.

FIGURE 10
Plant Community Map – South

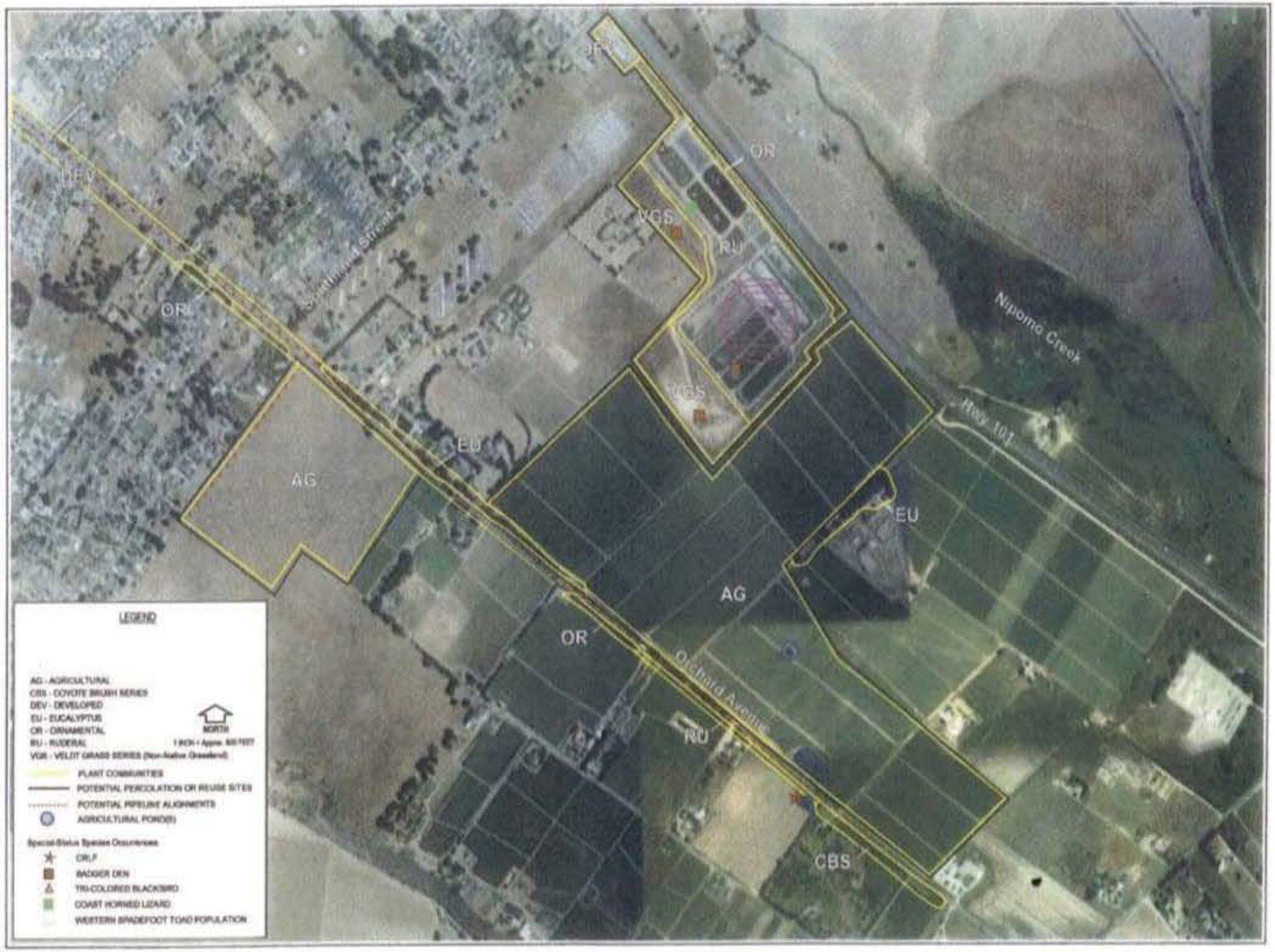


FIGURE 11
Plant Community Map – Central

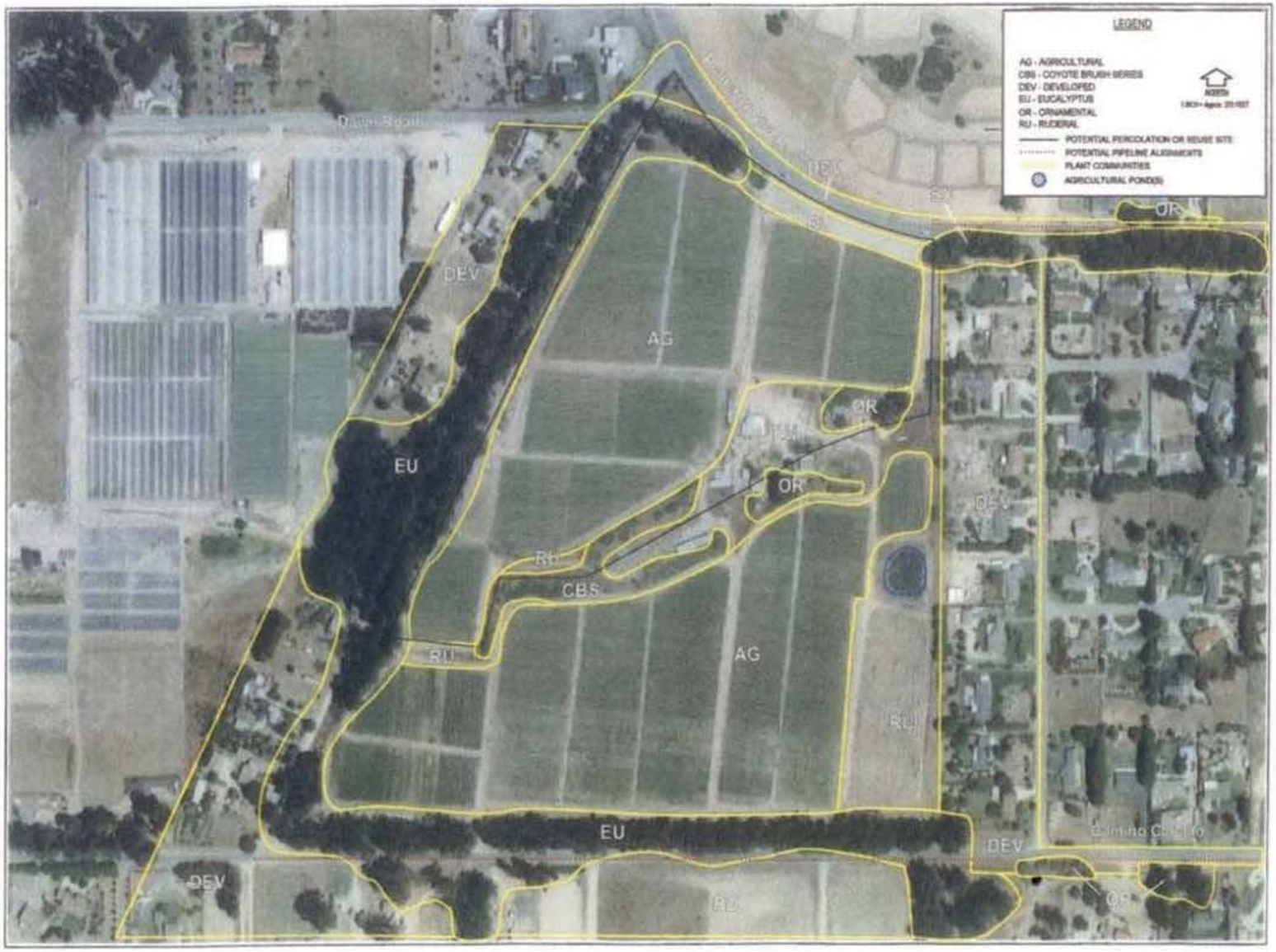
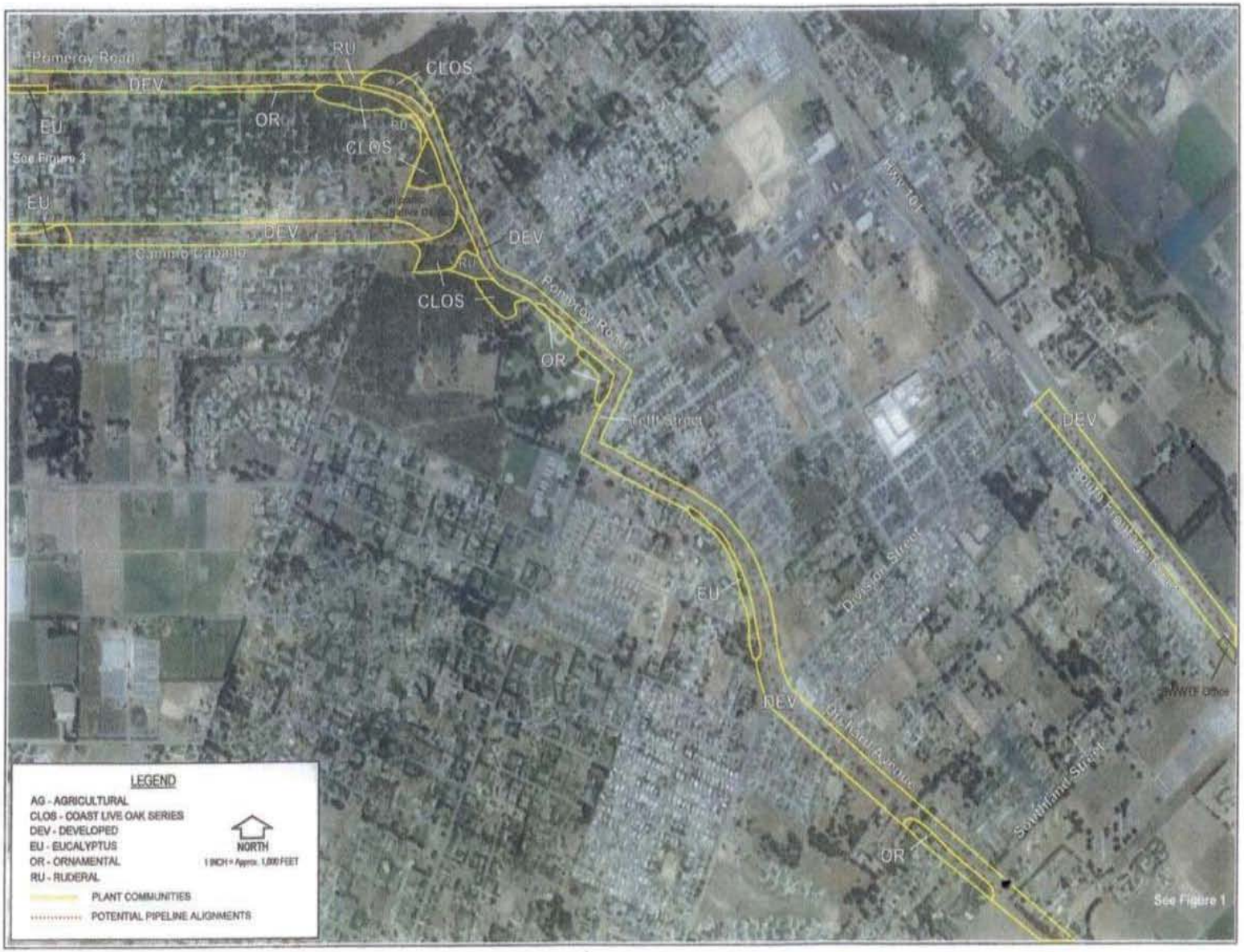


FIGURE 12
Plant Community Map – North



Agricultural. Agricultural habitat within the project area is present along and in the vicinity of Orchard Avenue and Pomeroy Road. All of the agricultural habitat areas contained strawberry crops with the exception of one fallow area within the Kaminaka Property. In addition, several agricultural detention basins and run-off ponds exist within and adjacent to the agricultural areas located on the Nipomo Mesa. The resulting wetland habitat contains many of the ruderal plant species listed below as well as California bulrush and curly dock.

Eucalyptus. This community is dominated by stands of blue gum eucalyptus. Plants of this genus were imported from Australia and originally planted in groves throughout many areas of coastal California as a potential source of lumber and for their use as windbreaks and visual barriers. This plant community provides potential overwintering habitat for the Monarch butterfly and nesting or foraging habitat for raptors.

Coast Live Oak Series. Coast live oak woodland communities are characteristic of the Nipomo Mesa and are particularly important for their ability to support a wide variety of wildlife species due to its high value as foraging habitat and protective cover. Because this habitat is frequently lost to agricultural production as well as development, oak woodland areas have been declining, a situation aggravated by the long time period required for regeneration. As a result, oak woodland is recognized by the California Department of Fish and Game as a valuable habitat that should be protected. Coast live oak habitat is considered to be a sensitive resource by the County of San Luis Obispo. This habitat type is dominated by Coast live oak and is found in areas along Pomeroy Road, Camino Caballo, other local roadways and within the Nipomo Native Garden.

Ornamental. A variety of trees and shrubs have been planted along the eastern portion of the WWTF and Orchard Road for landscaping purposes. Ornamental plantings observed within the project area include: Freemont cottonwood, myoporum, cherry, strawberry bush and juniper.

Ruderal. Ruderal habitat is a term used to describe those areas that have been disturbed by past land-use practices and/or recent ground disturbance. Within the project area, ruderal habitat also represents those areas which are routinely maintained. Within the project area, ruderal habitat occurs along roadways (i.e., Orchard Avenue, Southland Street, access roads, etc.) and disturbed areas adjacent to existing facilities and structures. This cover type consists almost entirely of disturbance-adapted weedy species including common lambsquarters, wild radish, redstem filaree, black mustard, rip-gut brome, veldt grass, summer mustard and curly dock.

Developed. Several large developed areas, including commercial, industrial and residential uses, exist within the project area. These areas contain many of the ornamental/landscape species and ruderal species listed above.

Many of the non-native plant species observed in the project area are included in the California Invasive Plant Council's list of Exotic Pest Plants of Greatest Ecological

Concern in California. Veldt grass, known to spread and degrade native habitats, is considered a highly invasive wildland pest plant. Other invasive species include blue gum, iceplant, Italian thistle, black mustard and summer mustard.

- ***Wildlife***

The principal habitat types that would be potentially impacted by proposed project activities include those plant communities previously discussed: Non-native Grassland, Coyote Brush Series, Agricultural, Ornamental, Developed, and Ruderal (disturbed) habitat. Typical wildlife species found in association with each of these cover types are discussed below:

- *Invertebrates*

Very few invertebrates were observed during field surveys of the project area. However, Eucalyptus windrows, which are present in the project area, provide potential overwintering habitat for monarch butterfly; however, no monarch butterflies were observed during field surveys.

- *Fish*

During the time of the field surveys (May, 2009), the existing WWTF aeration basins and several of the percolation basins were in use and contained water. Additionally, several of the agricultural basins contained water. However, no fish species were observed during the field surveys.

- *Amphibians and Reptiles*

No amphibians were observed during the field surveys (May, 2009). However, due to the presence of potential habitat for the Federally threatened California red-legged frog (CRLF) within the project area, namely existing percolation basins at the Southland WWTF and other agricultural ponds in the area, a U.S Fish and Wildlife Service (USFWS) protocol-level CRLF survey was initiated in June, 2009 in order to determine the presence or absence of the species. During these focused protocol field surveys, no CRLF's were identified within the areas proposed to contain project facilities. These field surveys further concluded that the existing infiltration basins at the Southland WWTF do not provide suitable breeding habitat for the CRLF due to the yearly scarification of the ponds beds, the removal of emergent vegetation and the short duration of the presence of water. However, CRLF may likely utilize these ponds for temporary dispersal. These surveys also noted that the CRLF is not using the small pond in the Kaminaka Property for the purposes of breeding due to high concentration of bullrush and the limited amount of open water habitat. It should be acknowledged, however, that CRLF are known to travel up to two miles between aquatic sites during the rainy season and, therefore, could be present anywhere within the project area during this period. This explains why during a February, 2009 field survey, one adult CRLF and one egg mass was identified within an

agricultural runoff pond along Orchard Avenue on agricultural lands southwest of the Southland WWTF, while no CRLF were observed during the subsequent protocol-level field surveys.

Both adult and juvenile western toad and Western spadefoot toad, the latter species being a California species of special concern, were observed within and adjacent to the existing percolation basins at the Southland WWTF during February, 2008 field surveys.

Despite previous disturbance, the grassland and ruderal habitat areas of the WWTF also provide adequate protective cover and foraging habitat for several other reptilian species. Reptile species observed during May, 2009 field surveys included the western fence lizard and coast horned lizard, the latter species being a California species of special concern. However, common reptile species expected to occur within this habitat include gopher snake, striped racer, western rattlesnake and common kingsnake. Further, the agricultural stock ponds throughout the project area may provide suitable habitat for the southwestern pond turtle.

- *Birds*

Non-native grassland, coyote brush, oak woodland and eucalyptus plant communities within the project area provide nesting and foraging habitat for a variety of smaller bird species as well as foraging habitat for raptors. Birds observed or expected to occur in association with these habitats include, but are not limited to, the California towhee, House Finch, Lesser goldfinch, Rock dove, Red-tailed hawk, Turkey vulture, Tri-colored blackbird and lark sparrow.

The existing aeration basins, percolation basins, topographic depressions, agricultural stock ponds and drainage basins throughout the project area provide foraging and nesting habitat for various bird species. Birds observed or expected to occur within this habitat include the American avocet, black tern, cliff swallow, mallard, spotted sandpiper, long-billed dowitcher, killdeer and western sandpiper. In addition, an active mallard nest (i.e., a single mallard egg) was identified within the project area during the field survey.

Birds occurring within ornamental, agricultural and ruderal/disturbed areas include the Brewer's blackbird, European starling, Anna's hummingbird and Northern mockingbird.

- *Mammals*

Mammalian species observed and/or expected to occur within the project area include the Audubon cottontail, Mule deer, California ground squirrel, Botta's pocket gopher, Black-tailed jackrabbit, Coyote, Black-tailed deer and other small rodents. In addition, several potential American badger dens were identified near Orchard Avenue.

A complete listing of the wildlife species observed during field surveys and/or expected to occur within the project area is provided in Technical Appendix D.

- ***Special Status Species***

Several species known to occur within, or in the vicinity of the project area, are accorded "special-status" designation because of their recognized rarity or vulnerability to various causes of habitat loss or population decline. Some of these receive specific protection defined in Federal or State endangered species legislation. Others have been designated as "sensitive" on the basis of adopted policies and expertise of State resource agencies or organizations with acknowledged expertise, or policies adopted by local governmental agencies such as counties, cities and special districts to meet local conservation objectives. Collectively this term refers to species possessing some level of local, State or Federal agency concern.

- Special-Status Plant Species

Special-status plant species are either listed as endangered or threatened under the Federal or California Endangered Species Acts, or rare under the California Native Plant Protection Act, or considered to be rare (but not formally listed) by resource agencies, professional organizations, and the scientific community. Based on the literature search and nine-quadrangle CNDDB query conducted for this project, 34 special-status plant species are known to occur within the region encompassing the project area. A complete list of these "Special Status" Plant Species is in included in Technical Appendix D.

Based upon the botanical surveys conducted in May, 2009, an analysis of the range and habitat preferences of these regional species was conducted to identify those special-status plant species that have the potential to occur within the project area based on existing habitat and site conditions. Based upon this analysis, it was determined that seven special-status plant species have the potential, however low, to occur within the project area: Hoover's bent-grass, San Luis mariposa lily, San Luis Obispo owl's clover, California saw-grass, Pismo clarkia, Leafy tarplant and Gambel's watercress. The following discussion presents the ecological and range information for these species:

Hoover's bent-grass. This perennial herb blooms from April to July and is typically found in chaparral, cismontane woodland and valley and foothill grassland habitats. Hoover's bent-grass is a California Native Plant Species (CNPS) List 1B.2 species (i.e., "Fairly endangered in California"). It is endemic to San Luis Obispo and Santa Barbara Counties including one occurrence within a 5-mile radius of the project area. Disturbed grassland habitat is present within the project area; however, no Hoover's bent-grass was observed during field surveys.

San Luis mariposa lily. This bulbiferous herb blooms from May to July and is typically found in chaparral, coastal scrub and valley and foothill grassland habitats. San Luis mariposa lily is a CNPS List 1B.2 species and is endemic to San Luis Obispo County. Although grassland habitat occurs within the project area, San Luis mariposa lily was not observed during field surveys.

San Luis Obispo owl's-clover. This annual herb blooms from March to May and is typically found in meadows and seeps, valley and foothill grassland and in serpentinite habitats. San Luis Obispo owl's clover is endemic to San Luis Obispo County and is listed as a CNPS List 1B.2 species. Although grassland habitat is present within the project area, this species was not observed during field surveys.

California saw-grass. California saw-grass is a CNPS List 2.2 species (i.e., "Rare or endangered in California but more common elsewhere") that typically blooms June to September. California saw-grass occurs in meadows/seeps and freshwater and alkaline marsh and swamp habitats. The nearest known occurrence is approximately four miles south of Arroyo Grande. California saw-grass has the potential to occur within aquatic habitat in the project area, however, no California saw-grass was observed during field surveys.

Pismo Clarkia. Pismo clarkia is a Federally Endangered, State Threatened, CNPS List 1B.1 species (i.e., "Seriously endangered in California") that is endemic to San Luis Obispo County. This annual herb occurs in chaparral, cismontane woodland, valley and foothill grassland habitats, often associated with sandy soils. Although sandy soil and grassland habitat occurs within the project area, Pismo clarkia was not observed during field surveys.

Leafy tarplant. Leafy tarplant is a CNPS List 1B.2 species. This species is an annual herb that occurs in valley and foothill grassland habitats. Leafy tarplant is typically associated with sandy soils and generally blooms from June to September. This species is known to occur in San Luis Obispo and Santa Barbara Counties. Although grassland habitat and sandy soils occur within the project area, no leafy tarplant was observed during field surveys.

Gambell's watercress. Gambell's watercress is a rhizomatous herb that inhabits marshes or swamps containing fresh or brackish waters that generally blooms from April to October. Gambell's watercress is a Federally Endangered, State Endangered and CNPS List 1B.1 species that occurs from Baja California to San Luis Obispo County. Gambell's watercress has the potential to occur in aquatic habitats within the project area, however, no Gambell's watercress was observed during field surveys.

No special-status plant species were observed within the project area during the May, 2009 field surveys.

- Special-Status Wildlife Species

Based on the literature search, nine-quadrangle CNDDB query and field surveys, 38 special-status wildlife species are known to occur within the region. A complete list of these species is included in Technical Appendix D.

Based upon applicable ecological and range information for those special-status wildlife species documented within the region, it was determined that 16 special status wildlife species have a likelihood of occurrence, however low, to occur within the project area based upon the presence of potentially suitable habitat.

- Invertebrates

Monarch butterfly. The overwintering habitats for the Monarch butterfly are considered to be of special concern by CDFG. This species is known to roost in winter (usually in dense concentrations) within coastal groves of eucalyptus, cypress or pine trees. Autumnal roosts are abandoned early (November or December) by individuals seeking more favorable conditions, while permanent roosts begin forming in October and persist into February. There are several known monarch butterfly roosting areas located within coastal San Luis Obispo County. The nearest known roosting site within the vicinity of the proposed project is in Preisker Park, which is located approximately one mile south of the Nipomo Mesa in Santa Maria. Preisker Park is an autumnal site, with a maximum monarch count of 27 in 1999. Several other eucalyptus windrows occur within the project area that may also provide suitable overwintering habitat. However, no monarch butterflies were observed within the project area due to the fact that these windrows are small and fragmented and much less suitable for Monarchs, as compared to Preisker Park. Therefore, it is unlikely the Monarch butterfly overwinters within the project area, but may utilize portions of the project area for temporary roosting.

- Reptiles

Coast horned lizard. The Coast horned lizard is a Federal species of concern and a California species of special concern that occurs in a variety of open habitats that provide sites for basking, sandy or sandy-loam substrates for nighttime burial and a suitable prey base. It was historically distributed throughout the Central and Coast Ranges, but now occurs at scattered, disjunct locations within this range. Coast horned lizard was observed during the May, 2009 field surveys within the ruderal habitat adjacent to the existing aeration basins at the Southland WWTF.

Southwestern pond turtle. The Southwestern pond turtle is a Federal species of special concern and a California species of special concern. It is an aquatic turtle inhabiting streams, marshes, ponds, and irrigation ditches within woodland and grassland communities. However, it requires upland sites for nesting and over-wintering. Southwestern pond turtle has the potential, however low, to occur within the agricultural run-off ponds and drainage structures within the project area.

Two-striped garter snake. The two-striped garter snake is a California species of special concern that occurs in freshwater streams and rivers bordered by riparian woodlands from the South Coastal and Transverse Ranges to the coast. This species has been recorded in the intermittently flooded marsh habitat and pools in the vicinity of the project area (i.e.,

the Santa Maria River floodplain and in marsh ponds along the Santa Maria River) and, as such, has the potential to occur in the project area.

Silvery legless lizard: The Silvery legless lizard is listed as California Species of Special Concern protected by the CDFG. This lizard is adapted for burrowing in sandy or loamy soils and through leaf litter. As such, they spend much of their time underground or beneath duff. Legless lizards may be active on the surface at night, remaining in subsurface moisture horizons during the day. The movement of this small, limbless lizard appears to be primarily determined by soil temperature and moisture gradients (Jennings and Hayes, 1994). This lizard can be found on the soil surface when the surface temperature is warm (greater than 67 degrees). Legless lizards were not observed at the Southland WWTF; however, the Project Site does provide suitable habitat, therefore the likelihood for silvery legless lizard to occur is considered moderate within undisturbed portions of the site.

- *Amphibians*

Arroyo toad. The Arroyo toad is a Federally listed endangered species and a California species of special concern. It was formerly found in rivers with near-perennial flow throughout Southern California between San Luis Obispo and San Diego counties. Populations persist in Santa Barbara, Ventura, Los Angeles, Riverside, and San Diego counties. The majority of the remaining populations in Santa Barbara and Ventura counties are located in the Los Padres National Forest; the USFWS has designated the Sisquoc and upper Santa Ynez Rivers as critical habitat for the Arroyo toad. These critical habitat locations are east and south of the project area, respectively. The nearest known occurrence of the species is within the Sisquoc River, approximately 15 miles to the east-southeast. This species is not expected to occur in the vicinity of the project area due to the lack of stream pools required for breeding.

California red-legged frog. The California red-legged frog (CRLF) is a Federally listed threatened species and a California species of special concern. It formerly ranged from Northern California south along the Pacific Coast, west of the Cascade Mountains and the Sierra Nevada, to Northern Baja California. Populations remain in the San Francisco Bay area, along the California coast, and on the western edge of the Central Valley.

The CRLF occurs in different habitats depending on their life stage and season. All stages are most likely to be encountered in and around breeding sites, which include coastal lagoons, marshes, springs, permanent and semi-permanent natural ponds, ponded and backwater portions of streams and artificial impoundments such as stock ponds, irrigation ponds and siltation ponds. This species prefers dense emergent and bank vegetation including willow, cattail and bullrush. The absence of these plant species within the project area does not exclude the possibility that the area provides red-legged frog habitat, but the presence of one or all of these plants is an important indicator that the site may provide foraging or breeding habitat.

CRLF has been observed in several locations within the project area. A U.S. Fish and Wildlife Service protocol-level survey was conducted by the field biologist in 2007 for the NCSD Waterline Intertie project in order to determine the presence or absence of this species within the project area. During the 2007 protocol-level surveys, adult CRLF were observed within the agricultural pond on the Nipomo Mesa located west of Orchard Road. In addition, one adult CRLF and one egg mass were observed during a subsequent February, 2008 survey within an agricultural pond along Orchard Avenue (see Figure 10, Plant Community Map – South).

Due to the known occurrences of CRLF within the project area, U.S. Fish and Wildlife Service protocol-level field surveys were initiated in June, 2009 in order to determine the presence or absence of this species within areas to be impacted by project facilities. During these focused protocol field surveys, no CRLF's were identified. These field surveys further concluded that the existing basins at the Southland WWTF do not provide suitable breeding habitat for the CRLF due to the yearly scarification of the pond beds, the removal of emergent vegetation and the short duration of the presence of water. However, CRLF may likely utilize these ponds for temporary dispersal. These surveys also noted that the CRLF is not using the small pond in the Kaminaka Property for the purposes of breeding due to high concentration of bulrush and the limited amount of open water habitat. Since the CRLF can travel up to two miles between aquatic sites during the rainy season, they could be present anywhere within the project area during this period which explains why a February, 2009 field survey identified one adult CRLF and one egg mass within an agricultural runoff pond along Orchard Avenue on agricultural lands southwest of the Southland WWTF while no CRLF were observed during the subsequent protocol-level field surveys.

Western spadefoot toad. Western spadefoot toad is a California species of special concern that primarily occurs in grassland habitats, although it is occasionally found in valley or foothill hardwood woodlands. Most of the year is spent in underground burrows up to 36 inches below the ground surface. Spadefoot toad emerge from underground burrows during the first rains of fall to initiate surface movements and breed in temporary pools from late winter to the end of March. Recent metamorphosed juveniles typically seek refuge in immediate vicinities of breeding ponds hiding in mud cracks and other surface objects (i.e., woody debris, etc.) days after transformation. Numerous adult and juvenile Western spadefoot toads were observed within and adjacent to the existing percolation basins at the Southland WWTF during February, 2008 field surveys. These existing percolation basins have created a favorable habitat for the survival and continued propagation of this species.

- Birds

Burrowing owl. The Burrowing owl is a California species of special concern and Federal species of special concern. The species is typically found throughout the Central Valley, in the San Francisco Bay area, at scattered locations along the coast and in portions of the desert region. The species is a year-round resident in annual and perennial grasslands or

other vegetation communities that support little to no tree or shrub cover. In California, the species utilizes ground squirrel burrows as year-round shelter and seasonal nesting habitat. However, burrowing owls also use human-made structures such as culverts, corrugated metal pipes, debris piles or openings beneath pavement as shelter and nesting habitat. No burrowing owl burrow sites were observed within the project area during the field surveys. The nearest known documented occurrence of this species is located northwest of the Santa Maria Airport. Due to the lack of field evidence and minimal available habitat, this species is not expected to occur within the project area.

Cooper's hawk. Cooper's hawk is a California species of special concern during nesting periods primarily due to the loss of its riparian nesting habitat. Preferred nesting habitat typically consists of dense stands of coast live oak, riparian or other forest habitat located near water. Cooper's hawk is an uncommon permanent resident and fairly common fall transient along the central coast. This species has been observed in the vicinity of the Santa Maria River. Suitable nesting habitat is present within the project area within Coast live oak and Eucalyptus woodlands and has the potential to occur within the project area for the purposes of foraging.

Least Bell's vireo. Least Bell's vireo is a State and Federally listed endangered species. This bird nests in the edges of riparian scrub or riparian forests. The nearest known documented occurrence of this species is the Hanson Aggregate property, adjacent to the Sisquoc River. This species has not been reported in the adjacent Nipomo Creek riparian habitats. However, it is possible that this species occasionally forages within or adjacent to the project area.

Loggerhead shrike. Loggerhead shrike is a Federal species of special concern and a California special concern species during nesting periods. The species generally occurs in a variety of open grassland, oak savannah, shrub land and other similar habitats. Because this species was observed within the project area and given the presence of suitable habitat, the Loggerhead shrike has the potential to utilize the project area for nesting and foraging purposes.

Horned lark. Horned lark is on the California Department of Fish and Game special concern species watch list and commonly occurs in grasslands and other open habitats with low, sparse vegetation. Given the presence of suitable habitat, this species has the potential to utilize the project area for nesting and foraging purposes.

Sharp-shinned hawk. The Sharp-shinned hawk is a California species of special concern during nesting periods. This species typically builds nests within woodland habitat where they forage on small birds. This species is a common winter visitor and resident along coastal ridges foraging in woodland and semi-open habitats. Although suitable habitat for this species is fragmented (isolated eucalyptus windrows), this species has the potential to occur occasionally within the project area for the purposes of foraging.

White-tailed kite. The White-tailed kite is a California fully protected species during nesting periods. The White-tailed kite typically occurs in coastal and valley lowlands, usually associated with agricultural lands and open fields. This species is considered an uncommon resident of most of San Luis Obispo County; however, this species was observed within the project area during the 2008 field surveys. Although suitable nesting habitat for White-tailed kite is not present, this species has the potential to forage within the project area.

Tricolored blackbird. The Tricolored blackbird is a California species of special concern. This species requires open water habitat areas surrounded by cattail marshland for the purposes of foraging and nesting. Tricolored blackbird was observed adjacent to the aeration basins at the Southland WWTF during the 2009 field surveys. Because this species was observed within the project area and the presence of suitable breeding habitat (i.e., temporary ponded areas with bullrush), tricolored blackbird has the potential to utilize the project area for the purposes of nesting and foraging.

- *Mammals*

American Badger. The American badger is a California species of special concern. This species typically occurs in drier open stages of most shrub, forest, and herbaceous habitats with dry, brittle soils and open, uncultivated ground. Several active badger burrows were observed at the Southland WWTF during the 2009 field surveys.

- ***Regulated Habitat***

- *Sensitive Habitats*

The California Natural Diversity Data Base has inventoried natural communities and ranked them according to their rarity and potential for loss. Based on the CNDDB query for the project area, central dune scrub, central foredune, coastal and valley freshwater marsh and southern vernal pool are considered sensitive natural communities that have been documented within the vicinity of the project area. However, based on past and recent field surveys, these habitats do not exist within the project area.

- *Critical Habitats*

In 2004, the USFWS designated critical habitat for the Santa Barbara County population of the California Tiger Salamander. Critical habitat identifies specific areas that are essential to the conservation of this species and areas that may require special management considerations or protection (i.e., aquatic and upland breeding habitats). The nearest known critical habitat for tiger salamander is Critical Habitat Unit 1 – Western Santa Maria/Orcutt. This unit is bordered by Highway 135 on the east and the City of Santa Maria to the north. The project area, however, is outside of the proposed critical habitat for the Santa Barbara County population.

- ***Wildlife Movement Corridors***

Wildlife migration corridors are generally defined as connections between habitat patches that allow for physical and genetic exchange between otherwise isolated animal populations. Migration corridors may be local such as between foraging and nesting or denning areas or they may be regional in nature. Migration corridors are not unidirectional access routes; however, reference is usually made to source and receiver areas when considering wildlife movement networks. Habitat linkages are migration corridors that contain contiguous strips of native vegetation between source and receiver areas. Habitat linkages provide cover and forage sufficient for temporary habitation by a variety of ground-dwelling animal species. Wildlife migration corridors are essential to the regional ecology of an area as they provide avenues of genetic exchange and allow animals to access alternative territories in response to fluctuating dispersal pressures. The project area does not encompass any known migration corridors, the nearest being the Santa Maria River and Nipomo Creek.

- ***Regulatory Setting***

- *Special Status Species*

The Federal Endangered Species Act (FESA), administered by the U.S. Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration – Fisheries (NOAA Fisheries), provides protection to species listed as threatened or endangered. FESA also provides protection to those species proposed to be listed under FESA or critical habitats proposed to be designated for such species. In addition to the listed species, the Federal government also maintains lists of species that are neither formally listed nor proposed, but could potentially be listed in the future. Species on this list receive "special attention" from Federal agencies during environmental review, although they are not protected otherwise under the FESA. The candidate species include taxa for which substantial information on biological vulnerability and potential threats exist and are maintained in order to support the appropriateness of proposing to list the taxa as an endangered or threatened species.

Section 9 of the FESA prohibits the "take" of any member of a listed species. Take is defined as, "…to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or to attempt to engage in any such conduct." Harass is "an intentional or negligent act or omission that creates the likelihood of injury to a listed species by annoying it to such an extent as to significantly disrupt normal behavior patterns that include, but are not limited to, breeding, feeding, or sheltering." Harm is defined as "…significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns such as breeding, feeding, or sheltering."

Projects that would result in the take of a Federally listed or proposed species are required to consult with USFWS or NOAA Fisheries. The objective of consultation is to determine whether the project would jeopardize the continued existence of a listed or proposed species and to determine what mitigation measures would be required to avoid jeopardy.

The USFWS and NOAA Fisheries are authorized to issue Incidental Take Permits (ITP) for the take of a listed species that results from, but is not the purpose of, carrying out an otherwise lawful activity conducted by the Federal agency. The ITP includes measures to minimize the take.

The USFWS also administers the Federal Migratory Bird Treaty Act (MBTA) of 1918. Under the MBTA, it is unlawful to take, possess, buy, sell, purchase or barter any listed migratory bird, including feathers or other parts of birds, nests, eggs or products, except as allowed by implementing regulations.

The California Department of Fish and Game (CDFG) administers a number of laws and programs designed to protect fish and wildlife resources. Principal among these is the California Endangered Species Act of 1984 (CESA) that regulates the listing and take of threatened and endangered species. Under the CESA, CDFG may authorize the take of an endangered and/or threatened species or candidate species by a permit or Memorandum of Understanding (MOU) for scientific, educational or management purposes.

CDFG also maintains lists of "candidate species" which are species that the CDFG has formally noticed as under review for addition to the threatened or endangered species lists. California candidate species are afforded the same level of protection as listed species. CDFG also designates "species of special concern" which are species of limited distribution, declining populations, diminishing habitat or unusual scientific, recreational or educational value. These species do not have the same legal protection as listed species, but may be added to official lists in the future. The species of special concern list is intended by CDFG to be a management tool to call attention to declining populations and focus efforts on decreasing threats to their long-term viability.

CDFG administers other State laws designed to protect wildlife and plants, including those laws stated within Fish and Game Code and the California Native Plant Protection Act of 1977. Pursuant to the California Fish and Game Code, CDFG designates species that are afforded "fully protected" status. Under this protection, designated species can only be taken or possessed with a permit.

CDFG manages the California Native Plant Protection Act of 1977 which was enacted to identify, designate and protect rare plants. In accordance with CDFG guidelines, California Native Plant Society (CNPS) 1B list plants are considered "rare" under the Act.

Special-status species found in the project area are afforded protection by San Luis Obispo County under goals and polices contained in the County of San Luis Obispo General Plan and the South County Area Plan (2002). These documents provide a framework of policies designed to protect special-status species and sensitive habitat areas.

- *Waters and Wetlands*

The Army Corps of Engineers (Corps) is responsible for the issuance of permits for the placement of dredged or fill material into waters of the United States (waters) pursuant to Section 404 of the Clean Water Act. As defined by the Corps, waters of the U.S. are those that are currently used or were used in the past or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; tributaries and impoundments to such waters; all interstate waters including interstate wetlands and territorial seas.

Wetlands are a special category of waters and are defined as: "...those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support and that under normal circumstances do support a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas."

In non-tidal waters, the extent of Corps jurisdiction is determined by the ordinary high water mark which is defined as the: "…line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris or other appropriate means that consider the characteristics of the surrounding areas."

In addition, a wetland definition has been adopted by the USFWS to include both vegetated and non-vegetated wetlands recognizing that some types of wetlands may lack vegetation (e.g., mudflats, sandbars, rocky shores and sand flats), but still provide functional habitat for fish and wildlife species.

Pursuant to Section 1602 of the California Fish and Game Code, the CDFG requires a Streambed Alteration Agreement between CDFG and any State or local governmental agency or public utility before the initiation of any construction project that will: 1) divert, obstruct or change the natural flow or the bed, channel, or bank of any river, stream or lake; 2) use materials from a streambed or 3) result in the disposal or deposition of debris, waste, or other material containing crumbled, flaked or ground pavement where it can pass into any river, stream or lake.

Unlike USFWS, the CDFG definition of wetlands only requires the presence of one wetland indicator for an area to qualify as a wetland. CDFG does not have a wetland regulatory program, but advises other state agencies on wetland issues.

The County of San Luis Obispo General Plan identifies a series of unique plant or animal habitats including the following: habitat of rare, endangered or threatened plant or animal species as classified by State and Federal agencies and the California Native Plant Society (CNPS), wetlands and marshes and sensitive natural communities as identified in the CDFG California Natural Diversity Data Base (CNDDB).

2. Thresholds of Significance

An impact to biological resources would be considered significant if the proposed project:

- Results in 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 CDFG, the USFWS or the NOAA Fisheries;
- Results in a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Coastal Commission, the CDFG, the USFWS or NOAA Fisheries;
- Results in a substantial adverse effect on Federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marshes, vernal pools, coastal habitats, etc.) through direct removal, filling, hydrological interruption or other means;
- Creates a substantial interference 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 a native wildlife nursery site;
- Conflicts with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan or any other approved local, regional or state habitat conservation plan;
- Results in a substantial reduction of habitat of a fish and wildlife species;
- Causes the population of a fish or wildlife population to drop below self-sustaining levels;
- Threatens to eliminate a plant or animal community or
- Conflicts with any local polices or ordinances protecting biological resources. For the purpose of this report, relevant goals and policies regarding sensitive resources from the San Luis Obispo County Land Use Ordinance, South County Area Plan were used to assess conflicts with local policies.

3. Project Impacts

- ***Short-Term Impacts***

Impact D-1: *Construction activities within the proposed pipeline alignments, wastewater treatment facilities improvements, disposal site options and associated facilities may potentially affect non-listed wildlife occupying adjacent habitats within existing wildlife migration corridors .However, impacts due to project construction upon non-listed wildlife species are considered short-term and less than significant. Impacts to existing wildlife movement corridors are considered to be less than significant.*

Areas containing proposed pipeline alignments, wastewater treatment facilities improvements, disposal site options and associated facilities would be disturbed by construction-related activities.

In general, construction-related disturbance (noise, dust, heavy equipment and truck traffic) may prevent local wildlife species from foraging and breeding within portions of the project area and adjacent habitats. However, these adverse effects would only affect a small portion of available habitat for a relatively short duration. Periods of intense activity would likely be limited to several months at any one project location. The level of expected disturbance and short-term effects upon common wildlife species would be similar at all three potential disposal sites. Due to the relatively small area of habitat to be affected by project construction and the short duration of overall impacts, no significant impacts upon common, non-listed wildlife species or their foraging or breeding habitats is expected. Moreover, areas of the proposed pipeline alignments located within existing residential areas would not be expected to result in significant effects to local wildlife because the new pipeline segments would be installed within previously disturbed and/or currently developed areas (i.e., within existing paved roadways, etc.).

Impacts due to project construction upon non-listed wildlife species are considered short-term and less than significant. Impacts to existing wildlife movement corridors are considered to be less than significant.

Impact D-2: *Construction activities within the proposed pipeline alignments, wastewater treatment facilities improvements, disposal site options and associated facilities could adversely affect nesting activities of protected migratory birds and raptors. . These impacts are considered to be potentially significant, but mitigable.*

Raptor and migratory bird species protected under the Migratory Bird Treaty Act and the California Fish and Game Code may nest along portions of the pipeline alignments (within oak and eucalyptus woodlands), the Southland WWTF proposed disposal sites and associated facilities. These include ground nesters (Western meadowlark and Lark sparrow), small tree/shrub nesters (Bushtit, American robin, Northern mockingbird, Loggerhead shrike, House finch and Lesser goldfinch), freshwater marsh nesters (Red-winged blackbird) and several raptors which require large trees, such as eucalyptus for

nesting purposes (Turkey vulture, Red-tailed hawk, Red-shouldered hawk, Great-horned owl and Barn owl). In addition, the existing percolation basins within the Southland WWTF provide suitable nesting habitat for a number of waterfowl (i.e., mallards) observed during May, 2009 field surveys. Short-term impacts to these species may occur due to vegetation clearing, debris removal, dust deposition and noise disturbance associated with project-related trenching, general construction activities and traffic. Specifically, vegetation removal and grading activities may significantly impact nests, nestlings or hatchlings of these protected bird species.

Special-status bird species such as the Sharp-shinned hawk also have the potential to periodically frequent the project area for the purpose of foraging and may be temporarily affected by construction activities due to the short-term loss of foraging opportunities. However, Loggerhead shrike and California horned lark could also potentially be impacted during construction through the disruption of breeding activities and/or short-term loss of foraging opportunities within areas of construction. This would be most applicable within the proposed percolation pond expansion area located along the southwestern portion of the WWTF. The Northern harrier could also be affected during the breeding season by the short-term disturbance of the open grassland areas along the southwestern portion of the WWTF. Further, the White-tailed kite and Cooper's hawk are likely to be affected by the short-term disturbance of both foraging habitat and potential nest sites, including the eucalyptus woodland windrows located along the proposed pipeline alignments and along the perimeter of the Kaminaka Property (Site #4). Lastly, the special-status Tricolored blackbird was observed within the existing aeration basin area of the WWTF during the May, 2009 surveys. As such, this species also could be affected during its breeding period by proposed improvements within the facility with emphasis on the existing percolation basin area which may provide suitable breeding habitat. Due to the relatively small area of disturbance and short-term construction period, overall impacts to foraging special-status raptors are expected to be minimal. However, potential nesting habitat for all migratory and special-status bird species with the potential to occur in the project area should be carefully surveyed prior to construction (see "Mitigation Measures").

Among the disposal site options, the level of expected disturbance and potentially significant impacts to nesting birds would be greatest with use of treated effluent at Blacklake Golf Course, Nipomo Community Park and the Kaminaka Property due to the length of the proposed pipeline alignment necessary to reach these sites and associated habitat elements (oak woodland habitats) which may support nesting raptors and migratory birds. However, it is recommended that scheduling project construction outside the nesting season or conducting pre-construction surveys be implemented (see "Mitigation Measures"). With implementation of these mitigation measures, impacts upon protected migratory birds and raptors due to project construction activities are considered potentially significant but mitigable.

Impact D-3: *Construction activities could adversely affect special-status terrestrial wildlife species potentially occurring in the project area. These impacts are considered to be potentially significant, but mitigable.*

The short-term construction activities associated with the proposed pipeline alignments, wastewater treatment facilities improvements, disposal site options and associated facilities have the potential to adversely affect terrestrial special-status wildlife species found in the project area. Specifically, the Coast horned lizard may be present within and/or adjacent to the proposed work areas within the Southland WWTF and the Coyote brush scrub habitat at the Kaminaka Property. Construction activities in the areas that may impact the Coast horned lizard at the Southland WWTF involve the proposed improvements to the existing aeration basins and construction of the additional ten acres of percolation ponds. A single, adult Coast horned lizard was observed during May, 2009 field surveys along the western perimeter of the existing Southland WWTF aeration basins. Suitable habitat for this species is also located within the Non-native grassland areas along the southwestern boundary of the WWTF as well as within the Coyote brush scrub habitat at the Kaminaka Property. Although the density of the Coast horned lizard within these suitable habitats is not known, it is likely that historical disturbance in the form of agricultural activities and residential development has resulted in a decreased population of Coast horned lizard within the region. Further, the Silvery legless lizard has the potential to be encountered during vegetation removal and subsequent ground disturbance associated with proposed improvements. While the number of impacted individual species is expected to be small, increased mortality of the species could be expected to impact the overall distribution and/or survival of the species in the region.

The American badger may also be present within or adjacent to the proposed construction areas at the Southland WWTF as well as the Coyote brush scrub habitat at the Kaminaka Property. Several active badger burrows were identified during the May, 2009 field surveys. Due to the lack of a suitable prey base and the extent of human disturbance, American badgers are not expected to occur within the agricultural areas surrounding the WWTF. While the number of impacted individual species is expected to be small, increased mortality of the species could be expected to impact the overall distribution and/or survival of the species in the region.

Among the disposal site options, the level of expected disturbance and potentially significant impacts to special-status wildlife species would be greatest with use of the Kaminaka Property due to the existing habitat elements which may support Coast horned lizard, American badger and nesting raptors.

At both of these locations, the Southland WWTF and the Kaminaka Property, it is recommended that all equipment staging and construction crew parking be established at pre-designated staging areas, exclusionary fencing be installed at construction area boundaries, a worker orientation program be conducted, nighttime lighting be shielded and dust control programs, pre-construction surveys and monitoring of all vegetation clearing be implemented (see “Mitigation Measures”). With implementation of these

mitigation measures, impacts upon special-status terrestrial wildlife species due to project construction are considered to be potentially significant, but mitigable.

Impact D-4: *Construction activities could adversely affect semi-aquatic special-status species within the existing percolation ponds at the Southland WWTF and agricultural stock ponds located within the proposed pipeline alignments. These impacts are considered to be potentially significant, but mitigable.*

The existing percolation ponds within the Southland WWTF provide suitable habitat for the special-status Western spadefoot toad. In addition, the agricultural stock ponds located within agricultural lands southwest of the WWTF provide habitat for the Federally-listed California red-legged frog (CRLF). Other semi-aquatic, special-status species such as the Southwestern pond turtle also have the potential to occur in temporarily ponded areas of the Southland WWTF and/or within the agricultural stock pond(s) in areas southwest of the WWTF.

During construction of the expanded percolation ponds within the Southland WWTF and the possible development of an effluent disposal facility on agricultural lands southwest of the WWTF, down-gradient sediment and incidental spills or leaks of oils or fluids from equipment and machinery may result in a pollutant discharge into existing percolation ponds and/or agricultural stock ponds and associated drainage channels. Such inadvertent spills and/or discharges would have the potential to result in direct impacts to special-status aquatic and semi-aquatic species or result in the degradation of existing wetland vegetation and overall water quality. Further, mobile semi-aquatic, special-status species, such as the Western spadefoot toad, California red-legged frog (CRLF) and the Southwestern pond turtle have the potential to occur within and/or adjacent to proposed pipeline segments containing suitable habitat, including the proposed pipeline alignments within the Nipomo Mesa. The CRLF is known to travel up to two miles between aquatic sites during the rainy season and therefore could be present anywhere in the project area during this period. Increased mortality of the Western spadefoot toad, the California red-legged frog and the Southwestern pond turtle would impact the overall distribution and/or survival of these species in the region.

Among the disposal site options, the level of disturbance and potentially significant impacts to semi-aquatic, special-status species would be greatest at the agricultural lands southwest of the Southland WWTF due to the existing agricultural stock ponds at this location which are known to support the CRLF.

It is recommended that site disturbance and construction activities not occur during the rainy season or during or immediately after a rain event, a worker orientation program be conducted, areas within 100 feet of the WWTF and existing agricultural stock ponds within the agricultural lands disposal site (if necessary) be subject to pre-construction surveys, an Erosion Control and Sedimentation Plan, Storm Water Pollution Prevention Plan and a Spill Contingency Plan be prepared and spill containment equipment be made available (see “Mitigation Measures”). With implementation of these mitigation

measures, impacts upon semi-aquatic special-status species due to project construction are considered to be potentially significant, but mitigable.

- ***Long-Term Impacts***

Impact D-5: *The proposed project could result in long-term impacts to the large Coast live oak and Eucalyptus trees located along the proposed pipeline alignments located on Orchard Avenue and Pomeroy Road. These trees may represent potential habitat for Monarch butterflies or nesting raptors. These impacts are considered to be potentially significant, but mitigable.*

The majority of the proposed pipeline alignments will occur in areas generally lacking significant biological resources. However, large trees located along Orchard Avenue, Pomeroy Road and Willow Road (see Figure 12, Plant Community Map – North) leading to the Blacklake Golf Course, Nipomo Community Park and the Kaminaka Property represent potential habitat for Monarch butterflies or nesting raptors, which could be impacted by proposed pipeline trenching activities. Specifically, pipelines installed within the drip line of these trees could result in direct impacts to vital root systems, which may lead to potential long-term impacts such as susceptibility to pests/diseases and/or death. Avoidance of root systems of large eucalyptus trees is recommended (see "Mitigation Measures"). With implementation of this mitigation measure, long-term impacts to Coast live oak and Eucalyptus trees are considered to be potentially significant, but mitigable impacts.

Impact D-6: *Long-term impacts associated with the potential generation of silt and sedimentation along the proposed pipeline alignments, wastewater treatment facilities improvements, disposal site options and associated facilities could result in adverse effects to adjacent habitat areas and associated special-status wildlife species. . These impacts are considered to be potentially significant, but mitigable.*

Terrestrial and semi-aquatic, special-status wildlife species potentially present within the proposed pipeline alignments, wastewater treatment facilities improvements, disposal site options and associated facilities includes the Coast horned lizard, CRLF, the Western spadefoot toad, American badger and the Southwestern pond turtle. The majority of these species (if present) would be expected to forage and possibly breed within the existing Southland WWTF percolation basins, surrounding grassland areas and the agricultural stock ponds located southwest of the WWTF. The proposed project will result in trenching and localized surface disturbance of ruderal, agricultural, and non-native grassland habitat areas throughout the project area. Potential long-term surface erosion of the recontoured areas could result in the degradation of adjacent habitat areas over time due to increased silt and sedimentation. Further, uncontrolled runoff could result in long-term silt and sedimentation impacts to adjacent drainages and secondary effects to associated aquatic habitats and residing special-status species. Implementation of an Erosion Control and Sedimentation Control Plan is recommended (see "Mitigation Measures"). With implementation of this mitigation measure, long-term impacts

associated with the potential generation of silt and sedimentation are considered to be potentially significant, but mitigable impacts.

Impact D-7: *Operation and maintenance activities of the Southland WWTF and the off-site disposal options could result in long-term adverse impacts to special-status wildlife species. These impacts are considered to be potentially significant, but mitigable.*

The proposed project will include the construction of pipelines, wastewater treatment facilities improvements, disposal site options and associated facilities. These newly-installed facilities could result in the addition of a permanent noise source as well as potential additional source of nighttime lighting to areas adjacent to the existing Southland WWTF. These facilities would also require periodic inspections and routine maintenance in order to insure proper function of these wastewater treatment and disposal facilities.

The expanded wastewater treatment facilities at the Southland WWTF will involve the construction of four additional percolation ponds within an area located immediately southwest of the existing wastewater treatment facilities. Maintenance of the existing and proposed percolation basins at this location will involve scarification once per year to restore infiltration/percolation capacity as well as periodic weed abatement of the basins and berms.

The Southland WWTF provides suitable habitat for the Western spadefoot toad, Coast horned lizard and American badger which were identified within or adjacent to the existing percolation ponds during 2009 field surveys. These percolation basins also provide suitable habitat for the Southwestern pond turtle.

Any new noise sources associated with the expanded Southland WWTF (including periodic maintenance) are expected to be negligible due to structure design coupled with the current and ongoing level of adjacent land uses within these areas (Highway 101 and agricultural activities). Any new lighting sources associated with the proposed project will occur at the existing structural facilities within the Southland WWTF which are located a sufficient distance away from the existing and proposed percolation ponds that would result in an insignificant impact upon the Western spadefoot toad or any other special-status wildlife due to increased glare.

Long-term maintenance operations of the existing and proposed percolation basins and other facility modifications or upgrades may, however, have the potential to result in impacts to existing populations of the Western spadefoot toad, Coast horned lizard and American badger possibly to below self-sustaining levels. It is recommended that a special-status species orientation program, restricting the timing of percolation basin maintenance activities or performance of surveys and relocation and temporarily halting basin maintenance until animals have vacated the immediate areas, be implemented (see "Mitigation Measures").

With implementation of these mitigation measures, impacts to special-status wildlife species at the Southland WWTF are considered to be potentially significant, but mitigable.

The proposed project includes the provision of three additional percolation ponds adjacent to the existing percolation ponds at the Southland WWTF. These additional percolation ponds will provide additional favorable habitat for the survivial and continued propagation of the Western spadefoot toad that is currently inhabiting the percolation ponds at the Southland WWTF. Given implementation of the proposed mitigation measures, the provision of additional habitat for this California species of special concern results in a beneficial impact relative to the survival of this species.

4. Mitigation Measures

The following measure addresses Impact D-2, impacts upon nesting activities of protected migratory birds and raptors.

D-1: All construction operations shall be conducted prior to, or after, the nesting season (February 15 to September 15) in order to avoid any potential impacts to nesting birds. This shall include any necessary vegetation and/or tree removals which could disrupt nesting birds. Therefore, construction activities should be conducted between September 15 and February 15 to the extent feasible.

If the above measure is not feasible, pre-construction surveys shall be conducted by a qualified biologist two weeks prior to the initiation of construction activities initiated between February 15 and September 15 in order to identify potential bird nesting sites.

- If active nest sites of common bird species protected under the Migratory Bird Treaty Act (e.g., Northern mockingbird, House finch, etc.) and Fish and Game Code Sections 3503 and 3503.5 are observed within 300 feet of construction activities, then the project shall be modified and/or delayed as necessary to avoid direct take of the identified nests, eggs and/or young.
- If active nest sites of raptors and/or species of special concern are observed within the vicinity of Southland WWTF, construction shall be avoided or terminated until the California Department of Fish and Game is contacted and an appropriate buffer zone around the nest site is established. Construction activities in the buffer zone shall be prohibited until the young have fledged the nest or the nest is abandoned.

The following measures address Impact D-3, impacts upon special status terrestrial wildlife species.

D-2: All equipment staging and construction crew parking areas shall be located within pre-designated staging areas identified on construction plans which avoid identified sensitive habitats as determined by a qualified biological monitor. This shall include pre-designation of all staging areas for construction of all pipeline improvements. Additionally, all construction access routes shall be established in previously disturbed areas and/or existing roadways.

D-3: Exclusionary fencing will be erected at the boundaries of the construction areas to avoid equipment and human intrusion into adjacent habitats with emphasis on protection of areas containing special-status species. The exact location of exclusionary fencing for each construction area shall be determined by a qualified biological monitor. The fencing shall remain in place throughout the construction phase for each individual project component.

D-4: A qualified biological monitor shall conduct a worker orientation for all construction contractors (site supervisors, equipment operators and laborers) which emphasizes the presence and identification of areas containing special-status species, their habitat requirements and applicable regulatory policies and provisions regarding their protection and measures being implemented to avoid and/or minimize impacts.

D-5: If nighttime construction activities are warranted, all equipment lighting shall be shielded away from adjacent wildlife habitat areas and the open sky in order to minimize lighting/glare impacts of wildlife while still providing safe working conditions for construction personnel.

D-6: A dust control program during the construction phase of the project shall be implemented to minimize dust impacts to adjacent vegetation communities and associated special-status species (see Section V.J. Air Quality).

D-7: A qualified biologist shall conduct a pre-activity survey to determine presence or absence of California horned lizard within the Southland WWTF and the Kaminaka Property. Surveys shall only be required during the active period of California horned lizards (generally April through September). If California horned lizards are identified adjacent to and/or within work areas, hand rakes or an equivalent method shall be utilized by the biologist in order to scarify the ground surface and encourage the horned lizards (and other wildlife) to vacate the immediate area prior to construction. Alternatively, drift fences shall be used to capture horned

lizards. As necessary, the qualified biologist shall physically relocate any California horned lizards to suitable habitat located outside the construction zone(s).

D-8: A qualified biologist shall conduct pre-construction survey(s) within one week of ground-disturbing activities to determine presence/absence of active badger dens within 100-feet of project activities at the WWTF (including 10-acre expansion area) and the Kaminaka Property. If no evidence of badger presence is detected, no further mitigation is required. The following measures shall be implemented if active badger dens are detected during pre-construction surveys:

- The entrance to the den and an area of approximately one square meter in front of entrance (i.e., den apron) shall be smoothed with a flat-head shovel or equivalent. Diatomaceous earth shall be placed on the smoothed areas. Check the next three consecutive mornings for badger tracks. If no tracks are observed, assume that the den is no longer occupied. However, to ensure no loss of badgers, hand excavate the den completely, then backfill to prevent re-occupation.
- If tracks are observed in the diatomaceous earth during any of the three mornings, progressively block the entrance, using soil and other nearby materials (woody debris, etc.) Render the entrance progressively more difficult to enter and exit over the following three days. Then, to assure no loss of badgers, hand excavate the den completely and backfill to prevent re-occupation.
- The above American badger protocols shall be implemented for dens at or near the Southland WWTF including the 10-acre percolation pond expansion area and within the Kaminaka Property. Dens identified near the equipment access routes shall be marked and carefully avoided during all construction activities. Verification of occupancy is not necessary if such dens can be avoided.

D-9: A qualified biological monitor shall be on-site during all vegetation clearing and shall periodically monitor the project area during construction activities in order to inspect protective fencing, equipment staging areas and to physically relocate or remove any special-status wildlife species entering the construction zone or identified during brush clearing and excavation (e.g., California horned lizard, Silvery legless lizard, etc.). All special-status species shall be relocated to suitable habitat located outside the construction zone by the qualified biologist. Exact procedures and protocols for relocating shall be based upon pre-project consultation with California Department of Fish and Game.

D-10: Nesting bird surveys shall be conducted between February 15 and September 15 to identify nest sites of special-status bird species including Loggerhead shrike, California horned lark, Northern harrier, Cooper's hawk, White-tailed kite and Tricolored blackbird.

The following measures address Impact D-4, impacts upon special-status semi-aquatic species.

D-11: Site disturbance and construction activities shall not occur during the rainy season (October 15 to April 15) within 300 feet of any areas containing suitable breeding habitat of the Western spadefoot toad in order to protect migrating and/or breeding of this species which typically initiates surface movements from burrows following first rains of fall. No construction activities shall occur in these areas during or immediately following a rain event or if water is ponding within these areas.

If the above measure is not feasible, pre-construction surveys for Western spadefoot toad shall be conducted by a qualified biologist within all portions of the project site containing suitable breeding habitat. This shall include an evaluation of all previously documented occupied areas and a reconnaissance-level survey of the remaining natural areas. Surveys shall be conducted when the Western spadefoot toad can be detected (i.e., during substantial rain events which have potential to result in ponding on-site [0.5-inches of rain or greater]). This shall include both night and day surveys to detect all life stages of the Western spadefoot toad.

- All Western spadefoot adults, tadpoles, and egg masses encountered shall be collected and released into pre-designated percolation pond(s) containing water within the Southland WWTF as approved by CDFG.
- The qualified biologist shall continue to monitor the relocation sites on a periodic basis throughout the breeding period (i.e., every two weeks) to document success of relocation efforts. Further, final survey and monitoring data will be provided to CDFG in a written report.

D-12: A qualified biological monitor shall conduct a worker orientation which emphasizes the presence of semi-aquatic, special-status species within the project area (e.g., western spadefoot toad, California red-legged frog, etc.), their habitat requirements, applicable regulatory policies and provisions regarding their protection and measures being implemented to avoid and/or minimize impacts.

D-13: All work areas within 100 feet of the existing Southland WWTF percolation ponds and/or existing agricultural stock ponds southwest of the WWTF shall be surveyed by a qualified biologist each day prior to the initiation of construction activities. As necessary, the qualified biologist shall physically relocate semi-aquatic, special-status species (e.g., Western

spadefoot toad, Southwestern pond turtle, etc.) and common semi-aquatic species (e.g., Western toad, Pacific chorus frog, etc.) to suitable habitat areas located outside the construction zone(s). Exact procedures and protocols for relocation of the special-status species shall be based upon pre-project consultation with the California Department of Fish and Game. In the event California red-legged frog (CRLF) is identified in a work area, all work shall cease until the CRLF has safely vacated the work area. At no time shall any CRLF be relocated and/or affected by project operations without prior approval from the U.S. Fish and Wildlife Service.

D-14: Prior to commencing construction, NCSD shall prepare the following plans and agency permit applications, and shall implement all plans prior to, during and immediately following construction activities.

- In compliance with the San Luis Obispo County Land Use Ordinance, the District shall prepare an Erosion and Sedimentation Control Plan (ESCP) outlining the measures to address both temporary (i.e., site disturbance and stock piling) and final (i.e., post-construction) methods for stabilizing soil and minimizing soil loss from the proposed project site. All applicable measures shall be included on final construction plans and adhered to throughout the project.
- All project operations shall comply with the requirements under the General Construction Storm Water General Permit, issued by the State Water Resources Control Board. Such requirements will include preparation of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP shall include provisions for the installation and maintenance of Best Management Practices to reduce the potential for erosion of disturbed soils at the project site.
- A Spill Contingency Plan (SCP) shall be prepared outlining measures to prevent the release of petroleum and hazardous materials including containment methods for emergency clean-up operations. Prevention measures shall include, but not be limited to, identification of appropriate fueling areas away from sensitive habitat areas such as swales and/or drainages, a maintenance schedule for equipment and a list of appropriate containment and spill response materials to be stored on-site. All vehicles shall be staged only in appropriately marked and protected areas and at no time shall any cleaning and/or refueling of equipment be allowed upslope and/or within the vicinity of any drainages and/or wetland habitat areas, including agricultural stock ponds. If an accidental spill of a hazardous or toxic material occurs, the Regional Water Quality Control Board (RWQCB), the California Department of Fish and Game and California Department of Toxic Substances (CDTS) shall be notified.

D-15: Spill containment equipment shall be available on-site during all construction activities. As necessary, this shall include placement of individual spill response trailers at each active work area during project operations.

The following measure addresses Impact D-5, impacts upon large Coast live oak and Eucalyptus trees located on Orchard Avenue and Pomeroy Road.

D-16: The proposed pipeline alignments shall be aligned to avoid impacting the root systems of large eucalyptus trees located on Orchard Avenue and Pomeroy Road. The precise location of these pipelines shall be reviewed by a qualified arborist to insure avoidance of or minimize impacts to the root systems of large trees throughout pipeline alignment at these locations.

The following measure addresses Impact D-6, long-term impacts associated with the generation of silt and sedimentation.

D-17: An Erosion and Sedimentation Control Plan shall be prepared which includes provision for stabilizing construction sites and pipeline alignments and monitoring. As necessary, this plan shall include the following:

- Implementation of standard Best Management Practices (e.g., hydroseeding, wattles, and earthen swales, etc.) along the recontoured sites and erosion control monitoring during subsequent rainy seasons to insure that previously disturbed areas are stabilized.
- Installation of long-term drainage devices at all construction areas including, as necessary, catchment basins, culverts with down-drains and storm flow energy dissipating devices (riprap or diffusers).

The following measures address Impact D-7, impacts associated with long-term facilities operations and maintenance activities.

D-18: A special-status species orientation program shall be provided to all WWTF facility workers (site supervisors, equipment operators and laborers) which emphasizes the presence of special-status species within the facility, identification, their habitat requirements, applicable regulatory policies and provisions regarding their protection and measures being implemented to avoid and/or minimize impacts. Permanent placards with relevant special-status species information shall be posted in all employee break areas and other facility locations as deemed necessary by NCSD

management. The orientation program shall be repeated annually for all staff and on an as needed basis for all new employees.

D-19: Percolation basin maintenance activities including scarification of pond bottoms with heavy equipment and weed abatement of pond berms shall not be conducted between January 1 and March 31 to avoid the primary breeding period for the Western spadefoot toad.

If the above measure is deemed infeasible between January 1 and March 31 due to a temporary increase in wastewater treatment demand and/or other emergency circumstances, then the following measures shall be implemented:

- All ponds proposed for maintenance shall be allowed to dry entirely with no standing water prior to scarification and/or weed abatement.
- A combined one day/night survey shall be conducted by a qualified biologist for Western spadefoot toad 24 hours prior to the proposed maintenance activity. The combined survey shall focus upon the pond bottoms and banks of all basins proposed for maintenance. Surveys shall be repeated, as necessary, to account for multiple maintenance activities within the Jan. 1 to March 31 breeding season.
- All Western spadefoot toad adults and metamorphs encountered during the combined day/night surveys shall be collected and released into other pre-designated percolation pond(s) containing water within the Southland WWTF as approved by CDFG.
- The qualified biologist shall continue to monitor the relocation sites on a periodic basis throughout the breeding period to document success of relocation efforts. Further, final survey and monitoring data will be provided to CDFG in a written report at the end of each breeding season.

D-20: Employees shall be directed to temporarily halt maintenance activities within areas containing special-status species until the animals have vacated the immediate area.

5. Cumulative Impacts

There are several development projects under construction, approved or pending approval in the South County Inland Planning Area (see Section IV.B, Cumulative Projects). Installation of the proposed pipelines, wastewater treatment facilities improvements, disposal site options and associated facilities would provide increased wastewater treatment and disposal capabilities and would eliminate a potential constraint upon the future development and population growth within the project area.

Direct project impacts related to the proposed project improvements would not contribute to the cumulative loss of vegetation and wildlife habitat in the project area. There would be a permanent loss of habitat related to project facilities; however, these facilities are generally located within previously disturbed areas containing non-native vegetation, areas under agricultural production and/or existing developed areas with negligible impacts to native habitat areas. Therefore, the incremental project contribution to cumulative loss of habitat would be negligible and would not contribute to a significant cumulative impact on biological resources.

Long-term fragmentation of wildlife habitat or interruption of migratory patterns would be considered an insignificant impact to wildlife resources due to the lack of any established migratory corridor within the project area. However, since direct project impacts related to proposed pipelines, wastewater treatment facilities improvements, disposal site options and associated facilities are temporary, cumulative impacts to wildlife resources are considered less than significant.

Cumulative impacts to special-status species existing within the project area would be considered a significant impact. However implementation of the proposed mitigation measures that include avoidance and protection of special-status species (Coast horned lizard, Western spadefoot toad, American badger and the California red-legged frog) would insure that the proposed project would not contribute to the decline of special-status species populations in the project area. Any other projects in the area that would result in impacts to special-status species would require additional environmental review and appropriate mitigation to avoid and/or minimize impacts. Prior to any project approval, the Lead Agency and other agencies with regulatory authority would require provision of site specific mitigation measures designed to avoid and/or minimize impacts to special-status species including implementation of habitat restoration, as necessary, at an appropriate mitigation ratio.

The proposed project would provide increased wastewater treatment and disposal capabilities for land development consistent with the South County Area Plan (Inland). Future development would indirectly affect biological resources by reducing the amount of vegetation and habitat available to wildlife. Impacts to threatened and endangered species and other sensitive biological resources within the project service area, including wetlands, would be adverse due to the continued conversion and degradation of habitat. Related land development would entail the cumulative loss, degradation, or fragmentation of habitats, which may result in local native plant and wildlife populations, including sensitive species, being reduced in size and made increasingly vulnerable to local extinction. Non-native species introduced through ornamental landscaping or habitat disturbances could also compete with native species or invade previously disturbed habitats, including those of special-status species.

6. Residual Impacts

Mitigation Measure D-1 will reduce potentially significant impacts related to nesting activities of protected migratory birds and raptors to an insignificant level (Class II Impact).

Mitigation Measures D-2 through D-10 will reduce potentially significant impacts associated with special-status terrestrial wildlife species to an insignificant level (Class II Impact).

Mitigation Measures D-11 through D-15 will reduce potentially significant impacts associated with special-status semi-aquatic species to an insignificant level (Class II Impact).

Mitigation Measure D-16 will reduce potentially significant impacts to large eucalyptus trees located on Orchard Avenue and Pomeroy Road to an insignificant level (Class II Impact).

Mitigation Measure D-17 will reduce potentially significant long-term impacts associated with the generation of silt and sedimentation to an insignificant level (Class II Impact).

Mitigation Measures D-18 through D-20 will reduce potentially significant impacts associated with long-term facilities operations and maintenance activities to an insignificant level (Class II Impact).

Potential impacts upon non-listed wildlife species and wildlife migration corridors are considered to be less than significant (Class III Impact).

Potential impacts related to the provision of additional habitat for the Western spadefoot toad are considered to be beneficial (Class IV Impact).

E. AESTHETICS

1. Existing Conditions

The project area contains a variety of views and perspectives which reflect the diversity of land uses found throughout the Nipomo Mesa.

A majority of views adjacent to Orchard Road south of Southland Street and west of the Southland Wastewater Treatment Facility include agricultural fields, overhead transmission lines emanating from an existing P.G.&E. electrical substation and scattered residences with Highway 101 and rolling hillsides visible in the distance. Views in the areas adjacent to Orchard Road north of Southland Street involve more developed residential uses and undeveloped lots (see Figure 13A, Existing Views). Views from Pomeroy Road and Willow Road include residential uses, the Nipomo Community Park, agricultural fields, open space areas and the Blacklake Golf Course (see Figures 13B and 13C, Existing Views).

2. Thresholds of Significance

A significant aesthetic impact would occur if the proposed project alters the visual resource quality of the surrounding area in combination with the public sensitivity to the viewing location. For the purposes of this EIR, the project would be determined to have a significant negative aesthetic effect if it alters the visual resource quality of the surrounding area or if a proposed structure extends above the highest horizon line of ridge-lines as seen from adjacent public roads or it substantially degrades the existing visual character or quality of the site or its surroundings. Obstruction or degradation of scenic views, obstruction of views from a scenic highway or heavily-traveled roadway or a substantial alteration of a unique environmental or man-made visual feature are also considered to be significant aesthetic impacts. Significant light and glare impacts are those that have the capacity of altering the visual resource quality of the project area or its surroundings.

3. Project Impacts

Impact E-1. *Project construction may potentially result in the short-term alteration of views from adjacent areas. However, while highly visible, impacts to views in surrounding areas are temporary in nature.*

Construction activities associated with the proposed project involve the use of heavy equipment for construction of proposed wastewater treatment facilities improvements, disposal site options, pipeline extension and associated facilities at various locations. These construction activities will result in short-term impacts to views of these areas from surrounding vantage points. Temporary construction impacts will also result during site preparation and construction of proposed wastewater treatment facilities

Orchard Road
Southwest of Southland WWTF

Orchard Road
Northwest of Southland WWTF

FIGURE 13B
Existing Views

Pomeroy Road
Near Nipomo Community Park

Pomeroy Road
at Olympic Way

FIGURE 13C
Existing Views

Pomeroy Road
at Kaminaka Property

Willow Road
Looking East to Blacklake Golf Course

improvements, disposal site options, pipeline extensions and other associated facilities to be installed adjacent to several local roadways. Phases I and II of these construction functions may occur simultaneously thereby reducing the overall longevity of these construction operations.

Construction activities, while usually considered obtrusive, are unable to employ mitigation measures such as those implemented after a project is constructed. While highly visible, impacts to views in surrounding areas are, due to their temporary nature, considered to be less than significant.

Impact E-2. *Project infrastructure facilities could degrade views from adjacent areas. These impacts are considered to be potentially significant, but mitigable.*

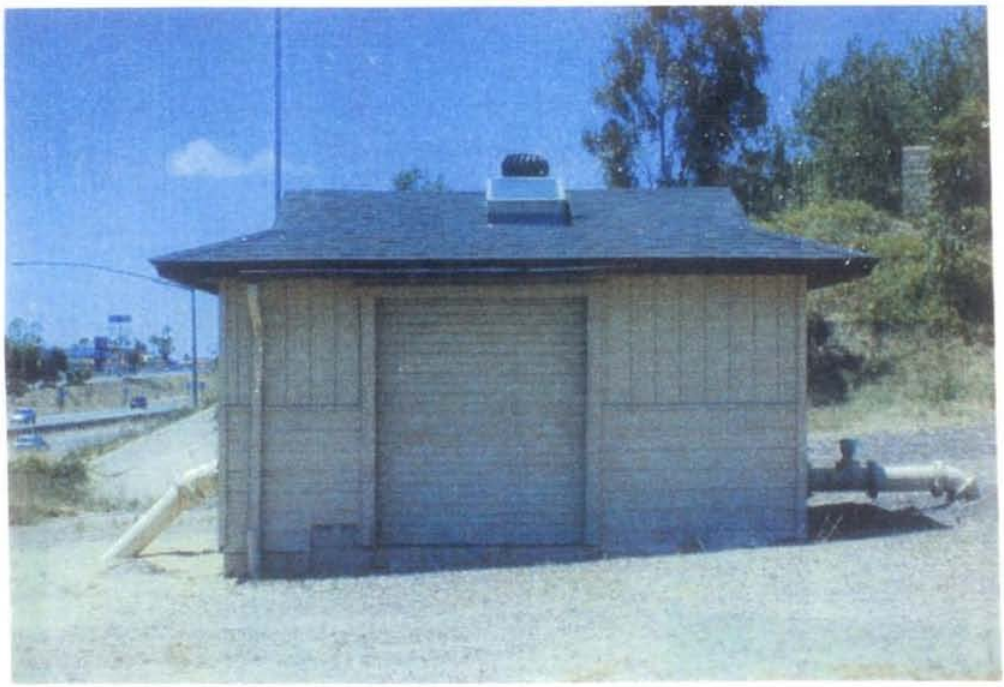
Once the proposed project facilities are installed, the primary aesthetic impacts of the proposed project involve the proposed above ground structures, such as the proposed wastewater treatment facilities improvements at the Southland WWTF and other project infrastructure including, but not limited to, pump stations and other associated facilities.

In order to insure adequate pumping pressures, pump stations will be required at various, undetermined locations along the proposed pipeline extensions from the Southland WWTF to the future off-site disposal facility. The number and location of these pump stations have not been determined at this time. Their number and location will depend upon the selected pipeline route, the length of the pipeline and the extent of any elevation changes. The pump station structures will be approximately ten feet in height and will measure approximately 1,000 square feet (roughly 25 feet by 40 feet, subject to refinement during the final design process). This structure will be designed to buffer operating noise from the pumping equipment and to fit architecturally with the surrounding area while also providing necessary security (see Figure 14, Typical Pump Station).

Additional proposed above ground structures at the Southland WWTF include a control/electrical building and a storage building, both of which will be a maximum of fifteen feet tall. Private storage tanks may also be constructed at the selected wastewater disposal site.

While none of these facilities are considered to represent a major addition to the existing visual landscape of the area, several measures including the use and proper maintenance of landscaped screening and proper color selection will result in potentially significant, but mitigable impacts.

FIGURE 14
Typical Pump Station



Impact E-3. *Long-term project operations could result in the generation of light and glare into surrounding areas. These impacts are considered to be potentially significant, but mitigable.*

Proposed project infrastructure facilities, primarily the above ground structures such as pump stations or other project infrastructure facilities that may be located adjacent to local roadways or existing residential uses will require exterior lighting for security purposes. It is anticipated that such low-level lighting will remain on throughout the evening. While night lighting will be generated by these facilities, travelers on surrounding roadways as well as residents in adjacent areas will not be as sensitive to the presence of night lighting at these locations. This is due to the relatively low level of illumination proposed coupled with existing night lighting emanating from adjacent properties as well as light and glare from nearby roadways, particularly from lighting and traffic on Highway 101.

The extent of visual impacts associated with project lighting is highly dependent upon the type and design of lighting selected for the project. By specifying appropriate lighting fixtures and types of lighting to be utilized, potential light and glare generated by project facilities will result in potentially significant, but mitigable impacts.

4. Cumulative Impacts

There are several development projects under construction, approved or pending approval in the South County Inland Planning Area. All aesthetics-related project impacts are largely confined to the project site. The proposed project in combination with other cumulative projects in the area (see Section IV. B. Cumulative Projects) will represent an incremental contribution to the cumulative visual conditions in the area. However, given the nature of the areas surrounding the site and the mitigation of project impacts, cumulative impacts to visual resources due to the proposed project within the cumulative development scenario are not expected to be significant.

5. Mitigation Measures

The following measures address Impact E-2, potential degradation of views due to project infrastructure facilities.

E-1: Prior to project construction, a Landscape Screening Plan shall be prepared for the District which provides landscaped screening consisting of trees and/or shrubs adjacent to proposed booster stations, the control/electrical and storage buildings at the Southland WWTF or any other above ground structure. Trees or shrubs will be provided which will reach six (6) feet surrounding these facilities without sacrificing safety considerations within two years of construction of these facilities.

E-2: Prior to project construction, a Landscape Maintenance Plan shall be prepared which provides a program for growing and maintaining the proposed vegetative screens so that they achieve the two-year growth plan for vegetation. The plan shall also identify the long range maintenance and vegetative requirements to insure that said screening will be maintained for 5 years, including replacement of any trees or shrubs which may die.

E-3: Prior to their construction, a color board will be provided which identifies the exterior colors and materials to be utilized on proposed pump stations, buildings at the Southland WWTF or any other above ground structure. The colors and materials selected will involve muted tones which match or are comparable with the colors found in the surrounding areas.

The following measure addresses Impact E-3, the generation of light and glare due to long-term project operations.

E-4: Prior to project construction, an Exterior Lighting Plan shall be prepared for the District which indicates the height, location and intensity of all proposed exterior lighting. All light fixtures shall be shielded so that neither the lamp nor the reflective interior surface is visible from beyond 50 feet of project facilities. All light poles, fixtures and hoods shall be dark (non-reflective) colored. All exterior lighting sources shall be low-level adjusted so that light is directed downward. Security lighting shall be shielded so as not to create glare when viewed from adjacent properties with lighting heights no more than is absolutely necessary. All project lighting shall not be obtrusive to travelers along any adjacent roadways.

6. Residual Impacts

Mitigation Measures E-1 through E-3 will reduce potentially significant aesthetic impacts associated with views of project facilities to an insignificant level (Class II Impact).

Mitigation Measure E-4 will reduce potentially significant visual impacts due to the generation of light and glare to an insignificant level (Class II Impact).

Potential impacts related to the visual impacts associated with project construction are considered to be less than significant (Class III Impact).

F. CULTURAL RESOURCES

The following analysis of cultural resources is based upon the "Results of Archival Records Search and Phase One Archaeological Surface Survey for the Nipomo Community Services District Southland Wastewater Treatment Facilities Improvement Project, San Luis Obispo County, CA" prepared by Gibson's Archaeological Consulting dated November 22, 2010. This document is included in its entirety in Technical Appendix E of this document.

1. Existing Conditions

- ***Chumash History***

This project area lies within the territory historically occupied by the Obispeño Chumash, the northernmost of the Chumashian speaking peoples of California. Archaeological evidence has revealed that the ancestors of the Obispeño settled in San Luis Obispo County more than 9,000 years ago.

Following an annual cycle of hunting, fishing, fowling and harvesting, the Chumash adapted to changing environmental and social conditions and grew into a large complex society that remains today. Aboriginal society underwent major changes soon after Spanish contact in 1769, primarily due to the introduction of epidemic European diseases and the consequent high mortality rate.

The name Nipomo was reported as the Purisimeño Chumash word, anipomo, meaning "promontory." A cemetery and village were located approximately 1 ½ miles north of the Dana ranch site (Site SLO-141). No mention is made in the San Luis Obispo Mission books of the Chumash village of Nipomo, however, the village of Laxicto has a marriage network and baptismal pattern that suggests it is same as the village of Nipomo. A total of 38 people from the Nipomo area were baptized at San Luis Obispo Mission and 14 people were baptized at La Purisima Mission between A.D. 1781 and A.D. 1802. The paramount chief of the northern Chumash was called by the Spanish "El Buchon." His main village was in Avila Beach. The entire Buchon family were high status members in Chumash society.

The Nipomo area contains more square meters of light density cultural deposits than any other area in southern San Luis Obispo County. This can be partly due to the large number of surface surveys conducted in the area associated with several utility and roadway projects. This proliferation of resources may also be due to the fact that the cultural deposits in the area are more dispersed on relative flat sandy terraces, all near water. Surveys conducted on the south, west and north sides of Nipomo Mesa have recorded many archaeological sites along the edges of the mesa but very few in the interior.

West of the mesa are a number of fresh water lakes and a series of low sand dunes adjacent to the beach. A number of small seasonal sites have been recorded in the dunes west and southwest of Nipomo Mesa. They usually contain sparse to low density deposits of Pismo clam shells and chert flakes with rare tools and burnt rock. Surface surveys of Guadalupe Oil Fields just north of the Santa Maria River in southern San Luis Obispo County have provided information on these seasonal sites. The antiquity of these sites ranges between about A.D. 625 and A.D. 1085.

- ***Historical Background***

The railroads came to the Nipomo area over 120 years ago coincident with the rapid changes of the late nineteenth century. This historic era produced many of the fundamental qualities of life found in California today. Railroads, their depots, stations and sidings were often the focus of much of the historical development during these times and provided feasible long-range transportation to the ranch families and early townspeople of the area. The importance of railroads in the growth of early American culture in California cannot be understated. Railroads opened up new areas to be developed by providing a reasonably priced and quick method of moving products to market.

The Pacific Coast Railway grew from its predecessor horse railroad at Port Harford in 1873 to become central California's premier narrow gauge line. The Pacific Coast Railway can claim to be the first narrow gauge railroad in California. The railroad was also featured in many early movies. Fatty Arbuckle made a picture in the early 1920's; the line starred again in the 1927 "Black Beauty" and in one of the early "talkies", the "Virginian." Universal Film's 1935 "Diamond Jim Brady" included a spectacular crash.

Operations for construction commenced in 1876 as the line was completed from Port Harford to San Luis Obispo. Tracklayers pushed south from Arroyo Grande in March, 1882 reaching Santa Maria (then Central City) on April 22, 1882 and Los Alamos in October of 1882. The line was built by Chinese laborers hired through Ah Louis of San Luis Obispo. Final new construction, the Palmer branch, was completed in 1913. Peak revenues were reached in 1916. By 1929, the railroad was in decline. Passenger service ended in 1937; the railroad was abandoned and salvaged in 1941-42.

Before the modern settlement of the Nipomo Mesa, trails connecting early ranches were turned into primitive roads by the passage of boots, horses and wagons. The Spanish El Camino Real, running between missions, ran close to the current alignment of Highway 1. Another trail of the early nineteenth century led south from San Luis Obispo roughly following the current alignment of Highway 101. This trail passed Dana's Adobe (Nipomo), then headed down Nipomo Creek and along the top of the river bluffs to a crossing of the Santa Maria River at Suey Canyon, the narrowest (one-third of a mile) portion of the Santa Maria Riverbed.

The early twentieth century brought the automobile. A civic group important towards securing public funds for roads was the El Camino Real Association formed in 1902-04, an outgrowth of the "Good Roads" movement active at the turn-of-the-century. In 1910, Californians passed the State Highways Act and later the Chandler Act that led to the creation of the State Highways Commission in 1911. A second Highways Act of 1916 passed with additional financing with Federal funds becoming available after 1920. The commission selected a new north-south coastal county route, part of State Highway 2 (future US 101). It ran from the Santa Ynez Valley through Santa Maria and straight across the Santa Maria River to the mouth of Nipomo Creek and then to Nipomo and beyond. This route was completed through Santa Barbara and San Luis Obispo Counties by 1918. The new County-built Santa Maria River crossing traversed a sandy channel approximately one mile in width. By 1924, over 5,000 vehicle trips a day were being made on the highway (2,828 northbound and 2,833 southbound). Vehicle trip totals of over 10,000 a day were reached by the early thirties (these levels are comparable to current hourly traffic levels).

Major improvements to the original paved highway made by the State included construction of a concrete girder bridge at the Santa Maria River crossing in 1926 on the same alignment as the original bridge, in 1929-1930 when the road was upgraded with wider lanes and shoulders and repaving in 1938. Surveyors in 1937 first explored the Solomon Grade route used by the current Highway 101 and Santa Maria River crossing which was constructed in the mid to late fifties.

- ***Survey Results***

An archival records search for a major portion of the project area was conducted in 2005 and 2008 in conjunction with the NCSD Waterline Intertie Project. An additional archival records search within the northern and western portion of the project area and a ¼ mile area around it was made in August, 2009 at the Central Coast Archaeological Information Center located at the University of California, Santa Barbara. The Central Coast Information Center is the official repository and clearinghouse for all archaeological information for San Luis Obispo County. The archival search yielded information on previously surveyed tracts within or near the project area, the intensity of previous survey efforts, the previously recorded properties within or near the project area, the characteristics of previously recorded properties and the dates of previous surveys and excavation programs, technical reports and authors. The records search included the inventories for the State Historic Property Data Files, National Register of Historic Places, National Register of Determined Eligible Properties, California Historical Landmarks, California Points of Historic Interest, California Office of Historic Preservation Archaeological Determinations of Eligibility and Caltrans State and Local Bridge Surveys. Within the ¼ mile search area, a total of 80 cultural resource surveys have been conducted and 26 archaeological sites have been recorded.

Several Franciscan and Monterey chert flakes (silica rock utilized for the manufacture of or use as a stone tool such as arrowheads, knives or other cutting or scraping tool) were

recorded during surface walkover surveys at the Southland Wastewater Treatment Facility. Numerous Pismo Clam fragments were identified on the north side of Southland Street. A historic site, SLO-2188H, was identified along Pomeroy Road near the entrance to Nipomo Regional Park. These prehistoric and historic sites identified within the project area are described in detail below.

- ***Southland Wastewater Treatment Facilities***

Recently-conducted (2009) surface walkover surveys adjacent to an existing aeration lagoon revealed several Franciscan and Monterey chert flakes. An additional Monterey chert flake was recorded along a dirt access road south of the aeration lagoon noted above. The areas containing the artifacts are highly disturbed due to the development of the WWTF and the subsequent grading and exporting of sand in the western and southwestern areas of the facility. Initial surveys of the WWTF site conducted in 1975 recorded a prehistoric site SLO-753 which was described as a 50 meter by 50 meter surface concentration of chert flakes and chunks located immediately west of the fence adjacent to Highway 101. Another prehistoric site, SLO-1783, estimated to be 100 meters south of SLO-753, was recorded in 1996. This later site contained a highly localized subsurface concentration of 27 Monterey and Franciscan chert flakes immediately below the ground surface in an area measuring five meters by five meters. Both of these sites were destroyed as a result of construction activities associated with the Southland WWTF. These artifacts noted above were displaced as a result of these activities. No other intact cultural resources were observed in the WWTF site.

- ***Kaminaka Property***

The 40 acre Kaminaka property consists of disced and irrigated field. Previous walkover surveys of this property as well as an archival records search have revealed no prehistoric cultural materials at this location.

- ***Agricultural Lands***

Agricultural lands on areas southeast of the Southland WWTF consist of plowed agricultural fields. Although no cultural materials were observed at this location during recent surveys (2008), a large buried prehistoric archaeological site (SLO-1770) is located approximately 1400 meters southwest of Orchard Road. The lack of any archaeological sites on the agricultural lands immediately southwest of the WWTF indicates a low probability of significant cultural resources at this location.

- ***Southland Street***

The section along Southland Street from South Frontage Road to Orchard Road is bordered by vacant lots and residential development. Numerous Pismo Clam fragments were identified on the south side of Southland Street during walkover surveys in conjunction with the NCSD Waterline Intertie Project in 2005 and 2008. Much of the

road shoulder is compact sandy soil, however, several areas of soft sand produced a limited number of small fragments of Pismo and other clam species. A vacant lot located across the street from 641 Southland Street was observed to have significant amount of shell covering the unpaved driveway, including Pismo Clam, Washington Clam, Turban Snail, non-native Oyster and domestic animal bone. The shells were in an area about 5 meters wide by 20+ meters long and are assumed to be a modern deposit of shell, possibly to stabilize the sand for an access driveway or just a trash scatter. This concentration of shell and bone fragments is not considered to be a significant resource. No prehistoric or significant historic cultural artifacts were identified on the northern side of Southland Street.

- ***Pomeroy Road***

An historic site, SLO-2188H, was recorded in 2002 along Pomeroy Road near Nipomo Regional Park. The site consists of layers of historic artifacts at the surface along Pomeroy Road which are exposed within the eroded portions of the adjacent roadside drainage ditches. The site appears south of the location of a previously-used (1880 to 1920) municipal dumping area. No record of historic features such as privies or discrete trash heaps for SLO-2188H were made in the recordation of this site. According to the field archaeologist, it is probable that the construction of Pomeroy Road destroyed or displaced the historic materials within and adjacent to Pomeroy Road. These materials are not likely to be significant historic features or unique historic items.

2. Thresholds of Significance

The CEQA Guidelines state that a project involves a "substantial adverse change" to cultural resources when one or more of the following occurs:

- Substantial adverse change in the significance of a historical or archaeological resource through physical demolition, destruction, relocation or alteration of the resource or its immediate surroundings such that the significance of the resource would be materially impaired.

- The significance of an archaeological resource is materially impaired when a project:

  a. Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its inclusion in or eligibility for inclusion in the California Register of Historical Resources; or

  b. Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to Section 5020.1(k) of the Public Resources Code or its identification in a historical resources survey meeting the requirements

of Section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant or

c. Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA.

3. Project Impacts

Impact F-1. *Project construction could disturb or materially alter areas containing prehistoric cultural resources which may be related to an identified prehistoric site. These impacts are considered to be potentially significant, but mitigable.*

As noted above, several chert flakes were recorded at the Southland Wastewater Treatment Facility.

Several Franciscan and Monterey chert flakes were recorded during surface walkover surveys of the Southland Wastewater Treatment Facility (WWTF). The areas containing these artifacts are highly disturbed due to the construction of the Southland WWTF and subsequent grading and exporting of sand in the western and southwestern areas of the facility. It is believed that prehistoric sites SLO-753 and SLO-1783, which were initially recorded in 1975 and 1996, were destroyed as a result of the construction of the WWTF and other associated activities and the artifacts noted above were displaced due to these activities.

Based upon this information, and surface walkover surveys, no other intact cultural resources remain on the Southland WWTF site. However, it is recommended that cultural resource monitoring accompany any grading or earth disturbance in the WWTF site (see "Mitigation Measures").

Agricultural lands southwest of the Southland WWTF consist of plowed agricultural fields. No cultural materials were observed within the 20 to 30 acres to possibly be utilized for treated effluent disposal facilities at this location. The lack of identified archaeological sites on these lands indicates a low probability of cultural resources at this location. However, the nature and extent of recorded cultural resources southwest of Orchard Road (SLO-1770) generates the need for a subsurface testing program in the event of any grading or earth disturbance in this area in order to insure that no buried cultural resources are present.

Table 18, Cultural Resources Summary provides a listing of all survey locations, the presence or absence of cultural materials, potential project impacts and proposed mitigation measures.

For the remainder of the project area proposed for pipeline routes and project facilities, no prehistoric cultural materials were noted and no additional cultural resource monitoring is recommended during construction unless undiscovered prehistoric cultural materials are accidentally unearthed (see "Mitigation Measures").

With implementation of the mitigation measures noted above, impacts to prehistoric cultural resources due to project construction are considered to be potentially significant, but mitigable impacts.

Impact F-2. *Project construction could disturb or materially alter areas containing historic cultural resources. These impacts are considered to be potentially significant, but mitigable.*

Numerous historic-era weathered shell fragments were identified on the south side of Southland Street and an historic site, SLO-2188H was identified along Pomeroy Road near the entrance to Nipomo Regional Park.

A significant amount of weathered shell fragments and a bone fragment were observed on the south side of Southland Street on a lot directly south of 641 Southland. Although these shell and bone fragments are not considered to be a significant resource, a 100 meter long area should be monitored during construction of the proposed sewer line along Southland Avenue in order to record the distribution and nature of the shells. If any trash pits or unusual items are unearthed they can be examined by a qualified principal archeologist and appropriate recommendations made (see "Mitigation Measures").

An historic site, SLO-2188H, was recorded along Pomeroy Road near Nipomo Regional Park which consists of layers of historic artifacts which are exposed within eroded portions of the adjacent roadside drainage ditches. The site appears south of the location of a previously-utilized municipal dumping area. It is probable that construction of Pomeroy Road destroyed or displaced historic materials at this location. Although the artifacts at this location are not likely to be significant historic resources, it is recommended that a qualified historic archaeologist conduct cultural monitoring along any pipeline excavation occurring along Pomeroy Road in the vicinity of Nipomo Regional Park (see "Mitigation Measures").

For the remainder of the project areas proposed for pipeline routes and project facilities, no historic cultural materials were noted and no additional cultural resource monitoring is recommended during construction unless undiscovered historic cultural materials are accidentally unearthed (see "Mitigation Measures").

Table 18, Cultural Resources Summary provides a listing of all survey locations, the presence or absence of cultural materials, potential project impacts and proposed mitigation measures. With implementation of the mitigation measures noted above,

impacts to historic cultural resources due to project construction are considered to be potentially significant, but mitigable impacts.

Impact F-3. *Project grading and construction could result in the discovery of currently-unknown cultural resources. These impacts are considered to be potentially significant, but mitigable.*

Surface walkover surveys did not reveal any prehistoric or historic resources beyond those discussed above. Although no other significant cultural resources were encountered in the remainder of the project devoted to project facilities and pipelines during site surveys, there remains the potential that currently unknown cultural resources may be unearthed during project grading or construction. If any cultural resources are unearthed during project grading or excavation, work will be temporarily halted in that area until the unearthed cultural resources are examined and appropriate recommendations are made. In addition, an archaeological workshop shall be conducted for construction personnel to educate them as to the types of cultural resources that may be encountered during construction grading and excavation. These workshops are effective in preventing accidental damage to significant cultural resources during the construction phase of a project; they also help to reduce unnecessary delays in construction activity (see "Mitigation Measures").

With implementation of these mitigation measures, impacts to currently-unknown cultural resources are considered to be potentially significant, but mitigable impacts.

TABLE 18
CULTURAL RESOURCES SUMMARY

Locations of Various Project Alternatives and Elements	**Cultural Materials Present**	**Potential Adverse Impacts**	**Recommendations**
Expand Southland Water Treatment Facilities	Yes, stone flakes, displaced	yes	cultural monitoring of earth disturbances
Pond Location Area 4 Kaminaka	none	none	none
Pond Location Area 8 Multiple Owners	none identified on surface buried possible	none	subsurface testing of proposed impacted areas, mitigation if needed and cultural monitoring
Orchard Rd. from southern end to Tefft St.	none	none	none

Pomeroy Rd. to northwest end	historic site, SLO-2188H	yes	cultural monitoring of earth disturbances, mitigation if needed
Pomeroy Rd. to Camino Caballo to northwest end	none	none	none
Southland St. between Frontage Rd. and Orchard Rd.	historic shell	possible	monitor 100 meter corridor centered at 641 Southland St.

4. Cumulative Impacts

There are several development projects under construction, approved or pending approval in the South County Planning Area. With the exception of potential impacts to identified prehistoric or historic cultural resources and to unknown cultural resources unearthed during project construction, the proposed project will not result in any other direct or indirect impacts upon other cultural resources in the area. According to the field archaeologist, due to the low density of prehistoric and historic cultural resources in the project area, cumulative impacts to cultural resources in the project area are considered to be insignificant. The proposed project, in combination with other cumulative projects in the area (see Section IV.B, Cumulative Projects) may incrementally contribute to the loss of cultural resources in the area. However, with the limited extent of project related impacts, the proposed project within the cumulative development scenario will not significantly impact regional or cumulative cultural resources conditions.

5. Mitigation Measures

The following mitigation measure addresses Impact F-1, potential disturbance or alteration of prehistoric cultural resources.

F-1: Prehistoric cultural resource monitoring shall accompany any construction trenching and excavation within the WWTF site and along a 100 meter area on the south side of Southland Street directly south of 641 Southland Street. A Prehistoric Cultural Resource Monitoring Plan shall be developed and approved by the County of San Luis Obispo which will include project review, a pre-construction archeological workshop, Chumash involvement, networking with all involved members of the project and the production of a final monitoring report.

The following mitigation measure addresses Impact F-2, potential disturbance or alteration of historic cultural resources.

F-2: Historic cultural resource monitoring shall accompany construction trenching and excavation along Pomeroy Road in the vicinity of Nipomo Regional Park in the event that the Kaminaka Property is utilized as a

treated effluent disposal facility. An Historic Cultural Resource Monitoring Plan shall be developed and approved by the County of San Luis Obispo which will include project review, networking with all involved members of the project and production of a final monitoring report.

F-3: In the event that the agricultural lands southeast of the WWTF are utilized as a treated effluent disposal facility, subsurface testing is required to confirm the lack of cultural resources.

The following mitigation measures address Impact F-3, the discovery of currently-unknown cultural resources during project construction.

F-4: An archaeological workshop shall be conducted by a qualified archaeologist at the pre-construction meeting for construction personnel to educate them about what types of cultural material may be encountered during construction grading and excavation. A procedure for notification of accidental discovery and communication network shall be developed so that if any suspected cultural materials are unearthed, they can be quickly examined and evaluated by a qualified archaeologist and appropriate recommendations can be made.

F-5: During any grading or excavation associated with the project, if any cultural materials are unearthed, work in that area shall be halted until all cultural materials can be examined by a qualified archaeologist and appropriate recommendations made pursuant to County Land Use Ordinance Section 22.0.

6. Residual Impacts

Mitigation Measure F-1 will reduce potentially significant impacts related to the disturbance or alteration of prehistoric cultural resources to an insignificant level (Class II Impact).

Mitigation Measures F-2 and F-3 will reduce potentially significant impacts related to the disturbance or alteration of historic cultural resources to an insignificant level (Class II Impact).

Mitigation Measures F-4 and F-5 will reduce potentially significant impacts related to the discovery of currently-unknown cultural resources during project construction to an insignificant level (Class II Impact).

G. GEOLOGY

The following analysis of geology is based upon the "Hydrologic Characterization, Southland Wastewater Treatment Facility, Nipomo, California" dated July 17, 2007; "Task 1 – Technical Memorandum (Revised), Feasibility Level Exploration Program for New Percolation Pond Sites, Phase 2 – Hydrogeologic Investigation of the Southland WWTF" dated February 21, 2008; "Hydrologic and Geotechnical Assessment of APN 090-311-001, Nipomo, California" dated July, 2008 and "Hydrogeologic Assessment, Kaminaka Property, Nipomo, California" dated June 8, 2009 all of which were prepared by Fugro West, Inc. These documents are included in their entirety in Technical Appendix C of this document.

1. Existing Conditions

- ***General Topography and Stratigraphy***

The project area is located on the Nipomo Mesa, which forms a transition area between the Coast Ranges to the northeast and the Transverse Ranges to the south, generally consists of a relatively flat-topped mesa which rises approximately 120 feet above the adjacent Santa Maria River to the south. This area is underlain primarily by Pleistocene older alluvium, older dune sand and the Orcutt Formation. The older alluvium consists of gravel, boulders, sand and other coarse detrital material of local origin imbedded in a dense matrix of silt and clay. The thickness of these deposits ranges between 10 and 90 feet.

The older dune sand deposits consist of coarse- to fine-grained, massive sand beds, containing some silt and clay. The soft, highly erodible dune sands are loosely to slightly compacted. These deposits are anchored by vegetation and have a well-developed soil mantle. Localized clay layers create perched groundwater conditions. These deposits form a triangular area approximately four miles wide at the coastline and extends inland approximately 12 miles to immediately east of Highway 101. The older dune sand deposits range in thickness between 150 and 250 feet within the project area. The Orcutt Formation in the project area consists primarily of loosely compacted, massive, medium-grained sand with lenses of clay. The thickness of the formation is approximately 100 feet.

- ***Site-Specific Topography and Stratigraphy***

The Nipomo Mesa has a surface elevation of approximately 300 feet above mean sea level with slope gradients ranging between zero and five percent. Surface elevations across the mesa gently decrease from east to west consistent with the coastal plain in the surrounding area.

- ***Faulting and Seismicity***

- Faulting

The project area is located in a seismically active area of Central California due to the presence of the active San Andreas Fault, located approximately 38 miles northeast. This fault is considered the most likely to generate a major earthquake in the region in the near future. Such an earthquake is expected to generate moderate to strong ground shaking in the area.

Three faults are either mapped or inferred within or in the vicinity of the project area. The inferred trace of the potentially active Wilmar Avenue Fault is a northwest-trending fault, the location of which is not well defined. It is only exposed at a sea cliff in Pismo Beach, but may extend south along the front of the San Luis Range and along the northeast margin of Nipomo Mesa, to the northern part of the Santa Maria Valley, where it may be cut off by the Santa Maria Fault. The northern terminus of the potentially active Santa Maria Fault is located approximately 0.5 mile south of the Santa Maria River. The Santa Maria Fault may act as a partial barrier to groundwater flow in the area. The inferred trace of the northwest-trending Oceano Fault is located approximately one mile southwest of the Nipomo Mesa with no known surface expression. Unlike the Santa Maria Fault, groundwater levels have been shown to be relatively consistent on each side of the fault. As such, this fault does not appear to act as a barrier to groundwater flow. No other known active faults traverse the project area nor is the area located within an Alquist-Priolo earthquake hazard zone.

- ***Seismicity***

- Ground Shaking

Ground shaking or ground motion is caused by the release of accumulated energy during a seismic event. Energy is released in the form of seismic waves that travel outward in all directions from the earthquake epicenter. The intensity of ground shaking at a particular location is a function of several factors including: maximum ground acceleration, magnitude of the earthquake, near surface amplification, distance from earthquake epicenter, duration of strong shaking and the natural vibration period. The potential for severe ground shaking at the project site could occur as a result of movement along one of several active faults in the vicinity of the site, including the San Andreas Fault Zone.

- Liquefaction

Liquefaction is the process in which saturated sandy soil loses strength during moderate to intense seismic-induced ground shaking. The potential for liquefaction is greatest in areas with loose, granular, low density soils and where the water table is shallow, usually within 40 to 50 feet of the ground surface. Liquefaction can cause extreme differential

settlement of structures potentially resulting in severe damage. Alluvial sediments within river bottoms typically contain shallow groundwater (i.e. less than 50 feet) and loose unconsolidated sediments which may be prone to liquefaction in the event of a moderate to severe earthquake. However, groundwater levels derived from data collected in the Nipomo area ranged from 100 feet to 110 feet above mean sea level or at a depth of approximately 100 feet below the ground surface.

Sediments underlying Nipomo Mesa would have a relatively low potential for liquefaction in the event of an earthquake as the older dune sand deposits in this area are largely unsaturated. Local zones of perched groundwater occur within the older dune sands on the mesa, but not continuously across the mesa. Soils underneath ponds, either natural or man-made, may also be subject to liquefaction during a seismic event.

- ***Slope Stability***

The topography across most of the project area is relatively flat to gently sloping; therefore, the potential for landslides, mudslides, or debris flows is very low. However, a near-vertical, 120-foot high, south-facing bluff is present on the north side of the Santa Maria River. This bluff face consists of soft, erodible, older dune sand, which contains extensive rills and gullies. Such slopes are generally susceptible to severe erosion and shallow slope failures in the event of a prolonged, high-intensity rainfall.

- ***Expansive Soils***

Expansive soils are generally clay-rich soils that swell when saturated and shrink when dry. When structures are placed on expansive soils, foundations may rise each rainy season and fall with the succeeding dry season. Movement may vary under different portions of a structure (i.e. differential settlement), resulting in cracks in foundations, walls and ceilings, distortions in various portions of a building and warping of windows and doorways. However, the Nipomo area is underlain by sandy soils which are generally not prone to expansion.

- ***Mineral Resources***

The Surface Mining and Reclamation Act of 1975 (SMARA) was enacted to promote conservation of the State's mineral resources and to ensure adequate reclamation of lands once they have been mined. Among other provisions, SMARA requires the State Geologist to classify land in California for mineral resource potential. The four classifications include: Mineral Resource Zone (MRZ-1), involving areas of no mineral resource significance; MRZ-2, areas of identified mineral resource significance; MRZ-3, areas of undetermined mineral resource significance, and MRZ-4, areas of unknown mineral resource significance.

To be considered significant for the purpose of mineral land classification, a mineral deposit, or a group of mineral deposits that can be mined as a unit, must meet

marketability and threshold value criteria adopted by the California State Mining and Geology Board. The criteria varies for different minerals depending on the following: (1) whether the minerals are strategic or non-strategic, (2) the uniqueness or rarity of the minerals and (3) the commodity-type category (metallic minerals, industrial minerals, or construction materials) of the minerals.

The closest area of identified mineral resource significance (MRZ-2 disjunction) is located south of the Nipomo Mesa within the Santa Maria River bed. Mineral resources extracted from this area consist primarily of construction-grade aggregate, consisting of sand, gravel and crushed stone. Aggregate provides bulk and strength to concrete, plaster, and stucco. Aggregate is also used as road base, subbase, railroad ballast and fill. Aggregate normally provides from 80 to 100 percent of the material volume for these uses.

There is a high likelihood that significant deposits of PCC-grade aggregate are located in this MRZ-2 area. Several active mining claims are located within or adjacent to the Santa Maria River bed including the Troesh Ready Mix, Inc. and the Santa Maria Sand Company and River Sand and Gravel, Inc. mining claims. The Nipomo Mesa area is designated MRZ-3, an area of undetermined mineral resource significance. No active mining claims are located in this area.

2. Thresholds of Significance

Geologic impacts would be considered significant if any component of the proposed project were to:

- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic groundshaking or seismic-related ground failure, including liquefaction or landslides.

- Result in substantial soil erosion or the loss of topsoil.

- Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project or potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.

Mineral resource impacts would be considered significant if the project were to:

- Result in the loss of availability of a known mineral resource that would be of value to the region or the residents of the State.

- Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

3. Project Impacts

Impact G-1. *The proposed project could expose project facilities to potential substantial adverse effects, including the risk of loss, involving strong seismic ground shaking and associated ground failure, including liquefaction. These impacts are considered to be potentially significant, but mitigable.*

Several regionally active faults are capable of producing significant ground shaking in the project area which could damage and/or rupture the proposed wastewater treatment facilities improvements, disposal site options, pipeline extensions and other associated facilities. Other possible types of seismic-related ground failure include lateral spreading, differential settlement, tectonic subsidence and liquefaction. Lateral spreading typically occurs when unsupported stream banks or drainage banks fail laterally during strong ground shaking, resulting in expansion cracks and ground collapse. The proposed above ground structures, such as wastewater treatment facilities improvements at the Southland WWTF and other project infrastructure including pump stations, etc. as well as pipelines in trenched areas, would be located at or near the ground surface and would potentially be subject to damage as a result of lateral spreading. Damage to such infrastructure cannot be totally precluded even with implementation of modern engineering and construction practices.

Differential settlement or subsidence typically occurs when non-uniformly compacted soils or non-uniformly competent bedrock settle differing amounts during ground shaking, potentially resulting in damage to overlying pipelines and other project infrastructure. During very large earthquakes, subsidence could occur instantaneously and may total several feet, resulting in pipeline damage and/or rupture.

Liquefaction-induced ground failure could occur within saturated soils beneath ponds including man-made surface ponds utilized for percolation of treated effluent. Since the proposed improvements to the Southland WWTF involves reconstruction or conversion of existing treatment ponds, loose to medium dense soils beneath these ponds may be subject to liquefaction during a seismic event. These potentially liquefiable near surface soils could, if necessary, be removed during project grading resulting in a potentially significant, but mitigable impact.

Several design measures are required by the State of California Uniform Building Code to minimize the potential earthquake shaking impacts noted above. A 50-foot setback is required from active faults. In addition, engineering designs must incorporate reinforcement and materials that can withstand seismic activity effects related to known credible ground acceleration factors. Although no active faults are located in the immediate vicinity of the project area, all project facilities would be required to

incorporate designs consistent with the Uniform Building Code Seismic Zone IV, corresponding to 0.75 g to 0.80 g. Because these measures are regulated by ordinance, they would be required as part of standard San Luis Obispo County Department of Planning and Building plan check review. Therefore, these regulations would reduce the potential impacts of earthquake ground shaking on proposed wastewater treatment improvements, disposal site options, pipeline extensions and other associated facilities. These potential seismic impacts are considered to be less than significant.

Impact G-2. *The proposed project may potentially increase the risk of landslides. However, since none of the proposed project facilities are located within one-half mile of the Nipomo Mesa bluffs, the potential for landslides due to the proposed project facilities is low.*

With the exception of the steep, south-facing bluffs of the Nipomo Mesa, the topography along the proposed pipeline alignment is generally gently sloping. Therefore, with the exception of the south-facing Nipomo Mesa bluffs, the potential for landslides is low. The steep bluffs of the Nipomo Mesa generally consist of loose, unconsolidated sand deposits, which are prone to severe erosion and shallow slope failures during prolonged, heavy rainfall events. Since none of the proposed wastewater treatment facilities, disposal site options, pipeline extensions and other associated facilities are located within one-half mile of the Nipomo Mesa bluffs, the potential for landslides due to the proposed project facilities is low. Therefore, the potential impact of increased landslide risk is considered to be less than significant.

Impact G-3. *The proposed project could result in substantial soil erosion or the loss of topsoil into local drainages. These impacts are considered to be potentially significant, but mitigable.*

Excavating and grading for the proposed wastewater treatment facilities, disposal site options, pipeline extensions and other associated facilities could result in potential erosion. Such activities would result in a short-term increase in soils exposed to wind and water erosion. Removal of vegetation, creation of temporary spoil piles, construction of temporary haul roads and excavation and filling operations could also result in disturbance of on-site soils, which would potentially contribute to increased erosion. Pipeline repair activities, such as in the event of seismically induced failure, would involve excavating a portion of the trench to expose the pipe, temporary stockpiling of soil, the use of temporary haul roads, backfilling and compaction operations. These activities could similarly result in erosion-induced siltation of local drainages, resulting in a potentially significant, but mitigable impact.

Impact G-4. *The proposed project may potentially be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project and could potentially result in lateral spreading, subsidence, liquefaction, or collapse. However, several design measures are required by the State of California Uniform Building Code to minimize potential earthquake shaking impacts.*

The proposed wastewater treatment facilities, disposal site options, pipeline extensions and other associated facilities are located in an area of potential lateral spreading and liquefaction susceptibility. Lateral spreading and liquefaction-induced ground failure could result in pipeline damage and/or failure. However, as previously discussed, several design measures are required by the State of California Uniform Building Code to minimize potential earthquake shaking impacts. Because these measures are regulated by ordinance, they would be required as part of standard San Luis Obispo County Department of Planning and Building plan check review. As a result of these regulations, the potential impacts of earthquake ground shaking on the proposed project facilities are considered to be less than significant.

Impact G-5. *The proposed project may potentially result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state and that is delineated on a local general plan, specific plan or other land use plan. However, the Nipomo Mesa is designated as an area of undetermined mineral resource significance with no active mining claims located in this area.*

The closest area of identified mineral resource significance is the Santa Maria River bed which is located in an area designated as MRZ-2. There is a high likelihood that significant deposits of PCC-grade aggregate are located in this area. None of the proposed project facilities are located in the vicinity of this area. The Nipomo Mesa is designated as an area of undetermined mineral resource significance with no active mining claims located in this area. Therefore, impacts associated with the potential loss of the availability of mineral resources due to the proposed project are considered to be less than significant.

4. Cumulative Impacts

There are several development projects under construction, approved or pending approval in the South County Inland Planning Area. All geology-related project impacts (landform, seismicity, etc.) are largely confined to the project site. Any seismic activity impacting the project site will similarly impact surrounding areas. The proposed project in combination with other cumulative projects in the area (see Section IV.B. Cumulative Projects) will incrementally impact regional geologic conditions but not to a significant degree.

Potential erosion induced siltation of drainages and creeks at individual grading sites would contribute the most to potential cumulative geologic impacts. Future projects could result in accelerated erosion and sedimentation impacts, particularly projects that are located in proximity to Nipomo Creek or other unnamed local creeks and drainages. However, the project's contribution to cumulative impacts would not be substantial, because the construction activities for the proposed project facilities are limited in scope and duration. Construction of the cumulative projects would not likely occur concurrently and project specific mitigation measures for establishment of erosion control

measures would minimize erosion-induced sedimentation. In addition, these cumulative projects would be subject to environmental review and appropriate mitigations established for each project prior to development. The proposed project's contribution to cumulative impacts on geology is considered less than significant.

5. Mitigation Measures

The following measure addresses Impact G-1, exposure of project facilities to potential adverse effects including liquefaction.

G-1: The design of any proposed surface percolation ponds shall include an evaluation of potentially-liquefiable near surface soils below pond slopes so that proper site preparation involving removal of these soils can, if necessary, occur.

The following measure addresses Impact G-3, erosion of temporarily exposed soils into local drainages.

G-2: The following shall be included in Final Grading and Drainage Plans to prevent erosion induced siltation of on-site and off-site drainages:

- A prohibition against grading during the rainy season (November 1-April 15) unless erosion control measures found adequate by the District are implemented.

- Methods for revegetation of disturbed soils for long-term stabilization.

6. Residual Impacts

Mitigation Measure G-1 will reduce potentially significant impacts associated with the increased risk of liquefaction to an insignificant level (Class II Impact).

Mitigation Measure G-2 will reduce potentially significant impacts associated with erosion induced siltation of into local drainages to an insignificant level (Class II Impact).

Potential impacts related to exposure of facilities to seismic ground shaking, the risk of landslides, locating the project on an unstable geologic unit or unstable soils or the loss of availability of a known mineral resource are considered to be less than significant (Class III Impact).

H. HAZARDS AND HAZARDOUS MATERIALS

1. Existing Condition

Hazardous and/or toxic wastes are those which may contribute to increased illness or mortality, or otherwise present a hazard to human health or the environment when improperly managed. Hazardous wastes include gasoline, oil and/or lubricants which would be utilized during heavy equipment use such as during construction operations as well as radioactive materials, explosives, infectious wastes, and industrial wastes such as acids, solvents and paint sludge typically generated by industrial operations.

At the State level, the Department of Health Services (DHS), Toxic Substance Control Division, is responsible for the regulation and control of hazardous materials, including hazardous wastes. At the local level, the County of San Luis Obispo, Public Health Department, Health Division, has the primary responsibility for hazardous waste enforcement. Other supporting agencies, the Central Coast Regional Water Quality Control Board and the San Luis Obispo Air Pollution Control District are responsible for implementing and enforcing the provisions of the various hazardous materials programs throughout the County.

2. Threshold of Significance

The proposed project would represent a significant hazardous materials impact if it creates a potential public health hazard due to the exposure of persons to hazardous materials or toxic substances generated by construction operations or maintenance activities associated with the proposed wastewater treatment facilities improvements, disposal site options, pipeline extensions and other associated facilities.

3. Project Impacts

Impact H-1. *The proposed project could result in the accidental release of hazardous materials as a result of a potential construction-related spill of petroleum products or other contaminants. These impacts are considered to be potentially significant, but mitigable.*

Project construction activities could potentially result in the accidental release of hazardous substances during construction of the proposed wastewater treatment facilities improvements, disposal site options, pipeline extensions and other associated facilities. Project construction activities are anticipated to require the operation, refueling and maintenance of construction equipment and the storage of hazardous materials which could result in the unintended release of fuel, oil and lubricants. Construction of project facilities will also require the use and storage of industrial coatings, concrete and other construction materials which, if not correctly stored or contained, could also be released downstream of the project construction site. Adherence to State and local regulations and ordinances and the implementation of measures to contain hazardous substances in the

event of their accidental release will result in potentially significant, but mitigable impacts (see "Mitigation Measures.") No hazards or hazardous materials are expected to be utilized or released during long-term project operations.

4. Cumulative Impacts

All potentially-hazardous toxic substances impacts are confined to the project construction areas. Given implementation of proposed mitigation measures, the proposed project in combination with other cumulative projects in the project area (see Section IV.B., Cumulative Projects) will not significantly alter regional or cumulative hazards or hazardous waste conditions.

5. Mitigation Measures

The following measures address Impact H-1, the accidental release of hazardous materials as a result of a spill of petroleum products or other contaminants during project construction activities.

H-1: The Nipomo Community Services District shall develop a Stormwater Pollution Prevention Plan (SWPPP) that will include Best Management Practices (BMPs) to prevent the discharge of construction materials, contaminants, washings, concrete, fuels, and oils. The SWPPP will be available on the construction site pursuant to State regulations. BMPs should include the following measures:

- Properly maintain (off-site) all construction vehicles and equipment that enter a construction area in order to prevent leaks of fuel, oil, and other vehicle fluids.
- Conduct equipment and vehicle fueling off-site. If refueling is required at a construction site, it will be done within a bermed area with an impervious surface to collect spilled fluids.
- Prepare a Spill Prevention/Spill Response Plan for the site that includes training, equipment and procedures to address spills from equipment, stored fluids and other materials including disposal of spilled material and materials used for clean up of contaminated soils and materials.
- Place all stored fuel, lubricants, paints, and other construction liquids in secured and covered containers within a bermed area.
- Conduct any mixing and storage of concrete or other construction materials in contained areas.
- Insure that all equipment washing and major maintenance is prohibited at a construction site except in bermed areas.

- Remove all refuse and excess material from a construction site as soon as possible.
- Channelize storm water to avoid construction equipment and materials and to avoid the diversion of runoff into existing drainages.

H-2: All project construction activities shall adhere to the standards and requirements of the State Department of Public Health (DPH), Toxic Substance Control Division; the County of San Luis Obispo, Public Health Department, Environmental Health Division and other supporting agencies including the Regional Water Quality Control Board and the San Luis Obispo Air Pollution Control District.

6. Residual Impacts

Mitigation Measures H-1 and H-2 will reduce potentially significant hazards and hazardous materials impacts associated with the accidental release of hazardous materials during project construction to an insignificant level (Class II Impact).

I. PUBLIC SERVICES AND UTILITIES

1. Existing Conditions

- ***Law Enforcement/ Fire Protection***

Law enforcement services for the Nipomo area are provided by the County of San Luis Obispo, Sheriff's Department from their Oceano Substation located at 1681 Front Street in Oceano. The Oceano Substation serves the area between Shell Beach and the southern boundary of the County. The Oceano Substation is staffed with 24 sworn officers. The staff includes a commander, two sergeants, two detectives and two school resources officers for the DARE program and eight non-sworn personnel. A volunteer search and rescue team and a Special Problems Unit are available Countywide. Available equipment includes ten patrol cars, two four-wheel drive vehicles and one unmarked vehicle. A typical shift involves three to four patrol cars in the morning, four to six vehicles in the afternoon/evening and one patrol car during the overnight shift. The precise number of cars and officers on patrol varies daily depending upon the time of day, estimated demand, employee availability, jail check-ins and other administrative duties.

Fire protection and emergency response services for the Nipomo area are currently provided by Cal Fire. The Nipomo Station 20, located at 450 Pioneer Street in Nipomo (at the corner of Oak Glen and Pioneer Streets near Tefft Street) and the Nipomo Mesa Station 22 located at 2391 Willow Road would be the first stations to participate in any fire or emergency response to the project area. Both stations are equipped with two Type I fire engines while the Nipomo Station 20 also has one Schedule B wildland fire engine (used during the dry season), one rescue engine, one battalion chief vehicle and one utility vehicle for both fire-fighting and personnel transport. Cal Fire also has a hazardous materials specialist.

- ***Schools***

The Nipomo area is located within the Lucia Mar Unified School District. District offices are located at 602 Orchard Road in Arroyo Grande. The school district has eleven elementary schools, three middle schools, two high schools and one continuation high school. Of this total, the Nipomo area is served by three elementary schools, one middle school, one high school and the continuation high school.

- ***Utilities and Services***

The Nipomo area lies within the service boundaries of the Southern California Gas Company for natural gas service and Pacific Gas and Electric Company (PG&E) for electrical service. Existing underground natural gas and electrical mains are located throughout the project area which provide utility services to developed land uses. A PG&E electric substation is located adjacent to Joshua Street near Highway 101. The project area is located within the Nipomo Community Services District which provides

wastewater treatment, water supply, storm drainage, retention basins and lighting services in the Nipomo area. Solid waste collection service to the Nipomo area is provided by the South County Sanitation Service. Solid waste is transported to the Cold Canyon Landfill located at 2268 Carpenter Canyon Road in San Luis Obispo. The landfill accepts approximately 600 tons of solid waste per day and has an estimated lifespan of 15 years.

2. Thresholds of Significance

A project is considered to have a significant impact upon law enforcement and fire protection/emergency response services if it generates a population growth or land uses which create the need for a substantial increase in law enforcement or fire protection/emergency response services over the current level of service.

A project is considered to have a significant impact on schools if it generates a population growth or land uses which create the need for a substantial increase in educational services which are beyond the capacity of existing or future school facilities. A project would have a significant impact on energy resources if it results in the unnecessary, unusual, substantially large or wasteful consumption of energy supplies or if it generates energy demands that are beyond the capabilities of the respective service providers. A project is considered to have a significant impact on water supplies if it creates a level of water demand which exceeds the available capacity of the water-providing agency or the capacity of existing or future supplies, facilities or distribution pipelines. A project is considered to have a significant impact upon wastewater treatment capacity if it creates a level of wastewater treatment demand which exceeds the available capacity of the local wastewater treatment facility or the capacity of existing or future facilities or collection pipelines. A project is considered to have a significant impact if it generates solid waste to a level which is beyond the capability of the solid waste collection service, generates large amounts of hazardous waste or significantly reduces the lifespan of the affected landfill.

3. Project Impacts

Impact I-1: *The proposed project may potentially generate the demand for increased law enforcement and fire protection services. However, the proposed project will not directly induce or generate any new population or housing or generate any increased demands for law enforcement or fire protection/emergency services.*

As indicated in Section V.B. Population and Housing, the proposed Wastewater Treatment Facilities Improvements Project will not directly induce or generate any new population or housing. In addition, the proposed wastewater treatment facilities improvements, disposal site options, pipeline extensions and associated facilities do not require any unusual law enforcement surveillance nor do they generate any increased demands for fire protection/emergency services. As such, potential impacts of the proposed project upon existing law enforcement and fire protection services are considered to be less than significant.

Impact I-2: *The proposed project may potentially impact existing educational services. However, the proposed project will not directly generate any population growth or land uses that create the need for increased educational services from the Lucia Mar Unified School District.*

The proposed Wastewater Treatment Facilities Improvements Project will not directly generate any population growth or land uses that create the need for increased educational services from the Lucia Mar Unified School District. Since the proposed project will not directly generate any school age children, no impacts to schools are anticipated.

Impact I-3: *The proposed project could result in impacts upon existing utilities and services. These impacts are considered to be potentially significant, but mitigable.*

Construction, operation and maintenance of the proposed wastewater treatment and disposal facilities will require the minimal use of electrical power. It should be noted, however, that proposed project improvements at the Southland WWTF will require less electricity per gallon of treated effluent than the current WWTF design. The District is considering provision of a solar power generating system as the primary power source for future treatment plant operations. Operations of the selected effluent disposal site will also require the use of electric powered pumps which will consume relatively small amounts of electricity. The impact of this future energy demand is not anticipated to be significant and falls within the anticipated service parameters of the involved service providers.

The proposed wastewater treatment facilities improvements project will not directly generate the demand for water service nor will it impact local or regional water treatment or distribution facilities. The proposed project will ultimately result in the increased percolation of treated wastewater effluent into the groundwater basin due to the increased treatment capacity at the Southland Wastewater Treatment Facility. This increased wastewater percolation will provide an additional source of water supply into the groundwater basin and may represent a potentially beneficial impact.

The proposed project is intended to improve the efficiency and reliability of the operations of the existing NCSD wastewater treatment and disposal system and is intended to serve existing customers within the NCSD service area. This proposed project is therefore considered to represent a beneficial impact to wastewater collection facilities within the NCSD wastewater treatment and disposal system. Since the proposed project will not increase the level of wastewater generation within the NCSD, impacts upon existing wastewater treatment and disposal facilities is considered to be less than significant. Since the proposed project involves the provision of additional facilities necessary to expand the wastewater treatment capabilities and capacity of the existing Southland Wastewater Treatment Facility, these improvements can be viewed as accommodating future demands for wastewater treatment within the Nipomo Community

Services District. However, the proposed project could also represent a reduction in or elimination of a potential constraint upon future development within areas to be served by the additional wastewater treatment facilities associated with the proposed project (see Section V.A. Land Use and Planning).

The proposed project will generate solid waste during project construction in the form of lumber used in reinforcement of utility trenches and other construction-related solid waste. This solid waste generation is considered to be a short-term impact. Given the limited extent of project construction, these construction-related solid waste impacts are considered to be less than significant.

The proposed increase in wastewater treatment capacity resulting from the proposed project will generate biosolids which will be disposed of through one or a combination of methods including landfill disposal, land application or composting at a regional composting facility. This increased generation of biosolids will be disposed of in a manner which is not beyond the capability of the solid waste collection service. It should be noted, however, that proposed project improvements will reduce the amount of generated biosolids per gallon of treated effluent as compared to the current WWTF design. Use of these biosolids for land application or composting at a regional composting facility will insure that this increased generation of biosolids will not affect the lifespan of any affected landfill. As such, impacts associated with this increased generation of biosolids is considered to represent a potentially significant, but mitigable impact.

4. Cumulative Impacts

Cumulative public services and utilities conditions are based upon existing levels of services combined with demands upon public services and utilities from projects under construction, approved or pending approval in the South County Planning Area (see Section V.B. Cumulative Projects). With the exception of the increased generation of biosolids resulting from increased levels of wastewater treatment which is considered to be a mitigable impact, the proposed project within the cumulative development scenario will not significantly impact regional or cumulative public services and utilities.

5. Mitigation Measures

I-1: The District shall, if feasible and cost-effective, pursue methods of disposal of biosolids involving land application and/or composting at a regional composting facility.

I-2: The District shall investigate the feasibility and cost-effectiveness of the use of solar power or other alternative energy sources to power wastewater treatment or other project facilities.

6. Residual Impacts

Mitigation Measure I-1 will reduce potentially significant solid waste impacts associated with the increased generation of biosolids to an insignificant level (Class II Impact).

Mitigation Measure I-2 will reduce impacts associated with project energy consumption to an insignificant level (Class II Impact).

Potential impacts upon law enforcement, fire protection services and educational services are considered to be less than significant (Class III Impact).

Potential impacts related to provision of percolation ponds and the resulting increased percolation of wastewater which provides an additional source of water supply into the groundwater basin and improves the efficiency and reliability of the operations of the NCSD wastewater treatment and disposal system resulting from the proposed project are considered to represent a beneficial impact (Class IV Impact).

J. TRAFFIC

1. Existing Conditions

Primary access to the project area is provided via State Highway 101. In the project area, Highway 101 is a four-lane freeway served by interchanges at Tefft Street, Los Berros Road and Thompson Avenue. The local circulation system serving the Nipomo Mesa includes Tefft Street, Thompson Avenue, Southland Street, Orchard Road, North and South Frontage Road, Joshua Street, Willow Road, Pomeroy Road and Hetrick Avenue. With the exception of the four lanes on Tefft Street, all these local roadways are two-lane paved roads.

2. Thresholds of Significance

The County of San Luis Obispo defines Level of Service C as the lowest acceptable service level for intersections and roadway segments in rural areas. According to San Luis Obispo County significance criteria, a significant traffic-related impact would occur if the addition of project traffic causes an intersection or roadway segment currently operating at acceptable levels of service (LOS C or better) to reduce to unacceptable levels (below LOS C) or if a project contributes additional traffic to intersections or roadways currently operating at unacceptable levels of service.

Construction activities may result in significant impacts to traffic circulation if they result in the long-term diversion of traffic or closure of a roadway or intersection resulting in an unacceptable level of service. Construction activities may also result in significant impacts if they result in the creation of insufficient parking, block or impede access to other properties or result in hazards to bicyclists, equestrians and/or pedestrians.

3. Project Impacts

Impact J-1. *The proposed project will generate additional traffic during project construction, which may potentially result in traffic congestion or unacceptable levels of service on an adjacent roadway or intersection. However, the proposed project will only generate a minor amount of traffic during construction activities. Regional traffic flows will not be affected by the long-term operation of project facilities.*

The proposed project will generate a minor amount of traffic during construction activities. The traffic generated by project construction activities will involve automobile trips associated with worker commutes, haul trucks and construction equipment. As noted in Table 19, Construction Employee Breakdown, a total of employees for Phase I project construction is 15 to 24 workers. Phase II including the construction of the off-site disposal area is estimated to generate a total of 22 to 39 workers while Phase III is estimated to generate a total of 15 to 24 workers. In order to provide a maximum probable impact ("worst case") total for traffic impacts during project construction, it is

assumed that Phases I and II of project construction occur concurrently thereby generating a total of 37 to 63 construction workers.

TABLE 19
CONSTRUCTION EMPLOYEE BREAKDOWN

Construction Function	Duration (months)	Foreman	Operators	Laborers	Specialists	Total
Phase I WWTF Improvements	18	2-5	3-5	8-10	2-4	15-24
Phase II WWTF Improvements	12	2-5	3-5	8-10	2-4	15-24
Off-site Reuse or Percolation Ponds	18	2-3	2-5	2-5	1-2	7-15
Phase III WWTF Improvements	15	2-5	3-5	8-10	2-4	15-24

Assuming two daily vehicle trips per employee, a maximum of 63 employees and an additional two trips per employee to account for vehicle trips associated with supervisors, haul trucks, construction equipment, etc. results in an estimated maximum of 252 total vehicle trips per day. Of this total, it is estimated that this construction-related traffic will generate a maximum of 63 peak hour trips or 25% of the total daily traffic. These low daily and peak hour volumes combined with the short-term nature of construction activities results in a less than significant impact.

Regional traffic flows will not be affected by the long-term operation of project facilities.

Impact J-2. *Project construction activities could result in the diversion of traffic creating an unacceptable level of service, insufficient parking, blocking or impeding access to adjacent properties or result in hazards to bicyclists, equestrians and/or pedestrian. These impacts are considered to be potentially significant, but mitigable.*

Project construction activities may result in the short-term diversion of automobile traffic or farm equipment from adjacent agricultural farmlands on certain local roadways including Orchard Road, Pomeroy Road, Willow Road and Tefft Street. With the provision of traffic controls or flagmen, where necessary, these impacts to traffic and circulation are considered to be potentially significant, but mitigable impacts.

Project construction may result in the temporary loss of available parking on roadways. However, most areas of project construction have adequate on- or off-street parking generally in areas with little parking demand. The potential loss of parking is considered to be short-term and, therefore, represents a less than significant impact.

Project construction activities may also result in the temporary blockage of access to adjacent properties or bicycle, equestrian or pedestrian routes on roadways subject to construction. These blockages are considered to be short-term and with the provision of

traffic controls or flagmen, where necessary, are considered to represent potentially significant, but mitigable impacts.

4. Cumulative Impacts

Cumulative traffic conditions are based upon existing traffic levels combined with projects under construction, approved or pending approval in the South County Planning Area (see Section IV.B., Cumulative Projects). With the exception of short-term traffic generation and circulation impacts associated with construction, the proposed project will generate little in the way of long-term traffic volumes. The proposed project within the cumulative development scenario will, therefore, not significantly impact regional or cumulative traffic conditions.

5. Mitigation Measures

The following measure addresses Impacts J-1 and J-2, potential diversion of traffic, potential hazards to bicyclists, equestrians and/or pedestrians and impeding access to adjacent properties.

J-1: All project construction sites accessing onto or occurring adjacent to public roadways shall provide adequate signage, barriers and, if necessary, flagmen in order to insure the safe diversion of traffic, bicyclists, equestrians and/or pedestrians. These measures shall also insure continued access from adjacent properties to local roadways.

6. Residual Impacts

Mitigation Measure J-1 will reduce potentially significant impacts related to the diversion of traffic, potential hazards to pedestrians, equestrians and/or bicyclists and impeding access to adjacent properties to an insignificant level (Class II Impact).

Potential impacts related to construction-related traffic generation and the potential loss of available parking are considered to be less than significant (Class III Impact).

K. NOISE

1. Existing Conditions

Ambient noise levels in the project area range from the low-30 to mid-60 dBA. Noise sources include traffic on Highway 101, automobile and truck traffic noise on local roadways, commercial and industrial uses, occasional small aircraft and other less obtrusive urban and non-urban noise sources.

The County of San Luis Obispo specifies outdoor and indoor noise limits for various land uses impacted by noise sources. The noise limits specified in the County's Noise Element are in terms of Community Noise Equivalent Level (CNEL). The County Noise Ordinance states that for residential uses, the exterior noise exposure level shall not exceed 60 CNEL and the interior noise exposure level shall not exceed 45 CNEL. There is no exterior noise standard for commercial and industrial uses. Several activities are exempted from the Noise Ordinance standards. Noise sources associated with construction are exempted, provided that such activities do not take place before 7:00 a.m or after 9:00 p.m. on any day except Saturday or Sunday, or before 8:00 a.m. or after 5:00 p.m. on Saturday or Sunday.

2. Thresholds of Significance

Noise impacts from the proposed project, both temporary and long-term, are measured against the County of San Luis Obispo Noise Ordinance. Construction activities as well as ongoing project operations must comply with the County Noise Ordinance. In community noise assessment, changes in noise levels greater than 3 dB are often identified as significant. Changes less than 1 dB will not be discernable to local residents. In the range of 1 to 3 dB, residents who are very sensitive to noise may perceive a slight change. A 3 dB or greater noise level increase is considered to be significant.

Long-term off-site impacts from traffic noise are measured against two criteria. Both criteria must be met for a significant impact to be identified. First, project traffic must cause a substantial noise level increase on a roadway segment adjacent to a noise sensitive land use. Second, the resulting noise levels must exceed the criteria level for the noise sensitive land use. In this case, the criteria exterior noise level is 60 CNEL for adjacent residential uses.

3. Project Impacts

Impact K-1. *The proposed project could generate construction noise which may impact surrounding areas containing noise sensitive uses. These impacts are considered to be potentially significant, but mitigable.*

Construction noise represents a short-term impact on ambient noise levels. The primary sources of construction noise are heavy equipment noise generated by construction equipment, including trenching equipment, trucks, bulldozers, concrete mixers and portable generators that can reach high levels. Grading generates the highest levels of noise during construction. The peak noise level for most of the heavy equipment that will be used during grading and excavation of the proposed treatment facilities improvements, disposal site options, pipeline extensions and associated facilities is 70 to 95 dBA at a distance of 50 feet. At 200 feet, the peak construction noise levels range from 58 to 83 dBA. At 400 feet, the peak noise levels range from 52 to 77 dBA. These noise levels are based upon worst-case conditions. Typically, construction-related noise levels near the construction site will be less.

Noise sensitive uses in the immediate vicinity of proposed locations for construction activities associated with the grading and excavation of the proposed treatment facilities improvements, disposal site options, pipeline extensions and associated facilities include existing residential uses adjacent to Orchard Road, Pomeroy Road and Tefft Street.

The County of San Luis Obispo Noise Ordinance requires construction activities and their resultant noise impacts occur during the hours between 7:00 a.m. and 9:00 p.m. on weekdays and between 8:00 a.m. and 5:00 p.m. on Saturdays and Sundays. In addition, all project construction equipment utilizing combustion engines will be equipped with mufflers.

Phases I and III of project construction involve provision of improvements at the Southland Wastewater Treatment Facility while Phase II of project construction involves additional treatment facilities improvements as well as the possibility of future off-site transmission mains and disposal site(s). All three phases of construction include other associated facilities including but not limited to pump stations, monitoring equipment, etc. These construction-related noise impacts can be mitigated to an insignificant level through compliance with County Noise Ordinance restrictions and the use of proper noise muffling devices. These construction noise impacts are considered short-term and with mitigation measures represent a potentially significant, but mitigable impact.

Impact K-2. *The proposed project could generate increased noise levels due to long-term project operations. These impacts are considered to be potentially significant, but mitigable.*

Noise associated with long-term operations of the proposed project will involve the operation of the pump stations, metering and electrical equipment as well as occasional vehicle trips for maintenance.

Maximum exterior noise levels from this equipment are not expected to exceed 60 dBA. Any stationary noise sources located within 300 feet of any occupied residential dwellings that exceed 60 dBA must be contained within a housing enclosure or other appropriate noise screen. Noise generated by long-term project operations or vehicle

traffic is considered negligible. Long-term noise impacts are considered to be potentially significant, but mitigable impacts.

4. Cumulative Impacts

Cumulative noise conditions are based upon existing noise levels combined with noise from projects under construction, approved or pending approval in the South County Planning Area (see Section IV.B. Cumulative Projects). With the exception of noise impacts associated with project construction, which are considered to be short-term, the proposed project does not represent a long-term noise source. The proposed project within the cumulative development scenario will not significantly impact regional or cumulative noise conditions.

5. Mitigation Measures

The following measures address Impact K-1, increased noise levels during project construction.

K-1: All project construction activities shall comply with the County of San Luis Obispo Noise Ordinance Section 22.06.042(d) which limits noise-generating construction activities to the hours between 7:00 a.m. and 9:00 p.m. on weekdays and 8:00 a.m. and 5:00 p.m. on Saturdays and Sundays.

K-2: All construction equipment utilizing combustion engines shall be equipped with "critical" grade (rather than "stock" grade) noise mufflers that are in good condition. Noise level reductions with the use of "critical" grade mufflers can be as high as 5 dBA. Back up "beepers" will also be tuned to insure lowest possible noise levels.

The following measure addresses Impact K-2, increased noise levels due to long-term project operations.

K-3: Stationary noise sources that exceed 60 dBA (i.e. pump stations and other project facilities) shall be located at least 300 feet from any occupied residential dwellings unless noise-reducing engine housing enclosures or other appropriate noise screens are provided in order to insure that exterior noise levels do not exceed 60 CNEL.

6. Residual Impacts

Mitigation Measures K-1 and K-2 will reduce potentially significant impacts related to the generation of short-term construction noise to an insignificant level (Class II Impact).

Mitigation Measure K-3 will reduce potentially significant noise impacts associated with long-term project operations to an insignificant level (Class II Impact).

L. AIR QUALITY

1. Existing Conditions

- ***Climate***

The climate of the project area can be generally described as Mediterranean, with warm, dry summers and cooler, relatively damp winters. Along the coast, mild temperatures are the rule throughout the year due to the moderating influence of the Pacific Ocean. This effect is diminished inland in proportion to distance from the ocean or by major intervening terrain features, such as the coastal mountain ranges. As a result, inland areas are characterized by a considerably wider range of temperature conditions. Maximum summer temperatures average approximately 70 degrees Fahrenheit near the coast, while inland valleys can reach over 100 degrees. Average minimum winter temperatures range from the low 30's along the coast to the low 20's inland.

- ***Air Quality***

The California Clean Air Act (CCAA) requires that all Air Pollution Control Districts (APCDs) and Air Quality Management Districts (AQMDs) adopt and enforce regulations to achieve and maintain the state ambient air quality standards for the area under its jurisdiction. The CCAA requires nonattainment districts to develop and adopt an Air Quality Management Plan (AQMP). The AQMP must include emission reduction strategies and control measures sufficient to demonstrate that California air quality standards will be attained by the "earliest practicable date." As a demonstration of progress toward attainment, the CCAA requires that emissions of nonattainment pollutants be reduced by at least 5% per year (compared to 1991 emission levels) until the standards are achieved. The Act identifies transportation control measures as an essential element of the attainment plan.

The closest monitoring stations to the project operated by the San Luis Obispo County Air Pollution Control District are the Nipomo Regional Park Monitoring Station located at West Tefft Street at Pomeroy Road and the Nipomo – Guadalupe Monitoring Station located at 1300 Guadalupe Road. These stations measure nitrogen oxides (NO_x) and ozone (Nipomo Regional Park Monitoring Station) and sulfur oxides (SO_x) (Nipomo – Guadalupe Monitoring Station). Between September, 2008 and September, 2009 these monitoring stations did not record any exceedences of State or Federal standards for these three pollutants.

San Luis Obispo County has been designated a nonattainment area for the State standards for ozone and particulate matter. Ground level ambient ozone is primarily generated by combustion byproducts reacting with sunlight and ambient conditions. San Luis County's primary areas where ozone violations occur are in the northern and eastern

portions of the County where the summer temperatures are high. In addition, ozone is transported to San Luis Obispo County from upwind regions in the state.

Ambient PM_{10} concentrations have been primarily a localized issue of concern in the southern portion of San Luis Obispo County, providing the major impetus for the County's non-attainment designation for the State PM_{10} standard. The major sources for PM_{10} are mineral quarries, grading, demolition, agriculture tilling, road dust and vehicle exhaust. One local source of particulates is off-road vehicle use at the Oceano Dunes Recreation Area.

The San Luis Obispo County Air Pollution Control District is the agency charged with monitoring air pollutant levels to insure that air quality standards are met and if they are not, developing and updating the Attainment Plan for this County. Updates to these plans must be performed every three years until attainment is reached.

- ***Global Climate Change***

Global climate change (GCC) refers to change in the average weather of the earth which can be measures by wind patterns, storms, precipitation and temperature. The impact of man-related activities on GCC is evident in the scientific correlation between rising global temperatures, atmospheric concentrations of CO_2 and other greenhouse gases (GHGs) and the industrial revolution.

The greenhouse effect is a natural process by which some of the radiant *heat* from the sun is captured in the lower atmosphere of the earth. The gases that help capture the heat are called greenhouse gases. While GHGs are not normally considered air pollutants, all have been identified as forcing the earth's atmosphere and oceans to warm above naturally occurring temperatures. Some GHGs occur naturally in the atmosphere, while others result from human activities. Naturally occurring GHGs include water vapor, carbon dioxide, methane, nitrous oxide and ozone. Certain human activities add to the levels of most of these naturally occurring gases. The United States is the top producer of GHG in the world. California's GHG emissions rank second in the United States (behind Texas) and rank internationally just below Australia. The primary contributors to man-related GHG emissions in California are transportation, electric power production from both in-state and out-of-state sources; industry; agriculture and forestry and other sources, which include commercial and residential activities.

According to the 2006 California Climate Action Team Report (CCAT, 2006) the following climate change effects are predicted in California over the course of the next century:

- Diminishing Sierra snow pack by 70 to 90%, threatening the state's water supply.
- Increasing temperatures from 8 to 10.4 degrees Fahrenheit under the higher emission scenarios, leading to a 25 to 35% increase in the number of days ozone pollution levels are exceeded in most urban areas.

- Rising sea level (from 4 to 33 inches), causing coastal erosion along the length of California and sea water intrusion into the Delta. This would also exacerbate flooding in already vulnerable regions.
- Increased vulnerability of forests due to pest infestation and increased temperatures.
- Increased challenges for the State's agriculture industry from water shortages, increasing temperatures, and saltwater intrusion into the Delta.
- Increased electricity demand, particularly in the hot summer months.

In June 2005, Governor Schwarzenegger established California's GHG emissions reduction targets in Executive Order S-3-05. The Executive Order established that GHG emissions should be reduced to 2000 levels by 2010; to 1990 levels by 2020; and to 80 percent below 1990 levels by 2050. In furtherance of the goals established in Executive Order S-3-05, the Legislature enacted Assembly Bill 32 (AB 32), the California Global Warming Solutions Act of 2006, which Governor Schwarzenegger signed on September 27, 2006. AB 32 represents the first enforceable statewide program to limit GHG emissions from all major industries with penalties for noncompliance. The California Air Resource Board (CARB) has been assigned to carry out and develop the programs and requirements necessary to achieve the goals of AB 32. In January 2008, a statewide cap for 2020 emissions based on 1990 levels was adopted. In October 2008, CARB published a Proposed Scoping Plan, in coordination with the Climate Action Team (CAT), to establish a comprehensive set of actions designed to reduce overall greenhouse gas emissions in California. The measures in the Scoping Plan approved by CARB will be developed by 2011 and will be in place by 2020. Significant progress can be made toward the 2020 goal which includes improving existing technologies and the efficiency of energy use. Other solutions involve improving the State's infrastructure, transitioning to cleaner and more secure sources of energy and adopting 21st century land use planning and development practices.

To meet the 1990 target established by CARB 32, CARB recommends a de minimis (minimal importance) emission threshold of 0.1 million metric tons annually (100,000 MT per year) of carbon dioxide per transportation source category. In addition to the Proposed Scoping Plan, CARB has released the Preliminary Draft Staff Proposal with the objective of developing interim significant thresholds for commercial and residential projects. CARB has proposed a threshold of 7,000 annual MT for industrial operational sources. However, the CARB has not yet defined or developed thresholds applicable to residential, commercial sources or recreational land uses.

2. Thresholds of Significance

The San Luis Obispo County Air Pollution Control District (APCD) has published recommended thresholds in their "2003 CEQA Air Quality Handbook (revised 2005)". Construction activities involving the generation of NO_x and ROG exceeding 185 lbs/day

or 2.5 tons/quarter of particulate emissions are considered to represent a significant short-term air quality impact.

Long-term daily emissions are considered to be significant if carbon monoxide levels exceed 50 pounds per day and levels for reactive organic gases, nitrogen oxides, sulfur oxides and particulates exceed 10 pounds per day. These represent the Tier 1 significance thresholds from the San Luis Obispo County Air Pollution Control District. If these Tier 1 thresholds are exceeded, mitigation measures contained in the 2003 APCD CEQA Handbook are recommended to be incorporated in the project. If the Tier 2 thresholds (550 pounds per day for carbon monoxide and 25 pounds per day for reactive organic gases, nitrogen oxides and particulates) are exceeded, all feasible mitigation measures must be incorporated into the project. If any of the pollutant emissions exceed 25 tons/year (Tier 3 threshold), offsets or off-site mitigation may be required.

No air district in California, including the San Luis Obispo Air Pollution Control District (APCD), has identified a significance threshold for Greenhouse Gas (GHG) emissions or a methodology for analyzing air quality impacts related to GHGs. Even though the GHG emissions associated with an individual development project could be estimated, there is no emissions threshold that can be used to evaluate the California Environmental Quality Act (CEQA) significance of these emissions. In addition, GHG models are not sensitive enough to be able to predict the effect of individual projects on global temperatures and the resultant effect on climate. Therefore, they cannot be used to evaluate the significance of a project's impact. Thus, insufficient information and predictive tools exist to assess whether an individual project would result in a significant impact on global climate.

3. Project Impacts

Air quality impacts are usually divided into short term and long term. Short term impacts are usually the result of grading operations, construction of project facilities and construction-related vehicle traffic. Long term impacts are associated with the operation of the proposed wastewater treatment facilities improvements project.

Impact L-1. *The proposed project could result in the generation of air pollutants during project construction activities. These impacts are considered to be potentially significant, but mitigable.*

The proposed project involves the construction of wastewater treatment facilities improvements, disposal site options, pipeline extensions and other associated facilities including pump stations and metering and electrical equipment.

Particulate matter in the form of fugitive dust will be generated during the grading and excavation of the proposed treatment facilities improvements, disposal site options, pipeline extensions and associated facilities. Emissions associated with grading to prepare for construction and/or installation of these facilities are based upon estimates

which assume that a maximum probable ("worst-case") impact assessment of project grading impacts include the simultaneous construction of the proposed facilities improvements at the Southland WWTF and one of the three wastewater disposal options as well as the pipelines extending to the three possible sites. These estimates assume that approximately one acre of grading will occur at the Southland WWTF and two acres at the disposal site will occur at any one time. Pipeline installation is anticipated to occur within 20 to 40 foot segments with an average trench width of eight feet. As such, 320 square feet or an additional 0.0073 acres will be disrupted. This results in a total disturbance of 3.0073 acres. Construction activities for large development projects are estimated in the San Luis Obispo County Air Pollution Control District CEQA Handbook to generate approximately 40 pounds per acre per day, or approximately 0.42 ton per acre per month of disturbed soil. If water or other soil stabilizers are used to control dust, the emissions can be reduced to an insignificant level.

This grading activity is estimated to generate a "worst-case" total of 0.63 tons of particulate matter per month or approximately 60.1 pounds of particulates per day. With implementation of proposed mitigation measures to reduce dust generation during project construction, this total does not exceed the APCD significance thresholds. With these measures, short-term air quality impacts associated with fugitive dust generation during project construction are considered to represent a potentially significant but mitigable impact. It should be noted that the impact due to grading is very localized. Additionally, this material is inert silicates rather than the complex organic particulate matter released from combustion sources which are more harmful to health. In some cases, grading may be near existing development. Care should be taken to minimize the generation of dust. Common practice for minimizing dust generation is watering before and during grading.

Serpentine rock has been identified by the State Air Resources Board (ARB) as having the potential to contain naturally-occurring asbestos, identified by the ARB as a toxic air contaminant. Under the ARB Air Toxics Control Measure (ATCM) for Construction, Grading, Quarrying, and Surface Mining Operations, prior to any grading activities at the site, a geologic analysis will be necessary to determine if asbestos-bearing serpentine rock is present. If naturally occurring asbestos is found at the site, an Asbestos Health and Safety Program and an Asbestos Dust Control Plan are required to be approved by the Air Pollution Control District prior to project grading.

Air pollutants will be emitted by construction equipment necessary for the construction of the proposed wastewater treatment facilities improvements, off-site disposal options, pipeline extensions and other associated facilities. During the anticipated period of operation of this equipment, nitrogen oxides, reactive organic gases, sulfur oxides, particulates and carbon monoxide will be emitted. Operation of diesel fueled trenching or grading equipment may generate pollutants that exceed the SLOAPCD thresholds of significance. Such equipment shall either be certified pursuant to the California Air Resources Board's Portable Equipment Registration Program (PERP) or will be subject to an Authority to Construct issued by the San Luis Obispo County Air Pollution Control District (APCD). This permit will allow implementation of Best Available Control

Technologies including diesel particulate filters and proper fuel selection. According to the County APCD, with implementation of proposed mitigations, total emissions from this equipment is not expected to exceed the calendar quarter SLOAPCD emissions thresholds for these pollutants resulting in a less than significant impact.

As discussed in Section V.H, Traffic, a maximum total employees for Phases I and II of project construction is 63 employees. Combining Phases I and II of project construction activities represent a maximum probable ("worst-case") scenario for air quality impacts associated with project construction. Assuming two daily vehicle trips per employee combined with an additional two trips per employee to account for vehicle trips associated with supervisors, haul trucks, construction equipment etc. results in an estimated maximum of 252 vehicle trips per day. Assuming an average trip length of ten miles results in a total of 2,520 vehicle miles per day during the maximum probable construction conditions. Pollutant generation resulting from construction traffic is provided in Table 20, Construction Traffic Emissions.

TABLE 20
CONSTRUCTION TRAFFIC EMISSIONS

Pollutant	Factor (gms/mile)	Emissions (lbs/day)	Tier 1 Significance Threshold (lbs/day)
CO	7.48	41.6	50
ROG	0.48	2.67	10
NO_x	0.82	4.56	10
PM_{10}	0.06	0.33	10
SO_x	0.29	1.61	10

These totals do not exceed the APCD Tier 1 significance thresholds. Short-term air quality impacts associated with project construction vehicular use is considered to be an insignificant impact.

Impact L-2. *The proposed project could generate pollutants associated with long-term project operations. These impacts are considered to be potentially significant, but mitigable.*

Long-term project operations will involve the operation of wastewater treatment facilities, pump stations, metering and electrical equipment and vehicle trips for District personnel. Long-term operation of a 360 horsepower pump is required in order to treat the anticipated future flow rates of the wastewater entering the Southland WWTF. These pumps used for pumping the treated wastewater will be electrically powered. Backup (standby) pumps, to be used only on an emergency basis during power outages or equipment breakdown, can be diesel-powered.

Based upon the electrical usage rate of 2,365,200 kilowatt hours per year, pollutant generation totals associated with long-term project operations, primarily due to effluent pumping, are provided in Table 21, Project Operations Emissions.

TABLE 21
PROJECT OPERATIONS EMISSIONS

Daily Power (KWH/day)	Emissions (lbs/day)				
	CO	ROG	NO_x	PM_{10}	SO_x
6,480	1.30	0.08	7.44	0.27	0.78

These totals do not exceed the APCD Tier 1 significance thresholds of 10 pounds per day for each pollutant. The occasional use of diesel-powered back-up (standby) pumps to only be used during a power outage or equipment breakdown will exceed the APCD Tier 1 significance thresholds. However, such use will be occasional and short-term and is therefore considered to be an insignificant impact that is outweighed by public health and safety concerns. It should be noted that pollutants generated by electrical use are produced at the power plant utilizing fossil fuels rather than at the project site. In California, 80 to 90 percent of power is generated from fossil-fueled power plants with the remainder of power supplied by nuclear fuels and other alternative energy sources. As such, these pollutants will not be introduced into the local but rather regional air inventory.

It should also be acknowledged that the use of diesel-powered pumps, as an alternative to electric power, generates significantly greater pollutant generation at the project site rather than at the power source. Table 22, Emissions Comparison, Diesel and Electric Powered Pumps provides a comparison of pollutant generation rates as expressed in pounds per day and the net change in pollutant generation expressed in pounds per day and tons per year. These factors are based upon 24-hour operation of each type of power source. As noted in the table below, the use of diesel powered pumps would result in significantly increased levels of pollutant generation as compared to the proposed use of electric powered motors.

TABLE 22
EMISSIONS COMPARISON
DIESEL AND ELECTRIC POWERED MOTORS

Pollutant Generation Factors (lbs/day)					
Motor	ROG	NO_x	SO_x	PM_{10}	CO
Diesel (lbs/day)	8.85	55.45	7.49	4.31	4,166.67
Electric (lbs/day)	0.08	7.44	0.78	0.27	1.30
Net Change (lbs/day)	8.77	48.01	6.71	4.04	4,165.37
Net Change (tons/year)	1.60	8.76	1.22	0.74	760.18

The use and operation of metering and other electrical equipment will generate insignificant amounts of pollutants well below the APCD Tier 1 significance thresholds. As such, potential air quality impacts associated with the use and operation of electrical equipment at the Southland WWTF and at pump stations is considered to represent an insignificant impact.

The use of service vehicles by the NCSD to monitor the long-term operations and/or repair project facilities is anticipated to involve approximately two vehicle trips per day from the District Management Facility located at 509 Southland Street to monitor/repair the proposed wastewater treatment facilities improvements, the disposal site and pipeline extensions/pump stations. With an average trip length of three miles, a total of 12 vehicle miles per day is generated.

Pollutants generated by this level of vehicle use, a "worst-case" total of 12 miles per day, are considered to be minimal and well below the APCD Tier 1 significant thresholds. As such, potential air quality impacts associated with the use of service vehicles by the NCSD is considered to represent an insignificant impact.

- ***Global Climate Change***

In the absence of quantitative emissions thresholds, consistency with adopted programs and policies is used by many jurisdictions to evaluate the significance of cumulative impacts. A project's consistency with the implementing programs and regulations to achieve the statewide GHG emission reduction goals established under Executive Order S-3-05 and AB 32 cannot yet be evaluated because they are still under development. Nonetheless, the Climate Action Team, established by Executive Order S-3-05, has recommended strategies for implementation at the statewide level to meet the goals of the Executive Order. In the absence of an adopted plan or program, the Climate Action Team's strategies serve as the current statewide approach to reducing the State's GHG emissions.

Short-term emissions resulting from project construction will generate emissions which may contribute to global climate change. The primary source of greenhouse gas emissions (primarily carbon dioxide) generated by construction activities is from the use of diesel-powered construction equipment and other combustion sources (i.e., generators, worker vehicles, materials delivery, etc.). It is estimated that project construction activities will generate a total of 0.78 metric tons of greenhouse gases over the entire project construction period of approximately six to eight months. Of this total, a maximum of 0.51 metric tons of carbon dioxide will be generated during grading and 0.27 metric tons during repaving.

The primary source of long-term greenhouse gas emissions from the proposed project will be generated by motor vehicles. The only long-term motor vehicles emissions associated with the proposed project will be for facilities maintenance. Based upon a

"worst-case" average trip length of 5.0 miles and two vehicle trips per day, a total of 10.0 vehicle miles per day will be generated. This total of vehicle miles travelled is estimated to generate 0.78 metric tons per year of greenhouse gas emissions.

Both the short and long-term generation of greenhouse gas emissions associated with the proposed project fall well below the preliminary thresholds developed by the California Air Resources Board. The emissions generated by this project will contribute a miniscule amount to overall global climate change. By way of comparison, based upon global data from the United Nations, the proposed project is estimated to contribute approximately 0.000000021% to the GHG burden for the planet. When compared to California's GHG emissions, the contribution from the proposed project is estimated to be 0.00000015% of 2004 California emissions. Therefore, impacts associated with the generation of greenhouse gas emissions from the proposed project are considered to be less than significant.

The Climate Action Team strategy involving the reduction of fuel usage and thus greenhouse gases during the operational phases of a proposed project is implemented through the proposed use of electric power for the ongoing project pumping. This results in a significant reduction in greenhouse gas generation as compared to the use of diesel-powered pumps. An additional mitigation measure recommends the use of alternative energy sources.

The Climate Action Team strategy of fuel usage reduction and thus greenhouse gases during project construction is implemented through mitigation measures which insure proper tuning and maintenance of construction equipment, use of the proper diesel fuels, minimizing the use of diesel equipment and implementation of Best Available Control Technologies.

These measures involve the most effective, yet reasonably feasible methods of greenhouse gas reduction during both short-term project construction activities and long-term project operations.

4. Cumulative Impacts

Project construction will represent an incremental addition of pollutants to the regional air quality inventory. The proposed project in combination with pollutants generated by projects currently under construction in the South County Planning Area (see Section IV.B Cumulative Projects) represents an incremental but temporary addition of pollutants to regional air quality conditions. The proposed project does not represent a long-term source of air pollutants. With the exception of pollutants generated during project construction which are considered to be short-term, the proposed project within the cumulative development scenario will not significantly impact regional or cumulative air quality conditions.

5. Mitigation Measures

The following measures address Impact L-1, the generation of pollutants during project construction.

L-1: Water trucks or sprinkler systems shall be used in sufficient quantities to prevent airborne dust from leaving any construction site. Increased watering frequency will be required whenever wind speeds exceed 15 mph. Reclaimed water, if available, shall be used for dust control and other construction-related purposes during project construction.

L-2: All dirt stock-pile areas shall be sprayed daily as needed.

L-3: Exposed ground areas that are planned to be reworked at dates greater than one month shall be sown with a fast-germinating native grass seed and watered until vegetation is established.

L-4: All disturbed soil areas not subject to revegetation shall be stabilized using approved chemical soil binders, jute netting or other methods approved by the APCD.

L-5: All roadways, driveways, etc. to be paved or repaved shall be completed as soon as possible. In the event that prompt paving is not possible, seeding or soil binders shall be utilized.

L-6: Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface at a construction site.

L-7: All trucks hauling dirt, sand, soil or other loose materials shall be covered or maintain at least two feet of freeboard.

L-8: Where vehicles enter and exit unpaved roads onto streets, wheel washers or gravel pads shall be installed or trucks and equipment will be washed when leaving the site.

L-9: Streets shall be swept at the end of each day if visible soil material is carried onto adjacent paved roads. Water sweepers with reclaimed water shall be used where possible.

L-10: All material excavated or graded shall be sufficiently watered to prevent excessive amounts of dust. Watering shall occur at least twice a day with complete coverage, preferably in the late morning and after work is done for the day.

L-11: All PM10 mitigation measures required must be included on any project plans. The contractor shall designate a person or persons to monitor the

dust control program and to order increased watering, as necessary, to prevent transport of particulate matter off site. Their duties shall include holidays and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the APCD prior to construction.

L-12: All construction equipment shall be properly maintained and tuned according to manufacturer's specifications.

L-13: All off-road and portable, diesel-powered equipment, including, but not limited to, bulldozers, grading, cranes, loaders, scrapers, backhoes, generator sets, compressors or auxiliary power units, shall be fueled exclusively with CARB motor vehicles diesel fuel. Such equipment shall be stored within a fenced enclosure during non-working hours in order to minimize potential vandalism.

L-14: Where possible, diesel powered equipment shall be replaced with gasoline, electrical, CNG or LPG powered equipment.

L-15: Prior to any project grading, a geologic analysis will be performed in order to determine if asbestos-bearing serpentine rock is present. If naturally occurring asbestos is found at the project site, an Asbestos Health and Safety Program and an Asbestos Dust Control Plan will be submitted to the Air Pollution Control District for review and approval prior to project grading.

The following measures addresses Impact L-2, the generation of pollutants associated with long-term project operations.

L-16: The daily pumping operations at the Southland WWTF for the proposed project shall utilize electric-powered pumps; diesel pumps shall be provided for backup (standby) operation to be used only on an emergency basis during power outages or equipment breakdown.

L-17: The District shall investigate the feasibility and cost-effectiveness of the use of solar power or other alternative energy sources to power wastewater treatment or other project facilities. This analysis shall assess the existing technologies and tradeoffs in order to determine the feasibility of alternate energy sources including solar power. This assessment will be based upon cost constraints, reliability, space requirements and other implementation factors.

6. Residual Impacts

Mitigation Measures L-1 through L-15 will reduce potentially significant air quality impacts associated with project construction to an insignificant level (Class II Impact).

Mitigation Measures L-16 and L-17 will reduce potentially significant air quality impacts related to pollutant generation associated with long-term project operations to an insignificant level (Class II Impact).

VI. UNAVOIDABLE ADVERSE IMPACTS

The State CEQA Guidelines state that an EIR must describe any significant impacts which cannot be avoided or eliminated if the proposed project is completed. These impacts have been discussed in detail in Section V. Environmental Analysis of this EIR and are listed in Table 23, Project Impact Summary below with their respective impact category.

TABLE 23
PROJECT IMPACT SUMMARY

Project Impact	Impact Category	Impact Area
A. Land Use and Planning	Class I	Long-term and cumulative impacts due to elimination of a constraint upon future development in areas served by additional sewer service.
	Class II	Temporary or permanent impacts to agricultural lands.
B. Population and Housing	Class I	Long-term and cumulative impacts due to elimination of a constraint upon future development in areas served by additional sewer service.
	Class III	Increased housing demand associated with project construction.
C. Water	Class II	The potential degradation of surface water quality due to construction-related spills or short-term landform alteration.
	Class IV	Management of the treated effluent mound beneath the Southland WWTF. Increased treatment plant capacity and additional disposal options. Preservation of available groundwater supplies. Maintenance of groundwater quality or violation of water quality standards.
D. Biological Resources	Class II	Impacts related to nesting activities of protected migratory birds and raptors, special-status terrestrial wildlife species, special-status semi-aquatic species, large eucalyptus trees located on Orchard Road and Pomeroy Road, the generation of silt and sedimentation and long-term facilities operations and maintenance activities.
	Class III	Impacts upon non-listed wildlife species and wildlife migration corridors.
	Class IV	Impacts related to the provision of additional habitiat for the Western spadefoot toad.
E. Aesthetics	Class II	Impacts associated with views of project facilities.
	Class III	Visual impacts associated with project construction and the generation of light and glare.
F. Cultural Resources	Class II	The potential disturbance or alteration of historic or prehistoric cultural resources or the discovery of unknown cultural resources during project construction.
G. Geology	Class II	Impacts related to the risk of liquefaction and erosion-induced siltation of local drainages.
	Class III	Exposure of facilities to seismic ground shaking and associated ground failure, exposure of facilities to landslides, locating the project on an unstable geologic unit or unstable soils and the loss of available mineral resources.
H. Hazards and Hazardous Materials	Class II	Impacts related to the accidental release of hazardous materials during project construction.
	Class III	Impacts related to the accidental release of hazardous materials during project operation.
I. Public Services and Utilities	Class II	Solid waste impacts related to the increased generation of biosolids and project energy consumption.
	Class III	Potential impacts to law enforcement, fire protection services and

		educational services.
	Class IV	Provision of percolation ponds and the resulting increased percolation of wastewater.
J. Traffic	Class II	Impacts related to the diversion of traffic, impeding access to adjacent properties and potential hazards to pedestrians, equestrians or bicyclists.
	Class III	Impacts related to construction-related traffic generation and the loss of available parking.
K. Noise	Class II	Impacts related to the short-term generation of construction noise and long-term project operations.
L. Air Quality	Class II	Air quality impacts associated with project construction and long-term project operations.

Class I Impact – Significant unavoidable adverse impacts that cannot be mitigated to a level of insignificance. Although mitigation measures may be proposed, these measures are not sufficient to reduce project impacts to a level of insignificance. These significant, unavoidable adverse impacts require the adoption of a Statement of Overriding Consideration by the Lead Agency if the proposed project is approved.
Class II Impact – Potentially significant adverse impacts which can be reduced to a level of insignificance or avoided entirely with the implementation of proposed mitigation measures.
Class III Impact – Adverse impacts which are found not to be significant for which mitigation measures may be applied but are not required.
Class IV Impact – Project impacts which are considered to be positive or of benefit to the site or the adjacent environment.

The significant unavoidable adverse (Class I) impacts noted above are also listed and briefly described below. These descriptions are followed by a cross-reference to the subsection of Section V. Environmental Analysis of this EIR where a detailed discussion of the significant impact is provided.

Land Use and Planning - The proposed project's potential long-term and cumulative land use and planning impacts resulting from the elimination of a constraint upon future development of areas served by the additional sewer service provided by the proposed project are considered to be significant impacts which cannot be reduced to an insignificant level (see Section V.A. Land Use and Planning).

Population and Housing - The proposed project's potential long-term and cumulative population and housing impacts resulting from the elimination of a constraint upon future development of areas served by the additional sewer service provided by the proposed project are considered to be significant impacts which cannot be reduced to an insignificant level (see Section V.B. Population and Housing).

These significant, unavoidable adverse impacts cannot be reduced to an insignificant level and will require the adoption of a Statement of Overriding Considerations by the Nipomo Community Services District acting as the Lead Agency.

VII. ALTERNATIVES TO THE PROPOSED PROJECT

According to the State CEQA Guidelines, an EIR is obligated to present alternatives to the proposed project which are capable of eliminating significant environmental impacts. A reasonable range of alternatives to the proposed project that could feasibly attain the basic project objectives must be provided. Significant environmental effects of the alternatives must be discussed, but the discussion may be in less detail than the prior analyses concerning the effects of the proposed project. This analysis of project alternatives will also identify the environmentally superior project alternative(s).

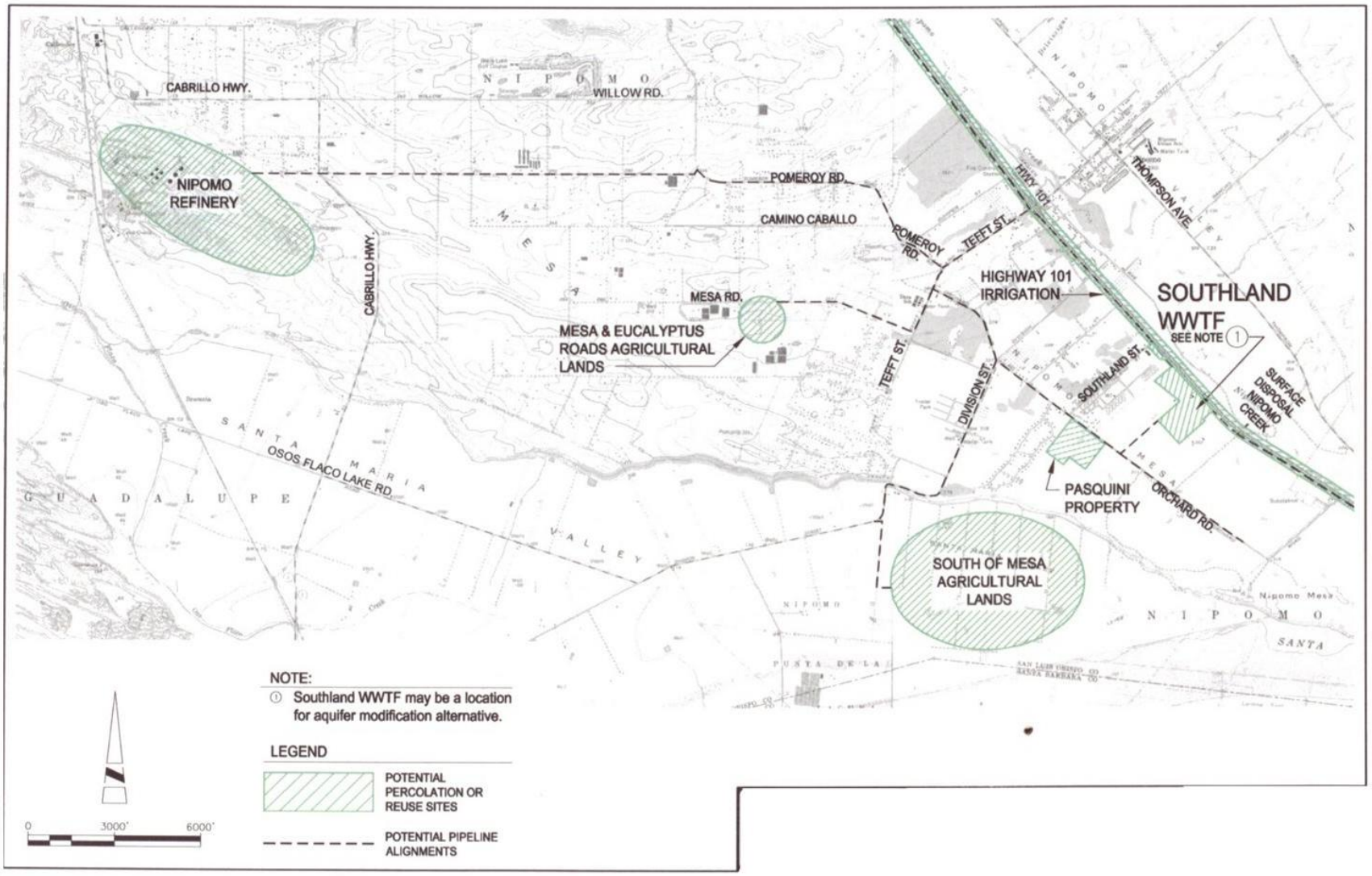
This Draft EIR addresses project alternatives that include the No Project Alternative (Alternative A) and eight treated wastewater disposal options (Alternatives B through I) (see Figure 15, Alternative Effluent Disposal Sites). The following alternatives to the proposed project are analyzed:

A. No Project Alternative
B. Groundwater Recharge Alternative
C. Surface Discharge Alternative
D. Pasquini Property Disposal Alternative
E. South of Mesa Disposal Alternative
F. Mesa and Eucalyptus Roads Disposal Alternative
G. Aquifer Modification Alternative
H. Highway 101 Landscape Irrigation Disposal Alternative
I. Nipomo Refinery Disposal Alternative

The analysis of each project alternative begins with a description of the alternative followed by a discussion of its environmental impacts as compared to the proposed project, that being the provision of wastewater treatment facilities improvements, three proposed treated effluent disposal options, numerous pipeline extensions and associated facilities (see Section III.D. Project Characteristics). Following this discussion, any environmentally superior project alternatives as compared to the proposed project are identified. This determination is based upon two separate analyses: a) the ability of the project alternatives to reduce and/or eliminate the significant unavoidable adverse (Class I) impacts associated with the proposed project which are in the issue areas of: land use and planning and population and housing (see Table 25, Environmentally Superior Alternatives-Significant Impacts) and b) the ability of the project alternatives to reduce or eliminate the remaining potentially significant but mitigable, i.e. direct (Class II) impacts associated with the proposed project (see Table 26, Environmentally Superior Alternatives-Direct Impacts and Table 27, Environmentally Superior Alternatives-Groundwater Impacts).

The proposed project alternatives must also be considered and evaluated in terms of their ability to feasibly attain as many of the objectives of the proposed project as possible as well as their ability to reduce or eliminate the significant environmental impacts of the proposed project. The basic objective of the proposed Nipomo Community Services District Southland Wastewater Treatment Facilities Improvements project is to construct additional wastewater treatment and disposal facilities necessary to serve both existing and future wastewater treatment demands generated

FIGURE 15
Alternative Effluent Disposal Sites



within the Southland WWTF service area of the Nipomo Community Services District consistent with the South County Area Plan (revised 1994). These project objectives are discussed in Section III.B. Project Objectives of this EIR and are listed below.

1. Provide reliable, high quality and cost effective wastewater treatment capacity and services to existing and future customers within the District's Town Sewer Service Area.

2. Respond to and remedy water quality violations associated with prior and current operations of the Southland Wastewater Treatment Facility.

3. Improve the water quality of treated wastewater to comply with current and projected State Waste Discharge Order requirements and to minimize adverse impacts upon Nipomo Mesa groundwater.

4. Manage the height and volume of the subsurface mound of treated wastewater under the Southland percolation basins and the resultant discharge of groundwater into Nipomo Creek over an annual period.

5. Assist in resolving the Nipomo Mesa water supply deficit by promoting the beneficial use of the treated wastewater to either offset current Nipomo Mesa non-potable water usage and/or, where feasible, to augment productive Nipomo Mesa groundwater aquifers.

6. To the extent feasible, minimize use of additional fossil fuels by offsetting project-related increased power utilization with a more sustainable energy source.

7. Improve the efficiency and reliability of operations of the Southland Wastewater Treatment Facility.

These project objectives provide the basis for the evaluation and possible adoption or rejection of various project alternatives. Table 24, Project Alternatives, Comparison With Project Objectives provides a tabular comparison of project objectives and the project alternatives. Two of the project alternatives are capable of meeting these objectives, those being the Mesa and Eucalyptus Roads and Nipomo Refinery Disposal Alternatives. The seven remaining project alternatives are not capable of meeting all of the project objectives in a manner similar to the proposed project. The Nipomo Community Services District, as Lead Agency, must evaluate the comparative merits of these alternatives in their consideration of the proposed project.

TABLE 24
PROJECT ALTERNATIVES -
COMPARISON WITH PROJECT OBJECTIVES

	ALTERNATIVES								
OBJECTIVES	A. No Project	B. Ground-water Recharge	C. Surface Discharge	D. Pasquini Property	E. South of Mesa	F. Mesa and Eucalyptus Roads	G. Aquifer Modification	H. Highway 101 Landscape	I. Nipomo Refinery
Provide reliable, high quality, cost effective wastewater treatment capacity	0	2	1	2	1	3	3	3	3
Remedy water quality violations	0	2	2	3	3	3	2	3	3
Improve quality of treated wastewater	0	4	4	3	3	3	2	3	3
Manage subsurface wastewater mound	0	3	3	3	3	3	2	3	3
Assist in resolving water supply deficit	0	1	2	2	1	3	2	2	3
Minimize use of additional fossil fuels	0	2	1	3	3	3	2	3	3
Improve efficiency and reliability of Southland WWTF	0	3	2	1	3	3	3	3	3

0 – Project alternative fails to meet objective.
1 – Project alternative meets objective but to a level which is significantly less than that provided by the proposed project.
2 – Project alternative meets objective but to a level less than the proposed project.
3 – Project alternative meets objective to a level equal to the proposed project.
4 – Project alternative meets objective to a level which exceeds the proposed project.

A. NO PROJECT ALTERNATIVE

1. Description of No Project Alternative

The No Project Alternative would continue disposal of treated effluent at the Southland WWTF with its current design by utilizing the existing percolation ponds and possibly new ponds on the WWTF site. The No Project Alternative would not involve the provision of any additional off-site treated effluent disposal areas.

2. Impacts of the No Project Alternative

The No Project Alternative maintains the current design and permitted capacity of the Southland WWTF of 0.9 million gallons per day. The No Project Alternative eliminates the following impacts that are associated with the proposed project and other development alternatives considered with this analysis:

1. Land Use and Planning/Population and Housing – The No Project Alternative by negating the potential for the provision of additional wastewater treatment facilities both at the Southland WWTF and off-site disposal areas for the Nipomo Community Services District would reduce the ability of the NCSD to serve new development within the District as allowed by the South County Area Plan. By maintaining wastewater treatment and disposal capacity water supplies at current levels, a potential constraint to future development, that being the future availability of long-term wastewater treatment and disposal is created. The No Project Alternative eliminates the significant (Class I) land use and planning and population and housing impacts associated with the proposed project.

2. Geology/Water – Impacts upon landform, geology and hydrology associated with construction of proposed project facilities are eliminated with this alternative. In terms of groundwater quality, the No Project Alternative eliminates the potential for additional wastewater treatment and disposal capacity beyond that currently allowed at the Southland WWTF at this time. In so doing, the ability of the District to provide area-wide groundwater management through the percolation of treated wastewater into the groundwater basin is eliminated.

   The No Project Alternative does not provide any alternative treated effluent disposal options thereby limiting treatment capacity to 0.90 MGD at the existing Southland WWTF. The lack of proposed wastewater treatment and disposal improvements would result in significant, unavoidable adverse ground and surface water quality impacts which will not occur with implementation of the proposed project.

3. Biological Resources – Impacts to existing biological resources associated with the proposed project will be eliminated with the No Project Alternative.

4. Aesthetics –Impacts to visual resources associated with the proposed project will be eliminated with the No Project Alternative.

5. Cultural Resources – Impacts to cultural resources associated with the proposed project will be eliminated with the No Project Alternative.

6. Traffic/Noise/Air Quality – Traffic, air quality and noise impacts associated with the proposed project will be eliminated with the No Project Alternative.

3. Comparative Analysis

The No Project Alternative fails to meet all of the proposed objectives related to the provision of: reliable, high quality, cost effective wastewater treatment capacity; a remedy for water quality violation; improved quality of treated wastewater; management of the subsurface wastewater mound; assistance in resolving the water supply deficit; minimized use of fossil fuels and improved to the efficiency and reliability of the Southland WWTF (see Table 24, Project Alternatives-Comparison With Project Objectives).

The No Project Alternative eliminates the significant, unavoidable adverse impacts in the issue areas of land use and planning and population and housing that are associated with the proposed project (see Table 25, Environmentally Superior Alternatives-Significant Impacts). The No Project Alternative also eliminates the potentially significant but mitigable (i.e. direct) impacts associated with the proposed project (see Table 26, Environmentally Superior Alternatives-Direct Impacts). The No Project Alternative will, however, result in additional significant, unavoidable adverse impacts upon local ground and surface water quality due to production of increased treated effluent flows to Nipomo Creek in violation of water quality standards adopted by the Regional Water Quality Control Board (see Table 27, Environmentally Superior Alternatives-Groundwater Impacts).

B. GROUNDWATER RECHARGE ALTERNATIVE

1. Description of Groundwater Recharge Alternative

The Groundwater Recharge Alternative involves treatment of wastewater through underground percolation and filtration followed by extraction of the filtered effluent for use as potable water (i.e. drinking water). The percolation/filtration methods typically considered for groundwater recharge are either surface spreading and percolation, subsurface percolation or direct injection. The first method may be preferred because it will allow natural percolation of the wastewater through the geological subsurface or vadose zone which allows for increased biological treatment and filtration. Subsurface application allows for percolation of wastewater through the soil but is applied beneath the ground surface with perforated pipes or through other techniques similar to a leach system. Direct injection is often energy intensive and may require an additional level of treatment such as reverse osmosis in order to respond to concerns regarding potential contamination of potable water supplies.

Recycled wastewater must be retained underground for a minimum of six months prior to extraction for use as potable, drinking water. The precise amount of retention time is outlined in the Groundwater Recharge Reuse Regulations from the California Department of Public Health. This document contains guidelines which address the maximum percentage of recycled water to be utilized, underground retention time, horizontal distance to extraction and maximum contaminate levels. These regulations also require any groundwater recharge reuse project to dilute recycled water with potable water that does not contain any treated municipal wastewater prior to spreading or injection. The ratio of recycled water to potable water is regulated and monitored monthly while maximum levels of other contaminants including inorganics, organics, copper, lead, radionuclide chemicals and disinfection byproducts are analyzed quarterly. Other secondary contaminants are monitored annually. For a groundwater recharge site to be effective, the underlying land must have proper soil characteristics for percolation and be located where recharge would add to the amount of available water in the underground aquifer. A groundwater recharge reuse project will require wastewater treatment improvements, transmission pipeline, pump stations, property for percolation ponds or other underground facilities and an identified source of potable water to blend with recycled water prior to spreading or injection. The precise location of off-site facilities necessary for percolation/filtration and extraction activities have not been determined. Underground areas beneath the Southland WWTF have limited percolation capacity and would not represent a site for additional percolation/filtration of wastewater and extraction of filtered effluent, thereby requiring off-site disposal of treated effluent.

2. Impacts of Groundwater Recharge Alternative

Environmental impacts associated with the Groundwater Recharge Alternative are discussed below and compared to the impacts associated with the proposed project.

1. Land Use and Planning/Population and Housing – The Groundwater Recharge Alternative will have a wastewater treatment capacity similar to the proposed project. As such, the Groundwater Recharge Alternative has similar land use and planning and

population and housing impacts as the proposed project. This alternative results in the same significant unavoidable adverse (Class I) impacts as the proposed project. Since no additional surface percolation basins will be constructed, this alternative will not result in any impacts to existing agricultural lands.

2. Geology/Water – The potential seismic impacts associated with the Groundwater Recharge Alternative are similar to those associated with the proposed project. The potential hydrogeologic impacts of the Groundwater Recharge Alternative are expected to be greater than those associated with the proposed project. The Groundwater Recharge Alternative will involve the introduction into and extraction of treated effluent from the existing groundwater basin. This wastewater may impact existing groundwater quality through possible contamination. This impact would not occur with the proposed project. This alternative, in contrast to the proposed project, will also require the use of potable water for dilution of wastewater prior to its introduction underground thereby reducing the amount of potable water supplies available to the NCSD. In the event that reverse osmosis is required to treat the effluent, suitable disposal of brine generated as a byproduct of reverse osmosis filtration will also be required. Finding a location to accept and dispose of the byproduct brine that complies with the RWQCB Central Coast Basin Plan will be difficult.

3. Biological Resources – Since the Groundwater Recharge Alternative requires off-site disposal of treated effluent, potential impacts to biological resources are similar to those associated with the proposed project.

4. Aesthetics – Given the limited amount of surface area disturbance associated with the Groundwater Recharge Alternative, little in the way of significant visual impacts as compared to the proposed project is anticipated. Potential impacts to visual resources associated with this alternative are reduced as compared to the proposed project.

5. Cultural Resources – In the event that the Groundwater Recharge Alternative is utilized, prehistoric cultural resource monitoring shall accompany any construction trenching and excavation within the Southland WWTF site and a Prehistoric Cultural Resource Monitoring Plan should be prepared. With implementation of this mitigation measure, impacts to cultural resources associated with this alternative are considered to be potentially significant, but mitigable impacts similar to the proposed project.

6. Traffic/Noise/Air Quality – The Groundwater Recharge Alternative will have similar impacts related to traffic, noise and air quality as compared to the proposed project for both short-term construction and long-term operations and maintenance activities.

3. Comparative Analysis

The Groundwater Recharge Alternative meets one project objective to a level that exceeds the proposed project, that being the provision of improved quality of treated wastewater. This alternative meets two project objectives in a manner similar to the proposed project, those being

management of the subsurface wastewater mound and improved efficiency and reliability of the Southland WWTF. This alternative meets four project objectives to a level less or significantly less than the proposed project, those being provision of high quality, cost-effective wastewater treatment capacity, provide a remedy for water quality violations, assist in resolving the water supply deficit and minimize use of fossil fuels (see Table 24, Project Alternatives-Comparison With Project Objectives).

The Groundwater Recharge Alternative will have similar significant, unavoidable adverse impacts in the issue areas of land use and planning and population and housing as the proposed project (see Table 25, Environmentally Superior Alternatives-Significant Impacts). This alternative has increased direct impacts in the area of geology/water as compared to the proposed project. This alternative has similar or reduced direct impacts in the areas of land use and planning, biological resources, aesthetics, cultural resources and traffic/noise/air quality as compared to the proposed project (see Table 26, Environmentally Superior Alternatives-Direct Impacts and Table 27, Environmentally Superior Alternatives-Groundwater Impacts).

C. SURFACE DISCHARGE ALTERNATIVE

1. Description of Surface Discharge Alternative

The Surface Discharge Alternative involves discharging treated effluent from the Southland WWTF into an available nearby waterway.

In order to secure a National Pollution Discharge Elimination System (NPDES) Permit as required by Section 401 of the Clean Water Act, this alternative must comply with 40 CFR Part 131, known as the California Toxics Rule. The California Toxics Rule identifies 23 contaminants, including organics and metals typically found in trace amounts in domestic wastewater that must be removed to levels that protect sensitive aquatic life. These parameters are typically more stringent than drinking water requirements. In addition, toxicity testing must be conducted to determine if any water quality constraints will affect sensitive organisms. In response to these requirements, additional wastewater treatment facilities may be required at the Southland WWTF beyond those improvements currently proposed. The nature and extent of these additional facilities can only be determined after the proposed improvements to the Southland WWTF are constructed and sampling and testing of treated effluent is completed. Possible additional improvements to the treatment plant necessary to insure that treated effluent complies with policies and standards contained in the Basin Plan may involve reverse osmosis and/or filtration utilizing activated carbon or membrane systems. The future capacity of the Southland WWTF with this alternative will be similar to that associated with the proposed project.

The Surface Discharge Alternative would also require construction of a transmission pipeline from the Southland WWTF to the surface discharge point. Although the specific waterway to accept the treated effluent has not been determined, it is assumed for this analysis that Nipomo Creek would provide the most logical and cost-effective location for surface discharge of treated effluent (see Figure 15, Alternative Effluent Disposal Sites). The treated effluent would be transmitted via an appropriately sized pipeline approximately 2,000 feet under Highway 101 to discharge at Nipomo Creek. Two additional potential surface discharge points, not considered in this alternatives analysis, are Black Lake Creek and the Santa Maria River. These surface discharge points would require extension of a pipeline approximately 40,000 linear feet or approximately 7.5 miles to Black Lake Creek and 10,000 feet to the Santa Maria River which would include installation of a pipeline on the south-facing Santa Maria bluff face.

2. Impacts of Surface Discharge Alternative

Environmental impacts associated with the Surface Discharge Alternative are discussed below and compared to the impacts associated with the proposed project.

1. Land Use and Planning/Population and Housing – The Surface Discharge Alternative will have a wastewater treatment capacity similar to the proposed project. As such, the Surface Discharge Alternative has similar land use and planning and population and housing impacts as the proposed project. This alternative results in the same significant unavoidable adverse (Class I) impacts as the proposed project. Since no additional

surface percolation basins will be constructed, this alternative will not result in any impacts to existing agricultural lands.

2. Geology/Water – The potential seismic impacts associated with the Surface Discharge Alternative are similar to those associated with the proposed project. The reduced amount of pipeline to be installed (2,000 feet) as compared to the proposed treated effluent disposal options will result in reduced geologic and soils impacts.

   The hydrogeologic impacts of the Surface Discharge Alternative are expected to be greater than those associated with the proposed project. Water quality in areas downstream of the point of discharge could be negatively impacted by the quality of treated effluent discharge into Nipomo Creek. Depending upon the level of treatment and water chemistry of the blended effluent, certain compounds could be introduced into the downstream watershed with this alternative that are not hazardous to humans but can be toxic to sensitive organisms in trace amounts. In the event that reverse osmosis or other methods of additional treatment are necessary, brine disposal will be required. Finding a location to accept and dispose of the byproduct brine that complies with the RWQCB Basin Plan will be difficult. This alternative also reduces the amount of treated effluent that will percolate in to the groundwater table, thereby reducing the amount of recharge into the NMMA groundwater basin. It should also be noted that State Water Policy discourages surface water discharge.

3. Biological Resources – Given the limited amount of surface area disturbance associated with the Surface Discharge Alternative, little in the way of disturbance or direct impacts to significant biological resources is anticipated. However, the Surface Discharge Alternative may increase impacts to wildlife species found downstream of the point of surface discharge as compared to the proposed project. The increased volume of water within Nipomo Creek may also alter the nature and extent of floral species as well as impacting existing wildlife species either inhabiting or migrating through this downstream area. Increased water volumes may generate additional trees and shrubs and may attract additional wildlife which could conversely impact existing floral and faunal species along the Creek. Depending upon its level of treatment, treated effluent could also result in increased toxicity of water in Nipomo Creek which could negatively impact biological resources as compared to the proposed project.

4. Aesthetics – Given the limited amount of surface area disturbance associated with the Surface Discharge Alternative, little in the way of significant visual impacts as compared to the proposed project is anticipated. Potential impacts to visual resources associated with this alternative are reduced as compared to the proposed project.

5. Cultural Resources – Although no walkover surveys of the Surface Discharge pipeline routes and point of discharge have been conducted, the disturbed nature of this area reduces the potential for excavation of significant cultural resources. Given implementation of mitigation measures associated with the proposed project related to the discovery of currently unknown cultural resources, impacts to cultural resources are considered to be potentially significant, but mitigable impacts. As such, potential

impacts to cultural resources associated with this alternative are similar to those associated with the proposed project.

6. Traffic/Noise/Air Quality – The Surface Discharge Alternative will have similar impacts related to traffic, noise and air quality as compared to the proposed project for both short-term construction and long-term operations and maintenance activities.

3. Comparative Analysis

The Surface Discharge Alternative meets one project objective to a level that exceeds the proposed project, that being the provision of improved quality of treated wastewater. This alternative meets one project objective in a manner similar to the proposed project, that being the management of the subsurface wastewater mound. This alternative meets five project objectives to a level less or significantly less than the proposed project, those being provision of high quality, cost-effective wastewater treatment capacity, provide a remedy for water quality violations, assist in resolving the water supply deficit, minimize the use of fossil fuels and improved efficiency and reliability of the Southland WWTF (see Table 24, Project Alternatives-Comparison With Project Objectives).

The Surface Discharge Alternative will have similar significant, unavoidable adverse impacts in the issue areas of land use and planning and population and housing as the proposed project (see Table 25, Environmentally Superior Alternatives-Significant Impacts). This alternative has increased direct impacts in the areas of geology/water and biological resources as compares to the proposed project. This alternative has similar or reduced direct impacts in the areas of land use, cultural resources, aesthetics and traffic/noise/air quality as compared to the proposed project (see Table 26, Environmentally Superior Alternatives-Direct Impacts and Table 27, Environmentally Superior Alternatives-Groundwater Impacts).

The Surface Discharge Alternative meets one project objective to a level that exceeds the proposed project, that being the provision of improved quality of treated wastewater. This alternative meets one project objective in a manner similar to the proposed project, that being the management of the subsurface wastewater mound. This alternative meets five project objectives to a level less or significantly less than the proposed project, those being provision of high quality, cost-effective wastewater treatment capacity, provide a remedy for water quality violations, assist in resolving the water supply deficit, minimize the use of fossil fuels and improved efficiency and reliability of the Southland WWTF (see Table 24, Project Alternatives-Comparison With Project Objectives).

D. PASQUINI PROPERTY DISPOSAL ALTERNATIVE

1. Description of Pasquini Property Disposal Alternative

The Pasquini Property Disposal Alternative includes the proposed upgrades to the Southland WWTF as discussed in Section III.D. Project Characteristics with a relocated treated effluent disposal site at the Pasquini property. The Pasquini Property consists of 192 acres located southwest of Orchard Road and south of Southland Street (see Figure 15, Alternative Effluent Disposal Sites). Treated effluent would be transmitted via an appropriately sized pipeline approximately 4,500 linear feet from the wastewater facility to the northern portion of the Pasquini Property. Recent geohydrologic analyses indicate that the northerly 35 acres of the Pasquini Property would be suitable for use as a percolation facility. Percolation of treated effluent at this location could occur either through the provision of surface percolation basins or in a subsurface percolation system. Approximately 24 acres of land would be utilized for percolation area, perimeter berms and access roads. Construction and operation of this percolation facility would require its acquisition by the District or by securing a land lease and an easement from the property owner.

2. Impacts of Pasquini Property Disposal Attachment

Environmental impacts associated with the Pasquini Property Disposal Alternative are discussed below and compared to the impacts associated with the proposed project.

1. Land Use and Planning/Population and Housing – The Pasquini Property Disposal Alternative involves a relocated treated effluent disposal site with a wastewater treatment capacity identical to the proposed project. As such, the Pasquini Property Disposal Alternative has similar land use and planning and population and housing impacts as the proposed project. This alternative results in the same significant, unavoidable adverse (Class I) impacts as the proposed project. In the event that a surface percolation basin is constructed, approximately 24 acres of agricultural land would be removed from production. This potentially significant impact can be mitigated to an insignificant level through implementation of mitigation measures provided by the County Agricultural Commissioner's Office (see Section V.A Land Use and Planning).

2. Geology/Water – The potential seismic impacts associated with the Pasquini Property Disposal Alternative are similar to those associated with the proposed project. The reduced amount of transmission pipeline to be installed (4,500 linear feet) as compared to two of the proposed treated effluent disposal options will result in reduced geologic and soils impacts.

   The extent of impacts associated with hydrogeology are potentially greater than the proposed project depending upon the level of use of the Pasquini Property as a treated effluent disposal site. The suitability of the property for percolation requires that soils beneath the site have sufficient permeability to allow for percolation of treated effluent and that clay layers known as aquitards that would prevent vertical percolation are not

present. The existence of clay layers beneath the soil surface may cause infiltrated water to "daylight" (or emerge) at the ground surface, such as along the face of a bluff or drainage canyon. Located on the southern end of the Nipomo Mesa, the western boundary of the Pasquini Property nearly coincides with the steep west-facing bluff that defines the boundary between the Nipomo Mesa and the lower-lying Santa Maria River Basin. The percolation site on the Pasquini Property is located approximately 2,200 feet from the Santa Maria River bluff face and is between 115 and 150 feet higher in elevation than the Santa Maria River. Field investigations revealed the presence of a thick, impermeable deep clay layer between 180 and 200 feet below the ground surface. Between the ground surface and the deep clay layer, several intermediate zones of silty sand sediments of undetermined lateral continuity were also observed. Given these subsurface soil characteristics in combination with the relatively close proximity of the Pasquini Property to the bluff face and the lower-lying Santa Maria River basin alluvium soils, an effluent percolation facility at this location could potentially lead to the development of a groundwater mound either within the shallow, silty sand zones or in the deep clay layer beneath the Pasquini Property. In addition, the Santa Maria River Fault, which is located approximately 1,200 feet east of the Pasquini Property, could potentially act as a horizontal barrier to groundwater from the percolation ponds. This could lead to a mound breakout at the Santa Maria River bluff face with resulting localized instability of soils or mound daylighting at the ground surface of the Santa Maria River. While further investigations indicated that a groundwater mound within the shallow silty sand zones would neither break out at the bluff face nor intersect the ground surface of the basin, groundwater modeling also revealed that at the proposed constant discharge rate of 1.23 million gallons per day (MGD), mounding within the deep, clay soil layers may result in groundwater mound breakout at either the Santa Maria River bluff face or at the ground surface of the Santa Maria River. Subsequent investigations indicated that a maximum annual constant discharge rate of 0.31 MGD of treated effluent or a three-month discharge at the proposed rate of 1.23 MGD could be percolated at the Pasquini Property without the risk of groundwater breakout at either the Santa Maria River bluff face or within the ground surface at the Santa Maria River. These limitations, however, would require the use of an additional treated effluent disposal site in order to dispose of the total, long-term treated effluent flows from the Southland WWTF.

3. Biological Resources – The Pasquini Property has been utilized for agricultural crop production and in the past was used for cattle grazing. As such, the Pasquini Property contains little in the way of special status plant or wildlife species or sensitive wildlife habitats. Use of the Pasquini Property as a treated effluent disposal site will not, with implementation of general mitigation measures that are applied to all project construction activities, result in any significant, unavoidable adverse impacts in the area of biological resources. However, in the event that a surface percolation basin is constructed, potentially increased long-term impacts to special-status species could occur at the Pasquini Property as compared to the proposed project. A surface percolation basin would create suitable habitat for semi-aquatic, special-status species including the Federally-listed California red-legged frog which may result in long-term maintenance conflicts with any re-established populations. Restricting percolation

basin maintenance activities between June 1 and November 1 will reduce these potentially significant impacts to special status wildlife species to an insignificant level.

4. Aesthetics – Use of the Pasquini Property as a treated effluent disposal site could have increased long-term visual impacts as compared to the proposed project. In the event that a surface percolation basin is constructed, views from the adjacent Orchard Road would be adversely impacted. If a subsurface percolation system were constructed, visual impacts associated with the use of the Pasquini Property would be similar to those associated with the proposed project.

5. Cultural Resources – Use of the Pasquini Property as a treated effluent disposal site could have increased impacts upon cultural resources as compared to the proposed project.

   Surface walkover surveys of the 35 acre Pasquini Property revealed three isolated prehistoric artifacts, which were identified as a Monterey chert flake and a Monterey chert biface tip. In addition, a four centimeter chunk of chalcedony (colorless chert) was discovered which is likely a prehistoric import. These isolated artifacts have been described as the "tip of an iceberg" in that approximately one-quarter mile south of the Pasquini Property is SLO-1770 which was discovered during grading and trenching of the Central Coast Aqueduct in 1996. The pattern of cultural materials found at SLO-1770 is very similar to that found at another prehistoric site, SLO-1192, which is located a few miles to the west. According to the field archaeologist, the artifacts found at the Pasquini Property are similar to those found at these other previously-identified prehistoric archaeological sites.

   In the event that the Pasquini Property is utilized as a treated effluent disposal facility, a comprehensive archaeological subsurface exploration program should be conducted by a qualified archaeologist in order to define and extent the nature of any cultural resource deposits and mitigate or avoid any identified significant cultural resources which may be impacted by construction of the facility. In addition, cultural resource monitoring should accompany excavation and trenching activities at this location. Disposal facilities should also be located as close as possible to the northwest corner of the property. With implementation of these mitigation measures, impacts to cultural resources associated with this alternative are considered to be potentially significant, but mitigable impacts.

6. Traffic/Noise/Air Quality – The Pasquini Property Disposal Alternative will have similar impacts related to traffic, noise and air quality as compared to the proposed project for both short-term construction and long-term operations and maintenance activities.

3. Comparative Analysis

The Pasquini Property Disposal Alternative meets four project objectives in a manner similar to the proposed project, those being provide a remedy for water quality violations, provision of

improved quality of treated wastewater, management of the subsurface wastewater mound and minimize the use of fossil fuels. This alternative meets three project objectives to a level that is less or significantly less than the proposed project, those being provision of high quality, cost-effective wastewater treatment capacity, assist in resolving the water supply deficit and improved efficiency and reliability of the Southland WWTF (see Table 24, Project Alternatives-Comparison With Project Objectives).

The Pasquini Property Disposal Alternative will have similar significant, unavoidable adverse impacts in the issue areas of land use and planning and population and housing as the proposed project (see Table 25, Environmentally Superior Alternatives-Significant Impacts). This alternative has increased potential impacts in the areas of land use, water, biological resources, aesthetics and cultural resources as compared to the proposed project. This alternative has similar or reduced impacts in the area of geology, traffic/noise/air quality as the proposed project (see Table 26, Environmentally Superior Alternatives-Direct Impacts and Table 27, Environmentally Superior Alternatives-Groundwater Impacts).

E. SOUTH OF MESA DISPOSAL ALTERNATIVE

1. Description of South of Mesa Disposal Alternative

The South of Mesa Disposal Alternative includes the proposed upgrades to the Southland WWTF as discussed in Section III.D. Project Characteristics with a relocated treated effluent disposal site located on 24 acres of land at the base of the Nipomo Basin (see Figure 15, Alternative Effluent Disposal Sites). Treated effluent would be transmitted via an appropriately sized pipeline approximately 9,500 linear feet on existing agricultural lands adjacent to the Santa Maria River channel. Percolation of treated effluent at this location could occur either through the provision of surface percolation basins or in a subsurface percolation system. Utilization of the South of Mesa Disposal Alternative would require additional treated effluent disposal facilities in the event that the use of these percolation facilities are interrupted during periods of possible high flows or flooding of the Santa Maria River. One possible back-up disposal opportunity would involve use of the Southland WWTF aquifer for seasonal storage while pumping to the disposal ponds at this location is interrupted. Construction and operation of this percolation facility would require its acquisition by the District or by securing a land lease aid easement from the property owner.

2. Impacts of South of Mesa Disposal Alternative

Environmental impacts associated with the South of Mesa Disposal Alternative are discussed below and compared to the impacts associated with the proposed project.

1. Land Use and Planning/Population and Housing – The South of Mesa Disposal Alternative involves a relocated treated effluent disposal site with a wastewater treatment capacity identical to the proposed project. As such, the South of Mesa Disposal Alternative has similar land use and planning and population and housing impacts as the proposed project. This alternative results in the same significant, unavoidable adverse (Class I) impacts as the proposed project. In the event that a surface percolation basin is constructed, approximately 24 acres of agricultural land would be removed from production. This potentially significant impact can be mitigated to an insignificant level through implementation of mitigation measures provided by the County Agricultural Commissioner's Office (see Section V.A Land Use and Planning).

2. Geology/Water – The potential seismic impacts associated with the South of Mesa Disposal Alternative are similar to those associated with the proposed project. Although the amount of transmission pipeline to be installed (9,500 linear feet) is less than two of the proposed treated effluent disposal options, the geologic and soils impacts associated with this alternative may be increased as compared to the proposed project. Due to the need to trench for and install a pipeline from the Nipomo Mesa to the Santa Maria River channel, an elevation change of between 115 and 150 feet, the required trenching and pipeline installation could result in localized instability of the south-facing Santa Maria River bluff face.

The hydrogeologic impacts of the South of Mesa Disposal Alternative may be greater than those associated with the proposed project. The use of percolation basins south of the Nipomo Mesa and adjacent to the Santa Maria River channel would require additional treated effluent disposal facilities in the event that the use of these percolation facilities is interrupted during periods of high flows or flooding of the Santa Maria River. Additional treated effluent disposal at the Southland WWTF during these periods of interruption may further impact the aquifer under the Southland WWTF. In addition, percolation of treated effluent at this location will occur outside the Nipomo Mesa Management Area.

3. Biological Resources – The South of Mesa disposal site has been utilized for agricultural crop production and in the past was used for cattle grazing. As such, the South of Mesa disposal site contains little in the way of special status plant or wildlife species or sensitive wildlife habitats. Use of this location as a treated effluent disposal site will not, with implementation of general mitigation measures that are applied to all project construction activities, result in any significant, unavoidable adverse impacts in the area of biological resources. However, in the event that a surface percolation basin is constructed, potentially increased long-term impacts to special-status species could occur at this location as compared to the proposed project. A surface percolation basin would create suitable habitat for semi-aquatic, special-status species including the Federally-listed California red-legged frog which may result in long-term maintenance conflicts with any re-established populations. Restricting percolation basin maintenance activities between June 1 and November 1 will reduce these potentially significant impacts to special status wildlife species to an insignificant level.

4. Aesthetics – Use of the South of Mesa site as a treated effluent disposal site could have increased long-term visual impacts as compared to the proposed project. This alternative involves either trenching for and installation of a pipeline on the south-facing Santa Maria River bluff face or the provision of a significant amount of additional pipeline in order to avoid the bluff face. This installation and potential instability of the bluff face may result in significant adverse visual impacts. In the event that a surface percolation basin is constructed, views from adjacent areas, including views from vantage points along the Santa Maria River would be adversely impacted.

5. Cultural Resources – Although no walkover surveys of the South of Mesa disposal site have been conducted, the disturbed nature of this site reduces the potential for excavation of significant cultural resources. Given implementation of mitigation measures associated with the proposed project related to the discovery of currently unknown cultural resources, impacts to cultural resources are considered to be potentially significant, but mitigable impacts. As such, potential impacts to cultural resources associated with this alternative are similar to those associated with the proposed project.

6. Traffic/Noise/Air Quality – The South of Mesa Disposal Alternative will have similar impacts related to traffic, noise and air quality as compared to the proposed project for both short-term construction and long-term operations and maintenance activities.

3. Comparative Analysis

The South of Mesa Disposal Alternative meets five project objectives in a manner similar to the proposed project, those being provide a remedy for water quality violations, provision of improved quality of treated wastewater, management of the subsurface wastewater mound, minimize the use of fossil fuels and improved efficiency and reliability of the Southland WWTF. This alternative meets two project objectives to a level that is significantly less than the proposed project, those being the provision of high quality, cost-effective wastewater treatment capacity and assist in resolving the water supply deficit (see Table 24, Project Alternatives-Comparison With Project Objectives).

The South of Mesa Disposal Alternative will have similar significant, unavoidable adverse impacts in the issue areas of land use and planning and population and housing as the proposed project (see Table 25, Environmentally Superior Alternatives-Significant Impacts). This alternative has increased direct impacts in the areas of land use, geology/water, biological resources and aesthetics as compared to the proposed project. This alternative has similar or reduced impacts in the areas of cultural resources and traffic/noise/air quality as the proposed project (see Table 26, Environmentally Superior Alternatives-Direct Impacts and Table 27, Environmentally Superior Alternatives-Groundwater Impacts).

F. MESA AND EUCALYPTUS ROADS DISPOSAL ALTERNATIVE

1. Description of Mesa and Eucalyptus Roads Disposal Alternative

The Mesa and Eucalyptus Roads Disposal Alternative includes the proposed upgrades to the Southland WWTF as discussed in Section III. D. Project Characteristics with a relocated treated effluent disposal site located on 24 acres of land near between Mesa and Eucalyptus Roads (see Figure 15, Alternative Effluent Disposal Sites). Treated effluent would be transmitted via an appropriately sized pipeline approximately 18,500 linear feet to agricultural land adjacent to this intersection in Nipomo. Percolation of treated effluent at this location could occur either through the provision of surface percolation basins or in a subsurface percolation system. Construction and operation of this percolation facility would require its acquisition by the District or by securing a land lease or easement from the property owner.

2. Impacts of Mesa and Eucalyptus Roads Disposal Alternative

Environmental impacts associated with the Mesa and Eucalyptus Roads Disposal Alternative are discussed below and compared to the impacts associated with the proposed project.

1. Land Use and Planning/Population and Housing – The Mesa and Eucalyptus Roads Disposal Alternative involves a relocated treated effluent disposal site with a wastewater treatment capacity identical to the proposed project. As such, the Mesa and Eucalyptus Roads Disposal Alternative has similar land use and planning and population and housing impacts as the proposed project. This alternative results in the same significant, unavoidable adverse (Class I) impacts as the proposed project. In the event that a surface percolation basin is constructed, approximately 24 acres of agricultural land would be removed from production. This potentially significant impact can be mitigated to an insignificant level through implementation of mitigation measures provided by the County Agricultural Commissioner's Office (see Section V.A Land Use and Planning).

2. Geology/Water – The potential seismic impacts associated with the Mesa and Eucalyptus Roads Disposal Alternative are similar to those associated with the proposed project. The reduced amount of pipeline to be installed (18,500 linear feet) as compared to two of the proposed treated effluent disposal options will result in reduced geologic and soils impacts as compared to the proposed project.

   The hydrogeologic impacts of the Mesa and Eucalyptus Roads Disposal Alternative are expected to be similar to those associated with the proposed project.

3. Biological Resources – The Mesa and Eucalyptus Roads disposal site has been utilized for agricultural crop production and in the past was used for cattle grazing. As such, the Mesa and Eucalyptus Roads disposal site contains little in the way of special status plant or wildlife species or sensitive wildlife habitats. Use of this location as a treated effluent disposal site will not, with implementation of general mitigation measures that are applied to all project construction activities, result in any significant, unavoidable

adverse impacts in the area of biological resources. However, in the event that a surface percolation basin is constructed, potentially increased long-term impacts to special-status species could occur at this location as compared to the proposed project. A surface percolation basin would create suitable habitat for semi-aquatic, special-status species including the Federally-listed California red-legged frog which may result in long-term maintenance conflicts with any re-established populations. Restricting percolation basin maintenance activities between June 1 and November 1 will reduce these potentially significant impacts to special status wildlife species to an insignificant level.

4. Aesthetics – Use of the Mesa and Eucalyptus Roads disposal site as a treated effluent disposal site could have increased long-term visual impacts as compared to the proposed project. In the event that a surface percolation basin is constructed, views from the adjacent Mesa and Eucalyptus Roads would be adversely impacted. If a subsurface percolation system were constructed, visual impacts associated with the use of this alternative would be similar to those associated with the proposed project.

5. Cultural Resources – Although no walkover surveys of the Mesa and Eucalyptus Roads disposal site have been conducted, the disturbed nature of this site reduces the potential for excavation of significant cultural resources. Given implementation of mitigation measures associated with the proposed project related to the discovery of currently unknown cultural resources, impacts to cultural resources are considered to be potentially significant, but mitigable impacts. As such, potential impacts to cultural resources associated with this alternative are similar to those associated with the proposed project.

6. Traffic/Noise/Air Quality – The Mesa and Eucalyptus Roads Disposal Alternative will have similar impacts related to traffic, noise and air quality as compared to the proposed project for both short-term construction and long-term operations and maintenance activities.

3. Comparative Analysis

The Mesa and Eucalyptus Roads Disposal Alternative meets all of the project objectives in a manner similar to the proposed project (see Table 24, Project Alternatives-Comparison With Project Objectives).

The Mesa and Eucalyptus Roads Disposal Alternative will have similar significant, unavoidable adverse impacts in the issue areas of land use and planning and population and housing as the proposed project (see Table 25, Environmentally Superior Alternatives-Significant Impacts). This alternative has increased direct impacts in the areas of land use, biological resources and aesthetics as compared to the proposed project. This alternative has similar or reduced direct impacts in the areas of geology/water, cultural resources and traffic/noise/air quality (see Table 26, Environmentally Superior Alternatives-Direct Impacts and Table 7, Environmentally Superior Alternatives-Groundwater Impacts).

G. AQUIFER MODIFICATION ALTERNATIVE

1. Description of Aquifer Modification Alternative

The Aquifer Modification Alternative includes the proposed upgrades to the Southland WWTF as discussed in Section III.D. Project Characteristics. This alternative also involves the installation of dry wells or other conducts in the aquitard (i.e. groundwater barrier) located underneath the existing Southland WWTF in order to enhance percolation of groundwater from the upper (perched) aquifer to the lower, deeper aquifer (see Figure 15, Alternative Effluent Disposal Sites). This aquitard is approximately 50 feet thick and is located between 60 and 140 feet beneath the ground surface which prevents the mound of treated effluent located underneath the existing percolation ponds at the Southland WWTF from percolating down to a deeper aquifer.

2. Impacts of Aquifer Modification Alternative

Environmental impacts associated with the Aquifer Modification Alternative are discussed below and compared to the impacts associated with the proposed project.

1. Land Use and Planning/Population and Housing – The Aquifer Modification Alternative will have a wastewater treatment capacity identical to the proposed project. As such, the Aquifer Modification Alternative has similar land use and planning and population and housing impacts as the proposed project. This alternative results in the same significant unavoidable adverse (Class I) impacts as the proposed project. Since no additional surface percolation basins will be constructed, this alternative will not result in any impacts to existing agricultural lands.

2. Geology/Water – The potential seismic impacts associated with the Aquifer Modification Alternative are similar to those associated with the proposed project. The elimination of transmission pipeline will result in significantly reduced geologic and soils impacts as compared to the proposed project.

   The potential hydrogeologic impacts of the Aquifer Modification Alternative are expected to be greater to those associated with the proposed project. The Aquifer Modification Alternative involves installation of dry wells or other conduits in order to enhance percolation of groundwater from the upper, perched aquifer to the lower, deeper aquifer. This approach may potentially impact the groundwater quality of the lower aquifer due to blending of water from the upper aquifer. Water from the upper aquifer will not have undergone the same degree of percolation and filtration as the groundwater found in the lower aquifer. It should also be noted that this approach is opposed by the Regional Water Quality Control Board.

3. Biological Resources – Given the limited amount of surface area disturbance associated with the Aquifer Modification Alternative, little in the way of disturbance or impacts to significant biological resources is anticipated. Potential impacts to biological resources are reduced as compared to potential impacts associated with the proposed project.

4. Aesthetics – Given the limited amount of surface area disturbance associated with the Aquifer Modification Alternative, little in the way of significant visual impacts as compared to the proposed project is anticipated. Potential impacts to visual resources associated with this alternative are significantly reduced as compared to the proposed project.

5. Cultural Resources – In the event that the Aquifer Modification Alternative is utilized, prehistoric cultural resource monitoring shall accompany any construction trenching and excavation within the Southland WWTF site and a Prehistoric Cultural Resource Monitoring Plan should be prepared. Given implementation of this mitigation measure, impacts to cultural resources associated with this alternative are considered to be potentially significant, but mitigable impacts. As such, potential impacts to cultural resources associated with this alternative are similar to those associated with the proposed project.

6. Traffic/Noise/Air Quality – The Aquifer Modification Alternative will have reduced impacts related to traffic, noise and air quality as compared to the proposed project due to the reduced area required for construction. This is due to the fact that this alternative does not involve the construction of any off-site transmission pipelines or treated effluent disposal facilities.

3. Comparative Analysis

The Aquifer Modification Alternative meets two project objectives in a manner similar to the proposed project, those being provision of high quality, cost-effective wastewater treatment capacity and improved efficiency and reliability of the Southland WWTF. This alternative meets five project objectives to a level that is less than the proposed project, those being provide a remedy for water quality violations, provision of improved quality of treated wastewater, management of the subsurface wastewater mound, assist in resolving the water supply deficit and minimize the use of fossil fuels (see Table 24, Project Alternatives-Comparison With Project Objectives).

The Aquifer Modification Alternative will have similar significant, unavoidable adverse impacts in the issue areas of land use and planning and population and housing as the proposed project (see Table 25, Environmentally Superior Alternatives-Significant Impacts). This alternative has increased direct impacts in the area of geology/water as compared to the proposed project. This alternative has similar or reduced direct impacts in the areas of land use and planning, biological resources, aesthetics, cultural resources and traffic/noise/air quality as compared to the proposed project (see Table 26, Environmentally Superior Alternatives-Direct Impacts and Table 27, Environmentally Superior Alternatives-Groundwater Impacts).

H. HIGHWAY 101 LANDSCAPE IRRIGATION DISPOSAL ALTERNATIVE

1. Description of Highway 101 Landscape Irrigation Disposal Alternatives

The Highway 101 Landscape Irrigation Disposal Alternative includes the proposed upgrades to the Southland WWTF as discussed in Section III.D. Project Characteristics. This alternative also involves the provision of one of two additional wastewater treatment scenarios, either a) increased filtration (beyond the filtration level currently proposed) and disinfection (chlorination) of effluent or b) the provision of additional percolation basins to accommodate increased flows. These additional processes are intended to insure that treated effluent meets Title 22 water recycling requirements which allow for the use of treated effluent for surface irrigation. Water pumped from the existing perched aquifer located beneath the Southland WWTF may also require disinfection in order to prevent biofilm from growing inside the distribution system. In addition, the District may need to verify that pathogens from the plant effluent are inactivated prior to the water being extracted for off-site use. This treated effluent would be transmitted via an appropriately sized pipeline approximately 750 feet to the adjacent Highway 101 right-of-way for irrigation of freeway landscaping with additional pipelines needed to extend the distribution system to the entire irrigation area (see Figure 15, Alternative Effluent Disposal Sites). Based upon an irrigation factor of 0.6 million gallons per acre per year, the estimated long-term discharge of 1.23 million gallons per day (MGD), approximately 750 acres would be required to dispose of the projected off-site treated effluent flows from the Southland WWTF. The Highway 101 Landscape Irrigation Disposal Alternative would require establishing a long-term contract with the California Department of Transportation (Caltrans) that specifies the terms and conditions for delivery and distribution of the treated effluent for irrigation purposes. In addition, NCSD may need to acquire property and easements for pipelines and other support facilities from Caltrans.

2. Impacts of the Highway 101 Landscape Irrigation Disposal Alternative

Environmental impacts associated with the Highway 101 Landscape Irrigation Disposal Alternative are discussed below and compared to the impacts associated with the proposed project.

1. Land Use and Planning/Population and Housing – The Highway 101 Landscape Irrigation Disposal Alternative involves relocated treated effluent disposal site with a wastewater treatment capacity identical to the proposed project. As such, the Highway 101 Landscape Irrigation Disposal Alternative has similar land use and planning and population and housing impacts as the proposed project. This alternative results in the same significant, unavoidable adverse (Class I) impacts as the proposed project. Since no additional surface percolation basins will be constructed, this alternative will not result in any impacts to existing agricultural lands.

2. Geology/Water – The potential seismic impacts associated with the Highway 101 Landscape Irrigation Disposal Alternative are similar to those associated with the proposed project. The significantly increased amount of pipeline to be installed as compared to the proposed treated effluent disposal options will result in increased geologic and soils impacts as compared to the proposed project.

The hydrogeologic impacts of the Highway 101 Landscape Irrigation Disposal Alternative are expected to be greater to those associated with the proposed project since a portion of the treated effluent percolation may occur outside the Nipomo Mesa Management Area.

3. Biological Resources – Given the lack of sensitive biological resources within the irrigation area (i.e. the Highway 101 median), little in the way of disturbance or impacts to significant biological resources is anticipated. Potential impacts to biological resources associated with this alternative are significantly reduced as compared to potential impacts associated with the proposed project.

4. Aesthetics – Given the limited amount of surface area disturbance associated with the Highway 101 Landscape Irrigation Disposal Alternative, little in the way of significant visual impacts as compared to the proposed project is anticipated. Potential impacts to visual resources associated with this alternative are significantly reduced as compared to the proposed project.

5. Cultural Resources – Although no walkover surveys of the Highway 101 landscape disposal area have been conducted, the disturbed nature of the disposal area reduces the potential for excavation of significant cultural resources. Given implementation of mitigation measures associated with the proposed project related to the discovery of currently unknown cultural resources during project construction, impacts to cultural resources are considered to be potentially significant, but mitigable impacts. As such, potential impacts to cultural resources associated with this alternative are similar to those associated with the proposed project.

6. Traffic/Noise/Air Quality – The Highway 101 Landscape Irrigation Disposal Alternative would have similar impacts related to traffic, noise and air quality as the proposed project for both short-term construction and long-term operations and maintenance activities.

3. Comparative Analysis

The Highway 101 Landscape Irrigation Disposal Alternative meets six project objectives in a manner similar to the proposed project, those being provision of high quality, cost-effective wastewater treatment capacity, provide a remedy for water quality violations, provision of improved quality of treated wastewater; management of the subsurface wastewater mound, minimize the use of fossil fuels and improved efficiency and reliability of the Southland WWTF. This alternative meets one project objective to a level that is less than the proposed project, that being assist in resolving the water supply deficit (see Table 24, Project Alternatives-Comparison With Project Objectives).

The Highway 101 Landscape Irrigation Disposal Alternative will have similar significant, unavoidable adverse impacts in the issue areas of land use and planning and population and housing as the proposed project (see Table 25, Environmentally Superior Alternatives-Significant Impacts). This alternative has increased direct impacts in the area of geology/water as compared

to the proposed project. This alternative has similar or reduced impacts in the areas of land use, biological resources, aesthetics, cultural resources and traffic/noise/air quality as compared to the proposed project (see Table 26, Environmentally Superior Alternatives-Direct Impacts and Table 27, Environmentally Superior Alternatives-Groundwater Impacts).

I. NIPOMO REFINERY DISPOSAL ALTERNATIVE

1. Description of Nipomo Refinery Disposal Alternatives

The Nipomo Refinery Disposal Alternative includes the proposed upgrades to the Southland WWTF as discussed in Section III.D. Project Characteristics with a relocated treated effluent site located on 24 acres near the Nipomo Refinery which is currently operated by the Conoco Phillips Company (see Figure 15, Alternative Effluent Disposal Sites). Treated effluent would be transmitted via an appropriately sized pipeline approximately 24,000 feet to vacant land adjacent to the existing refinery. Percolation of treated effluent at this location could occur either through the provision of surface percolation basins or in a subsurface percolation system. Construction and operation of this percolation facility would require its acquisition by the District or by securing a land lease or easements from the property owner.

2. Impacts of the Nipomo Refinery Disposal Alternative

Environmental impacts associated with the Nipomo Refinery Disposal Alternative are discussed below and compared to the impacts associated with the proposed project.

1. Land Use and Planning/Population and Housing – The Nipomo Refinery Disposal Alternative involves a relocated treated effluent disposal site with a wastewater treatment capacity identical to the proposed project. As such, the Nipomo Refinery Disposal Alternative has similar land use and planning and population and housing impacts as the proposed project. This alternative results in the same significant, unavoidable adverse (Class I) impacts as the proposed project.

2. Geology/Water – The potential seismic impacts associated with the Nipomo Refinery Disposal Alternative are similar to those associated with the proposed treated effluent disposal options. The amount of pipeline to be installed (24,000 linear feet) is similar to two of the proposed treated effluent disposal options will result in similar geologic and soils impacts as compared to the proposed project.

   The hydrogeologic impacts of the Nipomo Refinery Disposal Alternative may be greater than those associated with the proposed project as a result of questionable percolation capabilities of existing soils at this location which is known to contain clay soil layers.

3. Biological Resources – The Nipomo Refinery disposal site has been utilized for agricultural crop production and in the past was used for cattle grazing. As such, the Nipomo Refinery disposal site contains little in the way of special status plant or wildlife species or sensitive wildlife habitats. Use of the this location as a treated effluent disposal site will not, with implementation of general mitigation measures that are applied to all project construction activities, result in any significant, unavoidable adverse impacts in the area of biological resources. However, in the event that a surface percolation basin is constructed, potentially increased long-term impacts to special-status species could occur at this location as compared to the proposed project.

A surface percolation basin would create suitable habitat for semi-aquatic, special-status species including the Federally-listed California red-legged frog which may result in long-term maintenance conflicts with any re-established populations. Restricting percolation basin maintenance activities between June 1 and November 1 will reduce these potentially significant impacts to special status wildlife species to an insignificant level.

4. Aesthetics – Use of the Nipomo Refinery site as a treated effluent disposal site could have increased long-term visual impacts as compared to the proposed project. In the event that a surface percolation basin is constructed, views from adjacent areas would be adversely impacted. If a subsurface percolation system were constructed, visual impacts associated with the use of this alternative would be similar to those associated with the proposed project.

5. Cultural Resources – Although no walkover surveys of the Nipomo Refinery disposal area have been conducted, the disturbed nature of the site reduces the potential for excavation of significant cultural resources. Given implementation of mitigation measures associated with the proposed project related to the discovery of currently unknown cultural resources, impacts to cultural resources are considered to be potentially significant, but mitigable impacts. As such, potential impacts to cultural resources associated with this alternative are similar to those associated with the proposed project.

6. Traffic/Noise/Air Quality – The Nipomo Refinery Disposal Alternative will have similar impacts related to traffic, noise and air quality as compared to the proposed project for both short-term construction and long-term operations and maintenance activities.

3. Comparative Analysis

The Nipomo Refinery Disposal Alternative meets all of the project objectives in a manner similar to the proposed project (see Table 24, Project Alternatives-Comparison With Project Objectives).

The Highway the Nipomo Refinery Disposal Alternative will have similar significant, unavoidable adverse impacts in the issue areas of land use and planning and population and housing as the proposed project (see Table 25, Environmentally Superior Alternatives-Significant Impacts). This alternative has increased direct impacts in the areas of geology/water, biological resources and aesthetics as compared to the proposed project. This alternative has similar impacts in the areas of land use, cultural resources and traffic/noise/air quality as the proposed project (see Table 26, Environmentally Superior Alternatives-Direct Impacts and Table 27, Environmentally Superior Alternatives-Groundwater Impacts).

J. ENVIRONMENTALLY SUPERIOR ALTERNATIVES

The State CEQA Guidelines require an EIR to identify the alternative(s) that are environmentally superior to the proposed project. This determination is based upon three separate analyses: a) the ability of the project alternatives to reduce and/or eliminate the significant unavoidable adverse (Class I) impacts associated with the proposed project; b) the ability of the project alternatives to reduce or eliminate the remaining potentially significant but mitigable, i.e. direct (Class II) impacts associated with the proposed project and c) the project alternatives which adversely impact the Nipomo Mesa Management Area groundwater supplies.

Based upon the ability of the project alternatives to reduce and/or eliminate the significant unavoidable adverse (Class I) impacts associated with the proposed project, alternatives to the proposed project are ranked in Table 25, Environmentally Superior Alternatives–Significant Impacts. The only project alternative capable of reducing or eliminating the significant, unavoidable adverse (Class I) impacts associated with the proposed project is the No Project Alternative.

TABLE 25
ENVIRONMENTALLY SUPERIOR ALTERNATIVES-
SIGNIFICANT IMPACTS

Ranking	Alternative
1	No Project Alternative
2	PROPOSED PROJECT
2	Groundwater Recharge
2	Surface Discharge
2	Pasquini Property Disposal
2	South of Mesa Disposal
2	Mesa and Eucalyptus Roads Disposal
2	Aquifer Modification
2	Highway 101 Landscape Irrigation Disposal
2	Nipomo Refinery Disposal

Based upon the ability of the project alternatives to reduce and/or eliminate the remaining potentially significant but mitigable, i.e. direct (Class II) impacts associated with the proposed project, alternatives to the proposed project are ranked in Table 26, Environmentally Superior Alternatives–Direct Impacts. The project alternative considered to be environmentally superior to the proposed project is the No Project Alternative.

TABLE 26
ENVIRONMENTALLY SUPERIOR ALTERNATIVES-
DIRECT IMPACTS

Ranking	Alternative
1	No Project
2	PROPOSED PROJECT
3	Highway 101 Landscape Irrigation Disposal
3	Mesa and Eucalyptus Roads Disposal
3	Nipomo Refinery Disposal
4	South of Mesa Disposal
5	Aquifer Modification
6	Groundwater Recharge
7	Surface Discharge
8	Pasquini Property Disposal

Based upon project alternatives which adversely impact the Nipomo Mesa Management Area groundwater supplies, alternatives to the proposed project are ranked in Table 27, Environmentally Superior Alternatives–Groundwater Impacts. None of the project alternatives considered to be environmentally superior to the proposed project. The Mesa and Eucalyptus Roads Disposal Alternative and the Nipomo Refinery Disposal Alternative result in impacts upon groundwater supplies within the Nipomo Mesa Management Area similar to the proposed project.

TABLE 27
ENVIRONMENTALLY SUPERIOR ALTERNATIVES-
GROUNDWATER IMPACTS

Ranking	Alternative
1	PROPOSED PROJECT
1	Mesa and Eucalyptus Roads Disposal
1	Nipomo Refinery Disposal
2	Surface Discharge
2	Highway 101 Landscape Irrigation Disposal

3	South of Mesa Disposal
4	Pasquini Property Disposal
5	Aquifer Modification
5	Groundwater Recharge
6	No Project

Based upon the above analysis, the No Project Alternative is capable of eliminating the significant unavoidable adverse impacts in the areas of land use and planning and population and housing that are associated with the proposed project. It was also concluded that the No Project Alternative was capable of eliminating all of the potentially significant but mitigable (i.e. direct) impacts associated with the proposed project. The remaining project alternatives have significant but mitigable (i.e. direct) impacts that are greater than those associated with the proposed project. Based upon the above analysis, it was determined that two project alternatives, the Mesa and Eucalyptus Roads Disposal Alternative and the Nipomo Refinery Disposal Alternative, result in similar impacts upon groundwater supplies within the Nipomo Mesa Management Area as compared to the proposed project with the remaining project alternatives having potentially greater hydrogeologic impacts as compared to the proposed project.

The following table provides a summary of the rationale and reasons for the "environmentally superior" rankings contained within Tables 25 through 27 above.

TABLE 28
ENVIRONMENTALLY SUPERIOR RANKING RATIONALE

Alternative	Class I Impacts	Direct Impacts	Groundwater
A. No Project	Eliminated	Eliminated	Lack of improvements to treatment plant capabilities and capacity.
B. Groundwater Recharge	Same as project	Potential impact to groundwater quality; brine disposal	Potential impact to groundwater quality
C. Surface Recharge	Same as project	Downstream surface water quality; brine disposal; altering downstream biology	Less recharge area
D. Pasquini Property	Same as project	Breakout at bluff face; loss of agricultural lands; impacts to special status species	Limited percolation
E. South of Mesa	Same as project	Alternative site required; grading on bluff face; loss of agricultural lands; increased visual impacts	Interrupted percolation; disposal site outside NMMA
F. Mesa and	Same as project	Loss of agricultural lands;	Same as project

Eucalyptus Roads		impacts to special status species; increased visual impacts	
G. Aquifer Modification	Same as project	Potential impact to deep aquifer water quality	Potential impact to deep aquifer water quality
H. Highway 101 Irrigation	Same as project	No visual or water quality impacts	Disposal site partially outside NMMA
I. Nipomo Refinery	Same as project	Impacts to special status species; increased visual impacts	Same as project
PROJECT		Loss of agricultural lands; impacts to special status species; increased visual impacts	

VIII. GROWTH INDUCING IMPACTS

The State CEQA Guidelines (Section 15126 (g)) require an EIR to discuss how a proposed project could directly or indirectly lead to economic, population or housing growth. A project may be growth-inducing if it removes obstacles or impediments to growth, taxes community service facilities or encourages other activities or sets precedents which cause significant environmental effects. The potential growth-inducing impacts of the proposed project are discussed below in terms of these criteria. Occurrences

Economic, Population or Housing Growth

The proposed project will not directly generate any significant increases in population or housing.

Construction activities associated with the proposed project are estimated to generate a maximum total of 63 employees during project construction. It is anticipated that many of these employees will reside locally thereby not generating any demand for temporary housing. Those employees residing outside the area will find temporary accommodations in hotels and motels in the area or in short-term rental housing. The general availability of temporary housing in the area is expected to accommodate these workers with no substantial displacement of people or significant affect upon the available housing inventory. As a result, the construction phase of the proposed project will not create the demand for additional new housing. Provision of additional wastewater treatment and disposal capacity necessary to serve future growth within and adjacent to the Nipomo Community Services District is discussed in detail within the following subsection titled "Removal of an Impediment to Growth."

The proposed project involves the provision of additional wastewater treatment and disposal capacity thereby reducing or eliminating a potential constraint to future development within areas to be served by this additional wastewater treatment and disposal capability. However, Phase I of the proposed project will improve the treatment capability of the Southland WWTF but will not increase its existing treatment capacity. Phase II and III project improvements will expand the treatment capacity of the plant and/or develop off-site disposal options. Any increase in treatment capacity will be timed to meet population growth and increased wastewater treatment demand within the District's wastewater treatment sewer area. It should also be noted that any increase in residential density or other land use entitlements beyond that allowed by the South County Area Plan and any resultant increase in population and housing will require a General Plan Amendment, zone change as well as other subsequent approvals by the County of San Luis Obispo, for example, a Specific Plan, conditional use permit or tract map. These future discretionary approvals will require preparation and certification of additional environmental documentation pursuant to CEQA to address the potential population and housing impacts of these future approvals.

Removal of an Impediment to Growth

The County of San Luis Obispo General Plan governs the development of unincorporated land within the South County Planning Area. The County General Plan identifies the type and intensity of development allowed in each of several land use categories for Nipomo and other unincorporated areas (see Figure 8, South County Area Plan.) While service districts, including the Nipomo Community Services District, may provide the County with input regarding land use decisions and availability of wastewater treatment and disposal, it does not have any authority over land use entitlements. Development projects within the septic tank prohibition zone boundaries of the NCSD are sometimes approved by the County contingent upon receiving sewer services from a community water system such as the NCSD. It should be recognized that the Nipomo Community Services District does not have authority to approve development, however, the provision of public services such as wastewater treatment and disposal does increase the likelihood that an area may be developed.

The proposed project does not require any amendments to the South County Area Plan or any other Elements of the County General Plan and does not require any changes to existing zoning. The proposed project would not directly conflict with any environmental plans or policies adopted by agencies with jurisdiction over the project area. Although the proposed project would not directly result in a change in zoning or an increase in the intensity of currently-designated land uses, the proposed project represents a reduction or elimination of a potential constraint upon future development within areas served by the additional sewer service capacity and has the potential to hasten the conversion of areas to more intense urbanized uses over those land uses currently allowed by the South County Area Plan.

The proposed construction of additional wastewater treatment and disposal facilities necessary to serve both future wastewater treatment and disposal demands generated within the Southland WWTF service area of the Nipomo Community Services District consistent with the South County Area Plan will accomplish several objectives. These objectives include: provide reliable, high quality and cost effective wastewater treatment and disposal capacity and services to existing and future customers within the District's Town Sewer Service Area; respond to and remedy water quality violations associated with prior and current operations of the Southland Wastewater Treatment Facility; improve the water quality of treated wastewater to comply with current and projected State Waste Discharge Order requirements and to minimize adverse impacts upon Nipomo Mesa groundwater; manage the average height and volume of the subsurface mound of treated wastewater under the Southland percolation basins and the resultant discharge of groundwater into Nipomo Creek over an annual period; assist in resolving the Nipomo Mesa water supply deficit by promoting the beneficial use of the treated wastewater to either offset current Nipomo Mesa non-potable water usage and/or, where feasible, to augment productive Nipomo Mesa groundwater aquifers; to the extent feasible, minimize use of additional fossil fuels by offsetting project-related increased power utilization with a more sustainable energy source and improve the efficiency and reliability of operations of the Southland Wastewater Treatment Facility.

In order to determine the additional amount of development that could be served by these additional wastewater treatment and disposal facilities, a breakdown of land uses (as designated by the South County Area Plan) within the existing NCSD sewer service area must be identified. The Nipomo Community Services District, within the December, 2007 District Water and Sewer Master Plan evaluated six future (year 2030) wastewater production scenarios, three of which were based upon assumed water use rates and three of which were based upon observed water use rates within fiscal year 2005-2006. Within these two categories, three land use scenarios were evaluated: existing land uses, existing land uses plus proposed land use amendments and existing land uses within a high density land use scenario. Within these six future (year 2030) wastewater production scenarios, the maximum (or "worst-case") total number of acres served by the proposed wastewater treatment facilities improvements involve a maximum ("worst-case") production of 1.79 MGD (million gallons) per day. The future, maximum ("worst case") net increase in areas to be served and wastewater generated to the proposed wastewater treatment facilities improvements is 1,216 total acres and 1.157 million gallons of wastewater per day.

Although the proposed project would not directly result in a change in zoning or an increase in the intensity of currently-designated land uses, the proposed project would not only represent a reduction or elimination of a potential constraint upon future development within areas served by the additional sewer service but also has the potential to hasten the conversion of areas to more intense urbanized uses over those land uses currently allowed by the South County Area Plan. Any increase in density or change of land use to the South County Area Plan within the area to be served by the additional sewer service will, however, first require a General Plan Amendment and zone change. A General Plan Amendment would study a variety of land use and environmental issues before being approved or denied including community character and compatibility, existing land use policies, traffic and circulation impacts, the provision of public services, etc. This process involves significant public involvement and the implementation of the California Environmental Quality Act (per CEQA). Any future development within areas served by the additional sewer service would also require a number of additional approvals including approval of a Specific Plan, conditional use permit or tract map by the County of San Luis Obispo. These future discretionary approvals will require the preparation and certification of additional environmental documentation (pursuant to CEQA) to address the potential land use and planning impacts of these future approvals.

The proposed project has the potential to foster growth or changes in land uses in areas served by the additional sewer service particularly involving the conversion of agricultural lands. Potential growth-inducement involves a variety of factors including: removal of any impediments to growth such as the extension of roadways or utilities; the creation of development pressures in surrounding areas, particularly existing agricultural lands; growth-inducing impacts upon community services and the establishment of any precedent-setting effects upon parcels within the South County/Nipomo Mesa area.

Any reduction or elimination of a constraint to development (such as the provision of additional sewer service) can potentially hasten the conversion of vacant or existing agricultural lands, agricultural preserves or areas containing prime agricultural soils to developed uses. Any development in areas served by this additional sewer service beyond the uses currently allowed by the South County Area Plan will require approvals from the County of San Luis Obispo as discussed above.

The Nipomo Community Services District is a California Community Services District organized pursuant to Government Code Sections 61000 et. seq. The NCSD's service area overlies the southern portion of the Nipomo area within the unincorporated portion of San Luis Obispo County. The Nipomo Community Services District's authority does not include legislative or executive powers over zoning or land use.

Impact on Community Service Facilities

As discussed in Section V.I. Public Services and Utilities, the proposed project is not expected to significantly impact public services (police protection, fire protection and educational services) or utilities (natural gas/electricity, water service, wastewater treatment and solid waste).

The proposed additional wastewater treatment and disposal capacity will respond to existing and future wastewater treatment and disposal demands generated within the Southland WWTF service area of the Nipomo Community Services District. In so doing, the proposed project will provide reliable, high quality and cost effective wastewater treatment and disposal capacity to customers within the District. These additional wastewater treatment and disposal facilities will also respond to and remedy water quality violations associated with the Southland WWTF, improve water quality of treated wastewater, manage the height and volume of the subsurface mound of treated effluent beneath the Southland percolation basins, assist in resolving the Nipomo Mesa water supply deficit, minimize the use of additional fossil fuels and improve the efficiency and reliability of operations of the Southland WWTF. For these reasons, the proposed project will have a beneficial impact upon community services facilities within the Nipomo Community Services District as related to increased wastewater treatment and disposal capacity, preservation of available groundwater supplies and maintenance of groundwater quality.

Precedent-Setting Effects

Precedent setting concerns are defined as the ability of a project to set an example of what can be achieved elsewhere within the project area. The proposed project involves provision of additional wastewater treatment and disposal capacity in order to serve new development (pursuant to the South County Area Plan) within the Nipomo Community Services District. Since the proposed project is intended to provide wastewater treatment and disposal facilities adequate to serve the build-out condition within the NCSD, no additional facilities will be required in the near future (i.e. prior to the year 2030). As

such, the proposed project will not be setting a precedent for similar projects in the NCSD service area.

The proposed project has the potential to foster growth or changes in land uses in areas served by the additional sewer service particularly involving the conversion of agricultural lands. Any reduction or elimination of a constraint to development (such as the provision of additional wastewater treatment and disposal capacity) can potentially hasten the conversion of vacant or existing agricultural lands, agricultural preserves or areas containing prime agricultural soils to developed uses. Any development in areas served by these additional sewer service beyond the uses currently allowed by the South County Area Plan will, however, require approvals from the County of San Luis Obispo as discussed above.

The secondary or cumulative impacts associated with the proposed project are discussed within the Cumulative Impacts subsection within each environmental topic in Section V. Environmental Analysis of this EIR. These various assessments of cumulative impacts are addressed in relation to the following topic areas: land use and planning, population and housing, water/wastewater, biological resources, aesthetics, cultural resources, geology, hazards and hazardous materials, public services and utilities, traffic, noise and air quality.

IX. ORGANIZATIONS AND PERSONS CONSULTED

AECOM, Inc. (Mike Nunley, Eileen Shields, Josh Reynolds)

California Department of Fish and Game (Bob Stafford)

Cold Canyon Landfill (Lacy Ballard)

County of San Luis Obispo, Department of Planning and Building (John Nall, Brian Pedrotti)

County of San Luis Obispo, Public Health Department (Caleb Emmons)

County of San Luis Obispo, Sheriff - Coroner (Ken Conway)

Fugro West, Inc. (Paul Sorenson)

Gibson's Archaeological Consulting (Robert O. Gibson)

Lucia Mar Unified School District (Brenda Nushafer, Kim Pollard)

Mestre-Greve Associates, Inc. (Fred Greve, Matt Jones)

Nipomo Community Services District (Bruce Buel, Michael LeBrun, Don Spagnolo, Peter Sevcik)

Padre Associates, Inc. (Brian Dugas)

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San Luis Obispo Local Agency Formation Commission (David Church)

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