

NIPOMO COMMUNITY SERVICES DISTRICT WATERLINE INTERTIE



Draft Environmental Impact Report

State Clearinghouse No. 2005071114

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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 Nipomo Community Services District Waterline Intertie Project (to be referred to herein as the “Intertie Project” or “proposed waterline intertie”). 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. Approximately one-half mile south of the current District boundary is the Santa Maria River with an approximate width of 2,000 to 3,000 feet at this location. The City of Santa Maria is located on the south side of the Santa Maria River.

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 June 27, 2008 and July 28, 2008. 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. 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. As noted therein, the proposed project involves connecting to the City of Santa Maria water distribution system and construction of a waterline from Santa Maria to the Nipomo Community Services District water distribution system. The pipeline will be constructed beneath the Santa Maria River by horizontal directional drilling. A pump station(s) and water storage facilities will be constructed to boost the water pressure into the District system and provide water storage as necessary. Several water transmission facilities within the NCSD will be replaced and upgraded. A final element of the proposed project involves the

conversion of District water supply wells to chloramination treatment in order to provide disinfection within the District's water distribution system. These facilities may be developed within three phases and could have an ultimate capacity to transport a maximum 6,200 acre feet per year. 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, biological resources, aesthetics, cultural resources, geology, 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. 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 if and to what extent the proposed project will facilitate development within the areas served by the additional water supplies. 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.

In 2005, the Nipomo Community Services District initiated preparation of a Draft and Final Environmental Impact Report which addressed the potential impacts of three proposed methods for extension of a water supply pipeline. A Draft Environmental Impact Report dated May, 2006 for that project was prepared, reviewed and circulated for public and agency review and comment during the months of May and June of 2006. Subsequent to circulation of that document, several revisions and/or additions to the

project design were recommended. These revisions included the reduction in water storage, additional NCS D water distribution system improvements, resolution of water quality issues and phased project development. In addition, an expanded number of project alternatives were also evaluated including the investigation of the viability of desalinization and direct use of State Water Project water. In December, 2006, the NCS D Board of Directors suspended further work on this prior EIR until the NCS D Board of Directors could evaluate a lower cost project and project design issues could be resolved. Since that time, several additional studies and field surveys have been prepared by NCS D in order to further evaluate and refine the design of the waterline intertie project. In addition, the NCS D recently updated their Water Master Plan (December, 2007) in which the District water model was updated and recommendations for improvements to the District water distribution system were made.

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 Urban Water Management Plan 2005 Update prepared for the Nipomo Community Services District; 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; the County 2004 Annual Resources Summary Report and various environmental analyses prepared for projects throughout the Nipomo area as listed in Section X. References of this document.

This Draft EIR will provide a full and fair discussion of the environmental impacts of the proposed Nipomo Community Services District Waterline Intertie project. 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, 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

<u>TOPIC</u>	<u>LOCATION</u>
Environmental Procedures and Format	Section I
EIR Summary	Section II

Mitigation Monitoring Program	Section II
Project Description	Section III
Environmental Setting	Section IV
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, biological resources, aesthetics, cultural resources, geology, 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, hazards, public services, utilities and service systems 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. Approximately one-half mile south of the current District boundary is the Santa Maria River with an approximate width of 2,000 to 3,000 feet at this location. The City of Santa Maria is located in Santa Barbara County on the south side of the Santa Maria River.

The proposed project extends from a proposed pipeline connection and pump station site at the intersection of West Taylor Street and North Blosser Road approximately one mile south of the Santa Maria River in the City of Santa Maria. A proposed pipeline extension will run north on Blosser Road to the Santa Maria River levee. At that point, a pipeline will be placed under the levee, extended toward the bank of the river through an agricultural area, then directionally drilled beneath the Santa Maria River to a point on the Nipomo Mesa. Connection will be made to an existing pipeline on Orchard Road near Joshua Street which runs to Southland Street. This line will connect to an upgraded NCSD water distribution system on Orchard Road (north of Southland Street), Southland Street (east of Orchard Road), South Frontage Road (north of Southland Street), Darby Lane (east of South Frontage Road) and South Oakglen Avenue (north of Darby Lane to Tefft Street). The final project phase, if authorized, would include a pipeline extension from the proposed Pump Station No. 2 at Joshua Street and Orchard Road to the Quad Storage Tanks located at Tefft Street and Foothill Road.

A maximum of two pump stations and two water storage tanks will be constructed to boost the water pressure into the District system and provide operational or emergency water storage as necessary. Several water transmission facilities within the NCSD will be upgraded or replaced. A final element of the proposed project involves the conversion of District water supply wells from chlorination to chloramination treatment in order to provide disinfection that is compatible with the imported water supply.

The potential importation of a maximum of 6,200 acre-feet of water per year is intended to accomplish several objectives. Approximately 2,500 acre-feet per year will offset current groundwater production in order to avoid further depletion and assist in balancing of groundwater levels of the Nipomo Mesa Management Area (NMMA). The Phase I increment of 2,000 acre-feet per year of this total will be used to augment water supplies available to the existing customers of the Nipomo Community Services District thereby replacing/reducing groundwater pumping of the NMMA by that amount.

The second phase (Phase II) increment of supplemental water will total an additional 1,000 acre-feet per year. Half of this total (500 acre-feet each) will be used for the remaining groundwater replenishment for the NMMA (bringing that total to 2,500 acre-feet per year). The additional 500 acre-feet per year in the Phase II delivery of supplemental water will be used by the NCS D to serve future customers on currently vacant land within the existing NCS D boundaries.

The 3,200 acre-feet per year within the third (Phase III) increment of supplemental water could be utilized to serve future development within the Sphere of Influence areas adjacent to the existing NCS D boundaries.

The proposed Nipomo Community Services District Waterline Intertie 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, pump stations, storage facilities and other infrastructure for the proposed waterline intertie.

The proposed 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 or 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 in the event that a Section 404 Permit from the U.S. Army Corps of Engineers is required; 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 Section 7 Consultation or Section 10(a) Permit from the United States Fish and Wildlife Service which allows the “taking” of an endangered species; 9) a Section 7 Permit from or informal consultation with the National Oceanographic and Atmospheric Administration (NOAA) which oversees fisheries management in waterways nationwide; 10) a new or amended Domestic Water Supply Permit from the State Department of Public Health (formerly the Department of Health Services) for the introduction of supplemental water into the Nipomo Community Services District system; 11) an Authority to Construct issued by the San Luis Obispo County Air Pollution Control District and the Santa Barbara Air Pollution Control District in order to allow proposed horizontal directional drilling; 12) easements across the Santa Maria River and along the southern boundary of the river secured from landowners and other entities for right-of-way and construction of either Directional Drilling Options A and B and 13) any necessary construction and/or encroachment

permits from the County of San Luis Obispo, the City of Santa Maria or the County of Santa Barbara 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” preceding this summary.

**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		X	X	X
D. Biological Resources		X	X	
E. Aesthetics		X	X	
F. Cultural Resources		X		
G. Geology		X	X	
H. Traffic		X	X	
I. Noise		X		
J. Air Quality		X		

**TABLE 2
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

DESCRIPTION OF IMPACT	MITIGATION MEASURE SUMMARY	RESIDUAL IMPACTS
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A. LAND USE AND PLANNING

<p>A-1. The proposed project may impact land uses in areas adjacent to short-term project construction activities or long-term project operations.</p>	<p>No mitigation measures are proposed.</p>	<p>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 water supplies 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).</p>
<p>A-2. The proposed project may 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 increased water supplies provided by the proposed project.</p>	<p>No mitigation measures are proposed.</p>	<p>Potential direct impacts upon adjacent land uses associated with project construction and operations are considered to be less than significant (Class III Impact).</p>

B. POPULATION AND HOUSING

<p>B-1. The proposed project may result in the demand for new housing due to the need for labor during project construction.</p>	<p>No mitigation measures are proposed.</p>	<p>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 water supplies provided by the proposed project are considered to be significant</p>
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DESCRIPTION OF IMPACT	MITIGATION MEASURE SUMMARY	RESIDUAL IMPACTS
<p>B-2. The proposed project may 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 water supplies provided by the proposed project.</p>	<p>No mitigation measures are proposed.</p>	<p>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).</p> <p>Potential impacts related to increased housing demand associated with project construction activities are considered to be less than significant (Class III Impact).</p>

C. WATER

<p>C-1. The proposed project may result in the creation of water quality incompatibility due to the differences in water treatment employed by the City of Santa Maria and the NCSD</p> <p>C-2. The proposed project may result in degradation of surface and shallow groundwater quality as a result of underground horizontal directional drilling-related frac-outs.</p>	<p>C-1: A public awareness program shall be implemented by the Nipomo Community Services District that alerts District customers to the potential harmful effects of chloramines on certain aquatic species and reptiles and to treatment products that are readily available to treat water for fish tanks. Users of ultra-pure water, kidney dialysis patients and chloramine-sensitive manufacturing processes shall also be notified of the addition of chloramine to the District water supplies.</p> <p>C-2: Construction shall occur during the dry season (i.e., April 15 to November 15) when there is little or no flow in the Santa Maria River in order to reduce potential contact of frac-out fluids with surface waters.</p> <p>C-3: The Nipomo Community Services District shall complete a preliminary geotechnical investigation along the underground horizontal directional drilling route to further define the stratigraphy and determine the appropriate depth of drilling to avoid frac-outs (i.e., the depth of finest grained sediments) and to determine appropriate methods (i.e., appropriate drilling mud mixtures for specific types of sediments). Drilling pressures shall be closely monitored so that they</p>	<p>Mitigation Measure C-1 will reduce potentially significant impacts related to water quality incompatibility due to differences in water treatment employed by the City of Santa Maria and the NCSD to an insignificant level (Class II Impact).</p> <p>Mitigation Measures C-2, C-3, and C-4 will reduce potentially significant water quality impacts related to underground horizontal directional drilling-induced frac-outs to an insignificant level (Class II Impact).</p>
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DESCRIPTION OF IMPACT	MITIGATION MEASURE SUMMARY	RESIDUAL IMPACTS
<p>C-3. The proposed project may result in degradation of surface water quality as a result of potential construction related spills.</p>	<p>do not exceed those needed to penetrate the formation.</p> <p>C-4: The Nipomo Community Services District shall prepare a Frac-out Monitoring, Response and Clean-up Plan that shall be approved by the Regional Water Quality Control Board prior to any underground horizontal directional drilling activities. The Plan shall include the following elements:</p> <ul style="list-style-type: none"> • Description of the equipment and procedures for controlling fluid pressures to reduce the risk of hydraulic fracturing. • Description of monitoring procedures to detect surface exposures of drilling mud in dry areas and in flowing waters or to groundwater. • Description of equipment and procedures to respond to hydraulic fractures that break out at the ground surface or to the groundwater including overland access routes, containment methods and materials, equipment to be used and availability, environmental protection measures, emergency response plan, and post-containment clean up and restoration. • Description of equipment, procedures and materials for grouting and abandoning an incomplete pilot hole that cannot be advanced further. • Evaluation plan and criteria for continuing drilling. • Agency notification and post-event permitting. <p>C-5: 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 reviewed and approved by the Central Coast RWQCB prior to commencement of any clearing or other construction activities. BMPs should include the following measures:</p> <ul style="list-style-type: none"> • Properly maintain (off-site) all construction vehicles and equipment that enter the construction area to prevent leaks of fuel, oil, and other vehicle fluids. • Conduct equipment and vehicle fueling off-site. If refueling is required at the Project site, it will be done within a bermed area with an impervious surface to collect spilled fluids. 	<p>Mitigation Measure C-5 will reduce potentially significant water quality impacts associated with equipment maintenance and fueling spills to an insignificant level (Class II Impact).</p>

DESCRIPTION OF IMPACT	MITIGATION MEASURE SUMMARY	RESIDUAL IMPACTS
<p>C-4. The proposed project may result in a substantial depletion of the Santa Maria Groundwater Basin supplies, such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level.</p> <p>C-5. The proposed project will result in the replenishment of groundwater supplies within the Nipomo Mesa Management Area.</p>	<ul style="list-style-type: none"> • 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 and mortar in contained areas. • Insure that all equipment washing and major maintenance is prohibited at the project site except in bermed areas. • Remove all refuse and excess material from the site as soon as possible. • Channelize storm water to avoid construction equipment and materials, and to divert runoff to existing drainages. <p>No mitigation measures are proposed.</p> <p>No mitigation measures are proposed.</p>	<p>Potential impacts related to the groundwater supplies within the Santa Maria Groundwater Basin are considered to be less than significant (Class III Impact).</p> <p>Potential impacts related to groundwater supplies within the Nipomo Mesa Management Area are considered to be beneficial (Class IV Impact).</p>

D. BIOLOGICAL RESOURCES

<p>D-1. Construction activities within the proposed pipeline alignments, water storage tank and pump station locations may adversely affect non-listed wildlife occupying adjacent habitats within the Santa Maria River wildlife migration corridors.</p>	<p>No mitigation measures are proposed.</p>	<p>Potential impacts upon non-listed wildlife species, the Santa Maria River wildlife migration corridor or foraging bird species are considered to be less than significant (Class III Impact).</p>
<p>D-2. Construction activities within the proposed</p>	<p>D-1: Pipeline, water storage tank and pump station construction operations shall be conducted</p>	<p>Mitigation Measure D-1 will reduce potentially</p>

DESCRIPTION OF IMPACT	MITIGATION MEASURE SUMMARY	RESIDUAL IMPACTS
<p>pipeline alignments, storage tank and pump station locations could adversely affect nesting activities of protected migratory birds and raptors.</p> <p>D-3. Construction activities could adversely affect special-status terrestrial and avian species potentially occurring in the project area.</p>	<p>prior to, or after, the nesting season (February 15 to September 15) 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 the months of October and January to the extent feasible.</p> <p>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 to identify potential bird nesting sites.</p> <ul style="list-style-type: none"> • 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 project construction activities, construction shall avoid the nest site or be 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. <p>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, proposed horizontal directional drilling and jack-and-bore operations. Additionally, all construction access routes shall be established in previously disturbed areas and/or existing roadways.</p> <p>D-3: Exclusionary and silt 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</p>	<p>significant impacts related to nesting activities of protected migratory birds and raptors to an insignificant level (Class II Impact).</p> <p>Mitigation Measures D-2 through D-9 will reduce potentially significant impacts associated with special-status terrestrial and avian species to an insignificant level (Class II Impact).</p>

DESCRIPTION OF IMPACT	MITIGATION MEASURE SUMMARY	RESIDUAL IMPACTS
	<p>location of exclusionary and silt 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 project component.</p> <p>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 special-status species within the project area, their habitat requirements and applicable regulatory policies and provisions regarding their protection and measures being implemented to avoid and/or minimize impacts.</p> <p>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.</p> <p>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.</p> <p>D-7: A qualified biologist shall conduct a pre-activity survey to determine presence/absence of California horned lizard within and adjacent to the horizontal directional drilling laydown areas and jack-and-bore locations along the southern boundary of the Santa Maria River. 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). Procedures and protocols for relocation shall be based up on pre-project consultation with the California Department of Fish and Game.</p>	

DESCRIPTION OF IMPACT	MITIGATION MEASURE SUMMARY	RESIDUAL IMPACTS
<p>D-4. Pipeline construction activities could adversely affect aquatic and semi-aquatic special-status species within the Santa Maria River, Blosser Road drainage canal, and agricultural stock ponds located along the Nipomo Mesa.</p>	<p>D-8: 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 (e.g., California horned 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.</p> <p>D-9: Nesting bird surveys shall be conducted between February 15 and August 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.</p> <p>D-10: Site disturbance and construction activities associated with the Santa Maria River pipeline crossing, including the horizontal directional drilling operations shall not occur during the rainy season (October 15 to April 15). No construction activities shall occur during or immediately following a rain event or if water is flowing within the Santa Maria River.</p> <p>D-11: 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., California red-legged frog, Two-striped garter snake, etc.), their habitat requirements, applicable regulatory policies and provisions regarding their protection and measures being implemented to avoid and/or minimize impacts.</p> <p>D-12: The Blosser Road drainage canal shall be illustrated on all final construction plans. At no time shall any equipment and/or materials staging be allowed within the bed or banks of the drainage feature. In addition, a row of silt fencing or equivalent shall be installed along the perimeter of the drainage canal during project operations to prohibit CRLF movement into the work zone.</p> <p>D-13: All work areas within 100 feet of known</p>	<p>Mitigation Measures D-10 through D-16 will reduce potentially significant impacts associated with special-status aquatic or semi-aquatic species to an insignificant level (Class II Impact).</p>

DESCRIPTION OF IMPACT	MITIGATION MEASURE SUMMARY	RESIDUAL IMPACTS
	<p>California red-legged frog habitat 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., Southwestern pond turtle, Two-striped garter snake, 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 is identified in a work area, all work shall cease until the California red-legged frog has safely vacated the work area. At no time shall any California red-legged frog be relocated and/or affected by project operations without prior approval from the U.S. Fish and Wildlife Service. 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. In addition, silt fencing will be installed around temporary aquatic habitats (i.e. trenches that have perched groundwater) that have formed during project activities, to minimize the potential for migration of CRLF from the adjacent agricultural pond. The exact location of exclusionary and silt fencing shall be determined by a qualified biological monitor. The fencing shall remain in place throughout the construction phase for each individual project component.</p> <p>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.</p> <ul style="list-style-type: none"> • 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, stock piling and horizontal directional drilling activities) 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 	

DESCRIPTION OF IMPACT	MITIGATION MEASURE SUMMARY	RESIDUAL IMPACTS
	<p>the project.</p> <ul style="list-style-type: none"> • 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. • The District shall submit an application for a Streambed Alteration Agreement (SAA) to the California Department of Fish and Game. If required, the final SAA shall be received prior to project construction. All conditions in the final SAA shall be strictly adhered to during construction. • A Frac-out Contingency Plan (FCP) shall be prepared for horizontal directional drilling operations within the Santa Maria River channel and shall include appropriate measures for containment of spills, agency notifications (including a detailed call-down list of all applicable regulatory agency representatives), clean-up protocols, and procedures for restoring the river channel to pre-disturbance conditions. 	

DESCRIPTION OF IMPACT	MITIGATION MEASURE SUMMARY	RESIDUAL IMPACTS
<p>D-5. Construction activities could result in short-term impacts to the sensitive habitat areas of the Santa Maria River, including jurisdictional Waters of the United States and designated critical habitat of the Southern California ESU Steelhead</p>	<p>The “Frac-out” clean-up procedures shall emphasize minimizing and/or avoiding impacts to the main channel and alluvial scrub habitat areas of the Santa Maria River. Lastly, the FCP shall include the conditions by which the boring operation would be abandoned, if applicable, and how many repeated bores may be attempted.</p> <p>D-15: Prior to commencing project construction, the District shall retain a biological monitor experienced with horizontal directional drilling technology. The biological monitor shall be responsible for conducting field inspections of horizontal directional drilling operations, reporting, and enforcement of all applicable conditions of approval, including any required conditions from the California Department of Fish and Game SAA. Specifically, the qualified monitor shall be on-site to inspect the river corridor and pipeline alignment during drilling activities that have the potential for a spill or “Frac-out” (i.e. pull back operations, etc.) to ensure no impacts occur to the Santa Maria River. In the event of a spill or “Frac-out” within the Santa Maria River corridor, all work shall be halted and the spill shall be contained using the procedures outlined in the FCP.</p> <p>D-16: 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.</p> <p>Mitigation Measures D-10 through D-14 require provision of (pre-designated staging and fueling areas and equipment access routes, exclusionary fencing to protect sensitive habitat areas, dust control measures, etc.).</p> <p>D-17: In the event that a “Frac-out” occurs within the Santa Maria River channel due to horizontal directional drilling operations, the appropriate permits shall be obtained by the governing regulatory agency to facilitate clean-up and restoration of the affected portions of river channel to pre-project conditions. As necessary, this shall include a 404 Permit from the Army Corps of Engineers, a 401 Permit from the Regional Water Quality Control Board and Streambed Alteration Agreement from the California Department of Fish and Game.</p>	<p>Mitigation Measures D-17 and D-18 will reduce potentially significant short-term impacts upon sensitive habitat areas within the Santa Maria River to an insignificant level (Class II Impact).</p>

DESCRIPTION OF IMPACT	MITIGATION MEASURE SUMMARY	RESIDUAL IMPACTS
<p>D-6. Horizontal directional drilling operations along the southern boundary of the Santa Maria River have the potential to result in the permanent loss of special-status plant species.</p> <p>D-7. The proposed project may result in long-term impacts to the large eucalyptus trees located along the proposed pipeline alignment located on Southland Street, Orchard Road, South Frontage Road and Darby Lane. These trees may represent potential habitat for Monarch butterflies or nesting raptors.</p> <p>D-8. Long-term impacts associated with the potential generation of silt and sedimentation sources along the pipeline alignments, water storage tank and pump stations could result in adverse effects to adjacent habitat areas and associated</p>	<p>D-18: The restoration component of the Frac-out Contingency Plan (Mitigation Measure D-14) shall be implemented as necessary to ensure that the affected portions of stream channel and associated sensitive habitat areas are restored to pre-project conditions. The restored portions of stream channel shall be monitored until all performance criteria have been met as specified by the regulatory agency permits.</p> <p>D-19: Prior to project construction, a qualified botanist shall complete a focused botanical survey of the pipeline alignment along the southern boundary of the Santa Maria River. All Blochman's ragwort identified within 50 feet of the proposed horizontal directional drilling laydown area and pipeline alignment shall be marked with temporary flagging.</p> <p>D-20: Protective fencing shall be installed around populations of Blochman's ragwort to prevent loss of this special-status plant species. As necessary, this shall include minor modifications of the designated horizontal directional drilling laydown area to avoid Blochman's ragwort to the extent feasible.</p> <p>D-21: The proposed waterline shall be aligned to avoid impacting the root systems of large eucalyptus trees located on Southland Street, Orchard Road, South Frontage Road and Darby Lane. The precise location 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.</p> <p>D-22: Mitigation Measure D-14 includes provisions for stabilizing the water storage tank, pump station sites and pipeline alignments and monitoring. As necessary, this shall include the following:</p> <ul style="list-style-type: none"> • Implementation of standard Best Management Practices (e.g., hydroseeding, wattles, and earthen swales, etc.) along the recontoured sites and erosion control monitoring during subsequent 	<p>Potential impacts associated with special-status plant species are considered to be insignificant (Class III Impact), however, Mitigation Measures D-19 and D-20 are provided to further reduce these impacts.</p> <p>Mitigation Measure D-21 will reduce potentially significant impacts to large eucalyptus trees located on Southland Street and Orchard Road to an insignificant level (Class II Impact).</p> <p>Mitigation Measure D-22 will reduce potentially significant long-term impacts associated with the generation of silt and sedimentation to an insignificant level (Class II Impact).</p>

DESCRIPTION OF IMPACT	MITIGATION MEASURE SUMMARY	RESIDUAL IMPACTS
<p>special-status wildlife species.</p> <p>D-9. Pipeline operation and maintenance activities may result in long-term adverse impacts to special-status species.</p>	<p>rainy seasons to ensure that previously disturbed areas are stabilized.</p> <ul style="list-style-type: none"> • Installation of long-term drainage devices at all water storage tank and pump stations, including, as necessary, catchment basins, culverts with down-drains and storm flow energy dissipating devices (riprap or diffusers). <p>D-23: All water storage tank and pump station facility lighting shall be shielded away from adjacent wildlife habitat areas and sky to minimize lighting/glare impacts of wildlife, to the extent feasible while still providing safe working conditions for facility personnel.</p>	<p>Mitigation Measure D-23 will reduce potentially significant impacts associated with long-term pipeline operations and maintenance activities to an insignificant level (Class II Impact).</p>

E. AESTHETICS

<p>E-1. Project construction may result in the short-term alteration of views from adjacent areas.</p> <p>E-2. Project infrastructure facilities may degrade views from adjacent areas.</p>	<p>No mitigation measures are proposed.</p> <p>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. Trees or shrubs will be provided which will reach a six (6) feet surrounding booster stations without sacrificing safety considerations within two years of construction of these facilities.</p> <p>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 replacement plan to insure that said screening will be maintained for 15 years, including replacement of any trees which may die.</p> <p>E-3: Prior to project construction, a color board will be provided which identifies the exterior colors and materials to be utilized on proposed water storage tanks and booster stations. The colors and materials selected will involve muted</p>	<p>Potential impacts related to the visual impacts associated with project construction are considered to be less than significant (Class III Impact).</p> <p>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).</p>
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DESCRIPTION OF IMPACT	MITIGATION MEASURE SUMMARY	RESIDUAL IMPACTS
<p>E-3. Long-term project operations may result in the generation of light and glare into surrounding areas.</p>	<p>tones which match or are comparable with the colors found in the surrounding areas.</p> <p>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.</p>	<p>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).</p>

F. CULTURAL RESOURCES

<p>F-1. Project construction may disturb or materially alter areas containing prehistoric cultural resources which may be related to an identified prehistoric site.</p>	<p>F-1: Cultural resource monitoring shall accompany construction trenching and excavation along the South Frontage Road near Grande Avenue (SLO-808), between Division Street and Story Street (SLO-1254) as well as along a 100 meter area on the south side of Southland Street directly south of 641 Southland. A 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.</p> <p>F-2: The vacant lot located southeast of the intersection of Tefft Street and Highway 101 containing SLO-1394 shall not be utilized during any project construction activities including, but not limited to, a staging area for project construction.</p>	<p>Mitigation Measures F-1 and F-2 will reduce potentially significant impacts related to the disturbance or alteration of prehistoric cultural resources to an insignificant level (Class II Impact).</p>
<p>F-2. Project grading and construction may result in the discovery of currently-unknown cultural resources.</p>	<p>F-3: 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</p>	<p>Mitigation Measures F-3 and F-4 will reduce potentially significant impacts related to the discovery of currently-unknown cultural resources during project construction to an insignificant level (Class II Impact).</p>

DESCRIPTION OF IMPACT	MITIGATION MEASURE SUMMARY	RESIDUAL IMPACTS
	<p>examined and evaluated by a qualified archaeologist and appropriate recommendations can be made.</p> <p>F-4: 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.</p>	

G. GEOLOGY

<p>G-1. The proposed project could expose facilities to potential substantial adverse effects, including the risk of loss, involving strong seismic ground shaking and associated ground failure, including liquefaction.</p>	<p>No mitigation measures are proposed.</p>	<p>Potential impacts related to exposure of facilities to seismic ground shaking and associated ground failure are considered to be less than significant (Class III Impact).</p>
<p>G-2. The proposed project could expose facilities to the risk of landslides.</p>	<p>No mitigation measures are proposed.</p>	<p>Potential impacts related to exposure of facilities to landslides are considered to be less than significant (Class III Impact.)</p>
<p>G-3. The proposed project could result in substantial soil erosion or the loss of topsoil into the Santa Maria River or other local drainages.</p>	<p>G-1: The following shall be included in Final Grading and Drainage Plans to prevent erosion induced siltation of on-site and off-site drainages:</p> <ul style="list-style-type: none"> • The use of temporary berms and sedimentation traps, such as silt fencing, straw bales, and sand bags, to be installed in association with project excavations, grading and underground horizontal directional drilling activities in order to minimize erosion of soils and sedimentation into the Santa Maria River and other local drainages. Sedimentation basins and traps shall be cleaned periodically with silt removal and disposal in a location approved by the District. • 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. 	<p>Mitigation Measure G-1 will reduce potentially significant impacts associated with erosion induced siltation of the Santa Maria River and other local drainages to an insignificant level (Class II Impact).</p>

DESCRIPTION OF IMPACT	MITIGATION MEASURE SUMMARY	RESIDUAL IMPACTS
<p>G-4. The proposed project would 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.</p>	<p>No mitigation measures are proposed.</p>	<p>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).</p>
<p>G-5. The proposed project would 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.</p>	<p>No mitigation measures are proposed.</p>	<p>Potential impacts related to the loss of availability of a known mineral resource are considered to be less than significant (Class III Impact).</p>

H. TRAFFIC

<p>H-1. The proposed project will generate additional traffic which could result in traffic congestion or unacceptable levels of service on an adjacent roadway or intersection.</p>	<p>No mitigation measures proposed.</p>	<p>Potential impacts related to traffic generation are considered to be less than significant (Class III Impact).</p>
<p>H-2. Project construction activities may 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 pedestrians or bicyclists.</p>	<p>H-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 and/or pedestrians. These measures shall also insure continued access from adjacent properties to local roadways.</p>	<p>Mitigation Measure H-1 will reduce potentially significant impacts related to the diversion of traffic, impeding access to adjacent properties and potential hazards to pedestrians or bicyclists to an insignificant level (Class II Impact).</p> <p>Potential impacts related to the loss of available parking are considered to be less than significant (Class III Impact).</p>

I. NOISE

<p>I-1. The proposed project will generate construction noise which may impact</p>	<p>I-1: All project construction activities shall comply with the County of San Luis Obispo Noise Ordinance Section 22.06.042(d) which limits</p>	<p>Mitigation Measures I-1 through I-3 will reduce potentially significant</p>
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DESCRIPTION OF IMPACT	MITIGATION MEASURE SUMMARY	RESIDUAL IMPACTS
<p>surrounding areas containing noise sensitive uses.</p> <p>I-2. The proposed project will generate increased noise levels due to long-term project operations.</p>	<p>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.</p> <p>I-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.</p> <p>I-3: All necessary measures to muffle, shield or enclose construction equipment shall be implemented in order to insure that noise levels at the property line of the nearest residence do not exceed an exterior noise level of 60 dBA. During project construction, noise monitoring shall be conducted by a qualified acoustical engineer in order to insure the acceptable noise threshold of 60 dBA at the property line of the nearest sensitive receptor.</p> <p>I-4: Stationary noise sources (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.</p>	<p>impacts related to the generation of short-term construction noise to an insignificant level (Class II Impact).</p> <p>Mitigation Measure I-4 will reduce potentially significant noise impacts associated with long-term project operations to an insignificant level (Class II Impact).</p>

J. AIR QUALITY

<p>J-1. The proposed project will result in the generation of air pollutants during project construction activities.</p>	<p>J-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.</p> <p>J-2: All dirt stock-pile areas shall be sprayed daily as needed.</p> <p>J-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.</p> <p>J-4: All disturbed soil areas not subject to revegetation shall be stabilized using approved</p>	<p>Mitigation Measures J-1 through J-16 will reduce potentially significant air quality impacts associated with project construction to an insignificant level (Class II Impact).</p>
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DESCRIPTION OF IMPACT	MITIGATION MEASURE SUMMARY	RESIDUAL IMPACTS
	<p>chemical soil binders, jute netting or other methods approved by the APCD.</p> <p>J-5: All roadways, driveways, sidewalks, etc. to be paved shall be completed as soon as possible. In addition, building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.</p> <p>J-6: Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface at a construction site.</p> <p>J-7: All trucks hauling dirt, sand, soil or other loose materials shall be covered or maintain at least two feet of freeboard.</p> <p>J-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.</p> <p>J-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.</p> <p>J-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.</p> <p>J-11: All PM10 mitigation measures required must be included on any grading or building plans. These plans shall indicate the source of reclaimed water to be used for dust control. In addition, 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.</p> <p>J-12: All construction equipment shall be properly maintained and tuned according to manufacturer's specifications.</p> <p>J-13: All off-road and portable, diesel-powered equipment, including, but not limited to,</p>	

DESCRIPTION OF IMPACT	MITIGATION MEASURE SUMMARY	RESIDUAL IMPACTS
<p>J-2. The proposed project will generate pollutants associated with long-term project operations.</p>	<p>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.</p> <p>J-14: Where possible, diesel powered equipment shall be replaced with gasoline, electrical, CNG or LPG powered equipment.</p> <p>J-15: Diesel equipment used in proposed horizontal directional drilling shall either be certified pursuant to the California Air Resources Board's Portable Equipment Registration Program 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/or proper fuel selection.</p> <p>J-16: 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.</p> <p>J-17: The daily water pumping operations for the proposed projects 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.</p> <p>J-18: The District shall investigate the feasibility and cost-effectiveness of the use of solar power or other alternative energy sources to power water pumps or other project facilities.</p>	<p>Mitigation Measures J-17 and J-18 will reduce potentially significant air quality impacts related to pollutant generation associated with long-term project operations to an insignificant level (Class II Impact).</p>

B. MITIGATION MONITORING PROGRAM

Provided on the following pages is a listing of the proposed mitigation measures associated with the proposed Nipomo Community Services District Waterline Intertie Project (see Table 3, Mitigation Monitoring Programs). 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 SUMMARY	SPECIFIC ACTION	MITIGATION MILESTONE	RESPONSIBLE MONITORING PARTY
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A. LAND USE AND PLANNING

No mitigation measures are proposed.	--	--	--
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B. POPULATION AND HOUSING

No mitigation measures are proposed.	--	--	--
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C. WATER

C-1: A public awareness program shall be implemented by the Nipomo Community Services District that alerts District customers to the potential harmful effects of chloramines on certain aquatic species and reptiles and to treatment products that are readily available to treat water for fish tanks. Users of ultra-pure water, kidney dialysis patients and chloramine-sensitive manufacturing processes shall also be notified of the addition of chloramine to the District water supplies.	Conduct public awareness program	Prior to project construction	Nipomo Community Services District
C-2: Construction shall occur during the dry season (i.e., April 15 to November 15) when there is little or no flow in the Santa Maria River in order to reduce potential contact of frac-out fluids with surface waters.	Construction to occur during dry season	During project construction	Nipomo Community Services District
C-3: The Nipomo Community Services District shall complete a preliminary geotechnical investigation along the underground horizontal directional drilling route to further define the stratigraphy and determine the appropriate depth of drilling to avoid frac-outs (i.e., the depth of finest grained sediments) and to determine appropriate methods (i.e., appropriate drilling mud mixtures for specific types of sediments). Drilling pressures shall be closely monitored so that they do not exceed those needed to penetrate the formation.	Complete a preliminary geotechnical investigation	Prior to and during project construction	Nipomo Community Services District
C-4: The Nipomo Community Services District shall prepare a Frac-out Monitoring, Response and Clean-up Plan that shall be approved by the Regional Water Quality Control Board prior to any	Prepare a Frac-Out Monitoring, Response and Clean Up Plan	Prior to project construction	Nipomo Community Services District

MITIGATION MEASURE SUMMARY	SPECIFIC ACTION	MITIGATION MILESTONE	RESPONSIBLE MONITORING PARTY
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<p>underground horizontal directional drilling activities. The Plan shall include the following elements:</p> <ul style="list-style-type: none"> • Description of the equipment and procedures for controlling fluid pressures to reduce the risk of hydraulic fracturing. • Description of monitoring procedures to detect surface exposures of drilling mud in dry areas and in flowing waters or to groundwater. • Description of equipment and procedures to respond to hydraulic fractures that break out at the ground surface or to the groundwater including overland access routes, containment methods and materials, equipment to be used and availability, environmental protection measures, emergency response plan, and post-containment clean up and restoration. • Description of equipment, procedures and materials for grouting and abandoning an incomplete pilot hole that cannot be advanced further. • Evaluation plan and criteria for continuing drilling. • Agency notification and post-event permitting. <p>C-5: 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 reviewed and approved by the Central Coast RWQCB prior to commencement of any clearing or other construction activities. BMPs should include the following measures:</p> <ul style="list-style-type: none"> • Properly maintain (off-site) all construction vehicles and equipment that enter the construction area to prevent leaks of fuel, oil, and other vehicle fluids. • Conduct equipment and vehicle fueling off-site. If refueling is required at the Project 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 	<p>Develop a Stormwater Pollution Prevention Plan</p>	<p>Prior to project construction</p>	<p>Nipomo Community Services District</p>
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MITIGATION MEASURE SUMMARY	SPECIFIC ACTION	MITIGATION MILESTONE	RESPONSIBLE MONITORING PARTY
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<p>fluids and other materials including disposal of spilled material and materials used for clean up of contaminated soils and materials.</p> <ul style="list-style-type: none"> • 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 and mortar in contained areas. • Insure that all equipment washing and major maintenance is prohibited at the project site except in bermed areas. • Remove all refuse and excess material from the site as soon as possible. • Channelize storm water to avoid construction equipment and materials, and to divert runoff to existing drainages. 			
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D. BIOLOGICAL RESOURCES

<p>D-1: Pipeline, water storage tank and pump station construction operations shall be conducted prior to, or after, the nesting season (February 15 to September 15) 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 the months of October and January to the extent feasible.</p> <p>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 to identify potential bird nesting sites.</p> <ul style="list-style-type: none"> • 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 project construction activities, construction shall avoid the nest site or be terminated until the 	<p>Avoid bird nesting season or conduct pre-construction surveys</p>	<p>Prior to project construction</p>	<p>Nipomo Community Services District and California Department of Fish and Game</p>
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MITIGATION MEASURE SUMMARY	SPECIFIC ACTION	MITIGATION MILESTONE	RESPONSIBLE MONITORING PARTY
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<p>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.</p>			
<p>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, proposed horizontal directional drilling and jack-and-bore operations. Additionally, all construction access routes shall be established in previously disturbed areas and/or existing roadways.</p>	<p>Locate equipment staging and construction areas away from sensitive habitats</p>	<p>During project construction</p>	<p>Nipomo Community Services District</p>
<p>D-3: Exclusionary and silt 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 and silt 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 project component.</p>	<p>Provide exclusionary and silt fencing</p>	<p>During project construction</p>	<p>Nipomo Community Services District</p>
<p>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 special-status species within the project area, their habitat requirements and applicable regulatory policies and provisions regarding their protection and measures being implemented to avoid and/or minimize impacts.</p>	<p>Conduct worker orientation</p>	<p>Prior to and during project construction</p>	<p>Nipomo Community Services District</p>
<p>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.</p>	<p>Shield nighttime lighting from adjacent wildlife habitat areas</p>	<p>During project construction</p>	<p>Nipomo Community Services District</p>
<p>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-</p>	<p>Implement dust control program</p>	<p>During project construction</p>	<p>Nipomo Community Services District</p>

MITIGATION MEASURE SUMMARY	SPECIFIC ACTION	MITIGATION MILESTONE	RESPONSIBLE MONITORING PARTY
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<p>status species.</p> <p>D-7: A qualified biologist shall conduct a pre-activity survey to determine presence/absence of California horned lizard within and adjacent to the horizontal directional drilling laydown areas and jack-and-bore locations along the southern boundary of the Santa Maria River. 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). Procedures and protocols for relocation shall be based up on pre-project consultation with the California Department of Fish and Game.</p>	<p>Conduct surveys to determine presence or absence of California horned lizard</p>	<p>Prior to project construction</p>	<p>Nipomo Community Services District and California Department of Fish and Game</p>
<p>D-8: 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 (e.g., California horned 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.</p>	<p>Monitor vegetation clearing and construction</p>	<p>During project construction</p>	<p>Nipomo Community Services District and California Department of Fish and Game</p>
<p>D-9: Nesting bird surveys shall be conducted between February 15 and August 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.</p>	<p>Conduct bird nesting surveys</p>	<p>Prior to project construction</p>	<p>Nipomo Community Services District</p>
<p>D-10: Site disturbance and construction activities associated with the Santa Maria River pipeline crossing, including the horizontal directional</p>	<p>Horizontal directional drilling to avoid</p>	<p>During project construction</p>	<p>Nipomo Community Services District</p>

MITIGATION MEASURE SUMMARY	SPECIFIC ACTION	MITIGATION MILESTONE	RESPONSIBLE MONITORING PARTY
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<p>drilling operations shall not occur during the rainy season (October 15 to April 15). No construction activities shall occur during or immediately following a rain event or if water is flowing within the Santa Maria River.</p>	<p>rainy season and special-status wildlife species</p>		
<p>D-11: 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., California red-legged frog, Two-striped garter snake, etc.), their habitat requirements, applicable regulatory policies and provisions regarding their protection and measures being implemented to avoid and/or minimize impacts.</p>	<p>Conduct worker orientation</p>	<p>Prior to and during project construction</p>	<p>Nipomo Community Services District</p>
<p>D-12: The Blosser Road Drainage canal shall be illustrated on all final construction plans. At no time shall any equipment and/or materials staging be allowed within the bed or banks of the drainage feature. In addition, a row of silt fencing or equivalent shall be installed along the perimeter of the drainage canal during project operations to prohibit CRLF movement into the work zone.</p>	<p>Avoid Blosser Road drainage canal</p>	<p>During project construction</p>	<p>Nipomo Community Services District</p>
<p>D-13: All work areas within 100 feet of known California red-legged frog habitat 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., Southwestern pond turtle, Two-striped garter snake, 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 is identified in a work area, all work shall cease until the California red-legged frog has safely vacated the work area. At no time shall any California red-legged frog be relocated and/or affected by project operations without prior approval from the U.S. Fish and Wildlife Service. Exclusionary fencing will be erected at the boundaries of the construction areas to avoid equipment and human intrusion into adjacent</p>	<p>Survey work areas adjacent to special-status species habitats</p>	<p>Prior to and during project construction</p>	<p>Nipomo Community Services District and California Department of Fish and Game</p>

MITIGATION MEASURE SUMMARY	SPECIFIC ACTION	MITIGATION MILESTONE	RESPONSIBLE MONITORING PARTY
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<p>habitats with emphasis on protection of areas containing special-status species. In addition, silt fencing will be installed around temporary aquatic habitats (i.e. trenches that have perched groundwater) that have formed during project activities, to minimize the potential for migration of CRLF from the adjacent agricultural pond. The exact location of exclusionary and silt fencing shall be determined by a qualified biological monitor. The fencing shall remain in place throughout the construction phase for each individual project component.</p> <p>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.</p> <ul style="list-style-type: none"> • 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, stock piling and horizontal directional drilling activities) 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 	<p>Prepare plans and agency permit applications</p>	<p>Prior to and during project construction</p>	<p>Nipomo Community Services District, Regional Water Quality Control Board, California Department of Fish and Game and California Department of Toxic Substances</p>
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MITIGATION MEASURE SUMMARY	SPECIFIC ACTION	MITIGATION MILESTONE	RESPONSIBLE MONITORING PARTY
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<p>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.</p> <ul style="list-style-type: none"> • The District shall submit an application for a Streambed Alteration Agreement (SAA) to the California Department of Fish and Game. If required, the final SAA shall be received prior to project construction. All conditions in the final SAA shall be strictly adhered to during construction. • A Frac-out Contingency Plan (FCP) shall be prepared for horizontal directional drilling operations within the Santa Maria River channel and shall include appropriate measures for containment of spills, agency notifications (including a detailed call-down list of all applicable regulatory agency representatives), clean-up protocols, and procedures for restoring the river channel to pre-disturbance conditions. The “Frac-out” clean-up procedures shall emphasize minimizing and/or avoiding impacts to the main channel and alluvial scrub habitat areas of the Santa Maria River. Lastly, the FCP shall include the conditions by which the boring operation would be abandoned, if applicable, and how many repeated bores may be attempted. <p>D-15: Prior to commencing project construction, the District shall retain a biological monitor experienced with horizontal directional drilling technology. The biological monitor shall be responsible for conducting field inspections of horizontal directional drilling operations, reporting, and enforcement of all applicable conditions of approval, including any required conditions from the California Department of Fish and Game SAA. Specifically, the qualified monitor shall be on-site to</p>	<p>Monitor horizontal directional drilling</p>	<p>During project construction</p>	<p>Nipomo Community Services District and the California Department of Fish and Game</p>
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MITIGATION MEASURE SUMMARY	SPECIFIC ACTION	MITIGATION MILESTONE	RESPONSIBLE MONITORING PARTY
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<p>inspect the river corridor and pipeline alignment during drilling activities that have the potential for a spill or “Frac-out” (i.e. pull back operations, etc.) to ensure no impacts occur to the Santa Maria River. In the event of a spill or “Frac-out” within the Santa Maria River corridor, all work shall be halted and the spill shall be contained using the procedures outlined in the FCP.</p>			
<p>D-16: 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.</p> <p>Mitigation Measures D-10 through D-14 require provision of (pre-designated staging and fueling areas and equipment access routes, exclusionary fencing to protect sensitive habitat areas, dust control measures, etc.).</p>	<p>Make spill equipment available during construction activities</p>	<p>During project construction</p>	<p>Nipomo Community Services District</p>
<p>D-17: In the event that a “Frac-out” occurs within the Santa Maria River channel due to horizontal directional drilling operations, the appropriate permits shall be obtained by the governing regulatory agency to facilitate clean-up and restoration of the affected portions of river channel to pre-project conditions. As necessary, this shall include a 404 Permit from the Army Corps of Engineers, a 401 Permit from the Regional Water Quality Control Board and Streambed Alteration Agreement from the California Department of Fish and Game.</p>	<p>Obtain regulatory permits for Frac-out cleanup and habitat restoration</p>	<p>During project construction</p>	<p>Nipomo Community Services District, Army Corps of Engineers, the Regional Water Quality Control Board and the California Department of Fish and Game</p>
<p>D-18: The restoration component of the Frac-out Contingency Plan (Mitigation Measure D-14) shall be implemented as necessary to ensure that the affected portions of stream channel and associated sensitive habitat areas are restored to pre-project conditions. The restored portions of stream channel shall be monitored until all performance criteria have been met as specified by the regulatory agency permits.</p>	<p>Prepare Frac-out Contingency Plan</p>	<p>During project construction</p>	<p>Nipomo Community Services District</p>
<p>D-19: Prior to project construction, a qualified botanist shall complete a focused botanical survey of the pipeline alignment along the southern boundary of the Santa Maria River. All Blochman’s ragwort identified within 50 feet of the proposed</p>	<p>Complete focused botanical survey for Blochman’s ragwort</p>	<p>Prior to project construction</p>	<p>Nipomo Community Services District</p>

MITIGATION MEASURE SUMMARY	SPECIFIC ACTION	MITIGATION MILESTONE	RESPONSIBLE MONITORING PARTY
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horizontal directional drilling laydown area and pipeline alignment shall be marked with temporary flagging.			
D-20: Protective fencing shall be installed around populations of Blochman’s ragwort to prevent loss of this special-status plant species. As necessary, this shall include minor modifications of the designated horizontal directional drilling laydown area to avoid Blochman’s ragwort to the extent feasible.	Install protective fencing	During project construction	Nipomo Community Services District
D-21: The proposed waterline shall be aligned to avoid impacting the root systems of large eucalyptus trees located on Southland Street, Orchard Road, South Frontage Road and Darby Lane. The precise location 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-22: Mitigation Measure D-14 includes provisions for stabilizing the water storage tank, pump station sites and pipeline alignments and monitoring. As necessary, this shall include the following: <ul style="list-style-type: none"> • 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 ensure that previously disturbed areas are stabilized. • Installation of long-term drainage devices at all water storage tank and pump stations, including, as necessary, catchment basins, culverts with down-drains and storm flow energy dissipating devices (riprap or diffusers). 	Implement Best Management Practices and install drainage facilities	During project construction	Nipomo Community Services District
D-23: All water storage tank and pump station facility lighting shall be shielded away from adjacent wildlife habitat areas and sky to minimize lighting/glare impacts of wildlife, to the extent feasible while still providing safe working conditions for facility personnel.	Shield lighting away from adjacent wildlife habitat areas	During project construction	Nipomo Community Services District

MITIGATION MEASURE SUMMARY	SPECIFIC ACTION	MITIGATION MILESTONE	RESPONSIBLE MONITORING PARTY
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E. AESTHETICS

<p>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. Trees or shrubs will be provided which will reach a six (6) feet surrounding booster stations without sacrificing safety considerations within two years of construction of these facilities.</p>	<p>Prepare Landscape Screening Plan</p>	<p>Prior to project construction</p>	<p>Nipomo Community Services District</p>
<p>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 replacement plan to insure that said screening will be maintained for 15 years, including replacement of any trees which may die.</p>	<p>Prepare Landscape Maintenance Plan</p>	<p>Prior to project construction</p>	<p>Nipomo Community Services District</p>
<p>E-3: Prior to project construction, a color board will be provided which identifies the exterior colors and materials to be utilized on proposed water storage tanks and booster stations. The colors and materials selected will involve muted tones which match or are comparable with the colors found in the surrounding areas.</p>	<p>Select colors and materials with muted tones for storage tanks and pump stations</p>	<p>Prior to project construction</p>	<p>Nipomo Community Services District</p>
<p>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.</p>	<p>Prepare Exterior Lighting Plan</p>	<p>Prior to project construction</p>	<p>Nipomo Community Services District</p>

MITIGATION MEASURE SUMMARY	SPECIFIC ACTION	MITIGATION MILESTONE	RESPONSIBLE MONITORING PARTY
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F. CULTURAL RESOURCES

<p>F-1: Cultural resource monitoring shall accompany construction trenching and excavation along the South Frontage Road near Grande Avenue (SLO-808), between Division Street and Story Street (SLO-1254) as well as along a 100 meter area on the south side of Southland Street directly south of 641 Southland. A 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.</p>	<p>Monitor construction trenching and excavation along South Frontage Road</p>	<p>During project construction</p>	<p>Nipomo Community Services District</p>
<p>F-2: The vacant lot located southeast of the intersection of Tefft Street and Highway 101 containing SLO-1394 shall not be utilized during any project construction activities including, but not limited to, a staging area for project construction.</p>	<p>Avoid archaeological site SLO-1394</p>	<p>During project construction</p>	<p>Nipomo Community Services District</p>
<p>F-3: 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.</p>	<p>Conduct archaeological workshop for construction personnel</p>	<p>Prior to and during project construction</p>	<p>Nipomo Community Services District</p>
<p>F-4: 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.</p>	<p>Halt construction if cultural materials are unearthed</p>	<p>During project construction</p>	<p>Nipomo Community Services District</p>

MITIGATION MEASURE SUMMARY	SPECIFIC ACTION	MITIGATION MILESTONE	RESPONSIBLE MONITORING PARTY
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G. GEOLOGY

<p>G-1: The following shall be included in Final Grading and Drainage Plans to prevent erosion induced siltation of on-site and off-site drainages:</p> <ul style="list-style-type: none"> • The use of temporary berms and sedimentation traps, such as silt fencing, straw bales, and sand bags, to be installed in association with project excavations, grading and underground horizontal directional drilling activities in order to minimize erosion of soils and sedimentation into the Santa Maria River and other local drainages. Sedimentation basins and traps shall be cleaned periodically with silt removal and disposal in a location approved by the District. • 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. 	<p>Include measures to prevent erosion induced siltation on Final Grading and Drainage Plans</p>	<p>Prior to project construction</p>	<p>Nipomo Community Services District</p>
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H. TRAFFIC

<p>H-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 and/or pedestrians. These measures shall also insure continued access from adjacent properties to local roadways.</p>	<p>Provide adequate signage, barriers or flagmen</p>	<p>During project construction</p>	<p>Nipomo Community Services District</p>
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I. NOISE

<p>I-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</p>	<p>Comply with County Noise Ordinance</p>	<p>During project construction</p>	<p>Nipomo Community Services District</p>
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MITIGATION MEASURE SUMMARY	SPECIFIC ACTION	MITIGATION MILESTONE	RESPONSIBLE MONITORING PARTY
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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.			
I-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.	Utilize “critical” grade mufflers	During project construction	Nipomo Community Services District
I-3: All necessary measures to muffle, shield or enclose construction equipment shall be implemented in order to insure that noise levels at the property line of the nearest residence do not exceed an exterior noise level of 60 dBA. During project construction, noise monitoring shall be conducted by a qualified acoustical engineer in order to insure the acceptable noise threshold of 60 dBA at the property line of the nearest sensitive receptor.	Muffle, shield or enclose construction equipment	During project construction	Nipomo Community Services District
I-4: Stationary noise sources (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.	Locate stationary noise sources away from residences	During project construction	Nipomo Community Services District

J. AIR QUALITY

J-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 County Air Pollution Control District
J-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 County Air Pollution Control District
J-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	Plant exposed ground areas	During project construction	Nipomo Community Services District and County Air Pollution

MITIGATION MEASURE SUMMARY	SPECIFIC ACTION	MITIGATION MILESTONE	RESPONSIBLE MONITORING PARTY
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watered until vegetation is established.			Control District
J-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 County Air Pollution Control District
J-5: All roadways, driveways, sidewalks, etc. to be paved shall be completed as soon as possible. In addition, building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.	Pave roadways, driveways, sidewalks, etc. as soon as possible	During project construction	Nipomo Community Services District and County Air Pollution Control District
J-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 County Air Pollution Control District
J-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 material	During project construction	Nipomo Community Services District and County Air Pollution Control District
J-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.	Use wheel washers or gravel pads	During project construction	Nipomo Community Services District and County Air Pollution Control District
J-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 County Air Pollution Control District
J-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 County Air Pollution Control District
J-11: All PM10 mitigation measures required must be included on any grading or building plans. These plans shall indicate the source of reclaimed water to be used for dust control. In addition, 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	Include PM10 measures on any grading or building plans	During project construction	Nipomo Community Services District and County Air Pollution Control District

MITIGATION MEASURE SUMMARY	SPECIFIC ACTION	MITIGATION MILESTONE	RESPONSIBLE MONITORING PARTY
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<p>be in progress. The name and telephone number of such persons shall be provided to the APCD prior to construction.</p>			
<p>J-12: All construction equipment shall be properly maintained and tuned according to manufacturer's specifications.</p>	<p>Properly maintain and tune construction equipment</p>	<p>During project construction</p>	<p>Nipomo Community Services District and County Air Pollution Control District</p>
<p>J-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.</p>	<p>Use CARB diesel fuel</p>	<p>During project construction</p>	<p>Nipomo Community Services District and County Air Pollution Control District</p>
<p>J-14: Where possible, diesel powered equipment shall be replaced with gasoline, electrical, CNG or LPG powered equipment.</p>	<p>Replace diesel equipment where possible</p>	<p>During project construction</p>	<p>Nipomo Community Services District and County Air Pollution Control District</p>
<p>J-15: Diesel equipment used in proposed horizontal directional drilling shall either be certified pursuant to the California Air Resources Board's Portable Equipment Registration Program 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/or proper fuel selection.</p>	<p>Use certified diesel equipment</p>	<p>During project construction</p>	<p>Nipomo Community Services District and County Air Pollution Control District</p>
<p>J-16: 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.</p>	<p>Prepare analysis to determine presence of asbestos-bearing soils</p>	<p>Prior to project construction</p>	<p>Nipomo Community Services District and County Air Pollution Control District</p>
<p>J-17: The daily water pumping operations for the proposed projects 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.</p>	<p>Utilize electric-powered water pumps</p>	<p>During project operations</p>	<p>Nipomo Community Services District</p>

MITIGATION MEASURE SUMMARY	SPECIFIC ACTION	MITIGATION MILESTONE	RESPONSIBLE MONITORING PARTY
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J-18: The District shall investigate the feasibility and cost-effectiveness of the use of solar power or other alternative energy sources to power water pumps or other project facilities.	Investigate feasibility of solar power	Prior to project operations	Nipomo Community Services District
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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 June 27, 2008 and July 28, 2008. 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, Traffic, Noise and Air Quality.

Issues or concerns raised in response to the Notice of Preparation are listed below (see Table 4, Responses to Notice of Preparation/Scoping Meeting) accompanied by an indication of the source and date of the comment received. Comments received in response to the Notice of Preparation and the July 23, 2008 Scoping Meeting are also contained in Technical Appendix A of this EIR.

**TABLE 4
RESPONSES TO NOTICE OF PREPARATION/SCOPING MEETING**

Notice of Preparation Respondent	Date	Issues/ Concerns
Governor’s Office of Planning and Research	June 27, 2008	<ul style="list-style-type: none"> • Notice of Preparation distribution letter
California Department of Fish and Game	July 28, 2008	<ul style="list-style-type: none"> • Complete assessment of flora and fauna, direct, indirect and cumulative impacts, feasible mitigation measures and required alternatives • CESA Permit required if listed species taken • Elimination or channelization of watercourses is opposed
California Native American Heritage Commission	July 3, 2008	<ul style="list-style-type: none"> • Records survey and archaeological inventory required • Contact Native American Heritage Commission • Provisions for accidental discovery of cultural resources or human remains

San Luis Obispo County Air Pollution Control District	July 24, 2008	<ul style="list-style-type: none"> • Notification of APCD if contaminated soils encountered • Construction and operational permit requirements • Environmental information requirements
Santa Maria Valley Water Conservation District	July 18, 2008	<ul style="list-style-type: none"> • SMVWCD supports the proposed project and will abide by the recent Court Judgment
Maria Vista Estates Homeowners Association, the Bening Company LLC and Maria Vista Estates (identical letters)	July 22, 2008	<ul style="list-style-type: none"> • Areas of analysis to be included in the Draft EIR
Bening Company LLC	July 22, 2008	<ul style="list-style-type: none"> • Inadequacy of project description
William Petrick	July 23, 2008	<ul style="list-style-type: none"> • Status of contract with City of Santa Maria • Reliability of SWP water • Project costs and funding
Harold Snyder	July 28, 2008	<ul style="list-style-type: none"> • Areas of analysis to be included in the Draft EIR
Scoping Meeting Respondent		
William Petrick	July 23, 2008	<ul style="list-style-type: none"> • Project alternatives must include use of SWP water • Lack of an agreement with the City of Santa Maria
Jennifer Joshwick	July 23, 2008	<ul style="list-style-type: none"> • Reclamation offers a viable alternative water source
Arthur Tognazzi	July 23, 2008	<ul style="list-style-type: none"> • No withdrawal of groundwater from the NMMA • Water from the City of Santa Maria to be a blend of groundwater and SWP water

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 direction of the proposed horizontal directional drilling and the precise location of drilling activities and the pipeline layout areas must be determined.
3. The precise location of major project infrastructure facilities including the water storage tanks and two pump stations, one on the south (Santa Maria) side and one on the north (Nipomo) side of the river, must be identified. The need for Pump Station No. 1 on the south side of the Santa Maria River must also be determined.

III. PROJECT DESCRIPTION

A. PROJECT BACKGROUND

The Nipomo Community Services District (NCSD or the District) was formed in 1965 and currently provides water, wastewater, lighting and solid waste disposal 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. Pursuant to the Government Code, the NCSD provides water to its residents, similar to a municipal water 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). The District currently relies primarily upon groundwater from the Nipomo Mesa Management Area (formerly known as the Nipomo Mesa Groundwater Subbasin) of the Santa Maria Groundwater Basin for water supply.

Over the past several years, a number of groundwater studies have been conducted in the Nipomo Mesa area in order to assess the status of groundwater resources in the area. These analyses include: 1) Water Resources of the Arroyo Grande – Nipomo Mesa Area in 2002, prepared by the California Department of Water Resources (DWR), dated October 25, 2002; 2) Water and Wastewater Impacts Analyses for both the Summit Station Area Land Use Ordinance Amendment and the Woodlands EIR, prepared by Cleath & Associates, both dated 2003; (3) Nipomo Mesa Groundwater Resource Capacity Study prepared by the firm of S.S. Papadopoulos & Associates, Inc.; (4) "Water Supply in the Nipomo Mesa Area, October, 2004", a Resource Capacity Study prepared by the County of San Luis Obispo, Department of Planning and Building in 2004 and 5) Technical Memorandum Regarding Emergency Water Shortage Regulations and Future Groundwater in Storage prepared by Science Applications International Corporation (SAIC) dated January 6, 2008.

The above referenced studies contained varying conclusions concerning the status of groundwater supplies in the Nipomo Mesa Management Area. The Cleath Reports concluded that a groundwater overdraft condition does not exist in the Nipomo Mesa Sub-Area but a water deficit does exist within the area and this deficit is compensated by inflows from other portions of the Santa Maria Groundwater Basin. The 2002 Department of Water Resources Report concluded that overdraft of the Santa Maria Groundwater Basin is not likely through the year 2020 but indicates that projected water demands significantly exceed the dependable safe yield of groundwater in the Nipomo Mesa Sub-Area. The 2004 Papadopoulos Report concluded that the Nipomo Mesa Sub-Basin is currently in overdraft and that the greater Santa Maria Groundwater Basin is in steady decline. The County's 2004 Resource Capacity Study indicated that in order to maintain sustainability of the Nipomo Mesa groundwater supply, total extractions would have to be stabilized at 6,000 acre-feet per year (as first indicated in the Department of

Water Resources Report) and that sustainability can be achieved through a combination of conservation and water supply augmentation.

Since 1997, the entire Santa Maria Groundwater Basin, including the Nipomo Mesa Groundwater Management Area, has been the subject of ongoing adjudication based upon a lawsuit initiated by the Santa Maria Valley Water Conservation District against the City of Santa Maria and other water purveyors in the groundwater basin. When the lawsuit was first initiated, the issue was whether or not the City of Santa Maria had the right to claim ownership of percolated effluent resulting from the use of imported water in the basin. Subsequently, the lawsuit has broadened to address groundwater management of the entire Santa Maria Groundwater Basin. A preliminary ruling by the Court concluded that the overall Santa Maria Groundwater Basin is not currently in an overdraft condition but recognized the need for active management of the existing hydrologic sub-areas.

On August 3, 2005, the Court approved a Settlement Stipulation for the case which divides the Santa Maria Groundwater Basin into three separate management sub-areas; the Northern Cities Management Area, the Nipomo Mesa Management Area and the Santa Maria Valley Management Area. The Settlement Stipulation contained specific provisions with regard to groundwater rights, groundwater monitoring programs and development of plans and programs to respond to potential water shortage conditions. Within the Settlement Stipulation and subsequent Judgment, the Nipomo Community Services District has agreed to purchase supplemental water from the City of Santa Maria for delivery to the Nipomo Mesa Management Area.

In 2004, the San Luis Obispo Local Agency Formation Commission (LAFCO) completed a Sphere of Influence Update and Municipal Services Review for the Nipomo Community Services District (pursuant to the Cortese/Knox/Hertzberg Local Government Reorganization Act of 2000) as well as a Program Environmental Impact Report (EIR) for that project. The EIR evaluated the impacts of expanding the Sphere of Influence to include eight study areas (5,000 acres) adjacent to the Nipomo Community Services District. As a result of the Sphere of Influence Update and their analysis of available services and resources, LAFCO required that prior to the approval of any annexation to the NCSD, the District shall implement a water conservation program that decreases water use by 15 percent based upon per connection water consumption and update its Urban Water Management Plan (UWMP) “to reflect the need to provide additional water in the amount of 1,000 acre feet” to serve the expanded Sphere of Influence area. LAFCO also required that prior to the approval of any annexation, the District must complete negotiations for a supplemental water source outside the Nipomo Mesa Management Area.

In December, 2005, the Nipomo Community Services District completed their Urban Water Management Plan 2005 Update. This update was intended to provide a viable tool for the NCSD’s long-term water use planning and to comply with requirements of the California Urban Water Management Act which requires that all urban water suppliers serving more than 3,000 customers prepare and adopt an urban water management plan

every five years. The NCS D Urban Water Management Plan 2005 Update contains background on past and current water demands for different sectors of the Nipomo Community Services District. A copy of this plan is included within Technical Appendix B of this EIR. It provides data on water deliveries in the year 2000 and estimates of total water demand in 2005, based upon the following land use sectors: single family residential, multi-family residential and all other non-residential uses designated as "commercial". Estimates of future demand within the Urban Management Plan 2005 Update contained various assumptions regarding land uses and growth rates within the Nipomo area. As indicated therein, projected water demands for 2025 range from 4,030 acre-feet per year (assuming an existing County land use designation scenario and a 2.3 percent growth rate) to 5,750 acre-feet per year (assuming a high density land use assumption, higher than that currently allowed by the South County Area Plan, and a 7.8 percent growth rate). Future water demands were compared to projected water supplies during a normal water year, a single dry year and multiple dry years. Within a single dry year, no differences in conditions from the normal supply year are anticipated. Additional irrigation demands within this scenario are expected to be compensated by water conservation. Within multiple dry years, irrigation uses would be limited and additional water conservation measures would be required.

In response to these concerns regarding the availability of groundwater supplies in combination with the legislative requirements and judicial directives noted above, the Nipomo Community Services District entered into a Memorandum of Understanding with the City of Santa Maria dated September 7, 2004 for the purchase of approximately 2,500 acre-feet per year with deliveries of water to NCS D not to exceed a maximum of 250 acre-feet per month. The water will be a mix of both City groundwater and State Water Project water that is delivered to the City. According to the District, this acquisition of additional water supply is intended to augment current groundwater inventories with the goals of increasing the reliability and diversity of water supplies and balancing groundwater levels in the Nipomo Mesa Management Area. The Settlement Agreement and Judgment allocates approximately 2,500 acre-feet per year between Nipomo Community Services District and other water purveyors who overlie the Nipomo Mesa Management Area, including the Woodlands, Golden State (formerly Southern California) Water Company and Rural Water Company. Copies of the Memorandum of Understanding, Court Stipulation and Court Judgment are included within Technical Appendix C of this EIR.

In 2005, the Nipomo Community Services District prepared a Feasibility Study which evaluated several alternative methods for extension of a waterline from the City of Santa Maria across the Santa Maria River to connect to existing water transmission facilities within the NCS D. This study provided the basis for selection of three alternatives for extending a waterline from the City of Santa Maria. At that time, the proposed project involved the adoption of one of three alternative methods for the extension of the water supply pipeline across the Santa Maria River: a) attaching the pipeline to the existing Highway 101 bridge or b) two routes for horizontal directional drilling and underground burial of the pipeline beneath the riverbed.

In December, 2007, the Nipomo Community Services District completed their Water and Sewer Master Plan Update. A copy of this Master Plan is included within Technical Appendix D of this EIR. This Master Plan Update discussed projects completed under the previous master plans, identified new projects to meet current and future water and sewer demands and estimated costs and priorities for these future projects. The methodology utilized in the Master Plan Update included the development of future water demand and sewer flow projections. These projections to the year 2030 were based upon population growth and increases in system use assuming a General Plan build-out scenario for the NCS D service area and its Sphere of Influence. Existing annual water demand was identified at 3,000 acre-feet per year with future (2030) water demand estimated to be 6,200 acre-feet per year. This estimate of future water demand provided the basis for the design capacity of the proposed waterline intertie project.

In 2005, the Nipomo Community Services District initiated preparation of a Draft and Final Environmental Impact Report which addressed the potential impacts of these three proposed methods for extension of a water supply pipeline. A Draft Environmental Impact Report dated May, 2006 for that project was prepared, reviewed and circulated for public and agency review and comment during the months of May and June of 2006. Subsequent to circulation of that document, several revisions and/or additions to the project design were recommended. These revisions included the reduction in water storage, additional NCS D water distribution system improvements, resolution of water quality issues and phased project development. In addition, an expanded number of project alternatives were also evaluated including the investigation of the viability of desalinization and direct use of State Water Project water. In December, 2006, the NCS D Board of Directors suspended further work on the EIR until the NCS D Board of Directors could evaluate a lower cost project and project design issues could be resolved.

Since that time, several additional studies and field surveys have been prepared by NCS D in order to further evaluate and refine the design of the waterline intertie project. This information includes the Preliminary Engineering Memorandum, prepared by Boyle Engineering, dated November, 2006; Evaluation of Supplemental Water Alternatives – Technical Memorandum No. 1, prepared by Boyle Engineering dated June 2007; Evaluation of Desalinization as a Source of Supplemental Water - Technical Memorandum No. 2, prepared by Boyle Engineering dated September 28, 2007; Evaluation of Supplemental Water Alternatives - Technical Memorandum No. 3, prepared by Boyle Engineering dated November 30, 2007; California Red-Legged Frog Survey Results, prepared by Padre Associates dated April 12, 2007; Recent Biological Field Survey Results from Padre Associates dated March, 2008 and final Preliminary Engineering Memorandum for the proposed project dated May, 2008 prepared by Boyle Engineering.

In addition, the NCS D recently updated their Water and Sewer Master Plan (December, 2007) in which the District water model was updated and recommendations for improvements to the District water distribution system were made. The final Preliminary Engineering Memorandum presented several revisions to the project design which included revised pipeline sizes and routes, a relocated pump stations, elimination of another pump station, a resized water storage reservoir, upgraded in-system water

distribution facilities, phased development of the proposed project and an alternative method of water treatment.

In January, 2008, the State Court issued its final decision on the groundwater rights litigation discussed above. In April, 2008, the NCSD Board of Directors authorized preparation of this Draft and Final Environmental Impact Report pursuant to the requirements set forth in the California Environmental Quality Act (Public Resources Code 21000 et. seq.) and the State CEQA Guidelines which will address the environmental impacts of the currently proposed project.

B. PROJECT OBJECTIVES

The basic objective of the proposed Nipomo Community Services District Waterline Intertie Project is to construct a pipeline connection from the City of Santa Maria water distribution system across the Santa Maria River to the existing water distribution system within the Nipomo Community Services District. In so doing, the proposed project will also achieve the following objectives:

1. Slow the depletion of the above-sea-level groundwater in storage beneath the Nipomo Mesa Groundwater Management Area (NMMA) of the Santa Maria Groundwater Basin to reduce the potential for sea water intrusion by using supplemental water consistent with the settlement agreement and the judgment related to the groundwater adjudication. Since projections have shown that sea water intrusion could occur in 12-14 years with no new development, and under 8 years in a “dry years” scenario, the nearest-term project completion is essential. The conservative goal of this project is to provide at least 2,000 acre-feet per year (AFY) of supplemental water to the NMMA by 2013.
2. Comply with the 2005 groundwater adjudication settlement stipulation and judgment that dictates the need for active management of the NMMA.
3. Assist in stabilizing the groundwater levels in the NMMA by reducing pumping in the NMMA.
4. Augment current water supplies available to the Nipomo Community Services District by a phased delivery of supplemental water. Phase I will supply approximately 2,000 AFY by pipeline from Santa Maria following Phase I construction completion. Phase II will supply up to an additional 1,000 AFY by pipeline from Santa Maria (a cumulative total of 3,000 AFY). A third phase (Phase III), if implemented, would supply up to an additional 3,200 AFY (a cumulative total of 6,200 AFY) by pipeline from Santa Maria.
5. Augment current water supplies available to the Woodlands and other water purveyors on the Mesa by 831 acre-feet per year as follows: Woodlands (415 AFY), Golden State Water Company (208 AFY) and Rural Water Company (208 AFY).
6. Increase the reliability of District water supply by providing a diversity of water sources. Avoid the potential use of supplemental water return flows from the District, the Woodlands and the other purveyors, being used to support the water requirements of new development.
7. Comply with Local Agency Formation Commission (LAFCO) conditions for securing supplemental water prior to annexation of lands now within the District’s

Sphere of Influence. This supplemental water for annexations shall be in addition to the 3,000 AFY developed by Phases I and II.

8. Avoid multiple waterline crossings of the Santa Maria River and associated environmental impacts, by constructing a single pipeline capable of transporting sufficient water for potential NMMA growth consistent with the South County Area Plan (Inland) of San Luis Obispo County's General Plan. The pipeline diameter crossing the Santa Maria River would accommodate a 6,200 AFY capacity.
9. Slow the depletion of the above-sea-level groundwater in storage beneath the NMMA by:
 - A. Providing supplemental water for new development within the current service area of the District and the Mesa's other water purveyors (Golden State and Rural Water) consistent with the South County Area Plan (Inland);
 - B. Facilitating supplemental water delivery for new development within the District's Sphere of Influence consistent with the South County Area Plan (Inland) and the conditions in LAFCO's 2004 Sphere of Influence Update;
 - C. Providing the basis for the assessment of County Impact Fees upon development outside the District's Sphere of Influence and the service areas of the Mesa's other water purveyors (Golden State and Rural Water Companies).

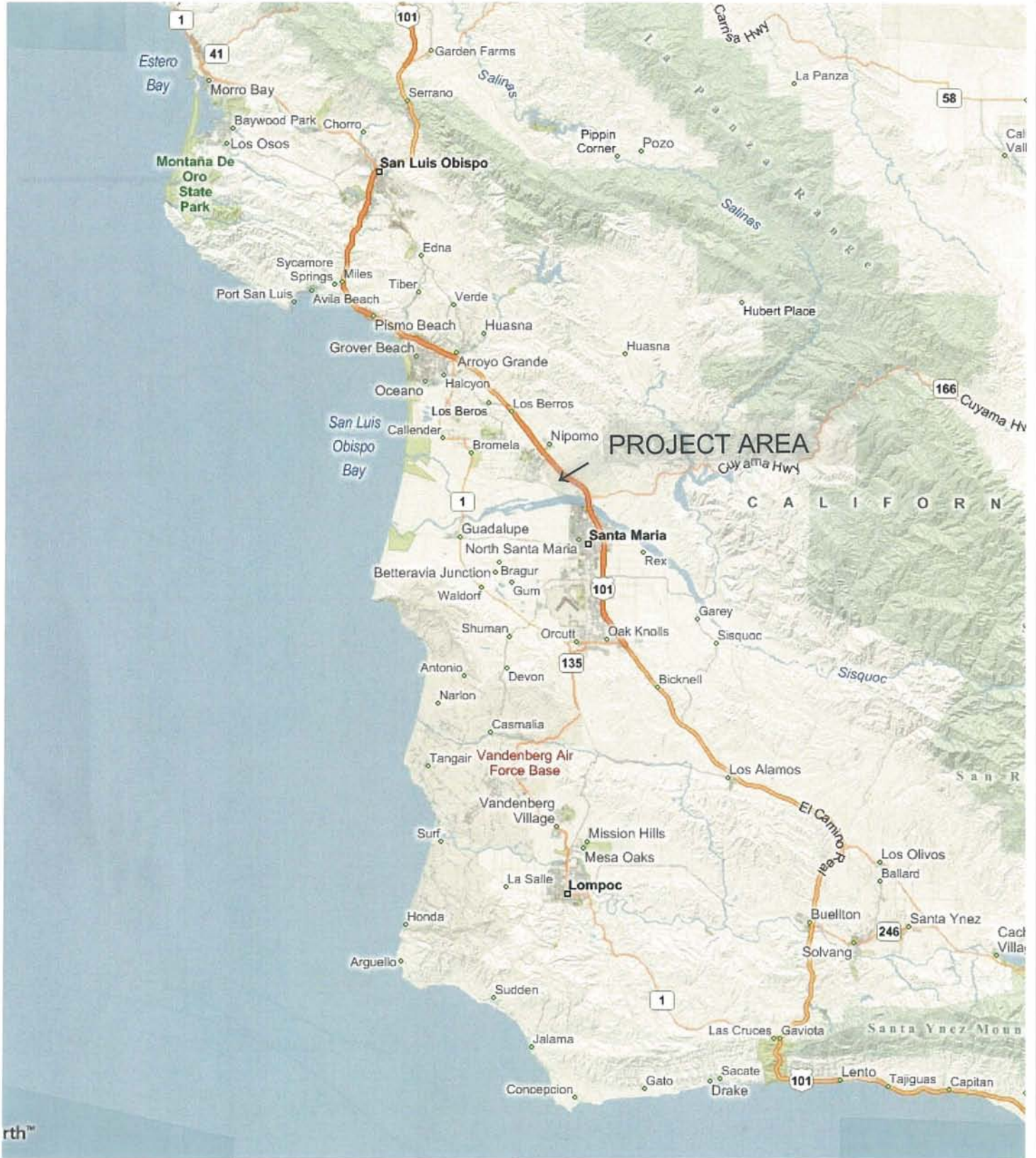
These project objectives play an important role in this EIR in that these objectives provide the basis for judging the merits of the proposed project. These objectives also assist in the evaluation (and possible adoption or rejection) of alternatives to the proposed project (see Section VII. Alternatives to the Proposed Project).

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). Approximately one-half mile south of the District boundary is the Santa Maria River with a width ranging between 2,000 to 3,000 feet at this location. The City of Santa Maria is located within Santa Barbara County on the south side of the Santa Maria River (see Figure 2, Vicinity Map and Figure 3, Aerial Photograph).

The proposed project extends from a proposed pipeline connection and pump station site at the intersection of West Taylor Street and North Blosser Road approximately one mile south of the Santa Maria River in the City of Santa Maria. A proposed pipeline extension will run north on Blosser Road to the Santa Maria River levee. At that point, a pipeline will be placed under the levee, extended toward the bank of the river through an agricultural area, then directionally drilled beneath the Santa Maria River to a point on the Nipomo Mesa. Connection will be made to an existing pipeline on Orchard Road near Joshua Street which runs to Southland Street. This line will connect to an upgraded NCSD water distribution system on Orchard Road (north of Southland Street), Southland Street (east of Orchard Road), South Frontage Road (north of Southland Street), Darby Lane (east of South Frontage Road) and South Oakglen Avenue (north of Darby Lane to Tefft Street). The final project phase, if authorized, would include a pipeline extension from the proposed Pump Station No. 2 at Joshua Street and Orchard Road to the Quad Storage Tanks located at Tefft Street and Foothill Road

FIGURE 1
Regional Map



NCSD Waterline Intertie

Douglas Wood & Associates, Inc.

Environmental Impact Report

FIGURE 2
Vicinity Map

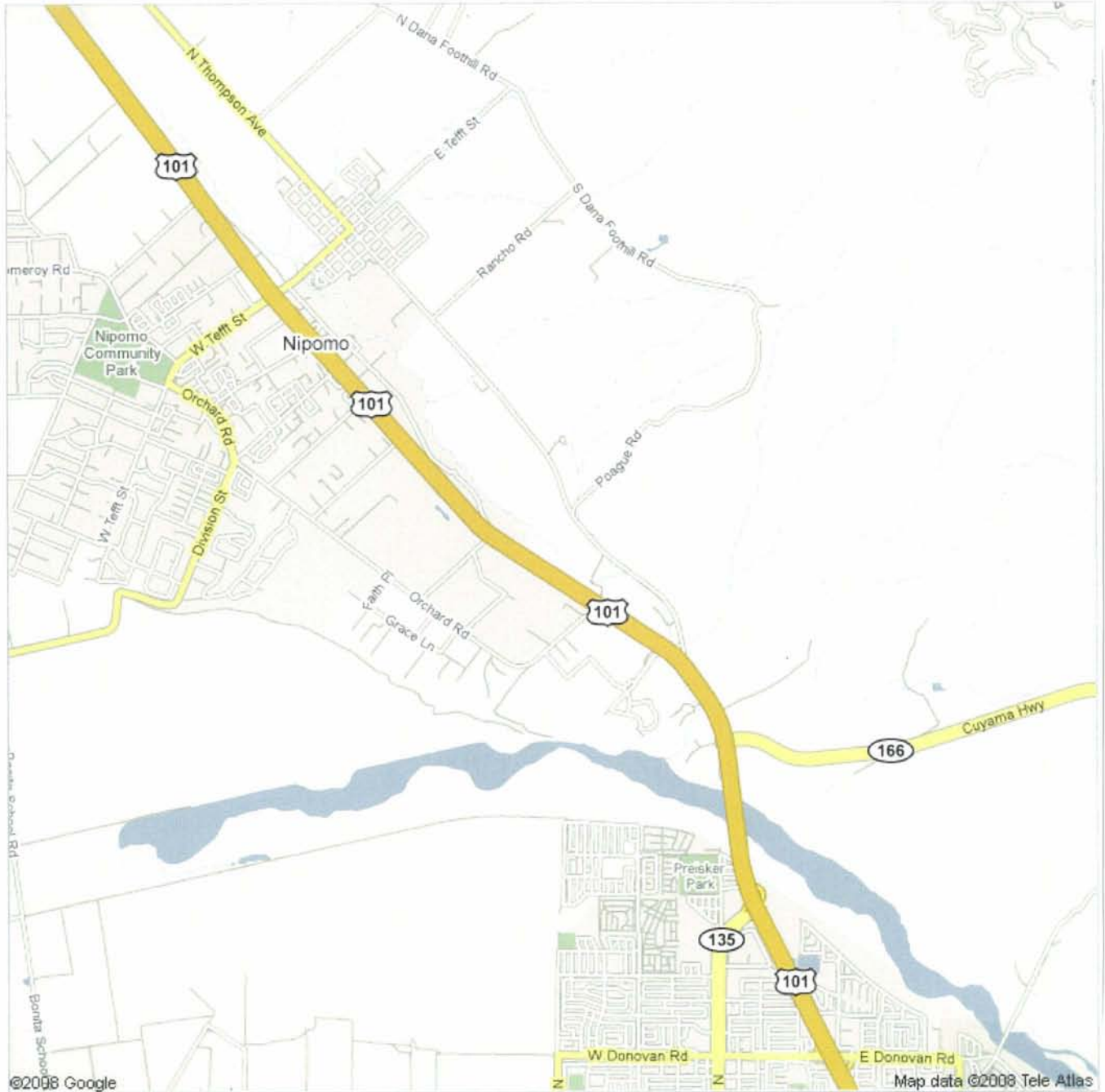
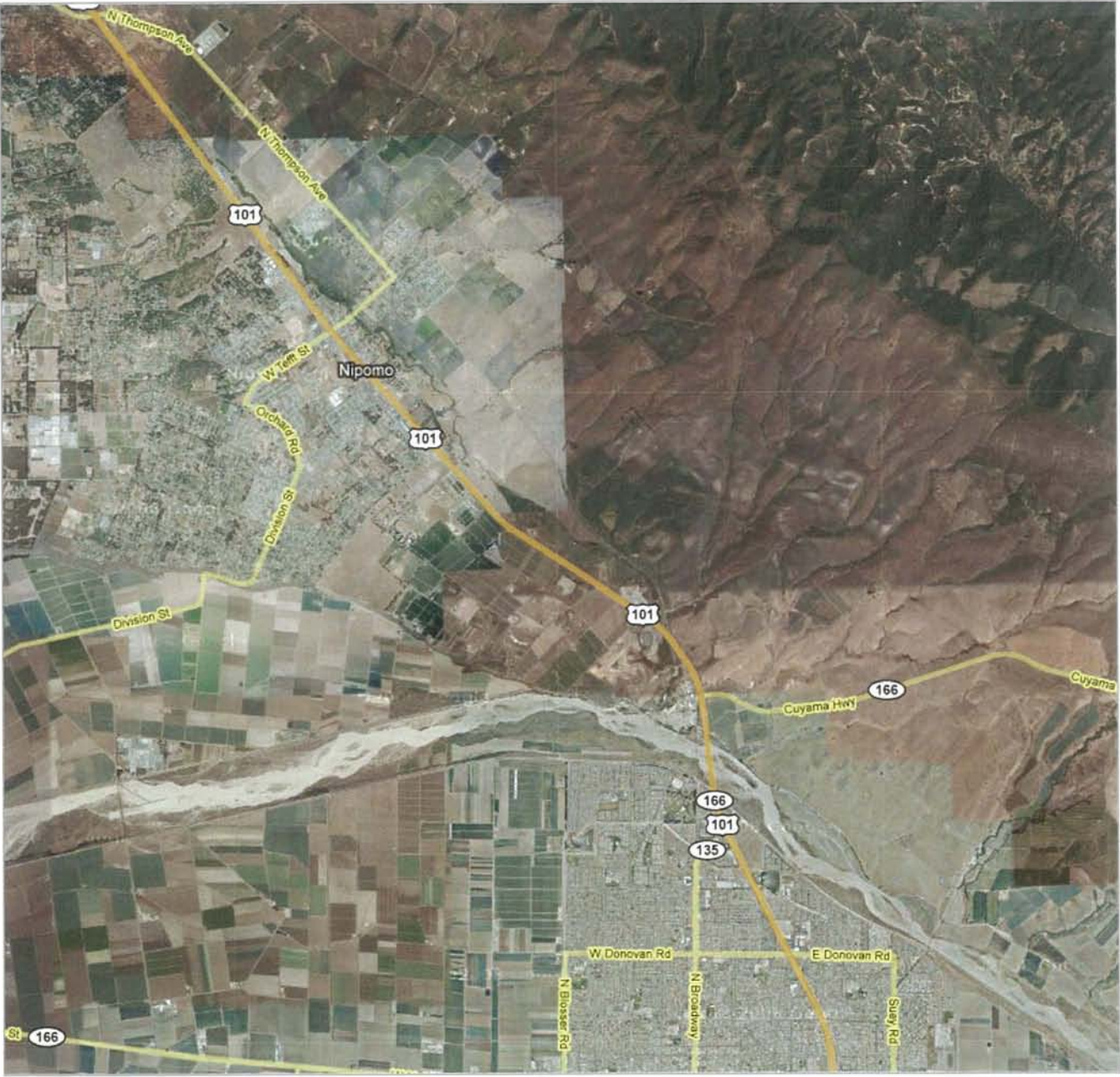


FIGURE 3
Aerial Photograph



D. PROJECT CHARACTERISTICS

The proposed project involves connecting to the City of Santa Maria water distribution system and construction of a waterline from Santa Maria to the Nipomo Community Services District water distribution system. The pipeline will be constructed beneath the Santa Maria River by horizontal directional drilling. A pump station(s) and water storage facilities will be constructed to boost the water pressure into the District system and provide operational or emergency water storage as necessary. Several water transmission facilities within the NCS D will be upgraded or replaced. A final element of the proposed project involves the conversion of District water supply wells from chlorination to chloramination treatment in order to provide disinfection that is compatible with the imported water supply.

Waterline Extension

The proposed Nipomo Community Services District waterline extension originates at the northern end of the City of Santa Maria at the intersection of West Taylor Street and North Blosser Road (see Figure 4, Pipeline Route and Project Facilities). At that point, a connection will be made to the City of Santa Maria water supply system via the existing Blosser Road Extension pipeline. Approximately 5,000 linear feet of 18-inch pipeline will be installed along the east side of Blosser Road using conventional open trench construction. At Atlantic Street, approximately 300 linear feet of 24-inch carrier pipe will be installed inside a 36-inch steel casing which will be placed under the Santa Maria levee at this location. This pipeline and protective casing will be installed under the levee using perpendicular jack-and-bore construction methods. Installation of the pipeline under the levee (instead of trenching up and over the levee) is the method of pipeline installation preferred by the Santa Barbara County Public Works Department.

Once the pipeline is constructed beneath the levee, approximately 900 linear feet of 24-inch pipeline will be installed in a north and northwest direction through open trench construction leading to the horizontal directional drilling site (see Figure 4, Pipeline Route and Project Facilities).

Horizontal directional drilling (HDD) will be utilized to install either a 24-inch pipeline within a 36-inch steel casing or direct placement of a 24-inch carrier pipe utilizing underground trenchless technology for approximately 2,500 linear feet in a northwest or southeast direction underneath the riverbed and surfacing at the opposite end of the underground drilling. By way of background, directional drilling is used to cross rivers, roads or other sensitive areas that require very limited impact to the environment or interruption of ongoing systems (such as traffic flow). The feasibility of HDD for this site and pipeline size will be confirmed during geotechnical exploration prior to the final design. A drilling rig is assembled at one end of the drilling operation and is oriented at a low angle. Once drilling reaches the desired depth, the drill path direction and depth are adjusted to traverse beneath the riverbed while also avoiding obstacles such as hard rock, existing pipelines, etc.

For this project, drilling operations may originate at either end of the underground drilling path. The proposed drilling will begin with the drilling of a pilot hole and the

FIGURE 4
Pipeline Route and Project Facilities



NCSD Waterline Intertie

insertion of a 36-inch steel casing or direct insertion of a 24-inch carrier pipe at one end of the underground pipeline route. Pipes are laid out and assembled within a laydown area at one end of the pipeline segment. In this case, the pipeline laydown area will be established along Blosser Road near the southern end of the underground drilling. An equipment staging area will also be established at the Nipomo Mesa end of the drilling operations. Once the pipeline path is first drilled and reaches its destination, the pipeline is pulled back through the drilled underground shaft (see Figure 5, Horizontal Directional Drilling Cross-Section.)

At this surface location on the Nipomo Mesa, approximately 2,500 linear feet of 24-inch waterline will be installed using open trench construction along one of two proposed routes to the proposed Pump Station No. 2 and reservoir site near Joshua Street and Orchard Road. At this location, connection will be made to an existing 12-inch waterline that runs along Orchard Road to Southland Avenue (see Figure 4, Pipeline Route and Project Facilities). With the introduction of supplemental water, the direction of flow in this waterline will be reversed to a south-to-north direction when the connection is in operation. At other times, flows will continue in the north-to-south direction.

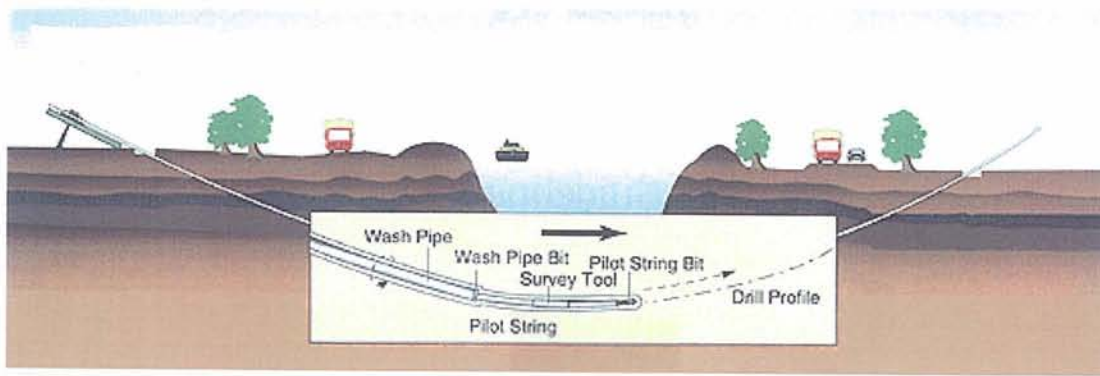
In order to increase the capacity of the water transmission system (from 3,000 to 6,200 acre-feet per year), two additional waterlines will be required if Phase III of the project is constructed. An 18-inch parallel waterline or a replacement 24-inch waterline would be installed for approximately 5,000 linear feet along the eastern side of Blosser Road from the original point of connection to Atlantic Place. In addition, approximately 27,000 linear feet of 24-inch waterline would be installed to connect Pump Station No. 2 with the Quad Storage Tanks located at Tefft Street and Foothill Road approximately five miles to the east. Phase III project facilities may also include an additional 0.5 million gallon underground reservoir, upgrades to Pump Station No. 2 and construction of Pump Station No. 1.

- ***Required Infrastructure***

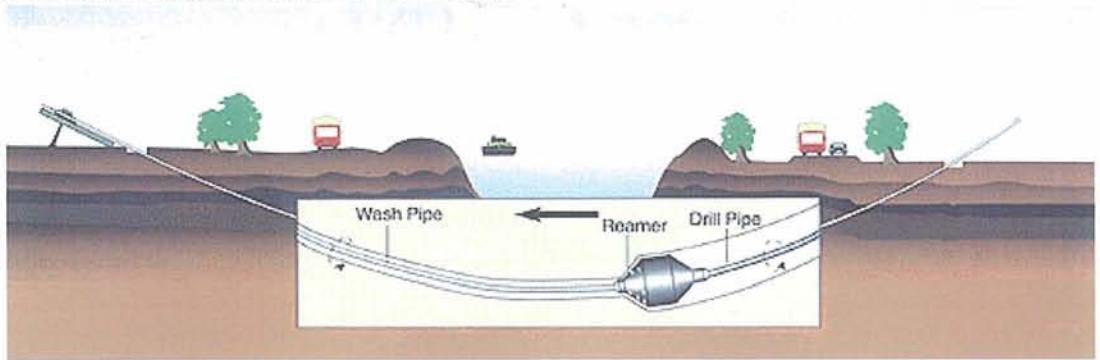
In addition to the pipeline facilities described above, the proposed waterline intertie will require provision of other infrastructure facilities including storage tanks, pump stations, pressure reducing valves and one pressure reducing station as well as metering, electrical controls, instrumentation and communications equipment. In order to provide adequate storage and accommodate anticipated waterline flows, one 0.5 million gallon underground water storage tank will be constructed at one of three possible locations on the Nipomo Mesa near Joshua Street and Orchard Road (noted as Locations 1, 2 and 3 on Figure 4, Pipeline Route and Project Facilities.) The storage tank will measure approximately 70 feet in diameter and 22 feet in depth. Underground water storage reduces pumping requirements and potential aesthetic impacts.

In order to insure adequate pumping pressures, a maximum of two pump stations may be constructed. Pump Station No. 1, if determined to be necessary, will be located at one of two locations, both of which are south of the Santa Maria River adjacent to Blosser Road. One potential location is approximately 600 feet north of the West Taylor Street/South Blosser Road intersection while the second possible site is located on the west side of Blosser Road at Atlantic Place (see Figure 4, Pipeline Route and Project Facilities.)

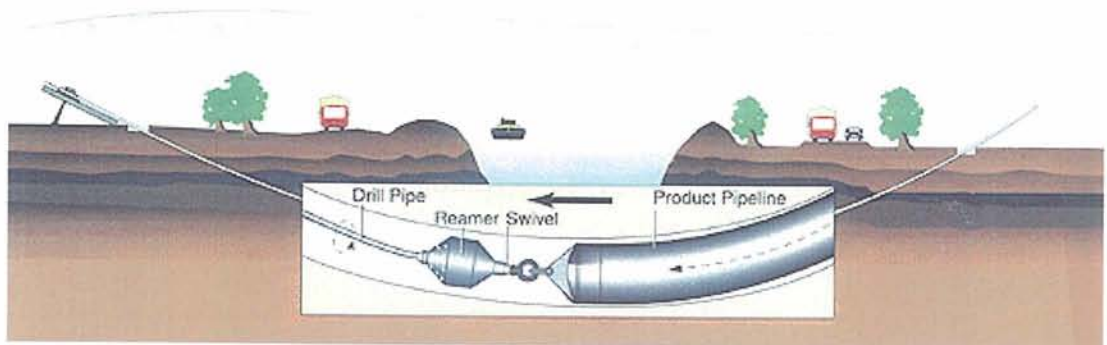
FIGURE 5
HDD Cross-Section



Pilot Hole – A pilot hole is drilled beginning at a prescribed angle from horizontal and continues under and across the river along a design profile made up of straight tangents and long radius arcs. Concurrent to drilling the pilot hole, the contractor may elect to run a larger diameter “wash pipe” that will encase the pilot drill string. The wash pipe acts as a casing providing rigidity to the smaller diameter pilot hole. Directional control is brought about by a small bend in the drill string just behind the cutting head. If the bend is orientated to the right, the drill path then proceeds in a smooth radius bend to the right. The drill path is monitored by an electronic device housed in the pilot drill string near the cutting head with data transmitted back to the surface.



Preream – Once the pilot hole is completed, the hole must be enlarged to a suitable diameter for the pipeline. This is accomplished by “prereaming” the hole to successively larger diameters. Generally, the reamer is attached to the drill string on the bank opposite the drilling rig and pulled back through the pilot hole.



Pullback – Once the drilled hole is enlarged, the pipeline can be pulled through it. The pipeline is prefabricated on the surface. A reamer is attached to the drill pipe and then connected to the pipeline pullhead via a swivel in order to prevent any rotation of the pipeline thereby allowing for a smooth pull into the drilled hole. The drilling rig then begins the pullback operation, rotating and pulling on the drill string until the reamer and pipeline break ground at the opposite end.

During the initial project phase, a flow meter will be installed at the Pump Station No. 1 site in order to monitor the volume of water flows. The need for construction of a pump station at this location will be evaluated during subsequent project phases (see “Project Phasing”).

A second pump station, known as Pump Station No. 2, will be located on the north side of the river on the Nipomo Mesa adjacent to the underground water storage tank site near Joshua Street and Orchard Road in order to boost pressures as necessary to transport water into the NCS D water distribution system. This pump station will be constructed during the first phase of project construction with the potential for the installation of additional pumps at a later phase. Each pump station will contain four 75 horsepower pumps to handle anticipated flow rate and provide backup (standby) service. Pumps will be sized to accept water from the City of Santa Maria water system and boost pressure for transport and to enter the higher pressure NCS D water supply system. Pumps will be housed within an enclosed booster station structure measuring approximately 1000 square feet (roughly 25 feet by 40 feet, subject to refinement during final design) and approximately ten feet in height. The 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 6, Typical Booster Station).

Additional infrastructure facilities include a single pressure reducing station to be installed on the existing 12-inch waterline serving the recently-constructed Maria Vista residential development and four additional pressure reducing stations on Orchard Road, Southland Street, South Frontage Road and South Oakglen Avenue(see Figure 7, NCS D System Improvements.)

- ***Upgraded NCS D Water Distribution System***

As a result of the importation of this supplemental water, several existing water transmission facilities within the Nipomo Community Services District must be replaced and upgraded in order to accommodate increased water volumes and pressures. These pipelines, as shown on Figure 7, NCS D System Improvements, are listed below:

- 11,000 linear feet of 12-inch waterline along Southland Street east of Orchard Road, South Frontage Road north to Grande Avenue, east under Highway 101 and along Darby Lane to South Oakglen Avenue and north on South Oakglen Avenue to Tefft Street.
- 5,200 linear feet of upgraded 12-inch waterline in Orchard Road between Southland Street and Grande Avenue.

- ***Project Phasing***

The proposed project will be developed within three phases. Phase I involves development of project facilities adequate to provide an additional supplemental water supply totaling approximately 2,000 acre-feet per year. Phase II involves provision of additional facilities in order to provide an increase of 500-1,000 acre-feet per year to a total of 2,500-3,000 acre-feet per year. These ranges of delivered flows are dependent upon the District’s demands and their ability to directly use this water since there is no

FIGURE 6
Typical Booster Station

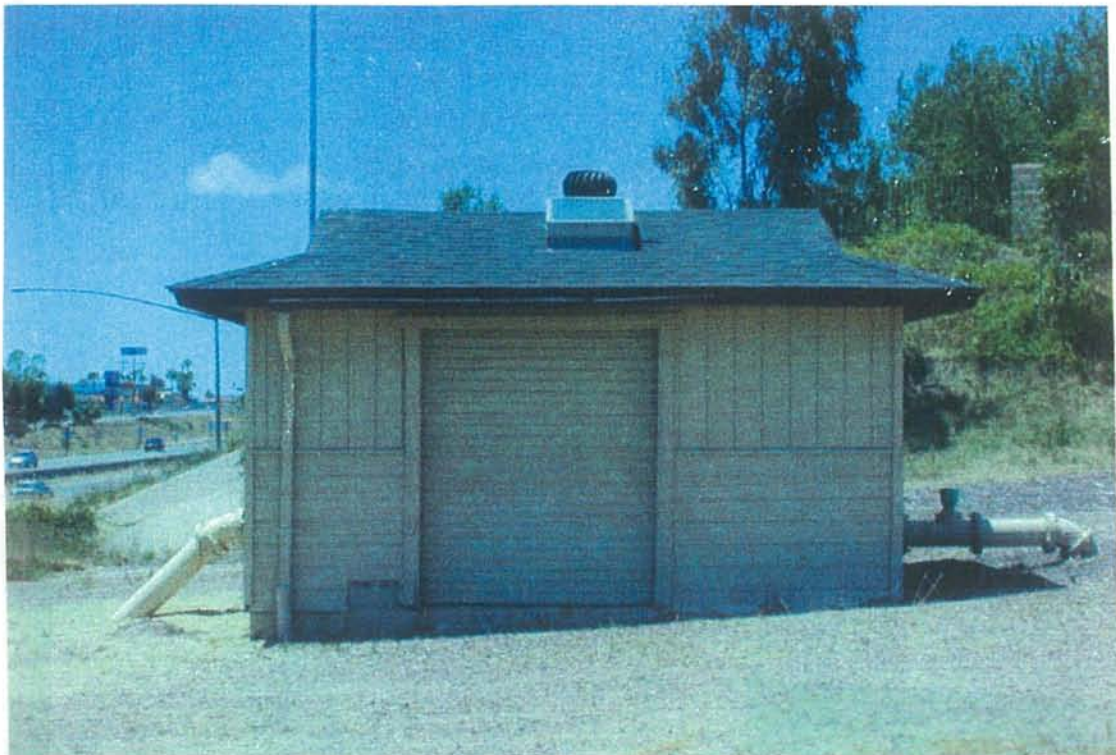
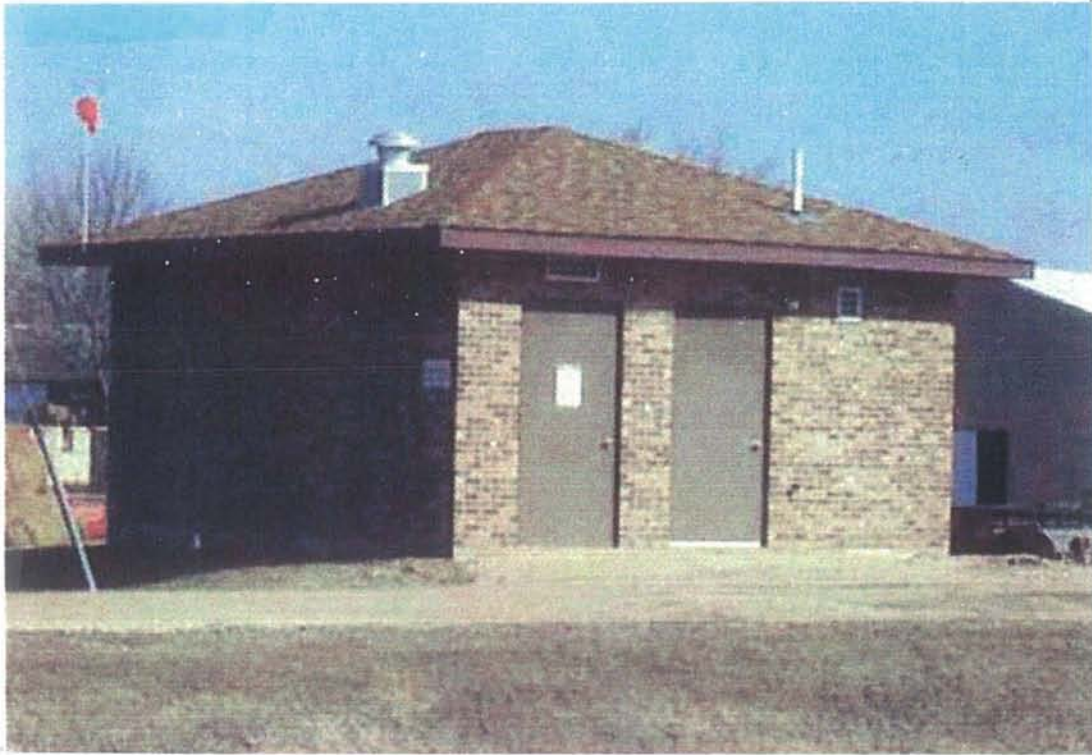
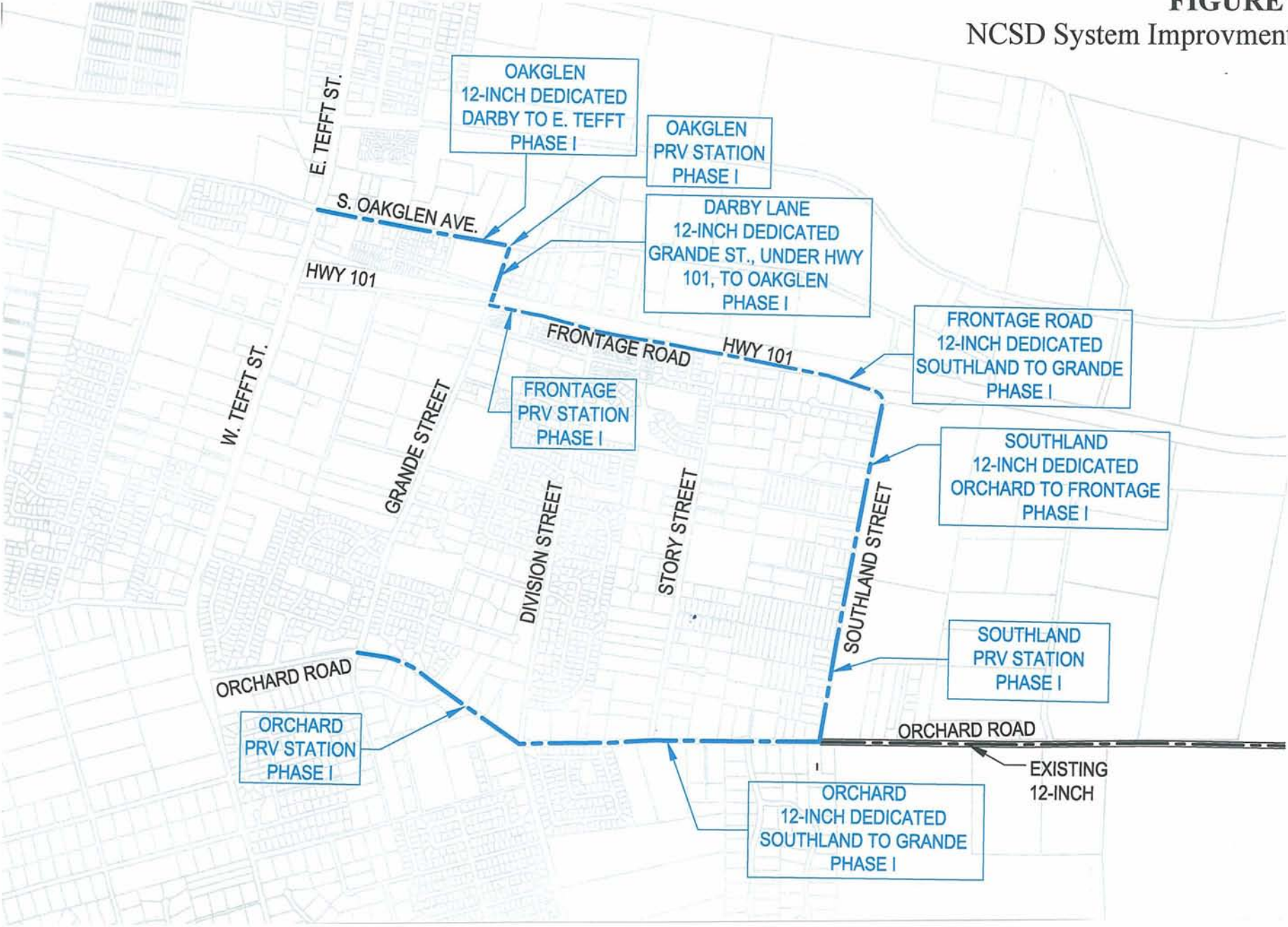


FIGURE 7
NCSD System Improvments



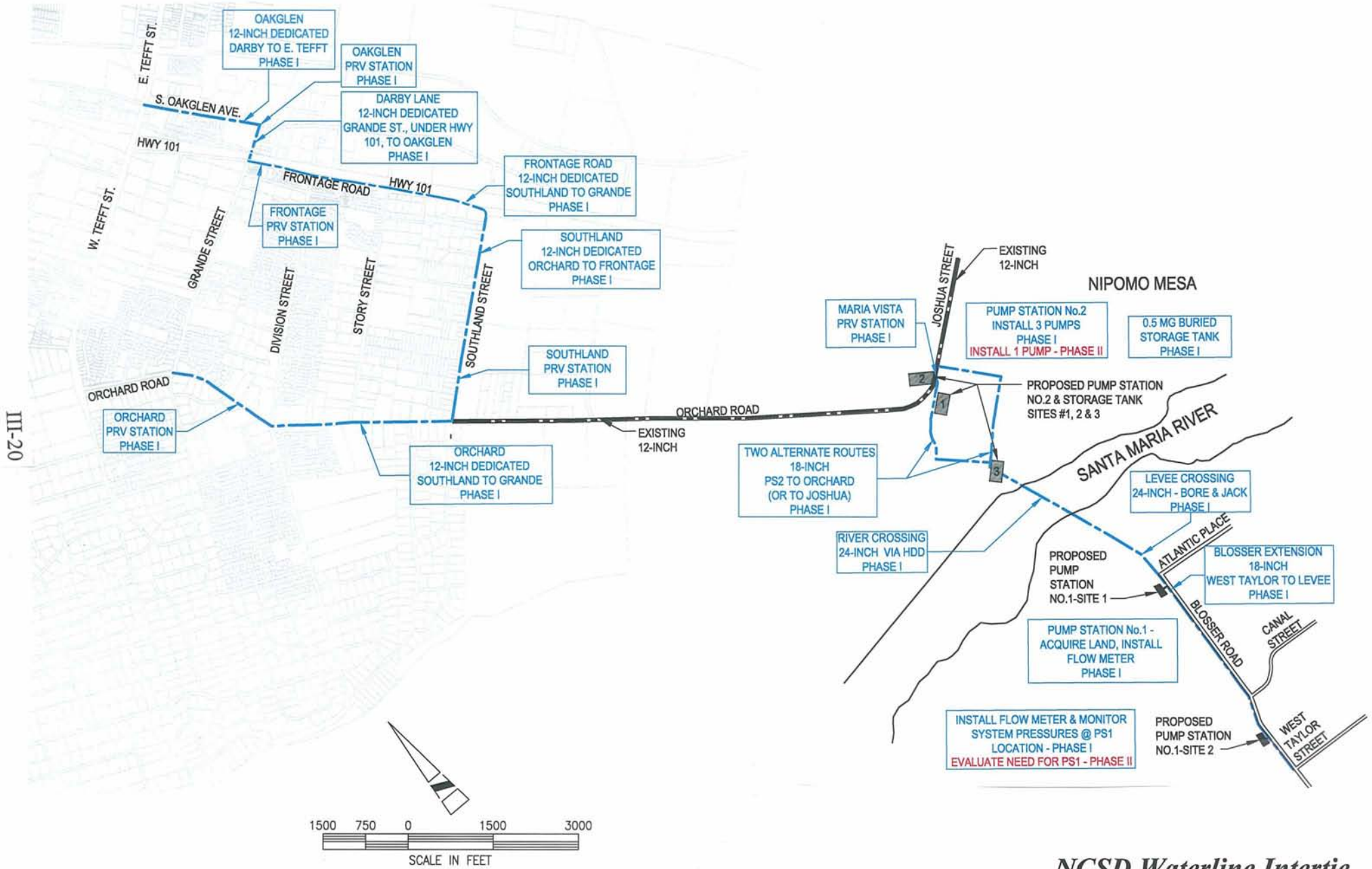
81-III

seasonal storage facility available to buffer these flows. Phases I and II may be combined. The final project phase, if authorized, will result in the development of the remaining project facilities which would provide an ultimate total of 6,200 acre-feet per year which represents the system capacity of the proposed pipeline and infrastructure. Provided below is a listing of project facilities by phase. These facilities are illustrated on Figures 8, Project Facilities and Phasing and Figures, 9, 10, and 11, Phase I, II and III, Project Facilities)

Phase I

- 1) Install 5,000 linear feet of 18-inch waterline along Blosser Road the connection to the City of Santa Maria water distribution system at the intersection of West Taylor Street and North Blosser Road to Atlantic Place at the Santa Maria River levee.
- 2) Install 300 linear feet of 24-inch waterline within a 36-inch steel casing beneath the southern Santa Maria River levee using jack-and-bore construction methods.
- 3) Install 900 linear feet of 24-inch waterline from the Santa Maria River levee to the horizontal directional drilling site within the riverbed.
- 4) Install 2,500 linear feet of 24-inch waterline either directly in the ground or within a 36-inch steel casing from the Santa Maria riverbed to the Nipomo Mesa using horizontal directional drilling.
- 5) Install 2,500 linear feet of 24-inch waterline along one of two proposed routes from the horizontal directional drilling site (pipeline laydown area) on the Nipomo Mesa to Pump Station No. 2.
- 6) Install a flow meter at Pump Station No. 1 site.
- 7) Construct Pump Station No. 2 near Joshua Street and Orchard Road on the Nipomo Mesa.
- 8) Construct a 0.5 million gallon underground reservoir, if required, at one of three possible locations on the Nipomo Mesa near Joshua Street and Orchard Road.
- 9) Install four additional pressure reducing stations on Orchard Road, Southland Street, South Frontage Road and South Oakglen Avenue (see Figure 7, NCSD System Improvements) and a single pressure reducing station in the existing 12-inch waterline serving the Maria Vista residential subdivision.
- 10) Install 11,000 linear feet of 12-inch waterline along Southland Street east of Orchard Road, South Frontage Road north to Grande Street, east under Highway 101 and along Darby Lane to South Oakglen Avenue and north on South Oakglen Avenue to Tefft Street.
- 11) Install a chloramination boosting system at Pump Station No. 2 and convert District wells to chloramination treatment.

FIGURE 8
Project Facilities and Phasing

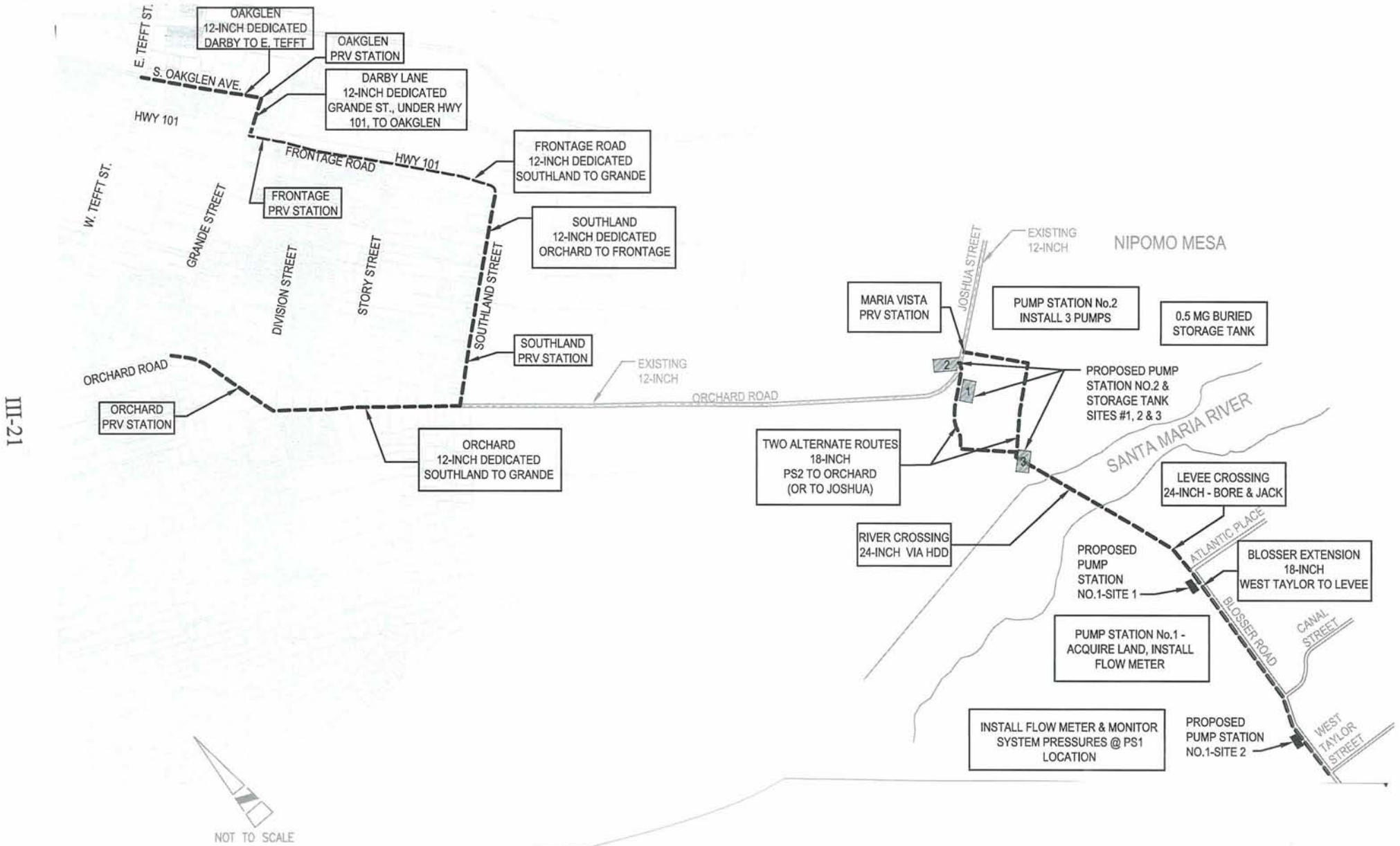


NCS Waterline Intertie

Environmental Impact Report

III-20

FIGURE 9
Phase I Project Facilities

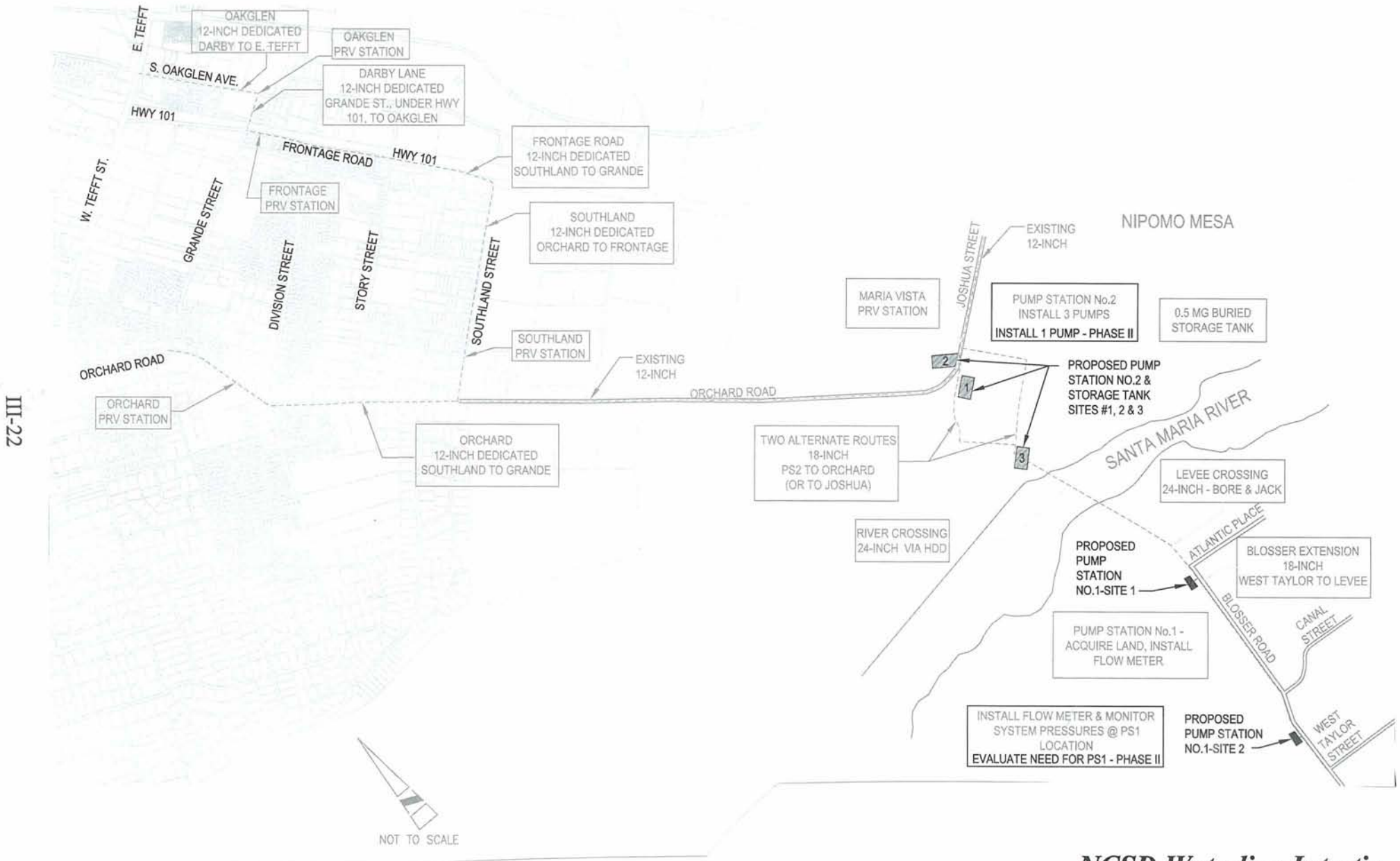


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NCS Waterline Intertie

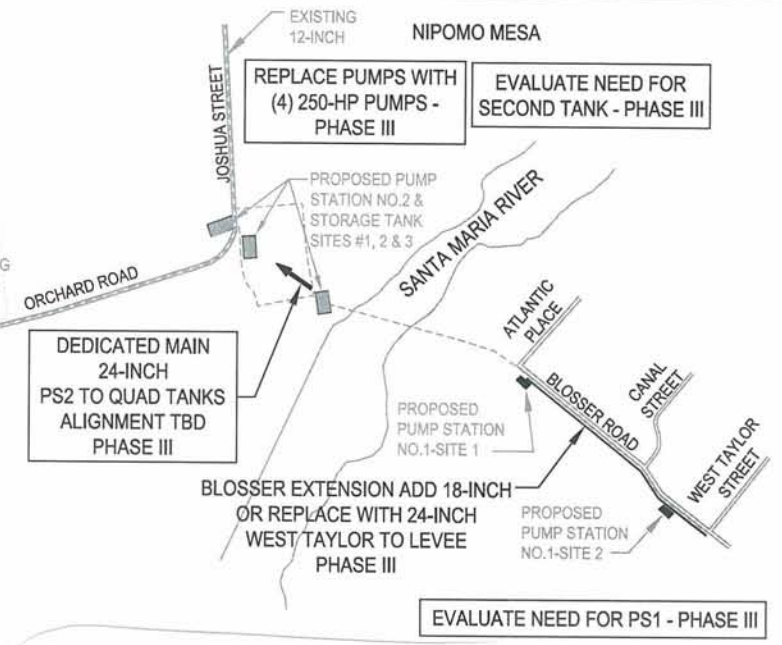
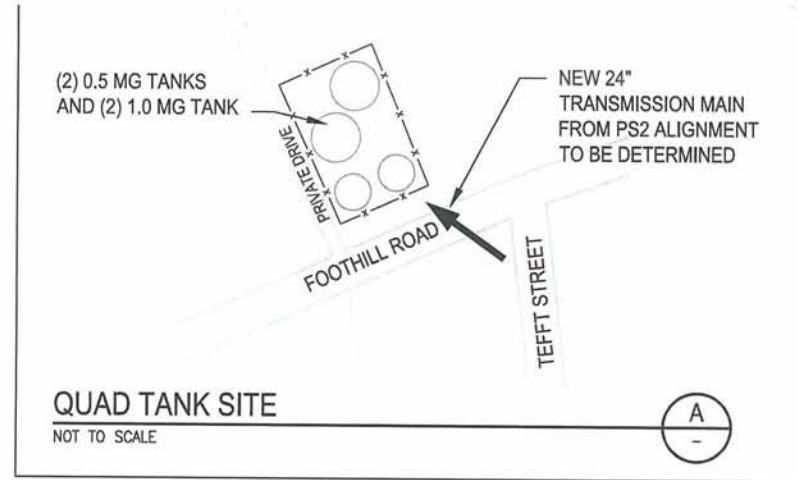
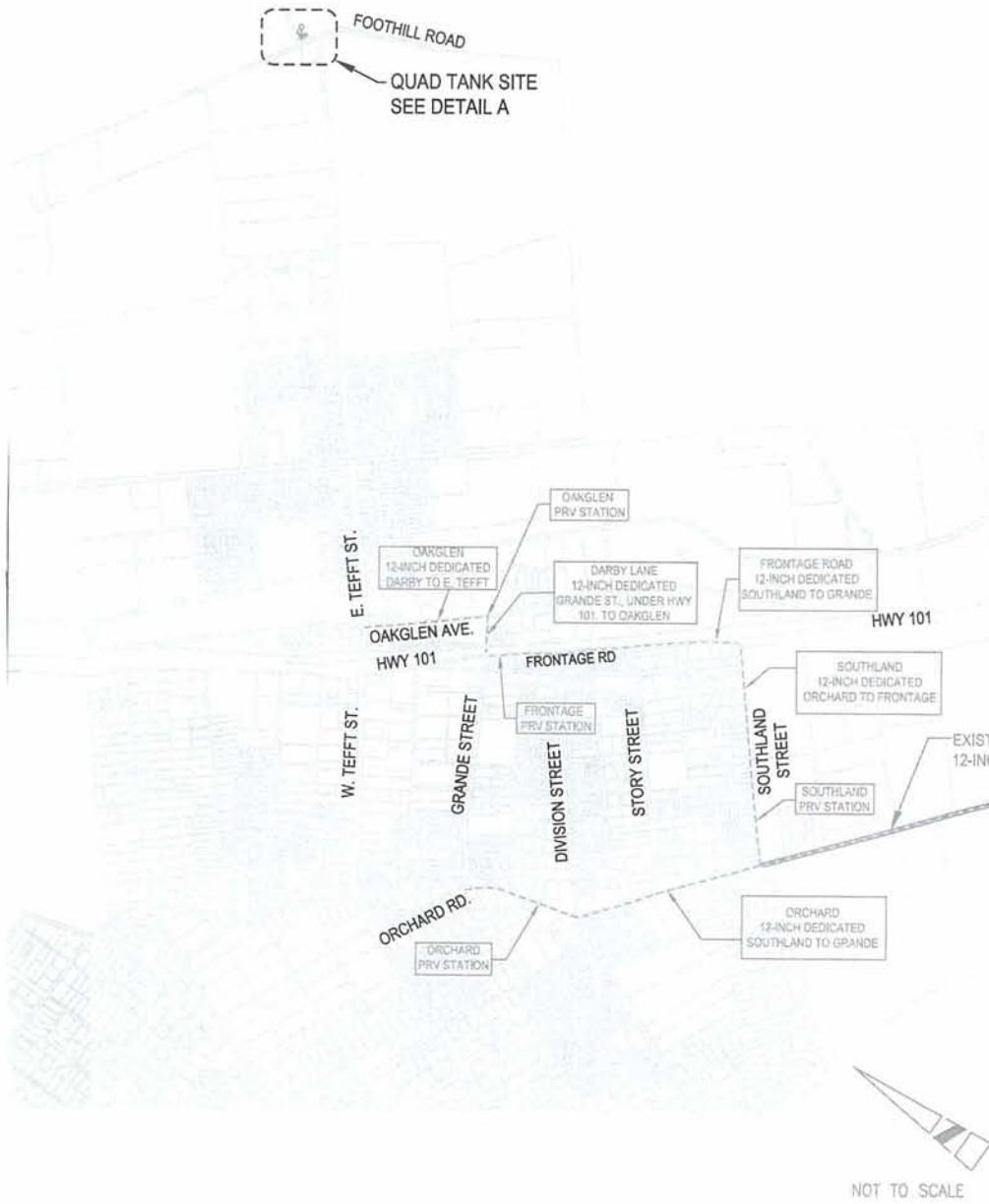
FIGURE 10
Phase II Project Facilities



III-22

FIGURE 11
Phase III Project Facilities

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Phase II

- 1) Evaluate need for Pump Station No. 1 and, if necessary, construct.
- 2) Add pump at Pump Station No. 2.
- 3) Upgrade 5,200 linear feet of existing waterline in Orchard Road between Southland Street and Grande Avenue to a 12-inch line.

Phase III

- 1) Install 5,000 linear feet of either a parallel 18-inch waterline or a replacement 24-inch waterline along Blosser Road from the original point of pipeline connection at West Taylor Street to Atlantic Place at the Santa Maria River levee.
- 2) Install 27,000 linear feet of 24-inch water main from Pump Station No. 2 to the Quad Storage Tanks located at Tefft Street and Foothill Road.
- 3) Evaluate the need for Pump Station No. 1 and, if necessary, construct.
- 4) Replace existing pumps with four pumps with an estimated power requirement of 250 horsepower and new manifold piping at Pump Station No. 2.
- 5) Construct an additional 0.5 million gallon underground reservoir near the location of the reservoir constructed in Phase I.

- ***Water Quality***

The importation of water from the City of Santa Maria water system creates water quality compatibility issues. The Nipomo Community Services District employs chlorination water treatment in order to provide disinfection within the District's water distribution system and meet State and Federal drinking water standards. The City of Santa Maria utilizes chloramination to boost chloramine levels in their blended groundwater and imported State Water supplies. Engineering analyses provided three potential water treatment alternatives, those being: 1) uncontrolled blending of City of Santa Maria and NCS D water; 2) converting City of Santa Maria water to chlorine treatment or 3) converting the NCS D water supply system to chloramine treatment. The third alternative was selected due to the fewest water quality impacts, reduced trihalomethane generation potential and a reduction in chlorine-related taste and odor all of which are associated with chloraminated water.

This change in water treatment, from chlorination to chloramination, will require the introduction of ammonia at District wells and increased chemical introduction capacity i.e. larger chlorine solution tanks and chemical feed pumps. Each well will also require online monitoring equipment to provide dosage control and a building to house two chemical solution tanks and four pumps for chemical introduction.

Maintaining a chloramine residual in the NCS D water supply will, according to the project engineer, result in the lowest potential for formation of disinfection by-products

(DBP's) and the fewest water quality problems in the water distribution system. In addition, the District expects to see a reduction in customer complaints related to taste and odor. However, this change in treatment method may affect certain aquatic pet species and reptiles, users of ultra pure water, kidney dialysis patients and chloramine sensitive manufacturing processes. Monitoring and public awareness programs will be required.

- ***Right-of-Way Acquisition***

Prior to construction of the proposed waterline intertie, the Nipomo Community Services District will require authorization from landowners and other entities for access and long-term maintenance of proposed project facilities. The strip of land (approximately 1,000 feet wide) between the Santa Maria River and the northern Santa Maria city limits falls within jurisdiction of the County of Santa Barbara. With proper permitting and notification, this area will be traversed by waterlines prior to crossing the river.

The proposed route for crossing the Santa Maria River will require contact with several private landowners in order to negotiate and secure required property interests, rights-of-way and construction easements (referred to as "property interests"). If securing these property interests is not agreed to by the involved landowners, the District may require the use of eminent domain in order to obtain these property interests.

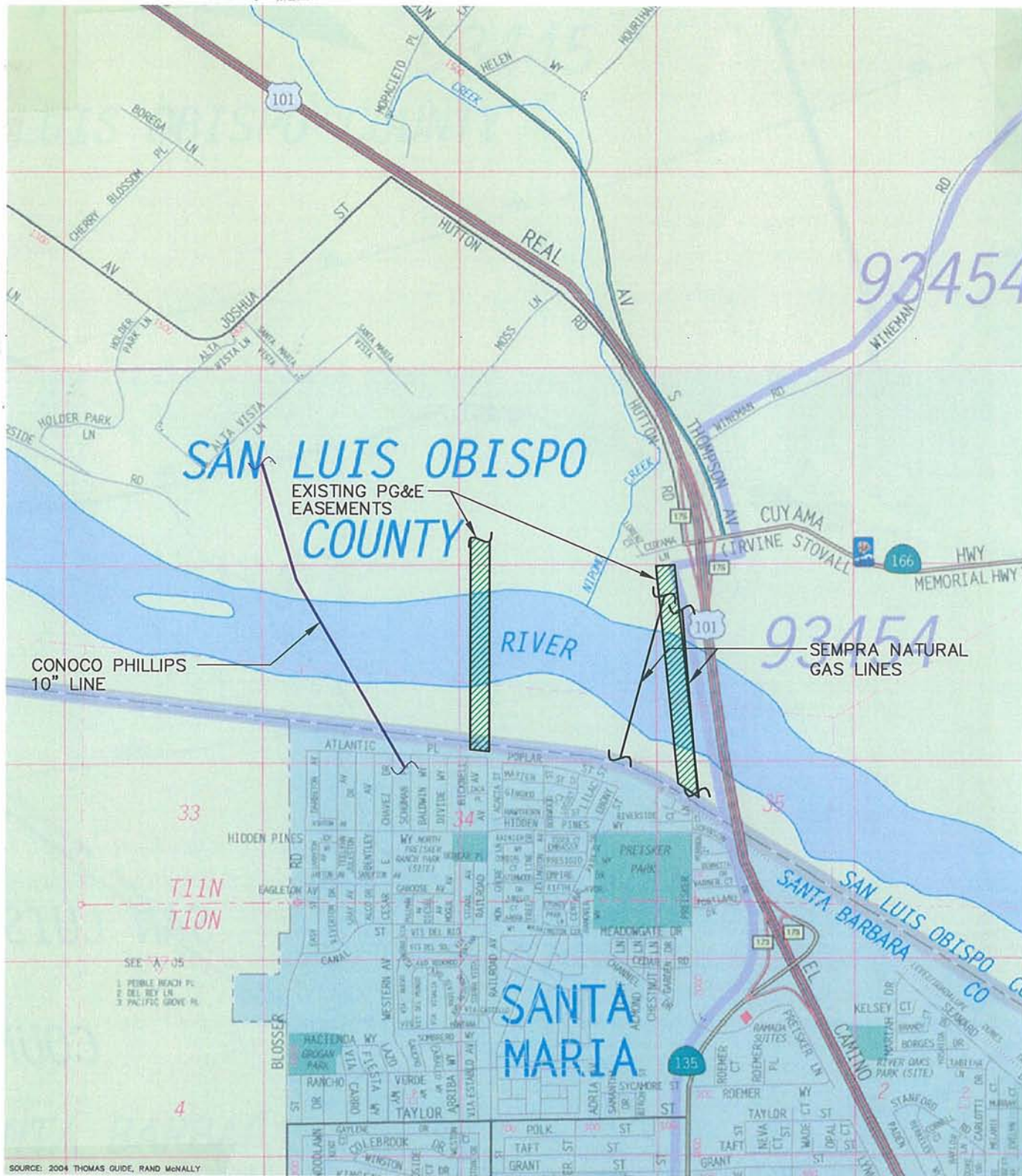
Encroachment permits may be required for trenching of new pipelines along public roadways. This construction activity will necessitate a 25-foot wide trench (including the pipeline trench and temporary side slopes) for installation of new pipelines adjacent to or within public or private roadways and easements.

Several existing easements and pipelines traversing the Santa Maria River will require avoidance. An existing Conoco Phillips underground 10-inch oil pipeline runs beneath the Santa Maria River in the vicinity of the proposed 24-inch underground HDD waterline. Pacific Gas and Electric has two easements and Sempra Energy has two natural gas lines located to the east or upstream of the proposed 24-inch underground line (see Figure 12, Existing Easements and Pipelines.) The California Department of Public Health requires that a minimum distance be maintained between oil and water pipelines depending on their depth relative to one another.

- ***Future Water Needs***

The potential importation of a maximum of 6,200 acre-feet of water per year is intended to accomplish several objectives. Approximately 2,500 acre-feet per year will offset current groundwater production in order to avoid further depletion and assist in balancing of groundwater levels of the Nipomo Mesa Management Area (NMMA). The Phase I increment of 2,000 acre-feet per year of this total will be used to augment water supplies available to the existing customers of the Nipomo Community Services District thereby replacing/reducing groundwater pumping of the NMMA by that amount. While this first (Phase I) increment of supplemental water will be used entirely by the NCSD, three local water purveyors may contribute funds for the purchase of a portion of this Phase I water supply. In accordance with the Court-approved Settlement Agreement and Judgment

FIGURE 12
Existing Easements and Pipelines



related to the future management of the Santa Maria Groundwater Basin, the Woodlands development has agreed to contribute funds equal to the cost for provision of up to 418 acre-feet per year. Both the Golden State Water Company and Rural Water Company have the option under the settlement agreement and judgment to contribute funds equal to 208 acre-feet per year or the find an alternate source of water supply. Participation of the latter two water purveyors is currently the subject of negotiations with the NCS D. While these entities will continue to pump groundwater from the NMMA, this funding of a portion of the supplemental water delivery to the NCS D is considered to be the equivalent of in-lieu fees as an offset for their continued pumping of groundwater at their current levels (see Figure 13, Phase I Water Use Area). A portion of the Phase I water supply may also be used to provide water service to vacant or undeveloped properties within the NCS D service area as long as they also pay a supplemental water capacity charge in order to offset their additional demand.

The second phase (Phase II) increment of supplemental water will total an additional 1,000 acre-feet per year. Half of this total (500 acre-feet each) will be used for the remaining groundwater replenishment for the NMMA (bringing that total to 2,500 acre-feet per year). The additional 500 acre-feet per year in the Phase II delivery of supplemental water will be used by the NCS D to serve future customers on currently vacant land within the existing NCS D boundaries (see Figure 14, Phase II Water Use Area.).

The 3,200 acre-feet per year within the third (Phase III) increment of supplemental water could be utilized to serve future development within the Sphere of Influence areas adjacent to the existing NCS D boundaries (see Figure 15, Phase III Water Use Area).

FIGURE 13
Phase I Water Use Area



Areas Currently Served by NCS D

FIGURE 14
Phase II Water Use Area

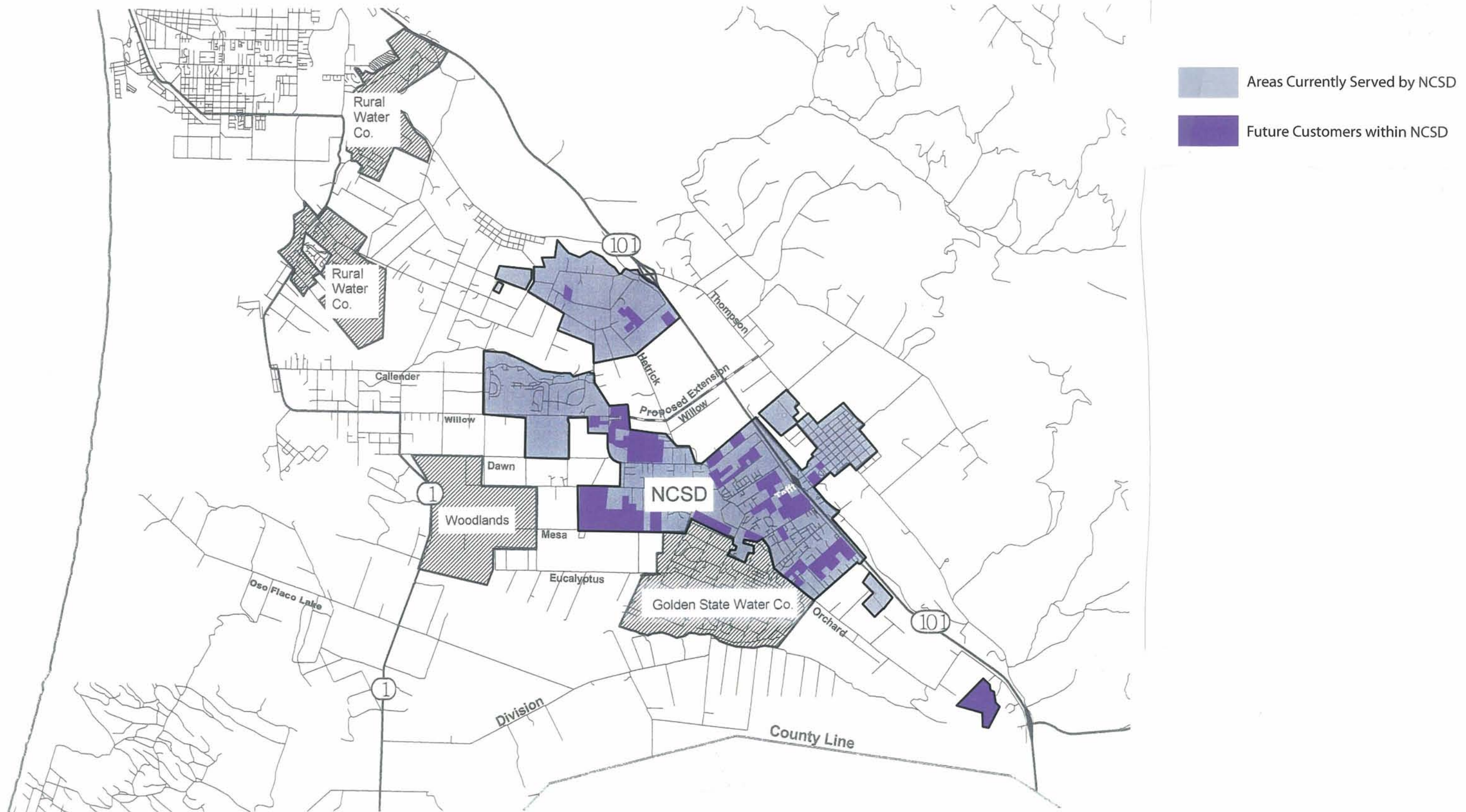
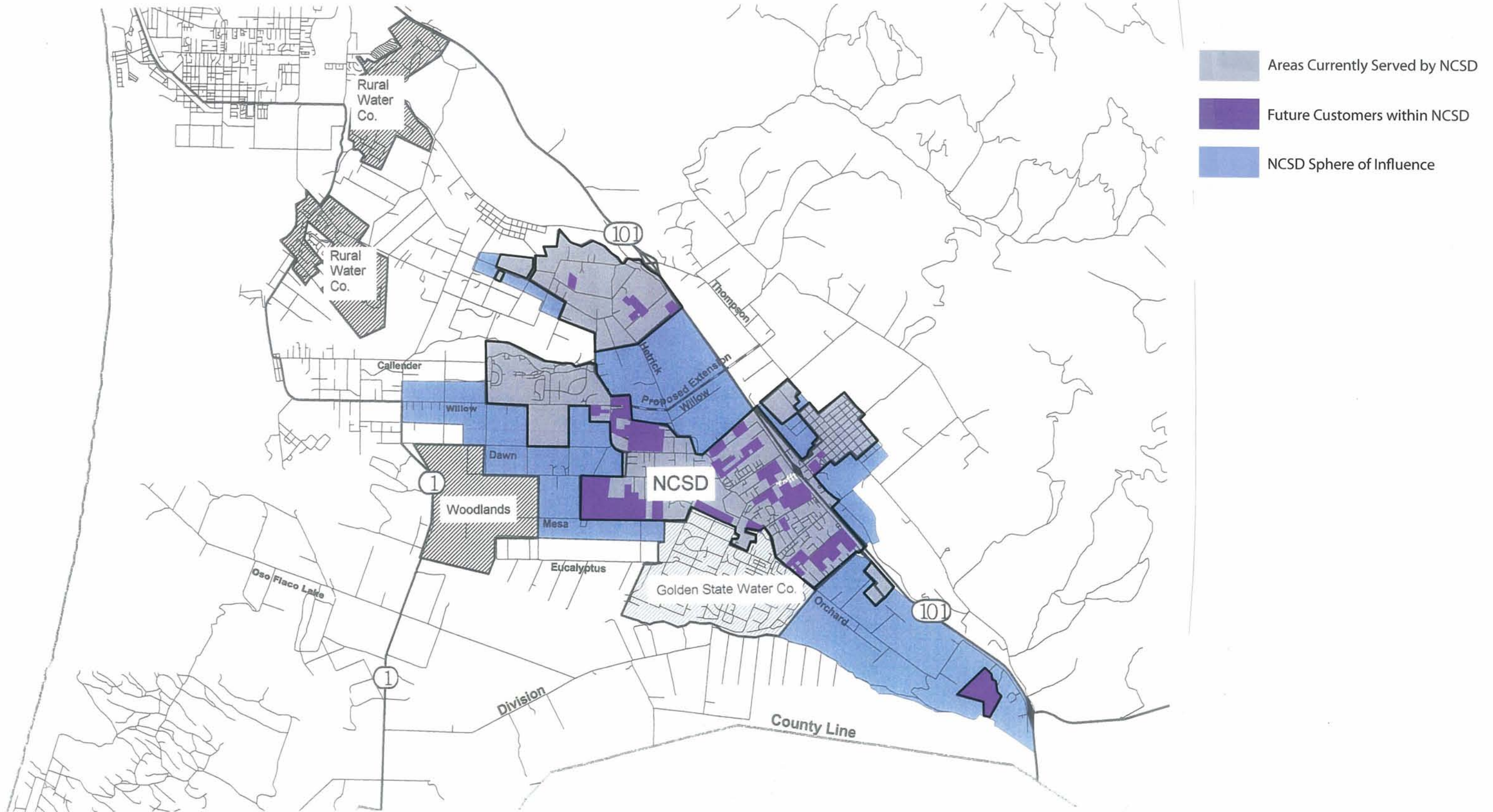


FIGURE 15
Phase III Water Use Area



E. REQUIRED PERMITS AND APPROVALS

The proposed Nipomo Community Services District Waterline Intertie 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 for the proposed Nipomo Community Services District Waterline Intertie;
2. Approval of the Mitigation Monitoring Program for the Nipomo Community Services District Waterline Intertie;
3. Review and approval of detailed plans for pipelines, pump stations, storage facilities and other infrastructure for the proposed waterline intertie.

The proposed Nipomo Community Services District Waterline Intertie 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 or 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 in the event that a Section 404 Permit from the U.S. Army Corps of Engineers is required;
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 Section 7 Consultation or Section 10(a) Permit from the United States Fish and Wildlife Service which allows the “taking” of an endangered species;
9. A Section 7 Permit from or informal consultation with the National Oceanographic and Atmospheric Administration (NOAA) which oversees fisheries management in waterways nationwide;
10. A new or amended Domestic Water Supply Permit from the State Department of Public Health (formerly the Department of Health Services) for the introduction of supplemental water into the Nipomo Community Services District system;
11. An Authority to Construct issued by the San Luis Obispo County Air Pollution Control District and the Santa Barbara Air Pollution Control District in order to allow proposed horizontal directional drilling;

12. Easements across the Santa Maria River and possibly along the southern boundary of the river secured from landowners and other entities for right-of-way and construction and
13. Any necessary construction and/or encroachment permits from the County of San Luis Obispo, the City of Santa Maria or the County of Santa Barbara for equipment staging and construction operations.

F. PROJECT TIMING

Detailed design efforts for the proposed project facilities will begin upon certification of the Final Environmental Impact Report. The District will develop a map that delineates the precise route of the waterline intertie and the location of other required project facilities (pipelines, pump stations, water storage facilities, etc.) which will provide the basis for any required right-of-way or facilities acquisition.

Phase I project construction is estimated by the project engineer to require a total of 350 to 380 calendar days. Several of the construction activities noted below will be performed concurrently within this overall range of timing. These Phase I construction activities include: 1) construction of the Blosser Road pipeline (120 to 140 days); 2) Santa Maria River crossing (280 to 300 days); 3) Pump Station # 2 and water storage tank construction (300 to 320 days) and 4) NCS D distribution system improvements (200 to 220 days). Start-up and testing of these facilities is estimated to require an additional 30 to 40 days. The project engineer has also estimated an additional 20 days for rain delays and/or contingency time.

Phase II project construction is estimated to require a total of 110 to 150 calendar days. Concurrent construction activities include: 1) Pump Station # 2 upgrades (90 to 120 days) and 2) NCS D distribution system improvements (90 to 120 days). Start-up and testing of these facilities is estimated to require an additional 10 to 20 days. The project engineer has also estimated an additional 10 days for rain delays and/or contingency time.

Phase III project construction is estimated to require a total of 350 to 380 calendar days for the additional or replacement waterline on Blosser Road, the provision of a water line to the Quad Storage Tanks and construction of or upgrades to Pump Stations No. 1 and No. 2 and an additional water storage tank.

IV. ENVIRONMENTAL SETTING

A. *EXISTING CONDITIONS*

The area encompassing the proposed Nipomo Community Services District Waterline Intertie extends from approximately one mile south of the Santa Maria River in the City of Santa Maria across the river 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 Santa Maria River channel consists of a sandy streambed which transports occasional river flows and a series of flat beaches leading to levees which define both the northern and southern boundaries of the river. To the north is nearly level to gently sloping terrain adjacent to Highway 101 with the southern extent of the Nipomo Mesa rising approximately 100 feet in elevation to a relatively level bluff or mesa with slope gradients between zero and five percent. The portion of the project area located on the Nipomo Mesa has a surface elevation of approximately 300 feet above mean sea level. Elevation changes are due to smoothly eroded hills and shallow linear valleys. Surface elevations across the mesa gently decrease from east to west consistent with the coastal plain in the surrounding area.

The Santa Maria River and adjacent areas are underlain by sand and silty alluvial soils deposited from flows of the river. The Nipomo Mesa is underlain by massive sand dune deposits whose thickness ranges from 150 to 250 feet in depth at certain locations.

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 project area south of the Santa Maria River lies within the Santa Maria watershed and floodplain while areas north of the river are located within the Nipomo Creek watershed area which drains to the Santa Maria River. The Santa Maria River, approximately 2,000 to 3,000 feet wide at this location, ultimately flows west to the Pacific Ocean. The Nipomo Creek watershed encompasses approximately 2,200 acres. The project area west of Highway 101 is characterized by open flat areas, linear drainages and hillsides which define the southern portion of the Nipomo Mesa.

The Santa Maria River channel contains a variety of sage scrub and riparian habitats with a sandy streambed in the middle of the channel. Portions of the riverbed downstream of the Highway 101 bridge contain agricultural fields adjacent to the southern levee. The Santa Maria River is defined as being part of the “waters of the United States” by the U.S. Army Corps of Engineers pursuant to Section 404 of the Clean Water Act.

The project area contains nine generalized habitat classifications: coyote brush series, alluvial scrub, riverbed, California annual grassland series, eucalyptus series, agricultural, ornamental, developed and ruderal (disturbed) habitats. A total of eight special-status plant species and 21 special-status wildlife species have the potential to occur within the project area.

Areas immediately south of the Santa Maria River are devoted to single family residential uses in neighborhoods served by Blosser Road, Atlantic Place and Preisker Lane. The Santa Maria River bed is vacant however areas to the north of the river contain several industrial and commercial facilities served by Hutton Road and Cuyama Lane. Further west, elevations rise to the top of the Nipomo Mesa which contains agricultural fields, scattered residences, a P.G. & E. electrical substation and the Maria Vista residential tract in the vicinity of the bluff edge. The portion of the project area further north on the Nipomo Mesa contains a variety of land uses including low and medium density residential uses, agricultural farmlands and commercial uses.

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, Hutton Road (Highway 166) and Broadway Street. Other regional roadways near the project area are State Highway 1 and State Highway 166. The local circulation system serving the project area include Tefft Street, Southland Street, Orchard Road, South Frontage Road and Joshua Street on the north side of the Santa Maria River. With the exception of the four lanes on Tefft Street, all of these local roadways are two lane paved roads. On the south side of the Santa Maria River, local roadways include Blosser Road, Atlantic Place and Preisker Lane, all two-lane local roadways, which lead to the four-lane Broadway Street and its interchange at Highway 101.

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 non-urban 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 the high 80's and 90's 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 Arroyo Grande Substation located at the South Bay Regional Center in Arroyo Grande. Fire protection and emergency response services for the Nipomo area are currently provided by the California Department of Forestry / San Luis Obispo County Fire Department. The Nipomo Station 20, located at 450 Pioneer Street in Nipomo (at the corner of Oak Glen and Pioneer Streets near Tefft Street), would be the first station to participate in any fire or emergency response to the

project area. This station is equipped with two wildland fire engines (used during the dry season), one Schedule A (on-road) fire engine and a CDF bulldozer.

Law enforcement and fire protection services on the Santa Maria side of the river are provided by the City of Santa Maria Police and Fire Departments, respectively. Police services emanate from headquarters located at 222 E. Cook Street. The closest fire station is Station #3 located at 1527 N. College Street approximately two miles to the south of the Santa Maria River. The station is equipped with one engine and a wildland fire engine.

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 for electrical service. Existing underground natural gas and electrical mains are located throughout the project area which provide utility services to developed land uses.

The Nipomo area contains more square meters of light density cultural deposits than any other area in southern San Luis Obispo County. Surveys conducted along the south, west and north sides of Nipomo Mesa have recorded many archaeological sites along the edge of the mesa but very few in the interior. Records checks identified and walkover surveys confirmed the location of two previously-recorded prehistoric sites, SLO-808 and SLO-1254 adjacent to South Frontage Road.

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 probably 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 September, 2008. These cumulative projects are listed by those that have been approved and those that are proposed, pending future approval.

- ***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 is within the Commercial Retail land use category and is located 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 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 is within the Commercial Retail land use category and is located between Hill Street and Grande Avenue, west of Highway 101.

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.

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. 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. 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.

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.

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. 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 and to construct eight detached multi-family residences. The proposed project is within the Residential Multi-Family land use category and is located at 365 Butterfly Lane, 200 feet southeast of Grand 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. 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.

Allhouse. A Vesting Tentative Tract Map and Conditional Use Permit to subdivide an existing 1.19 acre parcel involving fifteen residential condominium parcels ranging in size from approximately 1,000 to 1,200 square feet and one 0.30 acre parcel for an existing four-unit apartment building. 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.

- ***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. The area is intended to provide job generating business to help improve the present jobs/housing imbalance in Nipomo. Protection of natural resources including the large oak woodland areas is also a major priority. 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 (hereinafter 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. 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.

V. ENVIRONMENTAL ANALYSIS

An Initial Study for the proposed Nipomo Community Services District Waterline Intertie project was prepared by the Nipomo Community Services District and was circulated between June 27, 2008 and July 28, 2008 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
- Biological Resources
- Aesthetics
- Cultural Resources
- Geology
- 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 waterline intertie 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 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 project area contains a variety of land uses including residential, commercial, light industrial, recreation, agriculture and open space uses.

Areas immediately south of the Santa Maria River are devoted primarily to single family residential uses in neighborhoods served by Blosser Road, Atlantic Place and Preisker Lane. East of these neighborhoods is U.S. Highway 101 and the Santa Maria River Bridge. West of Blosser Road adjacent to the river is vacant open space and the abandoned Northside Air Park.

The Santa Maria River channel contains a variety of sage scrub and riparian habitats with the sandy streambed in the middle of the channel. The Santa Maria River is defined as being part of the “waters of the United States” by the U.S. Army Corps of Engineers pursuant to Section 404 of the Clean Water Act. Portions of the riverbed downstream from the bridge contain agricultural fields adjacent to the southern levee as well as a number of motorcycle trails. Eucalyptus tree rows line portions of the northern levee adjacent to the river channel. A bicycle/running trail runs along the top of the southern levee with a trail easement running along the northern levee adjacent to the river channel.

Immediately north of the Santa Maria River, there are several industrial and commercial facilities near Highway 101 served by Hutton Road and Cuyama Lane. These facilities include a landscape supply facility, a concrete batch plant, a waste transfer station, a food distribution facility, an exterminator service, a restaurant, an antique store and an RV sales facility. Further west, elevations rise to the top of the Nipomo Mesa which contains agricultural fields with scattered residences, a P.G.& E. electrical substation and the Maria Vista residential tract. This portion of the Nipomo Mesa contains a variety of land uses including low and medium density residential uses, agricultural farmlands and open space. The majority of areas adjacent to Joshua Street and Orchard Road are devoted to agricultural farmlands and scattered residences with low and medium density residential uses near Southland Street. North of Southland Street in the area bounded by Orchard Road, South Frontage Road and Tefft Street are developed residential land uses and a variety of commercial and residential uses along South Frontage Road facing Highway 101.

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 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 boundaries of the Nipomo Community Services District (NCSD) are approved by the County contingent upon receiving water and sewer services from a community water 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 16, 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 water and 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***

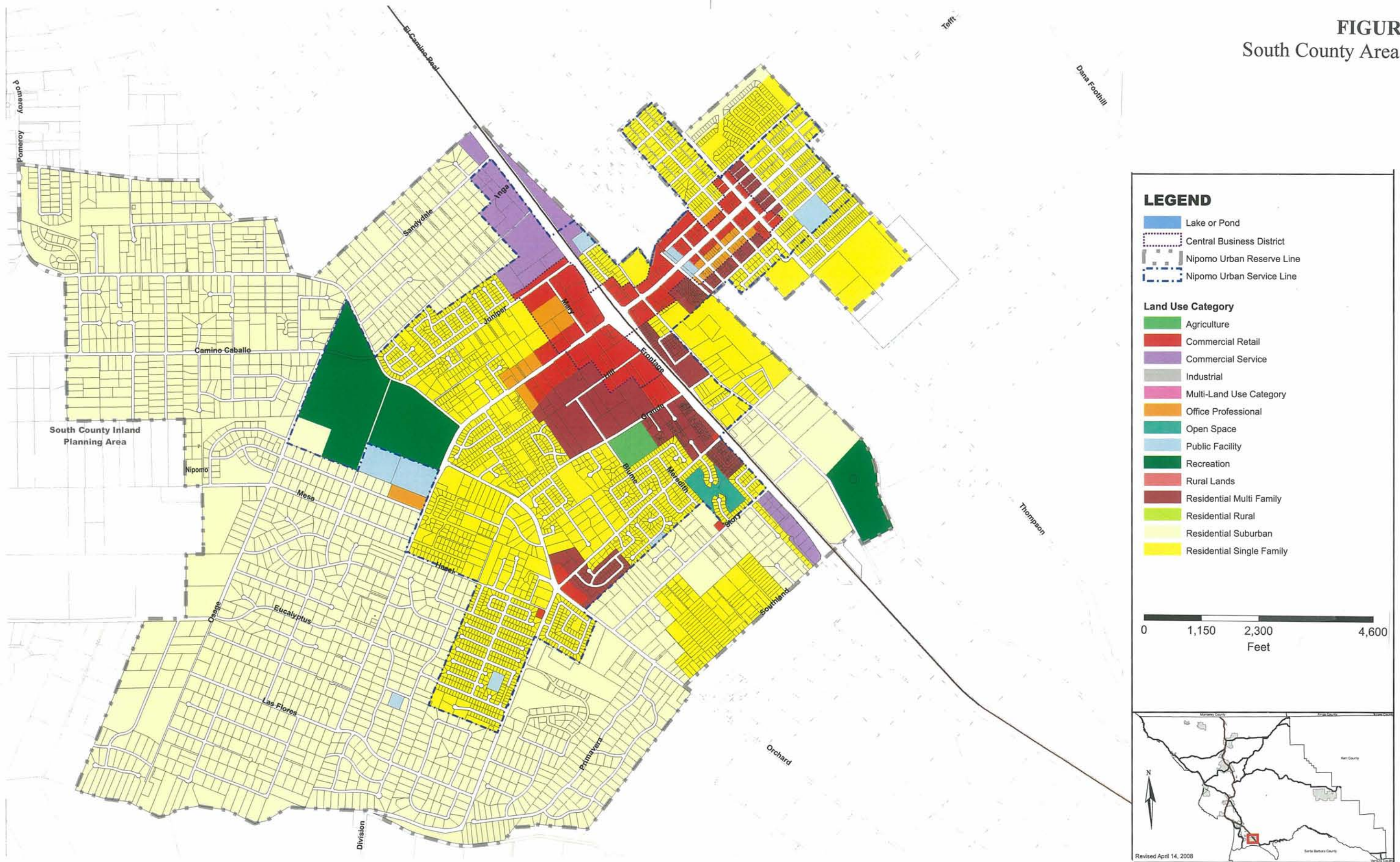
This land use category designates areas that have existing or potential agricultural production or capability. Agriculture has been and still is the most widespread use of land in the South County Planning Area. Minimum parcel sizes for agriculturally zoned areas range from 20 acres to 320 acres, depending 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.

- ***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

FIGURE 16
South County Area Plan



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 ranges from 6,000 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 and 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. 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. Pursuant to a 1962 judicial ruling (*City of Downey v. Downey County Water District*):

“The powers of a county water district are specifically defined in certain provisions of [State law]; the district's primary purpose is to carry out all of the necessary functions and operations of supplying sufficient water to inhabitants within its boundaries, and [State law] gives it the power to do so...nowhere therein or in any other legislative enactment, has a district been given powers in matters of police protection, traffic, zoning, health, recreation, regulation of business, transportation, the police power or other functions essential to municipal government.”

Pursuant to Government Code Sections 61100(a), the NCSD provides water to its residents for any beneficial use in the same manner as a municipal water district.

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

V. Environmental Analysis
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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 NCSO and the NCSO’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 NCSO can only implement project mitigation measures that are within the NCSO’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 NCSO 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 NCSO’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 NCSO. The NCSO Spheres of Influence are illustrated in Figure 15, Phase III Water Use Area. LAFCO, in recognition of its authority and in order to promote orderly development within the NCSO’s Sphere of Influence related to water resources, established conditions for annexations of territories within the NCSO’s Sphere of Influence.

The NCSD's obligation to plan for delivery of water to its residents and its future residents is also stated in Government Code Section 61001 (c)(3), which states that it was the intent of the Legislature "that residents, property owners, and public officials use the powers and procedures provided by community service district law to meet the diversity of the local conditions, circumstances and resources." Additionally, the Urban Water Management Plan Act found in the California Water Code establishes guidelines to provide for long range planning to meet the existing and future water needs of the NCSD.

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 may impact land uses in areas adjacent to short-term project construction activities or long-term project operations.*

The proposed Nipomo Community Services District Waterline Intertie project is not expected to directly impact any existing land uses in areas adjacent to short-term project construction activities or long-term project operations.

The areas through which the proposed pipeline extension and construction of various infrastructure facilities are located are within a variety of land uses including residential, commercial, industrial, agricultural and recreation facilities. The proposed project may represent a short-term conflict with existing uses during project construction activities. Throughout Section V. Environmental Analysis of this document, direct impacts related to the impacts of the project upon biological, cultural, visual, geologic and water resources 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 is not expected to directly impact the Maria Vista residential tract since the path for proposed horizontal directional drilling runs underground and to the west of the Maria Vista property. Proposed horizontal directional drilling is not expected to impact any existing trails or trail easements running along the northern or southern boundaries of the Santa Maria River.

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 water supplies, it may indirectly conflict with these environmental plans and policies (see Impact A-2 below). The potential direct land use impacts of the proposed project represent a less than significant impact.

Impact A-2. *The proposed project may 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 increased water supplies provided by the proposed project.*

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 does, however, involve the provision of additional water supplies thereby reducing or eliminating a potential constraint to future development within areas to be served by this additional water. The proposed project involves importation of water in order to reduce the current imbalance of groundwater levels and to serve new development consistent with the South County Area Plan within the current boundaries of the Nipomo Community Services District and its Sphere of Influence areas which are located adjacent to the District boundaries.

The potential importation of a maximum of 6,200 acre-feet of water per year would accomplish several objectives. Approximately 2,500 acre-feet of water per year will offset current groundwater production in order to avoid further depletion of and assist in balancing of groundwater levels in the Nipomo Mesa Management Area. An additional 500 acre feet per year will be used by the Nipomo Community Services District to serve future customers on currently vacant land within the existing NCS D boundaries. An additional 3,200 acre-feet per year could be utilized to serve future development within the current Sphere of Influence areas which are located adjacent to the existing NCS D boundaries. This additional imported water could be used to serve existing and new development within the South County Planning Area that would otherwise be served by groundwater supplies from the Nipomo Mesa Management Area.

In order to determine the additional amount of development that could be served by these additional water supplies, a breakdown of land uses (as designated by the South County Area Plan) within the existing NCS D boundaries must be identified. Table 5, NCS D Land Use Designations provides a breakdown of land uses in these areas in terms of both developed and vacant lands within the District boundaries as well as within the adjacent Sphere of Influence areas. These totals are based upon data contained within the NCS D Water and Sewer Master Plan Update as well as the NCS D Sphere of Influence Update/Municipal Services Review EIR.

**TABLE 5
NCS D LAND USE DESIGNATIONS (ACRES)**

Land Use Designation	Existing NCS D Customers ¹	Vacant Land within NCS D⁴	Sphere of Influence Areas ²
RMF – Residential Multi-Family	150	10	0
RSF – Residential Single Family	700	(-14) ³	91
RS – Residential Suburban	900	5	357
RR – Residential Rural	1380	24	2107
RL – Rural Lands	3	1	1073
AG – Agricultural	110	(-98) ³	693
PF – Public Facility	37	1	5
OP – Office and Professional	34	(- 1) ³	0
CR – Commercial Retail	160	0	0
CS – Commercial Services	80	14	104
OS – Open Space	11	0	0
REC – Recreation	116	515	0
Black Lake	510	0	0
Southland Specific Plan	0	0	100
TOTAL	4191	457	4530

(1) Source: NCS D Water and Sewer Master Plan Update, December, 2007

(2) Source: NCS D Sphere of Influence Update/Municipal Services Review EIR, December, 2003

(3) Urban Water Management Plan indicates acreage decrease with development of certain vacant lands

As noted above, the first 2,500 acre-feet per year of water from the proposed project (Phase I and half of Phase II) will offset current groundwater production in order to avoid further depletion of and assist in balancing groundwater levels in the Nipomo Mesa Management Area. This initial increment of imported water will, therefore, serve existing customers within the NCS D boundaries (see column 1 of Table 5 above and Figure 13, Phase I Water Use Area). The additional 500 acre-feet per year of imported water (the remainder of Phase II of the proposed project) will be used by the NCS D to serve future customers on currently vacant land within the District boundaries (see column 2 of Table 5 above and Figure 14, Phase II Water Use Area).

Table 6, Phase II – Additional Development Served by 500 AFY provides a detailed breakdown of the nature and extent of development to be served by these additional water supplies. As indicated below, the importation of 500 acre-feet per year of water could ultimately serve a maximum of 370 additional dwelling units on 457 acres as well as 14 acres of additional Commercial Services uses, 515 acres of Recreation use and one acre of Public Facilities use.

**TABLE 6
PHASE II – ADDITIONAL DEVELOPMENT
SERVED BY 500 AFY**

Land Use Designation	Number of Acres	No. of Dwelling Units
RMF – Residential Multi-Family	10	380
RSF – Residential Single Family	(-14)	(-14)
RS – Residential Suburban	5	5
RR – Residential Rural	24	4
RL – Rural Lands	1	0
AG – Agricultural	(-98)	-4
PF – Public Facility	1	
OP – Office and Professional	-1	
CS – Commercial Services	14	
REC – Recreation	515	
TOTAL	457	370

Source: NCSO Water and Sewer Master Plan Update, December 2007.

The remaining 3,200 acre-feet per year of imported water (Phase III of the proposed project) could be used by the NCSO to serve future development within the current Sphere of Influence areas which are located adjacent to the existing NCSO boundaries (see column 3 of Table 5, NCSO Land Use Designations (Acres) and Figure 15, Phase III Water Use Area)

Table 7, Phase III Additional Development Served by 3,200 AFY provides a detailed breakdown of the nature and extent of development served by these additional water supplies. As indicated below, the importation of 3,200 acre-feet per year of water could ultimately serve a total of 1,368 dwelling units on 4,295 acres.

**TABLE 7
PHASE III ADDITIONAL DEVELOPMENT
SERVED BY 3,200 AFY**

Land Use Designation	Number of Acres	No. of Dwelling Units
RSF – Residential Single Family	91	364
RS – Residential Suburban	84	84
RR – Residential Rural	1995	398
RL – Rural Lands	1173	59
AG – Agricultural	652	13
SP – Specific Plan	300	450
TOTAL	4,295	1,368

Source: NCSO Sphere of Influence Update / Municipal Services Review EIR, December 2003.

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 water supplies 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 water supplies would, 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 water supplies 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 water supplies 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 importation of additional water supplies) 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 water supplies 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 water supplies 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 water

supplies 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

No mitigation measures are proposed.

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 additional water supplies 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 direct impacts upon adjacent land uses associated with project construction and operations are considered to be less than significant (Class III Impact).

B. POPULATION AND HOUSING

1. Existing Conditions

Provided below are several population and housing inventories and projections that provide pertinent background relative to the project area. Much of this background information does not precisely equate to the boundaries of the areas to be served by the additional water supplies provided by the proposed project (see Figures 13 through 15 in Section III. Project Description) but represent the best information available to describe these 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 8, 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 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 8
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 (see Figure 13, Phase I Water Use Area). Future development within the NCSD is estimated to increase to 17,754 customers by the year 2020 (see Figure 14, Phase II Water Use Area). Future population projections for the NCSD Sphere of Influence areas (see Figure 15, Phase III Water Use Area) are estimated at 4,104 additional residents between the years 2000 and 2020.

The NCSD Urban Water Management Plan 2005 Update provides a range of population projections for the NCSD service 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 reflect the historic (1990-2003) average annual increase in dwelling units, approximately 3.7 percent in the Nipomo area or (c) population increases are similar to annual population growth in the Nipomo area from 1990 to 2000, 7.8 percent (see Table 9, NCS D Population Projections).

**TABLE 9
NCS D POPULATION PROJECTIONS**

Assumed Annual Population Growth Rate	2005	2010	2015	2020	2025	2030
2.3 Percent	12,000	13,440	15,060	16,880	18,910	21,190
3.7 Percent	12,000	14,390	17,260	20,690	24,820	29,760
7.8 Percent	12,000	17,470	25,430	37,020	53,900	78,460

Table 11, Building Permits Issued, provides a summary of building permits that have been issued over the past fifteen years (1990-2005) in the South County area. Permits have been compiled for the following areas: Rural South County, Nipomo, Los Berros, Calendar-Garrett, Palo Mesa, Black Lake and the balance of the Nipomo Mesa.

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 10, 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 10
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

**TABLE 11
BUILDING PERMITS ISSUED**

	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04	05	06	07
Nipomo	90	87	107	147	112	111	58	72	101	126	117	109	113	94	296	170	105	155
Los Berros	0	1	0	0	2	0	0	0	3	1	4	1	0	0	2	0	0	3
Calendar Garrett	3	3	3	3	0	0	1	3	5	5	3	4	21	14	9	27	5	3
Palo Mesa	7	12	17	7	6	4	7	14	5	10	23	72	121	39	59	20	19	3
Black Lake	0	0	0	0	0	0	0	0	0	36	60	4	1	0	0	17	3	7
Balance of Mesa	34	42	21	27	30	21	27	33	41	36	21	33	29	22	81	227	135	101
Total Mesa	134	145	148	184	150	136	93	122	155	214	228	223	285	169	447	461	267	272
Total Units @ year end	4092	4237	4385	4569	4719	4855	4948	5070	5225	5439	5667	5890	6175	6344	6791	7,252	7,519	7,791
County Growth Management Ordinance Growth Rate (2.3%)		94	97	101	105	109	112	114	117	120	125	130	142	146	156	167	173	179
Rural South County	52	72	25	33	40	49	46	52	63	45	24	47	41	32	116	70	32	19
South County Total	152	175	152	190	160	164	112	141	177	223	231	237	297	179	482	497	292	296
Mesa as % of South County Total	88%	83%	97%	97%	94%	83%	83%	87%	88%	96%	99%	94%	96%	94%	93%	93%	91%	92%

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 result in the demand for new housing due to the need for labor during project construction.*

The proposed Nipomo Community Services District Waterline Intertie Project will not directly induce significant population or housing growth in the area.

Construction activities associated with the proposed project are estimated to generate a maximum total of 54 employees over a period of approximately one year for Phases I and III of project construction and up to five months for Phase II of 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 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 water supplies provided by the proposed project.*

The proposed project will not directly generate any new population or housing. The proposed project does, however, involve the provision of additional water supplies thereby reducing or eliminating a potential constraint to future development within areas to be served by this additional water. The proposed project involves the importation of

water in order to reduce the current imbalance of groundwater levels, to serve new development consistent with the South County Area Plan within the current boundaries of the Nipomo Community Services District and its Sphere of Influence areas which are located adjacent to the District boundaries.

As discussed in Section V.A. Land Use and Planning, additional population and housing will be served by these additional water supplies. The first 2,500 acre-feet per year of imported water from the proposed project (Phase I and half of Phase II) will offset current groundwater production in order to avoid further depletion of and assist in balancing groundwater levels in the Nipomo Mesa Management Area. This initial increment of imported water will, therefore, serve existing customers within the NCSD boundaries (see Figure 13, Phase I Water Use Area). An additional 500 acre-feet per year of imported water (the remainder of Phase II of the proposed project) will be used by the NCSD to serve future customers on currently vacant land within the District boundaries (see Figure 14, Phase II Water Use Area). This additional imported water is estimated to serve a maximum of 370 additional dwelling units on 457 acres as well as 14 acres of additional Commercial Service uses, 515 acres of Recreation use and one acre of Public Facilities use. Based upon a population generation factor of 3.0 persons per dwelling unit, an additional 1,110 residents would be generated by this residential growth. The remaining 3,200 acre-feet per year of imported water (Phase III of the proposed project) will be used by the NCSD to serve future development within the current Sphere of Influence areas which are located adjacent to the existing NCSD boundaries (see Figure 15, Phase III Water Use Area). The importation of 3,200 acre-feet per year of water is estimated to serve a total of 1,368 dwelling units on 4,295 acres. Based upon a population generation factor of 3.0 persons per dwelling unit, this additional development would generate an additional 4,104 residents.

The proposed project could represent a reduction or elimination of a potential constraint upon future development within areas to be served by these additional water supplies. However, any increase in residential density beyond that allowed by the South County Area Plan and the resultant increase in population and housing will 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 water and sewer services from a community water system 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 water to its residents, similar to a municipal water 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 water supplies 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 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 increased water supplies 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 water supplies 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

The following analysis of water is based upon the “Urban Water Management Plan Update” prepared for the Nipomo Community Services District and adopted on January 25, 2006, the “NCSD Water and Sewer Master Plan Update” dated December, 2007 and “Nipomo Community Services District Waterline Intertie Project, Water Resources Evaluation” prepared by Science Applications International Corporation (SAIC) dated July 29, 2005. These documents are included in their entirety in Technical Appendices B, D and E, respectively, of this document.

1. Existing Conditions

- ***Surface Water***

- *Santa Maria River*

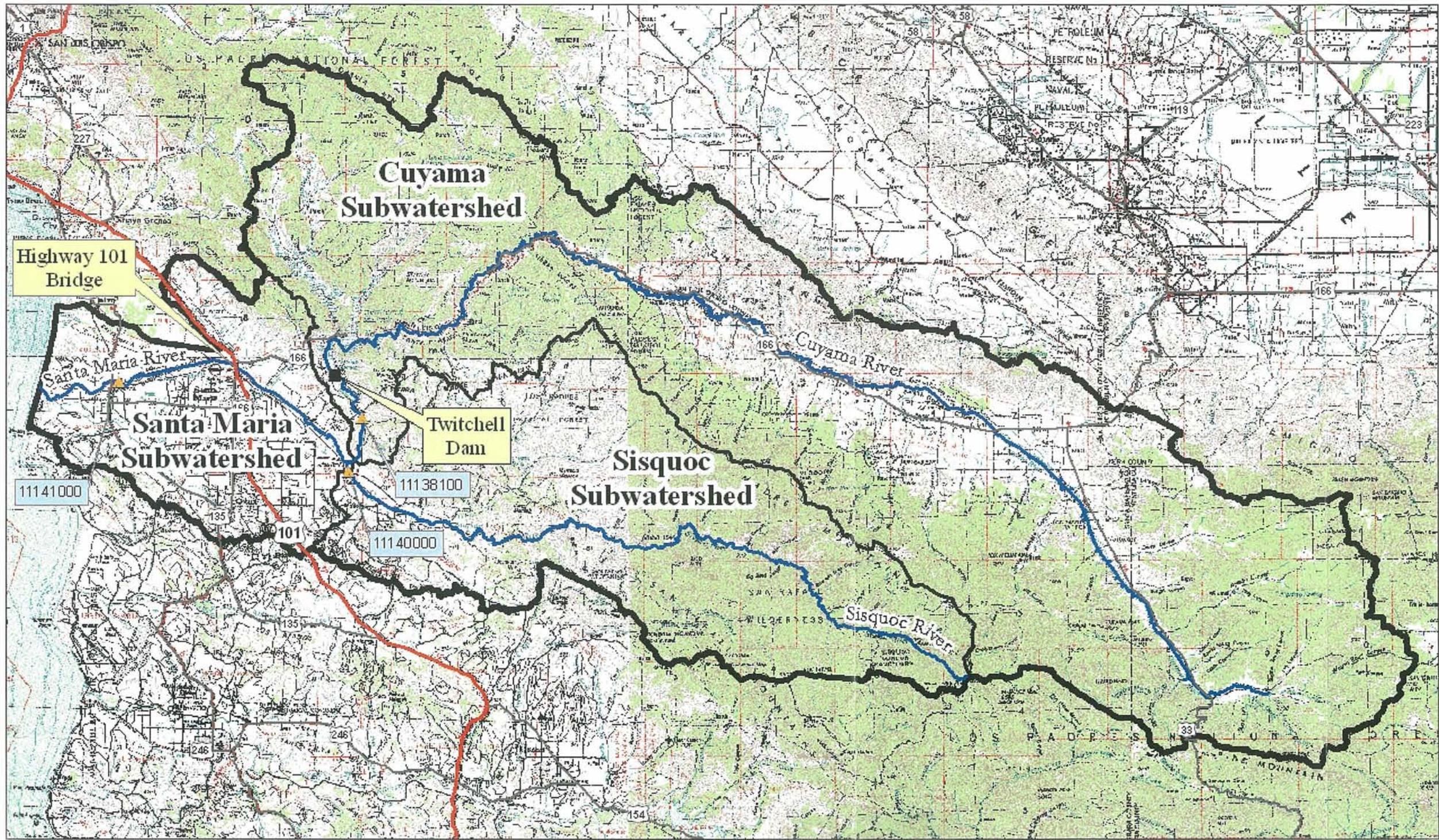
The Santa Maria River flows originate from a large coastal watershed area comprising 1,853 square miles along the Central Coast of California, as shown in Figure 17, Santa Maria River Watershed. The Cuyama River, with flows attenuated by Twitchell Dam, joins the Sisquoc River at Fugler’s Point to form the Santa Maria River, which then discharges to the Pacific Ocean through a channel near the Guadalupe sand dunes.

The watershed area of the Cuyama River is 1,130 square miles, draining the northern slopes of the Sierra Madre Range and the southern slopes of the Caliente Range. It also includes the Alamo and Huasna Creek drainages located north of Twitchell Reservoir. Twitchell Dam, the dominant hydraulic structure in the watershed, was constructed in 1959, 7.7 miles north of Fugler’s Point. Twitchell Reservoir serves as both a flood control and water conservation reservoir with a total of reservoir storage of 224,000 acre-feet (AF), of which 135,615 AF is used for water conservation storage and groundwater recharge. Water in Twitchell Reservoir is released to the Santa Maria River in dry months in order to recharge the groundwater basin.

The Sisquoc River, with a watershed area of 471 square miles, drains the southern and western slopes of the Sierra Madre Range and the northern slope of the San Rafael Mountains. The main portion of the river lies within the Los Padres National Forest. Downstream of the confluence of the Sisquoc and Cuyama Rivers, the Santa Maria River runs northwest over 23 miles to a coastal estuary and into the Pacific Ocean.

The Santa Maria River exhibits typical arid zone hydrology patterns, with rare extreme runoff events and many days of low or no flow. The closest USGS streamflow gauge to the project area is along the river at Guadalupe. The records for this gauge indicate no flow during the dry summers, even with releases from Twitchell Reservoir for recharge purposes. The rarity of the high flows can be seen in the probability of exceedance graph in Figure 18, Santa Maria River Flows at Guadalupe.

FIGURE 17
 Santa Maria River Watershed



Legend

- USGS Gage
- Twitchell Dam
- Highway 101
- Other Highway
- Major River
- Santa Maria Watershed
- Subwatershed Boundary

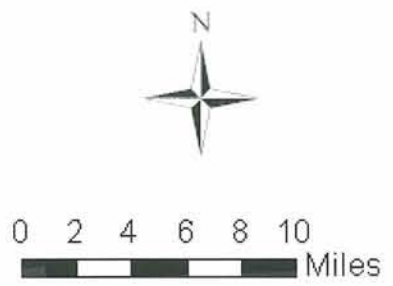
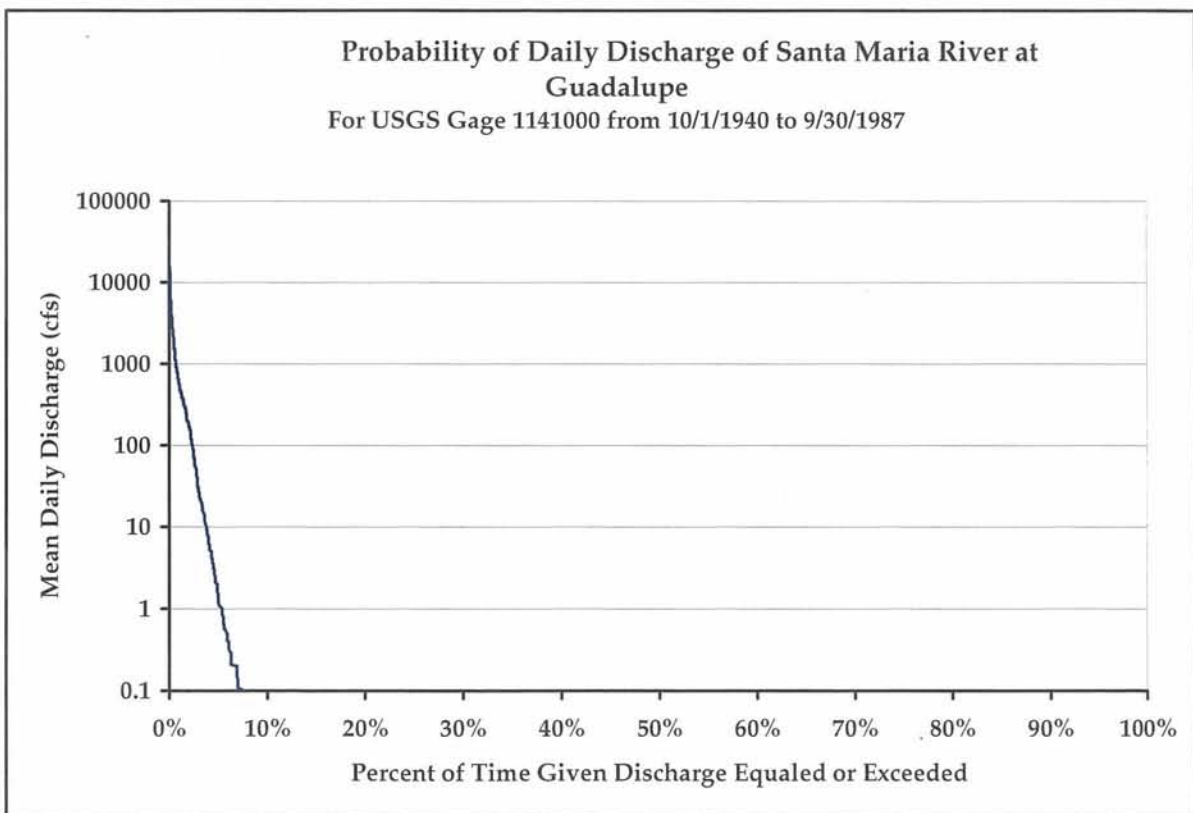
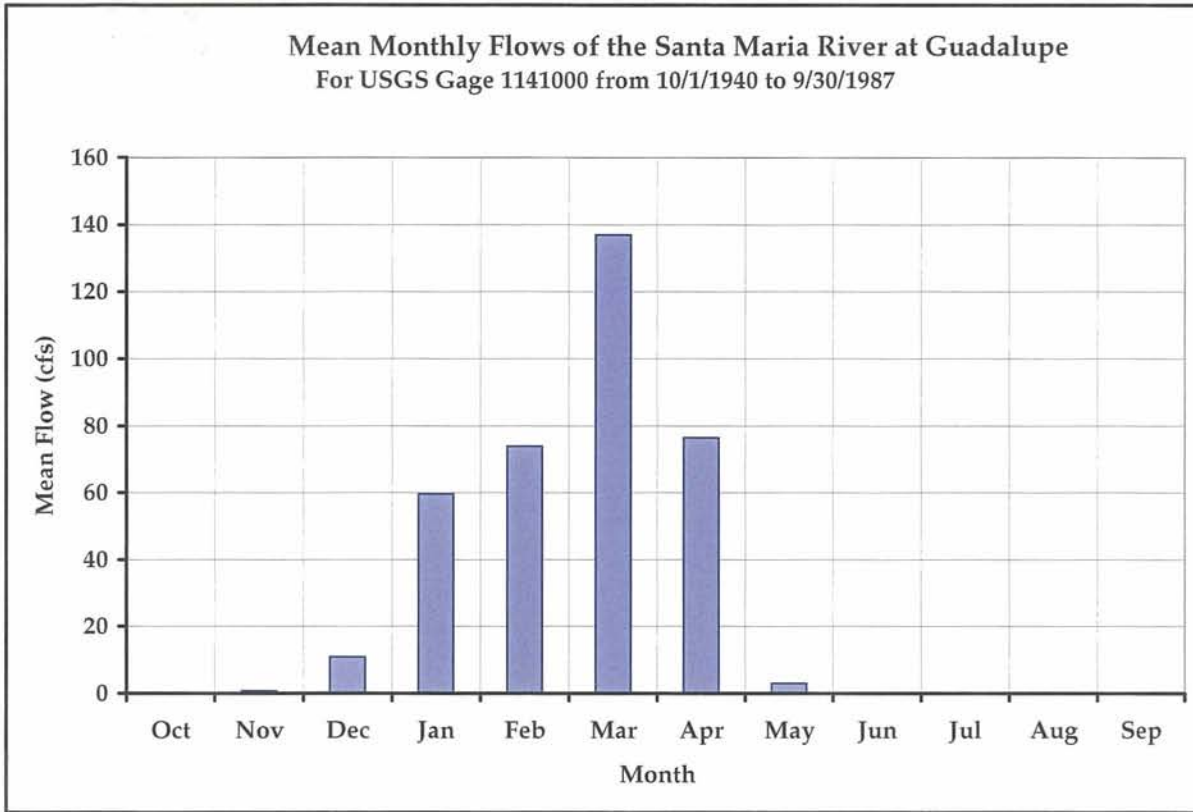


FIGURE 18
Santa Maria River Flows at Guadalupe



- Water Quality

Water quality along the Santa Maria River is regulated by the California Regional Water Quality Control Board (RWQCB), Central Coast Region, which operates under authority delegated by the Environmental Protection Agency and the State Water Resources Control Board. The RWQCB is the local enforcement agency for the Federal Clean Water Act and the State Porter-Cologne Water Quality Act. Water quality in the Central Coast Region is managed by this agency in accordance with a Water Quality Control Plan for the Central Coastal Basin, or Basin Plan, which lists the various beneficial water uses and describes the water quality which must be maintained to allow those uses. Water quality-related beneficial uses include municipal and domestic supply, wildlife habitat, agricultural supply, industrial process supply and industrial service supply.

Provisions of the California Water Code specify that each RWQCB shall establish water quality objectives that, in the Regional Board’s judgment, are necessary for the reasonable protection of these beneficial uses. Water quality objectives contained in the Basin Plan are designed to satisfy all State and Federal requirements. Maximum contaminant levels (MCLs) have been established for individual water quality parameters and contaminants, in order to meet the water quality objectives contained in the Basin Plan.

As part of the Central Coast Ambient Monitoring Program (CCAMP), water samples were taken at various points on the Santa Maria River in 2000 and 2001, as shown in Table 12, Surface Water Quality-Samples and Regional Board Objectives.

**TABLE 12
SURFACE WATER QUALITY – SAMPLES AND REGIONAL BOARD OBJECTIVES
(MEAN CONCENTRATIONS IN mg/L)**

<i>Water Sampling Sites</i>	<i>TDS</i>	<i>Cl</i>	<i>SO4</i>	<i>B</i>	<i>Na</i>	<i>TSS</i>	<i>Turbidity¹</i>
Sisquoc River at Santa Maria Way	685	22.8	380	0.2	50.5	19	6
<i>Sisquoc River Water Quality Objectives</i>	<i>600</i>	<i>20</i>	<i>250</i>	<i>0.2</i>	<i>50</i>	<i>NS</i>	<i>NS</i>
Cuyama River below Twitchell Dam at White Rock Lane	1099	61.3	730	0.3	90.5	343	143
<i>Cuyama River Water Quality Objectives</i>	<i>900</i>	<i>50</i>	<i>400</i>	<i>0.3</i>	<i>70</i>	<i>NS</i>	<i>NS</i>
Santa Maria River at Bull Canyon Rd (between Fugler's Point and U.S. 101)	898	53.6	455	0.2	64.3	174	86
Santa Maria River at HWY 1	1667	155.3	740	0.3	128.8	183	66
Santa Maria River Estuary	2025	188.2	913	0.4	168.7	147	130
Nipomo Creek at HWY 166	946	151.5	232	0.1	122.1	26	20
<i>Drinking Water MCLs</i>	<i>1000</i>	<i>500</i>	<i>500</i>	<i>1</i>	<i>NS</i>	<i>NS</i>	<i>5</i>
<i>Source: Samples taken in 2000 and 2001 as part of the CCAMP for the Central Coast Regional Water Quality Control Board. Water Quality Objectives are from the Central Coast Regional Water Quality Control Plan (1994). ¹Turbidity is measured in NTUs.</i>							

- Flood Hazard Areas

The FEMA Flood Hazard Map of the project area (see Figure 19, FEMA Flood Hazard Map) delineates the areas of potential inundation from both 100- and 500-year runoff events in the vicinity of the Santa Maria River. Two tributary drainages to the Santa Maria River near the project area as shown on the FEMA map include Nipomo Creek and an unnamed creek that has been channelized near Cuyama Lane, near the Cuyama Highway 166 interchange with Highway 101.

- Twitchell Reservoir Operations

The magnitude and timing of releases from Twitchell Reservoir for groundwater recharge purposes depend on the amount of unregulated flow in the Santa Maria River that originates in the Cuyama River downstream of Twitchell Dam and in the Sisquoc River watershed. Water in Twitchell Reservoir is released so that the total flow in the Santa Maria River is percolated before reaching the Bonita School Road crossing, approximately four miles downstream of the Highway 101 Bridge and approximately 23 miles downstream of Twitchell Dam.

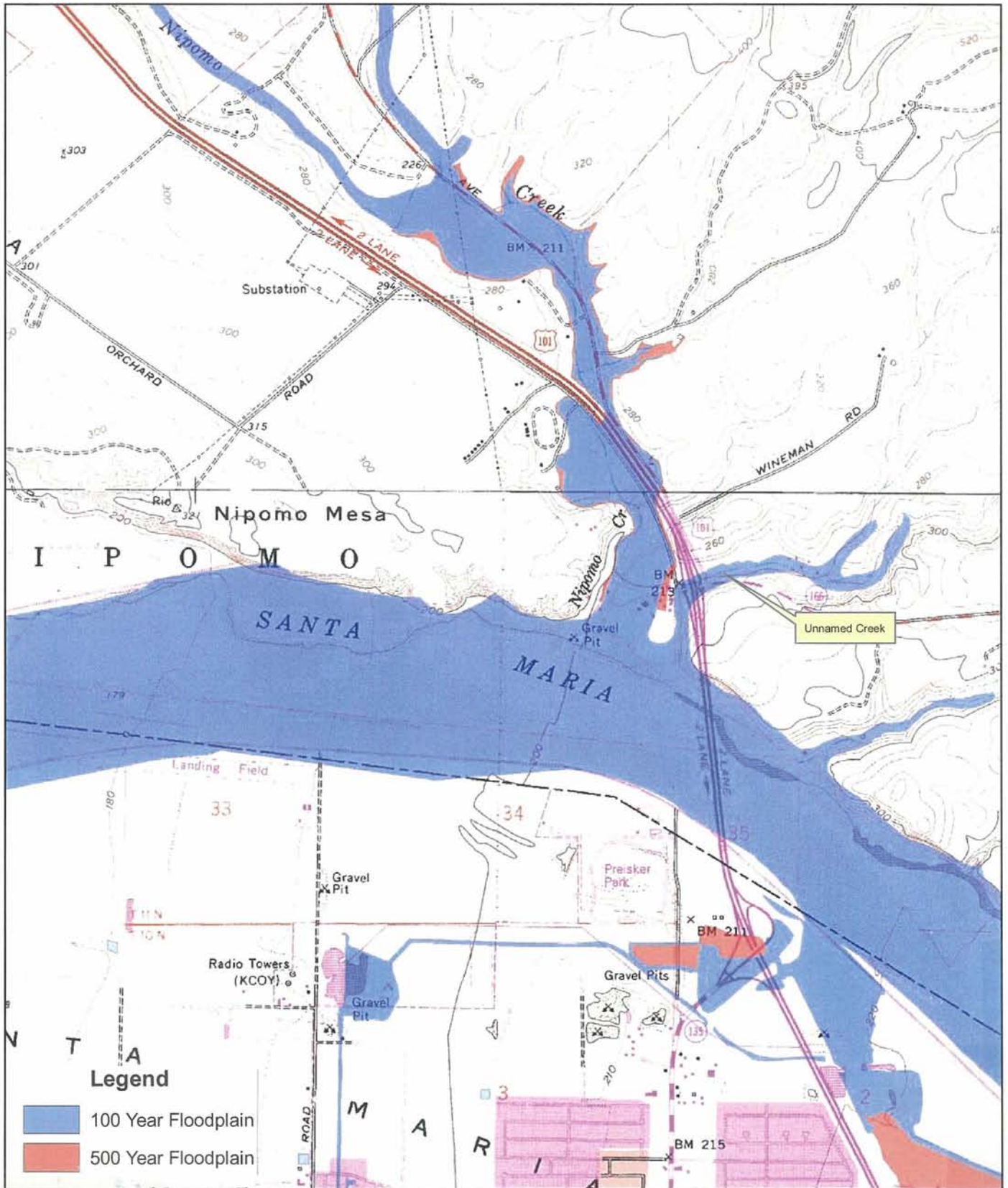
Groundwater recharge releases from Twitchell Reservoir typically begin in late April to early May and continue until October or until the reservoir is empty. The releases are usually limited to 300 cubic feet per second (cfs) in order to maximize percolation. In years with low precipitation, releases may not occur because the reservoir is empty. In wetter years, the water in storage in the reservoir may require several years to be completely released. It typically takes two weeks of releases before water released from Twitchell Reservoir reaches the Highway 101 Bridge. In 2005, water releases began on April 30, 2005. No water was observed flowing beneath the bridge in June, 2005.

- Gravel Pit Mines

The alluvial bed of the Santa Maria River has eroded and lowered in elevation over the years near the Highway 101 Bridge. The erosion appears related to the mining activities by gravel mining operators upstream and downstream of the bridge.

There are two gravel pit mines located along the Santa Maria River downstream of Twitchell reservoir: the Coast Rock and the SP Milling gravel mines. The Coast Rock mining operations extend along a 17-mile stretch of the Santa Maria and Sisquoc rivers and cover 3,970 acres. These mining parcels are located in the river channel and in the nearby agricultural land. Excavations in the river channel lower the channel elevation over the entire width of the river in the project area. Reclamation occurs through natural sediment replenishment. The SP Milling gravel mine is located in the Santa Maria River near Sisquoc and covers 404 acres.

FIGURE 19
FEMA Flood Hazard Map



NCS D Waterline Intertie EIR

Although not actively being mined, several other mining claims are located within the Santa Maria Riverbed in the project area. The Troesh Ready Mix, Inc. and Santa Maria Sand Company and River Sand and Gravel, Inc. mining claims are located in this portion of the Santa Maria Riverbed.

- Nipomo Creek

Nipomo Creek originates in the hills north of Santa Maria and extends nine miles from its headwaters to the Santa Maria River near the southern boundary of the Nipomo Mesa (see Figure 18, FEMA Flood Hazard Map). Nipomo Creek has a watershed area of approximately 2,200 acres. Estimates of the average annual runoff range from 800 to 925 acre-feet. Water quality sampling of Nipomo Creek conducted in 2000 and 2001 indicated a mean total dissolved solids (TDS) concentration of 946 milligrams per liter (mg/L), a mean total suspended solids (TSS) of 26 mg/L and a mean turbidity of 20 Nephelometric Turbidity Units (NTU) (see Table 12, Surface Water Quality - Samples and Regional Board Objectives).

- Unnamed Creek Near Cuyama Lane

A small drainage area totaling 5.8 square miles has been channelized as it crosses Highway 101 in twin four-foot diameter culverts. Flood runoff is conveyed by irregularly shaped cement- and earth- lined channel to Nipomo Creek prior to its discharge into the Santa Maria River. No discharge or water quality data is available for this unnamed drainage.

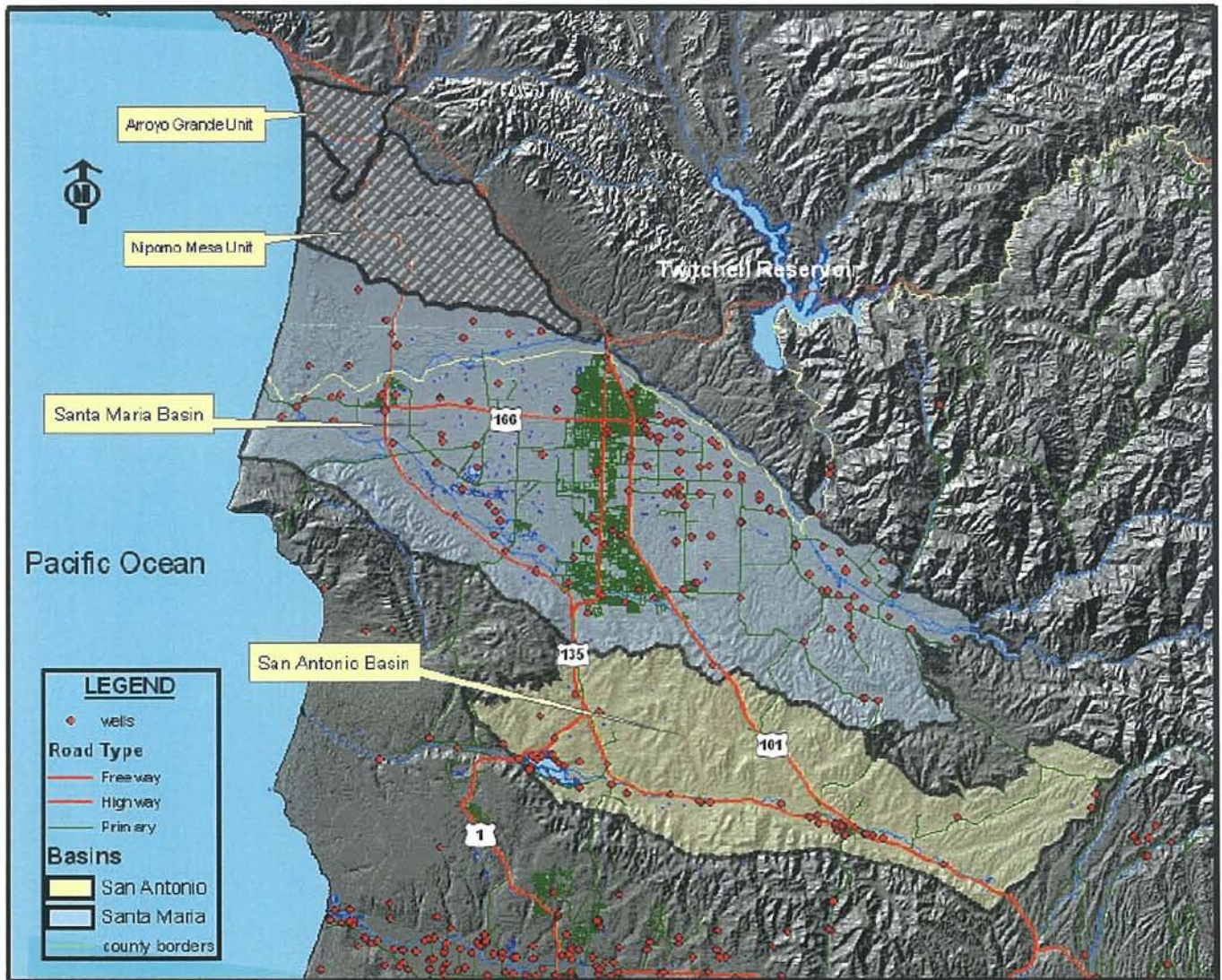
- ***Groundwater***

- Santa Maria Groundwater Basin

The Santa Maria Groundwater Basin (SMGB) is bounded on the north by the San Luis and Santa Lucia Mountain Ranges, to the south by the Casmalia-Solomon Hills, to the east by the San Rafael Mountains and to the west by the Pacific Ocean. The basin is approximately 184,000 acres or 287.5 square miles with a general downslope gradient to the west. The basin is composed of water-bearing unconsolidated dune sand, river channel, and alluvial sediments which overlie non-water bearing consolidated bedrock. The water bearing deposits have an average depth of approximately 1,000 feet with maximum depths reaching 2,800 feet. Figure 20, Santa Maria Groundwater Basin illustrates the location of the groundwater basin.

The sources of recharge to the SMGB include: infiltration of precipitation, inflow from adjacent areas, return flows from irrigation and percolation of water from streams flowing across or in the vicinity of the basin, primarily the Arroyo Grande Creek to the north and the Santa Maria and Sisquoc Rivers in the south. Groundwater discharges from the basin include: use of groundwater by agricultural, municipal and industrial users (oil industry for secondary oil recovery) and groundwater discharge to the ocean to prevent seawater intrusion. Total groundwater storage capacity of the basin is estimated by the

FIGURE 20
Santa Maria Groundwater Basin



State Department of Water Resources at 4,000,000 acre feet. The City's wells have a current normal year active capacity of 24,878 acre-feet per year with an actual production of an average of 661 acre-feet per year between 2000 and 2004.

General groundwater level contours shown in the vicinity of the project area, derived from data collected in the spring of 2004, ranged from 100 feet to 110 feet above mean sea level or at a depth of approximately 100 feet below ground surface.

- The Basin Litigation

The Santa Maria Groundwater Basin has been the subject of ongoing litigation efforts that were initiated in 1997, collectively called the Santa Maria Groundwater Litigation (Santa Maria Valley Water Conservation District vs. City of Santa Maria, et. al.) and referred to herein as the "Basin Litigation." The Santa Maria Valley Water Conservation District was originally concerned that the City of Santa Maria's banking of State Water Project water in the groundwater basin would give the City priority rights to the groundwater that was historically held by the agricultural water users. The lawsuit was broadened to address groundwater management of the entire Santa Maria Groundwater Basin. On August 3, 2005, the Court approved a Settlement Stipulation for the case which divides the Santa Maria Groundwater Basin into three separate management sub-areas, the Northern Cities Management Area, the Nipomo Mesa Management Area and the Santa Maria Valley Management Area (see Figure 20, Santa Maria Groundwater Basin).

The Court found that the Santa Maria Basin as a whole was not in a condition of long-term overdraft. The Court did, however, acknowledge that sub-areas within the basin could be found to be in overdraft as additional data is developed. The court stated that "some wells in the Nipomo Mesa area do show lowering of water levels that may result from a pumping depression or other cause, and there may be some effects in that portion of the basin that are not shared basin-wide, but that is not sufficient in any event to demonstrate basin-wide overdraft."

The Stipulation that was later included in the Judgment recognizes the Memorandum of Understanding (MOU) between the City of Santa Maria and the Nipomo Community Services District for the wholesale purchase and transmission from the City of Santa Maria to the NMMA a certain amount of water each year. The Stipulation provides that "the NCS D in Santa Maria shall employ their best efforts to timely implement the Nipomo Supplemental Water project, subject to their quasi-judicial obligations specified for administrative action and in the California Environmental Quality Act." The Stipulation goes on to provide that "once the Nipomo Supplemental Water is capable of being delivered, that the referenced stipulating parties will purchase a portion of the Nipomo Supplemental Water on a yearly basis." The Settlement Stipulation and subsequent Judgment contains specific provisions with regard to groundwater rights, groundwater monitoring programs and development of plans and programs to respond to potential water shortage conditions.

The January 25, 2008 Judgment states:

“The Groundwater Monitoring Provisions and Management Area Monitoring Programs contained in the Stipulation, including Sections IV(D) (All Management Areas); (B) (Santa Maria Management Area), VI(C) (Nipomo Mesa Management Area), and VII (1) (Northern Cities Management Area), inclusive, are independently adopted by the court as necessary to manage water production in the basin and are incorporated herein and made terms of this Judgment.”

The Stipulation requires that:

“a Monitoring Program shall be established in each of the three Management Areas to collect and analyze data regarding water supply and demand conditions. Data collection and monitoring shall be sufficient to determine land and water uses in the Basin, sources of supply to meet those uses, groundwater conditions including groundwater levels and quality, the amount and disposition of Developed Water supplies and the amount and disposition of any other sources of water supply in the Basin” and that “the NMMA Technical Group shall develop a Monitoring Program for the NMMA (“NMMA Monitoring Program”) which shall be consistent with the Monitoring Program described in the paragraphs above. The NMMA Monitoring Program shall also include the setting of well elevation and water quality criteria that trigger the responses set forth herein.”

The Stipulation establishes the characteristics of the trigger points:

“1. Caution trigger point (Potentially Severe Water Shortage Conditions)
(a) Characteristics. The NMMA Technical Group shall develop criteria for declaring the existence of Potentially Severe Water Shortage Conditions. These criteria shall be approved by the Court and entered as a modification to this Stipulation or the judgment to be entered based upon this Stipulation. Such criteria shall be designed to reflect that water levels beneath the NMMA as a whole are at a point at which voluntary conservation measures, augmentation of supply or other steps may be desirable or necessary to avoid further declines in water levels.
(b) Responses. If the NMMA Technical Group determines that Potentially Severe Water Shortage Conditions have been reached, the Stipulating Parties shall coordinate their efforts to implement voluntary conservation measures, adopt programs to increase the supply of Nipomo Supplemental Water if available, use within the NMMA other sources of Developed Water or New Developed Water, or implement other measures to reduce Groundwater use.

2. Mandatory action trigger point (Severe Water Shortage Conditions)

(a) Characteristics. The NMMA Technical Group shall develop the criteria for declaring that the lowest historic water levels beneath the NMMA as a whole have been reached or that conditions constituting seawater intrusion have been reached. These criteria shall be approved by the Court and entered as a modification to this Stipulation or the judgment to be entered based upon this Stipulation.

(b) Responses. As a first response, subparagraphs (i) through (iii) shall be imposed concurrently upon order of the Court. The Court may also order the Stipulating Parties to implement all or some portion of the additional responses provided in subparagraph (iv) below.”

The NMMA Technical Group has submitted and the Court has approved the Monitoring Program referenced above. Further, the NMMA Technical Group is currently in the process of establishing the trigger points for Potentially Severe and Severe Water Conditions. Within the Settlement Stipulation and subsequent Judgment, the Nipomo Community Services District has agreed to purchase supplemental water from the City of Santa Maria.

The County of San Luis Obispo has received a number of water studies for the portion of the Santa Maria Basin underlying the NMMA. These studies include: 1) the 1996 Woodland Environmental Impact Report; 2) a groundwater study of the Arroyo Grande-Nipomo Mesa area by the Department of Water Resources that began in 1993 and was completed in 2002 (2002 DWR Report) and 3) the March 2004 S.S. Papadopolus & Associates, Environmental and Water-Resource Consultants (SSPA) report titled Nipomo Mesa Groundwater Resource Capacity Study that reviewed the analysis the 2002 DWR Report and other reports and reached various conclusions and recommendations.

The above studies are summarized in the San Luis Obispo County Department of Planning and Buildings Resource Capacity Study Water Supply in the Nipomo Mesa Area dated November 2004 (2004 RCS). Additionally, the 2004 RCS reviews the County’s Resource Management System (RMS) and reaches “conclusions related to the water capacity of the aquifer underlying the NMMA.”

According to the 2004 RCS, the County’s RMS is a mechanism for ensuring a balance between land development and the resources necessary to sustain such development. When a resource deficiency becomes apparent, efforts are made to determine how the resource capacity might be expanded, whether conservation measures could be introduced to extend the availability of unused capacity or whether development should be limited or restricted to areas with remaining resource capacities. The RMS is designed to avoid adverse impacts from depletion of a resource.

The RMS describes a resource in terms of its level of severity based on the rate of depletion and an estimate of the remaining capacity. As to the underlying groundwater basin’s dependable yield and estimated extractions, the 2004 RCS includes tables that compare the estimated dependable yield to the estimated extractions for the base period (2004) as well as for 2010 and 2020.

This comparison of dependable yield and extractions indicates that for the worst case scenario, representing the lowest estimate of dependable yield, dependable yield is exceeded in the base period (2004) for the Nipomo Mesa, the Santa Maria Valley and the Main Basin. For the year 2010, dependable yield is exceeded in the Tri-Cities Mesa, Nipomo Mesa and the Main Basins. Dependable yield is not exceeded in the Santa Maria Valley due to reduced agricultural extractions. For the year 2020, extractions in all sub-areas and the Main Basin exceed the dependable yield. As noted therein:

“For the best case scenario, representing the highest estimate of dependable yield, the estimate for the Nipomo Mesa indicates a deficit in the base period. For the Nipomo Mesa, the deficit increases by 2010. In 2020, the Nipomo Mesa deficit increases again and a deficit is also indicated for the Main Basin.”

“DWR 2002 estimates that in 2020, the Nipomo Mesa will have urban extractions of about 6,600 acre-feet per year (afy). The Master Water Plan Update estimates urban and rural non-agricultural extractions of about 10,970 afy for the Nipomo Mesa at buildout. The comprehensive compilation of extractions, including projected agricultural extractions, indicates total extractions of about 8,600 afy in 2003, increasing to 10,020 afy in 2010, 10,600 afy in 2020 and 13,056 afy at buildout.”

“In order to maintain the sustainability of the groundwater supply, total extractions would have to become stabilized at 6,000 afy. Sustainability can be achieved through some combination of conservation and supply augmentation so that urban extractions do not exceed 3,400 afy or that they increase by no more than the addition of supplemental water to the Nipomo Mesa portion of the basin. To address fully the projected deficits, a combination of conservation and additional supply totaling 4,020 afy should be in place by 2010 and a combination equaling 4,600 afy should be on line by 2020. For example, without any supplemental water, conservation would be the only mechanism for achieving sustainability. In 2010, 7,430 afy is projected to be extracted for urban use to meet demand. However, if per capita water use could be reduced by 35 percent, the population served could increase by over 50 percent with no corresponding increase in extractions. For the projected 2020 demand of 8,700 afy to be reduced to 4,490 afy to maintain sustainability, per capita water use would need to be reduced by about 48 percent. It is theoretically possible that full implementation of an array of conservation programs could produce a savings of up to 40 percent, as estimated by the Pacific Institute. However, it is more likely that some increment of additional supply, in combination with conservation, will be required.”

“The County General Plan’s Framework for Planning contains a discussion of the objectives, procedures and criteria for levels of severity

of the Resource Management System. Regarding water resources, the RMS indicates that Level of Severity III exists when water demand equals the available resource; the amount of consumption has reached the dependable supply of the resource. A Level III may also exist if the time required to correct the problem is longer than the time available before the dependable supply is reached.”

These three levels of severity are summarized below:

Level 1: Projected consumption estimated to exceed dependable supply within 9 years

Level 2: Seven year lead time to develop supplementary water for delivery to users

Level 3: Resource is being used at or beyond its estimated dependable supply or will deplete dependable supply before new supplies can be developed

The Resource Capacity Study confirms that,

“for the Nipomo Mesa area, demand presently equals or exceeds the dependable yield. Therefore, Level of Severity III is recommended for the water resources of the Nipomo Mesa area. For other portions of the basin, demand may equal or exceed the dependable yield by 2010 before a supplemental water supply can reasonably be expected to be secured. Level of Severity II is recommended for the balance of the basin within San Luis Obispo County.”

On May 23, 2006, the County Board of Supervisors adopted Ordinance 3090 that amended Title 22.112.020 to add a new area wide standard as follows:

“General Plan Amendments and Land Divisions.

Applications for general plan amendments and land divisions in the Nipomo Mesa Water Conservation Area shall include documentation regarding estimated existing and proposed non-agricultural water demand for the land division or development that could occur with the General Plan Amendment. If this documentation indicates that the proposed non-agricultural water demand exceeds the demand without the requested amendment or land division, the application shall include provisions for supplemental water as follows:

“(a) General Plan Amendments: Where the estimated non-agricultural water demand resulting from the amendment would exceed the existing non-agricultural demand, the application shall not be approved unless supplemental water to off-set the proposed development’s estimated increase in non-agricultural demand has been specifically allocated for the exclusive use of the development resulting from the general plan amendment, and is available for delivery to the Nipomo Mesa Water Conservation Area.

“(b) Land Divisions: Where the estimated non-agricultural water demand resulting from the land division would exceed the existing non-agricultural demand, a supplemental water development fee shall be paid for each dwelling unit or dwelling unit equivalent, at the time of building permit issuance, in the amount then currently imposed by county ordinance, not to exceed \$13,200. If the development resulting from the land division is subject to payment of supplemental water development fees to an entity other than San Luis Obispo County, the amount of these other fees shall be deducted from the County fee.”

In June, 2007, the County Board of Supervisors certified their Severity Level III finding.

In addition to the Basin Litigation and the water studies received by the County, the District has retained an outside consultant to perform an annual spring and fall well monitoring program. This well monitoring program is coordinated with the County of San Luis Obispo’s well monitoring program for the NMMA and to the extent practical uses the same wells and methodology as the Department of Water Resources in the 2002 DWR Report.

Based on the County water studies and actions, the Basin Litigation, and the District studies, the District has: a) adopted restrictions by Ordinance limiting District water commitments for residential development to 31 acre feet per year; b) hired a water conservation coordinator; c) adopted water capacity charges to be paid by new connections to finance supplemental water projects and d) participated in the NMMA Technical Group.

- Nipomo Mesa Management Area

The Nipomo Mesa Management Area underlies the sand dune deposits that form the Nipomo Mesa. The dune deposits are from 150 to 250 feet thick and overlie the Paso Robles Formation, the primary groundwater aquifer. Since there are no streams on the Nipomo Mesa and the dune deposits are highly porous and permeable, recharge to the aquifer only occurs through precipitation, agricultural and urban return flows and sub-surface inflows from the nearby Santa Maria Groundwater Basin. The precise amount of precipitation recharging the aquifer is difficult to determine. While the dune sands are highly permeable, transpiration from existing eucalyptus groves and lateral flows along clay layers to nearby dune lakes prevent a certain amount of the precipitation from recharging back into the aquifer. To the west, the Nipomo Mesa Management Area is bordered by the Pacific Ocean. As such, the potential for sea water intrusion is a continuing issue.

Based on estimates of deep percolation and subsurface inflow for 1975 through the year 2000, NCS D has projected the safe yield of the Nipomo Mesa Management Area to be between 5,450 acre-feet per year to 6,450 acre-feet per year. DWR estimated the dependable yield of the Nipomo Mesa groundwater basin to be between 4,800 to 6,000 acre-feet per year.

Data from the State Department of Water Resources states that groundwater levels beneath the Nipomo Mesa declined from 1 to 10 feet in the northern part between 1975 through 2000 and as much as 58 feet in the central part between 1968 through 2000. However, their report further states that groundwater levels were stable in the western and southeastern parts of the Mesa, generally following rainfall cycles. According to DWR, groundwater levels beneath the Santa Maria Valley generally declined between 1945 through 1977, recovered by year 1986, then declined until about 1992; and by 1998 groundwater levels beneath the Santa Maria Valley recovered to near historic high levels. DWR describes the formation and growth of a groundwater depression in the south-central part of the Nipomo Mesa, where many NCS D and Golden State Water Company (formerly called Southern California Water Company) wells are located. Data in the 2002 DWR report suggested groundwater overdraft, though the report did not make that finding conclusive.

Because of inconsistencies in the 2002 DWR Report raised during the Santa Maria Groundwater Litigation, the County of San Luis Obispo commissioned its own study of groundwater issues in the Santa Maria Groundwater Basin and specifically the Nipomo Mesa. This study, by S.S. Papadopoulos and Associates, concluded that the 2002 DWR study correctly identified overdraft conditions in the Nipomo Mesa area of the groundwater basin. Based on this and other evidence, the County's Water Resources Advisory Committee concluded that overdraft in the Nipomo Mesa area either exists currently or is imminent. However, as noted above, based on data presented to the Court in the Santa Maria Groundwater Litigation, the Court found that the Santa Maria Basin as a whole was not in a condition of long-term overdraft. The Court did, however, acknowledge that sub-areas within the basin could be found to be in overdraft as additional data is developed.

Within the Court's Settlement Stipulation and Judgment for the Santa Maria Groundwater Litigation, the Nipomo Community Services District has agreed to purchase supplemental water for delivery to the Nipomo Mesa Management Area. A minimum of 2,500 acre-feet per year of supplemental water is to be purchased and transmitted to the Nipomo Mesa by NCS D. The following parties shall purchase the following portions of this Nipomo Supplemental Water: NCS D – 66.68% (1,667 afy); Woodlands Mutual Water Company – 16.66% (417 afy); Golden State Water Company – 8.33% (208 afy) and Rural Water Company – 8.33% (208 afy).

Additional water supplies up to 3,700 acre-feet per year may be purchased by the District resulting in a total of 6,200 acre-feet per year.

- ***City of Santa Maria***

- *Water Supply*

The City of Santa Maria receives water from three sources, City water wells located near the Santa Maria Airport, the State Water Project (SWP) from Northern California by way

of the Coastal Branch Aqueduct and recharge from Twitchell reservoir. The blend or mix ratio of water from these sources varies with the amount of available SWP water and seasonal demand. The City of Santa Maria has a water supply agreement with the Central Coast Water Authority for 17,820 acre-feet of water per year of imported SWP water which is delivered to the City via the Coastal Branch of the California Aqueduct from the Polonio Pass Water Treatment Plant. Pursuant to this agreement, the City has agreed to import and use no less than 10,000 acre-feet per year of available SWP water or the full amount of available SWP water if the amount available is less than 10,000 acre-feet in any given year. The City plans to import its full allotment of 17,280 acre-feet of SWP water. Based on the Department of Water Resources Delivery Reliability Report prepared in 2005, the long-term average SWP deliveries are estimated to be approximately 77 percent of the SWP allocations because of the level of development of the SWP facilities and operational constraints which results in Santa Maria's long-term average SWP deliveries to be 13,706 acre-feet per year (AFY). Groundwater for the City is supplied by nine wells within the Santa Maria Valley Groundwater Basin. As previously noted, the total groundwater to storage capacity of the basin is estimated at approximately 4,000,000 acre-feet. This volume of groundwater in the basin provides, according to the City, a buffer to respond to drought conditions in the basin. The Settlement Stipulation and Judgment for the Santa Maria Groundwater Basin has given the City appropriate rights to pump a total of 12,795 acre-feet per year of groundwater from the Santa Maria Valley Groundwater Basin.

In addition to the natural recharge of the basin, recharge from Twitchell Reservoir represents an additional, man-made source of groundwater recharge which is operated for flood control and water conservation purposes. Releases from Twitchell Reservoir are controlled in order to maximize recharge of the basin through percolation along the Santa Maria River bed. Yield from the Twitchell Reservoir percolation when comingled with the other developed groundwater sources totals 14,300 acre-feet per year. Return flows from the use of State Water Project water is 65 percent of SWP water in the basin or an additional 8,909 acre-feet per year. These sources account for a total of 49,710 acre-feet per year of water introduced into the Santa Maria Groundwater Basin. This water supply is projected to remain relatively constant through the year 2030 in order to meet current and projected water demands over that period.

The City of Santa Maria expects to have an available supply in excess of projected water demands through the year 2030. In 2001, the City of Santa Maria's annual water demand was 12,930 acre-feet while current demands total approximately 15,000 acre-feet per year. The projected annual water demand for the City of Santa Maria in the year 2020 is estimated to be 20,500 acre-feet, 25,000 acre-feet per year by 2025 and 28,867 acre-feet per year by 2030.

- Water Quality

In the City's annual water quality report, the water from the city wells had an average TDS concentration of 764 mg/L and an average nitrate concentration of 25.5 mg/L. Water from the SWP had an average TDS of 280 mg/L and a nitrate concentration of 2.3

mg/L. In 1997, the City of Santa Maria began using chloramine to treat its SWP supply. Chloramine is created when ammonia is added to stabilize free chlorine. Chloramine provides a long-lasting contact time with disinfection to the end of the distribution systems and does not have the chlorine odor or taste. The small amount of residual chloramine, 1.6 to 2.6 mg/L in the City of Santa Maria water supply, is considered safe for drinking by the U.S. Environmental Protection Agency (EPA). Generally, chloramines are ingested at low concentrations and are neutralized before they enter the bloodstream. The drawback to chloramine is that if it directly contacts the blood stream, it becomes unsafe. Kidney dialysis patients, owners of certain fish and reptiles and manufacturers which require ultra-pure water must take precautionary measures to remove the chloramine.

- ***Nipomo Community Services District***

- *Water Supply*

The water supply for the Nipomo Community Services District (NCSD) is currently provided by eight active groundwater wells with an additional five wells on standby or currently out of service. The eight active wells possess a combined capacity of approximately 3,920 gallons per minute which extract groundwater from the Nipomo Mesa Management Area in order to provide water to its customers (see Table 13, Water Well Supply).

**TABLE 13
WATER WELL SUPPLY**

Water Wells	Flowrate Range (gpm)	Average Flow Capacity (gpm)	Cumulative Capacity (gpm)
<i>Active Wells</i>			
Sundale	800-1,200	1,000	1,000
Eureka	820-965	890	1,890
Via Concha	700-800	750	2,640
BL Well No. 4	300-450	375	3,015
Bevington	330-405	370	3,385
Knollwood	210-270	240	3,625
BL Well No. 3	120-210	165	3,790
Olympic	110-150	130	3,920
<i>Standby Wells</i>			
Church*	130-160	145	
Dana No. 1 (Cheyene)	75-125	---	
Dana No. 2 (Mandi)	75-125	---	
Savage	Out of Service	---	
Omiya	Out of Service	---	

* Water Quality less than desirable.

The District distributes the water through two separate operating systems: Blacklake Division (approximately 600 accounts) and the Town Division (approximately 3,400 accounts). Table 14, Nipomo Mesa and NCSD Historic Water Demand indicates the historic extractions from the Nipomo groundwater basin by NCSD.

**TABLE 14
NIPOMO MESA AND NCSD HISTORIC WATER DEMAND (AFY)**

Year	Nipomo Mesa Management Area					NCSD (Town\Black Lake Divisions)	
	Population ¹	Urban ²	Agriculture ³	Other ⁴	Total Demand	Accounts	Production Needed ⁵
1975	5,530	1,500	1,400	950	3,850	-	-
1980	6,490	2,100	1,700	950	4,750	-	-
1985	7,580	3,000	2,000	960	5,960	1,170	817
1990	9,666	3,900	1,900	960	6,760	1,731	1,247
1995	10,400	3,100	1,600	970	5,760	2,652	1,653
2000	No data available after 1995					3,254	1,892
2005						3,672	2,325
¹ Population values from DOF Special Projections for DWR in 1996 ² Multiplying population by per capita water demand ³ Derived from crop acreage multiplied by crop irrigation efficiency ⁴ Conveyances losses, environmental demands, miscellaneous <i>Source: DWR 2002.</i>						⁵ Estimated by multiplying the consumption by 1.1 ⁶ 2005 estimates based upon 2004 data <i>Source: NCSD UWMP 2004.</i>	

Table 15, Recent Groundwater Pumping by NCSD indicates the extent of the most recent five-year groundwater pumping by NCSD.

**TABLE 15
RECENT GROUNDWATER PUMPING BY NCSD (AFY)**

Source	NCSD Division	2000	2001	2002	2003	2004	2005	2006	2007
Nipomo Mesa Management Area of Santa Maria Groundwater Basin	Town	2,002	1,905	2,252	2,105	2,402	2,195	2,364	2,693
Nipomo Mesa Management Area of Santa Maria Groundwater Basin	Blacklake	409	373	447	435	476	411	384	290
<i>Sub-Total, NCSD production from NMMA</i>		2,411	2,278	2,699	2,904	2,878	2,606	2,748	2,983
Nipomo Valley Groundwater	Town	3	7	11	93	30	0	0	0
Total Pumped by NCSD		2,414	2,285	2,710	3,033	2,908	2,606	2,748	2,983

In response to the Stipulated Judgment, NCSD has implemented many policies to protect the Nipomo Mesa Management Area through the development of alternative water sources. NCSD's Annexation Policy requires that "...annexations shall provide a reliable water source, other than water from the Nipomo Hydrologic Sub-Area or pay for the costs of supplemental water for the area of annexation as a condition of District approval." New connections in NCSD's existing service area are required to pay a supplemental water fee. NCSD's future groundwater pumping from the NMMA will be monitored by the NMMA Technical Group, and depending on the condition of the groundwater basin, pumping of NCSD as well as others from the NMMA could be curtailed under Court authority pursuant to the Stipulated Judgment.

The Stipulated Judgment calls for the Nipomo Community Services District to develop 2,500 acre feet per year of supplemental water to reduce demand on groundwater resources. As a result, the District is developing outside sources of supplemental water to help offset existing groundwater use and to meet future needs. Future supplemental water sources could include state water (CCWA) and desalinated water. Table 16, Future Annual Water Supply indicates the assumptions made for transitioning from current water supply conditions using wells, to CCWA/wells and ultimately to desalination/wells. In general, near-term is defined as needing to occur by the year 2010, interim by 2020, and future by 2030.

**TABLE 16
FUTURE ANNUAL WATER SUPPLY**

Source/Condition	Current	Near-Term (2010)	Interim (2020)	Future (2030)
NCSW Wells	3,000	1,000	1,000	1,000
Proposed Project	--	2,500	1,500	0
Desalination	--	0	2,000	5,200
Total	3,000	3,500	4,500	6,200

As indicated above, future annual water supply projections indicate a significant reduction in District well usage from current production levels. It is anticipated that once supplemental water is secured wells will be primarily used to offset seasonal peak demand.

As previously discussed, NCSW’s future groundwater pumping has been directed by the Court (pursuant to the Stipulated Judgment) through the directives of the NMMA Technical Group. It has been assumed that the Court and the Technical Group will manage the Nipomo Mesa Management Area to protect the long-term safe yield of the basin. However, with this management, in times of drought it may be necessary to take groundwater in excess of water annually recharged, known as “mining” the groundwater. This operation could only be allowed to the extent that an adequate sized buffer pool of groundwater storage remained above mean sea level so that sea water intrusion into the groundwater basin is precluded. Mining of groundwater provides some additional flexibility in water management. However, this cannot be considered a consistent supply. Mining of groundwater would need to be followed by additional replenishment in subsequent years.

The Nipomo Mesa Management Area was designated by the San Luis Obispo County Board of Supervisors as a Level of Severity III groundwater condition whereby “discretionary projects should be reviewed to insure inclusion of efficient water use practices for agricultural and domestic uses.”

In May, 2006, as a part of the annual Growth Management Ordinance update, the County Board of Supervisors adopted the following relating to the Nipomo area:

1. Reaffirm limiting new residential development in the Nipomo Mesa Area to an annual 1.8% growth rate;
2. Change the Level of Severity for Water Supply from II to III; however, the Board further determined that a building moratorium would not be necessary based on implementing the following measures, as well as environmental determinations for development proposals on the Nipomo Mesa would continue to be made on a case-by-case basis, where an EIR would not necessarily be required if water supply is identified as the only significant issue. The following water conservation measures were required of all new development (and added as County LUO planning area standards) as of August, 2006:
 - a. Require all sink faucets in bathrooms and kitchens in new residences be equipped with automatic shut off devices. This also applies when a bathroom is added, or when the floor area is increased by twenty per cent (20%). Automatic shut off faucets operate by means of a hands-free electric sensor.
 - b. Require drip-line irrigation for all landscaped areas (except turf areas) installed for new construction. The drip irrigation system must include an automatic rain shut-off device, soil moisture sensors, a separate meter for outdoor water and an operating manual to instruct the building occupant on how to use and maintain the water conservation hardware.
 - c. The maximum amount of turf (lawn) area may not exceed twenty percent of the site's total irrigated landscape area, and, in all cases the site's total irrigated landscape area shall be limited to 1,500 square feet.

Water purveyors in the Nipomo Mesa area were encouraged to strengthen their water conservation programs, increase their use of reclaimed water and continue their efforts to secure supplemental water.

Also, in an effort to monitor the effectiveness of these water conservation measures, each annual update of the Growth Management Ordinance will include data to indicate if the water use rate per dwelling unit is trending downward. If progress toward water conservation targets is not evident, further growth limitations may be recommended.

In August, 2006, the Board also approved new requirements for all land divisions accepted for processing after June 23, 2006 and General Plan Amendments submitted after June 23, 2006 in the Nipomo and the Nipomo Mesa areas. Applications for general plan amendments and land divisions in the Nipomo Mesa Water Conservation Area will include documentation regarding estimated existing and proposed non-agricultural water demand for the land division or development that could occur with the General Plan Amendment. If this documentation indicates that the proposed non-agricultural water demand exceeds the demand without the land division, the project will be subject to contributing towards acquiring supplemental water.

On June 26, 2007, the Board of Supervisors, as a part of the County's Resource Management System annual update, reaffirmed and certified a Level of Severity III for

water supply in the Nipomo area and directed the preparation of additional water conservation ordinance(s). The new ordinance(s) will require the establishment of retrofit program(s) and/or other new water conservation program(s) where new development will be required to participate to offset/reduce new impacts to water consumption from the Nipomo Mesa groundwater basin.

In August, 2008, the County Board of Supervisors amended provisions of Section 8 of the County Code requiring property owners who sell or substantially remodel residential units to install water-conserving fixtures. Additionally, the Board of Supervisors is considering amendments to Sections 19 and 22 of the County Code prescribing water conservation requirements for new construction.

The Urban Water Management Plan 2005 Update contains background on past and current water demands for different sectors of the Nipomo Community Services District. Table 17, Past Water Demand, provides data on water deliveries in the year 2000 and estimates of total water demand in 2005. Land use sectors are single family residential, multi-family residential and all other non-residential uses designated as “commercial.”

**TABLE 17
PAST WATER DEMAND**

LAND USE	2000		2005	
	<i># of Accounts</i>	<i>Deliveries (afy)</i>	<i># of Accounts</i>	<i>Deliveries (afy)</i>
Single Family Residential	2,994	1,729	3,354	2,120
Multi-Family Residential	239	99	235	111
Commercial	71	64	83	94
Total	3,254	1,892	3,672	2,325

Estimates of future demand within the Urban Water Management Plan 2005 Update used various assumptions regarding land uses and growth rates within the Nipomo area. These land use scenarios were selected including: 1) “existing land use descriptions” which assumes that future urban development is consistent with current land use designations within the Land Use and Circulation Element of the County General Plan, South County – Inland; 2) “existing land use designations with pending land use amendments” which assumes future approval and development of pending land use amendments (see Section IV.B. Cumulative Projects) for a history of these proposed land use amendments and 3) the “high density land use” assumption where in addition to the pending land use amendments, remaining agricultural and rural lands are assumed to convert to higher density uses. These growth rates are applied to all three of these land use scenarios: 1) a 2.3% annual population growth which is consistent with the annual growth limitation on residential development contained in the County Growth Management Ordinance; 2) a 3.7% annual growth rate which reflects the historic (1990 to 2003) average annual increase dwelling units in the Nipomo area and 3) a 7.8% growth rate which reflects the average annual population growth in the Nipomo area from 1990 to 2000. Table 18,

NCSD Future Water Demands By Land Use Scenario and Growth Rate provides a summary of estimated future water demands within the NCSD service area and sphere of influence area for each land use scenario and growth rate. As indicated therein, projected water demands for 2025 range from 4,030 acre-feet per year (assuming the existing Land Use designation scenario and the 2.3 percent growth rate) to 5,750 acre-feet per year (assuming the high density land use assumption and the 7.8 percent growth rate).

**TABLE 18
NCSD FUTURE WATER DEMANDS BY LAND USE
SCENARIO AND GROWTH RATE**

Land Use Scenario and Growth Rate	2010	2015	2020	2025	2030
Existing Land Use Designations and 2.3% Growth Rate	3,450	3,920	3,980	4,030	4,080
Existing Land Use Designations and 3.7% Growth Rate	3,650	3,930	4,030	4,130	4,230
Existing Land Use Designations and 7.8% Growth Rate	3,730	4,000	4,210	4,510	4,720
Existing Land Use Designations with Land Use Amendments and 2.3% Growth Rate	3,480	3,960	4,030	4,080	4,150
Existing Land Use Designations with Land Use Amendments and 3.7% Growth Rate	3,680	3,980	4,080	4,200	4,330
Existing Land Use Designations with Land Use Amendments and 7.8% Growth Rate	3,760	4,060	4,300	4,650	4,880
High Density Land Uses and 2.3 % Growth Rate	3,600	4,350	4,720	4,800	4,930
High Density Land Uses and 3.7% Growth Rate	3,800	4,630	4,790	5,000	5,220
High Density Land Uses and 7.8% Growth Rate	4,180	4,740	5,150	5,750	6,200

Future water demands, as noted above, were compared to projected water supplies during a normal water year, a single dry year and multiple dry years. A normal supply year is found sufficient to serve the existing service area through the year 2030, using the lower and middle growth rates. The highest growth rate under each land use scenario exceeds available normal supplies and the high density land use scenario exceeds these available normal supplies the soonest (as early as 2011).

Within a single dry year, no differences in conditions from the normal supply year are anticipated. Additional irrigation demands within this scenario are expected to be compensated by water conservation.

Within multiple dry years, irrigation uses would be limited and additional conservation measures would be required. A management alternative to the imposition of major water demand reductions is the pumping of additional groundwater in excess of the amount of water annually recharged known as groundwater “mining.”

The NCSD Water and Sewer Master Plan Update, dated December, 2007, provides a detailed breakdown of existing water demand and projections of future demand by land use designation based upon the assumption of future development within the District and its adjacent Sphere of Influence areas pursuant to the current County General Plan (i.e. the South County General Plan). Table 19, Existing and Future Annual Water Demand By Land Use indicates existing and future water demand totals from the District Master Plan Update.

**TABLE 19
EXISTING AND FUTURE ANNUAL WATER
DEMAND BY LAND USE**

Land Use Designation	Existing Annual Demand (afy)	Estimated Water Use at Buildout (afy)
RMF – Residential Multi-Family	332	600
RSF – Residential Single Family	867	1632
RS – Residential Suburban	520	1237
RR – Residential Rural	163	688
RL – Rural Lands	0.2	106
AG – Agricultural	0	0
PF – Public Facility	13	25
OP – Office and Professional	5	9
CR – Commercial Retail	134	227
CS – Commercial Services	17	69
OS – Open Space	8	13
REC – Recreation	67	618
Black Lake	461	530
Southland Specific Plan	--	98
Total	2,587	5,852¹

¹ Source: NCSD Water and Sewer Master Plan Update, December, 2007

These demand totals have been rounded to 3,000 afy for existing conditions and 6,200 afy for estimated water use at build-out to account for in-lieu groundwater recharge and an 8% unaccounted system loss factor.

Nipomo Mesa well water meets primary drinking water quality standards. The entire NCSD water supply is classified as hard water with data from four wells indicating TDS concentrations over 500 mg/L. The NCSD uses one active well to extract groundwater from the Nipomo Valley. NCSD tries to limit the use of Nipomo Valley groundwater in order to avoid potential interference with agricultural pumping in the area because this water source contains elevated levels of sulfides and dissolved solids.

NCSD currently uses chlorine to disinfect its water supply. Chlorine disinfection is very efficient and has a low cost. The disadvantage is that chlorine is fast acting and may not reach the ends of the water distribution system. It also may cause an unpleasant taste and if there is organic material in the water, trihalomethanes (THMs) may be formed which are known carcinogens.

2. Thresholds of Significance

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

- Violation of any water quality standards or waste discharge requirements.
- Otherwise substantially degrade water quality.
- Substantial interference with groundwater recharge, such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level.
- Substantial alteration of the existing drainage pattern of the site or area, including through alteration of the course of a stream or river or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site.
- Creation or contribution of runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.
- Exposure of people or structures to a significant risk of loss, injury or death involving flooding as a result of the failure of a levee or dam.
- Substantial depletion of groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g. the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)

3. Project Impacts

Impact C-1. *The proposed project may result in the creation of water quality incompatibility due to the differences in water treatment employed by the City of Santa Maria and the NCSD.*

The importation of water from the City of Santa Maria water system creates water quality compatibility issues. The Nipomo Community Services District currently employs chlorination water treatment in order to provide disinfection within the District's water distribution system and meet State and Federal drinking water standards. The City of Santa Maria utilizes chloramination to boost chloramine levels in their blended groundwater and imported State Water supplies. Engineering analyses provided three potential water treatment alternatives, those being: 1) uncontrolled blending of City of Santa Maria and NCSD water; 2) converting City of Santa Maria water to chlorine treatment or 3) converting the NCSD water supply system to chloramine treatment.

The advantage of uncontrolled blending is that no changes in the NCSD water disinfection system are required. However, uncontrolled blending of City of Santa Maria and NCSD water may result in the loss of chlorine residual in the interface zone where the two sources of water meet in the NCSD water distribution system. As a result, a higher than desired chlorine to ammonia ratio is created. Blending of chloraminated and

chlorinated waters is more effective when done in a storage reservoir, so chemical reactions take place within the tank before entering the distribution system. Blending the groundwater and incoming City water at one location would require the District to pipe all active groundwater wells to the blend location.

Converting City of Santa Maria water to chlorine treatment requires removal of chloramines from the incoming City of Santa Maria water through the addition of free chlorine resulting in the elimination of ammonia and the maximum reduction of chlorine residual at which point additional free chlorine is introduced. No other changes to the NCS D disinfection system are required. However, once the water has a free chlorine residual, disinfection by-products (TTHM or Total Trihalomethane and HAA5 – Five Haloacetic Acids) begin to form. One way of controlling these disinfection by-products is to maintain a proper level of free chlorine throughout the system. This requires reducing the amount of time water is stored in the NCS D water distribution system which requires frequent cycling of storage tanks and flushing at dead-ends in the system. An alternative method to control these disinfection by-products is to pass the water through granular activated carbon filtration.

The third alternative available to the District is to maintain a chloramine residual throughout the NCS D system by converting the free chlorination treatment process at the wells to chloramination. This alternative was selected due to the fewest water quality impacts, reduced trihalomethane generation potential and a reduction in chlorine-related taste and odor, all of which are associated with chloraminated water.

This change in water treatment, from chlorination to chloramination, will require the introduction of ammonia at District wells and increased chemical introduction capacity i.e. larger chlorine solution tanks and chemical feed pumps. Each well will also require online monitoring equipment to provide dosage control and a building to house two chemical solution tanks and four pumps for chemical introduction.

Maintaining a chloramine residual in the NCS D water supply will, according to the project engineer, result in the lowest potential for formation of disinfection by-products (DBP's) and the fewest water quality problems in the water distribution system. In addition, the District will see a reduction in customer complaints related to taste and odor. However, this change in treatment method may affect certain aquatic pet species and reptiles, users of ultra pure water, kidney dialysis patients and chloramine sensitive manufacturing processes. Monitoring and public awareness programs will be required in order to insure that potential water quality incompatibility is a potentially significant but mitigable impact.

Impact C-2. *The proposed project may result in degradation of surface and shallow groundwater quality as a result of underground horizontal directional drilling-related frac-outs.*

Proposed horizontal directional drilling would occur in relatively coarse-grained sediments beneath the Santa Maria River. Although the exact depth of underground horizontal directional drilling beneath the river channel has not yet been determined, the primary concern associated with this method of construction is frac-outs, which are generally defined as an inadvertent return of drilling fluids to the ground surface. Frac-

outs could potentially result in adverse impacts to both surface water quality in the Santa Maria River and the underlying Santa Maria Groundwater Basin.

Frac-outs generally occur in very coarse grained, pebbly to cobbly sands, such as occur within the currently and formerly active channels of the Santa Maria River, to a depth of approximately 130 feet, or in fractured bedrock. Underground horizontal directional drilling in clay, silt, and sand generally does not result in frac-outs, as these types of sediments allow a cohesive mudpack, or filter-pack, to form on the walls of the borehole. The integrity of the mudpack in these types of sediments prevents the drilling mud from permeating the surrounding strata and migrating to the ground surface or groundwater.

The potential for frac-outs also increases with increasing length of the underground borehole. Longer drilling reaches require increased hydraulic pressures for effective drilling at increased distances from the drill rig. Higher pressures also occur with increases in elevation. This increased hydraulic pressure increases the pressure on the surrounding strata, thus increasing the potential for frac-outs. Therefore, the extended length of the proposed bores (up to 2,500 feet) and the generally coarse-grained materials through which drilling would occur would result in potentially significant, but mitigable impacts.

Impact C-3. *The proposed project may result in degradation of surface water quality as a result of potential construction related spills.*

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 or the Santa Maria River. Water quality impacts would be potentially significant, but mitigable.

Impact C-4. *The proposed project may result in a substantial depletion of the Santa Maria Groundwater Basin supplies, such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level.*

In dry years, when the City of Santa Maria receives a less than average allotment of SWP water, the City may increase pumping from the Santa Maria Groundwater Basin to make deliveries to the Nipomo area. Diversion of up to a maximum of 6,200 acre-feet per year of City of Santa Maria water to the NCSD is a potential part of the project.

As previously discussed, the three sources of water to the City of Santa Maria, groundwater from City Wells, the State Water Project (including return flows) and a recharge from Twitchell Reservoir provides a total of 49,710 acre-feet per year of water being introduced into the Santa Maria Groundwater Basin. This water supply is projected to remain relatively constant throughout the year 2030 in order to meet current and projected water demands over that period. Current water demands within the City of Santa Maria are approximately 15,000 acre-feet per year with projected water demands in the year 2020 estimated to be 20,500 acre-feet per year, 25,000 acre-feet per year in the year 2025 and 28,867 acre-feet per year in the year 2030.

The additional demand of 3,000 acre-feet per year (Phases I and II of the proposed waterline intertie project) combined with the current total demand of 15,000 acre-feet per year results in a total demand of 18,000 acre-feet per year or a net surplus of 31,710 acre-feet per year. The additional “worst-case” demand of 6,200 acre-feet per year (completion of Phase III of the proposed project) results in a total demand of 26,700 acre-feet per year by the year 2020, 31,200 acre-feet per year by the year 2025 and 35,067 acre-feet per year by the year 2030. These future water demand levels result in a net surplus of 23,010 acre-feet per year in the year 2020, 18,510 acre-feet per year in the year 2025 and 14,643 acre-feet per year in the year 2030. With the additional water demands associated with the provision of the proposed waterline intertie project, the City of Santa Maria expects to have an available water supply in excess of projected water demands through the year 2030. The impact of the additional water demands associated with the proposed project upon the Santa Maria Groundwater Basin represents a less than significant impact.

However, management of the Santa Maria Valley Groundwater Basin has been evaluated and restructured by the Settlement Stipulation and Judgment with specific provisions related to groundwater rights, groundwater monitoring programs and development of plans and programs to respond to potential water shortage conditions. The City of Santa Maria recently entered an agreement, dated July 7, 2005, with other water purveyors in the Santa Maria Groundwater Basin, which stipulates that a proposed entity will monitor groundwater levels and water quality in the basin, as well as recommend groundwater management actions if needed. Therefore, groundwater extractions would be limited to maintain a safe yield. Any limits set forth by the adjudication could also limit the NCS D deliveries. The City would not be able to provide water to the Nipomo area in excess of limitations of the adjudication. This would act to further protect the Santa Maria Valley Groundwater Basin, resulting in a less than significant impact.

Impact C-5. *The proposed project will result in the replenishment of groundwater supplies within the Nipomo Mesa Management Area.*

The importation of additional water as a result of the NCS D Waterline Intertie will augment current water supplies available to the Nipomo Community Services District as well as supplies available to other local water purveyors by diminishing groundwater pumping and via return flows. It will also provide a greater diversity of water sources to the District thereby increasing the reliability of water supply to the District through the addition of a second water source which reduces the potential need for groundwater “mining.” A portion of these future water supplies (2,500 acre-feet per year) can assist in the balancing of groundwater levels in the Nipomo Mesa Management Area. These additional water supplies will serve existing customers, new development within the current service area of NCS D, the District’s Sphere of Influence area and areas outside both the current service area or Sphere of Influence area of the District or local water purveyors. For these reasons, the proposed project will provide a beneficial impact to groundwater supplies within the Nipomo Mesa Management Area.

4. Cumulative Impacts

Installation of the proposed waterline intertie would provide a source of water that would eliminate a potential constraint upon the future development and population growth within the planning area. Regional drainage patterns will not be altered as a result of the proposed project. No significant net change in downstream flooding conditions is anticipated as a consequence of the proposed project. Although the proposed project in combination with other cumulative projects in the area (see Section IV.B. Cumulative Projects) represents an incremental change in regional drainage patterns, the proposed project within the cumulative development scenario represents an insignificant change in the regional or cumulative drainage and flooding conditions. The proposed project in combination with other cumulative projects in the area represents an incremental addition of graded and impervious surfaces. Increases in surface drainage due to the proposed project, however, are considered to be a minor addition to existing water quality conditions. With proper erosion control and other water quality measures in place, potential project impacts related to downstream sedimentation and the introduction of other pollutants typical of urban use within the cumulative development scenario will not significantly impact cumulative or regional water quality conditions.

Within the cumulative development scenario, cumulative projects in the area (see Section IV.B. Cumulative Projects) would generate additional water demands. These additional demands may impact available water supplies within the entire Santa Maria Groundwater Basin. Withdrawal of groundwater from the Santa Maria Valley Management Area would contribute to these potential cumulative water resources impacts. Management of the Santa Maria Valley Management Area has been evaluated and restructured by the Settlement Stipulation and Judgment with specific provisions related to groundwater rights, groundwater monitoring programs and development of plans and programs to respond to potential water shortage conditions. The City of Santa Maria recently entered an agreement with other water purveyors in the Santa Maria Valley Management Area, which stipulates that a separate entity will monitor groundwater levels and water quality in the basin, as well as recommend groundwater management actions if needed. Therefore, groundwater extractions would be limited to maintain a safe yield. Any limits by the adjudication could also limit the NCS D deliveries. The City would not be able to provide water to the Nipomo area in excess of limitations of this adjudication. This would act to further protect the Santa Maria Valley Management Area, resulting in less than significant cumulative impacts.

Provision of additional water supplies to the Nipomo Mesa Management Area as a result of the proposed project is considered to represent a beneficial cumulative impact to this area.

5. Mitigation Measures

The following measure addresses Impact C-1, potential creation of water quality compatibility issues in District water supplies.

C-1: A public awareness program shall be implemented by the Nipomo Community Services District that alerts District customers to the potential harmful effects of chloramines on certain aquatic species and reptiles and to treatment products that are readily available to treat water for fish tanks. Users of ultra-pure water, kidney dialysis patients and chloramine-sensitive manufacturing processes shall also be notified of the addition of chloramine to the District water supplies.

The following measures address Impact C-2, potential violation of water quality standards as a result of a frac-out during underground horizontal directional drilling operations.

C-2: Construction shall occur during the dry season (i.e., April 15 to November 15) when there is little or no flow in the Santa Maria River in order to reduce potential contact of frac-out fluids with surface waters.

C-3: The Nipomo Community Services District shall complete a preliminary geotechnical investigation along the underground horizontal directional drilling route to further define the stratigraphy and determine the appropriate depth of drilling to avoid frac-outs (i.e., the depth of finest grained sediments) and to determine appropriate methods (i.e., appropriate drilling mud mixtures for specific types of sediments). Drilling pressures shall be closely monitored so that they do not exceed those needed to penetrate the formation.

C-4: The Nipomo Community Services District shall prepare a Frac-out Monitoring, Response and Clean-up Plan that shall be approved by the Regional Water Quality Control Board prior to any underground horizontal directional drilling activities. The Plan shall include the following elements:

- Description of the equipment and procedures for controlling fluid pressures to reduce the risk of hydraulic fracturing.
- Description of monitoring procedures to detect surface exposures of drilling mud in dry areas and in flowing waters or to groundwater.
- Description of equipment and procedures to respond to hydraulic fractures that break out at the ground surface or to the groundwater including overland access routes, containment methods and materials, equipment to be used and availability, environmental protection measures, emergency response plan, and post-containment clean up and restoration.
- Description of equipment, procedures and materials for grouting and abandoning an incomplete pilot hole that cannot be advanced further.
- Evaluation plan and criteria for continuing drilling.

- Agency notification and post-event permitting.

The following measure addresses Impact C-3, potential violation of water quality standards as a result of a spill of petroleum products or other contaminants during construction activities.

C-5: 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 reviewed and approved by the Central Coast RWQCB prior to commencement of any clearing or other construction activities. BMPs should include the following measures:

- Properly maintain (off-site) all construction vehicles and equipment that enter the construction area to prevent leaks of fuel, oil, and other vehicle fluids.
- Conduct equipment and vehicle fueling off-site. If refueling is required at the Project 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 and mortar in contained areas.
- Insure that all equipment washing and major maintenance is prohibited at the project site except in bermed areas.
- Remove all refuse and excess material from the site as soon as possible.
- Channelize storm water to avoid construction equipment and materials, and to divert runoff to existing drainages.

6. Residual Impacts

Mitigation Measure C-1 will reduce potentially significant impacts related to water quality incompatibility due to differences in water treatment employed by the City of Santa Maria and the NCS D to an insignificant level (Class II Impact).

Mitigation Measures C-2, C-3, and C-4 will reduce potentially significant water quality impacts related to underground horizontal directional drilling-induced frac-outs to an insignificant level (Class II Impact). Mitigation Measure C-5 will reduce potentially significant water quality impacts associated with equipment maintenance and fueling spills to an insignificant level (Class II Impact).

Potential impacts related to the groundwater supplies within the Santa Maria Groundwater Basin are considered to be less than significant (Class III Impact).

Potential impacts related to groundwater supplies within the Nipomo Mesa Management Area 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 Waterline Intertie Project” prepared by Padre Associates, Inc. dated June, 2008 and “Addendum to Final Biological Resources Survey Report for the Nipomo Community Services District Waterline Intertie Project” prepared by Padre Associates, Inc. dated October 17, 2008. These analyses are included in their entirety in Technical Appendix F of this document.

1. Existing Conditions

- ***Vegetation***

A total of 102 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 47 (46 percent) native taxa and 55 (54 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.

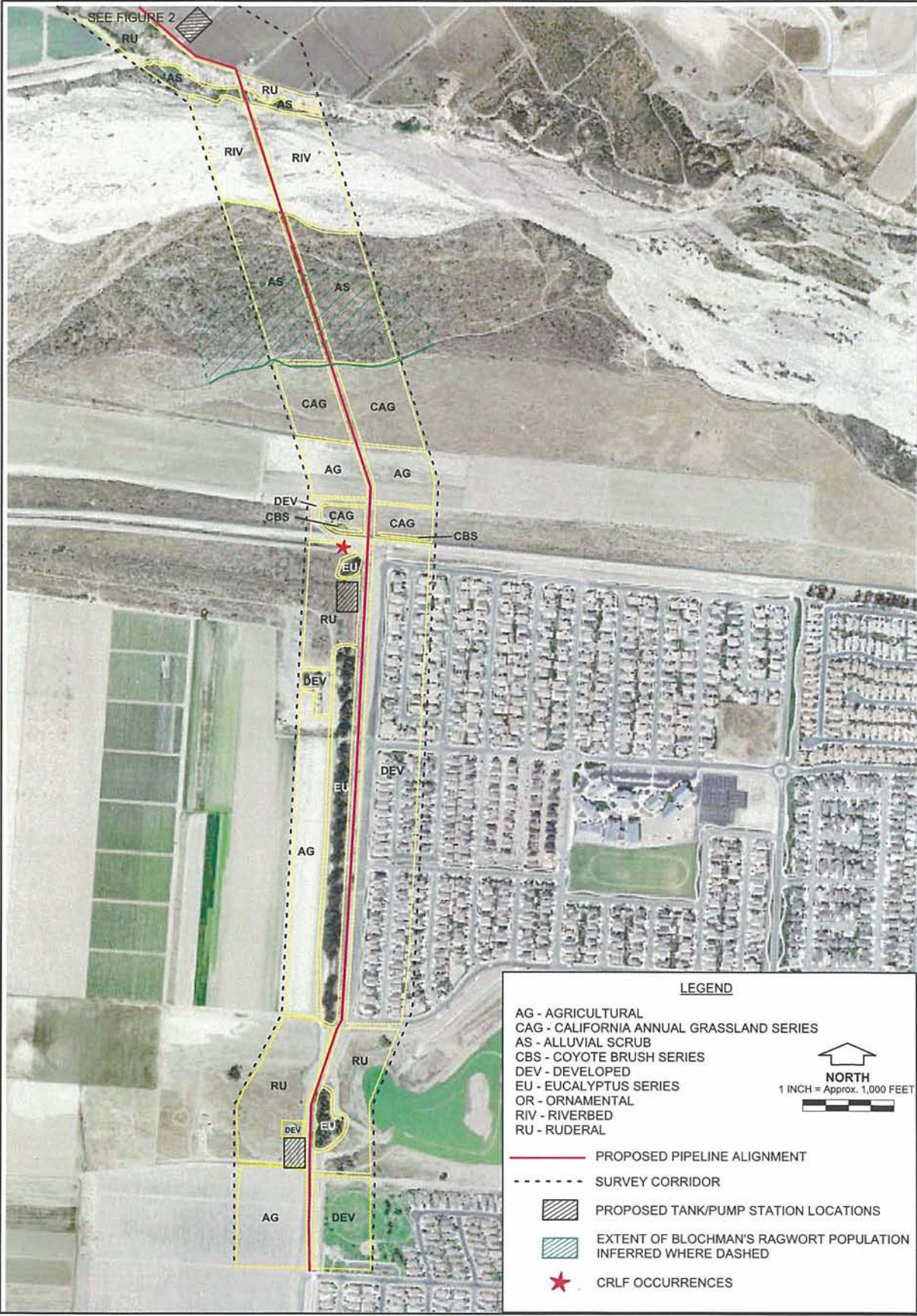
The project area encompasses nine generalized habitat classifications: Coyote Brush Series, Alluvial Scrub, Riverbed, California Annual Grassland Series, Eucalyptus Series, Agricultural, Ornamental, Developed and Ruderal (disturbed) habitats. The general location of these communities within the project area is depicted in Figure 21, Plant Community Map – South, Figure 22, Plant Community Map – Central and Figure 23, Plant Community Map – North. Provided below is a description of each of the plant communities occurring within the project area:

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 were intermingled within the coyote brush habitat. This community is present along the Santa Maria River levee and in scattered locations on the Nipomo Mesa.

Alluvial Scrub. The alluvial scrub community is dominated by narrow-leaved willow, mule fat and mock heather. Sub-dominant species include California buckwheat and black sage. Deerweed, Blochman’s ragwort, and buck brush also occurred frequently in association within this community. This habitat occurs adjacent to the active river channel.

Riverbed. The active channel/riverbed of the Santa Maria River is comprised of a series of alluvial channels and associated sandbars. Vegetation within the riverbed consists of scattered occurrences of narrow-leaved willow, coyote brush and mock heather.

FIGURE 21
Plant Community Map - South



NCSD Waterline Intertie

FIGURE 22
Plant Community Map - Central

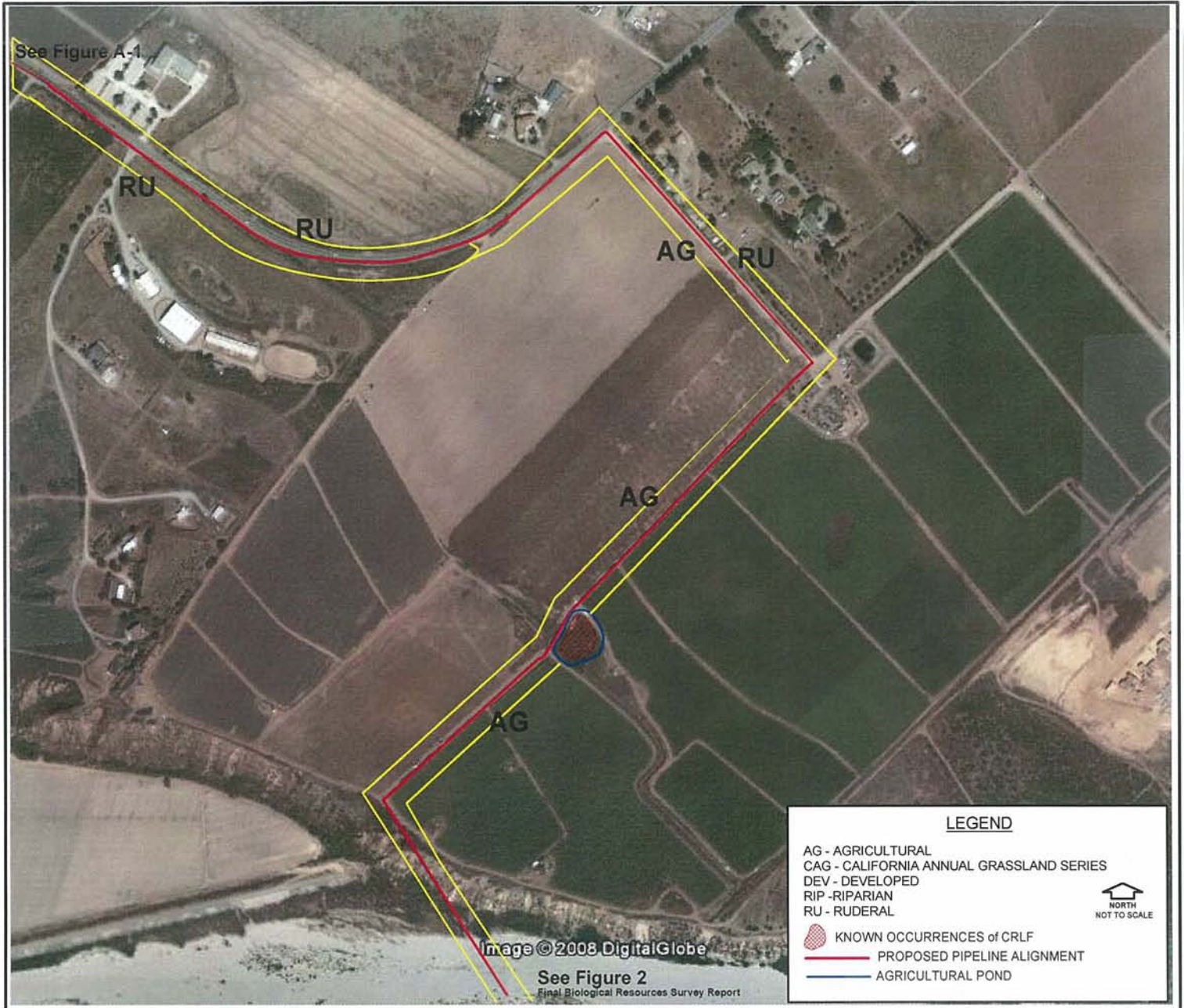


FIGURE 23
Plant Community Map - North



California Annual Grassland Series. Annual grassland habitat exists along the Santa Maria River levee, along Orchard Avenue near Southland Street and within the river basin adjacent to and intergrading with the alluvial scrub habitat described above. These areas show evidence of previous disturbance from agriculture, grazing, and maintenance activities (i.e., mowing). Consequently, the vegetation is comprised of non-native annual grasses and weedy plant species typical of disturbed grassland areas. Dominant plant species observed within the annual grassland habitat include rip-gut brome, red brome, slender wild oat, hare barley, horehound, black mustard and telegraph weed.

Eucalyptus Series. 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. In areas where eucalyptus form dense stands, growth of native plants within the immediate vicinity is inhibited due to allelopathic compounds of the bark and leaf litter as is the case within these areas located along Orchard Road, Southland Street, South Frontage Road and Darby Lane.

Agricultural. Agricultural areas within the project area are present along Blosser Road, Orchard Avenue and adjacent to the southern Santa Maria River levee. All of the agricultural areas within the project area contained strawberry crops with the exception of one fallow area adjacent to the levee. In addition, several 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.

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., Blosser Road, Orchard Avenue, Southland Street, Darby Lane, South Oakglen Avenue, etc.) and along the Nipomo Mesa bluffs adjacent to agricultural areas. This cover type consists almost entirely of disturbance-adapted weedy species including cheeseweed, radish, redstem filaree, castor bean, black mustard, English plantain and bur-clover. In addition, the artificial drainage feature located adjacent to Blosser Road collects agricultural surface run-off throughout the year and is maintained (i.e. mowed) by the Santa Barbara County Flood Control District (SBCFD). The resulting wetland habitat contains many of the ruderal species listed above as well as curly dock, tall flatsedge and water cress.

Ornamental. A variety of trees and shrubs have been planted along Blosser Road and Orchard Road for landscaping purposes. Ornamental plantings observed within the project area include: redwood, myoporum, coast live oak, Monterey cypress, Monterey pine and juniper. In addition, escaped landscape species such as sweet alyssum were also observed along the Blosser Road drainage structure.

Developed. Several large developed areas, primarily residential, exist within the project area along Blosser Road, Orchard Avenue, Southland Street, South Frontage Road,

Darby Lane and South Oakglen Avenue. These areas contain many of the ornamental/landscape species and ruderal species listed above.

- *Wildlife*

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

- *Invertebrates*

Two macro-invertebrates, the European garden snail and shoulder-band snail, were observed within the project area during field surveys. In addition, eucalyptus windrows also provide potential overwintering habitat for monarch butterfly; however, no monarch butterflies were observed during field surveys.

- *Fish*

During the time of the field surveys (February 2008), the Santa Maria River contained low water flows (i.e., flows a few cubic feet per second). No fish species were observed during the field surveys. In addition, no fish species were observed within the Blosser Road drainage structure or the agricultural run-off ponds located on the Nipomo Mesa.

However, during high flow periods the Santa Maria River has the potential to support a variety of aquatic species. In addition, the Santa Maria River is known to contain arroyo chub and is the northern most extent of the Southern California ESU (Evolutionary Significant Unit) Steelhead trout. The Southern California Steelhead is the primary fish species of concern within the Santa Maria River watershed and is Federally listed as threatened. In-stream habitat within the project area has the potential to support Southern California Steelhead and Arroyo chub during high flow periods. However, no Steelhead trout or Arroyo chub were observed during the field surveys.

- *Amphibians and Reptiles*

Amphibians observed during the field surveys included the Pacific chorus frog and the Federally threatened California red-legged frog (CRLF). Specifically, one adult CRLF and one egg mass were identified within an agricultural run-off pond along Orchard Avenue during the February 29, 2008 field survey. In addition, one adult CRLF was observed within the Blosser Road drainage structure during a CRLF survey conducted in February 2007. In addition, adult CRLF were identified within the agricultural pond on the Nipomo Mesa near the proposed horizontal directional drilling laydown area and in the agricultural pond adjacent to the levee, just west of Blosser Road during the CRLF surveys conducted in 2007. The agricultural ponds and the Blosser Road drainage structure also provide suitable conditions for other semi-aquatic species such as the

Southwestern pond turtle. In addition, ephemeral pools associated with the Santa Maria River channel may provide suitable habitat for the Western spadefoot.

Coyote brush and alluvial scrub habitat provide shade and shelter for several reptilian species. Common reptiles expected to occur within this habitat include Western fence lizard, Western rattlesnake, Common kingsnake, and Coast horned lizard, a California species of special concern. No reptiles were observed during the field surveys.

- Birds

Coyote brush and alluvial scrub habitat 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 the coyote brush and alluvial scrub habitat include, but are not limited to, Scrub jay, Golden crowned sparrow, California towhee, Song sparrow, Bushtit, Bewick's wren, White-crowned sparrow, White-tailed kite and Loggerhead shrike.

Eucalyptus windrows provide a substantial amount of foraging and roosting habitat for various bird species. Birds observed or expected to occur within this habitat include Yellow-rumped warbler, House finch, Great horned owl, Red-shoulder hawk, Barn owl, Red-tailed hawk, American crow and Turkey vulture. Birds observed within the annual grassland habitat include Red-tailed hawk, Northern harrier and Western meadowlark.

Birds occurring within ornamental, agricultural and ruderal/disturbed areas included Brewer's blackbird, European starling, Anna's hummingbird, Northern mockingbird, American robin, Say's phoebe and Horned lark. In addition, several waterfowl species including Mallard, Ruddy duck and American coot were observed within the detention basin along Blosser Road and have the potential to occur within the agricultural stock ponds on the Nipomo Mesa.

No active bird nests were identified within the project area during the field surveys; however, the project area may provide suitable nesting habitat for a variety of migratory birds.

- Mammals

Mammalian species observed and/or expected to occur within the project area include Desert cottontail, Black-tailed jackrabbit, Long-tailed weasel, Grey fox, Bobcat, Coyote, Black-tailed deer, California ground squirrel, Western gray squirrel and other small rodents. In addition, a potential American badger den was identified near the intersection of Orchard Avenue and Joshua Street.

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 F.

- *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 CNDDDB 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 included in Technical Appendix F.

Based upon the botanical surveys conducted in 2008, 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 on this analysis, it was determined that eight special-status plant species have the potential, however low, to occur within the project area: Straight-awned spineflower, La Graciosa thistle, Nipomo Mesa lupine, Kellogg’s horkelia, Crisp monardella, San Luis Obispo monardella, Blochman’s ragwort, Nuttall’s milk-vetch and San Bernardino aster. The following discussion presents the ecological and range information for these species:

Straight-awned spineflower. An annual herb that blooms from May to July and is typically found in chaparral cismontane woodland and coastal scrub habitats. Straight-awned spineflower is a CNPS List 1B.3 species. It is endemic to Monterey, San Luis Obispo and Santa Barbara Counties and is known from approximately twenty occurrences; eleven of these occurrences in San Luis Obispo. Although coastal scrub habitat occurs within the project area, no Straight-awned spineflower was observed during the field surveys.

La Graciosa thistle. La Graciosa thistle is a Federally endangered, State threatened species and a CNPS List 1B.1 species. This species is a perennial herb that blooms May through August and occurs in coastal dunes, brackish marshes or riparian scrub often in association with lake edges, riverbanks and other wetlands. This species is endemic to Monterey, San Luis Obispo, Santa Barbara and Ventura Counties and is known from

approximately twenty occurrences. Although riparian scrub habitat occurs within the project area, no La Graciosa thistle was observed during field surveys.

Nipomo Mesa lupine. Nipomo Mesa lupine is an annual herb that typically blooms from December through May and occurs in coastal dune habitat. Nipomo Mesa lupine is a Federally endangered, State threatened species and a CNPS List 1B.1 species. This species is known from only one extended occurrence of five populations on the Nipomo Mesa in San Luis Obispo County. Nipomo Mesa lupine was not observed during field surveys and therefore, is not expected to occur within the project area.

Kellogg's horkelia. Kellogg's horkelia is perennial herb that occurs in closed-cone coniferous forest, chaparral, coastal dunes and coastal scrub habitats. It is a CNPS List 1B.1 Species which is typically associated with sandy or gravelly soils and generally blooms from April to September. This species is known to occur in central California from the San Francisco Bay area south to Santa Barbara County. Although coastal scrub habitat occurs within the project area, no Kellogg's horkelia was observed during field surveys.

Crisp monardella. Crisp monardella is a rhizomatous herb that typically blooms from April to August. This species generally occurs in coastal dune and coastal scrub habitat and is a CNPS List 1B.2 species that occurs in San Luis Obispo and Santa Barbara Counties. Crisp monardella was not observed during field surveys and therefore, is not expected to occur within the project area.

San Luis Obispo monardella. San Luis Obispo monardella is a rhizomatous herb that inhabits coastal dunes and coastal scrub habitat associated with sandy soils. It generally blooms from May to September and is a CNPS List 1B.2 species that occurs in San Luis Obispo and Santa Barbara Counties. San Luis Obispo monardella was not observed during field surveys and therefore, is not expected to occur within the project area.

Blochman's ragwort. Blochman's ragwort is a CNPS List 4.2 species that typically occurs in coastal dunes and coastal floodplains. Blochman's ragwort is a subshrub. It is a perennial herb that blooms from May to October and is known to occur in San Luis Obispo and Santa Barbara Counties. A scattered population of this species (less than 100) was identified within the alluvial scrub habitat of the project area located south of the Santa Maria River channel (see Figure 21, Plant Community Map - South).

Nuttall's milk-vetch. Nuttall's milkvetch is a perennial herb that occurs in coastal dune and coastal bluff scrub habitat. It is a CNPS List 4.2 which is considered to have limited distribution within central California. Nuttall's milk-vetch was documented near Blosser Road during spring botanical surveys conducted in 2005; however, during focused botanical surveys conducted in May 2008 only another variety of milk-vetch was observed within the project area. Although suitable scrub habitat occurs within the project area, no Nuttall's milk-vetch was observed during the field surveys.

San Bernardino aster. San Bernardino aster is a rhizomatous herb that typically occurs in cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, and valley and foothill grassland habitat. It generally blooms from July to November and is known to occur in Southern California with possible hybrids having been collected in San Luis Obispo, Santa Barbara and Ventura Counties. Although coastal scrub habitat occurs within the project area, no San Bernardino aster was observed during the field surveys.

Only one special-status plant species (Blochman's ragwort) was observed within the project area.

- Special-Status Wildlife Species

Based on the literature search, nine-quadrangle CNDDDB query and field surveys, 36 special-status wildlife species are known to occur within the region. A complete list of these species is included in Technical Appendix F.

Based upon applicable ecological and range information for those special-status wildlife species documented within the region, it was determined that 21 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 east of Blosser Road. Preisker Park is an autumnal site, with a maximum monarch count of 27 in 1999. Several eucalyptus windrows occur within the project area that may provide suitable overwintering habitat. However, no monarch butterflies were observed within the project area and 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 alignments, but may utilize portions of the project area for temporary roosting.

- Fish

Arroyo chub. The Arroyo chub is a California species of special concern that occurs in slow-moving or backwater sections of warm to cold streams with mud or sand substrates. Arroyo chubs are native to the Los Angeles, San Gabriel, San Luis Rey, Santa Ana and Santa Margarita Rivers and to Malibu and San Juan Creeks. They have been successfully

introduced into the Santa Ynez, Santa Maria, Cuyama, and Mojave River systems and other smaller coastal streams (e.g., Arroyo Grande Creek). The northernmost introduced population is in Chorro Creek, San Luis Obispo County. Arroyo chubs are scarce within their native range because the low-gradient streams in which they are the most successful have largely disappeared. The nearest known documented occurrences of Arroyo chub are Cuyama River (tributary to the Santa Maria River), 9.5 miles to the east and the Santa Maria estuary, approximately 10 miles west of the proposed project. This species is known to occur in the Santa Maria River and may occur within the project area during periods of surface flow.

Southern California ESU Steelhead. The Southern California ESU was listed as endangered by the NOAA Fisheries in 1997. Southern California Steelhead is also a California species of special concern. Steelhead have been divided into 15 evolutionary significant units (ESU's) based on similarity in life history, location, and genetic markers. The Southern California ESU includes all naturally spawned populations of steelhead and their progeny in streams from the Santa Maria River to the U.S. – Mexico border. Historical information indicates that the Santa Maria River supported a steelhead run in the early 1900s. Currently, there is no evidence suggesting the presence of this species in the Santa Maria River for several decades. However, it is assumed this species has the potential to occur in the project area within the Santa Maria River.

- 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 night-time 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 has the potential to occur within the coyote brush and alluvial scrub habitats within the project area.

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, grassland and open forest communities. However, it requires upland sites for nesting and over-wintering. Southwestern pond turtle has the potential to occur within the agricultural run-off ponds and the Blosser Road drainage structure 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 within the Santa Maria River floodplain, in the estuary lagoon and in marsh ponds along the Santa Maria River and, as such, has the potential to occur in the project area.

- *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 on the Los Padres National Forest, and 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 from early April to early July 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 site does not exclude the possibility that the site 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 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 approximately 500 feet northeast of the proposed horizontal directional drilling laydown area, three egg masses were observed within the agricultural pond along the Santa Maria River levee approximately 0.75-mile west of Blosser Road and one adult CRLF was observed within the Blosser Road drainage. In addition, one adult CRLF and one egg mass were observed during a subsequent 2008 survey within an agricultural pond along Orchard Avenue. (see Figure 21, Plant Community Map – South and Figure 22, Plant Community Map - Central).

California tiger salamander. In 2004, the USFWS down-listed the Santa Barbara County population of the California tiger salamander (CTS) to threatened status, but included the entire species throughout its range. In addition to this species' Federal status, CTS are also a California species of special concern.

Adult and juvenile CTS emerge from underground burrows at night between late autumn through early spring and travel to breeding pools. Most breeding pools are ephemeral (vernal). Use of permanent aquatic sites as breeding habitat is unlikely unless these features lack predators such as introduced fish and bullfrogs. Man-made ponds can function as salamander breeding habitat as long as these ponds are kept free of fish and bullfrogs and possess suitable seasonal hydrologic characteristics. Adult salamanders remain at the breeding site for only a few days after breeding, then move back to their terrestrial retreats (small mammal burrows) well away from the pool.

The nearest known documented occurrence of this species was located within the vicinity of the Santa Maria Airport. Due to the lack of suitable habitat (vernal pools) in the project vicinity, California tiger salamander is not expected to occur within the project area.

Western spadefoot. Western spadefoot toad is a California species of special concern. Spadefoot toad emerge from underground burrows during the spring and breed in temporary pools. Western spadefoot toad occurs primarily in grassland habitats, although it is occasionally found in valley or foothill hardwood woodlands. The nearest known documented occurrence of this species was located within a mile of the proposed pipeline alignment near Blosser Road. Western spadefoot has the potential to occur, however low, within the ephemeral pools of the Santa Maria River in the project area.

- 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 and at scattered locations along the coast. 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 habitat available, 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 within riparian habitat just east of the proposed project area. However, the riparian habitat along the Santa Maria River channel is sparse and suitable nesting habitat is not present within the project area. Nevertheless, this species 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 Santa Maria River or Nipomo Creek riparian habitats. Riparian habitat along the Santa Maria River channel is considered marginal habitat due to its limited width, adjacent development and fragmented nature. 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, this species has the potential to utilize the project area for nesting and foraging purposes.

Horned lark. Horned lark is on the California special concern species watch list and commonly occurs in grasslands and other open habitats with low, sparse vegetation. Horned lark was observed within the project area and 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.

Yellow warbler. The Yellow warbler is a California species of special concern during nesting periods. Within San Luis Obispo County, this species is a fairly common summer transient utilizing deciduous riparian habitats. This species typically nests within riparian woodland habitat of the coastal foothills from mid-April to early August. The nearest known occurrence of this species was located at Hanson Aggregates, near the Sisquoc River. Riparian habitat along the Santa Maria River channel is considered marginal habitat due to its limited width, adjacent development and fragmented nature. However, it is possible that yellow warbler occasionally forages within or adjacent to the project area.

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 February 29, 2008 field survey. Suitable nesting habitat for White-tailed kite may occur along the Santa Maria River and surrounding habitats. Therefore, this species has the potential to nest and 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 at the agricultural pond on the Nipomo Mesa located approximately 500 feet northeast of the proposed horizontal directional drilling laydown area during the 2008 field survey (see Figure 22, Plant Community Map – Central). Because this species was observed within the project area and the presence of suitable breeding habitat (i.e., freshwater pond with bullrush), tricolored blackbird has the potential to utilize the project area for the purposes of nesting and foraging.

- *Mammals*

Pallid bat. The pallid bat is a California species of special concern. The pallid bat has a range that extends from southern British Columbia to central Mexico and east to Oklahoma and northern Texas. Suitable roosting habitat includes crevices in rocky outcroppings, caves, mines, hollow trees and buildings. The nearest known documented occurrence of this species is a day roost consisting of crevices beneath the Garey Bridge, approximately ten miles east-southeast of the project area. This species generally forages no more than three miles from its day roost; therefore, it is not expected to occur within the project area.

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 friable soils and open, uncultivated ground. A potential burrow was identified during the 2008 surveys within coyote brush near the intersection of Orchard Avenue and Joshua Street. Although, no American badgers were observed during the field surveys, this species has the potential to occur within the project area.

- *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 CNDDDB 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 proposed project area. However, based on past and recent field surveys, these habitats do not exist within the project area and therefore will not be impacted as a result of the proposed project.

- *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 unit 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. Because the project area is outside of the proposed critical habitat for the Santa Barbara County population, this regulated habitat will not be impacted as a result of the proposed project.

Santa Maria River and its tributaries are known steelhead habitat and are considered an integral component of the Southern California ESU Steelhead. In 2005, the NOAA Fisheries designated critical habitat for 19 salmon and steelhead populations on the west coast, including those contained in the South central coast steelhead ESU. This included designation of the Santa Maria River Hydrologic Unit 3312 which includes the Santa Maria and Siquoc River systems and associated tributaries, excluding the Cuyama River. Because the proposed project occurs within the limits of existing critical habitat for the Southern California ESU Steelhead, this regulated habitat has the potential to be impacted as a result of project implementation.

- ***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 in discussions of 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 as fluctuating dispersal pressures dictate.

The Santa Maria River and associated tributaries including Nipomo Creek are migration corridors for wildlife species moving within the region and coastal habitat areas to the west. These migration corridors are especially critical through areas where human activities (i.e., urban development, agriculture, etc.) would otherwise prohibit or impair the movement of species between habitat areas.

- ***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 as a management tool to call attention to declining populations and focus efforts on decreasing threats to long-term viability.

CDFG administers other State laws designed to protect wildlife and plants, including those laws stated within Fish and Game Code Section 3511, 3503, 3503.5 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 of the project area are afforded protection by the Counties of Santa Barbara and San Luis Obispo under goals and policies contained in the County of Santa Barbara General Plan, the County of San Luis Obispo General Plan, the South County Area Plan (2002) and the City of Santa Maria General Plan. 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 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 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 (OHWM), which is defined as the: “...line on the shore established by the fluctuations of water and indicated by physical characteristics such as 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, sandbar, 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, 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, the Santa Barbara County General Plan, and the City of Santa Maria identify 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, regulation, or by the California Coastal Commission, CDFG, 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, marsh, vernal pool, coastal, 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 native wildlife nursery site;

- Conflicts with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or 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;
- 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, water storage tank and pump station locations may adversely affect non-listed wildlife occupying adjacent habitats within the Santa Maria River wildlife migration corridors.*

Proposed pipeline alignment, water storage tank and pump station locations would be disturbed by construction-related activities. In addition, the proposed horizontal directional drilling (HDD) operations would result in short-term construction activity along the southern perimeter of the Santa Maria River and on the Nipomo Mesa.

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 Santa Maria River and adjacent habitat areas. However, these adverse effects would only affect a small portion of available habitat for a relatively short period. Periods of intense activity would likely be limited to several months at any one project location. Due to the relatively small area of habitat to be affected by project operations and the short duration of overall impacts, no significant impacts upon non-listed wildlife or their foraging or breeding habitats is expected due to project construction activities. 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.).

Conversely, drilling activities adjacent to the Santa Maria River may reduce the quality of this established wildlife movement corridor by introducing another source of disturbance (noise, dust, human presence, etc.). However, the proposed project has been designed to avoid and/or minimize direct impacts to the Santa Maria River channel and surrounding alluvial scrub habitat areas for only a short period. Due to the small area affected,

location of the horizontal directional drilling operations and laydown areas outside the river channel and the short duration of disturbance, impacts to this wildlife movement corridor are considered to be less than significant.

Impact D-2: *Construction activities within the proposed pipeline alignments, storage tank and pump station locations could adversely affect nesting activities of protected migratory birds and raptors.*

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 (i.e., eucalyptus woodland) and the areas adjacent to the Santa Maria River and Nipomo Mesa affected by the proposed horizontal directional drilling operations. 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). Short-term impacts to these species may occur from vegetation clearing, debris removal, dust deposition and noise disturbance associated with project-related trenching and general construction activities and traffic. Specifically, vegetation removal and grading activities may significantly impact nests, nestlings, or hatchlings of these protected bird species. Scheduling pipeline, storage tank and pump station construction outside the nesting season or conducting pre-construction surveys would result in potentially significant, but mitigable impacts.

Impact D-3: *Construction activities could adversely affect special-status terrestrial and avian species potentially occurring in the project area.*

The proposed project includes the installation of approximately 5,000 linear feet of 18-inch pipeline along the east side of Blosser Road using conventional open trench construction. At Atlantic Place, approximately 300 linear feet of 24-inch carrier pipe will be installed inside a 36-inch steel casing which will be placed under the Santa Maria levee at this location using perpendicular jack-and-bore construction methods. An existing access road will be utilized to allow equipment and construction crew access to the north side of the levee at Blosser Road. The levee access road and surrounding areas have been historically disturbed from past and ongoing agricultural activities in the area which, however, still contains fragmented annual grassland and coyote brush scrub habitat areas.

Once the pipeline is constructed beneath the levee, approximately 900 linear feet of 24-inch pipeline will be installed in a north and northwest direction through open trench construction leading to the horizontal directional drilling site along the southern boundary of the Santa Maria River channel. The area proposed for disturbance consists primarily of annual grassland and active agricultural fields. The proposed drilling will begin with the drilling of a pilot hole and the insertion of a 36-inch steel casing at one end of the underground pipeline route. Pipes will be laid out and assembled within a pre-designated

laydown area at one end of the pipeline segment. At the surface location on the Nipomo Mesa, approximately 2,500 linear feet of 24-inch waterline will be installed using open trench construction to the proposed Pump Station No. 2 and proposed reservoir site adjacent to Joshua Street. Lastly, the proposed project will require provision of other infrastructure facilities including a water storage tank, pump stations and pressure reducing valves as well as metering, electrical and communications equipment.

The proposed short-term construction activities discussed above 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 along the southern boundary of the Santa Maria River during the construction phase of the project. Construction activities in this area would include both the proposed jack-and-bore and proposed horizontal directional drilling laydown area operations along the southern boundary of the Santa Maria River. This species prefers open sandy areas, washes and floodplains with sufficient red-ant populations. Suitable habitat for this species is predominately found along the sandy open areas along the southern boundary of the Santa Maria River channel. It is likely that historical disturbance, including agriculture and encroachment of residential development, has resulted in a decreased population of Coast horned lizard within the project area. As such, the number of individuals affected is expected to be very small. However, increased mortality of this species would be expected to affect the overall distribution and/or survival of this species in the region. Therefore, impacts to coast horned lizard are considered to be potentially significant but mitigable.

Special-status bird species such as the Sharp-shinned hawk that 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 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 temporary proposed horizontal directional drilling laydown area along the south side of the Santa Maria River. The Northern harrier could also be affected during the breeding season by the short-term disturbance of the open grassland areas along the south side of the river channel. 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 Blosser Avenue. Lastly, the special-status Tricolored blackbird was observed within the agricultural stock pond located directly northeast of the pipeline alignment on the Nipomo Mesa during the 2008 spring survey (see Figure 22, Plant Community Map – Central) and could be affected during its breeding period by pipeline trenching and proposed horizontal directional drilling operations at this location. 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. Surveying of potential nesting habitat of all migratory and special-status bird species in the project area prior to construction will result in potentially significant but mitigable impacts.

Potential impacts to resident special-status animal species, California horned lizard, Loggerhead shrike (nesting), California horned lark (nesting), Northern harrier (nesting), Cooper's hawk (nesting), White-tailed kite (nesting), and Tricolored blackbird (nesting) are considered to be significant but mitigable with implementation of measures to avoid or minimize impacts to these special-status species. Impacts to migratory special-status species (Sharp-shinned hawk) that have the potential to periodically frequent the project area for the purpose of foraging are considered short-term and less than significant.

Impact D-4: *Pipeline construction activities could adversely affect aquatic and semi-aquatic special-status species within the Santa Maria River, Blosser Road drainage canal, and agricultural stock ponds located along the Nipomo Mesa.*

Special-status fish species associated with the Santa Maria River (Arroyo chub and Southern steelhead) have the potential to occur within the river channel during high flow periods (between November and March). Further, the Blosser Road drainage canal and agricultural stock pond located along the Nipomo Mesa provide habitat for the Federally-listed California red-legged frog (CRLF). Other semi-aquatic, special-status species such as the Southwestern pond turtle and the Two-striped garter snake also have the potential to occur in temporarily ponded areas of the Santa Maria River during wet periods, the Nipomo Creek confluence with the Santa Maria River and/or within the agricultural stock pond(s) along the Nipomo Mesa. The proposed pipeline routes from the northern pipe laydown area to the proposed Pump Station No. 2/Water Storage Tank site may impact California red-legged frog due to the close proximity of proposed construction activities to the agricultural pond on the Nipomo Mesa with known occurrences of CRLF. Trenching activities associated with the proposed pipeline installation have the potential to reach shallow groundwater, thereby forming temporary aquatic habitat suitable for dispersing juvenile and adult CRLF. As such, pipeline installation activities could result in direct take of Federally-listed CRLF.

During proposed site disturbance activities, including pipeline excavations and trenching, levee jack-and-boring and horizontal directional drilling operations beneath the Santa Maria River, down-gradient sediment and incidental spills or leaks of oils or fluids from equipment and machinery may result in a pollutant discharge into the Santa Maria River corridor and floodplain, Nipomo Mesa agricultural stock ponds and associated drainage channels and/or the Blosser Road drainage canal. 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/riparian vegetation and overall water quality. Further, mobile semi-aquatic, special-status species, such as the California red-legged frog have the potential to occur within and/or adjacent to proposed project segments containing suitable habitat, including the proposed pipeline alignment along the Blosser Road drainage canal and the proposed horizontal directional drilling laydown area on the Nipomo Mesa. This species 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.

Proposed horizontal directional drilling operations have the potential to result in frac-out into the Santa Maria River which could result in the release of drilling mud, increased turbidity, and localized degradation of riparian vegetation and water quality within the channel. Such water quality and habitat effects have the potential to result in significant impacts to Steelhead and Arroyo chub within the river system.

Impacts to the Arroyo chub, Southern California ESU Steelhead, California red-legged frog, Southwestern pond turtle and Two-striped garter snake are considered to be potentially significant but mitigable with implementation of mitigation measures to avoid or minimize impacts to these species.

Impact D-5: *Construction activities could result in short-term impacts to the sensitive habitat areas of the Santa Maria River, including jurisdictional Waters of the United States and designated critical habitat of the Southern California ESU Steelhead.*

Surrounding sensitive habitats include the riparian corridors of Santa Maria River, Nipomo Creek and associated mixed willow series, a sensitive plant community and wetlands under the definition adopted by CDFG and USFWS. Although the riparian corridor of nearby Nipomo Creek and associated mixed willow series habitat areas would be entirely avoided by the project operations through project design, short-term impacts to the sensitive habitats of the Santa Maria River, including alluvial scrub and areas considered Waters of the U.S. may result from temporary horizontal directional drilling operations including heavy equipment operation, temporary materials staging and in the event of a “Frac-out” along the river floodplain (i.e., worst-case scenario). This could result in direct adverse impacts to sensitive habitat of the Santa Maria River channel, including areas under jurisdiction of regulatory agencies, such as the U.S. Army Corps of Engineers, CDFG, and RWQCB and designated critical habitat of the Southern California ESU Steelhead. Implementation of mitigation measures to avoid or minimize impacts to sensitive species would result in a potentially significant, but mitigable impact.

- ***Long-Term Impacts***

Impact D-6: *Horizontal directional drilling operations along the southern boundary of the Santa Maria River have the potential to result in the permanent loss of special-status plant species.*

The only special-status plant species observed within the project boundaries during surveys conducted was Blochman’s ragwort. Specifically, a fairly dense population (less than 100 plants) is located directly north and bordering the proposed horizontal directional drilling laydown area along the southern boundary of the Santa Maria River (see Figure 21, Plant Community Map - South). This plant has been designated as a List 4 species by the California Native Plant Society, which denotes a plant of limited distribution or infrequent throughout a broader area in California and vulnerability or susceptibility to threat appears low at this time. Therefore, this species is not considered rare or endangered. The proposed project has the potential to result in the loss of only a small number of individuals of this species, however, is not expected to substantially

affect the distribution or survival of this species in the region. Therefore, potential long-term impacts to special-status plant species are considered to be less than significant.

Impact D-7: *The proposed project may result in long-term impacts to the large eucalyptus trees located along the proposed pipeline alignment located on Southland Street, Orchard Road, South Frontage Road and Darby Lane. These trees may represent potential habitat for Monarch butterflies or nesting raptors.*

The majority of the proposed waterline extension will occur in areas generally lacking significant biological resources. The pipeline alignment along Blosser Road would also be installed along the east side of the drainage channel away from the root systems of the existing eucalyptus windrow at this location. Further, impacts to biological resources located along Orchard Avenue would be minimized by tying the new pipeline alignment(s) into an existing 12-inch pipeline that is located along this roadway. However, large eucalyptus trees located along Southland Street, Orchard Road, South Frontage Road and Darby Lane. (see Figure 23, Plant Community Map - North) represent potential habitat for Monarch butterflies or nesting raptors, which could be impacted by proposed 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 would result in potentially significant, but mitigable impacts.

Impact D-8: *Long-term impacts associated with the potential generation of silt and sedimentation sources along the pipeline alignments, water storage tank and pump stations could result in adverse effects to adjacent habitat areas and associated special-status wildlife species.*

Terrestrial and semi-aquatic, special-status wildlife species potentially present within the pipeline alignments, storage tank and pump stations includes the Coast horned lizard, CRLF, Southwestern pond turtle and Two-striped garter snake. The majority of these species (if present) would be expected to forage and possibly breed within the alluvial scrub and aquatic habitats along the Santa Maria River, the Blosser Road drainage channel and the agricultural stock ponds on the Nipomo Mesa. The proposed project will result in trenching and localized surface disturbance of ruderal, agricultural, and California annual grassland habitat areas throughout the project area. Potential long-term surface erosion of the recontoured pipeline alignments could result in the degradation of adjacent habitat areas over time due to increased silt and sedimentation. Further, uncontrolled runoff from the newly proposed water storage tank and pump stations along Blosser Road and on the Nipomo Mesa 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 mitigation measures to avoid or minimize impacts to habitat areas would result in potentially significant but mitigable impacts.

Impact D-9: *Pipeline operation and maintenance activities may result in long-term adverse impacts to special-status species.*

The proposed project will include the construction of water storage facilities and two pump stations along the pipeline alignments. This would include one pump station along the west side of Blosser Road and another pump station on the Nipomo Mesa near Orchard Avenue. These newly-installed facilities would result in the addition of a permanent noise source to the project area as well as potential additional source of night-time lighting. Specifically, each pump station will contain four, 75 horsepower pumps housed within an enclosed booster station structure. The structures will be designed to insure minimal increase of exterior noise levels due to pump operations. It is anticipated that the facilities would also require periodic inspections and routine maintenance to ensure proper function and operation of the pumps and water storage facilities.

As discussed above, the drainage channel located along Blosser Road provides suitable habitat for the California red-legged frog which was identified in the drainage channel during the 2007 field survey. Further, the rows of eucalyptus trees along Blosser Road provide suitable nesting habitat for a number of migratory birds and raptors. Lastly, the southern boundary of the Santa Maria River provides suitable habitat for the Coast horned lizard, migratory birds, and, when water is present, a number of semi-aquatic, special-status species including, the Southwestern pond turtle and Two-striped garter snake. Although, the new noise source associated with the water storage tank and pump station facilities (including periodic maintenance) is expected to be negligible due to structure design coupled with the current and ongoing level of agricultural activities within these areas, these new lighting sources would have the potential to result in adverse impacts to California red-legged frog and other special-status wildlife due to increased glare. Shielding of facility lighting away from adjacent wildlife habitat areas would result in long-term light and glare impacts that are potentially significant but mitigable impacts. Long-term lighting and glare impacts are considered to be potentially significant but mitigable.

4. Mitigation Measures

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

D-1: Pipeline, water storage tank and pump station construction operations shall be conducted prior to, or after, the nesting season (February 15 to September 15) 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 the months of October and January 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 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 project construction activities, construction shall avoid the nest site or be 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 and avian 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, proposed horizontal directional drilling and jack-and-bore operations. Additionally, all construction access routes shall be established in previously disturbed areas and/or existing roadways.
- D-3:** Exclusionary and silt 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 and silt 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 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 special-status species within the project area, 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 subsection 5, Mitigation Measures).

- D-7:** A qualified biologist shall conduct a pre-activity survey to determine presence/absence of California horned lizard within and adjacent to the horizontal directional drilling laydown areas and jack-and-bore locations along the southern boundary of the Santa Maria River. 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). Procedures and protocols for relocation shall be based upon pre-project consultation with the California Department of Fish and Game.
- D-8:** 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 (e.g., California horned 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-9:** Nesting bird surveys shall be conducted between February 15 and August 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 aquatic or semi aquatic species.

- D-10:** Site disturbance and construction activities associated with the Santa Maria River pipeline crossing, including the horizontal directional drilling operations shall not occur during the rainy season (October 15 to April 15). No construction activities shall occur during or immediately following a rain event or if water is flowing within the Santa Maria River.
- D-11:** 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., California red-legged frog, Two-striped garter snake, etc.), their habitat requirements, applicable regulatory policies and provisions regarding their protection and measures being implemented to avoid and/or minimize impacts.
- D-12:** The Blosser Road drainage canal shall be illustrated on all final construction plans. At no time shall any equipment and/or materials staging be allowed within the bed or banks of the drainage feature. In addition, a row of silt fencing or equivalent shall be installed along the perimeter of the drainage canal during project operations to prohibit CRLF movement into the work zone.

D-13: All work areas within 100 feet of known California red-legged frog habitat 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., Southwestern pond turtle, Two-striped garter snake, 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 is identified in a work area, all work shall cease until the California red-legged frog has safely vacated the work area. At no time shall any California red-legged frog be relocated and/or affected by project operations without prior approval from the U.S. Fish and Wildlife Service. 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. In addition, silt fencing will be installed around temporary aquatic habitats (i.e. trenches that have perched groundwater) that have formed during project activities, to minimize the potential for migration of CRLF from the adjacent agricultural pond. The exact location of exclusionary and silt fencing shall be determined by a qualified biological monitor. The fencing shall remain in place throughout the construction phase for each individual project component.

D-14: Prior to commencing construction, NCS D 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, stock piling and horizontal directional drilling activities) 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.

- The District shall submit an application for a Streambed Alteration Agreement (SAA) to the California Department of Fish and Game. If required, the final SAA shall be received prior to project construction. All conditions in the final SAA shall be strictly adhered to during construction.
- A Frac-out Contingency Plan (FCP) shall be prepared for horizontal directional drilling operations within the Santa Maria River channel and shall include appropriate measures for containment of spills, agency notifications (including a detailed call-down list of all applicable regulatory agency representatives), clean-up protocols, and procedures for restoring the river channel to pre-disturbance conditions. The “Frac-out” clean-up procedures shall emphasize minimizing and/or avoiding impacts to the main channel and alluvial scrub habitat areas of the Santa Maria River. Lastly, the FCP shall include the conditions by which the boring operation would be abandoned, if applicable, and how many repeated bores may be attempted.

D-15: Prior to commencing project construction, the District shall retain a biological monitor experienced with horizontal directional drilling technology. The biological monitor shall be responsible for conducting field inspections of horizontal directional drilling operations, reporting, and enforcement of all applicable conditions of approval, including any required conditions from the California Department of Fish and Game SAA. Specifically, the qualified monitor shall be on-site to inspect the river corridor and pipeline alignment during drilling activities that have the potential for a spill or “Frac-out” (i.e. pull back operations, etc.) to ensure no impacts occur to the Santa Maria River. In the event of a spill or “Frac-out” within the Santa Maria River corridor, all work shall be halted and the spill shall be contained using the procedures outlined in the FCP.

D-16: 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 measures address Impact D-5, short-term impacts upon sensitive habitat areas within the Santa Maria River including critical habitat of the Southern California ESU Steelhead and areas under the jurisdiction of the U.S. Army Corps of Engineers. Mitigation Measures D-10 through D-14 require provision of (pre-designated staging and fueling areas and equipment access routes, exclusionary fencing to protect sensitive habitat areas, dust control measures, etc.).

D-17: In the event that a “Frac-out” occurs within the Santa Maria River channel due to horizontal directional drilling operations, the appropriate permits shall be obtained

by the governing regulatory agency to facilitate clean-up and restoration of the affected portions of river channel to pre-project conditions. As necessary, this shall include a 404 Permit from the Army Corps of Engineers, a 401 Permit from the Regional Water Quality Control Board and Streambed Alteration Agreement from the California Department of Fish and Game.

D-18: The restoration component of the Frac-out Contingency Plan (Mitigation Measure D-14) shall be implemented as necessary to ensure that the affected portions of stream channel and associated sensitive habitat areas are restored to pre-project conditions. The restored portions of stream channel shall be monitored until all performance criteria have been met as specified by the regulatory agency permits.

Although impacts to Blochman's ragwort are considered to be less than significant, the following measures will avoid and/or minimize potential impacts to this special-status plant species during project operations:

D-19: Prior to project construction, a qualified botanist shall complete a focused botanical survey of the pipeline alignment along the southern boundary of the Santa Maria River. All Blochman's ragwort identified within 50 feet of the proposed horizontal directional drilling laydown area and pipeline alignment shall be marked with temporary flagging.

D-20: Protective fencing shall be installed around populations of Blochman's ragwort to prevent loss of this special-status plant species. As necessary, this shall include minor modifications of the designated horizontal directional drilling laydown area to avoid Blochman's ragwort to the extent feasible.

The following measure addresses Impact D-7, impacts upon large eucalyptus trees located on Southland Street, Orchard Road, South Frontage Road and Darby Lane.

D-21: The proposed waterline shall be aligned to avoid impacting the root systems of large eucalyptus trees located on Southland Street, Orchard Road, South Frontage Road and Darby Lane. The precise location 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-8, long-term impacts associated with the generation of silt and sedimentation.

D-22: Mitigation Measure D-14 includes provisions for stabilizing the water storage tank, pump station sites and pipeline alignments and monitoring. As necessary, this 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 ensure that previously disturbed areas are stabilized.

- Installation of long-term drainage devices at all water storage tank and pump stations, including, as necessary, catchment basins, culverts with down-drains and storm flow energy dissipating devices (riprap or diffusers).

The following measure addresses Impact D-9, impacts associated with long-term pipeline operations and maintenance activities.

D-23: All water storage tank and pump station facility lighting shall be shielded away from adjacent wildlife habitat areas and sky to minimize lighting/glare impacts of wildlife, to the extent feasible while still providing safe working conditions for facility personnel.

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 waterline intertie would provide a source of water that would eliminate a potential constraint upon the future development and population growth within the general planning area.

Direct project impacts related to installation of the pipeline alignments would be temporary and therefore 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 support facilities (e.g., proposed water storage tank and pump stations); however, these facilities would be located within previously disturbed 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 a significant impact to wildlife resources. However, since these direct project impacts due to pipeline installation activities are temporary, cumulative impacts on wildlife resources are considered less than significant.

Cumulative impacts that would result in the degradation of wetland resources, including the Santa Maria River channel due to an inadvertent “Frac-out” would be considered a significant impact. However implementation of the proposed mitigation measures that include avoidance and protection of wetland resources and restoration of affected areas to pre-project conditions would insure that the proposed project would not contribute to the long-term loss or degradation of wetland resources in the project area. Any other projects in the area that would result in impacts to wetlands would require additional environmental review and appropriate regulatory permits from the U.S. Army Corps of Engineers, Regional Water Quality Control Board and the California Department of Fish and Game. Prior to any project approval, these agencies would require provision of site specific mitigation measures designed to prevent the net loss of wetland resources including implementation of habitat restoration and/or creation of in-kind wetland habitat areas at an appropriate mitigation ratio.

The proposed project would provide water 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-9 will reduce potentially significant impacts associated with special-status terrestrial and avian species to an insignificant level (Class II Impact). Mitigation Measures D-10 through D-16 will reduce potentially significant impacts associated with special-status aquatic or semi-aquatic species to an insignificant level (Class II Impact). Mitigation Measures D-17 and D-18 will reduce potentially significant short-term impacts upon sensitive habitat areas within the Santa Maria River to an insignificant level (Class II Impact). Mitigation Measure D-21 will reduce potentially significant impacts to large eucalyptus trees located on Southland Street and Orchard Road to an insignificant level (Class II Impact). Mitigation Measure D-22 will reduce potentially significant long-term impacts associated with the generation of silt and sedimentation to an insignificant level (Class II Impact). Mitigation Measure D-23 will reduce potentially significant impacts associated with long-term pipeline operations and maintenance activities to an insignificant level (Class II Impact).

Potential impacts upon non-listed wildlife species, the Santa Maria River wildlife migration corridor or foraging bird species are considered to be less than significant (Class III Impact). Potential impacts associated with special-status plant species are also considered to be insignificant (Class III Impact), however, Mitigation Measures D-19 and 20 are provided to further reduce these impacts.

E. AESTHETICS

1. Existing Conditions

The project area contains a variety of views and perspectives which reflect the diversity of land uses found from areas south of the Santa Maria River across the river into the Nipomo Mesa.

South of the Santa Maria River, views include existing residential areas in neighborhoods served by Blosser Road and Atlantic Place with Highway 101 and the Santa Maria River Bridge dominating views to the east (see Figure 24A, Existing Views). The river levee and adjacent eucalyptus tree row define views to the west of the southern boundary of the river. Beyond Blosser Road to the west is vacant open space. Views across the river channel from this vantage point include elevated benches within the riverbed containing sage scrub and riverine vegetation with the sandy streambed in the middle of the channel. Views from this location also include utility lines crossing the river, the bluffs which define the southern boundary of the Nipomo Mesa and rolling hills in the distance.

Immediately north of the Santa Maria River is another eucalyptus tree row running parallel to the northern river levee as well as a hillside bluff adjacent to Highway 101. Within this area, views are dominated by existing light industrial and commercial development. Further west, elevations rise to the top of the Nipomo Mesa. Views of areas near the edge of the bluff are defined by a eucalyptus tree row, vehicle and equipment storage areas and the Maria Vista residential tract. A majority of views adjacent to Joshua Street and Orchard Road south of Southland Street 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 to the north (see Figure 24B, Existing Views).

Views in the areas adjacent to Orchard Road north of Southland Street and Southland Street between Orchard and South Frontage Roads involve more developed residential uses and undeveloped lots (see Figure 24C, Existing Views). South Frontage Road from Southland Street north to Tefft Street runs parallel and adjacent to Highway 101 and provides views of a variety of commercial uses and a residential tract. Darby Lane and South Oakglen Avenue are bordered by existing single family homes.

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 proposed structure extends above the highest horizon line of ridge-

FIGURE 24A
Existing Views



South of Santa Maria River
at Atlantic Street and Blosser Road



Santa Maria River Looking North
from Blosser Road

FIGURE 24B
Existing Views



Orchard Road and
Joshua Street



Orchard Road North
of Joshua Street

FIGURE 24C
Existing Views



Southland Street at
Orchard Road



Southland Street and
South Frontage Road

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 result in the short-term alteration of views from adjacent areas.*

Construction activities associated with the proposed project involve the use of heavy equipment for underground horizontal directional drilling activities or other construction equipment including trucks, graders and bull dozers at various infrastructure sites. 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 infrastructure facilities, primarily water storage facilities, booster stations and waterlines to be installed adjacent to several local roadways. Project construction is expected to commence with construction of facilities at the connection location at the intersection of West Taylor Street and Blosser Road and the pipeline extension along Blosser Road to the Santa Maria River levee which will require 124 to 140 days to complete. Construction involving the crossing of the Santa Maria River (including the installation of a waterline beneath the levee, a waterline extension north to the horizontal directional drilling site and the horizontal directional drilling operations are expected to required 280 to 300 days. Construction of the pump station and underground water storage tank on the Nipomo Mesa is expected to require 300 to 320 days with other NCS D distribution system improvements requiring 200 to 220 days. Several of these construction functions may occur simultaneously thereby reducing the overall longevity of these construction operations.

Construction activities, while considered usually 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 may degrade views from adjacent areas.*

Once the proposed pipeline is installed, the primary aesthetic impacts of the proposed project involve the proposed project facilities, primarily two pump stations, two underground water storage tanks and other infrastructure facilities.

In order to insure adequate pumping pressures, a maximum of two pump stations may be constructed. Pump Station No. 1, if determined to be necessary, will be located at one of two locations, both of which are south of the Santa Maria River adjacent to Blosser Road.

One potential location is approximately 600 feet north of the West Taylor Street/South Blosser Road intersection while the second possible site is located on the west side of Blosser Road at Atlantic Place (see Figure 4, Pipeline Route and Project Facilities.) During the initial project phase, a flow meter will be installed at the Pump Station No. 1 site in order to monitor the volume of water flows. The need for construction of a pump station at this location will be evaluated during subsequent project phases.

A second pump station, known as Pump Station No. 2, will be located on the north side of the river on the Nipomo Mesa adjacent to the underground water storage tank site in order to boost pressures as necessary to transport water into the NCSD water distribution system. This pump station will be constructed during the first phase of project construction with the potential for the installation of additional pumps at a later phase. Pumps will be housed within an enclosed booster station structure measuring approximately 1000 square feet (roughly 25 feet by 40 feet, subject to refinement during final design) and approximately ten feet in height. The 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 6, Typical Booster Station).

In order to provide adequate storage and accommodate anticipated waterline flows, one 0.5 million gallon underground water storage tank will be constructed at one of three possible locations on the Nipomo Mesa (noted as Locations 1, 2 and 3 on Figure 4, Pipeline Route and Project Facilities.) Since these water storage facilities will be placed underground, the primary design elements to be visible will be security, fencing, employee parking and security lighting. A second water storage tank may be constructed in Phase III.

In addition, a single pressure reducing station will be installed on the existing 12-inch waterline serving the recently-constructed Maria Vista residential development and four pressure reducing stations on Orchard Road, Southland Street, South Frontage Road and South Oakglen Avenue (see Figure 7, NCSD System Improvements).

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 of landscaped screening and proper color selection will result in potentially significant, but mitigable impacts.

Impact E-3. *Long-term project operations may result in the generation of light and glare into surrounding areas.*

Proposed project infrastructure facilities, primarily booster stations and security for the proposed water storage tank 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. Trees or shrubs will be provided which will reach a six (6) feet surrounding booster stations 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 replacement plan to insure that said screening will be maintained for 15 years, including replacement of any trees which may die.

E-3: Prior to project construction, a color board will be provided which identifies the exterior colors and materials to be utilized on proposed water storage tanks and booster stations. 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 Addendum Report of Archival Records Search and Phase One Archaeological Surface Survey for the Nipomo Community Services District Waterline Intertie, San Luis Obispo County and Santa Barbara County, CA” prepared by Gibson’s Archaeological Consulting dated June 11, 2008 (this analysis is an addendum to a similarly titled study dated June 11, 2005) and subsequent correspondence dated October 19, 2008 from Gibson’s Archaeological Consulting. Each of these documents are included in their entirety in Technical Appendix G of this document.

1. Existing Conditions

- ***Santa Maria Floodplain***

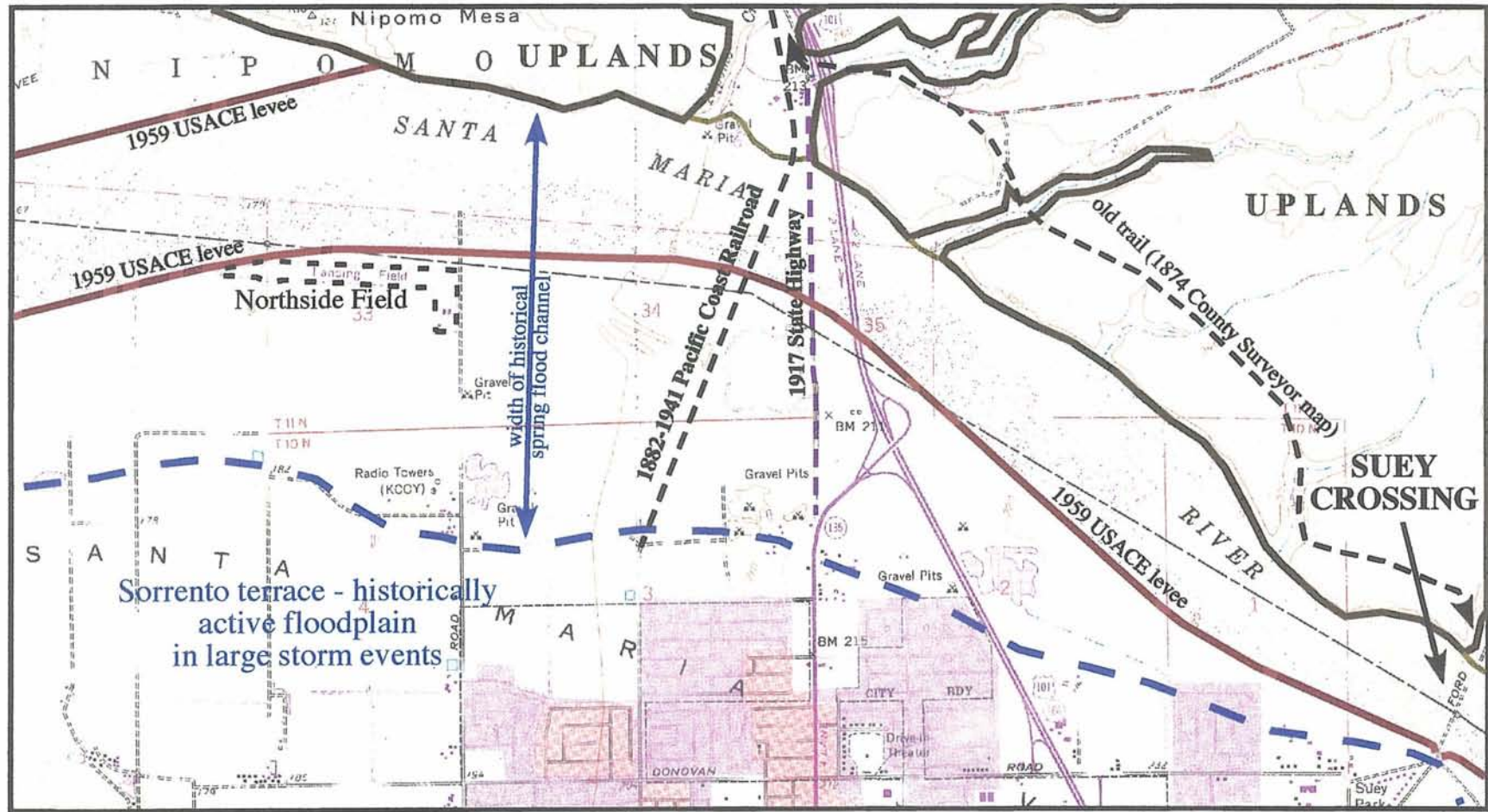
Modern stream flows in the Santa Maria River are contained by the levees built for the 1957-59 U.S. Army Corps of Engineers Santa Maria River Flood Control Project. However, prehistoric and historic floods inundated the entire Santa Maria Valley Plain as far south as Battles Road. Historic photographs show the intersection of Broadway and Church Street (one block south of Main Street) under over a foot of water during the 1905 and 1911 floods. A series of small dikes and levees were constructed during the twenties to hold the water. In 1924, falling water tables from agricultural withdrawals prompted the first water conservation surveys. After the 1937 flood, the Santa Maria Valley Water Conservation District was formed. County Supervisor T.A. “Cap” Twitchell, son of pioneer resident Fremont Twitchell, was a prime mover behind Northern Santa Barbara County dams until he passed away in 1955. The dam, built in 1957 on the Santa Maria River as part of the Army Corps Flood Control Project, was named after him.

The channel of the Santa Maria River is approximately one-third of a mile wide at the Suey Crossing and widens in the project area to approximately one mile in width (see Figure 25, Santa Maria River-Natural Channel and Historic Crossings and Figure 26, Santa Maria River-Modern Crossings). During low flows, the river typically occupies a small channel on the northern (Nipomo) side into which the river has eroded a bluff. However, during spring floods, the channel fills with flowing water. During past flood events, the channel overflows and mingles with rising ground waters to inundate the Santa Maria Valley with a broad sheet of relatively slow moving shallow water in which suspended sediment falls out and is deposited onto the floodplain, commonly leaving a foot or thicker layer of mud and sand behind, as in 1905 and 1911. In these floodplain areas, Sorrento series soils have formed in the sandy sediment. Santa Maria is built on top of the Sorrento terrace. In the channel area, however, the riverbed is composed of noncohesive material and is modified into various bedforms by the energy of the flow. Large amounts of sediment are transported downstream in suspension in the fast moving waters, as saltating grains stirred up from the riverbed or as shifting bedforms such as sand ripples and bars of the river bottom. During floods, the amount of sediment transported in stream channels increases by several times. Large sediment loads in the

FIGURE 25

Santa Maria River – Natural Channel and Historic Crossings

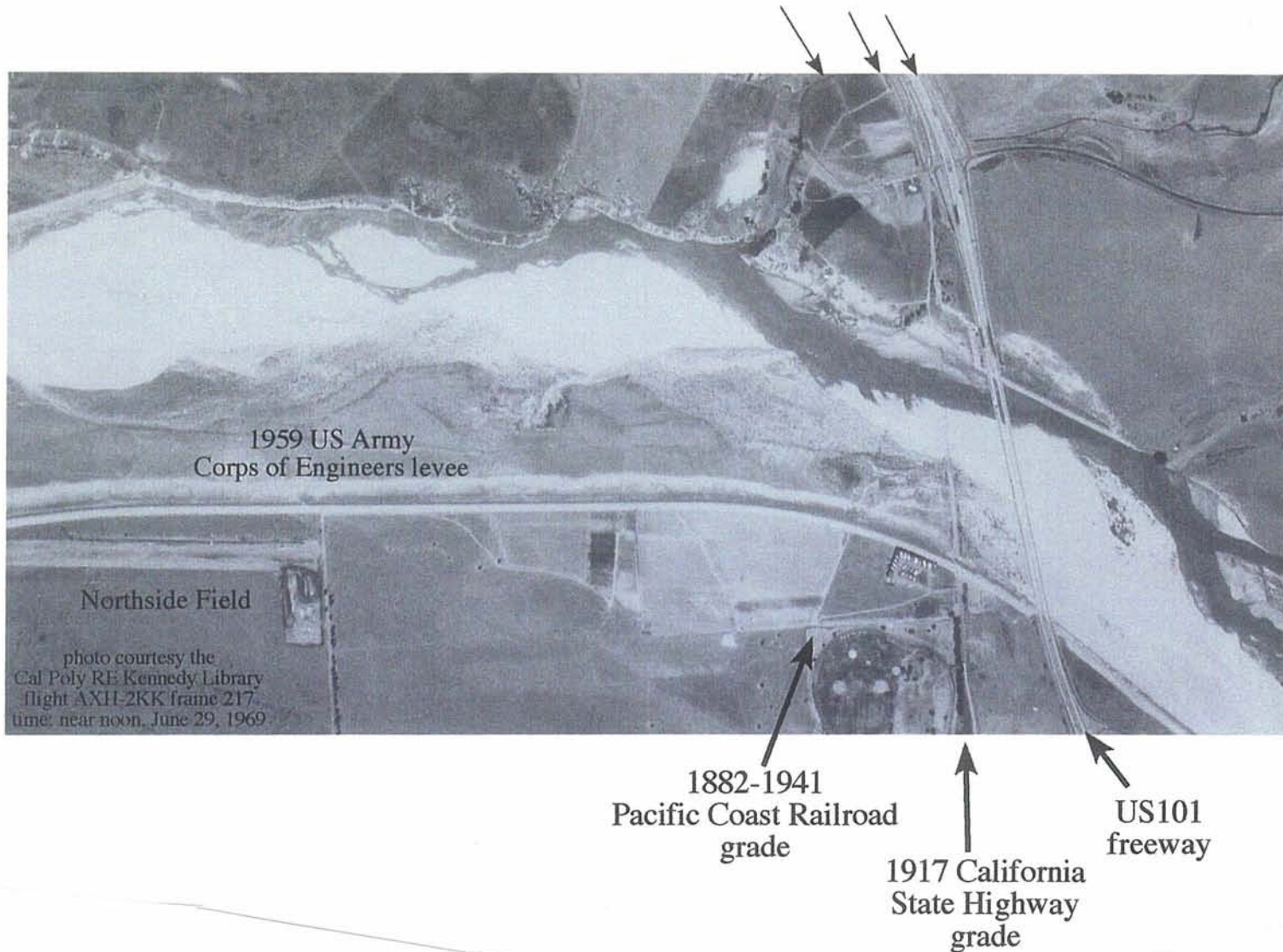
V-95



scale: one mile

FIGURE 26

Santa Maria River – Modern Crossings



96-V

strong currents create scour and can have a tremendous pull on resisting objects such as trees, animals and structures. Objects caught in the flow can be carried downstream large distances, or become trapped by shifting bars and rapidly buried. After floods, during strong spring and early summer winds, open areas of sand are eroded by wind and the sand re-deposited into deposits of sand sheets and small dunes, further burying objects in the channel during the dry season. Although useful as hunting and gathering areas during quiet periods, river channels are generally avoided as permanent occupation sites due to their destructive power during floods. Any seasonal uses of the areas along the floodplain are typically covered or eroded during flooding.

- ***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 northern Santa Barbara County and 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 water 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 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.

Surface surveys have been more limited south of the Santa Maria River in northern Santa Barbara County. A number of surface surveys conducted within one mile south of the river along the Highway 101 corridor have not recorded any prehistoric sites. This is probably due to the seasonal flooding of historic and prehistoric sites in the river.

- ***Historical Background***

The railroads came to the Santa Maria 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.

In April, 1882, the mile long crossing of the Santa Maria River was accomplished by temporary rock fill placed over drain pipes, providing an operating railbed and allowing the opening of the line to Santa Maria on April 22nd of that year. Soon thereafter, the wooden mile-long trestle was constructed and placed in operation on the main rail alignment (see Figure 26, Santa Maria River-Modern Crossings). The trestle was partially washed away or damaged, needing rebuilding, by floods in 1890, 1911 and 1938.

Before the modern settlement of Santa Maria Valley, 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 west of the valley closer 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 before heading up Foxen Canyon (and Foxen's Ranch) to the Santa Ynez Valley. The Suey Crossing takes advantage of the narrowest (at about a third of a mile) portion of the Santa Maria Riverbed.

Mail service, on horseback between Santa Barbara and San Luis Obispo, began using this route in 1855. In 1869, the original lumber to build the first buildings at Santa Maria (pioneers called it Four Corners, then Grangeville; the name changed to Central City when lots were laid out in 1874 and in 1882 to Santa Maria) came from Port Harford over this road. Later, beginning in 1862, stages used the old road between Dana's Adobe and Ballard.

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 by way of Los Alamos Valley over the divide to Orcutt and up Broadway, the main north-south route through Santa Maria, 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.

California was a leader in early road construction; the new state highway system was one of the first in the nation. Paving of the road between Nipomo and Orcutt occurred in 1914 through 1917 using the first California standard highway design of 60 feet wide right-of-way with 4-inch-thick-15-feet-wide concrete roadways and 3 feet wide oiled shoulders. By contrast, Broadway was designed by the pioneers as a wide thoroughfare where six-and-eight-horse teams could turn around.

The new County-built Santa Maria River crossing, connecting the north end of Broadway with Nipomo, crossed a sandy channel approximately one mile in width using a series of steel trusses on concrete piles with an additional concrete trestle and earthwork approach on the Santa Maria side (see Figure 26, Santa Maria River-Modern Crossings). 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 hourly traffic levels today). The new California

highways were designed for speeds of 15 to 30 miles per hour; 30 mph was the posted speed limit.

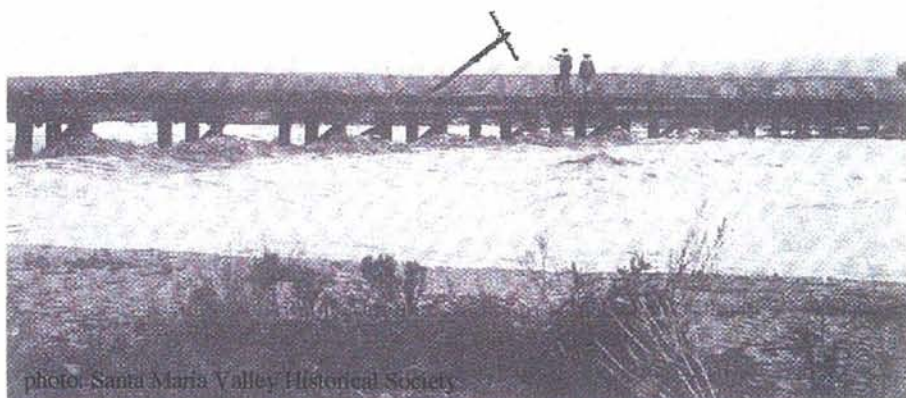
Major improvements to the original paved highway made by the State included construction of a concrete girder bridge at the Santa Maria River crossing in 1926 on the same alignment as the original bridge, in 1929-1930 when the road was upgraded with wider lanes and shoulders and repaving in 1938. Surveyors 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.

Little is known about the small airfield located south of the Santa Maria River and west of Blosser Road. The airfield did not appear in the 1937 photo (see Figure 27, Historic Photographs of Santa Maria River), but appears in photos from the sixties. Although historic information from the 1940-50's is currently lacking, the airfield was likely constructed in this period. Its single runway is approximately 3,500 feet long and 30 feet wide, a size useful for small aircraft or as an emergency field. Although it may have been constructed as an auxiliary landing field for training aircraft (e.g., Stearman biplanes) out of Hancock Airfield (Santa Maria Airport today), most World War II-era military strips are longer (4,500-6,000+ feet) to accommodate powerful fighter planes such as the P40 and P38 squadrons located at Santa Maria during the war. Also, its location in the river channel is unusual for any Army engineers. The existing tin-metal hangar buildings appear to be a light mid-twentieth century commercial architecture type of airfield structures. These elements suggest that Northside Airfield is a small agricultural field used primarily by small, highly maneuverable crop-dusting aircraft and probably operated in the fifties. The end of the runway was cut by construction of the river levees in 1959. The airfield has fallen into apparent disuse as evidenced by crumbling of the asphalt runway which has been overgrown with coyote bush. However, the hangar structures appear to be still in use as warehouses or offices.

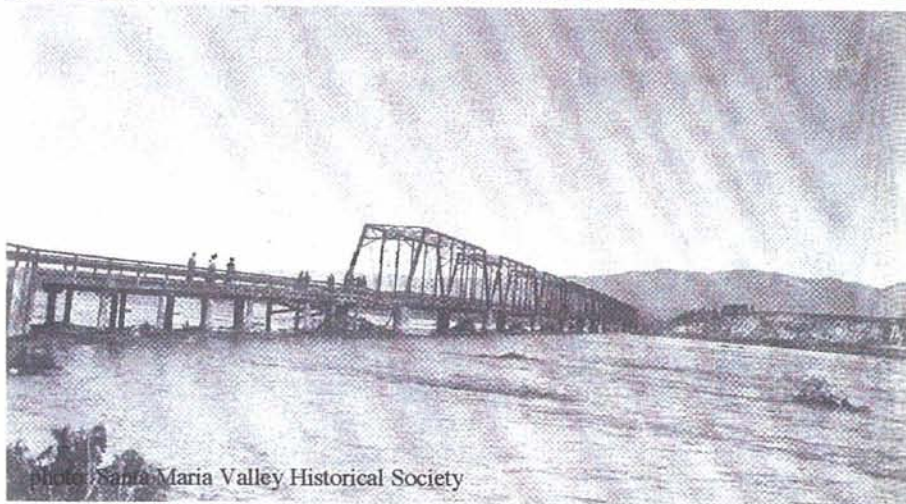
- ***Survey Results***

An archival records search for the project area and a ¼ mile area around it was made with 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 eight archaeological sites have been recorded. Two pre-

FIGURE 27
 Historic Photographs of Santa Maria River



Pacific Coast Railroad trestle in 1907 flood from Santa Maria bank (NCSD study area under water).



Original highway bridge during flood (unknown year) from Santa Maria bank (NCSD study area under water).



Santa Maria River Crossing area in 1937 (pre levee)

NCSD Waterline Intertie EIR

historic sites, SLO-808 and SLO-1254 were recorded adjacent to the pavement of South Frontage Road near the northern end of the proposed project. A third prehistoric site, SLO-1394, was recorded southeast of the intersection of Tefft Street and Highway 101.

- ***Prehistoric Site SLO-808***

First recorded in 1977, the SLO-808 site is located south of Tefft Street and west of Highway 101. The site is located on a vacant lot bounded on the north by Hill Street and west of South Frontage Road. This site originally measured 85 meters by 35 meters (0.66 acres) and consisted of a light surface density of chert flakes and tools with pebbles and cobbles. Most of this cultural deposit was destroyed by unauthorized grading that was conducted in 1980 or 1981. Much of the cultural deposit on a low knoll was graded to the north and east and is likely incorporated into a lower fill area in order to level the parcel for future development. After the illegal grading and destruction, a subsequent survey of the parcel observed;

“chert flakes of varying sizes and colors scattered over most of the parcel with heavier concentration of lithic artifacts in the northwestern and southeastern corners including two bifacially flaked pieces (possibly knives or projectile points). The site was possibly a special purpose site, and may be part of a larger complex of sites whose center may have been the historic Chumash village of Nipomo.”

Subsequent surveys of SLO-808 were conducted in 1990, 1991, 1995 and 1999. As a result of these surveys, the distribution of artifacts was enlarged to 240 meters by 100 meters (5.29 acres) with much of the extension in the direction of Tefft Street. While the original distribution of this site is unknown, it is possible that intact or displaced prehistoric cultural materials from SLO-808 are present beneath the South Frontage Road between Tefft Street and Grande Avenue.

- ***Prehistoric Site SLO-1254***

This prehistoric site was first recorded in 1987 and is located on a five acre parcel southwest of the corner of Division Street and the South Frontage Road. The site measures approximately 175 meters by 100 meters (3.86 acres). Several artifacts including biface manufacturing flakes were observed in a cut bank immediately west of the South Frontage Road at this location. Subsurface testing was conducted on the site in 1988 in which;

“a 30 meter by 50 meter area contained an estimated total of 11 to 154 chert flakes per cubic meter or an estimated total of 82,500 flakes. Surrounding areas may contain an additional 75,000 flakes. One fragment of mortar and two pieces of burnt rock indicate the occurrence of some food preparation although no ovens, shell, bone or charcoal were noted.”

Subsequent to these 1987 surveys, a multi-family residential development was constructed on the five acre parcel which destroyed the SLO-1254 site with no additional testing or mitigation. It is possible that intact or displaced prehistoric materials from SLO-1254 are present beneath the South Frontage Road between Division Street and Story Street.

- ***Prehistoric Site SLO-1394***

The archival records check reported an archaeological site, SLO-1394, located southeast of the intersection of Tefft Street and Highway 101. This site is located on a vacant lot and consists of a scatter of Pismo clam shells.

In recent years, a total of at least 19 prehistoric sites have been identified in the general area around the town of Nipomo. Eleven of the sites contain Monterey chert, flakes and tools with two acres east of Nipomo Creek containing isolated stone artifacts.

The extent of the surface walkover surveys of the project area were based upon the locations of the proposed project facilities, including pipeline routes, connection points, storage tank sites, booster stations and staging areas necessary for pipeline installation on both the north and south sides of the Santa Maria River.

- ***Pipeline Corridor along Blosser Road from Taylor Street to Santa Maria River***

This section of the pipeline corridor is approximately 4,000 feet long and is located between West Taylor Street on the south and the Santa Maria River levee. Pavement, sidewalks and a deep concrete drainage ditch are on the east side of Blosser Road and agricultural fields are on the west side (see Figure 28A, Survey Location Site Photographs, Photos 1 and 2).

Native soils were a loose sandy loam with various sized gravels which indicate a very high alluvial deposition. This confirms the floods in the area. Although modern stream flows are contained in levees built between 1957 and 1959 for the Santa Maria Flood Control project, prehistoric and historic floods inundated the entire Santa Maria Valley plain as far south as Battles Road. No cultural materials were observed in this section.

- ***Proposed Pump Station 1, Site No. 1.***

This area is located west of Blosser Road and south of the river levee. It consists of flat alluvial deposits and grades to the south into agricultural fields. South of the levee fence is some evidence of the North Side Air Field. Its single runway is about 3,500 feet long by 30 feet wide and was probably used for small aircraft or for an emergency landing field. Currently thin layers of asphalt and oil are visible along the airfield runway. The building and runway are south and outside any area proposed for direct impacts (see Figure 28B, Survey Location Site Photographs, Photo 3).

FIGURE 28A
Survey Location Site Photographs



Photo 1: Blosser Road near West Taylor Street
along Pipeline Route



Photo 2: Blosser Road near West Taylor Street
Pump Station No. 1, Site 2

FIGURE 28B
Survey Location Site Photographs

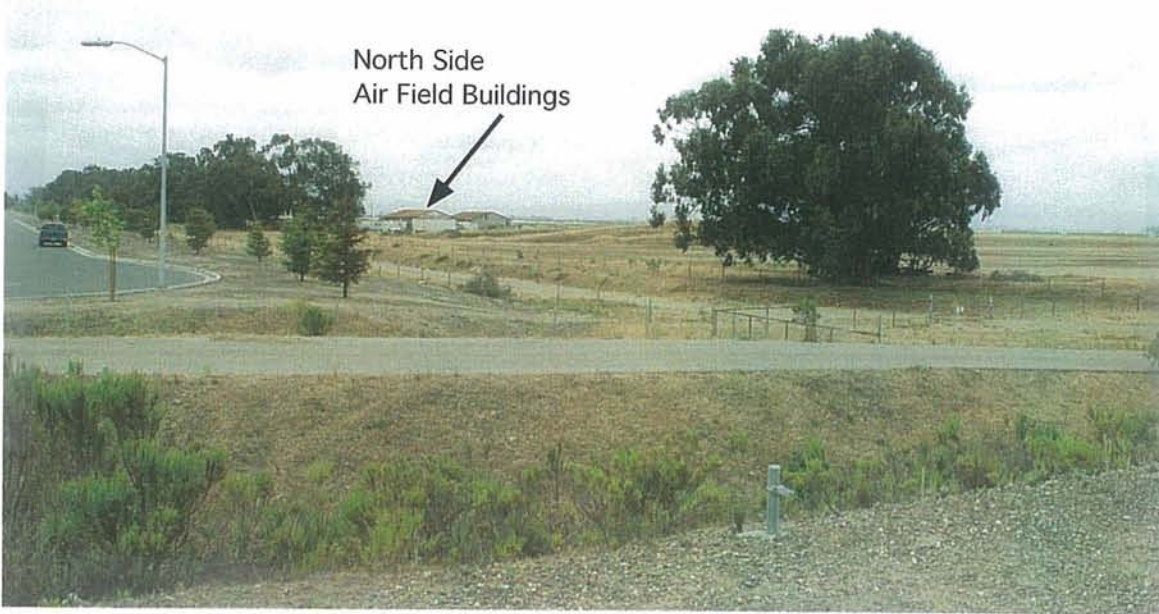


Photo 3: Blosser Road at Atlantic Street
Pump Station No. 1, Site 1



Photo 4: Blosser Road looking South
Pump Station No. 1, Site 2

This survey area did not contain any prehistoric or significant historic cultural materials. Based on the geomorphological analysis and historic archival research, the entire Pump Station 1, Site 1 is within areas that prehistorically would have been seasonally flooded. No cultural materials were observed at this location.

- ***Proposed Pump Station 1, Site No. 2.***

This area is located west of Blosser Road and is flat with a cover of weeds and brush. This area contains an abandoned communication building and tower that is surrounded by agricultural fields (see Figure 28B, Survey Site Photographs, Photo 4). Modern debris litters the area but no prehistoric or significant historic cultural materials were observed.

Based on the geomorphological analysis and historic archival research, the entire Pump Station 1, Site 2 is within areas that prehistorically would have been seasonally flooded. No cultural materials were observed at this location.

- ***Proposed Southern Pipe Laydown Area***

This area is located on the south side of the Santa Maria River between the levee and West Taylor Street. It is an area estimated to be only 30 feet wide and approximately 2,600 feet long. The main area along the levee is completely graded and contains only alluvial gravels with light cover of weeds, grasses and shrubs. The area along Blosser Road on the east side of the pavement is completely developed with residential areas, streets and a large water basin. The west side of Blosser Road is in agricultural fields or open space. At the northern end are buildings associated with the North Side Air Field as described above.

Based on the geomorphological analysis and historic archival research, the entire pipeline laydown alignment, work areas and tie-in points are within areas that prehistorically would have been seasonally flooded. This survey area did not contain prehistoric or significant historic cultural materials.

- ***Direct Drill Pipeline Route Across the Santa Maria River***

The bore pits for the prior project proposal were originally surveyed in 2005 when no cultural resources had been recorded. None were found during the current survey.

- ***Pipeline Corridor From Proposed Northern Pipe Laydown Area to Proposed Pump Station No. 2/Water Storage Tank Site***

The two pipeline routes in this area traverse agricultural fields operated by Linda Vista Farms southwest of the intersection of Orchard Road and Joshua Street where no cultural resources were recorded. None were found during the current survey.

- ***Proposed Pump Station No. 2/ Water Storage Tank Site No. 1.***

Located just south of Joshua Street and Orchard Road, this pump station/water storage tank location was originally surveyed in 2005 (see Figure 28C, Survey Location Site Photographs, Photo 5). The area included a dirt access road adjacent to agricultural fields. No prehistoric or significant historic cultural materials were observed in 2005. No cultural materials were observed during the current examination of this area.

- ***Proposed Pump Station No.2/Water Storage Tank Site No. 2***

This proposed pump station/water storage tank location is northwest of Joshua Street and was originally surveyed in 2005. It is an undisturbed landform consisting of gentle south sloping terrace with grasses and extensive rodent activity. Currently most of the area is in agricultural fields. The 2005 survey area did not observe any prehistoric or significant historic cultural materials. No cultural materials were observed during the current examination of this area.

- ***Proposed Pump Station No.2/Water Storage Tank Site No. 3***

This proposed pump station/water storage tank site is also the location of the HDD Laydown area (see Figure 28C, Survey Location Site Photographs, Photo 6). An area approximately 300 feet by 300 feet was examined. It is located on the north terrace edge of the Nipomo Mesa overlooking the Santa Maria River. Currently the area is planted in strawberries. No cultural materials were observed during the current examination of this area.

- ***Pipeline Corridor along Orchard Road from Joshua Street to Southland Street***

This area was originally surveyed in 2005 and consists mostly of agricultural fields bordered by single-family residences on various sized lots, eucalyptus trees, shrubs, weeds and fences. The topography is flat to gently rolling terraces with sandy soil and small gravels. No cultural materials were observed in 2005 and none were observed during the current surveys.

- ***Pipeline Corridor along Southland Street from South Frontage Road to Orchard Road***

The section along Southland Street from 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. Both landscaping and natural weed and grasses were present on both sides. 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

FIGURE 28C
Survey Location Site Photographs



Photo 5: Edge of Nipomo Mesa looking North
Water Storage Tank Site 3 and
HDD Laydown Area

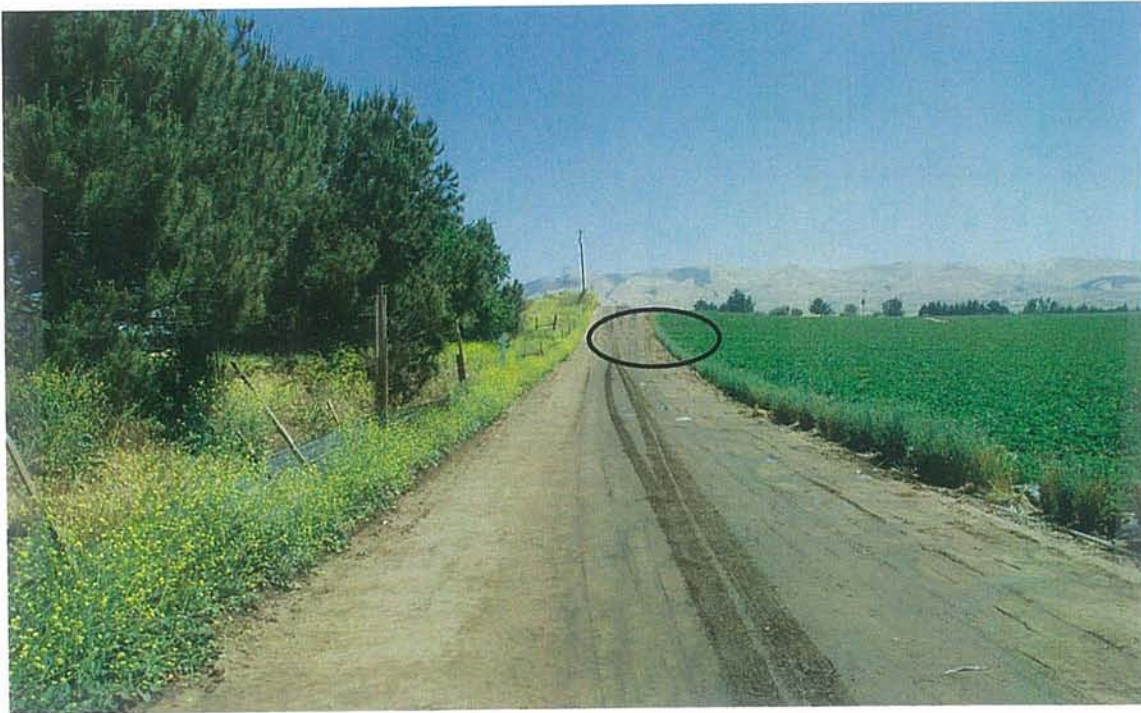


Photo 6: Nipomo Mesa looking East toward Orchard Avenue
Water Storage Tank Site 1

domestic animal bone (see Figure 28E, Survey Location Site Photographs, Photo 9). 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.

- ***Pipeline Corridor along Orchard Road from Southland Street to Grande Avenue***

This segment of the pipeline route follows Orchard Road that is bordered by residential areas, some cut banks and weeds and grasses (see Figure 28D, Survey Location Site Photographs, Photo 8). The topography is flat to gently rolling terraces with sandy soil and small gravels. No cultural materials were observed in this area.

- ***Pipeline Corridor along South Frontage Road Southland Street to Grande Avenue***

This segment of the project begins at Southland Street and follows the South Frontage Road north to Grande Avenue. It is bordered on the west by vacant parcels, commercial development, multi-family and residential lots (see Figure 28D, Survey Location Site Photographs, Photo 7). Two previously-recorded prehistoric sites were identified in the records check on the west side of the Frontage Road (see Figure 28E, Survey Location Site Photographs, Photo 10.)

- ***Pipeline Corridor under Highway 101 and along Darby Lane to South Oakglen Avenue***

Darby Lane between Highway 101 and South Oakglen Avenue is a cul-de-sac street terminating at Highway 101 which is bordered by older, single family residences. No cultural resources were observed on either side of the street between Oakglen Avenue and Highway 101.

- ***Pipeline Corridor along South Oakglen Avenue from Darby Lane to Tefft Street***

South Oakglen Avenue from Darby Lane to Tefft Street is bordered by single family homes. No cultural resources were observed on either side of the street between Darby Lane and Tefft Street. SLO-1394 is located west of this pipeline corridor southeast of the intersection of Tefft Street and Highway 101.

- 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.

FIGURE 28D
Survey Location Site Photographs



Photo 7: South Frontage Road looking South along Pipeline Route



Photo 8: Orchard Avenue looking North along Pipeline Route

FIGURE 28E
Survey Location Site Photographs



Photo 9: Southland Street East of Orchard Avenue
Modern Shell Concentration



Photo 10: Graded Parcel West of South Frontage Road
near Site SLO-808

- 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.

2. Project Impacts

Impact F-1. *Project construction may disturb or materially alter areas containing prehistoric cultural resources which may be related to an identified prehistoric site.*

As noted above, two prehistoric sites, SLO-808 and SLO-1254 were identified at the northern end of the proposed project adjacent to the South Frontage Road, one prehistoric site, SLO-1394, was identified southeast of Tefft Street and Highway 101 and one area of shells and shell fragments was identified on the south side of Southland Street.

SLO-808 is located on a vacant lot near the intersection of Hill Street and the South Frontage Road (see Figure 28E, Survey Location Site Photographs, Photo 10). It is unknown if intact cultural deposits of SLO-808 exist beneath the South Frontage Road. Both north and south of SLO-808, prehistoric sites originally extended across the highway and frontage roads towards Nipomo Creek. It is possible that displaced and/or intact cultural resources from SLO-808 may be encountered during construction trenching along the South Frontage Road during Phase I construction of the proposed project. Given the lack of information concerning intact portions of SLO-808, it is recommended that cultural resources monitoring accompany construction trenching along the South Frontage Road in the vicinity of Grande Avenue. If any displaced or intact cultural resources are unearthed, work in that area should halt until they can be evaluated by a qualified archeologist and Chumash representative and appropriate recommendations made.

SLO-1254 is located southwest of the intersection of Division Street and the South Frontage Road. No cultural resources were observed between the South Frontage Road and the multi-family residential development on the adjacent lot. However, several artifacts were observed in a cut bank at this location. It is possible that either intact or displaced cultural resources are located beneath the South Frontage Road between Division Street and Story Street which may be encountered during construction trenching along the South Frontage Road during Phase I construction of the proposed project. Given the lack of information concerning intact portions of SLO-1254, it is recommended that cultural resource monitoring accompany construction trenching along the South Frontage Road from Division Street south to Story Street. If any displaced or intact cultural resources are unearthed, work in that area should halt until they can be evaluated by a qualified archeologist and Chumash representative and appropriate recommendations made.

SLO-1394 is located southeast of the intersection of Tefft Street and Highway 101. This site, located on a vacant lot, consists of a scatter of Pismo clam shells. While the proposed project will not directly impact these resources, the vacant lot should not be utilized as a staging area for project construction.

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 trenching along Southland Street during Phase I construction of the proposed project 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.

For the remainder of the project areas for pipeline routes, facilities and staging areas, no prehistoric cultural materials (chert flakes, weathered shell or other prehistoric materials) or historic cultural materials were noted and no cultural resource monitoring is recommended during construction unless undiscovered cultural materials are accidentally unearthed.

Table 20, 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 these measures, impacts to cultural resources due to project construction are considered to be potentially significant, but mitigable impacts.

Impact F-2. *Project grading and construction may result in the discovery of currently-unknown cultural resources.*

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 area 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

**TABLE 20
CULTURAL RESOURCES SUMMARY**

Locations of Various Project Alternatives and Elements	Surface Description	Cultural Materials Present	Potential Adverse Impacts	Mitigation
South of River				
Pump Station 1, Site 1 – west of Blosser Road	flat alluvial terrace	asphalt and tar sand runway	none	none
Pump Station 1, Site 2 – west of Blosser Road	flat alluvial terrace	none	none	none
Water pipeline along Blosser Road	flat alluvial terrace	none	none	none
Pipe laydown along Blosser Road	flat alluvial terrace	none	none	none
Bore pit, laydown, south side of River	alluvial terrace, levee	none	none	none
North of River				
Storage Tank 1 – north of River SE of Orchard Avenue	flat terrace, both disturbed and non disturbed	none	none	none
Storage Tank 2 – north bank of River	knoll/flat alluvial terrace	none	none	none
Storage Tank 3 – north of River	knoll/flat alluvial terrace	none	none	none
Joshua Street north to Southland Street	agricultural fields, roads	none	none	none
Orchard Road from Southland Street to Grande Avenue	natural sloped terraces, roads	none	none	none
Division Street at Alegre Street	natural sloped terrace/road	none	none	none

Southland Street from Orchard Road to South Frontage Road	natural sloped terrace/road residential	shell and bone frags, probably modern	none	cultural resource monitoring
South Frontage Road between Grande Avenue and Story Street	disturbed and graded, road	SLO-808 and SLO-1254	possible	cultural resource monitoring

South Frontage Road fro Story Street to Southland Street	disturbed and graded, road	none	none	none
Under Highway 101 and Darby Lane to South Oakglen Avenue	disturbed and graded, residential	none	none	none
South Oakglen Avenue from Darby Lane to Tefft Street	disturbed and graded, residential	SLO-1394	possible	avoidance of SLO-1394

construction activity. The ability to halt grading or excavation when unknown cultural resources are encountered coupled with the archaeological workshops for construction personnel 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 Planning Area. With the exception of potential impacts to identified prehistoric 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. 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 measures address Impact F-1, potential disturbance or alteration of prehistoric cultural resources.

F-1: Cultural resource monitoring shall accompany construction trenching and excavation along the South Frontage Road near Grande Avenue (SLO-808), between Division Street and Story Street (SLO-1254) as well as along a 100 meter area on the south side of Southland Street directly south

of 641 Southland. A 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.

F-2: The vacant lot located southeast of the intersection of Tefft Street and Highway 101 containing SLO-1394 shall not be utilized during any project construction activities including, but not limited to, a staging area for project construction.

The following measures address Impact F-2, the discovery of currently-unknown cultural resources during project construction.

F-3: 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-4: 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 Measures F-1 and F-2 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-3 and F-4 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 “Nipomo Community Services District Waterline Intertie Project, Geological Resources Evaluation” prepared by Science Applications International Corporation (SAIC) dated July 29, 2005. This analysis is included in its entirety in Technical Appendix H of this document.

1. Existing Conditions

- ***General Topography and Stratigraphy***

The project area includes the Nipomo Mesa on the north and the Santa Maria Plain to the south. The northern, Nipomo Mesa portion of the project area, which is located generally north of the Santa Maria River, consists of a relatively flat-topped mesa, which rises approximately 120 feet above the adjacent Santa Maria River. 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. These deposits are crudely stratified, poorly consolidated and locally cemented. Thicknesses of these deposits range 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 sands are loosely to slightly compacted. These deposits are typically anchored by vegetation and have a well-developed soil mantle. Localized clay layers create perched groundwater conditions. The older dune sand deposits have a maximum thickness of approximately 250 feet in 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.

The southern portion of the project area, which is underlain by the relatively flat-lying Santa Maria River bottom, is underlain by Holocene alluvium, consisting primarily of unconsolidated, poorly-bedded, poorly sorted sand, gravel, silt, and clay with some cobbles and boulders. The alluvium is approximately 130 feet thick in the project area. Interbedded clay, clayey sand and gravel are present at depths below 130 feet.

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

The southern terminus of the project area is located approximately one mile south of the Santa Maria River at the intersection of Blosser Road and West Taylor Street. The east-west trending flood control levee along the southern bank of the Santa Maria River consists of a sediment core that is armored by partially grouted boulders and is underlain by Holocene alluvial deposits. Immediately north of the southern flood control levee is a relatively flat-lying overbank area of the Santa Maria River. An approximate six foot high river bank is present along the boundary of the main (i.e. active) river channel, which ranges between 30 and 50 feet in width. Sediments in the southern overbank area,

which is approximately 1,500 feet wide, consist of relatively loose, unconsolidated fine- to medium-grained alluvial sands, with lenses of cobbles. The main river channel similarly consists of unconsolidated sands, but contains an abundance of pebbles and cobbles, up to 10 inches in diameter. Other linear areas of abundant pebbles and cobbles, such as those found in the main river channel, are also likely present beneath the overbank deposits, as active river channels generally migrate laterally through time. The overbank area on the north side of the main channel ranges between 100 and 1,000 feet in width in the project area resulting in a total river width ranging between 1,650 and 2,500 feet. The northern boundary of the Santa Maria River abuts the near-vertical, approximately 120-foot high bluff which defines the southern extent of the Nipomo Mesa. These bluffs are comprised of Pleistocene older dune sand which are generally erodible resulting in rilling and gulying on the bluff face. North of the river is a gently sloping alluvial canyon, underlain by Holocene alluvial sand, pebbles, and gravel. The canyon is bordered by steep bluffs of older dune sand to the west and the Pleistocene Orcutt Formation to the east.

The relatively flat top of the Nipomo Mesa is underlain by relatively soft, erodible older dune sand. 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*

There are no active faults in the immediate vicinity of the project area although it is located in a seismically active area of Southern California, due to the presence of the active San Andreas Fault, located approximately 38 miles northeast of the project area. Other active faults in the vicinity include the offshore Hosgri Fault Zone, located approximately 22 miles northwest of the project area, the Los Osos Fault, located approximately 23 miles northwest of the project area and the Los Alamos Fault, located approximately 19 miles to the southeast.

Two potentially active northwest-trending faults, the Santa Maria River and Wilmar Avenue Faults, may traverse the project area. The location of these faults is not well defined. The existence of the Santa Maria River Fault was proposed to explain: 1) the southward truncation (i.e. cutting off) of a thick section of early Miocene volcanic siltstone and claystone, 2) the northward truncation of late Miocene and early Pliocene diatomaceous mudstone and siltstone associated with the Santa Maria Basin, 3) an up-to-the-northeast vertical offset of Franciscan bedrock and 4) other stratigraphic contrasts evident from subsurface data. This fault appears to have played a major role in the formation of the Santa Maria Basin. The youngest fault activity along this fault may have occurred as recently as late Quaternary.

The northwest-trending Wilmar Avenue Fault is a late Quaternary reverse fault which is exposed only 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. Along this southerly segment, the alignment of this fault is indicated by the alignment of subtle geomorphic and geologic features, including a straight segment of Nipomo Creek.

In addition, 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 is a concealed high angle reverse fault which transects the City of Santa Maria. Because the location of the fault is based primarily on oil well data, its precise location is not determined. The Plio-Pleistocene Paso Robles Formation is the youngest strata offset by the Santa Maria Fault, therefore, this fault should be considered potentially active.

- *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 or Hosgri Fault Zones.

- *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, such as those present along the Santa Maria River, 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 project area in 2004 ranged from 100 feet to 110 feet above mean sea level or at a depth of approximately 100 feet below the ground surface. In a runoff event, there will be mounding of groundwater close to the river channel. However, this area is a relatively free draining recharge zone. Therefore, the potential for liquefaction is generally limited to periods of runoff.

Sediments underlying Nipomo Mesa would be less likely to liquefy 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.

- ***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. The project area is generally 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.

Mineral resources in the project area consist primarily of construction-grade aggregate, consisting of sand, gravel and crushed stone. Aggregate provides bulk and strength to Portland cement concrete (PCC), asphaltic 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.

The portion of the project area located south of Nipomo Mesa (i.e. the Santa Maria River bed) is located in an area designated as MRZ-2. The Nipomo Mesa area is located in an area designated as MRZ-3. There is a high likelihood that significant deposits of PCC-grade aggregate are located in MRZ-2 of the project area. Several active mining claims are located within the Santa Maria River bed portion of the project area. Mining claims north of the Santa Maria River include the Troesh Ready Mix, Inc. and the Santa Maria Sand Company and River Sand and Gravel, Inc. mining claims.

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 facilities to potential substantial adverse effects, including the risk of loss, involving strong seismic ground shaking and associated ground failure, including liquefaction.*

Several regionally active faults are capable of producing significant ground shaking in the project area which could damage and/or rupture the proposed pipeline, water tank and related 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 pipeline associated with the proposed horizontal directional drilling would be buried well

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below the ground surface, thus minimizing the potential for lateral spreading impacting these pipelines. However, proposed above ground structures, such as the proposed pump stations, 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 related infrastructure. During very large earthquakes, subsidence could occur instantaneously and may total several feet, resulting in pipeline damage and/or rupture.

Although generally limited to periods of surface runoff, the Santa Maria River is also located in an area of potential liquefaction susceptibility. Liquefaction-induced ground failure could also result in damage and/or failure of the proposed pipeline, water tank, pump stations and other related facilities.

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 site, all structures 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 pipeline, water tank, pump stations and other related facilities. These potential seismic impacts are considered to be less than significant.

Impact G-2. *The proposed project could expose facilities to the risk of landslides.*

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, 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. However, the proposed pipeline extension would be bored at a significant depth beneath this slope. Therefore, the potential for landslides, as a result of the proposed project, is low and impacts are considered to be less than significant.

Impact G-3. *The proposed project could result in substantial soil erosion or the loss of topsoil into the Santa Maria River or other local drainages.*

The proposed horizontal directional drilling would generate large quantities of drilling cuttings, which must be temporarily stockpiled prior to off-site disposal. Exposure of such soil cuttings could result in erosion-induced siltation of local drainages or the Santa Maria River. Excavating and grading for the proposed pipeline, water tank, pump stations and other 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 and the adjacent Santa Maria River, resulting in a potentially significant, but mitigable impact.

Impact G-4. *The proposed project would 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.*

The proposed pipeline extension is 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 pipeline, water tank, pump stations and other project facilities are considered to be less than significant.

Impact G-5. *The proposed project would 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.*

The Santa Maria River portion of the project area 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. The proposed horizontal directional drilling traverses the Troesh Ready Mix, Inc. mining claim. However, the pipeline easement would be approximately 10 to 16 feet wide. The quantity of potential aggregate that would be unavailable for mining along this corridor as a result of the proposed project, in comparison to extensive unmined MRZ-2 areas along the Santa Maria River, as well as the area surrounding the City of Santa Maria, would be negligible. Therefore, impacts associated with the potential loss of the availability of mineral resources 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 the Santa Maria River, Nipomo Creek, Deleissigues Creek, Mehlschau 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 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-3, erosion of temporarily exposed soils into Nipomo Creek, the Santa Maria River and other drainages.

G-1: The following shall be included in Final Grading and Drainage Plans to prevent erosion induced siltation of on-site and off-site drainages:

- The use of temporary berms and sedimentation traps, such as silt fencing, straw bales, and sand bags, to be installed in association with project excavations, grading and underground horizontal directional drilling activities in order to minimize erosion of soils and sedimentation into the Santa Maria River and other local drainages. Sedimentation basins and traps shall be cleaned periodically with silt removal and disposal in a location approved by the District.
- 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 erosion induced siltation of the Santa Maria River and other local drainages to an insignificant level (Class II Impact).

Potential impacts related to 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 or the loss of availability of a known mineral resource are considered to be less than significant (Class III Impact).

H. 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, Hutton Road (Highway 166) and Broadway Street. Other regional roadways near the project area are State Highway 1 and State Highway 166. The local circulation system serving the Nipomo area includes Joshua Street, Orchard Road, Southland Street, South Frontage Road, Darby Lane, South Oakglen Avenue and Tefft Street. With the exception of the four lanes on Tefft Street, all these local roadways are two-lane paved roads. Immediately north of the Santa Maria River, Cuyama Lane and Hutton Road west of Highway 101 are the two-lane paved roadways serving the industrial and commercial uses in this area.

On the south side of the Santa Maria River, local roadways include Blosser Road and Preisker Lane, both two-lane local roadways, which lead to the four-lane Broadway Street and its interchange at Highway 101. Atlantic Place runs parallel to the southern river levee. West Taylor Street intersects and terminates at Blosser Road approximately one mile south of the Santa Maria River.

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 pedestrians or bicyclists.

3. Project Impacts

Impact H-1. *The proposed project will generate additional traffic which could result in traffic congestion or unacceptable levels of service on an adjacent roadway or intersection.*

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 21. Construction Employee Breakdown, a maximum total of employees for Phase I project construction is 54 workers. Given its extensive nature, Phase I construction activities represent a maximum probable impact (“worst case”) scenario for traffic impacts during project construction. It should be noted however that this employee total is distributed to five separate locations. The maximum number of employees at any one location is fifteen workers.

**TABLE 21
CONSTRUCTION EMPLOYEE BREAKDOWN**

Construction Function	Foreman	Operators	Laborers	Specialists	Total
Horizontal Directional Drilling Santa Maria River Crossing	1	4	7	3	15
NCS D System Pipeline Improvements	1	3	5	1	10
Blosser Road Water Main & Flow Meter Pump Station & Reservoir	1	3	5	1	10
	2	4	7	2	15
Wellhead Chloramination Improvements	1	1	2	0	4

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 216 total vehicle trips per day with no individual site generating more than 60 vehicle trips per day. These low daily 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 H-2. *Project construction activities may 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 pedestrians or bicyclists.*

Project construction activities may result in the short-term diversion of automobile traffic or farm equipment from adjacent agricultural farmlands on certain local roadways. These roadways may include Blosser Road, West Taylor Street and Atlantic Place south of the Santa Maria River and Joshua Street, Orchard Road, Southland Street, South Frontage Road, Darby Lane, South Oakglen Avenue and Tefft Street north of the Santa Maria River. 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 pedestrian or bicycle 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.

3. 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.

4. Mitigation Measures

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

H-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 and/or pedestrians. These measures shall also insure continued access from adjacent properties to local roadways.

5. Residual Impacts

Mitigation Measure H-1 will reduce potentially significant impacts related to the diversion of traffic, impeding access to adjacent properties and potential hazards to pedestrians or bicyclists 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).

I. 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, industrial uses, including the existing concrete batch plant located at the current terminus of Hutton Road and the adjacent waste transfer station, the Santa Maria Speedway, occasional small aircraft and other less obtrusive 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 I-1. *The proposed project will generate construction noise which may impact surrounding areas containing noise sensitive uses.*

Construction noise represents a short-term impact on ambient noise levels. The primary sources of construction noise are heavy equipment either from underground horizontal

directional drilling or noise generated by construction equipment, including trenching equipment, trucks, graders, 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 underground horizontal directional drilling and for water storage tank and booster station sites grading 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 proposed horizontal directional drilling include residential uses adjacent to Blosser Road and Atlantic Place south of the Santa Maria River and existing residential uses in areas adjacent to Joshua Street and Orchard Road north of the river and the Maria Vista residential tract.

Maximum noise levels from construction equipment associated with the proposed horizontal directional drilling at the southern HDD laydown area to the nearest residence which is located adjacent to Blosser Road or Atlantic Place on the south side of the Santa Maria River (a distance of approximately 1000 feet from the proposed construction area) is 69 dBA. Existing residences on the north side of the river are located no less than 500 feet from the proposed construction area. Noise generated by the installation of a pipeline underneath the southern levee using jack-and-bore construction techniques which may impact residences located adjacent to Blosser Road and Atlantic Place will not generate noise levels that meet or exceed those associated with underground directional drilling. However, the proximity of existing residences adjacent to Blosser Road or Atlantic Place (a distance of approximately 200 feet from the construction area) results in a maximum noise exposure of 83dBA. In all cases, these maximum noise levels would be temporary and represent “worst case” estimates of construction noise. Average noise levels during peak periods of construction are not expected to exceed 60 CNEL.

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.

Project construction is expected to commence with construction of facilities at various locations along the proposed pipeline extension. Phase I construction activities include: 1) construction of the Blosser Road pipeline (120 to 140 days); 2) Santa Maria River crossing (280 to 300 days); 3) Pump Station # 2 and Storage Tank construction (300 to 320 days) and 4) NCSO distribution system improvements (200 to 220 days). Start-up and testing of these facilities is estimated to require an additional 30 to 40 days. Phase I project construction is estimated by the project engineer to require a total of 350 to 380 calendar days. Several of the construction activities noted above will be performed

concurrently within this overall range of timing. Phase II project construction is estimated to require a total of 110 to 150 calendar days. Concurrent construction activities include: 1) Pump Station # 2 upgrades (90 to 120 days) and 2) NCSD distribution system improvements (90 to 120 days). Start-up and testing of these facilities is estimated to require an additional 10 to 20 days. Phase III project construction is estimated to require a total of 350 to 380 calendar days for the additional or replacement waterline on Blosser Road, the provision of a water main to the Quad Storage Tanks and construction of or upgrades to Pump Stations No. 1 and No. 2. These construction noise impacts are considered short-term and with mitigation measures represent a potentially significant, but mitigable impact.

Impact I-2. *The proposed project will generate increased noise levels due to long-term project operations.*

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 equipment within the enclosed pump stations is not expected to exceed 60 dBA. Any stationary noise sources located within 300 feet of any occupied residential dwellings must be contained within a housing enclosure or other appropriate noise screen in order to insure that exterior noise levels do not exceed 60 CNEL. 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 I-1, increased noise levels during project construction.

I-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.

I-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.

I-3: All necessary measures to muffle, shield or enclose construction equipment shall be implemented in order to insure that noise levels at the property line of the nearest residence do not exceed an exterior noise level of 60 dBA. During project construction, noise monitoring shall be conducted by a qualified acoustical engineer in order to insure the acceptable noise threshold of 60 dBA at the property line of the nearest sensitive receptor.

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

I-4: Stationary noise sources (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 I-1 through I-3 will reduce potentially significant impacts related to the generation of short-term construction noise to an insignificant level (Class II Impact).

Mitigation Measure I-4 will reduce potentially significant noise impacts associated with long-term project operations to an insignificant level (Class II Impact).

J. 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 are often in the high 90's. 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 sulphur oxides (SO_x) (Nipomo – Guadalupe Monitoring Station). Between September, 2007 and September, 2008 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 PM₁₀ 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 PM₁₀ standard. The major sources for PM₁₀ are mineral quarries, grading, demolition, agriculture tilling, road dust and vehicle exhaust.

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 measured 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 CO₂ 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. By January 2009, CARB must adopt mandatory reporting rules for major sources of GHGs and also a plan indicating how reductions in significant GHG sources will be achieved through regulations, market mechanisms, and other actions.

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 waterline intertie project.

Impact J-1. *The proposed project will result in the generation of air pollutants during project construction activities.*

The proposed project involves the construction of a waterline intertie under the Santa Maria River as well as the installation of other underground pipelines and other infrastructure facilities including pump stations, a water storage tank, and metering and electrical equipment.

Particle matter in the form of fugitive dust will be generated during the grading required for site preparation of the proposed pump stations and water storage tank as well as for installation of various pipelines. 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 one pump station (Pump Station No. 2), the proposed underground water storage tank and approximately 1,000 linear feet of pipeline at one time. The size of the area to be disturbed with this maximum (or "worst case") level of project construction is 35,000 square feet or 0.80 acres (10,000 square feet for the pump station, 10,000 square feet for the water storage tank and 15,000 square feet for the pipeline). These estimates also assume 21 working days per month. 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 acres per month of disturbed soil. If water or other soil stabilizers are used to control dust, the emissions can be reduced by 50 percent.

This grading activity is estimated to generate a "worst-case" total of 0.168 tons of particulate matter per month or approximately 16 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 Tier 2 significance thresholds. With these measures, short-term air quality impacts associated with fugitive dust generation during project construction are considered to represent a 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 including equipment necessary for the proposed underground horizontal directional drilling as well as the construction of the proposed pumps stations, a water storage reservoir and other pipeline and water well improvements. During the anticipated period of operation of this equipment, nitrogen oxides, reactive organic gases, sulphur oxides, particulates and carbon monoxide will be emitted. Operation of diesel fueled drilling or trenching equipment may generate pollutants that exceed the SLOAPCD thresholds of significance. In particular, diesel equipment used in proposed horizontal directional drilling 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.

As discussed in Section V.H, Traffic, a maximum total employees for Phase I project construction is 54 workers. Given their extensive nature, i.e. construction work at five separate locations, Phase I 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 216 vehicle trips per day. Assuming an average trip length of ten miles results in a total of 2,160 vehicle miles per day during the maximum probable construction conditions. Pollutant generation resulting from construction traffic is provided in Table 22, Construction Traffic Emissions.

**TABLE 22
CONSTRUCTION TRAFFIC EMISSIONS**

Pollutant	Factor (gms/mile)	Emissions (lbs/day)	Tier 1 Significance Threshold (lbs/day)
CO	7.48	35.5	50
ROG	0.48	2.28	10
NO _x	0.82	3.89	10
PM ₁₀	0.06	70.01	10
SO _x	0.29	1.38	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 J-2. *The proposed project will generate pollutants associated with long-term project operations.*

Long-term project operations will involve the operation of pump stations, metering and electrical equipment and vehicle trips for District personnel. Long-term operation of 75 horsepower pumps are required in order to handle the anticipated flow rates of the imported water as well as provide backup (standby) service. Pumps will be sized to accept water from the City of Santa Maria water system at Blosser Road and West Taylor Street and boost pressure for transport and to enter the higher pressure NCSD water supply system. The primary pumps used for pumping the imported water will be electrically powered, the backup (standby) pump, to be used only on an emergency basis during power outages or equipment breakdown. Table 23, Project Power Requirements provides a detailed breakdown of electrical usage associated with project pumping.

**TABLE 23
PROJECT POWER REQUIREMENTS**

Project Phase	Water Delivery (acre-feet/year)	Annual Power (kwh/year)	Daily Power (kwh/day)
I	1000	476,611	1,306
	1500	714,917	1,959
	2000	453,222	2,612
II	2500	1,241,018	3,400
	3000	1,489,221	4,080
III	6300	3,208,223	8,789

Based upon these electrical usage rates, pollutant generation totals associated with long-term project operations, primarily due to water pumping, are provided in Table 24, Project Operations Emissions.

**TABLE 24
PROJECT OPERATIONS EMISSIONS**

Project Phase	Daily Power (KWH/day)	Emissions (lbs/day)				
		CO	ROG	NO _x	PM ₁₀	SO _x
I	2,612	0.52	0.03	3.00	0.10	0.32
II	4,080	0.82	0.05	4.69	0.17	0.49
III	8,789	1.76	1.77	10.11	0.36	1.06

With the exception of nitrogen oxides at the completion of Phase III of the proposed project, these totals do not exceed the APCD Tier 1 significance thresholds of 10 pounds per day. The Phase III generation of nitrogen oxides falls slightly above this threshold, however, the use of electric power combined with other proposed mitigation measures generates pollutants during the operation of pumps which is considered to be a potentially significant, but mitigable impact.

It should be noted that pollutants generated by electrical use are produced at the power plant rather than at the project site. 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 25, 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 25
EMISSIONS COMPARISON
DIESEL AND ELECTRIC POWERED MOTORS**

Pollutant Generation Factors (lbs/day)					
Motor	ROG	NO _x	SO _x	PM ₁₀	CO
Diesel (lbs/day)	3.57	22.36	3.02	1.74	1,680.11
Electric (lbs/day)	0.03	3.15	0.33	0.11	0.55
Net Change (lbs/day)	3.54	19.21	2.69	1.63	1,679.56
Net Change (tons/year)	0.65	3.50	0.49	0.30	306.52

The use and operation of metering and other electrical equipment within the pump stations, at pressure reducing stations and at District wells 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 metering and electrical equipment 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 the following trip profile:

- Two vehicle trips per day from the District Management Facility located at 509 Southland Street to monitor/repair the proposed Pump Station No. 2, water storage facility and various wells sites. With an average trip length of three miles, a total of 12 vehicle miles per day is generated.
- One vehicle trip per week from the District Maintenance Facility to monitor/repair facilities within Santa Maria, on the south side of the Santa Maria River. With an average trip length of nine miles, a worst-case total of 18 miles on any one day is generated.

Pollutants generated by this level of vehicle use, a “worst-case” total of 30 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.

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, certification of horizontal directional drilling 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 J-1, the generation of pollutants during project construction.

- J-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.
- J-2:** All dirt stock-pile areas shall be sprayed daily as needed.
- J-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.
- J-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.
- J-5:** All roadways, driveways, sidewalks, etc. to be paved shall be completed as soon as possible. In addition, building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- J-6:** Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface at a construction site.
- J-7:** All trucks hauling dirt, sand, soil or other loose materials shall be covered or maintain at least two feet of freeboard.

- J-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.
- J-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.
- J-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.
- J-11:** All PM10 mitigation measures required must be included on any grading or building plans. These plans shall indicate the source of reclaimed water to be used for dust control. In addition, 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.
- J-12:** All construction equipment shall be properly maintained and tuned according to manufacturer's specifications.
- J-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.
- J-14:** Where possible, diesel powered equipment shall be replaced with gasoline, electrical, CNG or LPG powered equipment.
- J-15:** Diesel equipment used in proposed horizontal directional drilling shall either be certified pursuant to the California Air Resources Board's Portable Equipment Registration Program 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/or proper fuel selection.
- J-16:** 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 J-2, the generation of pollutants associated with long-term project operations.

J-17: The daily water pumping operations for the proposed projects 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.

J-18: The District shall investigate the feasibility and cost-effectiveness of the use of solar power or other alternative energy sources to power water pumps or other project facilities.

6. Residual Impacts

Mitigation Measures J-1 through J-16 will reduce potentially significant air quality impacts associated with project construction to an insignificant level (Class II Impact).

Mitigation Measures J-17 and J-18 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 26, Project Impact Summary below with their respective impact category.

**TABLE 26
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 water supplies.
	Class III	Direct impacts on adjacent land uses due to project construction and operations.
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 water supplies.
	Class III	Increased housing demand associated with project construction.
C. Water	Class II	Water quality impacts due to differences in water treatment employed by the City of Santa Maria and the NCSO, underground horizontal directional drilling and equipment maintenance/refueling.
	Class III	Impacts to groundwater supplies in the Santa Maria Groundwater Basin.
	Class IV	Addition of groundwater supplies to the Nipomo Mesa Management Area.
D. Biological Resources	Class II	Impacts related to nesting activities of protected migratory birds and raptors, special-status terrestrial and avian species, special-status aquatic or semi-aquatic species, sensitive habitat areas within the Santa Maria River, large eucalyptus trees located on Southland Street and Orchard Road, the generation of silt and sedimentation and long-term pipeline operations and maintenance activities.
	Class III	Impacts upon non-listed wildlife species, the Santa Maria River wildlife migration corridor, foraging bird species and special-status plant species.
E. Aesthetics	Class II	Impacts associated with views of project facilities and the generation of light and glare.
	Class III	Visual impacts associated with project construction.
F. Cultural Resources	Class II	The potential disturbance or alteration of cultural resources or the discovery of unknown cultural resources during project construction.
G. Geology	Class II	Erosion-induced siltation of the Santa Maria River and other 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. Traffic	Class II	Impacts related to the diversion of traffic, impeding access to adjacent properties and potential hazards to pedestrians or bicyclists.
	Class III	Impacts related to construction-related traffic generation and the loss of available parking.
I. Noise	Class II	Impacts related to the short-term generation of construction noise and long-term project operations.
J. 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 water supplies 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 water supplies 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 Consideration by the Nipomo Community Services District 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 the following alternatives to the proposed project:

- A. No Project Alternative
- B. Eastern River Crossing Alternative
- C. Highway 101 Bridge Alternative
- D. Surface Crossing Alternative
- E. Existing Pipeline Alternative
- F. New Bridge Alternative
- G. Reduced Pipeline Capacity Alternative
- H. Alternative Project Sites
- I. Alternative Water Sources

The analysis of each project alternative begins with a description of the alternative followed by a discussion of its environmental impacts. Following this discussion, the environmentally superior project alternatives (as compared to the proposed project) are identified. 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 following analysis, the No Project Alternative and the Reduced Pipeline Capacity Alternative are capable of reducing or 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 further concluded that the No Project Alternative was capable of eliminating the potentially significant but mitigable (i.e. direct) impacts associated with the proposed waterline intertie. It was also concluded that the Eastern River Crossing, Highway 101 Bridge, Surface Crossing, Existing Pipeline and New Bridge Alternatives have significant but mitigable (i.e. direct) impacts that are greater than those associated with the proposed intertie project and the remaining project alternatives. It was finally determined that two project alternatives, the No Project Alternative and the Reduced Capacity Alternative, will result in additional adverse impacts upon groundwater supplies within the Nipomo Mesa Management Area as compared to the proposed project and the remaining project alternatives.

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. These project objectives are discussed in Section III.B. Project Objectives of this EIR and are listed below.

1. Slow the depletion of the above-sea-level groundwater in storage beneath the Nipomo Mesa Groundwater Management Area (NMMA) of the Santa Maria Groundwater Basin to reduce the potential for sea water intrusion by using supplemental water consistent with the settlement agreement and the judgment related to the groundwater adjudication. Since projections have shown that sea water intrusion could occur in 12-14 years with no new development, and under 8 years in a “dry years” scenario, the nearest-term project completion is essential. The conservative goal of this project is to provide at least 2,000 acre-feet per year (AFY) of supplemental water to the NMMA by 2013.
2. Comply with the 2005 groundwater adjudication settlement stipulation and judgment that dictates the need for active management of the NMMA.
3. Assist in stabilizing the groundwater levels in the NMMA by reducing pumping in the NMMA.
4. Augment current water supplies available to the Nipomo Community Services District by a phased delivery of supplemental water. Phase I will supply approximately 2,000 AFY by pipeline from Santa Maria following Phase 1 construction completion. Phase II will supply up to an additional 1,000 AFY by pipeline from Santa Maria (a cumulative total of 3,000 AFY). A third phase (Phase III), if implemented, would supply up to an additional 3,200 AFY (a cumulative total of 6,200 AFY) by pipeline from Santa Maria.
5. Augment current water supplies available to the Woodlands and other water purveyors on the Mesa by 831 acre-feet per year as follows: Woodlands (415 AFY), Golden State Water Company (208 AFY) and Rural Water Company (208 AFY).
6. Increase the reliability of District water supply by providing a diversity of water sources. Avoid the potential use of supplemental water return flows from the District, the Woodlands and the other purveyors, being used to support the water requirements of new development.
7. Comply with Local Agency Formation Commission (LAFCO) conditions for securing supplemental water prior to annexation of lands now within the District’s Sphere of Influence. This supplemental water for annexations shall be in addition to the 3,000 AFY developed by Phases I and II.
8. Avoid multiple waterline crossings of the Santa Maria River and associated environmental impacts, by constructing a single pipeline capable of transporting sufficient water for potential NMMA growth consistent with the South County Area Plan (Inland) of San Luis Obispo County's General Plan. The pipeline diameter crossing the Santa Maria River would accommodate a 6,200 AFY capacity.

9. Slow the depletion of the above-sea-level groundwater in storage beneath the NMMA by:
 - A. Providing supplemental water for new development within the current service area of the District and the Mesa's other water purveyors (Golden State and Rural Water) consistent with the South County Area Plan (Inland);
 - B. Facilitating supplemental water delivery for new development within the District's Sphere of Influence consistent with the South County Area Plan (Inland) and the conditions in LAFCO's 2004 Sphere of Influence Update;
 - C. Providing the basis for the assessment of County Impact Fees upon development outside the District's Sphere of Influence and the service areas of the Mesa's other water purveyors (Golden State and Rural Water Companies).

These project objectives provide the basis for the evaluation (and possible adoption or rejection) of various project alternatives. Table 27, Project Alternatives, Comparison With Project Objectives provides a tabular comparison of project objectives and the project alternatives. The basic objective of the proposed Nipomo Community Services District Waterline Intertie is to construct a pipeline connection from the City of Santa Maria water distribution system across the Santa Maria River to the existing water distribution system within the Nipomo Community Services District in order to meet the stated objectives of the project through the provision of supplemental water supplies. Several of the project alternatives are capable of meeting these objectives, those being the Eastern River Crossing, Highway 101 Bridge, Surface Crossing, Existing Pipeline and New Bridge Alternatives. Two project alternatives, the No Project and Reduced Pipeline Capacity Alternatives, are not capable of meeting 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 27
PROJECT ALTERNATIVES
COMPARISON WITH PROJECT OBJECTIVES**

OBJECTIVES	ALTERNATIVES						
	No Project	Eastern River Crossing	Highway 101 Bridge	Surface Crossing	Existing Pipeline	New Bridge	Reduced Pipeline Capacity
Slow the Depletion of NMMA Groundwater Supplies	0	3	3	3	3	3	1
Comply With Groundwater Adjudication	0	3	3	3	3	3	3
Assist in Stabilizing Groundwater Levels	0	3	3	3	3	3	1
Augment NCSD Water Supplies	0	3	3	3	3	3	3
Augment Water Supplies to Other Current Purveyors	0	3	3	3	3	3	3
Provide Diversity of Water Sources	0	3	3	3	3	3	2
Respond to LAFCO Requirements	0	3	3	3	3	3	3
Avoid Multiple River Crossings	3	3	3	3	3	3	1
Provide Water to NCSD Service Area and Spheres of Influence	0	3	3	3	3	3	1

- 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

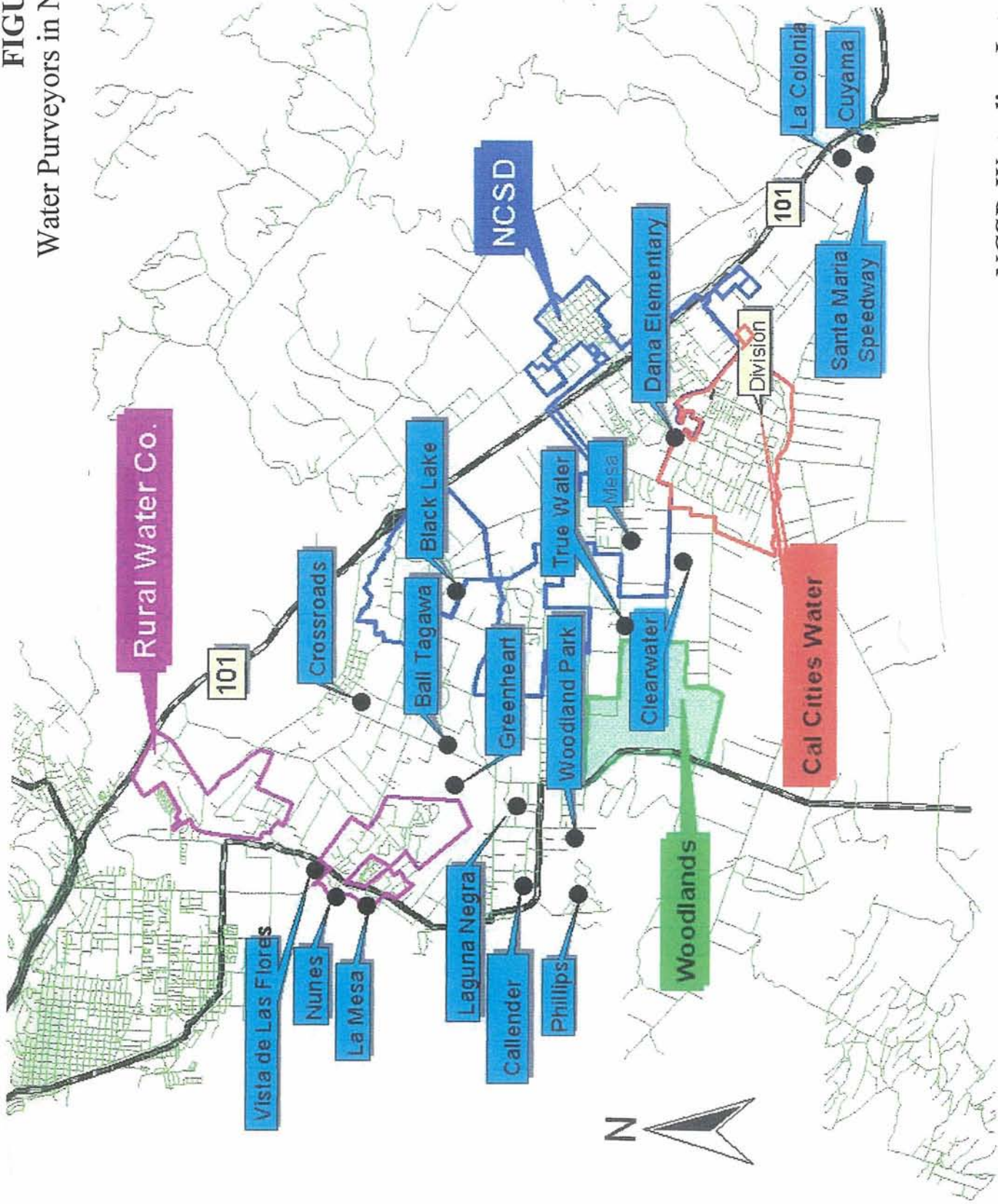
The No Project Alternative would retain the project area in its current condition and could eliminate the City of Santa Maria as a future source for supplemental water to the Nipomo Community Services District.

2. Impacts of the No Project Alternative

The No Project Alternative maintains the existing conditions in the project area as discussed in Section V. Environmental Analysis of this EIR. 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 supplemental water delivery to the Nipomo Community Services District would reduce the amount of future water supplies available to serve new development within the Nipomo Mesa Management Area. By maintaining water supplies at current levels, a potential constraint to future development, that being the future availability of long-term water supplies, is retained. 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 – Grading and construction impacts associated with impacts upon landform, geology and hydrology of the project area will be eliminated with this alternative. In terms of water supply, the No Project Alternative eliminates the potential for supplemental water delivery to the Nipomo Community Services District at this time. In so doing, the ability of the District and other Mesa water providers to provide area-wide groundwater management is reduced while increasing dependence upon pumping of the groundwater basin. With the No Project Alternative, other water purveyors within the Nipomo area, who are not governed by many of the conditions and regulations applied to the Nipomo Community Services District, may utilize the groundwater basin as a future water source for new development. These water purveyors, as illustrated in Figure 29, Water Purveyors in Nipomo, have the capability and authority to pump additional groundwater from the Nipomo Mesa Management Area thereby potentially contributing to continued degradation and potential overdraft of the groundwater basin which would result in an additional significant adverse impact upon these groundwater supplies.
3. Biological Resources – Impacts to existing biological resources associated with the proposed project will be eliminated with the No Project Alternative.

FIGURE 29
Water Purveyors in Nipomo



4. Aesthetics – The No Project Alternative will eliminate any impacts to visual resources and light and glare associated with the proposed project.
5. Cultural Resources – Potential impacts to cultural resources will be eliminated with the No Project Alternative.
6. Traffic/Noise/Air Quality – Traffic and associated 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 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. The No Project Alternative also eliminates the potentially significant but mitigable (i.e. direct) impacts associated with the proposed project. The No Project Alternative will, however, result in additional adverse impacts upon the groundwater supplies within the Nipomo Mesa Management Area.

The No Project Alternative fails to meet all of the proposed objectives related to the avoiding further depletion of NMMA groundwater supplies, compliance with the Groundwater Adjudication, assisting in balancing groundwater levels, augmenting NCS D water supplies, augmenting water supplies to current purveyors, provision of a diversity of water sources, responding to LAFCO requirements and provision of supplemental water supplies to the NCS D service area and Spheres of Influence (see Table 27, Project Alternatives, Comparison With Project Objectives).

B. EASTERN RIVER CROSSING ALTERNATIVE

1. Description of Surface Crossing Alternative

Two options were identified as potential routes for an eastern pipeline alignment beneath the Santa Maria River (see Figures 30A and 30B, Eastern River Crossing Alternatives). Both alignments connect to the proposed 18-inch waterline along Blosser Road near its intersection with Atlantic Place. At this point, the pipeline is extended approximately 300 feet north on Blosser Road and either 4,300 feet (Alternative 30A) or 5,200 feet (Alternative 30B) east along Atlantic Place via open trench construction. At this point, approximately 300 linear feet of 24-inch carrier pipe will be installed with a 36-inch steel casing under the river levee using jack-and-bore construction methods. An additional 1,800 linear feet of pipeline will then be installed from the Santa Maria River levee to a horizontal directional drilling site within the riverbed. This open trench construction will either follow the existing abandoned railroad alignment (Alternative 30A) or the abandoned 1917 State Highway alignment (Alternative 30B). The next 2,500 linear feet of 24-inch waterline will be installed either directly in the ground or within a 36-inch steel casing from the Santa Maria riverbed to the Nipomo Mesa using horizontal directional drilling. This methodology and underground drilling distance is approximately equal to that associated with the pipeline alignment for the proposed project. The pipeline continues as a 24-inch waterline along Hutton Road via open-trench construction approximately 3,800 linear feet to Nipomo Creek where the pipeline transverses the Creek by attachment to the existing bridge. Following this bridge crossing, the pipeline will continue approximately 6,000 linear feet to the proposed water storage tank and Pump Station No. 2 near the intersection of Joshua Street and Hutton Road.

2. Impacts of Eastern River Crossing Alternative

Environmental impacts associated with the Eastern River Crossing Alternative are discussed below.

1. Land Use and Planning/Population and Housing – The Eastern River Crossing 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 Eastern River Crossing Alternative are similar to those associated with the proposed project. The extent of impacts associated with geology and drainage would be greater with the Eastern River Crossing Alternative than that associated with the proposed project. There is due to the original trenching within the Santa Maria Riverbed with this Alternative than with the proposed project (1,800 feet as compared to 900 feet for the proposed project), significantly greater trenching required on the south side of the river levee (4,300 or 5,200 linear feet) and an additional 7,300 linear feet on the north side of the river.

FIGURE 30A
Eastern River Crossing Alternative

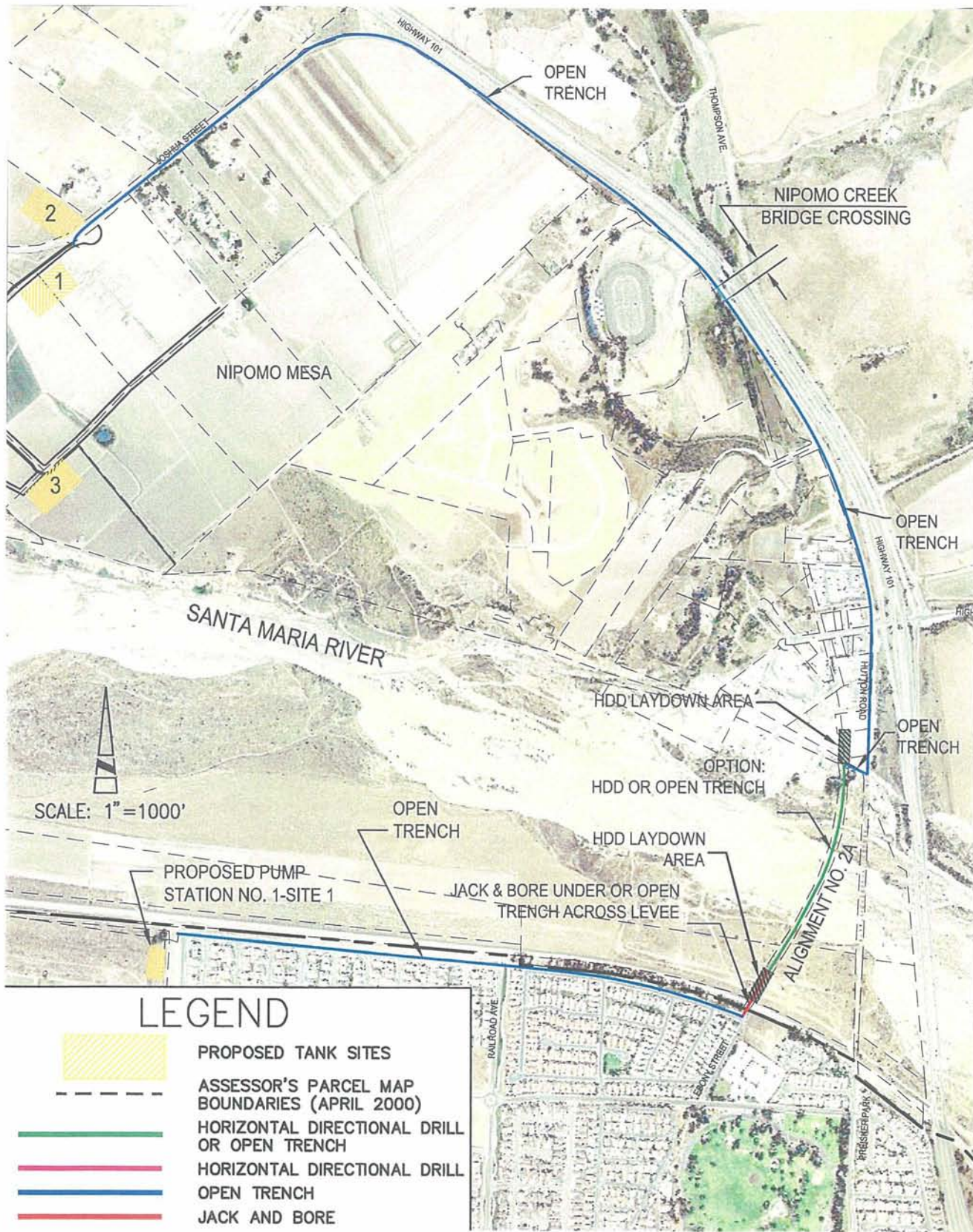
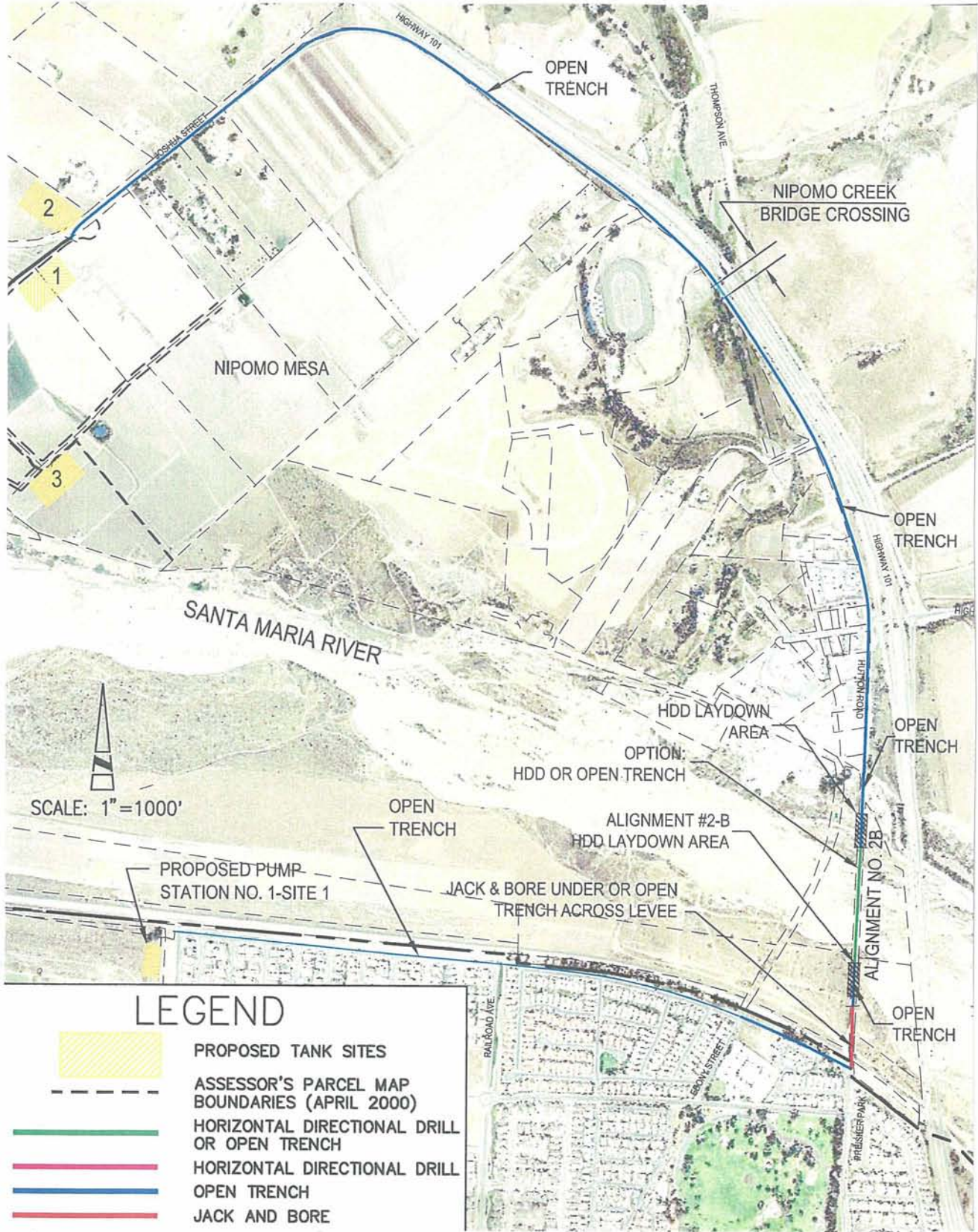


FIGURE 30B
 Eastern River Crossing Alternative



Impacts associated with potential degradation of surface and shallow groundwater quality as a result of proposed horizontal directional drilling due to the Eastern River Crossing Alternative are similar to those associated with the proposed project since both options involve a similar amount of horizontal directional drilling.

Impacts upon surface water quality as a result of potential construction related spills is greater with the Eastern River Crossing Alternative due to the increased amount of surface trenching required within and on each side of the Santa Maria Riverbed as compared to the proposed project.

3. Biological Resources – The extent of potential impacts upon sensitive biological resources is greater with the Eastern River Crossing Alternative as compared to the proposed project due to the need to traverse Nipomo Creek with the pipeline. Nipomo Creek has been observed to contain the California red-legged frog (CRLF), a Federally-listed threatened species and a California Species of Special Concern. Construction activities within the area proposed for crossing Nipomo Creek may also impact riparian habitat, wetland vegetation and other sensitive biological resources at this location. This Alternative alignment will, however, avoid three other observed locations of the CRLF in areas near the proposed project pipeline alignment.
4. Aesthetics – The Eastern River Crossing Alternative will have increased short-term visual impacts as compared to the proposed project due to the increased amount of surface trenching required within and on each side of the Santa Maria Riverbed as compared to the proposed project.
5. Cultural Resources – The Eastern River Crossing Alternative would have similar impacts upon cultural resources as the proposed project.
6. Traffic/Noise/Air Quality – The Eastern River Crossing will have increased traffic, noise and air quality impacts as compared to the proposed project due to the increased amount of surface trenching required within and on each side of the Santa Maria Riverbed.

3. Comparative Analysis

The Eastern River Crossing 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. This alternative has increased direct impacts in the areas of geology/water, biological resources, aesthetics and traffic/noise/air quality as compared to the proposed project.

The Eastern River Crossing Alternative meets all of the project objectives in a manner similar to the proposed project (see Table 27, Project Alternatives, Comparison with Project Objectives).

C. HIGHWAY 101 BRIDGE ALTERNATIVE

1. Description of Highway 101 Bridge Alternative

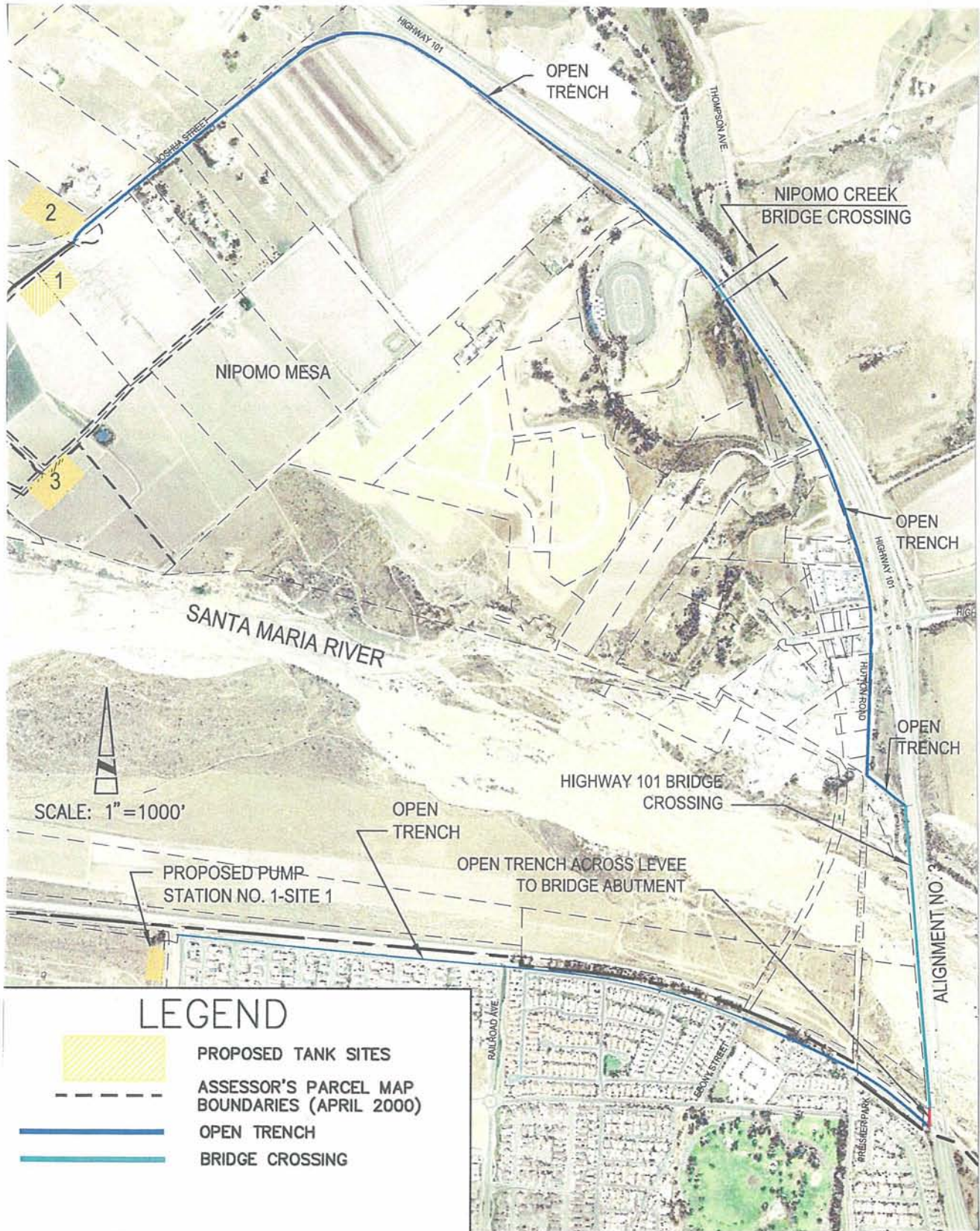
The Highway 101 Bridge Alternative involves attaching the pipeline to the existing Highway 101 Bridge which spans the Santa Maria River (see Figure 31, Highway 101 Bridge Alternative). This alternative alignment connects to the proposed 18-inch waterline along Blosser Road near its intersection with Atlantic Place. At this point, the pipeline is extended approximately 300 feet north on Blosser Road and 5,900 linear feet east along Atlantic Place via open trench construction. At this point, the pipeline is reduced to four parallel 12-inch pipes to be attached underneath the bridge with coring between the girders and through the bridge abutments. The California Department of Transportation (Caltrans) has stated that the current structure would support any retrofitted supports and the new waterlines. According to Caltrans, the Highway 101 Bridge is scheduled for upgrading and expansion by the year 2012. If attachment of the waterline to the current bridge is not pursued, space can be created for the waterline in the design phase of the bridge upgrade project. The pipeline will be extended approximately 2,100 linear feet attached to the bridge. Following the bridge crossing, the pipeline is consolidated back to a 24-inch pipeline which is extended via open-trench construction approximately 800 linear feet to Hutton Road. The pipeline continues as a 24-inch waterline along Hutton Road via open-trench construction approximately 3,800 linear feet to Nipomo Creek where the pipeline transverses the Creek by attachment to the existing bridge. Following this bridge crossing, the pipeline will continue approximately 6,000 linear feet to the proposed water storage tank and Pump Station No. 2 near the intersection of Joshua Street and Orchard Road.

2. Impacts of Highway 101 Bridge Attachment

Environmental impacts associated with the Highway 101 Bridge Alternative are discussed below.

1. Land Use and Planning/Population and Housing – The Highway 101 Bridge 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 Highway 101 Bridge Alternative are similar to but less than those associated with the proposed project as the pipeline would be suspended on the existing Highway 101 bridge rather than buried under the Santa Maria River. The extent of impacts associated with geology and drainage would be greater with the Highway 101 Bridge Alternative than that associated with the proposed project. Although there is slightly less trenching within the Santa Maria Riverbed with this Alternative than with the proposed project (800 feet as compared to 900 feet for the proposed project), there is significantly greater trenching required on the south side of the river levee (5,900 linear feet) and an additional 7,300 linear feet on the north side of the river.

FIGURE 31
 Highway 101 Bridge Alternative



Impacts associated with the potential degradation of surface and shallow groundwater quality as a result of proposed horizontal directional drilling are eliminated with the Highway 101 Bridge Alternative.

Impacts upon surface water quality as a result of potential construction related spills is greater with the Highway 101 Bridge Alternative as compared to the proposed project due to the increased use of construction equipment needed for attachment of pipelines to the bridge within the Santa Maria riverbed as well as the increased amount of surface trenching on each side of the Santa Maria River as compared to the proposed project.

3. Biological Resources – The extent of potential impacts upon sensitive biological resources is greater with the Highway 101 Bridge Alternative as compared to the proposed project due to the need to traverse Nipomo Creek with the pipeline. Nipomo Creek has been observed to contain the California red-legged frog (CRLF), a Federally-listed threatened species and a California Species of Special Concern. Construction activities within the area proposed for crossing Nipomo Creek may also impact riparian habitat, wetland vegetation and other sensitive biological resources at this location. This Alternative will, however, avoid three other observed locations of the CRLF in areas near the propose project pipeline alignment.
4. Aesthetics – The Highway 101 Bridge Alternative will have increased short-term visual impacts as compared to the proposed project due to the increased amount of surface trenching required on each side of the Santa Maria River as well as the additional use of construction equipment needed for attachment of pipelines to the bridge.
5. Cultural Resources – The Highway 101 Bridge Alternative would have similar impacts upon cultural resources as the proposed project.
6. Traffic/Noise/Air Quality – The Highway 101 Bridge Alternative will have increased traffic, noise and air quality impacts as compared to the proposed project due to the increased amount of surface trenching required on each side of the Santa Maria River.

3. Comparative Analysis

The Highway 101 Bridge 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. This alternative has increased direct impacts in the areas of geology/water, biological resources, aesthetics and traffic/noise/air quality as compared to the proposed project.

The Highway 101 Bridge Alternative meets all of the project objectives in a manner similar to the proposed project (see Table 27, Project Alternatives, Comparison with Project Objectives).

D. SURFACE CROSSING ALTERNATIVE

1. Description of Surface Crossing Alternative

Extension of a waterline across the surface of the Santa Maria River channel will involve excavating an open trench. This would involve excavation of a trench approximately twelve feet deep and forty feet wide at the surface as it traverses the Santa Maria River channel. When combined with the open trench construction required to scale and traverse the Nipomo Mesa, involving a 15-foot wide trench, a total surface soil disturbance of approximately 4.55 acres will result.

2. Impacts of Surface Crossing Alternative

Environmental impacts associated with the Surface Crossing Alternative are discussed below.

1. Land Use and Planning/Population and Housing – The Surface Crossing 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 Surface Crossing Alternative will, due to the extent of excavation associated with open trench construction, have significantly increased impacts upon geology and drainage as compared to the proposed project. Open trenching across the Santa Maria River (up to 40 feet in width) and the temporary stockpiling of excavated soil would involve soil disturbance and exposure of soil to wind and water erosion, which could result in increased siltation of the river. Trenching up the steep, south-facing bluff of the Nipomo Mesa along the proposed waterline intertie alignment would potentially result in severe slope erosion and shallow slope failures, as this bluff face consists of loose, relatively unconsolidated sands which are prone to erosion.

If construction of this alternative occurs while there are flows in the river, water flows would require diversion which would temporarily alter existing drainage patterns. Impacts associated with diversion of river flows can be averted if construction activities in the riverbed were confined to the dry season.

Water quality impacts associated with potential spills from equipment operating within the riverbed would be greater with this alternative as compared to the proposed project as additional construction equipment would be required and more surface disturbance will occur within the riverbed.

3. Biological Resources – The Surface Crossing Alternative will, as a result of excavation associated with open trench construction, have increased impacts upon biological resources as compared to the proposed project. If open trenching associated with this alternative were to occur along the proposed waterline intertie alignment, the extent of trenching would be increased by a distance of approximately 3,600 linear feet or

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NCSD Waterline Intertie EIR

approximately 0.7 miles in order to traverse the river and the steep cliff surrounding the Nipomo Mesa. Trenching at this location would disturb approximately 3.4 acres of habitats including alluvial scrub and riparian habitats within the river bottom and coastal scrub on the bluff face as well as creating the potential for accelerated erosion on the steep bluff.

4. Aesthetics – The Surface Crossing Alternative would result in increased aesthetics impacts during project construction as compared to the proposed project due to the excavation of an open cut trench and associated stockpiling of excavated soil within the Santa Maria River channel and the bluff face.
5. Cultural Resources – Soil disturbance associated with the Surface Crossing Alternative increases the potential for discovery of cultural resources during construction. Because no prehistoric or historic cultural resources were identified along the proposed pipeline routes, potential adverse impacts can be mitigated with the currently proposed mitigation measures. 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 Crossing Alternative will have increased traffic, noise and air quality impacts as compared to the proposed project due to the noise and air pollutants generated during excavation of the open cut trenches and the associated stockpiling of excavated soil within the Santa Maria River channel.

3. Comparative Analysis

The Surface Crossing 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. This alternative has increased direct impacts in the areas of geology, water, biological resources, noise and air quality as compared to the proposed project.

The Surface Crossing Alternative meets all of the project objectives in a manner similar to the proposed project (see Table 27, Project Alternatives, Comparison With Project Objectives).

E. EXISTING PIPELINE ALTERNATIVE

1. Description of Existing Pipeline Alternative

Three pipelines cross the Santa Maria River in the vicinity of the proposed project. Conoco Phillips has two pipelines: an 8-inch pipeline immediately downstream from the Highway 101 Bridge and a 10-inch pipeline approximately one mile downstream from the highway. The third pipeline is owned by Sempra Energy and is located between the Conoco Phillips 8-inch line and the Highway 101 Bridge (see Figure 32, Existing Pipeline Routes). The Sempra Energy line was replaced in the mid 1990's utilizing directional drilling methods but Sempra representatives have not been able to confirm if the old line was removed. These pipelines are all currently in service, however, the Nipomo Community Services District may be able to negotiate for their future use.

Two methods of installation of a water pipeline area available with this alternative. The most commonly used method for replacing a pipe is pipe bursting. The pipe bursting process involves driving a tool on the front end of the replacement pipe that expands, splits, or cracks the existing pipe to a larger diameter, allowing the new pipe to be pushed through the void. Pipe bursting allows for replacement or upsizing of an existing pipe with little to no excavation. The condition of the pipe, and whether or not is encased in concrete, is vital to successful pipeline replacement. The second method is known as slip-lining or close-fit lining of the existing pipe. The process entails inserting a new line into an existing line by pushing or pulling it into place. This is accomplished using a fully expanded cylindrical pipe or a folded liner which will then need to be expanded and cured in place. Polyethylene is the most commonly used material for this method.

2. Impacts of Existing Pipeline Alternative

1. Land Use and Planning/Population and Housing – The Existing Pipeline 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 Existing Pipeline Alternative will have increased impacts upon geology and water quality as compared to the proposed project. Pipe bursting has limitations in that difficulties can arise in expansive soils, close proximity of other service lines, point repairs that reinforce the existing pipe with ductile material, a collapsed pipe at a certain point along the pipe, etc. These potential limitations may result in increased drilling or excavation at the point of limitation.
3. Biological Resources – Any required excavation associated with the Existing Pipeline Alternative may result in increased impacts upon biological resources as compared to the proposed project. Riparian and alluvial scrub habitats in the riverbed would be disturbed.

4. Aesthetics – The Existing Pipeline Alternative would have similar visual impacts as the proposed project
5. Cultural Resources – The Existing Pipeline Alternative would have similar cultural resources impacts as the proposed project.
6. Traffic/Noise/Air Quality – The Existing Pipeline Alternative would have similar traffic, noise and air quality impacts as the proposed project.

3. Comparative Analysis

The Existing Pipeline 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. This alternative has increased direct impacts in the areas of geology/water and biological resources as compared to the proposed project.

The Existing Pipeline Alternative meets all of the project objectives in a manner similar to the proposed project (see Table 27, Project Alternatives, Comparison With Project Objectives).

F. NEW BRIDGE ALTERNATIVE

1. Description of New Bridge Alternative

Similar to attaching a new pipeline to the Highway 101 Bridge, the New Bridge Alternative involves an over-river crossing of the pipeline, attached to a bridge structure. This new bridge may be a dedicated pipeline bridge that could suspend the pipe across the river or a multi-purpose bridge which could include a pedestrian/bicycle trail. Bridge construction will involve excavation and grading to construct bridge supports and the hauling of materials into the riverbed for bridge construction (see Figure 33, New Bridge Routes).

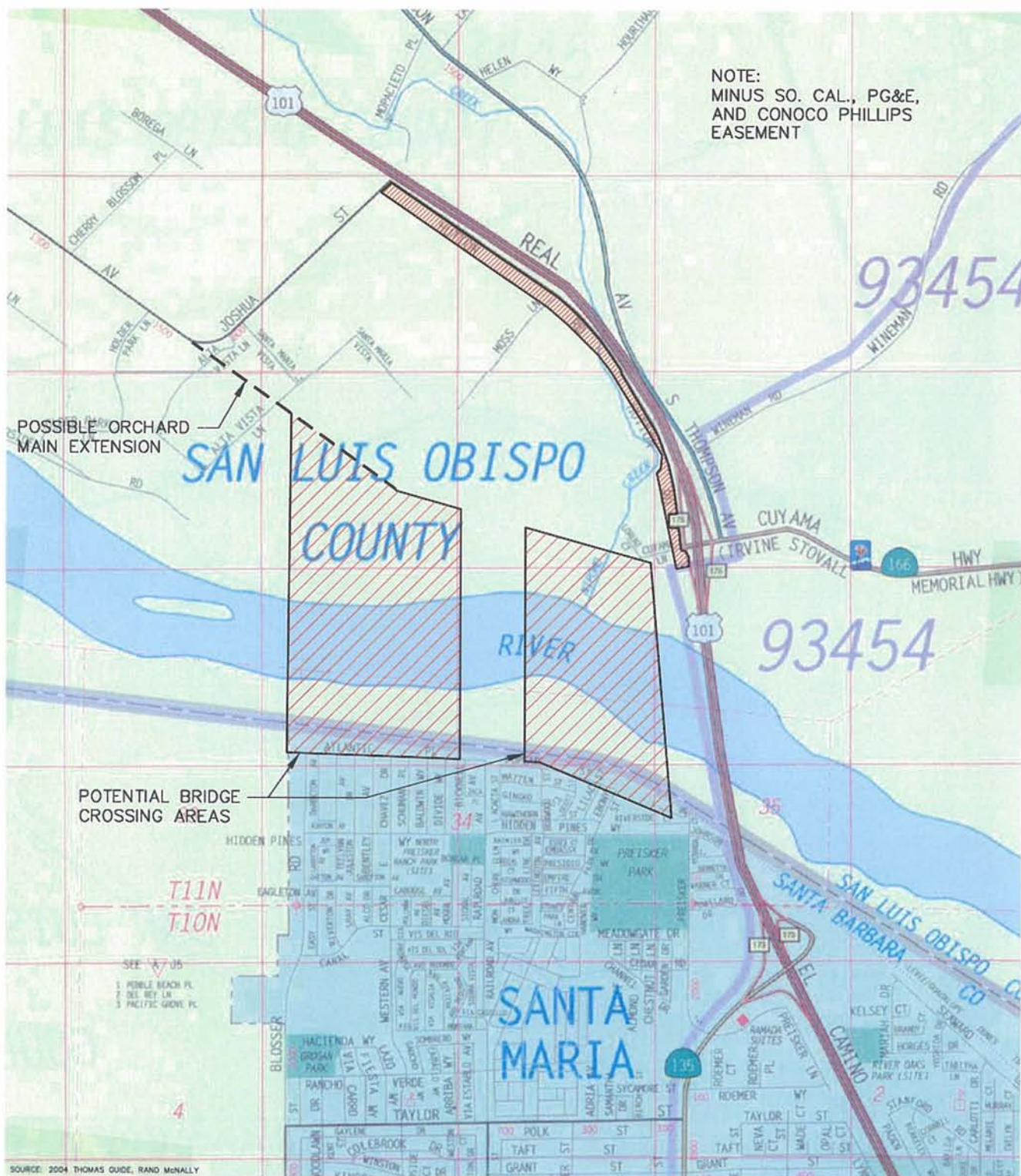
2. Impacts of New Bridge Alternative

1. Land Use and Planning/Population and Housing – The New Bridge 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 New Bridge Alternative will have increased impacts upon geology and drainage as compared to the proposed project as a result of the excavation and grading required for bridge construction. The excavation required for bridge supports and the associated stockpiling of excavated soil will result in soil disturbance and exposure of soil to wind and water erosion and siltation in the river.

If construction of this alternative occurs while there are flows in the river, water flows would require diversion which would temporarily alter drainage patterns. Water quality impacts associated with potential spills from construction equipment in the riverbed would also be greater with this alternative as compared to the proposed project.

3. Biological Resources – The New Bridge Alternative will, as a result of excavation and grading required for bridge construction, have increased impacts upon biological resources as compared to the proposed project. Riparian and alluvial scrub habitats in the riverbed could be disturbed.
4. Aesthetics – The New Bridge Alternative will result in increased aesthetics impacts as compared to the proposed project due to the excavation and grading required for bridge construction and the associated stockpiling of excavated soil.
5. Cultural Resources – Soil disturbance associated with the New Bridge Alternative increases the potential for discovery of cultural resources during construction. Because no prehistoric or historic cultural resources were

FIGURE 33
New Bridge Routes



identified in the riverbed, potential adverse impacts can be mitigated with the currently proposed mitigation measures. 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 New Bridge Alternative will have increased traffic, noise and air quality impacts as compared to the proposed project due to noise and air pollutants generated as a result of excavation and grading required for bridge construction and the associated stockpiling of excavated soil.

3. Comparative Analysis

The New Bridge 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. This alternative has increased direct impacts in the areas of geology/water, biological resources, aesthetics, traffic, noise and air quality as compared to the proposed project.

The New Bridge Alternative meets all of the project objectives in a manner similar to the proposed project (see Table 27, Project Alternatives, Comparison With Project Objectives).

G. REDUCED PIPELINE CAPACITY ALTERNATIVE

1. Description of Reduced Pipeline Capacity Alternatives

The Reduced Pipeline Capacity Alternative involves the provision of a waterline intertie with the capacity of 2,500 acre-feet per year rather than the 6,200 acre-feet per year capacity pipeline that is currently proposed. This reduced capacity would be utilized to avoid further depletion and assist in balancing of groundwater levels in the Nipomo Mesa Groundwater Management Area by augmenting water supplies available to the Nipomo Community Services District and provide additional water supplies to other local water purveyors who overlie the Nipomo Mesa Management Area. The additional 3,700 acre-feet per year is required to serve new development within vacant land within the Nipomo Community Services District boundaries as well as the Sphere of Influence areas adjacent to the current NCS D boundaries. If this higher capability is ever authorized, an additional pipeline is necessary. This new development, which is assumed to be consistent with the South County Area Plan, would not be provided with supplemental water with the Reduced Pipeline Capacity Alternative.

2. Impacts of the Reduced Pipeline Capacity Alternative

1. Land Use and Planning/Population and Housing – The Reduced Pipeline Capacity Alternative reduces the significant, unavoidable adverse (Class I) land use and planning and population and housing impacts associated with the proposed project by maintaining a potential constraint to future development in areas currently proposed to be served by supplemental water supplies beyond the 2,500 acre-foot per year provided by this Alternative. Those areas include vacant land within the Nipomo Community Services District boundaries and the Sphere of Influence Areas adjacent to the current NCS D boundaries.
2. Geology/Water – The Reduced Pipeline Capacity Alternative will have similar geologic and drainage impacts as the proposed project. In terms of water supply, the Reduced Pipeline Capacity Alternative reduces or eliminates supplemental water availability to certain areas currently proposed to be served by supplemental water supplies. By reducing the amount of supplemental water available to the Nipomo Community Services District and indirectly to the entire Nipomo Mesa Management Area, this alternative reduces the ability of the District and other Mesa water providers to provide area-wide groundwater management and increases the dependence upon pumping of the groundwater basin thereby continuing degradation and potential overdraft of the groundwater basin which would result in an additional significant adverse impact upon these groundwater supplies.
3. Biological Resources – The Reduced Pipeline Capacity Alternative would have similar impacts to biological resources as the proposed project.
4. Aesthetics – The Reduced Pipeline Capacity Alternative would have similar visual impacts as the proposed project.

5. Cultural Resources – The Reduced Pipeline Capacity Alternative would have similar cultural resources impacts as the proposed project.
6. Traffic/Noise/Air Quality- The Reduced Pipeline Capacity Alternative would have similar traffic, noise and air quality impacts as the proposed project.

3. Comparative Analysis

The Reduced Pipeline Capacity Alternative reduces 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. The remaining potentially significant but mitigable (i.e. direct) environmental impacts associated with this alternative are similar to the proposed project. The Reduced Pipeline Capacity Alternative will, however, result in additional significant adverse impacts upon the groundwater supplies within the Nipomo Mesa Management Area.

The Reduced Pipeline Capacity Alternative meets the project objectives related to slowing depletion of NMMA groundwater supplies, assisting in stabilizing groundwater levels, provision of supplemental water supplies to the NCS D current service area and Spheres of Influence and avoiding multiple river crossings to a level significantly less than the proposed project. This alternative meets the project objective related to the provision of a diversity of water sources to a level less than the proposed project. This alternative meets the remaining project objectives, those related to compliance with the Groundwater Adjudication, augmenting NCS D water supplies and augmenting water supplies to current purveyors in a manner similar to the proposed project (see Table 27, Project Alternative, Comparison With Project Objectives).

H. ALTERNATIVE PROJECT SITES

The State CEQA Guidelines require an evaluation of reasonable alternatives to the location of the proposed project when appropriate. Alternative project sites should be considered when the proposed project results in unavoidable significant adverse impacts. A primary constraint in this consideration is finding an alternative project site of nearly equivalent size under a single ownership which is either not the subject of a development application or approval or not possessing significant environmental constraints of its own. The consideration of alternative project sites must be based upon their feasibility and their ability to meet the project objectives.

The Nipomo Community Services District considered several project alternatives, including those analyzed within this EIR, in order to select the proposed method for traversing the Santa Maria River with the proposed waterline intertie.

The only alternative location for the proposed project that was beyond those previously considered by the District was a pipeline crossing of the Santa Maria River in the vicinity of Suey Road approximately one-mile east (upstream) of the Highway 101 Bridge. This alternative location was not selected due to the additional pipelines necessary to bring water from this crossing location to connect to existing Nipomo Community Services District facilities. Many of the impacts associated with the proposed project, including the unavoidable, significant adverse (Class I) impacts in the areas of land use and planning and population and housing, would remain with a waterline crossing at this alternative location.

I. ALTERNATIVE WATER SOURCES

The Nipomo Community Services District considered several alternative sources of supplemental water prior to their selection of the proposed waterline intertie project. These options include: 1) Santa Maria Groundwater; 2) State Water Project Water; 3) Desalination; 4) Brackish Agriculture Drainage; 5) Nacimiento Water Project; 6) Wastewater Recharge and 7) Recycling. The evaluation of these alternative water sources was based upon several factors including: 1) water supply, 2) water quality, 3) reliability of supply, 4) schedule (i.e. timing), 5) institutional (legal and regulatory) constraints and 6) project costs.

1. Santa Maria Groundwater

This alternative water source involves acquiring supplemental water supplies from the City of Santa Maria through the direct pumping of groundwater from the Santa Maria Groundwater Basin at a new well site adjacent to the Santa Maria River. In addition to a new well, this option also requires water treatment, storage and transmission pipelines to deliver water to the NCSD.

As discussed in Section V.C. Water, the City of Santa Maria has adequate water supplies to provide supplemental water to the NCSD in the quantities currently proposed. However, it is uncertain whether this alternative water source will provide a “new” supply of water to the NCSD or whether it will intercept the existing inflow of groundwater from the Santa Maria Valley Management Area (SMVMA) to the Nipomo Mesa Management Area (NMMA).

The hydrogeologic interaction between NMMA and the SMVMA is currently not well defined. According to the 2005 Santa Barbara County Groundwater Report, these separate management areas appear to have limited interaction. However, a 2002 Department of Water Resources study notes that groundwater flow from the SMVMA to the NMMA may occur and is dependent on groundwater elevation and hydraulic gradients. That report further estimated inflow to the NMMA from the SMVMA to be between 1,200 and 5,100 AFY in 1995. There is also the likelihood that extracting groundwater at the location proposed would lower groundwater elevations, thereby reducing the hydraulic gradient between the SMVMA and the NMMA. If such a reduction in gradient were to occur, the effect would be to reduce the quantity of groundwater flowing from SMVMA to NMMA, and by extension, could also reduce the movement of groundwater from NMMA to the Northern Cities Management Area.

Water quality and reliability were not considered to be significant constraints to the implementation of this option. It is estimated that four to six years would be required to fully implement this alternative water source in comparison to the one year required for construction of Phase I of the proposed project.

The institutional constraints on this option involve the potential violation of the Stipulated Settlement and Judgment for the Santa Maria Groundwater Basin due to lowering of groundwater elevations and/or impacts upon the hydrologic interaction between the SMVMA and the NMMA. This option is also dependent upon the willingness of the City of Santa Maria to pursue this options and a transfer of yield from the Twitchell Reservoir supply.

This alternative water source was rejected by the NCSD due to the fact that pumping groundwater from near the Santa Maria may result in no net gain to the District and that such pumping has significant institutional and legal obstacles which must be resolved in order to implement this option.

2. State Water Project

The State Water Project (SWP) is a system of dams, reservoirs, power and pumping plants, canals and aqueducts that conveys water from Lake Oroville to Southern California. The “Coastal Branch” of the SWP consists of water conveyance facilities built by the California Department of Water Resources (DWR) and regional distribution and treatment facilities constructed by the Central Coast Water Authority (CCWA). Water could be provided to the NCSD via a turnout along the Coastal Branch within the District’s boundaries. Water would then be delivered either directly to the District’s water system or indirectly via aquifer storage and recovery.

The State Water Project allocates its deliveries in any year among its customers based upon the contracted amounts purchased by these agencies which extend from Santa Maria south to Carpinteria in Santa Barbara County and from Morro Bay to Pismo Beach in San Luis Obispo County. There are several potential scenarios for purchase of State Water Project water including acquisition of unused or excess water supplies, purchase of water from other CCWA participants (similar to the proposed project’s purchase from the City of Santa Maria) or direct participation in the State Water Project. Although sufficient supply may be available from one of these sources, the reliability of SWP water as a supplemental water source remains a variable. Being dependent upon Northern California hydrological conditions, the SWP is not always available to provide the full allocation of water to its customers. In such cases, deliveries are distributed to each customer based upon a portion of their purchase allocation. Based upon the California Department of Water Resources Delivery Reliability Report prepared in 2005, the long-term average SWP deliveries are estimated to be approximately 72 percent of SWP allocations. The actual amount of available excess water available for purchase is, therefore, not fully known at this time. Water quality is not considered to be a constraint with this option.

It is estimated that four to six years will be required to fully implement this alternative water source in comparison to the one year required for construction Phase I of the proposed project.

The institutional constraints with the purchase of State Water Project water involve the fact that any transfer of permanent entitlement from one SWP customer to another requires multiple jurisdictional approvals. These agencies include the CCWA as well as the San Luis Obispo and Santa Barbara County Boards of Supervisors and the Department of Water Resources. As such, the opinions and goals of these agencies must be addressed and satisfied in order to secure additional SWP water. It should also be recognized that there exists competing interests among current SWP participants with regard to unused or excess capacity of SWP supplies. Finally, a prior voter referendum regarding NCSD involvement in the State Water Project specified that the District would not contract with the State DWR for State Project water. Therefore, the District should require a public vote prior to pursuing any supply option involving the purchase of SWP water.

This alternative water source was rejected by the NCS D given the inability to precisely identify the source and amount of available SWP water and the extent of required agency and voter approval necessary to implement this option.

3. Desalination

This alternative water source involves the desalination of seawater or brackish groundwater in order to provide the NCS D with a reliable water source. Three desalination alternatives have been identified involving either the construction of an NCS D owned facility or the NCS D partnering with either the Nipomo Refinery or with the South San Luis Obispo County Sanitation District in the construction of a desalination plant.

Desalination would offer an unlimited source of water supply subject to the limits imposed by regulatory agencies. Water quality is not considered a constraint however the need for increased treatment reduces the amount of water produced. The reliability of this option is also considered to be high with temporary interruptions occurring only in the event of a power outage or required maintenance and repair.

It is estimated that between 6.5 and 10.5 years would be required to fully implement this alternative water source in comparison to the one year required for construction of Phase I of the proposed project.

The institutional constraints involved with desalination involve entering into agreements with other agencies if the District decides to partner in the construction of a desalination plant, approval for construction of supply lines across ocean dunes from regulatory agencies involved in resource protection and approvals from the California Coastal Commission and State Lands Commission.

The timing for implementation of the desalination option combined with the institutional approvals required was the basis for rejection of this option at this time. However, the NCS D intends to continue to investigate this option as a future long-term water source.

4. Brackish Agricultural Drainage

This alternative water source involves the treatment of shallow groundwater or agricultural runoff from Oso Flaco Lake and the delivery of treated water to the NCS D distribution system. Oso Flaco Lake is owned by the California Parks Department and is the largest of four small freshwater lakes located in the Guadalupe Nipomo Dunes complex. It occupies a surface area of 82 acres and is classified by the U.S. Fish and Wildlife Service as a “palustrine emergent wetlands”. It is considered a valuable wildlife habitat as well as resource for recreational and educational activities.

Oso Flaco Lake represents a limited supply source since its primary water source is agricultural runoff estimated at 968 acre-feet per year. Rainfall runoff accounts for an additional 152 acre-feet per year resulting in a total annual inflow of 1,120 acre-feet per year. Efforts are currently underway to improve agricultural irrigation efficiency to both reduce the quantity of water applied and the volume of agricultural runoff. It has been estimated that if 100% of the irrigated area were

to adopt sprinkler/drip systems, the annual runoff volume would decrease to 440 AFY. It is therefore concluded that extracting either 3,000 or 6,300 acre-feet per year from the lake or hydraulically-connected shallow aquifer would significantly lower the existing level of the lake. As such, the water supply and reliability of this water source is highly questionable.

The quality of water extracted from the lake requires a water treatment facility to respond to high coliform, nitrate, ammonia and chlorophyll concentrations as well as high Ph, low dissolved oxygen and high toxicity and pesticide levels found in lake water.

It is estimated that between 7 and 10 years would be required to fully implement this alternative water source in comparison to the one year required for construction of Phase I of the proposed project.

The institutional constraints associated with this alternative water source involve the required approval from the California Parks Department who would support the project only if it was demonstrated that it would result in an environmentally beneficial and compatible use of the parkland. Since the Oso Flaco drainage is considered a component of the Santa Maria Valley Groundwater Basin, use of this supply would require approval by all signatory parties to the litigation and subsequent management agreements. Use of water from Oso Flaco Lake would, due to its poor water quality, be subject to California Department of Health Services water quality requirements.

This alternative water source was rejected by the NCS D given the lack of supply and reliability combined with poor water quality and the institutional approvals required to implement this option.

5. Nacimiento Water Project

The Nacimiento Water Project is a water transmission project that will convey untreated water from Lake Nacimiento to several San Luis Obispo communities. The initial participants include the Cities of Paso Robles and San Luis Obispo as well as the Atascadero Municipal Water Company, Templeton Community Services District and the Cayucos County Services Area 10A. The project consists of 45 miles of water transmission lines as well as storage reservoirs and pump stations. The pipeline terminates at the City of San Luis Obispo Water Treatment Plant. Use of the Nacimiento Water Project as an alternative water source would require extending a pipeline from the City of San Luis Obispo Water Treatment Plant to the NCS D water system.

Current plans for the Nacimiento Water Project indicate that approximately 2,148 acre-feet of reserve (unsubscribed) entitlement of water would be available at the San Luis Obispo Water Treatment Plant, however, the final reach of the Nacimiento Water Project could be upgraded by an additional involved agency to provide up to 3,000 acre-feet per year.

Water from the Nacimiento Water Project would require treatment to remove various chemicals, algae and other pollutants or develop an aquifer storage and recovery system.

Reliability of this alternative water source is considered to be good since involved participants are to be provided their total entitlements over an eleven month period with one month set aside for routine maintenance.

It is estimated that the Nacimiento Water Project will require 5 to 7 years to fully complete construction of the extension of the water transmission pipeline to San Luis Obispo in comparison to the one year required for construction of Phase I of the proposed project.

The institutional constraints associated with this alternative water source involve receiving approval from all of the project participants and the alteration of existing entitlement contracts.

This alternative water source was rejected by the NCSD due to the lack of supply water treatment requirements and the timing for completion.

6. Wastewater Recharge

The Nipomo Community Services District owns and operates the Southland Wastewater Treatment Facility (WTTF), located west of Highway 101 at Southland Street and South Frontage Road. The WWTF provides secondary treatment for a mixture of domestic and industrial wastewater from Nipomo. Existing facility components include four aeration ponds, two sludge-drying beds and eight infiltration basins. The WWTF has a permitted capacity of 900,000 gallons per day based on the maximum monthly demand. Use of wastewater recharge as an alternative water source involves developing a groundwater recharge program within the Nipomo Mesa Management Area (NMMA) in order to recharge of the groundwater basin with recycled water from Southland WWTF.

The proposed groundwater recharge alternative is intended to function as a groundwater management program within the NMMA. As such, no increase in supply to the District would result because Southland WWTP discharge is included in the groundwater budget that has been presented during litigation involving the Santa Maria and Nipomo aquifers (i.e., WWTP groundwater recharge is already considered as “return flows” to the NMMA). As no new supplemental water will be imported from outside the NMMA, there will be no effect on the overall water balance within the NMMA. However, there may be some benefit to specific areas of the depressed groundwater basin within the NMMA.

Average annual flow rates to the Southland WWTP are currently 0.59 MGD, equivalent to approximately 662 acre-feet per year (AFY). These flows are projected to increase to 1,460 AFY (1.3 MGD) in the year 2030.

Wastewater recharge as an alternative water source must respond to potential water quality impacts due to high salt and nitrogen levels. The 2007 Draft Groundwater Recharge Reuse Regulations prepared by the California Department of Health Services indicate that recycled water used for groundwater recharge reuse projects must meet the definition of filtered, disinfected tertiary wastewater.

Recycled water is considered a reliable water supply. However, its reliability as it pertains to groundwater recharge is contingent on the NCS D's ability to provide and maintain recycled water quality meeting the Draft Groundwater Recharge Reuse Regulations as well as taking additional necessary measures to mitigate salt accumulation in the groundwater basin. The recharged groundwater will be extracted by existing or new NCS D wells. Therefore, the reliability of the return flows will be approximately the same as the existing groundwater supply. As such, its reliability may be hindered by drought conditions within the NMMA and any further development/expansion of the pumping depressions.

It is estimated that wastewater recharge facilities will require approximately 2 to 4 years to complete in comparison to the one year required for construction of Phase I of the proposed project.

The primary institutional constraint associated with this alternative water source is the fact that wastewater recharge is not considered a new source of supplemental water thereby conflicting with terms of the Stipulated Settlement and Judgment.

This alternative water source was rejected by the NCS D due to its not being a source of supplemental water. However, the NCS D intends to proceed with expansion of the wastewater treatment capacity and wastewater recharge independent of its consideration as an alternative water source.

7. Recycling

This alternative water source consists of developing a program involving delivery of recycled water from Southland WWTF for direct use as irrigation in-lieu of groundwater pumping. This alternative provides for disposition of effluent from Southland WWTP to locations other than the existing percolation ponds. Upgrades to the Southland WWTP and the provision of transmission lines and pumping facilities will be required to deliver effluent to irrigation locations.

Recycling of treated wastewater is intended to function as a groundwater management program within the NMMA. Very little increase in supply to the District would result because the net effect of this type of exchange is much smaller than the volume of water exchanged. Approximately ten percent of the water exchanged is retained within the groundwater aquifer. As no new supplemental water will be imported from outside the NMMA with this option, there will be no effect on the overall water balance within the NMMA. However, there may be some benefit to the specific areas of the depressed groundwater basin within the NMMA.

Recycling may have negative impacts to water quality in the local, underlying aquifer due to salt accumulation. Other water quality constraints associated with the recycling of treated water involves the removal of chlorides, nitrogen, total dissolved solids and sodium which may impact agricultural crops.

Recycled water is considered a reliable water supply. However, its reliability is contingent on the NCS D's ability to provide and maintain levels of recycled water quality that meet the applicable

water quality standards as well as taking additional necessary measures to mitigate salt accumulation in the groundwater basin.

It is estimated that recycling facilities will require approximately 2 to 4 years to complete in comparison to the one year required to complete construction of Phase I of the proposed project.

The primary institutional constraint associated with this alternative water source is the fact that recycled water will not affect the overall water balance in the NMMA thereby conflicting with the terms of the Stipulated Settlement and Judgment.

This alternative water source was rejected by the NCSD due to its not being a source of supplemental water.

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 28, Environmentally Superior Alternatives–Significant Impacts. The project alternatives considered to be environmentally superior to the proposed project include the No Project Alternative and the Reduced Pipeline Capacity Alternatives.

**TABLE 28
ENVIRONMENTALLY SUPERIOR ALTERNATIVES-
SIGNIFICANT IMPACTS**

Ranking	Alternative
1	No Project Alternative
2	Reduced Pipeline Capacity Alternative
3	PROPOSED PROJECT
3	Highway 101 Bridge Alternative
3	Eastern River Crossing
3	Surface Crossing Alternative
3	Existing Pipeline Alternative
3	New Bridge Alternative

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 29, Environmentally Superior Alternatives–Direct Impacts. The project alternatives considered to be environmentally superior to the proposed project include the No Project Alternative and the Reduced Pipeline Capacity Alternative.

**TABLE 29
ENVIRONMENTALLY SUPERIOR ALTERNATIVES-
DIRECT IMPACTS**

Ranking	Alternative
1	No Project Alternative
2	PROPOSED PROJECT
2	Reduced Pipeline Capacity Alternative
3	Existing Pipeline Alternative
4	Highway 101 Bridge Alternative
5	Eastern River Crossing Alternative
6	New Bridge Alternative
7	Surface Crossing Alternative

Based upon project alternatives which adversely impact the Nipomo Mesa Management Area groundwater supplies, alternatives to the proposed project are ranked in Table 30, Environmentally Superior Alternatives–Groundwater Impacts. None of the project alternatives considered to be environmentally superior to the proposed project. The No Project and the Reduced Pipeline Capacity Alternatives result in additional adverse impacts upon groundwater supplies within the Nipomo Mesa Management Area as compared to the proposed project and the remaining project alternatives.

**TABLE 30
ENVIRONMENTALLY SUPERIOR ALTERNATIVES-
GROUNDWATER IMPACTS**

Ranking	Alternative
1	PROPOSED PROJECT
1	Highway 101 Bridge Alternative
1	Eastern River Crossing
1	Surface Crossing Alternative
1	Existing Pipeline Alternative

1	New Bridge Alternative
2	Reduced Pipeline Capacity Alternative
3	No Project Alternative

Alternative project sites and alternative projects were not ranked due to the lack of information concerning their location or precise design.

Based upon the above analysis, the No Project Alternative and the Reduced Pipeline Capacity Alternative are capable of reducing or 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 the potentially significant but mitigable (i.e. direct) impacts associated with the proposed waterline intertie. It was further concluded that the Existing Pipeline, Highway 101 Bridge, Eastern River Crossing, New Bridge and Surface Crossing Alternatives have significant but mitigable (i.e. direct) impacts that are greater than those associated with the proposed intertie project and the remaining project alternatives. Based upon the above analysis, it was determined that two project alternatives, the No Project Alternative and the Reduced Capacity Alternative, will result in additional adverse impacts upon groundwater supplies within the Nipomo Mesa Management Area as compared to the proposed project and the remaining project alternatives.

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.

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 54 employees over a period of approximately one year for Phases I and III of project construction and approximately five months for Phase II of 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 water supplies 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 water supplies thereby reducing or eliminating a potential constraint to future development within areas to be served by this additional water. However, 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 (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 16, South County Area Plan.) While

service districts, including the Nipomo Community Services District, may provide the County with input regarding land use decisions and water availability, it does not have any authority over land use entitlements. Development projects are sometimes approved by the County contingent upon receiving water and 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 water and sewer 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 water supplies and has the potential to hasten the conversion of areas to more intense urbanized uses over those land uses currently consistent with the South County Area Plan.

The potential importation of a maximum of 6,200 acre-feet of water per year would accomplish several objectives. Approximately 2,500 acre-feet of water per year will offset current groundwater production in order to avoid further depletion of and assist in balancing of groundwater levels in the Nipomo Mesa Management Area. An additional 500 acre feet per year will be used by the Nipomo Community Services District to serve future customers on currently vacant land within the existing NCSD boundaries. An additional 3,200 acre-feet per year could be utilized to serve future development within the current Sphere of Influence areas which are located adjacent to the existing NCSD boundaries. This additional imported water could be used to serve existing and new development within the South County Planning Area that would otherwise be served by groundwater supplies from the Nipomo Mesa Management Area.

In order to determine the additional amount of development that could be served by these additional water supplies, a breakdown of land uses (as designated by the South County Area Plan) within the existing NCSD boundaries must be identified. Table 31, NCSD Land Use Designations provides a breakdown of land uses in these areas in terms of both developed and vacant lands within the District boundaries as well as within the adjacent Sphere of Influence areas. These totals are based upon data contained within the NCSD Water and Sewer Master Plan Update as well as the NCSD Sphere of Influence Update/Municipal Services Review EIR.

**TABLE 31
NCSD LAND USE DESIGNATIONS (ACRES)**

Land Use Designation	Existing NCSD Customers ¹	Vacant Land within NCSD¹	Sphere of Influence Areas ²
RMF – Residential Multi-Family	150	10	0
RSF – Residential Single Family	700	(-14)	91
RS – Residential Suburban	900	5	357
RR – Residential Rural	1380	24	2107
RL – Rural Lands	3	1	1073
AG – Agricultural	110	(-98)	693
PF – Public Facility	37	1	5
OP – Office and Professional	34	- 1	0
CR – Commercial Retail	160	0	0
CS – Commercial Services	80	14	104
OS – Open Space	11	0	0
REC – Recreation	116	515	0
Black Lake	510	0	0
Southland Specific Plan	0	0	100
TOTAL	4191	457	4530

(1) Source: NCSD Water and Sewer Master Plan Update, December, 2007

(2) Source: NCSD Sphere of Influence Update/Municipal Services Review EIR, December, 2003

(3) NCSD Urban Water Management Plan indicates acreage decrease with development of certain vacant lands.

As noted above, the first 2,500 acre-feet per year of water from the proposed project (Phase I and half of Phase II) will offset current groundwater production in order to avoid further depletion of and assist in balancing groundwater levels in the Nipomo Mesa Management Area. This initial increment of imported water will, therefore, serve existing customers within the NCSD boundaries (see column 1 of Table 31 above and Figure 13, Phase I Water Use Area). The additional 500 acre-feet per year of imported water (the remainder of Phase II of the proposed project) will be used by the NCSD to serve future customers on currently vacant land within the District boundaries (see column 2 of Table 31, NCSD Land Use Designations (Acres) and Figure 14, Phase II Water Use Area).

Table 32, Phase II – Additional Development Served by 500 AFY provides a detailed breakdown of the nature and extent of development to be served by these additional water supplies. As indicated below, the importation of 500 acre-feet per year of water could ultimately serve a maximum of 370 additional dwelling units on 457 acres as well as 14 acres of additional Commercial Services uses, 515 acres of Recreation use and one acre of Public Facilities use.

**TABLE 32
PHASE II – ADDITIONAL DEVELOPMENT
SERVED BY 500 AFY**

Land Use Designation	Number of Acres	No. of Dwelling Units
RMF – Residential Multi-Family	10	380
RSF – Residential Single Family	(-14)	(-14)
RS – Residential Suburban	5	5
RR – Residential Rural	24	4
RL – Rural Lands	1	0
AG – Agricultural	(-98)	-4
PF – Public Facility	1	
OP – Office and Professional	-1	
CS – Commercial Services	14	
REC – Recreation	515	
TOTAL	457	370

Source: NCSO Water and Sewer Master Plan Update, December 2007.

The remaining 3,200 acre-feet per year of imported water (Phase III of the proposed project) could be used by the NCSO to serve future development within the current Sphere of Influence areas which are located adjacent to the existing NCSO boundaries (see column 3 of Table 31, NCSO Land Use Designations (Acres) and Figure 15, Phase III Water Use Area)

Table 33, Phase III Additional Development Served by 3,200 AFY provides a detailed breakdown of the nature and extent of development served by these additional water supplies. As indicated below, the importation of 3,200 acre-feet per year of water could ultimately serve a total of 1,368 dwelling units on 4,295 acres.

**TABLE 33
PHASE III ADDITIONAL DEVELOPMENT
SERVED BY 3,200 AFY**

Land Use Designation	Number of Acres	No. of Dwelling Units
RSF – Residential Single Family	91	364
RS – Residential Suburban	84	84
RR – Residential Rural	1995	398
RL – Rural Lands	1173	59
AG – Agricultural	652	13
SP – Specific Plan	300	450
TOTAL	4,295	1,368

Source: NCSO Sphere of Influence Update/Municipal Services Review EIR, December 2003.

Any increase in density of change or land use to the South County Area Plan within the area to be served by the additional water supplies would, 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. These future discretionary approvals will require the preparation and certification of additional environmental documentation (pursuant to CEQA) to address the potential environmental impacts of these future approvals. Any future development within areas served by the additional water supplies 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. It should be noted again that the proposed importation of supplemental water is intended to respond to development consistent with the South County Area Plan (Inland).

The Nipomo Community Services District is a California Community Services District organized pursuant to Government Code Sections 61000 et. seq. The NCS D'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 NCS D provides water to its residents, similar to a municipal water 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).

Impact on Community Service Facilities

Based upon the results of the Initial Study (a copy of which is included in Technical Appendix A of this document), the proposed project is not expected to significantly impact public services (police protection and fire protection) or utilities (natural gas/electricity, communication systems, water service, wastewater treatment and solid waste).

The importation of additional water as a result of the proposed waterline intertie project will augment current water supplies available to the Nipomo Community Services District as well as supplies available to other local water purveyors. It will also provide a greater diversity of water sources to the District thereby increasing the reliability of water supply to the District through the addition of a constant, non-fluctuating water source which reduces the potential need for groundwater "mining." A portion of these future water supplies will assist in the balancing of groundwater levels in the Nipomo Mesa Management Area by reducing dependence upon the pumping of the groundwater basin and augmenting the groundwater basin through return flows. These additional water supplies will serve new development within the current service area of NCS D as well as the District's Sphere of Influence areas. For these reasons, the proposed project will provide a beneficial impact to groundwater supplies within the Nipomo Mesa Management Area.

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 importation of water in order to reduce the current imbalance of groundwater levels, to serve new development (pursuant to the South County Area Plan) within the current boundaries of the Nipomo Community Services District and its adjacent Sphere of Influence areas. Since the proposed project is intended to provide water supplies adequate to serve the build-out condition within the NCSD, no additional water supply facilities will be required in the future. As such, the proposed waterline intertie 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 water supplies particularly involving the conversion of agricultural lands. Any reduction or elimination of a constraint to development (such as the importation of additional water supplies) 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 water supplies 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, biological resources, aesthetics, cultural resources, geology, traffic, noise and air quality.

IX. ORGANIZATIONS AND PERSONS CONSULTED

Boyle Engineering (Mike Nunley, Josh Reynolds)

California Department of Transportation (James Kilmer)

Cannon Associates (Ernie Rey, Brien Vierra, Jack Mitchell)

City of Santa Maria (Rick Sweet)

County of San Luis Obispo (John Nall, John McKenzie, Jay Johnson, James Caruso,
Brian Pedrotti)

Gibson's Archaeological Consulting (Robert Gibson)

Mestre Greve Associates, Inc. (Fred Greve, Matt Jones)

Nipomo Community Services District (Bruce Buel, Peter Sevcik)

Padre Associates, Inc. (Brian Dugas)

San Luis Obispo County Air Pollution Control District (Larry Allen, Andrew Mutziger)

San Luis Obispo Local Agency Formation Commission (David Church)

Science Applications International Corporation (SAIC) (Lauren Brown, Bill O'Brien,
Meredith Clement)

Shipsey and Seitz (Jon Seitz)

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**COPIES OF APPENDICES ARE AVAILABLE UPON REQUEST FROM THE
NIPOMO COMMUNITY SERVICES DISTRICT
(805) 929-1133**

X. References

NCSD Waterline Intertie EIR