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 *an informal dirt trail* 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, *a cleaning warehouse supplies* 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.

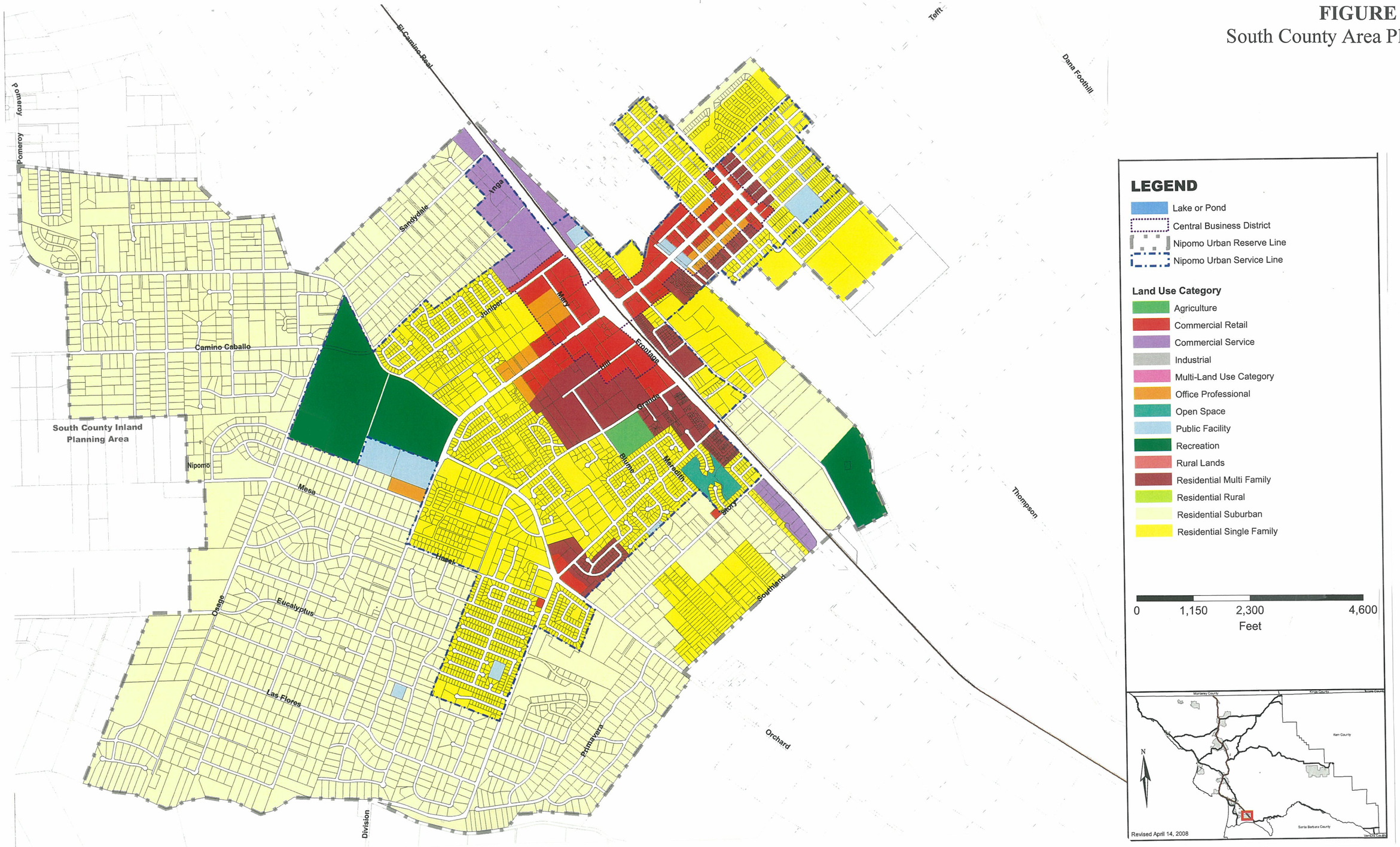
While the Nipomo Community Services District may provide the County with input regarding land use decisions, it does not have any authority over land use entitlements. Development projects within the boundaries of the Nipomo Community Services District (NCSD) are approved by the County contingent upon 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.


El Camino Real
Pomeroy
Pomeroy
Sandydale
Inga
Juniper
Mary
Frontage
Hill
Grande
Blume
Meredith
Story
Teft
Dana Foothill
Thompson
Southland
Orchard
Primavera
Camino Caballo
South County Inland
Planning Area
Nipomo
Mesa
Hasel
Osage
Eucalyptus
Las Flores
Division
LEGEND
Lake or Pond
Central Business District
Nipomo Urban Reserve Line
Nipomo Urban Service Line
Land Use Category
Agriculture
Commercial Retail
Commercial Service
Industrial
Multi-Land Use Category
Office Professional
Open Space
Public Facility
Recreation
Rural Lands
Residential Multi Family
Residential Rural
Residential Suburban
Residential Single Family
0
1,150
2,300
4,600
Feet
Monterey County
Kings County
Kern County
Santa Barbara County
Ventura County
N
Revised April 14, 2008

- ***Residential Rural***

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

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

- ***Residential Suburban***

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

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

- ***Recreation***

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

- ***Rural Lands***

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

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

- ***Residential Single Family***

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

- ***Residential Multi-Family***

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

- ***Public Facilities***

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

- ***Office 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 *or other appropriate agency or entity*. The open space designation may be applied to public or private lands with public easements including the undeveloped portions of State or local park properties. Areas designated as open space may contain natural features such as unique topography, vegetation or stream courses without a quality or extent sufficient to apply a Sensitive Resource Area combining designation.

Legislative Authority of NCSD

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

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

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

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

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

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

Pursuant to Cortese/Knox/Hertzberg Local Government Reorganization Act of 2000, LAFCO updated the NCSD's Sphere of Influence and completed a Municipal Service Review in 2004. A sphere of influence is defined by the Government Code as "a plan for the probable physical boundary and service area of a local agency or municipality." A

sphere of influence is generally considered to be a twenty (20) year growth boundary for a local agency such as the NCSD. The NCSD 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 NCSD's Sphere of Influence related to water resources, established conditions for annexations of territories within the NCSD'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 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. *Phases I and II of the proposed project will be separately approved and funded by authorization of the NCSD Board of Directors. Phases I and II totaling 3,000 acre-feet per year will supply water only to customers within the current NCSD boundaries and other water purveyors in the NMMA. Only in Phase III totaling an additional 3,200 acre-feet per year of supplemental water will be made available to new customers in the 2004 Sphere of Influence Areas that are annexed into the District.*

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 5, 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 5
NCSD LAND USE DESIGNATIONS (ACRES)

Land Use Designation	Existing NCSD Customers [1]	Vacant Land within NCSD[1]	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: NCSD Water and Sewer Master Plan Update, December, 2007
(2) Source: NCSD 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 NCSD 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 NCSD 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: NCSD 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 NCSD to serve future development within the current Sphere of Influence areas which are located adjacent to the existing NCSD boundaries (see column 3 of Table 5, NCSD 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: NCSD 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 *from Phase III of the proposed project* 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

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

- *A geotextile membrane shall be placed on top of native soils prior to the placement of any stockpile, fill, base materials or construction materials*
- *Upon completion of the project, native soil will be replaced to its previous condition in terms of soil texture, water holding capacity and soil permeability*
- *Pipelines will be placed five to six feet below existing grade through agricultural farmland*
- *All excavated soils will be stockpiled during construction in a manner that protects the soils' physical, chemical and biological characteristics. Biologically active topsoil (A horizon) shall be segregated from deeper soils during construction and replaced in a similar manner upon completion of construction*
- *At the conclusion of construction, soils will be replaced in a manner that mimics the pre-construction characteristics of the*

soils, including compacting the soils to the same soil permeability, soil texture and available water holding capacity

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

- *All existing irrigation systems shall be located in order to avoid damaging buried irrigation lines, wells, risers and other agricultural infrastructure*

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

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).

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

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, NCSD Population Projections).

TABLE 9
NCSD 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***

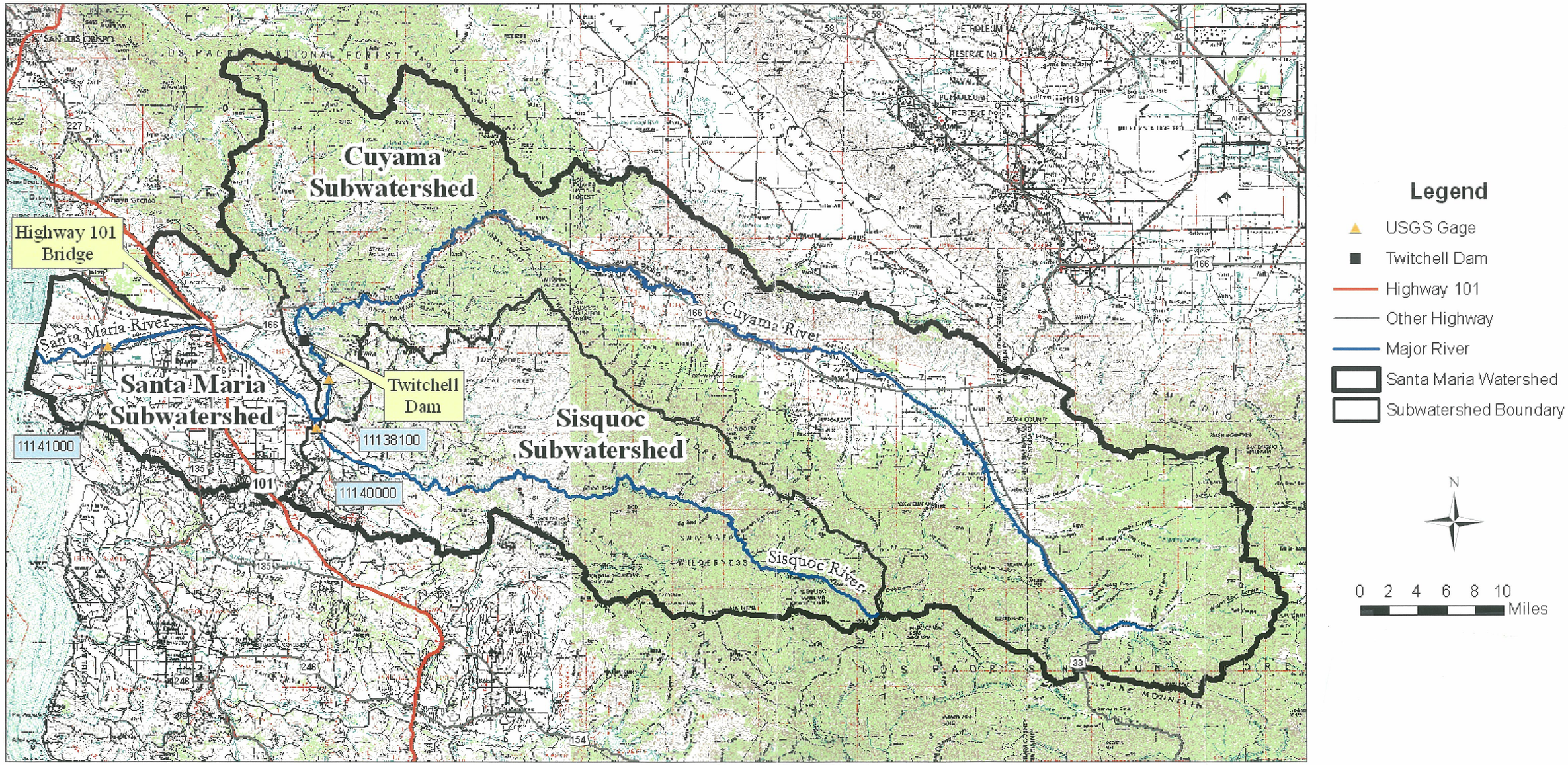
- Santa Maria River

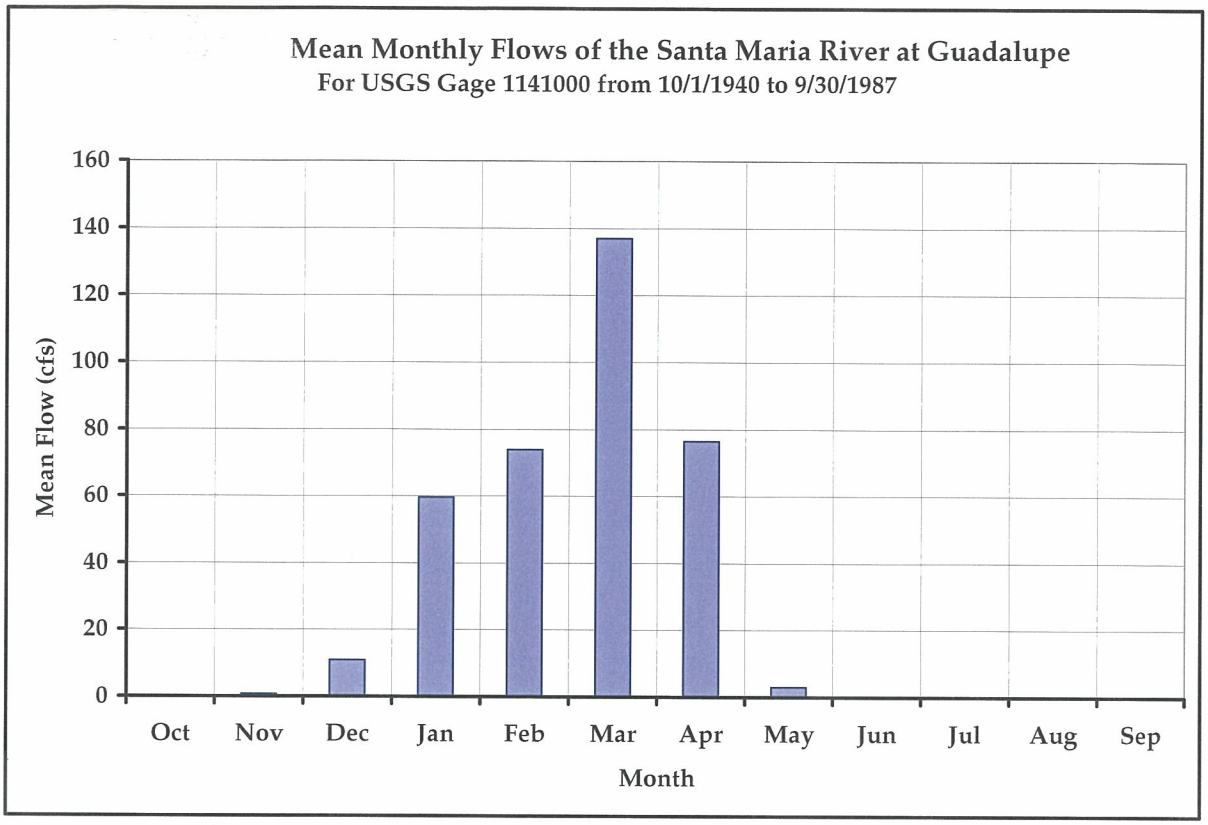
The Santa Maria River flows originate from a large coastal watershed area comprising 1,853 square miles along the Central Coast of California, as shown in Figure 17, Santa Maria River Watershed. The Cuyama River, with flows attenuated by Twitchell Dam, joins the Sisquoc River at Fugler's Point to form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

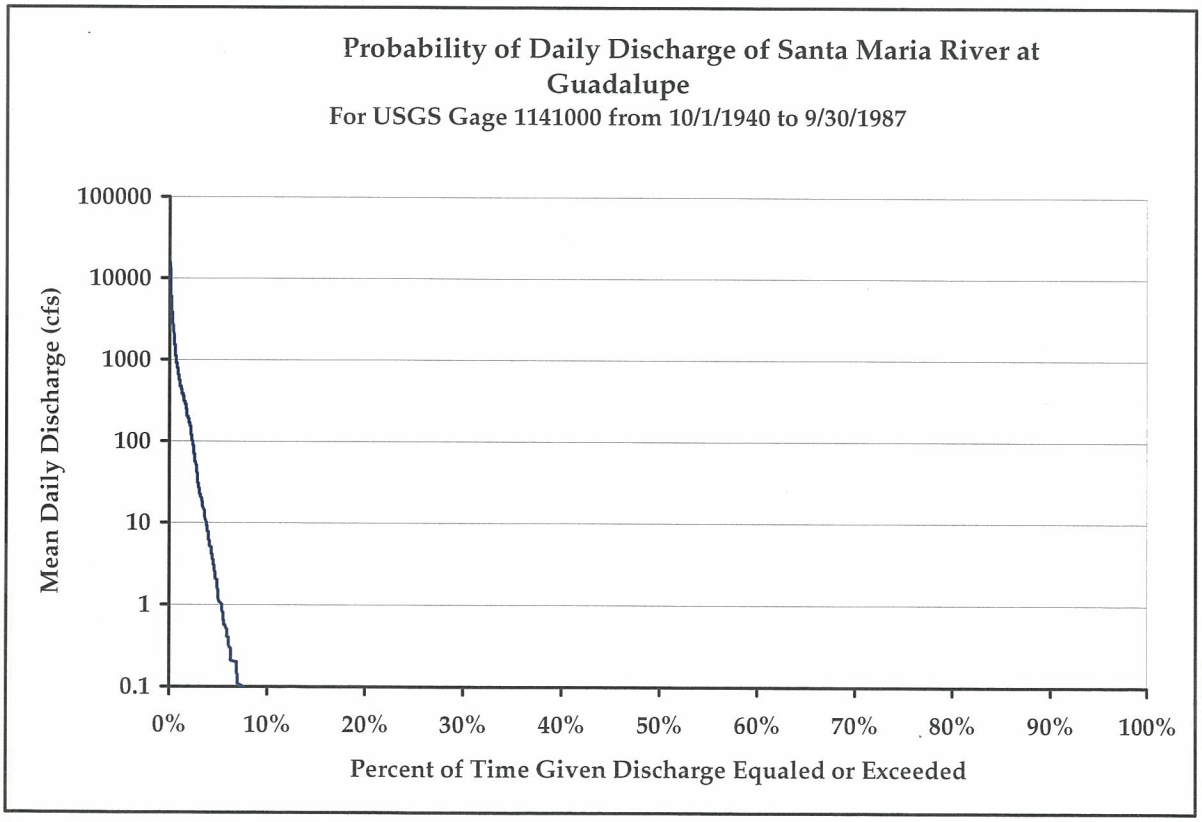
The watershed area of the Cuyama River is 1,130 square miles, draining the northern slopes of the Sierra Madre Range and the southern slopes of the Caliente Range. It also includes the Alamo and Huasna Creek drainages located north of Twitchell Reservoir. Twitchell Dam, the dominant hydraulic structure 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.


Cuyama Subwatershed
Highway 101 Bridge
Santa Maria River
Santa Maria Subwatershed
Twitchell Dam
Sisquoc Subwatershed
Cuyama River
Sisquoc River
11141000
11138100
11140000
Legend
USGS Gage
Twitchell Dam
Highway 101
Other Highway
Major River
Santa Maria Watershed
Subwatershed Boundary
N
0 2 4 6 8 10
Miles


Mean Monthly Flows of the Santa Maria River at Guadalupe
For USGS Gage 1141000 from 10/1/1940 to 9/30/1987
Mean Flow (cfs)
160
140
120
100
80
60
40
20
0
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Month


Probability of Daily Discharge of Santa Maria River at Guadalupe
For USGS Gage 1141000 from 10/1/1940 to 9/30/1987
Mean Daily Discharge (cfs)
100000
10000
1000
100
10
1
0.1
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Percent of Time Given Discharge Equaled or Exceeded

- *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)

Water Sampling Sites	*TDS*	*Cl*	*SO4*	*B*	*Na*	*TSS*	*Turbidity*[1]
Sisquoc River at Santa Maria *Mesa* Road	685	22.8	380	0.2	50.5	19	6
Sisquoc River Water Quality Objectives	*600*	*20*	*250*	*0.2*	*50*	*NS*	*NS*
Cuyama River below Twitchell Dam at White Rock Lane	1099	61.3	730	0.3	90.5	343	143
Cuyama River Water Quality Objectives	*900*	*50*	*400*	*0.3*	*70*	*NS*	*NS*
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
Drinking Water MCLs	*1000*	*500*	*500*	*1*	*NS*	*NS*	*5*

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).
[1]Turbidity is measured in NTUs.

- *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.

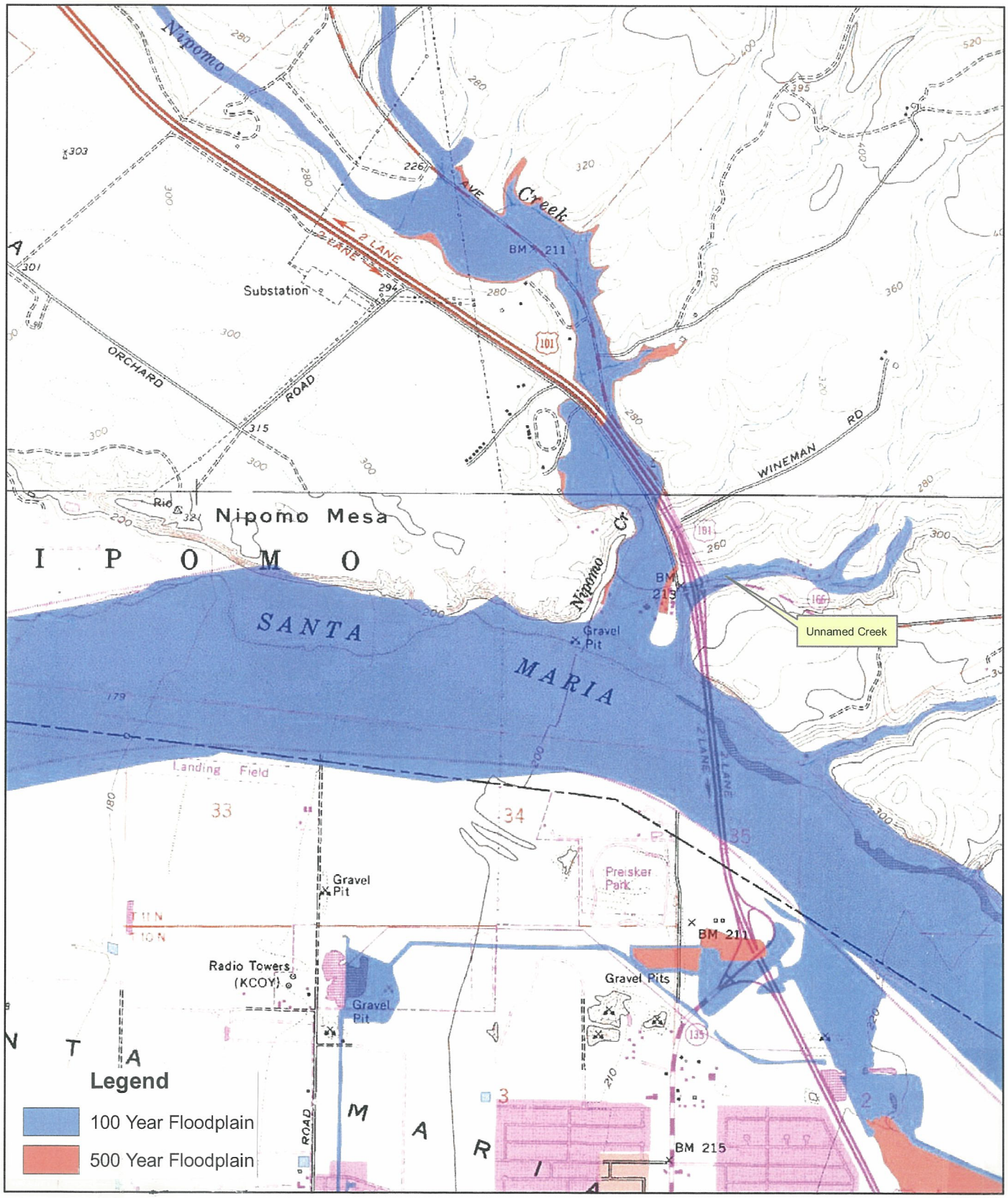
- *Gravel Pit Mines*

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 gravel pit mines located along the Santa Maria River south of the Twitchell Reservoir. These mining parcels are located in the river channel and in nearby agricultural lands. Reclamation occurs through natural sediment replacement.

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.

FIGURE 19
FEMA Flood Hazard Map



- *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 *16,318* 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.

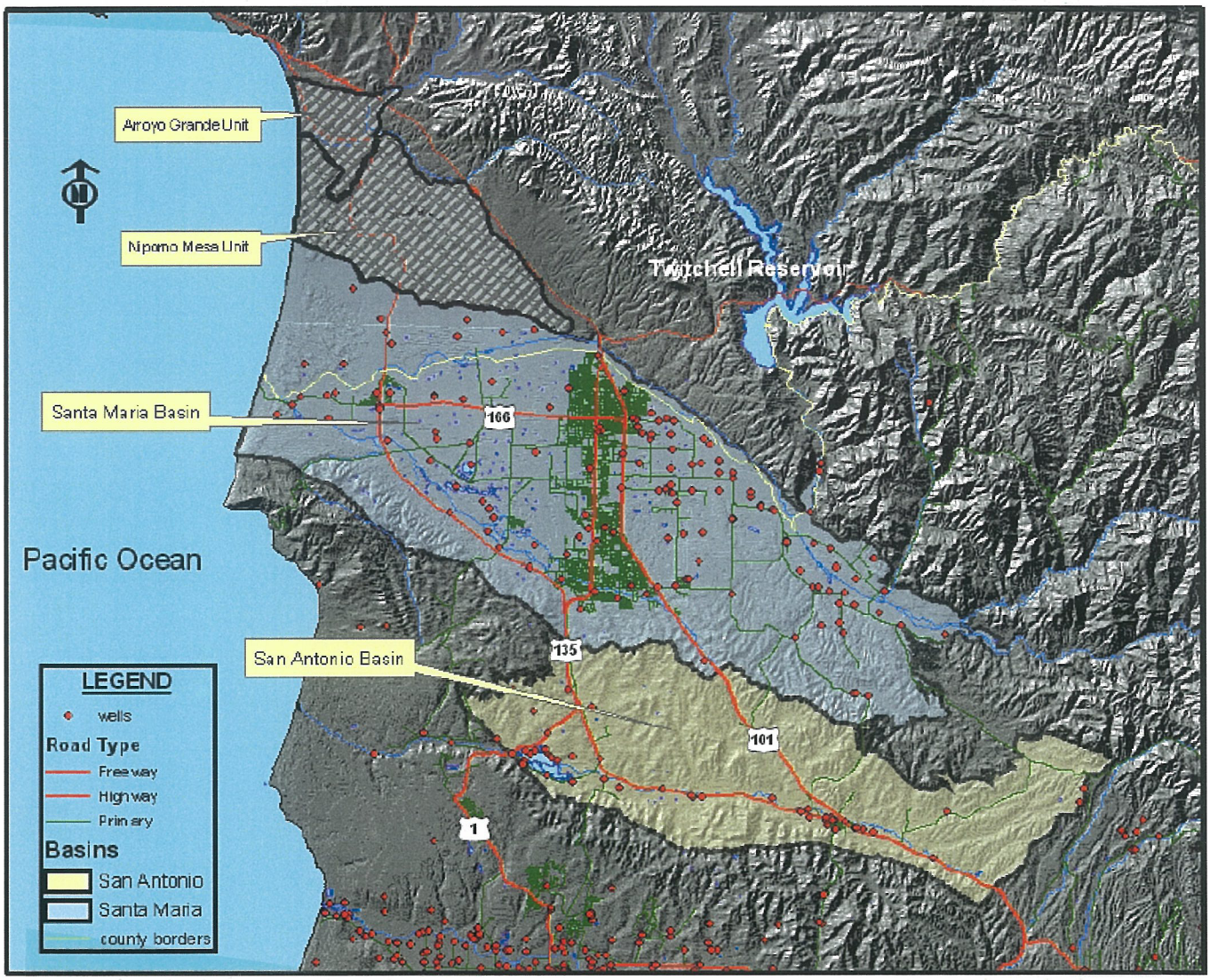
- ***Groundwater***

- *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 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.

FIGURE 20
Santa Maria Groundwater Basin



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 NCSD *and* 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 a*rea*, 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 *34.3* 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, NCSD 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 NCSD 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. Papadopulos 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 NCSD. The following parties shall purchase the following portions of this Nipomo Supplemental Water: NCSD – 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 appropriative 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)
Active Wells			
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
Standby Wells			
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)

	Nipomo Mesa Management Area					NCSD (Town\Black Lake Divisions)	
Year	*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
Source: DWR 2002.

[5] Estimated by multiplying the consumption by 1.1
[6] 2005 estimates based upon 2004 data
Source: NCSD UWMP 2004.

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 Bain	Blacklake	409	373	447	435	476	411	384	290
Sub-Total, NCSD production from NMMA		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)
NCSD 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, NCSD'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**	
	# of Accounts	*Deliveries (afy)*	*# of Accounts*	*Deliveries (afy)*
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	5,852[1]

[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 NCSD 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 NCSD 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 NCSD system by converting the free chlorination treatment process at the wells to chloramination. This alternative was selected due to the fewest water quality impacts. *The use of chloraminated water will reduce* trihalomethane generation potential and *will result in* 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 NCSD 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 NCSD 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 NCSD 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 NCSD, 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 NCSD 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 NCSD 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).