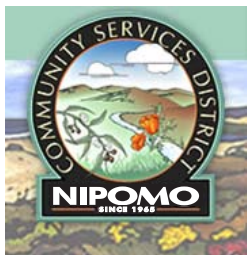


URBAN WATER MANAGEMENT PLAN 2005 UPDATE



Nipomo Community Services District
148 South Wilson Street
P.O. Box 326
Nipomo, CA 93444-0326

Adopted January 25, 2006

Urban Water Management Plan 2005 Update

Adopted January 25, 2006

Prepared for:

Nipomo Community Services District

Prepared by:

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Dear Interested Parties:

SUBJECT: NIPOMO COMMUNITY SERVICES DISTRICT URBAN WATER MANAGEMENT PLAN 2005 UPDATE

On behalf of Nipomo Community Service District, I am pleased to announce the adoption, on January 25, 2006, of Nipomo CSD's Urban Water Management Plan 2005 Update. The Plan was adopted in compliance with the California Urban Water Management Planning Act and consistent with that Act, the adopted plan is hereby being distributed within 30-days of adoption. The District coordinated development of the Plan with local land use agencies and made an effort to get public input to the Plan. The Plan was adopted after a hearing that was advertised in local newspapers per Section 6066 of the Government Code. A specific invitation to the hearing on the Plan was extended to San Luis Obispo County and the San Luis Obispo Local Agency Formation Commission.

Copies of the final plan are available for public review on the District's website (Nipomocsd.com) and at the District office (hard copy) during normal business hours.

Thank you for your interest in our water planning efforts.

Please contact the District directly if you have any questions about the Plan.

Sincerely,

NIPOMO COMMUNITY SERVICES DISTRICT

Michael LeBrun, P.E.
General Manager

Enclosure

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1.0 INTRODUCTION

This report describes the 2005 update of the Urban Water Management Plan (UWMP) for the Nipomo Community Services District (NCSD), an independent Special District formed and operated pursuant to Government Code §61000 et seq. Pursuant to Government Code §61600(a) the NCSD provides water service to its residents. The NCSD is situated within the unincorporated community of Nipomo and its associated Mesa, in San Luis Obispo County, California.

The purpose of this document is to satisfy the requirements of the California Urban Water Management Planning Act (Act), to be a reliable tool for future NCSD water use planning, to provide guidance when discussing regional water and land use planning with local agencies, including the County of San Luis Obispo, and to ensure NCSD's eligibility for California Department of Water Resources (DWR) grants and drought assistance. This document is based on the Act and the DWR *Guidebook to Assist Water Suppliers in the Preparation of a 2005 Urban Water Management Plan*, issued January 18, 2005. To assist reviewers, the UWMP Checklist is provided in Appendix A.

The Act requires most utilities to update and submit an UWMP every five years, in years ending with a '5' or '0.' NCSD previously adopted a UWMP in January 2004. This revision to the UWMP provides updated supply and demand projections. NCSD is one of many parties to the Santa Maria Groundwater Litigation, the final outcome of which may affect projections contained in this UWMP. Any amendments or changes to the UWMP will be adopted and filed consistent with the Act.

1.1 URBAN WATER MANAGEMENT PLANNING

1.1.1 Appropriate Level of Planning

As described earlier, the Act requires that every urban water supplier prepare and adopt an urban water management plan every five years. Water Code section 10617 describes an "urban water supplier" as a supplier "either publicly or privately owned, providing water for municipal purposes either directly or indirectly to more than 3,000 customers or supplying more than 3,000 acre-feet (af) of water annually. An urban water supplier includes a supplier or contractor for water, regardless of the basis of right, which distributes or sells for ultimate resale to customers."

In 2004, NCSD had approximately 3,750 water service accounts and delivered approximately 2,900 af of water. NCSD adopted its first UWMP in January 2004, in compliance with DWR regulations.

Water Code Section 10630 states, "It is the intention of the Legislature, in enacting this part, to permit levels of water management planning commensurate with the numbers of customers served and the volume of water supplied." As stated in the DWR *Guidebook to Assist Water Suppliers in the Preparation of a 2005 Urban Water Management Plan*, "The level of detail provided in an UWMP should reflect the size and complexity of the water supplier. However, all elements required by the Urban Water Management Planning Act must be discussed in an UWMP. Note that certain specific provisions of the Act require inclusion of historic information 'if available.'"

1.1.2 Public and Agency Coordination

As required by the Act, NCSD has coordinated development of the UWMP with nearby water and governing agencies to foster cooperation between agencies; this coordination is summarized in Table 1 below. San Luis Obispo County, the only affected land use jurisdiction, was notified of the UWMP

update, and participated in developing land use projections for future water demand projections. The San Luis Obispo Local Agency Formation Commission (LAFCO), which recently completed a Municipal Services review for NCSD, was also contacted for their expertise on future land uses in the NCSD service area and Sphere of Influence Area. Representatives from the City of Santa Maria were consulted on several occasions in order to understand future water supplies which NCSD will be receiving under contract with the City. As summarized in Table 1, interested parties were notified of the UWMP update, provided information on the availability of the Draft UWMP and its review process, and invited to attend any of the multiple public meetings held with regard to the UWMP.

The first public meeting on the update to the UWMP was held on June 22, 2005, during the regular NCSD Board meeting. A second public meeting on the Draft UWMP was held on November 16, 2005. A third meeting, held during the public review period for the Draft UWMP, occurred on January 11, 2006. Notice of the presentations/public meetings were provided in the regular board agenda announcements. An adoption hearing was held on January 25, 2006 and this meeting was advertised in both the *Santa Maria Times* and the *San Luis Obispo Tribune*.

1.2 SERVICE AREA INFORMATION AND 25-YEAR PROJECTIONS

In the following sections the service area of NCSD is described, including the current and projected population, climate, and other factors affecting NCSD's water management planning.

1.2.1 NCSD Service Area Description

The Nipomo Community Services District was formed on January 28, 1965 to provide services as allowed under the Community Services District Law of Government Code Section 61000 et. seq. The current area (2005) of the District is approximately 4,650 acres, with an approximate population of 12,000 (Boyle Engineering 2002). Figure 1 shows the location of the NCSD service area and its relative location in San Luis Obispo County and the State of California.

NCSD's existing water service area is composed of two distinct and independent divisions, the Blacklake Division serving the Blacklake Specific Plan area, and the Town Division serving the remainder of the NCSD service area. NCSD's service area is illustrated in Figure 2. In addition to its existing service area, NCSD has a Sphere of Influence, approved by the San Luis Obispo LAFCO in May 2004. The Sphere of Influence has several components, generally labeled Sphere of Influence (SOI) areas 1, 2, 3, 4, 7 and 8. Though SOI areas 5 and 6 were considered in the Sphere of Influence Update and Municipal Service Review conducted by LAFCO, Area 6 was not approved as part of NCSD's sphere of influence, and Area 5 was approved for all services except water service (San Luis Obispo LAFCO 2004). Figure 2 also illustrates NCSD's approved sphere of influence.

1.2.2 Population

As discussed above, the NCSD service area is within the unincorporated portion of San Luis Obispo County. 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

Table 1. Coordination with Appropriate Agencies, Advisory Groups, Purveyors, Private Water Companies and Interested Parties

<i>Water Purveyor</i>	<i>Participated in UWMP Development</i>	<i>Commented on the Draft</i>	<i>Attended Public Meetings</i>	<i>Contacted for Assistance</i>	<i>Received Notice of Draft Availability</i>	<i>Sent Notice of Intention to Adopt</i>	<i>Not Involved/ No Information</i>
San Luis Obispo County	X			X	X	X	
City of Santa Maria				X	X	X	
San Luis Obispo LAFCO	X	X		X	X	X	
Central Coast Water Authority					X		
Golden State Water Co.					X		
Rural Water Co.					X		
Woodlands Mutual Water Co.					X		
Nipomo Valley Mutual Water Co.					X		
Rim Rock Water Co.					X		
Santa Maria Valley Water Conservation District					X		
Nipomo Community Advisory Council			X		X		
Nipomo Water Planning Forum			X		X		
Dana Elementary School					X		
Nipomo High School					X		
Arroyo Grande Mushroom Farm					X		
Ball Tagawa Growers					X		
Blacklake Canyon Water Supply					X		
Callender Water Association					X		
Country Hills Estates					X		
Greenheart Farms					X		
Heritage Lane Mutual Water Co.					X		
Hetrick Water Co.					X		
Ken Mar Gardens					X		
La Mesa Water Co.					X		
Rancho Nipomo Water Co.					X		
Guadalupe Cooling					X		

Table 1. Coordination with Appropriate Agencies, Advisory Groups, Purveyors, Private Water Companies, and Interested Parties
(continued)

<i>Water Purveyor</i>	<i>Participated in UWMP Development</i>	<i>Commented on the Draft</i>	<i>Attended Public Meetings</i>	<i>Contacted for Assistance</i>	<i>Received Notice of Draft Availability</i>	<i>Sent Notice of Intention to Adopt</i>	<i>Not Involved/ No Information</i>
Clearwater Nursery					X		
Cuyama Lane Water Co.					X		
La Colonia Water Association					X		
Mesa Mutual Water Co.					X		
Santa Maria Speedway					X		
Speedling, Inc.					X		
True Water Supply					X		
Home Builders Assoc. of the Central Coast		X	X				
San Luis Obispo Coastal Keeper		X					
Greg Nester Construction and Development		X	X				
Kirk Consulting/Rob Rossi		X	X				

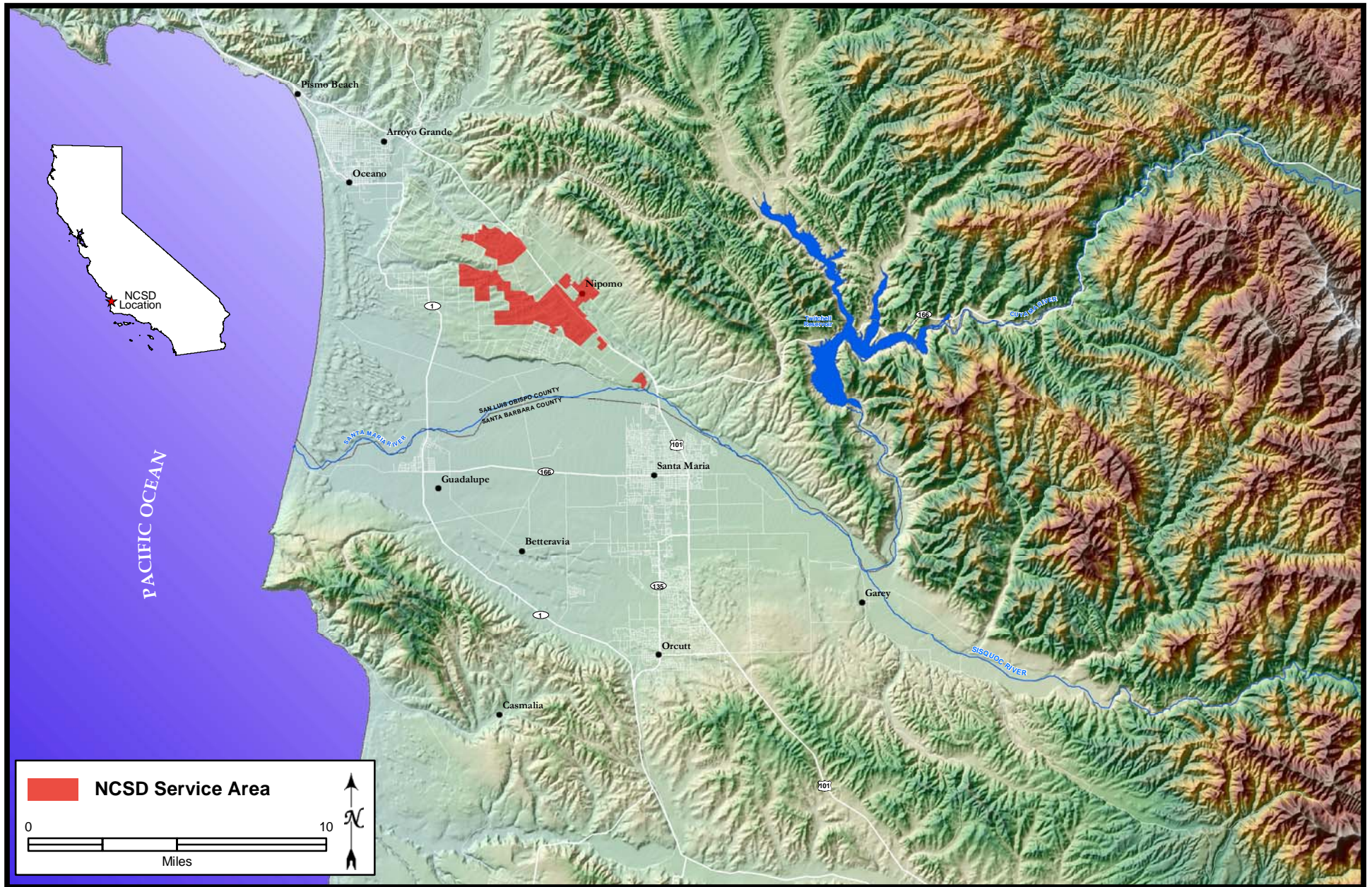


Figure 1. Nipomo Community Services District Location

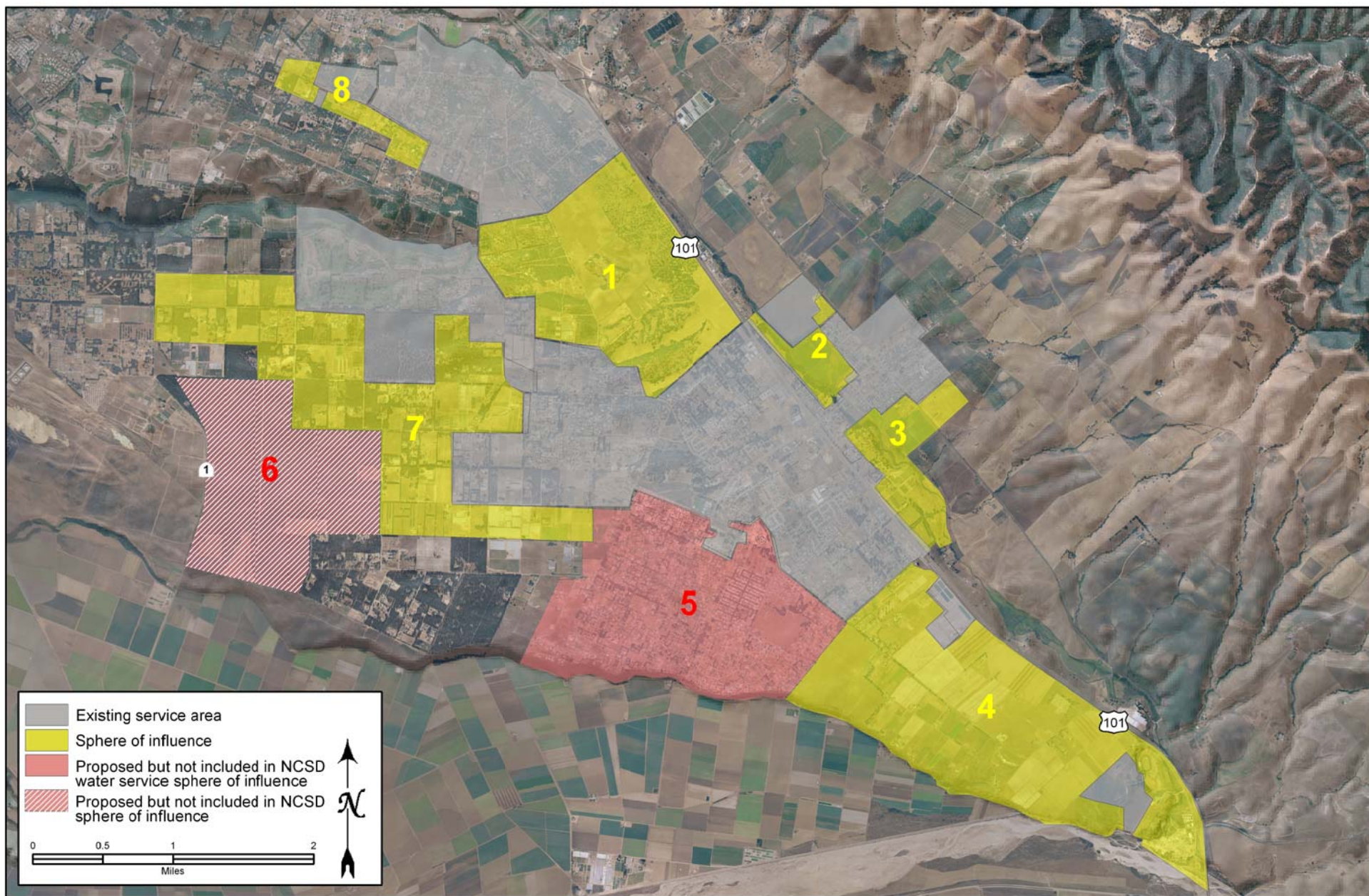


Figure 2. Nipomo Community Services District Existing Service Area and Adopted Sphere of Influence

the county. As shown in Table 2 the San Luis Obispo County Growth Management Ordinance has kept overall unincorporated county growth below 2.3 percent per year, but has concentrated growth in some specific communities, including Nipomo. As shown in Table 2, the average annual percent increase in dwelling units in Nipomo from 1990 to 2003 was 3.71 percent.

Table 2. Dwelling Units by Planning Area in San Luis Obispo County 1990-2003

<i>Community or Planning Area ¹</i>	<i>Dwelling Units 1990</i>	<i>Dwelling Units 2003 ^a</i>	<i>New Dwelling Units 1990-2003</i>	<i>Percent Increase 1990-2003</i>	<i>Average Annual Percent Increase</i>
Templeton	1,100	1,801	701	63.72	3.87
Nipomo	2,386	3,829	1,443	60.48	3.71
Rural El Pomar	1,710	2,701	991	57.95	3.58
Rural Adelaida	650	911	261	40.15	2.63
Paso Robles	7,599	10,230	2,631	34.62	2.31
Pismo Beach	4,548	5,693	1,145	25.18	1.74
Rural South County	2,510	3,139	629	25.06	1.74
San Miguel	451	560	109	24.17	1.68
Heritage Ranch	1,047	1,295	248	23.69	1.65
Cambria	3,081	3,773	692	22.46	1.57
Arroyo Grande	6,059	7,179	1,120	18.48	1.31
Atascadero	8,875	10,377	1,502	16.92	1.21
Rural Las Pilitas	709	808	99	13.96	1.01
Rural Salinas River	3,101	3,520	419	13.51	0.98
Morro Bay	5,694	6,459	765	13.44	0.97
Grover Beach	4,941	5,547	606	12.26	0.89
Oceano	2,433	2,724	291	11.96	0.87
Rural Nacimiento	761	842	81	10.64	0.78
Cayucos	2,133	2,353	220	10.31	0.76
San Luis Obispo	17,887	19,617	1,730	9.67	0.71
Santa Margarita	488	531	43	8.81	0.65
Los Osos	6,097	6,290	193	3.17	0.24
Total County Unincorporated	84,260	100,179	15,919	18.89	1.33

Notes:

1. Communities are ranked according to their percentage increase in dwelling units between 1990 and 2003.
- a. Number of dwelling units in the Nipomo Planning area may not equal number of NCSD water accounts in the Nipomo Planning area for several reasons (e.g., some accounts serve multiple dwelling units; other accounts are outside District boundaries).

Source: San Luis Obispo County Department of Planning and Building, Annual Resources Summary Report, 2004, as cited in San Luis Obispo County. 2005. Draft Environmental Impact Report for Growth Management Ordinance (Title 26) Amendments. SCH. No. 2002051075. June.

However, in January 2000 the San Luis Obispo County Board of Supervisors adopted, via emergency ordinance, a community-specific growth rate for the Nipomo Mesa of 2.3 percent per year, limiting residential construction permits for non-exempt buildings issued each year. For the purposes of this analysis, 2.3 percent will be considered as one potential growth rate for future population and water demand. On May 24, 2005, the County lowered the growth cap in the Nipomo Planning Area to 1.8 percent based on concerns over traffic congestion and water resources. The 2005 San Luis Obispo County Annual Resources Summary anticipates having projects in place to resolve traffic congestion in the Nipomo area by year 2010 (San Luis Obispo County 2005c). Once projects to relieve traffic congestion are underway and once supplemental water is acquired (see section 2.3) 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, as demonstrated in Table 2, have been higher than 1.8 and 2.3 percent. The average annual percent increase from 1990 to 2003 in the Nipomo Planning area was 3.71 percent; the growth rate in 2004 was 7.9 percent; and there is reason to believe future growth rates may be greater than 2.3 percent due to current as well as proposed exemptions from the Growth Management Ordinance. For the purposes of this analysis, 3.7 percent will also be considered as a potential growth rate for both population and water demand.

Current exemptions from the San Luis Obispo County Growth Management Ordinance include:

- Approvals of subdivisions with specific plans and buildout rates exempted from growth cap limitations. The phasing plan for the Woodlands Specific Plan, for example, received County approval at a rate much higher than that of the Maximum Annual Allocation. The Woodlands Specific Plan allows units to be phased at a rate of 165 units per year for the first five years and 99 units per year for the remaining portion of development, for a total of approximately 1,320 units. Given a 2.3 percent Community-Specific Growth Limit, the maximum allocation of units in the Nipomo Mesa would have been only 92 in year 2005 and cumulative allocation from year 2005 through 2015 would only be 1,136 (San Luis Obispo County 2005b).
- “Pipeline Projects.” Those are applications filed and accepted for development within the Nipomo Mesa between November 14, 1999, and April 4, 2000. There are currently approximately 180 exempted “pipeline projects.” According to the San Luis Obispo County Department of Planning and Building staff, the majority of these in-progress projects have been, or will soon be, completed.
- Exemptions for affordable housing.
- Exemptions for antiquated subdivisions with Certificates of Compliance.

From 1991 to 2001, approximately 41 percent of the Building Permits issued in San Luis Obispo County were exempt from the Growth Management Ordinance; in the same period approximately 46 percent of the dwelling units finalized were exempted (San Luis Obispo County 2005b). The fact that the Growth Management Ordinance was in effect during this time period makes a compelling case that many dwelling units are, and could continue to be, permitted exempt from the Growth Management Ordinance.

San Luis Obispo County is considering additional amendments and exemptions to the Growth Management Ordinance. Consideration is being given to:

- Allowing “carry-over” of up to 10 percent of any unused allocations from one year to another year;
- Increasing incentives for low- and moderate-income housing projects; and
- Accommodating the distribution of up to 2,596 previously unused building allocations.

Given this potential for future exemptions to the Growth Management Ordinance, as a high-end bookend assumption, this UWMP will also examine potential growth assuming an annual population growth rate mirroring that from 1990 to 2000, 7.8 percent (San Luis Obispo LAFCO 2004).

Table 3 shows the range of anticipated future population in the NCSD service area assuming: (a) population is consistent with the 2.3 percent annual limitation on residential dwelling units set by the Nipomo community-specific Growth Management Ordinance; (b) population mirrors historic (1990-2003) average annual increase in dwelling units, approximately 3.7 percent on the Nipomo Mesa; or (c) population growth similar to annual population growth in the Nipomo area from 1990 to 2000, 7.8 percent. Table 3 demonstrates that during the period covered by this UWMP, 2005 through 2030, the population growth will have an extreme influence on the number of persons seeking water in the Nipomo Mesa Area (as defined by San Luis Obispo County). A slow growth rate will result in only approximately 21,190 residents within the NCSD service area by year 2030, but the high-bookend growth rate results in an estimate of 78,460 persons by year 2030. Because the current NCSD service area would not accommodate the higher numbers of population growth, it is assumed that some of the population growth in the NCSD service area would take place in the Sphere of Influence areas identified in Figure 2.

Table 3. NCSD Population – Current and Projected

<i>Assumed Annual Population Growth Rate</i>	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

1.2.3 Climate

The climate in the Nipomo Mesa and southern coastal portion of San Luis County is moderate because of the buffering marine influence of the Pacific Ocean. This influence provides a Mediterranean-like climate with cool moist winters and warm dry summers. The northwest-southwest orientations of the local mountains govern the wind direction, which is dominantly from the northwest. During the summer months, the warm air inland rises and draws in the cooler marine layer near the coastline. This keeps summers cool, and provides moisture for plant growth. The annual growing season, days without freezing temperatures, averages over 325 days on the Nipomo Mesa. Precipitation normally occurs between November and April, and increases in the foothills and mountains due to the orographic (elevation) effect. Climate data for the Nipomo Mesa are tabulated below in Table 4.

Table 4. Climate in the Nipomo Mesa Area

	<i>Jan</i>	<i>Feb</i>	<i>Mar</i>	<i>Apr</i>	<i>May</i>	<i>Jun</i>	<i>Jul</i>	<i>Aug</i>	<i>Sep</i>	<i>Oct</i>	<i>Nov</i>	<i>Dec</i>	<i>Annual</i>
Standard Monthly Average ET _o (inches) ¹	1.83	2.30	3.70	5.12	5.71	5.79	5.63	5.34	4.21	3.51	2.39	1.91	47.44
Average Rainfall (inches) ²	3.14	3.60	2.79	1.06	0.23	0.03	0.02	0.04	0.28	0.63	1.65	2.17	15.65
Average Temperature (Fahrenheit) ³	51.0	52.5	53.3	55.1	57.5	60.3	62.9	63.5	63.3	60.7	55.7	51.5	57.3

Notes:

Previously studies of precipitation records by SAIC determined that the CDF Nipomo rain gage best represents the Nipomo region. For temperature and evapotranspiration (ET)_o, stations in Santa Maria are used. Santa Maria is similar to Nipomo in elevation and distance from the Pacific Ocean and is the nearest climate station.

1. Data from CIMIS Station #38, Santa Maria. Source: <http://www.cimis.water.ca.gov/cimis/data.jsp>
2. Data from CDF Nipomo Rain Gage 151.5 (1959 to 2000). Received from SLO County by SAIC in 2002.
3. Data from WRCC station #47946, the Santa Maria Airport, during the 30-year time period of 1951 through 2004. Source: <http://www.wrcc.dri.edu/climsum.html>

2.0 WATER SOURCES

The NCSD's current water supply is solely groundwater, extracted primarily from the Nipomo Mesa Management Area of the Santa Maria Groundwater Basin. The Nipomo Mesa Management Area (NMMA) is in the northwestern portion of the Santa Maria Groundwater Basin and encompasses 27.5 square miles (see Figure 3). A small proportion of NCSD's water is pumped from groundwater in the Nipomo Valley, a component of the Santa Maria Valley Groundwater Basin outside the adjudication area. Negotiations are currently underway to bring supplemental water from the City of Santa Maria. This supplemental water would be delivered via a proposed pipeline across the Santa Maria River.

2.1 SANTA MARIA GROUNDWATER BASIN

The Santa Maria Groundwater Basin is approximately 288 square miles – bounded in the north by the San Luis and Santa Lucia mountain ranges, in the south by the Casmalia-Solomon Hills, in the east by the San Rafael Mountains, and in the west by the Pacific Ocean. Sediment eroded from the nearby mountains and deposited in the Santa Maria Valley formed beds of unconsolidated alluvium, averaging 1,000 feet in depth, with maximum depths up to 2,800 feet. These loose river sediments are the primary source of water supply in the region, and are estimated to have the capacity to store at least 14,900,000 af of water (DWR 2003).

Recharge to the Santa Maria Groundwater Basin occurs by river bed recharge, direct rainfall percolation, and subsurface flow from the foothills surrounding the basin. River bed recharge comprises the most significant element of recharge (SBCWA 1994). It is estimated that between 75 to 85 percent of the total 83,000 acre-feet per year (afy) average annual recharge to the Santa Maria Groundwater Basin is due to percolation from river flows (SBCWA 2000).

Since July 1997 the Santa Maria Valley Groundwater Basin has been the subject of ongoing litigation between nearly 800 parties with competing claims to pump groundwater, collectively called the Santa Maria Groundwater Litigation (*Santa Maria Valley Water Conservation District vs. City of Santa Maria, et al.* Case No. 770214). The Santa Maria Valley Water Conservation District was originally concerned that the City of Santa Maria's banking of State Water Project (SWP) water in the groundwater basin would give the City priority rights to the groundwater that was historically held by agricultural water users. The lawsuit broadened to address groundwater management of the entire Santa Maria Basin. On August 3, 2005, the Court approved a Settlement Stipulation for the case. The Settlement Stipulation, contained in Appendix B of this UWMP, divides the Santa Maria Basin into three separate management sub-areas (the Northern Cities Management Area, the NMMA, and the Santa Maria Valley Management Area). The Settlement Stipulation contains specific provisions with regard to rights to use groundwater, development of groundwater monitoring programs, and development of plans and programs to respond to potential severe water shortage conditions.

2.1.1 Nipomo Mesa Management Area

The Nipomo Mesa's raised bluffs overlook the Santa Maria River Valley and the dune system to the west and are formed by relic sand dunes. The dune deposits are from 150 to 250 feet thick and overlie the Paso Robles Formation, which is the primary aquifer and composed of unconsolidated alluvial deposits. The dune deposits are highly porous and permeable so very little runoff leaves the Nipomo Mesa, and because of its elevated nature there are no foothill streams that flow into the Mesa. Thus, the primary source of recharge is deep percolation, with contributions from agricultural and urban return flows, and sub-surface inflows from the nearby Santa Maria Basin. Part of this deep percolation from rainfall is lost by evapotranspiration and lateral flows along the finer-grained upper layers of the Paso Robles formation to Black Lake and other western dune lakes. The dependence on deep percolation as the major source of recharge makes the groundwater supply vulnerable during prolonged periods of low rainfall (S.S. Papadopoulos 2004).

Table 5 below, is an example of a hydrologic inventory for the Nipomo Mesa Management Area. Table 5 has been derived from NCSD Exhibit C-4 of the Santa Maria Groundwater Litigation and is based on hydrology and estimated land uses for the years 1975 through 2000. Based on estimates of deep percolation and subsurface inflow for 1975 through year 2000, NCSD has projected the safe yield of the NMMA to be between 5,450 afy to 6,540 afy (SAIC 2003). DWR (2002) estimated the dependable yield of the Nipomo Mesa groundwater basin to be between 4,800 to 6,000 afy.

California's Groundwater Bulletin 118 (DWR 2003) states that groundwater levels beneath the Nipomo Mesa declined from 1 to 10 feet in the northern part during 1975 through 2000 and as much as 58 feet in the central part during 1968 through 2000. However, this report states that groundwater levels were stable in the western and southeastern parts, generally following rainfall cycles. According to DWR, groundwater levels beneath the Santa Maria Valley generally declined during 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. Papadopoulos and Associates, concluded that the 2002 DWR study correctly identified overdraft conditions in the Nipomo Mesa area of the groundwater basin. Based on this and other evidence, the County's Water Resources Advisory Committee concluded that overdraft in the Nipomo Mesa area either exists currently or is imminent (San Luis Obispo County 2004).

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 are developed.

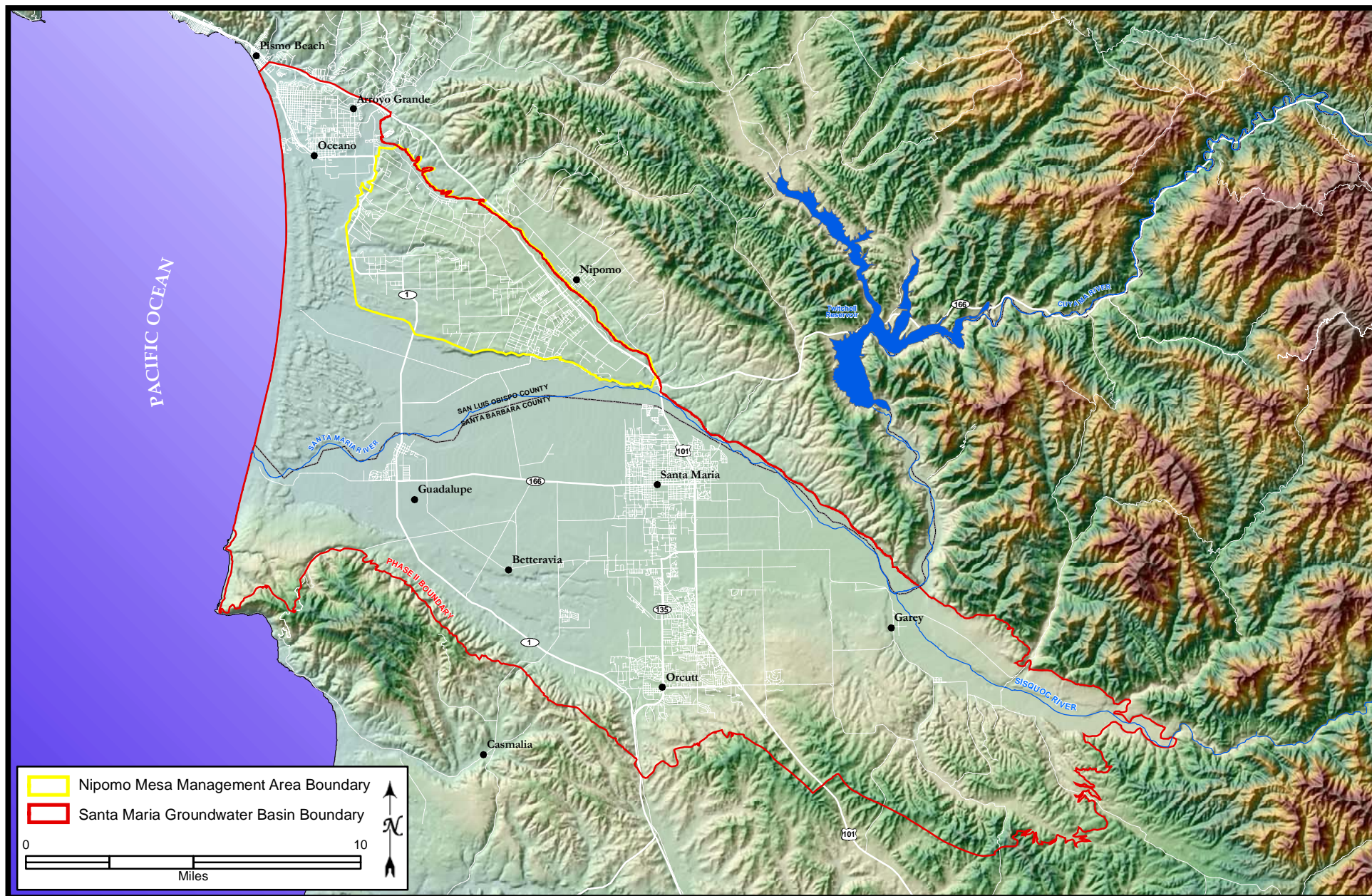


Figure 3. Santa Maria Groundwater Basin and Nipomo Mesa Management Area

Table 5
Example Hydrologic Inventory
for Nipomo Mesa Management Area

ELEMENTS OF HYDROLOGIC INVENTORY

ELEMENTS OF HYDROLOGIC INVENTORY																												AVERAGE (1975-2000)	AVERAGE 1975 - 1995	
	WATER YEAR	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	TOTALS		
ANNUAL PRECIPITATION (INCHES)		17.29	13.45	10.23	30.66	15.80	16.57	13.39	18.58	33.21	11.22	12.20	16.85	11.29	12.66	12.22	7.12	13.06	15.66	20.17	12.15	25.47	16.54	20.50	33.67	12.98	14.47	437.4	16.82	16.15
AREA (ACRES)		19,410	19,410	19,410	19,410	19,410	19,410	19,410	19,410	19,410	19,410	19,410	19,410	19,410	19,410	19,410	19,410	19,410	19,410	19,410	19,410	19,410	19,410	19,410	19,410	19,410				
ELEMENTS OF HISTORICAL SUPPLY (volumes in acre-feet)																														
DEEP PERCOLATION OF PRECIPITATION ⁽¹⁾																														
NATIVE TREES ⁽³⁾		0	0	0	2,520	0	0	0	0	2,780	0	0	0	0	0	0	0	0	0	0	0	650	0	760	2,130	0	0	8,840	340	280
NATIVE GRASSES ⁽³⁾		90	0	0	9,180	710	880	0	0	9,120	0	0	0	0	0	0	0	1,650	1,330	3,190	0	5,240	2,130	4,240	6,890	0	120	44,770	1,720	1,490
AGRICULTURAL LAND		1,190	640	60	3,420	1,170	1,360	850	1,790	4,310	680	800	1,610	720	880	790	10	940	1,370	2,070	770	2,860	1,490	2,100	4,170	900	1,150	38,100	1,470	1,350
URBAN LAND		870	250	0	3,690	790	1,000	320	1,590	5,350	0	50	1,420	0	210	80	0	400	1,460	3,420	70	6,120	2,150	4,170	11,030	510	1,350	46,300	1,780	1,290
GOLF COURSES		0	0	0	0	0	0	0	0	0	0	180	70	100	90	0	110	160	220	90	320	180	230	1,040	110	150	3,050	120	60	
TOTAL DEEP PERCOLATION		2,150	890	60	18,810	2,670	3,240	1,170	3,380	21,560	680	850	3,210	790	1,190	960	10	3,100	4,320	8,900	930	15,190	5,950	11,500	25,260	1,520	2,770	141,060	5,430	4,470
SUBSURFACE INFLOW ⁽²⁾																														
FROM SANTA MARIA RIVER VALLEY		(10)	70	150	230	300	380	460	540	610	690	770	840	920	1,000	1,080	1,150	1,230	1,310	1,380	1,460	1,540	1,510	1,480	1,450	1,420	1,390	23,350	900	770
FROM NIPOMO VALLEY		120	150	250	110	110	80	150	140	190	100	40	190	290	260	320	340	370	250	320	280	150	210	290	380	190	210	5,490	210	200
TOTAL SUBSURFACE FLOW		110	220	400	340	410	460	610	680	800	790	810	1,030	1,210	1,260	1,400	1,490	1,600	1,560	1,700	1,740	1,690	1,720	1,770	1,830	1,610	1,600	28,840	1,110	970
TOTAL SUPPLY		2,260	1,110	460	19,150	3,080	3,700	1,780	4,060	22,360	1,470	1,660	4,240	2,000	2,450	2,360	1,500	4,700	5,880	10,600	2,670	16,880	7,670	13,270	27,090	3,130	4,370	169,900	6,540	5,450
ELEMENTS OF USE/ OUTFLOW (volumes in acre-feet)																														
CONSUMPTIVE USE OF PRODUCTION ⁽⁴⁾																														
AGRICULTURAL ⁽⁵⁾		1,620	1,710	1,940	1,590	1,870	1,920	1,980	2,010	1,860	2,230	2,200	2,270	2,410	2,400	2,470	2,960	2,600	2,670	2,670	2,810	2,730	2,940	2,950	2,890	3,150	3,210	62,060	2,390	2,230
URBAN ⁽⁶⁾		1,720	1,770	1,820	1,880	1,930	2,000	2,070	2,160	2,250	2,340	2,440	2,560	2,670	2,800	2,930	3,060	3,030	2,990	2,940	2,860	2,790	2,910	3,040	3,170	3,310	3,460	66,900	2,570	2,430
GOLF COURSE ^{(5) (7)}		0	0	0	0	0	0	0	0	0	0	0	410	440	440	440	480	440	410	370	440	340	410	370	580	790	750	7,110	270	200
TOTAL CONSUMPTIVE USE OF PRODUCTION		3,340	3,480	3,760	3,470	3,800	3,920	4,050	4,170	4,110	4,570	4,640	5,240	5,520	5,640	5,840	6,500	6,070	6,070	5,980	6,110	5,860	6,260	6,360	6,640	7,250	7,420	136,070	5,230	4,860
SURFACE OUTFLOW ⁽⁸⁾		0	0	0	120	0	0	0	0	130	0	0	0	0	0	0	0	0	0	0	0	100	0	0	130	0	0	480	20	20
SUBSURFACE OUTFLOW ⁽²⁾																														
TO PACIFIC OCEAN		420	420	420	420	420	420	420	420	420	420	420	420	420	420	420	420	420	420	420	420	420	420	420	420	420	420	10,920	420	420
TO NORTHERN CITIES		1,290	1,240	1,250	1,190	1,210	1,280	1,190	1,210	1,150	1,350	1,300	1,300	1,300	1,270	1,290	1,290	1,290	1,270	1,230	1,250	1,170	1,170	1,110	1,050	1,110	1,190	31,950	1,230	1,250
TOTAL SUBSURFACE OUTFLOW		1,710	1,660	1,670	1,610	1,630	1,700	1,610	1,630	1,570	1,770	1,720	1,720	1,720	1,690	1,710	1,710	1,710	1,690	1,650	1,670	1,590	1,590	1,530	1,470	1,530	1,610	42,870	1,650	1,670
TOTAL USE		5,050	5,140	5,430	5,200	5,430	5,620	5,660	5,800	5,810	6,340	6,360	6,960	7,240	7,330	7,550	8,210	7,780	7,760	7,630	7,780	7,550	7,850	7,890	8,240	8,780	9,030	179,420	6,900	6,550
SURPLUS/ DEFICIENCY BY WATER YEAR		(2,790)	(4,030)	(4,970)	13,950	(2,350)	(1,920)	(3,880)	(1,740)	16,550	(4,870)	(4,700)	(2,720)	(5,240)	(4,880)	(5,190)	(6,710)	(3,080)	(1,880)	2,970	(5,110)	9,330	(180)	5,380	18,850	(5,650)	(4,660)	(9,520)	(360)	(1,100)
CUMULATIVE SURPLUS/DEFICIENCY		(2,790)	(6,820)	(11,790)	2,160	(190)	(2,110)	(5,990)	(7,730)	8,820	3,950	(750)	(3,470)	(8,710)	(13,590)	(18,780)	(25,490)	(28,570)	(30,450)	(27,480)	(32,590)	(23,260)	(23,440)	(18,060)	790	(4,860)	(9,520)			
GROUNDWATER PRODUCTION																														
AGRICULTURAL		2,290	2,390	2,730	2,220	2,590	2,650	2,730	2,760	2,550	3,080	3,000	3,090	3,330	3,290	3,380	4,130	3,570	3,650	3,680	3,850	3,780	4,030	4,060	3,980	4,330	4,410	85,550	3,290	3,080
URBAN		2,130	2,220	2,310	2,420	2,520	2,630	2,770	2,920	3,080	3,250	3,420	3,630	3,840	4,060	4,290	4,530	4,480	4,400	4,310	4,180	4,040	4,260	4,490	4,730	4,980	5,240	95,130	3,660	3,400
GOLF COURSE		0	0	0	0	0	0	0	0	0	0	0	480	510	510	510	570	510	480	440	510	410	480	440	670	920	880	8,320	320	230
TOTAL EXTRACTIONS		4,420	4,610	5,040	4,640	5,110	5,280	5,500	5,680	5,630	6,330	6,420	7,200	7,680	7,860	8,180	9,230	8,560	8,530	8,430	8,540	8,230	8,770	8,990	9,380	10,230	10,530	189,000	7,270	6,710

⁽¹⁾ Rainfall data provided by San Luis Obispo County Department of Public Works. Groundwater recharge due to deep percolation of precipitation estimated using Nipomo CDF precipitation gage for water years 1975 through 2000.

⁽²⁾ Data developed from 1975, 1995, and 2000 Groundwater Contour maps and available well data. Years without well data estimated with linear interpolation of contour data.

⁽³⁾ Accounts for precipitation used to meet root zone moisture deficit.

⁽⁴⁾ Historical land use data provided by DWR for 1977, 1985 and 1996. Land use data for all other years estimated by linear interpolation.

⁽⁵⁾ Consumptive use varies by crop type. Assume 90% of ag land is irrigated.

⁽⁶⁾ Assume 56% consumptive use for urban water produced. Assume Tosco Refinery pumps 1,370 AFY from 1975 - 2000. 1,290 AFY consumptively used. (Source: Lawrance, Fisk & McFarland 1993)

⁽⁷⁾ Assume Black Lakes Golf Course began irrigating in 1986. Assume Cypress Ridge Golf course began irrigating in 1998.

⁽⁸⁾ Surface water outflow occurs in years of 25 inches or greater precipitation.

2.1.2 Future Groundwater Management in the Santa Maria Groundwater Basin

As described earlier, on August 3, 2005, the Court tentatively approved a Settlement Stipulation for the Santa Maria Groundwater Litigation, though the terms of this document are not in effect (or enforceable) until additional proceedings of the trial have concluded. The Settlement Stipulation, provided in Appendix B of this UWMP, contains specific provisions with regard to rights to use groundwater, development of groundwater monitoring programs, and development of plans and programs to respond to potentially severe water shortage conditions. The intent of the Stipulation is to impose a physical solution establishing the legal and practical means for ensuring the long-term sustainability of the Santa Maria Groundwater Basin.

The Settlement Stipulation includes the following major concepts:

Recognition of Priority of Overlying Rights. The Stipulation holds that overlying owners that are parties to the stipulation have a prior and paramount overlying right.

No Prescriptive Rights. The Stipulation holds that no party to the stipulation has proven prescriptive rights to any native groundwater.

Appropriative Rights. Those parties to the Stipulation owning and exercising appropriative rights have the right to reasonable and beneficial use of native groundwater that is surplus to the reasonable and beneficial uses of the overlying owners that are parties to the Stipulation.

Establishment of Basin Management Areas. Though the court found insufficient evidence to support the existence of sub-basins within the Santa Maria Valley Basin, the Stipulation does establish three Management Areas, the Northern Cities Management Area, the NMMA, and the Santa Maria Valley Management Area. In the NMMA, management functions are to be performed by the NMMA Technical Group, which shall include representatives appointed by NCSD, Golden State Water Company, ConocoPhillips, Woodlands Mutual Water Company, and an agricultural overlying owner who is also a Stipulation party.

Groundwater Monitoring. A monitoring program is to be established in each of the three Management Areas to collect and analyze data on land use, water use, groundwater levels, and groundwater quality. The results of the monitoring program are to be filed in an annual report to the Court. In the NMMA, this monitoring program is to be developed by the NMMA Technical Group.

Supplemental Water to be delivered to the Nipomo Mesa Management Area. Consistent with the Memorandum of Understanding between the City of Santa Maria and the District, a minimum of 2,500 afy 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% (1667 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).

Definition of Severe Water Shortage Conditions and Development of Response for Shortage. The NMMA Technical Group is to develop criteria for declaring the existence of Potentially Severe Water Shortage Conditions (Caution Trigger Point) and Severe Water Shortage Conditions (Mandatory Action Trigger Point), to be approved by the Court. In the event the NMMA Technical Group determines that Caution Trigger Point shortage conditions have been reached, parties agreeing to the Settlement Stipulation shall coordinate efforts to increase groundwater recharge, increase supply of

Nipomo Supplemental Water if available, and reduce groundwater use. In the event the NMMA Technical Group determines that Mandatory Action Trigger Point conditions have been reached: (a) Overlying Owners that are parties to the Stipulation (other than Woodlands Mutual Water Company and ConocoPhillips) shall reduce the use of groundwater to no more than 110 percent of the highest pooled amount previously collectively used by those parties in a year, prorated for any partial Year; (b) ConocoPhillips shall reduce its groundwater use to no more than 110 percent of the highest amount it previously used in a single year; (c) NCSD, Rural Water Company, Golden State Water Company, and Woodlands Mutual Water Company shall implement mandatory conservation measures prescribed by the NMMA Technical Group and approved by the Court. Depending on how Woodlands Mutual Water Company uses Supplemental Water, Woodlands may not be subject to mandatory conservation measures.

NMMA Requirement for New Urban Uses to Provide Supplemental Water or Water Development Fee. In the NMMA, new urban uses within existing service areas or sphere of influence areas are to obtain water service from the local public water supplier. New municipal and industrial uses on land adjacent to or within one quarter mile of the boundary line of a municipality or its sphere of influence or within the certificated service area of a publicly regulated utility shall enter into good faith negotiations with local water purveyor(s) prior to forming a mutual water company to provide water service.

Injunction Against Transportation From the Basin. Each and every party signing the Settlement Stipulation is enjoined and restrained from transporting groundwater to areas outside the Santa Maria Groundwater Basin [as described in the Phase I and II orders of the Court as modified], except for those uses in existence in effect at the date of the Stipulation. However, groundwater may be delivered for use outside the Basin so long as the wastewater generated by the use is discharged within the Basin, or agricultural return flows resulting from that use return to the Basin.

2.2 NCSD GROUNDWATER SUPPLY

NCSD currently uses nine active wells and two standby wells to extract groundwater from the NMMA of the Santa Maria Groundwater Basin to provide water to its customers. As shown in Figure 4, the active wells in the NMMA are Blacklake Wells 3 and 4, Bevington, Via Concha, Sundale, Eureka, Omiya, Knollwood and Olympic; the standby wells are Cheyenne and Mandi. NCSD distributes the water through two separate operating systems: Blacklake Division (~580 accounts) and the Town Division (~3,120 accounts). These nine wells have the capacity to pump 5,150 afy assuming 20 percent of the time the wells will be down for maintenance.

NCSD has one active well (Church), and one standby well (Savage), available to pump groundwater from the Nipomo Valley. The Church well can pump up to 200 afy (assuming operation at 70 percent capacity). NCSD is considering upgrading or replacing the aging standby well in the Nipomo Valley to increase total pumping in this area to 300 afy. Funding for well improvement/replacement would come from NCSD's existing Replacement Fund, which currently has a balance of approximately \$1.5 million. NCSD tries to limit its use of Nipomo Valley groundwater in order to avoid potentially interfering with agricultural pumping in the area and because this water source has elevated sulfides and dissolved solids.

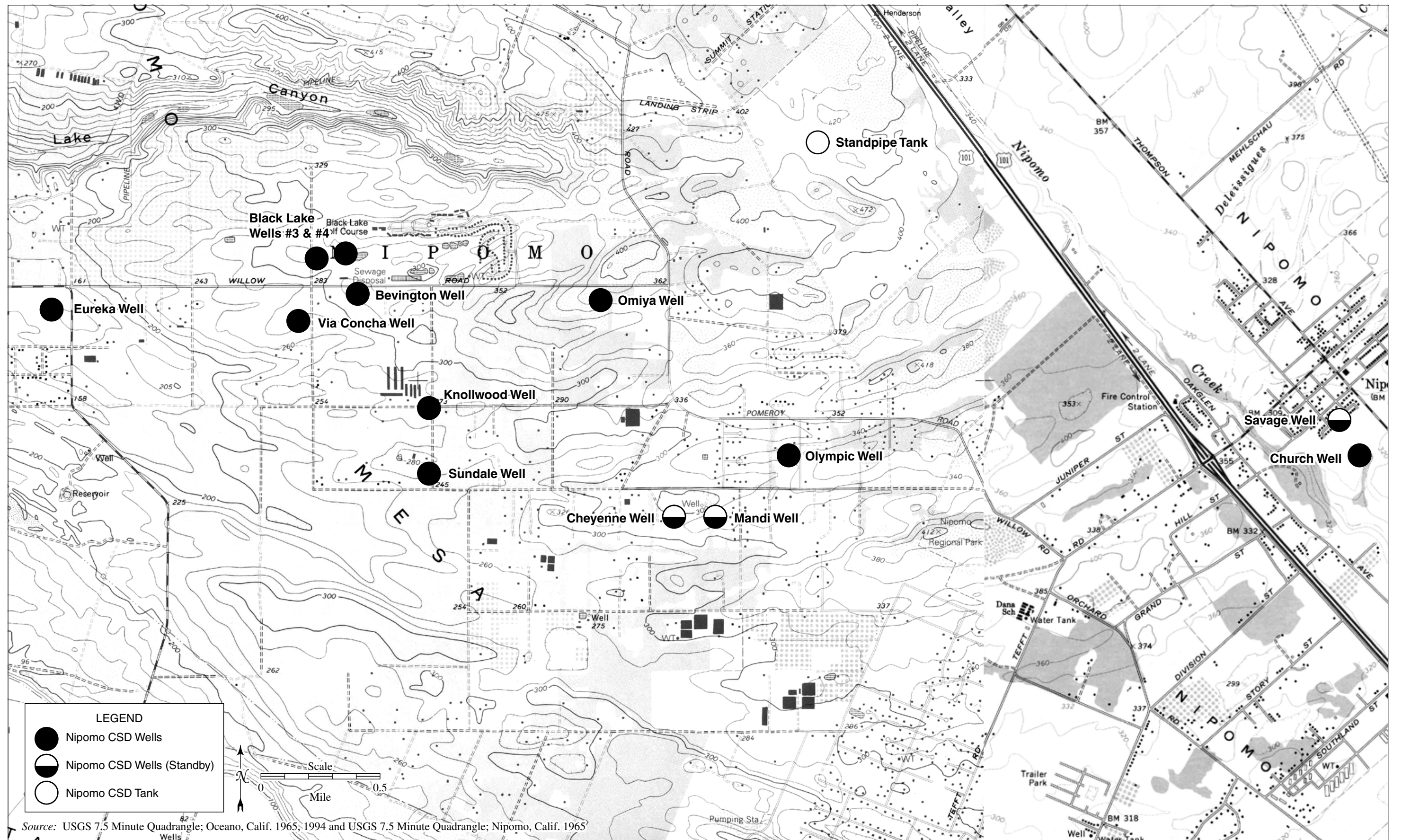


Figure 4. Location of Nipomo Community Services District Wells

The following table shows the most recent five-year groundwater pumping by NCSD.

Table 6. Amount of Groundwater Pumped Annually by NCSD (afy)

<i>Source Name</i>	<i>NCSD Division</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>
Nipomo Mesa Management Area of Santa Maria Groundwater Basin	Town	2,002	1,905	2,252	2,105	2,402
Nipomo Mesa Management Area of Santa Maria Groundwater Basin	Blacklake	409	373	447	435	476
<i>Sub-Total, NCSD production from NMMA</i>		2,411	2,278	2,699	2,904	2,878
Nipomo Valley Groundwater	Town	3	7	11	93	30
<i>Total pumped by NCSD</i>		2,414	2,285	2,710	3,033	2,908

In response to the current litigation, NCSD has implemented many policies to protect the NMMA. NCSD's Annexation Policy requires that "...annexations shall provide a reliable water source, other than water from the Nipomo Hydrologic Sub-Area (HSA)¹ 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 (see section 2.3). 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 Settlement Stipulation. Table 7 shows the projected average extraction by NCSD from the NMMA and Nipomo Valley groundwater. Given the various actions in place to protect the NMMA (NCSD's actions to bring in supplemental water, NCSD requiring annexations to rely on a water source other than water from the NMMA) it has been assumed that production from the NMMA by NCSD will increase only until supplemental water is available and then return to near 2004 levels. If other limits are imposed on groundwater pumping from the Nipomo Mesa by future actions of the NMMA Technical Group or the Court, estimates in Table 7 would need to be revisited.

¹ At the time the annexation ordinance was adopted the NMMA had yet to be defined by the Court. The geographic area defined as the Nipomo Mesa HSA does differ in some ways from the NMMA but they are largely the same area.

Table 7. Projected Average Amount of Groundwater to Be Pumped by NCSD (afy)

<i>Water Source Name</i>	<i>2010*</i>	<i>2015</i>	<i>2020</i>	<i>2025</i>	<i>2030</i>
Nipomo Mesa Management Area	2,900	2,900	2,900	2,900	2,900
Nipomo Valley Groundwater	300	300	300	300	300
<i>Total Projected NCSD Groundwater Production</i>	<i>3,200</i>	<i>3,200</i>	<i>3,200</i>	<i>3,200</i>	<i>3,200</i>
* Between years 2005 and 2010 NCSD may increase groundwater pumping greater than 2,900 afy. It is anticipated that after supplemental water becomes available, groundwater pumping will decline again to near 2004 levels.					

2.2.1 Groundwater Not Available on a Consistent Basis

As described earlier, NCSD's future groundwater pumping will ultimately be directed by the Court (pursuant to the Settlement Stipulation) through the directives of the NMMA Technical Group. It has been assumed that the Court and the Technical Group will manage the NMMA to protect the long-term safe-yield of the basin. However, within this management, in times of drought it may be necessary to "mine" the groundwater – take water in excess of water annually recharged. 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 by requesting delivery of supplemental water in wet or above-normal years. It is likely that this supplemental water would be delivered directly to NCSD customers and NCSD well production would be curtailed to accomplish "in-lieu" groundwater banking/replacement. DWR estimated in 2002 that there was approximately 75,000 af of groundwater above mean sea level in the Nipomo Mesa Hydrologic Sub-Area as defined by DWR and which encompasses most of the NMMA.

2.3 IMPORTED WATER SUPPLIES/TRANSFER AND EXCHANGE OPPORTUNITIES

NCSD has entered into a memorandum of understanding (MOU) with the City of Santa Maria for the wholesale purchase of water. This MOU is provided in Appendix D. Initial deliveries are anticipated to be up to 3,000 afy for balancing the estimated overdraft in the NMMA, and providing for new growth within NCSD's current service area boundary. The District anticipates requiring new development within its SOI to provide additional supplemental water resources. While the District is not at this time limited in what it will consider as acceptable supplemental water, the City of Santa Maria clearly indicates it has additional water resources available for purchase. Upon execution of the MOU, NCSD paid the City of Santa Maria a Reservation Fee for the water contemplated in the MOU. NCSD intends to connect its existing water distribution system to the City's existing distribution system via a pipeline crossing at the Santa Maria River. According to an engineering report commissioned by NCSD (Cannon Associates 2005), the pipeline could be of 12- to 16-inch diameter capable of carrying up to 6,300 afy across the Santa Maria River either by using horizontal directional drilling under the riverbed, or by attachment to the nearby Highway 101 bridge over the River. NCSD is currently evaluating these various options as part of its California Environmental

Quality Act (CEQA) process. A Notice of Preparation for the project was released on July 25, 2005, and an Environmental Impact Report is under preparation. NCSD must complete and approve the CEQA documents before construction of the waterline intertie can take place. In addition, NCSD anticipates that the following regulatory approvals will be needed for construction of delivery facilities to convey, or deliver supplemental water:

- Section 404 Permits under the Clean Water Act from the U.S. Army Corps of Engineers, which regulates the discharge of dredged and/or fill material into the “waters of the United States;”
- Public Resources Code Sections 1601-1603 Streambed Alteration Agreements from the California Department of Fish and Game, which regulates all diversions, obstructions or changes in the natural flow or bed, channel or bank of any river, stream or lake which supports fish or wildlife;
- A National Pollution Discharge Elimination System (NPDES) permit to comply with Section 401 of the Clean Water Act from the State Water Quality Control Board in the event that a Section 404 Permit from the U.S. Army Corps of Engineers is required;
- A Section 401 Water Quality Certification and a General Permit for Storm Water Discharges Associated with Construction Activities from the Central Coast Regional Water Quality Control Board;
- An Encroachment Permit from the California Department of Transportation for the attachment of the proposed waterline intertie to the Highway 101 Bridge and access for construction and maintenance equipment into the riverbed; and
- Easements across the Santa Maria River and along the southern boundary of the river secured from landowners and other entities for right-of-way and construction.

The City of Santa Maria shall deliver the supplemental water to NCSD from sources used to provide water to the City’s retail customers. The City of Santa Maria water supply is made up of SWP, groundwater yield from the Twitchell Project, and groundwater drawn from the Santa Maria Valley Management Area of the Santa Maria Groundwater Basin. The City of Santa Maria has a contract with the Central Coast Water Authority for a SWP allocation of up to 16,200 afy of treated water from the Polonio Pass Water Treatment Plant, delivered to the City via the Coastal Branch of the California Aqueduct. The City of Santa Maria also has rights to yield of the Twitchell Reservoir, estimated at 20,000 afy, water it dedicates to recharge the Santa Maria Groundwater Basin (County of Santa Barbara 2005). The Settlement Stipulation (see section 2.1.2 and Appendix B), requires the City of Santa Maria, Golden State Water Company, and the City of Guadalupe to divide 80 percent of Twitchell’s yield and overlying owners who are stipulating parties to the Settlement Stipulation receive the remaining 20 percent of Twitchell’s yield. Groundwater from the Santa Maria Valley Management Area is used by multiple entities, including overlying landowners, the City of Santa Maria, the City of Guadalupe, and the Golden State Water Company.

The estimated cost to construct the intertie with the City of Santa Maria is six million dollars. Water delivered under the project is estimated to cost approximately \$1,250 per af (as defined by the terms of the MOU). NCSD considered these costs in its August 2005 rate study and has since developed and adopted new water and sewer system buy-in charges necessary to finance supplemental water.

For example, the new water and sewer system buy-in charges for a 1-inch or less water meter include an additional \$11,121 for supplemental water (NCSD Ordinance 2005-101).

The amount of supplemental water anticipated to be delivered from the City of Santa Maria is shown in Table 8 below. As depicted in Table 8, per the Settlement Stipulation, this water is to be delivered to replenish and recharge the groundwater resources of the NMMA. Though NCSD has the responsibility for contracting for supplemental water, of this water delivered, only two-thirds is available to NCSD's service area and customers.

Table 8. Projected Amount of Supplemental Water from City of Santa Maria (afy)

	2010	2015	2020	2025	2030
Nipomo Mesa Management Area	3,000	3,000	3,000	3,000	3,000
NCSD ^{1, 2}	2,000	2,000	2,000	2,000	2,000
<i>Notes:</i> 1. Estimate based on NCSD use of two-thirds of the first 3,000 afy of supplemental water. 2. The existing MOU with the City of Santa Maria describes acquisition of up to 3,000 afy supplemental water; 2,000 afy to be delivered in NCSD's service area. However, future annexations to NCSD's service area will require additional supplemental water.					

2.3.1 Uses of Supplemental Water

As described earlier, based on testimony in the groundwater litigation, NCSD has developed an estimate of the safe yield of the NMMA, 5,500 afy to 6,500 afy. For the purposes of future water planning NCSD has decided to use the lower bookend of the estimate of safe yield, 5,500 afy. NCSD will be providing supplemental water, per the Settlement Stipulation, in order maintain the health of the groundwater basin. However, NCSD anticipates other demands for this water, including requests for additional water service. NCSD assumes the following for supplemental water:

- The first priority for supplemental water must be to meet provisions of the Settlement Stipulation;
- NCSD has rights to use two-thirds of the first 3,000 afy of supplemental water to be purchased from the City of Santa Maria. As described earlier, NCSD's Annexation Policy requires that annexations shall either provide a reliable water source of water (other than water from the Nipomo Hydrologic Sub-Area²) or pay for the costs of supplemental water for the area of annexation as a condition of District approval.
- Overliers in the NMMA can use groundwater up to 110 percent of their highest use in any past year. For planning purposes, the highest yearly use by overlayers has been assumed to be 3,210 af in any year. One hundred ten percent of 3,210 afy is 3,530 af in any year. The assumed NMMA safe yield remaining after accounting for overlayers is then 5,500 af less 3,530 af, or 1,970 afy.
- NCSD has historically pumped about 58 percent of total water pumped by large producers (NCSD, Golden State Water Company, and Rural Water Company). NCSD therefore has

assumed it will be able to use 58 percent of the remaining NMMA safe yield after consumptive use by overlayers is subtracted (~1,140 afy).

- Assuming consumptive uses of 60 percent and a return flow of 40 percent for urban uses (SAIC 2003), NCSD production of 2,900 afy from the NMMA would negatively affect groundwater by 1,740 afy, exceeding NCSD's share of the safe yield by approximately 597 afy. NCSD would therefore need to in-lieu recharge approximately 600 afy of supplemental water to account for the District's pumping effect on safe yield.

2.4 CURRENT AND PLANNED WATER SUPPLIES

The following table identifies existing and planned water supply sources and associated quantities available to NCSD for the period 2005 to 2030. This table does not reflect additional supplemental water NCSD anticipates to be available from the City of Santa Maria.

Table 9. Current and Planned NCSD Water Supplies (afy)

<i>Water Supply Sources</i>	<i>2005</i>	<i>2010</i>	<i>2015</i>	<i>2020</i>	<i>2025</i>	<i>2030</i>
NMMA Groundwater	2,900	2,900	2,900	2,900	2,900	2,900
Nipomo Valley Groundwater	200	300	300	300	300	300
Supplemental Water	0	2,000	2,000	2,000	2,000	2,000
Total NCSD Supply	3,100	5,200	5,200	5,200	5,200	5,200

2.5 RELIABILITY OF SUPPLY

2.5.1 Selection of Normal and Dry Years, and Multiple Dry Years – Groundwater

The UWMP calls for determining water supply during critical drought situations and for a normal year. To select these years, the longest rainfall records in the vicinity of the Nipomo Mesa and the longest hydrologic inventories were examined. Rainfall was examined because rainfall is the primary source of recharge in the Nipomo Mesa; there are no large alluvial recharge streams or imported water from other watersheds. The hydrologic inventory was examined because it recognizes sub-surface inflow as a contributor to the water supply.

The longest continuous rainfall record in the vicinity of NCSD is the City of Santa Barbara rain gage from water year (WY) WY 1888-89 to 2004-05. The longest rainfall record on the Nipomo Mesa is from WY 1920-21 to 2002-03 at the Nipomo 2NW gage (also called Mehlschau #38). Figure 5 shows the historical rainfall on the Nipomo Mesa, including three major sequences of consecutive dry years: 1929-1934, 1944-1951, and 1987-1990. Figure 5 demonstrates that 1990 was a low precipitation year (approximately 7.21 inches). The year 1990 also falls within the timeframe 1975 to 2000, a period for which a hydrologic inventory has been prepared on the Nipomo Mesa and other parameters (groundwater inflow, groundwater outflow) necessary for understanding groundwater reliability have been estimated. For the purposes of this UWMP and water reliability planning purposes, a repeat of year 1990 water supply conditions and present day land use conditions (year 2000 land uses as defined by SAIC 2003) is assumed to be representative of water supply conditions in a single dry year (see Table 10).

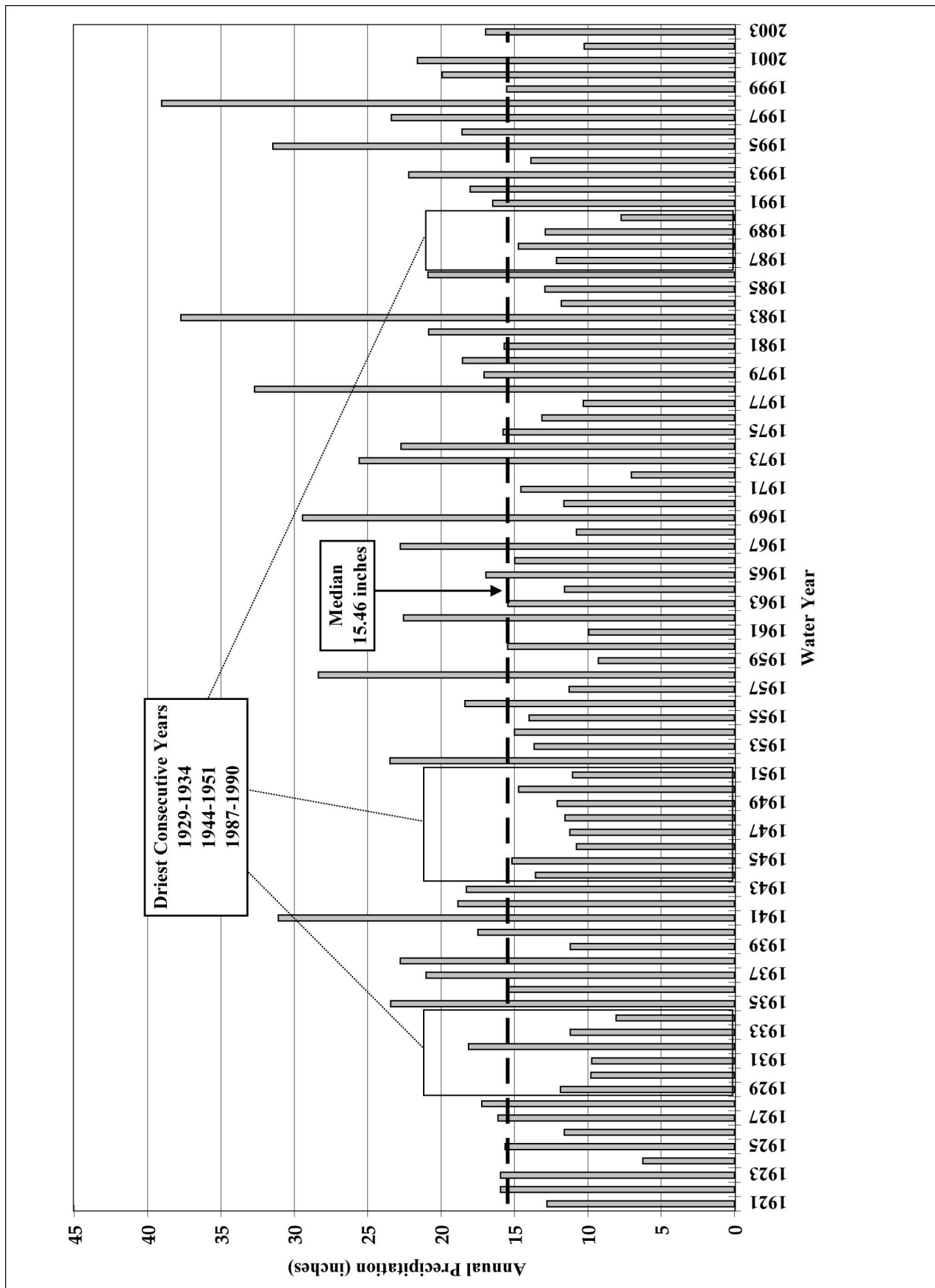


Figure 5. Historical Rainfall on the Nipomo Mesa

The trends in total water supply to the Nipomo Mesa is shown in Figure 6, based on the 1975-2000 Hydrologic Inventory (SAIC 2003, Exhibit C4). On this Accumulated Departure from the Mean figure, the driest consecutive periods have the sharpest downward slopes.

Table 10. Basis of Water Year Data

<i>Water Year Type</i>	<i>Base Year(s)</i>	<i>Historical Record Examined</i>
Normal Water Year	1975-2000	1975-2000
Single Dry Water Year	1990	1975-2000
Multiple Dry Water Years	1987-1990	1975-2000

The longest consecutive below average (mean) dry period is the 9 years from WY 1983 to 1992. However, the most critical water supply period within this drought is WY 1987-1990 when all four years are less than the median. Since both the rainfall (Figure 5) and hydrologic inventory (Figure 6) show the critical four years of 1987-1990, they are selected for the reliability estimates as representative of Multiple-Dry water years (see Table 10).

The Normal Year is represented by the long-term water supply trends, in this case the long-term safe-yield as estimated based on review of the hydrologic record for 1975-2000.

2.5.2 Selection of Normal and Dry Years, and Multiple Dry Years – Supplemental Water

The City of Santa Maria was contacted for information on the reliability of their supply in order to develop a reliability estimate of NCSD's future supplemental water supply. However, the City of Santa Maria was unable to provide reliability estimates at the time of this Draft UWMP because they are working on their own Draft UWMP. NCSD examined the City's various water sources (groundwater from the Santa Maria groundwater basin, SWP water) and reliability of each, as well as the City's estimated demands. Assuming even if the City of Santa Maria received only 20 percent of its SWP delivery (the lowest delivery as reported in the City's 2000 UWMP) and given its future demands through year 2025, it is estimated that the City of Santa Maria has enough groundwater and pumping capacity to meet both its demands and meet NCSD's supplemental water deliveries.

These estimates will be re-examined and revised if necessary when updated data becomes available from the City of Santa Maria.

2.5.3 Supply Reliability

The following section describes the reliability of the water supply given seasonal or other factors affecting supply. Table 11 identifies factors that could result in inconsistency of supply. Legal and environmental, and climatic factors have been discussed in detail in the preceding sections. Water quality is another factor that could affect supply reliability. A major impetus behind the creation of the NMMA is to prevent deterioration of the basin as a water quality source, particularly from sea water intrusion and low groundwater levels. It is assumed for the purposes of NCSD's water supply planning, that sea water intrusion will not be an issue for its water supply so long as the physical solution and other actions prescribed by the Stipulation Settlement are maintained.

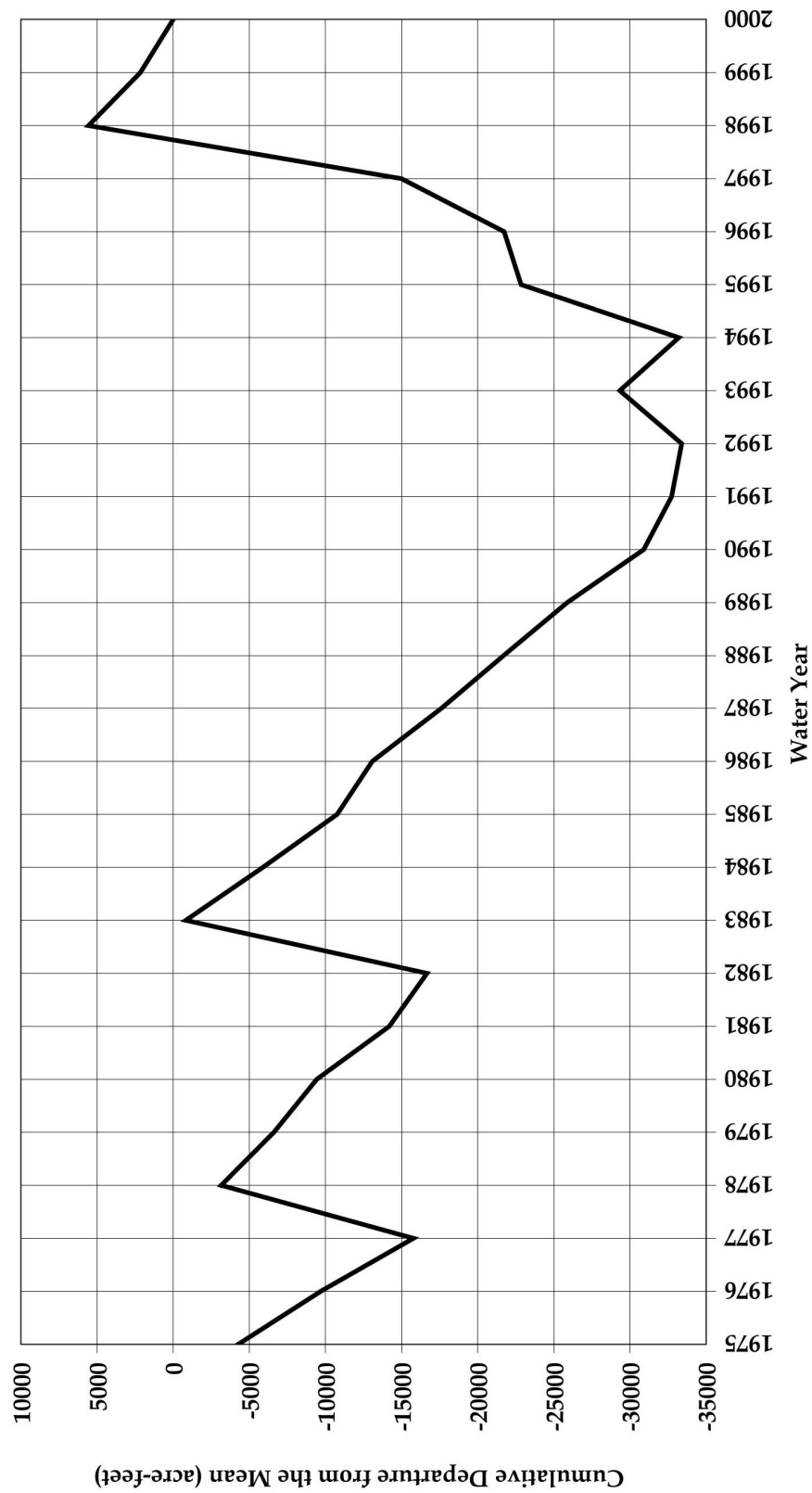


Figure 6. Nipomo Mesa Water Supply Trends - Accumulated Departure from the Mean

Table 11. Factors Resulting in Inconsistency in Supply

<i>Name of Supply</i>	<i>Legal</i>	<i>Environmental</i>	<i>Climatic</i>	<i>Water Quality</i>
NMMA Groundwater	Santa Maria Groundwater Litigation could set annual pumping limits on the Nipomo Mesa.		Series of low rainfall years	Risk of low groundwater levels and sea water intrusion if terms and conditions of Settlement Stipulation not maintained.
Nipomo Valley Groundwater	None identified	None identified	Series of low rainfall years.	Sulfides and high TDS at some well locations.
Supplemental water from City of Santa Maria	MOU Conditions	EIR under preparation	Series of low rainfall years on SWP	None identified.

Regular sampling of NCSD's groundwater has found elevated sulfate and total dissolved solids (TDS) at some wells, primarily in Nipomo Valley Groundwater. However, NCSD does not believe these water quality concerns will affect reliability of the water supply. In 2004, the water NCSD provided to customers was in compliance with all US Environmental Protection Agency and California Department of Health Services regulations for drinking water, though water was found to be corrosive to plumbing fixtures. In May and June 2001, NCSD completed an assessment of the vulnerability of its drinking water sources from various contaminants. Based on this assessment, ongoing groundwater sampling and testing, and NCSD's commitment to the Settlement Stipulation, NCSD does not expect water quality to affect groundwater supply reliability.

Based on review of City of Santa Maria water quality reports and the Draft UWMP prepared by the Central Coast Water Authority, NCSD does not believe water quality will negatively impact its ability to receive supplemental water over the next twenty years.

Table 12 presents a total snapshot of NCSD supply reliability. Table 12 identifies reliability of supply in a Normal, Single Dry, and Multiple-Dry year period and accounts for legal limitations on pumping resulting from the Santa Maria Groundwater Litigation as well as the terms and conditions for receipt of supplemental water from the City of Santa Maria.

2.6 PLANNED WATER SUPPLIES NOT IMPLEMENTED

In addition to the water supply sources described in sections 2.1 through 2.5 of this UWMP, NCSD has prepared preliminary analysis on the reliability, barriers to implementation, costs, and advantages of a variety of other potential water sources (Final Evaluation of Water Supply Alternatives, Nipomo Community Services District, October 2001). Particular options to consider for future implementation include the following:

- Desalination of cooling and process water; and
- Recycled water delivery to, and groundwater exchange with, oil refining interests and agricultural users.

Table 12. NCSD Supply Reliability (afy)

YEAR TYPE	NORMAL WATER YEAR	SINGLE DRY YEAR	MULTIPLE DRY YEARS			
			Year 1	Year 2	Year 3	Year 4
Representative Water Year(s)	1975-2000	1990	1987	1988	1989	1990
Nipomo Mesa Total Supply ¹	5,500	1,600	2,280	2,900	2,560	1,600
% of Normal Year Total Nipomo Mesa Supply	100%	29%	41%	53%	47%	29%
NCSD NMMA Groundwater Supply ²	2,900	2,900	2,900	1,530	1,350	840
NCSD Nipomo Valley Groundwater ²	300	300	300	158	140	87
<i>Total NCSD Groundwater Supply</i>	<i>3,200</i>	<i>3,200</i>	<i>3,200</i>	<i>1,688</i>	<i>1,490</i>	<i>927</i>
NCSD Supplemental Water ³	2,000	2,000	2,000	2,000	2,000	2,000
Total NCSD Supply	5,200	5,200	5,200	3,688	3,490	2,927
<p><i>Notes:</i></p> <p>1. Hydrologic Inventory 1975-2000 (SAIC 2003, Exhibit C4), Mean = 5,500 afy.</p> <p>2. For planning purposes it is assumed that pumping is normal in the first year of a drought. In the second or subsequent year of shortage, it is assumed that NCSD's normal groundwater supply would be reduced to be reflective of severity of water shortage. For example, in the second or later year where Total Mesa Supply is only 53% of normal, it is assumed NCSD's groundwater supply would be 53% of normal.</p> <p>3. Assumes supplemental water supply not curtailed in single dry or multiple-dry year.</p>						

2.6.1 Development of Desalinated Water

NCSD has identified two distinct water supply options involving desalinated water. The first involves desalinating cooling and other wastewaters currently discharged by oil refinery operations. The second involves treating water produced as a by-product of oil extraction operations and exchanging that water with oil refining or agricultural users.

The ConocoPhillips refinery currently discharges its cooling and other wastewaters to the Pacific Ocean. The potential exists to desalinate this cooling water so that it could be reused by refinery operations and thereby decrease the refinery's demands for groundwater. It is assumed that approximately 360 afy of groundwater could be conserved by using desalinated water. An additional 700 - 800 afy of water may be made available by treating oil field produced water. Based on preliminary analysis, treatment of cooling water and produced water would provide a reliable source of non-potable water, as long as the ConocoPhillips refinery continues to operate and require the non-potable water. This water supply option would require institutional arrangements between NCSD

and ConocoPhillips refinery as well as environmental review and permitting before it could be implemented. NCSD is not actively pursuing this water supply option at this time.

2.6.2 Additional Recycled Water

NCSD already has extensive use of recycled water from its own sanitation plants for groundwater recharge (see section 5). Another potential source of recycled water is the South San Luis Obispo County Sanitation District Water Reclamation Facility in Oceano, which is northwest of the NMMA. It is estimated that 1,200 afy could be available from this source. This water supply option would require treating wastewater from the secondary level to tertiary standards and blending it with water low in total dissolved solids. While recycled water is considered very reliable, this particular option would be dependent on the availability of blending water. This water supply option would require institutional arrangements between NCSD, the South San Luis Obispo County Sanitation District, and the end water user, require study on potential affects to the adjacent groundwater Management Areas, as well as environmental review and permitting before it could be implemented. NCSD is not actively pursuing this water supply option at this time.

2.7 RESOURCES MAXIMIZATION

The mix of supplies developed by NCSD represent the District's efforts to maximize and protect its local water supply sources (groundwater) and minimize need to import water. As demonstrated in earlier sections, NCSD anticipates being a partner in the NMMA Technical Group, a group which will develop tools to monitor the groundwater basin and coordinate efforts to avoid groundwater deterioration (e.g., increase groundwater recharge, increase supply, reduce groundwater use). Additionally, NCSD is actively working with the City of Santa Maria to bring in supplemental water necessary to protect the resources of the NMMA.

3.0 WATER DEMANDS

3.1 WATER USE BY CUSTOMER TYPE

The Urban Water Management Planning Act requires that, to the extent records are available, a purveyor provide information on past and current water uses for different sectors, including but not limited to residential, commercial, industrial, institutional, and landscape - and project future use by these same sectors for the period 2005 to 2025. Also in this section any additional water uses or losses are to be identified, such as water used for saline barriers, and unaccounted for system losses.

Table 13 provides past (2000) and current (2005) water use by customer type. In Table 13, year 2005 is estimated based on year 2004 data. In Table 13, due to the nature in which NCSD bills customers, data was collected for Single-Family Residential, Multi-Family Residential, and Commercial, with Commercial being representative of all non-residential uses.

Table 13. Past and Current Water Deliveries by Customer Type

WATER USE SECTOR	2000		2005 ^a	
	<i># of Accounts</i>	<i>Deliveries (afy)</i>	<i># of Accounts</i>	<i>Deliveries (afy)</i>
Single Family Residential	2,994	1,729	3,354	2,120
Multi-Family Residential	239	99	235	111
Commercial	71	64	83	94
Total	3,254	1,892	3,672	2,324
<i>Notes:</i>				
a. Year 2005 is estimated based on 2004 data.				

3.1.1 Methodology for Estimating Future Demand

Future water demands were estimated using various assumptions about land uses and growth rates in the Nipomo Area. Three land use “scenarios” were considered:

- “Existing Land Use Designations.” Under this scenario, water demands were calculated assuming Nipomo Mesa urban development is consistent with the existing land use designations of the effective Land Use and Circulation Element of San Luis Obispo County General Plan, South County-Inland.
- “Existing Land Use Designations with Pending Land Use Amendments.” Under this scenario, water demands were calculated assuming Nipomo Mesa urban development is consistent with the existing land use designations of the effective Land Use and Circulation Element of San Luis Obispo County General Plan, South County-Inland, but as amended by proposed Land Use Amendments. Proposed Land Use Amendments for inclusion in the analysis were identified in coordination with San Luis Obispo County Planning and Building Department staff. Table 14 details the proposed Land Use Amendments considered in this scenario.

- “High Density Land Use Assumption.” Under this scenario, water demands were calculated assuming Nipomo Mesa urban development is the same as the “Existing Land Use Designations with Pending Land Use Amendments” except that any agriculture acreage or rural land acreage remaining after accounting for Land Use Amendments is assumed to convert to a higher density use. For example in SOI areas 1, 2, and 3 it is assumed that agricultural and rural lands would convert to Single-Family Residential; in SOI areas 4 and 8 it is assumed these remaining use would convert to Residential Suburban.

For each land use a water duty factor was applied. Table 15 illustrates the water duty factors for the various land use categories.

Spreadsheets detailing the specific assumptions of each scenario, and the resultant water demand estimates are provided in Appendix E.

Table 14. Proposed Land Use Amendments Included in Water Demand Calculations in the “Existing Land Use Designations with Pending Land Use Amendments” Scenario

<i>Affected Area</i>	<i>Proposed Land Use Amendment</i>
Blacklake Division	No Land Use Amendments identified for this area.
Town Division	No Land Use Amendments identified for this area. Existing Land Use is inclusive of the Robertson (G990001T) and Summit Station (G980008N) Land Use Amendments.
Sphere of Influence Area 1	(a) Nipomo Oaks/Mehlschau Property (G990013M), which would remove 164 acres from an Agriculture land use designation and make this former Agriculturally designated land Rural Residential (110 acres), Residential Suburban (14 acres), and Commercial Retail (28 acres) and (b) Crystal Oaks Ranch, a proposed 288-acre mixed use development residing within the Canada Ranch Specific Plan area, to be developed consistent with Canada Ranch objectives identified in the San Luis Obispo County General Plan.
Sphere of Influence Area 2	No Land Use Amendments identified for this area.
Sphere of Influence Area 3	Nipomo Hills Proposed Annexation. This is a proposed annexation into the NCSD sphere of influence. The overall project is 91 acres, 43 acres of which already reside within SOI 3. The annexation would add 48 acres, 10 acres of Open Space (park) and 38 acres of Single Family Residential.
Sphere of Influence Area 4	Brand Project (G990027M), which would remove 72 acres from the Southland Specific Plan and make this area Residential Suburban (32 acres), Commercial Service (32 acres), and Open Space (park) (8 acres).
Sphere of Influence Area 7	Anderson (G02008M), which made this former Agriculture designation land Residential Rural (38 acres).
Sphere of Influence Area 8	No Land Use Amendments identified for this area.

Table 15. Assumptions Used to Calculate Water Demand for a Given Land Use Designation

RESIDENTIAL USES										
Type of Use	Population		Est. Use per Capita		Est. Use per Lot or Unit per day		Estimated Units/Acre		Est. Use per Acre per Year	
Residential Single Family	3.40	per unit ¹	120	gpcd ¹	0.0013	af/unit-day	3.5	See note 5	1.60	af/year
Residential Suburban	3.15	per unit ¹	175	gpcd ¹	0.0017	af/unit-day	1	See note 6	0.62	af/year
Rural Lands	5.45	per unit ²	175	gpcd ⁴	0.0029	af/unit-day	0.1	See note 6	0.11	af/year
Residential Multi-Family	2.9	per unit ¹	45	gpcd ¹	0.0004	af/unit-day	15	See note 7	2.19	af/year
Residential Rural	5.45	per unit ²	175	gpcd ⁴	0.0029	af/unit-day	0.2	See note 6	0.21	af/year
Recreation	3.15	per unit ¹	175	gpcd ¹	0.0017	af/unit-day	1	See note 6	0.62	af/year
Cañada Ranch Spec. Plan	3	per unit ³	175	gpcd ³	0.0016	af/unit-day	2	See note 3	1.18	af/year
Southland Specific Plan	3	per unit ³	175	gpcd ³	0.0016	af/unit-day	1	See note 3	0.59	af/year
NON-RESIDENTIAL USES										
Type of Use	Est. Use per Acre per Day			Est. Use per Acre per Year						
Agriculture	0.00		gal/acre-day ⁸	0.00	af/year					
Commercial Retail	1264		gal/acre-day ¹	1.42	af/year					
Commercial Service	310		gal/acre-day ¹	0.35	af/year					
Industrial	598		gal/acre-day ⁹	0.67	af/year					
Office and Professional	230		gal/acre-day ¹	0.26	af/year					
Open Space	1049		gal/acre-day ¹⁰	1.17	af/year					
Notes:										
1. Estimated occupancy and use rate for similar land use as reported in Boyle Engineering Corporation. March 2002. <i>Water and Sewer System Master Plan 2001 Update</i> . Table 1, Page 10.										
2. Estimated occupancy rate based on assumption that a lot would contain both a primary unit of 3.15 persons and a secondary unit of 2.3 persons as reported in County of San Luis Obispo. September 2004. Final Environmental Impact Report Summit Station Land Use Ordinance Amendment. State Clearinghouse Number 2003021008. Page 2-118.										
3. San Luis Obispo Local Agency Formation Commission. Nipomo Community Services District. Sphere of Influence Update, Municipal Services Review. Adopted May 20, 2004.Pages 2-9, 2-10 and 3-39.										
4. Estimated use rate assumed to be similar to that reported for Summit Station Area as reported in County of San Luis Obispo. September 2004. Final Environmental Impact Report Summit Station Land Use Ordinance Amendment. State Clearinghouse Number 2003021008. Page 2-118.										
5. Per the County of San Luis Obispo. Department of Planning and Building. The Land Use and Circulation Elements of the San Luis Obispo County General Plan - Framework for Planning (Inland). Revised January 2003. This land use category will allow up to 7 dwelling units per acre, but for the purposes of this analysis 3.5 units per acre have been assumed.										
6. Per the County of San Luis Obispo. Department of Planning and Building. The Land Use and Circulation Elements of the San Luis Obispo County General Plan - Framework for Planning (Inland). Revised January 2003.										
7. Per the County of San Luis Obispo. Department of Planning and Building. The Land Use and Circulation Elements of the San Luis Obispo County General Plan - Framework for Planning (Inland). Revised January 2003. This land use category allows up to 38 dwellings per acre, but to be more consistent with allowed density in the developed portions of Nipomo Village, for the purposes of this study, 15 units per acre have been assumed.										
8. It is assumed that NCSD does not supply agricultural irrigation.										
9. Estimated water duty factor for "Industrial" from City of Pasadena Water System Master Plan, 2002.										
10. Based on Sept. 18, 2003 SAIC memorandum describing analysis of average use for predominantly grass area on the Nipomo Mesa.										

In combination with these various land use projections are the three potential growth rates described in section 1.2.2: (a) population is consistent with the 2.3 percent annual limitation on residential dwelling units set by the Nipomo community-specific Growth Management Ordinance; (b) population mirrors historic (1990-2003) average annual increase in dwelling units, approximately 3.7 percent on the Nipomo Mesa; or (c) population growth similar to annual population growth in the Nipomo area from 1990 to 2000, 7.8 percent.

The three land use scenarios coupled with the three potential growth rates results in nine projections of future water use by customer sector for the period 2005 to 2030:

- Future Water Demands by Sector, Assuming Existing Land Use Designations and a 2.3% Growth Rate (see Table 16);
- Future Water Demands by Sector, Assuming Existing Land Use Designations and a 3.7% Growth Rate (see Table 17);
- Future Water Demands by Sector, Assuming Existing Land Use Designations and a 7.8% Growth Rate (see Table 18);
- Future Water Demands by Sector, Assuming Existing Land Use Designations with Pending Land Use Amendments and a 2.3% Growth Rate (see Table 19);
- Future Water Demands by Sector, Assuming Existing Land Use Designations with Pending Land Use Amendments and a 3.7% Growth Rate (see Table 20);
- Future Water Demands by Sector, Assuming Existing Land Use Designations with Pending Land Use Amendments and a 7.8% Growth Rate (see Table 21);
- Future Water Demands by Sector, Assuming High Density Land Uses and a 2.3% Growth Rate (see Table 22);
- Future Water Demands by Sector, Assuming High Density Land Uses and a 3.7% Growth Rate (see Table 23); and
- Future Water Demands by Sector, Assuming High Density Land Uses and a 7.8% Growth Rate (see Table 24);

Table 25 provides a summary of the overall estimated future demands in the NCSD service area and sphere of influence area for each combination of land use scenario and growth rate. What these tables show is a wide range of demands, varying from 3,950 afy in year 2025 (assuming development consistent with existing land use designations and a 2.3 percent growth rate) up to 5,750 afy (assuming high density land uses and a 7.8 percent growth rate).

Table 16. Future NCSD Water Demands by Sector, Assuming Existing Land Use Designations and a 2.3% Growth Rate

WATER USE SECTOR	2010		2015		2020		2025		2030	
	# of accounts	Demand (afy)	# of accounts	Demand (afy)	# of accounts	Demand (afy)	# of accounts	Demand (afy)	# of accounts	Demand (afy)
Single-Family Residential										
Existing Service Area	4,410	2,660	4,800	2,880	4,800	2,880	4,800	2,880	4,800	2,880
Sphere of Influence	130	140	410	320	480	360	530	400	570	440
Multi-Family Residential										
Existing Service Area	2,180	320	2,400	350	2,400	350	2,400	350	2,400	350
Sphere of Influence	0	0	0	0	0	0	0	0	0	0
Commercial										
Existing Service Area		240		270		270		270		270
Sphere of Influence		0		10		10		20		20
Industrial										
Existing Service Area		0		0		0		0		0
Sphere of Influence		0		0		0		0		0
Institutional										
Existing Service Area		20		20		20		20		20
Sphere of Influence		0		0		0		0		0
Landscape										
Existing Service Area		10		10		10		10		10
Sphere of Influence		0		0		0		0		0
Agricultural										
Existing Service Area		0		0		0		0		0
Sphere of Influence		0		0		0		0		0
Total Estimated Demands Assuming Existing Land Use and 2.3% growth rate		3,390		3,860		3,900		3,950		3,990

Table 17. Future NCSD Water Demands by Sector, Assuming Existing Land Use Designations and a 3.7% Growth Rate

WATER USE SECTOR	2010		2015		2020		2025		2030	
	# of accounts	Demand (afy)	# of accounts	Demand (afy)	# of accounts	Demand (afy)	# of accounts	Demand (afy)	# of accounts	Demand (afy)
Single-Family Residential										
Existing Service Area	4,690	2,820	4,800	2,880	4,800	2,880	4,800	2,880	4,800	2,880
Sphere of Influence	130	140	410	320	500	400	610	470	720	560
Multi-Family Residential										
Existing Service Area	2,340	340	2,400	350	2,400	350	2,400	350	2,400	350
Sphere of Influence	0	0	0	0	0	0	0	0	0	0
Commercial										
Existing Service Area		260		270		270		270		270
Sphere of Influence		0		10		10		20		20
Industrial										
Existing Service Area		0		0		0		0		0
Sphere of Influence		0		0		0		0		0
Institutional										
Existing Service Area		20		20		20		20		20
Sphere of Influence		0		0		0		0		0
Landscape										
Existing Service Area		10		10		10		10		10
Sphere of Influence		0		0		0		0		0
Agricultural										
Existing Service Area		0		0		0		0		0
Sphere of Influence		0		0		0		0		0
Total Estimated Demands Assuming Existing Land Use and 3.7% growth rate		3,590		3,860		4,940		4,020		4,110

Table 18. Future NCSD Water Demands by Sector, Assuming Existing Land Use Designations and a 7.8% Growth Rate

WATER USE SECTOR	2010		2015		2020		2025		2030	
	# of accounts	Demand (afy)	# of accounts	Demand (afy)	# of accounts	Demand (afy)	# of accounts	Demand (afy)	# of accounts	Demand (afy)
Single-Family Residential										
Existing Service Area	4,800	2,880	4,800	2,880	4,800	2,880	4,800	2,880	4,800	2,880
Sphere of Influence	130	140	460	370	670	530	970	770	1,250	950
Multi-Family Residential										
Existing Service Area	2,400	350	2,400	350	2,400	350	2,400	350	2,400	350
Sphere of Influence	0	0	0	0	0	0	0	0	0	0
Commercial										
Existing Service Area		270		270		270		270		270
Sphere of Influence		0		10		20		30		40
Industrial										
Existing Service Area		0		0		0		0		0
Sphere of Influence		0		0		0		0		0
Institutional										
Existing Service Area		20		20		20		20		20
Sphere of Influence		0		0		0		0		0
Landscape										
Existing Service Area		10		10		10		10		10
Sphere of Influence		0		0		0		0		0
Agricultural										
Existing Service Area		0		0		0		0		0
Sphere of Influence		0		0		0		0		0
Total Estimated Demands Assuming Existing Land Use and 7.8% growth rate		3,670		3,910		4,080		4,330		4,520

Table 19. Future NCSD Water Demands by Sector, Assuming Existing Land Use Designations with Pending Land Use Amendments and a 2.3% Growth Rate

WATER USE SECTOR	2010		2015		2020		2025		2030	
	# of accounts	Demand (afy)	# of accounts	Demand (afy)	# of accounts	Demand (afy)	# of accounts	Demand (afy)	# of accounts	Demand (afy)
Single-Family Residential										
Existing Service Area	4,410	2,660	4,800	2,880	4,800	2,880	4,800	2,880	4,800	2,880
Sphere of Influence	300	230	610	420	690	480	780	540	860	600
Multi-Family Residential										
Existing Service Area	2,180	320	2,400	350	2,400	350	2,400	350	2,400	350
Sphere of Influence	0	0	0	0	0	0	0	0	0	0
Commercial										
Existing Service Area		240		270		270		270		270
Sphere of Influence		20		30		40		40		50
Industrial										
Existing Service Area		0		0		0		0		0
Sphere of Influence		0		0		0		0		0
Institutional										
Existing Service Area		20		20		20		20		20
Sphere of Influence		0		0		0		0		0
Landscape										
Existing Service Area		10		10		10		10		10
Sphere of Influence		0		10		10		10		10
Agricultural										
Existing Service Area		0		0		0		0		0
Sphere of Influence		0		0		0		0		0
Total Estimated Demands Assuming Existing Land Use with Amendments and 2.3% growth rate		3,500		3,990		4,060		4,130		4,190

Table 20. Future NCSD Water Demands by Sector, Assuming Existing Land Use Designations with Pending Land Use Amendments and a 3.7% Growth Rate

WATER USE SECTOR	2010		2015		2020		2025		2030	
	# of accounts	Demand (afy)	# of accounts	Demand (afy)	# of accounts	Demand (afy)	# of accounts	Demand (afy)	# of accounts	Demand (afy)
Single-Family Residential										
Existing Service Area	4,690	2,820	4,800	2,880	4,800	2,880	4,800	2,880	4,800	2,880
Sphere of Influence	300	230	630	430	770	540	930	640	1,110	770
Multi-Family Residential										
Existing Service Area	2,340	340	2,400	350	2,400	350	2,400	350	2,400	350
Sphere of Influence	0	0	0	0	0	0	0	0	0	0
Commercial										
Existing Service Area		260		270		270		270		270
Sphere of Influence		20		40		40		50		60
Industrial										
Existing Service Area		0		0		0		0		0
Sphere of Influence		0		0		0		0		0
Institutional										
Existing Service Area		20		20		20		20		20
Sphere of Influence		0		0		0		10		10
Landscape										
Existing Service Area		10		10		10		10		10
Sphere of Influence		0		10		10		10		10
Agricultural										
Existing Service Area		0		0		0		0		0
Sphere of Influence		0		0		0		0		0
Total Estimated Demands Assuming Existing Land Use with Amendments and 3.7% growth rate		3,700		4,010		4,120		4,240		4,380

Table 21. Future NCSD Water Demands by Sector, Assuming Existing Land Use Designations with Pending Land Use Amendments and a 7.8% Growth Rate

WATER USE SECTOR	2010		2015		2020		2025		2030	
	# of accounts	Demand (afy)	# of accounts	Demand (afy)	# of accounts	Demand (afy)	# of accounts	Demand (afy)	# of accounts	Demand (afy)
Single-Family Residential										
Existing Service Area	4,800	2,880	4,800	2,880	4,800	2,880	4,800	2,880	4,800	2,880
Sphere of Influence	300	230	720	510	1060	740	1,530	1,080	1,870	1,290
Multi-Family Residential										
Existing Service Area	2,400	350	2,400	350	2,400	350	2,400	350	2,400	350
Sphere of Influence	0	0	0	0	0	0	0	0	0	0
Commercial										
Existing Service Area		270		270		270		270		270
Sphere of Influence		20		40		60		90		110
Industrial										
Existing Service Area		0		0		0		0		0
Sphere of Influence		0		0		0		0		0
Institutional										
Existing Service Area		20		20		20		20		20
Sphere of Influence		0		0		10		10		10
Landscape										
Existing Service Area		10		10		10		10		10
Sphere of Influence		0		10		10		10		20
Agricultural										
Existing Service Area		0		0		0		0		0
Sphere of Influence		0		0		0		0		0
Total Estimated Demands Assuming Existing Land Use with Amendments and 7.8% growth rate		3,780		4,090		4,350		4,780		4,960

Table 22. Future NCSD Water Demands by Sector, Assuming High Density Land Uses and a 2.3% Growth Rate

WATER USE SECTOR	2010		2015		2020		2025		2030	
	# of accounts	Demand (afy)	# of accounts	Demand (afy)	# of accounts	Demand (afy)	# of accounts	Demand (afy)	# of accounts	Demand (afy)
Single-Family Residential										
Existing Service Area	4,560	2,710	5,050	2,980	5,410	3,180	5,410	3,180	5,410	3,180
Sphere of Influence	520	330	1,210	730	1,390	840	1,540	920	1,720	1,040
Multi-Family Residential										
Existing Service Area	1,980	290	2,220	320	2,400	350	2,400	350	2,400	350
Sphere of Influence	0	0	0	0	0	0	0	0	0	0
Commercial										
Existing Service Area		220		250		270		270		270
Sphere of Influence		20		30		40		40		50
Industrial										
Existing Service Area		0		0		0		0		0
Sphere of Influence		0		0		0		0		0
Institutional										
Existing Service Area		20		20		20		20		20
Sphere of Influence		0		0		0		0		0
Landscape										
Existing Service Area		10		10		10		10		10
Sphere of Influence		0		10		10		10		10
Agricultural										
Existing Service Area		0		0		0		0		0
Sphere of Influence		0		0		0		0		0
Total Estimated Demands Assuming High Density Land Uses and 2.3% growth rate		3,600		4,350		4,720		4,800		4,930

Table 23. Future NCSD Water Demands by Sector, Assuming High Density Land Uses and a 3.7% Growth Rate

WATER USE SECTOR	2010		2015		2020		2025		2030	
	# of accounts	Demand (afy)	# of accounts	Demand (afy)	# of accounts	Demand (afy)	# of accounts	Demand (afy)	# of accounts	Demand (afy)
Single-Family Residential										
Existing Service Area	4,860	2,870	5,410	3,180	5,410	3,180	5,410	3,180	5,410	3,180
Sphere of Influence	250	330	580	750	700	910	850	1,100	1,010	1,310
Multi-Family Residential										
Existing Service Area	2,120	310	2,220	350	2,400	350	2,400	350	2,400	350
Sphere of Influence	0	0	0	0	0	0	0	0	0	0
Commercial										
Existing Service Area		240		270		270		270		270
Sphere of Influence		20		40		40		50		60
Industrial										
Existing Service Area		0		0		0		0		0
Sphere of Influence		0		0		0		0		0
Institutional										
Existing Service Area		20		20		20		20		20
Sphere of Influence		0		0		0		10		10
Landscape										
Existing Service Area		10		10		10		10		10
Sphere of Influence		0		10		10		10		10
Agricultural										
Existing Service Area		0		0		0		0		0
Sphere of Influence		0		0		0		0		0
Total Estimated Demands Assuming High Density Land Uses and 3.7% growth rate		3,800		4,630		4,790		5,000		5,220

Table 24. Future NCSD Water Demands by Sector, Assuming High Density Land Uses and a 7.8% Growth Rate

WATER USE SECTOR	2010		2015		2020		2025		2030	
	# of accounts	Demand (afy)	# of accounts	Demand (afy)	# of accounts	Demand (afy)	# of accounts	Demand (afy)	# of accounts	Demand (afy)
Single-Family Residential										
Existing Service Area	5,410	3,180	5,410	3,180	5,410	3,180	5,410	3,180	5,410	3,180
Sphere of Influence	520	330	1,410	860	2,050	1,240	2,990	1,810	3,710	2,230
Multi-Family Residential										
Existing Service Area	2,400	350	2,220	350	2,400	350	2,400	350	2,400	350
Sphere of Influence	0	0	0	0	0	0	0	0	0	0
Commercial										
Existing Service Area		270		270		270		270		270
Sphere of Influence		20		40		60		90		110
Industrial										
Existing Service Area		0		0		0		0		0
Sphere of Influence		0		0		0		0		0
Institutional										
Existing Service Area		20		20		20		20		20
Sphere of Influence		0		0		10		10		10
Landscape										
Existing Service Area		10		10		10		10		10
Sphere of Influence		0		10		10		10		20
Agricultural										
Existing Service Area		0		0		0		0		0
Sphere of Influence		0		0		0		0		0
Total Estimated Demands Assuming High Density Land Uses and 7.8% growth rate		4,180		4,740		5,150		5,750		6,200

Table 25. Summary of NCSD Water Demands by Land Use Scenario and Growth Rate for the Period 2010 to 2030 (afy)

	2010	2015	2020	2025	2030
Land Use Scenario and Growth Rate					
Existing Land Use Designations and 2.3% Growth Rate	3,390	3,860	3,900	3,950	3,990
Existing Land Use Designations and 3.7% Growth Rate	3,590	3,860	3,940	4,020	4,110
Existing Land Use Designations and 7.8% Growth Rate	3,670	3,910	4,080	4,330	4,520
Existing Land Use Designations with Land Use Amendments and 2.3% Growth Rate	3,500	3,990	4,060	4,130	4,190
Existing Land Use Designations with Land Use Amendments and 3.7% Growth Rate	3,700	4,010	4,120	4,240	4,380
Existing Land Use Designations with Land Use Amendments and 7.8% Growth Rate	3,780	4,090	4,350	4,720	4,960
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

3.1.2 Additional Water Uses

In addition to deliveries to customers, NCSD anticipates two other water uses, groundwater recharge and unaccounted for system losses, as shown in Table 26 by scenario.

As described in section 2.3.1, NCSD expects having to recharge approximately 600 afy of its supplemental water supply in order to maintain its share of the NMMA safe yield.

NCSD's system loss varies from year to year. In 2004 system loss was only about three percent of total production, in year 2000 system loss was almost 14 percent of total production. For planning purposes it is assumed that future system loss will be eight percent of total production.

3.1.3 Total Water Use

Total Water Use, accounting for customer demands, system loss, and future groundwater recharge is presented, by scenario, in Table 27.

Table 26. Additional NCSD Water Uses for the Period 2000 to 2030 (afy)

Land Use Scenario and Growth Rate		2000	2005 ^a	2010	2015	2020	2025	2030
Existing Land Use Designations and 2.3% Growth Rate	In-Lieu Groundwater Recharge	0	0	600	600	600	600	600
	Unaccounted for system loss	358	98	320	360	360	360	370
	<i>Total for Scenario</i>	358	98	920	960	960	960	970
Existing Land Use Designations and 3.7% Growth Rate	In-Lieu Groundwater Recharge	0	0	600	600	600	600	600
	Unaccounted for system loss	358	98	340	360	360	370	380
	<i>Total for Scenario</i>	358	98	940	960	960	970	980
Existing Land Use Designations and 7.8% Growth Rate	In-Lieu Groundwater Recharge	0	0	600	600	600	600	600
	Unaccounted for system loss	358	98	340	360	370	390	410
	<i>Total for Scenario</i>	358	98	940	960	970	990	1,010
Existing Land Use Designations with Land Use Amendments and 2.3% Growth Rate	In-Lieu-Groundwater Recharge	0	0	600	600	600	600	600
	Unaccounted for system loss	358	98	330	370	370	380	380
	<i>Total for Scenario</i>	358	98	930	970	970	980	980
Existing Land Use Designations with Land Use Amendments and 3.7% Growth Rate	In-Lieu Groundwater Recharge	0	0	600	600	600	600	600
	Unaccounted for system loss	358	98	340	370	380	390	400
	<i>Total for Scenario</i>	358	98	940	970	980	990	1,000
Existing Land Use Designations with Land Use Amendments and 7.8% Growth Rate	In-Lieu Groundwater Recharge	0	0	600	600	600	600	600
	Unaccounted for system loss	358	98	350	380	400	430	440
	<i>Total for Scenario</i>	358	98	950	980	1,000	1,030	1,040
High Density Land Uses and 2.3% Growth Rate	In-Lieu Groundwater Recharge	0	0	600	600	600	600	600
	Unaccounted for system loss	358	98	340	400	430	430	440
	<i>Total for Scenario</i>	358	98	940	1,000	1,030	1,030	1,040
High Density Land Uses and 3.7% Growth Rate	In-Lieu Groundwater Recharge	0	0	600	600	600	600	600
	Unaccounted for system loss	358	98	350	420	430	450	470
	<i>Total for Scenario</i>	358	98	950	1,020	1,030	1,050	1,070
High Density Land Uses and 7.8% Growth Rate	In-Lieu Groundwater Recharge	0	0	600	600	600	600	600
	Unaccounted for system loss	358	98	380	430	460	510	540
	<i>Total for Scenario</i>	358	98	980	1,030	1,060	1,110	1,140
Notes:								
a. Year 2005 estimated based on year 2004 data.								

Table 27. Total NCSD Water Use (afy)

Land Use Scenario and Growth Rate		2000	2005 ^a	2010	2015	2020	2025	2030
Existing Land Use Designations and 2.3% Growth Rate	Customer Demand	2,524	2,908	3,390	3,860	3,900	3,950	3,990
	Additional Water Uses	358	98	920	960	960	960	970
	<i>Total for Scenario</i>	2,882	3,006	4,310	4,820	4,860	4,910	4,960
Existing Land Use Designations and 3.7% Growth Rate	Customer Demand	2,524	2,908	3,590	3,860	3,940	4,020	4,110
	Additional Water Uses	358	98	940	960	960	970	980
	<i>Total for Scenario</i>	2,882	3,006	4,530	4,820	4,900	4,990	5,090
Existing Land Use Designations and 7.8% Growth Rate	Customer Demand	2,524	2,908	3,670	3,910	4,080	4,330	4,520
	Additional Water Uses	358	98	940	960	970	990	1,010
	<i>Total for Scenario</i>	2,882	3,006	4,610	4,870	5,050	5,320	5,530
Existing Land Use Designations with Land Use Amendments and 2.3% Growth Rate	Customer Demand	2,524	2,908	3,500	3,990	4,060	4,130	4,190
	Additional Water Uses	358	98	930	970	970	980	980
	<i>Total for Scenario</i>	2,882	3,006	4,430	4,960	5,030	5,110	5,170
Existing Land Use Designations with Land Use Amendments and 3.7% Growth Rate	Customer Demand	2,524	2,908	3,700	4,010	4,120	4,240	4,380
	Additional Water Uses	358	98	940	970	980	990	1,000
	<i>Total for Scenario</i>	2,882	3,006	4,640	4,980	5,100	5,230	5,380
Existing Land Use Designations with Land Use Amendments and 7.8% Growth Rate	Customer Demand	2,524	2,908	3,780	4,090	4,350	4,720	4,960
	Additional Water Uses	358	98	950	980	1,000	1,030	1,040
	<i>Total for Scenario</i>	2,882	3,006	4,730	5,070	5,350	5,750	6,000
High Density Land Uses and 2.3% Growth Rate	Customer Demand	2,524	2,908	3,600	4,350	4,720	4,800	4,930
	Additional Water Uses	358	98	940	1,000	1,030	1,030	1,040
	<i>Total for Scenario</i>	2,882	3,006	4,540	5,350	5,750	5,830	5,970
High Density Land Uses and 3.7% Growth Rate	Customer Demand	2,524	2,908	3,800	4,630	4,790	5,000	5,220
	Additional Water Uses	358	98	950	1,020	1,030	1,050	1,070
	<i>Total for Scenario</i>	2,882	3,006	4,750	5,650	5,820	6,050	6,290
High Density Land Uses and 7.8% Growth Rate	Customer Demand	2,524	2,908	4,180	4,740	5,150	5,750	6,200
	Additional Water Uses	358	98	980	1,030	1,060	1,110	1,140
	<i>Total for Scenario</i>	2,882	3,006	5,160	5,770	6,210	6,860	7,340
Notes:								
a. Year 2005 estimated based on year 2004 data.								

3.2 DEMAND MANAGEMENT MEASURES

3.2.1 Overview of Demand Management Measures and Requirements of the Urban Water Management Planning Act

The Urban Water Management Planning Act requires that an UWMP contain a discussion of a water purveyor's water Demand Management Measures (DMMs), including a description of each DMM currently being implemented or scheduled for implementation, the schedule of implementation for all DMMs, and the methods, if any, the supplier will use to evaluate the effectiveness of DMMs. The Urban Water Management Planning Act identifies 14 specific DMMs:

1. Water conservation coordinator;
2. Water Survey Programs for single-family residential and multi-family residential customers;
3. Residential plumbing retrofit;
4. System water audits, leak detection, and repair;
5. Metering with commodity rates for all new connections and retrofit of existing connections;
6. Large landscape conservation programs and incentives;
7. High-efficiency washing machine rebate programs;
8. Public information programs;
9. School education programs;
10. Conservation programs for commercial, industrial, and institutional accounts;
11. Wholesale agency programs;
12. Conservation pricing;
13. Water waste prohibition; and
14. Residential ultra-low flush toilet replacement programs.

The UWMP must discuss each of these potential DMMs and any other measures the supplier is implementing or has scheduled for implementation through year 2010. If a particular DMM is not scheduled for implementation by the water supplier, the UWMP must include a cost-benefit evaluation that takes into consideration the economic, environmental, social, health, customer impact, and technological factors.

NCSD's stated goal is to reduce water use within its service area by 15 percent. NCSD intends to measure effectiveness of its DMMs as a whole by change in average per-connection water use.

3.2.2 Water Conservation Coordinator

In calendar year 2006 NCSD has budgeted for the hiring of a Conservation Coordinator. It is anticipated that a full-time staff person will be hired and approximately half of this person's time would be devoted to conservation efforts. Expenditures for conservation-related staff efforts are anticipated to be approximately \$15,000 per year for the period 2006 through 2010. At this time no methods have been developed to evaluate this specific measure's effectiveness, and there has been no analysis of the effect of this measure on the ability to further reduce demand.

3.2.3 Water Survey Programs for Single-Family Residential and Multi-Family Residential Customers

It has been on-going NCSD policy to provide leak detection information and assistance to its customers. While there is no formal strategy to encourage customers to undertake a water survey, NCSD will provide information and assistance upon request or when a discrepancy in a customer's water use indicates a potential leak. The Blacklake Division of NCSD's service area has automatic meter readers that detect leaks based on water use patterns. In the remainder of the NCSD system, the database that tracks water use alerts operators when current water use at a given meter varies from historic use – indicating a leak. When a leak is detected, NCSD contacts the customer. At the present time NCSD's water survey program focuses on providing the customer with the information needed to find leaks.

No formal statistics have been kept about the number of customers assisted, the number of single- or multi-family residential water use surveys performed, or the effect of such savings on the ability to further reduce demand. No estimates have been made as to the effectiveness of this specific DMM measure. In calendar year 2006 NCSD intends to develop formal water survey materials and keep statistics on the number of surveys performed.

3.2.4 Residential Plumbing Retrofit

As a condition for water service as part of annexations, NCSD required that for every home added to the system, developers retrofit eight pre-1992 homes with low-flow plumbing fixtures. NCSD solicited volunteers for the retrofit by contacting owners of all pre-1992 homes in its service area. As of 2004, 834 homes had been retrofitted through this program. However, due to lack of volunteers with homes to be retrofitted, this program has been retired.

NCSD intends to develop a formal marketing strategy for distributing low-flow devices. NCSD intends that this strategy be in place by year 2008. NCSD has determined that money from its water and sewer capacity funds can be used to support residential plumbing retrofit programs. At this time there are no formal estimates on the number of single- or multi-family homes to receive retrofit, the projected expenditures, the projected water savings for this specific DMM, or the effect of this measure on the ability to further reduce demand.

3.2.5 System Water Audits, Leak Detection, and Repair

NCSD produces annual reports for the Department of Health Services each year comparing total water in the NCSD system and metered water deliveries. These reports are one means by which NCSD monitors the differences between production and delivery to track unaccounted for water. NCSD staff visit and inspect all production and storage facilities weekly. All NCSD tanks, reservoirs,

and pumps have alarms that indicate over-topping or loss of pressure. These alarms alert NCSD staff of any potential problem so adjustments can be made to limit system losses.

NCSD has approximately 73 miles of distribution line. NCSD has never had to perform major repairs or pipeline replacement due to leaks, all pipeline upgrades or replacements have been the result of capacity increases or a desire to upgrade to better pipeline material. Due to its underground placement NCSD does not regularly survey or inspect pipeline. NCSD intends to complete a system audit in calendar year 2006.

Between years 2000 and 2004 unaccounted system loss varied from a high of approximately 14 percent of total production to as little as three percent (NCSD Annual Reports to the Department of Health Services). For planning purposes future system loss is estimated to be eight percent.

3.2.6 Metering with Commodity Rates for All New Connections and Retrofit of Existing Connections

The NCSD service area is 100 percent metered. Effective August 2005, all of NCSD's customers are billed an availability charge (a charge to have water service available) and a usage rate/commodity charge for each unit of water consumed. Single-Family Residential customers are charged a lower rate for the first 40 units (1 unit is 100 cubic feet or about 750 gallons) of water consumed bi-monthly, and a higher rate thereafter. From July to September 2004, versus July-September 2005 (the first period capturing the new water rates), four percent less water was used within the NCSD service area, while in the same period the number of connections increased.

Effective August 2005 NCSD adopted new sewer rates. Under the new sewer rate structure, non-residential sewer charges in the NCSD service area are based on the size of, and water use at, the interior water meter. The new sewer rate structure encourages existing commercial accounts to install separate interior and outdoor/irrigation meters to avoid high sewer bills. All new commercial accounts are required to have separate interior use and irrigation meters.

In calendar year 2006 NCSD intends to further develop estimates of water savings resulting from the new commodity rates as well as track the number of existing commercial accounts switching to separate indoor and irrigation meters. At this time no methods have been developed to evaluate this specific measure's effectiveness and the effect of this measure on the ability to further reduce demand.

3.2.7 Large Landscape Conservation Programs and Incentives

In year 2001 NCSD had approximately 54 connections classified as "Landscape Irrigation" and in year 2004 this had increased to 76. NCSD does not conduct formal landscape surveys, prepare irrigation schedules, or perform irrigation system checks. However, NCSD does require that all applications for will-serve letters for single-family dwelling units on existing parcels and for secondary dwelling units require an engineer's or architect's certification that low use landscape irrigation systems will be installed to irrigate landscaping (NCSD Code, Title 3, Chapter 3.05). At this time there are no estimates of the cost of this DMM, no methods have been developed to evaluate this specific measure's effectiveness, and there has been no analysis of the effect of this measure on the ability to further reduce demand.

3.2.8 High-Efficiency Washing Machine Rebate Programs and Residential Ultra-Low Flush Toilet Replacement Program

NCSD intends to examine the possible range of rebates and other incentives that could be used to encourage the installation of high-efficiency washing machines and/or ultra-low flush toilets. NCSD intends to complement the efforts of Pacific Gas and Electric and Southern California Gas companies, both of whom currently offer rebates of up to \$75 for installation of high efficiency washing machines. NCSD expects a rebate/incentive program to be in place by year 2008. NCSD has determined that money from its water and sewer capacity funds would be available to support certain types of residential plumbing retrofit programs. At this time there are no estimates of the cost of this DMM, no methods have been developed to evaluate this specific measure's effectiveness, and there has been no analysis of the effect of this measure on the ability to further reduce demand.

3.2.9 Public Information Programs

It has been on-going NCSD policy to provide water conservation information to its customers. Customer bills show water usage in comparison to usage for the same period the previous year. NCSD takes the opportunity to remind customers of the need for conservation in many of its public reports, including the Consumer Confidence Report. A list of native plants suitable for low-water use landscaping is available on the NCSD website. The cost to date of public information programs has been minimal. With the assistance of the Water Conservation Coordinator, in year 2006, NCSD intends to add more water conservation materials to its website and start running regular newspaper advertising with a conservation message. Expenditures are anticipated to be minor.

3.2.10 School Education Programs

NCSD intends to develop and distribute materials applicable for teaching water conservation to elementary school-age children. The intent is to have materials developed and available to teachers by year 2007, and in later years have in-classroom presentations and demonstrations. NCSD expects only minimal cost for this DMM above that of the labor for the Water Conservation Coordinator. At this time no methods have been developed to evaluate this specific measure's effectiveness, and there has been no analysis of the effect of this measure on the ability to further reduce demand.

3.2.11 Conservation Pricing

NCSD's water and sewer rate structure encourages conservation by charging increasing rates for larger meters and by charging a tiered commodity rate for water actually consumed.

Water

As described earlier, the NCSD service area is 100 percent metered. Effective August 2005, all of NCSD's water customers are billed an availability charge (a charge to have water service available) and a usage rate/commodity charge for each unit of water consumed. Customers are billed in two categories Residential and Non-Residential (Multi-Family, Commercial, Irrigation, Industrial, and Construction). Single-Family Residential customers are charged a lower rate for the first 40 units of water consumed bi-monthly, and a higher rate thereafter. Multi-Family, Commercial, Irrigation, Industrial, and Construction customers pay an availability charge and a flat usage charge for each unit of water consumed. Bi-Monthly Water Availability charges are shown in Table 28; Table 29

provides the water usage rates and charges. In Table 29 a unit of water is equivalent to 100 cubic feet or approximately 750 gallons.

Table 28. Bi-Monthly Water Availability Charges

<i>Size of Meter</i>	<i>August 1, 2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>
TOWN DIVISION					
1 inch or less	\$16.76	\$18.43	\$20.64	\$22.71	\$24.52
Litigation Charge	\$6.32	\$6.32	\$6.32	\$6.32	\$6.32
1½ Inch	\$47.56	\$52.32	\$58.60	\$64.46	\$69.61
Litigation Charge	\$14.36	\$14.36	\$14.36	\$14.36	\$14.36
2 Inch	\$75.33	\$82.86	\$92.81	\$102.09	\$110.25
Litigation Charge	\$19.92	\$19.92	\$19.92	\$19.92	\$14.36
3 Inch	\$140.17	\$154.18	\$172.68	\$189.95	\$205.15
Litigation Charge	\$27.92	\$27.92	\$27.92	\$27.92	\$27.92
4 Inch	\$232.77	\$256.05	\$286.77	\$315.45	\$340.68
Litigation Charge	\$36.00	\$36.00	\$36.00	\$36.00	\$36.00
6 Inch	\$464.07	\$510.48	\$571.73	\$628.91	\$679.22
Litigation Charge	\$59.58	\$59.58	\$59.58	\$59.58	\$59.58
8 Inch	\$741.74	\$815.92	\$913.83	\$1,005.21	\$1,085.63
Litigation Charge	\$68.08	\$68.08	\$68.08	\$68.08	\$68.08
BLACKLAKE DIVISION					
1 inch or less	\$15.09	\$18.10	\$22.08	\$26.06	\$30.75
Litigation Charge	\$6.32	\$6.32	\$6.32	\$6.32	\$6.32
1½ Inch	\$41.73	\$50.07	\$61.09	\$72.08	\$85.06
Litigation Charge	\$14.36	\$14.36	\$14.36	\$14.36	\$14.36
2 Inch	\$65.74	\$78.89	\$96.24	\$113.57	\$134.01
Litigation Charge	\$19.92	\$19.92	\$19.92	\$19.92	\$14.36
3 Inch	\$121.81	\$146.17	\$178.33	\$210.43	\$248.31
Litigation Charge	\$27.92	\$27.92	\$27.92	\$27.92	\$27.92
4 Inch	\$201.90	\$242.28	\$295.58	\$348.78	\$411.56
Litigation Charge	\$36.00	\$36.00	\$36.00	\$36.00	\$36.00
6 Inch	\$401.93	\$482.32	\$588.42	\$694.34	\$819.32
Litigation Charge	\$59.58	\$59.58	\$59.58	\$59.58	\$59.58
8 Inch	\$642.06	\$770.48	\$939.98	\$1,109.18	\$1,308.83
Litigation Charge	\$68.08	\$68.08	\$68.08	\$68.08	\$68.08
<i>Notes:</i>					
Rates are effective August 1, 2005, and future increases shall take effect on January 1 of each succeeding year.					

Table 29. Bi-Monthly Water Usage Rates and Charges

<i>Water Use</i>	<i>August 1, 2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>
TOWN DIVISION					
Residential Tier 1 (0-40 units)	\$1.12	\$1.23	\$1.38	\$1.52	\$1.64
Residential Tier 2 (> 40 Units)	\$1.91	\$2.10	\$2.35	\$2.59	\$2.80
Non-Residential (Multi-Family, Commercial, Irrigation, Industry, and Construction)	\$1.41	\$1.55	\$1.74	\$1.91	\$2.06
BLACKLAKE DIVISION					
Residential Tier 1 (0-40 units)	\$0.97	\$1.16	\$1.42	\$1.68	\$1.98
Residential Tier 2 (> 40 Units)	\$1.70	\$2.04	\$2.49	\$2.94	\$3.47
Non-Residential (Multi-Family, Commercial, Irrigation, Industry, and Construction)	\$1.18	\$1.42	\$1.73	\$2.04	\$2.41
<i>Notes:</i> Rates are effective August 1, 2005, and future increases shall take effect on January 1 of each succeeding year.					

Sewer

Effective August 2005, NCSD also adopted new sewer rates. Under the new sewer rate structure, non-residential sewer charges in the NCSD service area are based on the size of, and water use at, the interior water meter. Residential rates (defined as Single- and Multi-Family) are billed a flat-service fee. The bi-monthly sewer service and usage rates for the Town Division are shown in Table 30; sewer rate information for Blacklake Division is provided in Table 31.

NCSD intends to develop estimates of water savings resulting from the new commodity rates as well as track the number of existing commercial accounts switching to separate indoor and irrigation meters. At this time no methods have been developed to evaluate this specific measure's effectiveness and the effect of this measure on the ability to further reduce demand.

3.2.12 Water Waste Prohibition

Title 3, Chapter 3.24 of the NCSD Code states the following:

3.24.020 Prohibition of certain uses.

- A. No customer shall waste water. As used herein the term "waste water" means:
 1. Allow potable water to escape from breaks within the customer's plumbing system for more than four hours after the customer is notified or discovers the break.
 2. Use of potable water for sewer system maintenance or fire protection training without prior approval by the District. (Ord. 92-65 2, 1992 as amended)

NCSD has provided warnings, but has not levied fines based on the water waste prohibition. No formal statistics have been kept on the number of violations of the ordinance or warnings issued. Actual expenditures in enforcing the water waste prohibition have been minimal.

Table 30. Bi-Monthly Sewer Service and Usage Charges – Town Division

<i>Size of Meter</i>	<i>August 1, 2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>
RESIDENTIAL (PER DWELLING UNIT)					
Single Family	\$41.60	\$43.27	\$45.00	\$46.80	\$48.67
Multi-Family	\$32.17	\$33.46	\$34.80	\$36.19	\$37.63
NON-RESIDENTIAL BI-MONTHLY SERVICE CHARGE					
1 inch or less	\$16.08	\$16.72	\$17.39	\$18.09	\$18.81
1½ Inch	\$46.01	\$47.85	\$49.77	\$51.76	\$53.83
2 Inch	\$72.99	\$75.91	\$78.95	\$82.11	\$85.39
3 Inch	\$135.99	\$141.43	\$147.09	\$152.97	\$159.09
4 Inch	\$225.97	\$235.01	\$244.41	\$254.19	\$264.36
6 Inch	\$450.72	\$468.75	\$487.50	\$507.00	\$527.28
8 Inch	\$720.53	\$749.35	\$779.32	\$810.49	\$842.91
NON-RESIDENTIAL BI-MONTHLY USAGE RATE					
Low Strength	\$1.22	\$1.27	\$1.32	\$1.37	\$1.43
Medium Strength	\$1.35	\$1.40	\$1.46	\$1.52	\$1.58
High Strength	\$1.75	\$1.82	\$1.89	\$1.97	\$2.05
<i>Notes:</i> Sewer rates for non-residential customers include a service charge based on the size of the water meter and a usage charge based on sewer strength category and metered water usage. The District has established a category of users to determine strength of sewer discharge. Said categories of uses are for reference only and establish minimum strength standards. The District retains the discretion to assign a higher strength category to individual discharges.					

Table 31. Bi-Monthly Sewer Service and Usage Charges – Blacklake Division

<i>Size of Meter</i>	<i>August 1, 2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>
RESIDENTIAL (PER DWELLING UNIT)					
Single Family	\$71.70	\$74.56	\$77.55	\$80.65	\$83.87
Multi-Family	\$38.42	\$39.96	\$41.56	\$43.22	\$44.95
NON-RESIDENTIAL BI-MONTHLY SERVICE CHARGE					
1 inch or less	\$32.76	\$34.07	\$35.44	\$36.86	\$38.33
1½ Inch	\$94.24	\$98.01	\$101.93	\$106.01	\$110.25
2 Inch	\$149.66	\$155.64	\$161.87	\$168.34	\$175.08
3 Inch	\$279.05	\$290.21	\$301.82	\$313.89	\$326.45
4 Inch	\$463.85	\$482.40	\$501.70	\$521.77	\$542.64
6 Inch	\$925.45	\$962.46	\$1,000.96	\$1,041.00	\$1,082.64
8 Inch	\$1,479.58	\$1,538.76	\$1,600.31	\$1,664.33	\$1,730.90
NON-RESIDENTIAL BI-MONTHLY USAGE RATE					
Low Strength	\$1.38	\$1.44	\$1.49	\$1.55	\$1.61
Medium Strength	\$1.88	\$1.96	\$2.03	\$2.11	\$2.20
High Strength	\$3.00	\$3.12	\$3.24	\$3.37	\$3.51
<i>Notes:</i> Sewer rates for non-residential customers include a service charge based on the size of the water meter and a usage charge based on sewer strength category and metered water usage. The District has established a category of users to determine strength of sewer discharge. Said categories of uses are for reference only and establish minimum strength standards. The District retains the discretion to assign a higher strength category to individual discharges.					

3.3 EVALUATION OF DEMAND MANAGEMENT MEASURES NOT IMPLEMENTED

NCSD has not implemented, and does not intend to implement, the following DMMs:

- Wholesale agency programs;
- Conservation programs for commercial, industrial, and institutional (CII) accounts;

NCSD is not a wholesale supplier, and hence wholesale agency programs are not applicable.

In 2004 NCSD had no industrial accounts and approximately 83 commercial and institutional accounts (NCSD Annual Report to Department of Health Services). Commercial and institutional accounts make-up less than 3 percent of NCSD's total accounts. NCSD has decided not to pursue implementation of conservation programs for these customers because they would not be cost effective.

It is estimated that it would take approximately 3 weeks to develop and advertise a CII program, resulting in administrative and advertising costs of approximately \$3,000. If approximately 10 percent of all CII customers were surveyed in a year, 8 surveys would take place. It is estimated that each survey and follow-up would take staff time of about 10 hours, for total staff time of 80 hours for 8

annual surveys, costing an additional \$1,600. Therefore, total annual costs to the agency would be approximately \$4,600. Customer costs for participating in the survey and implementing equipment and operational changes would vary and be specific to the business being surveyed, but for planning purposes have been estimated as \$500.

NCSD has approximately 20 “Large Users” that use in excess of 2,000 gallons per day. Assuming that CII surveys resulted in an 11 percent reduction in water use at these types of business, water savings would be approximately 0.25 afy, per each survey. Assuming this savings decays at a rate of 3 percent overtime, savings over a 25-year period would be approximately 35 af. There would be only 8 surveys a year, and water savings from the surveys performed in the early years decline even as new surveys are performed.

NCSD may recognize savings in other areas. NCSD would also save on water and wastewater supply and treatment costs. Total savings to the agency is estimated at approximately \$160 per af.

The net present value (given discounting) for the agency benefits is only \$4,574, while the program present value costs is \$4,600, meaning this DMM is not cost-effective to implement from the agency perspective.

4.0 WATER SHORTAGE CONTINGENCY PLAN

Water supplies can be interrupted by drought and other disasters (earthquakes, power outages). The Water Shortage Contingency Analysis contains information on actions to be undertaken by the water supplier in response to water supply shortages of varying severity; actions NCSD has taken to prepare for catastrophic supply interruption (due to non-drought related events); the mechanism for determining actual reductions in water use pursuant to the urban water shortage contingency analysis; an estimate of minimum supply for the years 2006-2008; revenue impacts of reduced sales during shortages; and a discussion on proposed revisions to NCSD's existing Water Conservation and Emergency Water Shortage Regulations.

4.1 STAGES OF ACTION

The following procedures specify voluntary and mandatory provisions to minimize the effect of a water shortage to NCSD's customers and extend available water supply the event of a water shortage. NCSD policies for responding to water supply shortage are located in NCSD code, Chapter 3.24, "Water Conservation and Emergency Water Shortage Regulations."

NCSD policies require that the District and its manager monitor supply and demand on a weekly basis during drought conditions and recommend to the board of directors the extent of the conservation required, in order for NCSD to continue to supply adequate water to the customers. Thereafter the board of directors may order that the appropriate phase of water conservation be implemented and/or terminated. NCSD's three-stage demand reduction plan is detailed in Table 32.

Nipomo Community Services District utilizes a two-tiered residential water rate structure to encourage water conservation. But in addition NCSD has penalties and charges for violations of the "Water Conservation and Emergency Water Shortage Regulations":

- First Violation. A copy of the notice will be left with a resident or employee at the establishment, or left in a conspicuous place, at the time of the violation observance.
- Second Violation. A copy of the violation notice will be sent to the address of the violator by certified mail, return receipt requested, with a letter explaining the gravity of the situation and the penalties for future violations.
- Third Violation. A one gallon per minute flow restriction will be installed at the violators meter and left in place for seventy-two hours. Installation and removal charges of thirty dollars will be assessed to the account of the violator.
- Fourth Violation. The water meter will be removed from the premises of the violator. The meter will be reinstalled after the payment of a fifty-dollar reconnection charge.

Table 32. Water Supply Shortage Stages and Conditions

<i>Stage</i>	<i>% Shortage/ Deficiency</i>	<i>Demand Reduction Goal</i>	<i>Type of Program</i>	<i>Description</i>
I	Up to 15 %	15%	Voluntary	<p>Voluntary conservation shall be requested annually on May 15th. Stage I will be rescinded on October 15th or at any time that prevailing conditions indicate a more restrictive stage is necessary.</p> <p><i>Prohibitions:</i></p> <p>A. No customer shall waste water. As used herein the term “waste water” means:</p> <ol style="list-style-type: none"> 1. Allow potable water to escape from breaks within the customers plumbing system for more than four hours after the customer is notified or discovers the break; 2. Use of potable water for sewer system maintenance or fire protection training without prior approval by the district.
II	Between 15% and 30%	Between 15% and 30%	Mandatory	<p>Stage II conservation shall be required when pumpage is in excess of 1.5 mgd for four consecutive days or pumpage in excess of 1.9 mgd for one day. Upon termination of Stage II, Stage I becomes operative.</p> <p><i>Prohibitions:</i></p> <ol style="list-style-type: none"> 1. All prohibitions applicable to Stage I; 2. All outdoor irrigation of vegetation shall occur only between the hours of six p.m. and nine a.m. on designated days and must utilize hand held hoses, drip irrigation or permanently installed automatic sprinkler systems;

Table 32. Water Supply Shortage Stages and Conditions
(continued)

<i>Stage</i>	<i>% Shortage/ Deficiency</i>	<i>Demand Reduction Goal</i>	<i>Type of Program</i>	<i>Description</i>
				<p>3. The washing of automobiles, trucks, trailers, boats and other types or mobile equipment not occurring upon the immediate premises of commercial car washes and commercial service stations and not in the immediate interest of the public health, safety and welfare shall be prohibited;</p> <p>4. Use of water from fire hydrants shall be limited to fire suppression and/or other activities immediately necessary to maintaining health, safety and welfare of the citizens within the boundaries of the Nipomo Community Services District.</p>
III	Up to 50%	50% to 65%	Mandatory	<p>Stage III conservation shall be required when pumpage is in excess of 1.9 mgd for four consecutive days; or 2.1 mgd for one day; or continually falling reservoir levels which do not refill above fifty percent overnight. Stage III shall be terminated when all of the conditions listed as triggering events have ceased to exist for a period of five consecutive days. Upon termination of Stage III, Stage II becomes operative.</p> <p><i>Prohibitions:</i></p> <ol style="list-style-type: none"> 1. All prohibitions applicable to Stages I and II; 2. Water used shall not exceed seventy-five gallons per day per person.

4.2 MECHANISMS FOR MONITORING WATER SUPPLY REDUCTIONS

NCSD has mechanisms in place to monitor both demand and production so as to determine actual reduction in water use upon implementation of the three water shortage stages of action described in part 4.1.

Under normal conditions NCSD bills its customers on a bi-monthly basis. The prior year's water use is included on a customer's bill so as to allow a comparison of the total consumption from each billing period to the same billing period from the prior year. Also under normal conditions, NCSD prepares monthly production reports, which are reviewed and compared to production reports from the prior month and same period of the prior year.

4.2.1 Stage 1 Water Shortage

Under a Stage I Water Shortage, NCSD will continue to review demand and production reports on a monthly basis.

4.2.2 Stage 2 Water Shortage

Under a Stage II Water Shortage, NCSD will review select production reports on a daily basis.

4.2.3 Stage 3 Water Shortage

Under a Stage II Water Shortage, NCSD will review all production reports and pumping statistics on a daily basis. Billing reports will be reviewed to identify users in violation of mandatory prohibitions.

4.3 ESTIMATE OF MINIMUM SUPPLY FOR NEXT THREE YEARS

The UWMP Act requires that an agency quantify the minimum water supply available during the next three years (2006 to 2008) based on the driest three-year historic sequence for that agency's supply. As described in section 2.5.1, the years 1988 to 1990 represent the most critical water supply period for NCSD's primary water source, groundwater from the NMMA. Table 33 presents an estimate of the minimum supply available to NCSD for the years 2006 to 2008.

Table 33. Three-Year Estimated Minimum Water Supply (2006-2008) (afy)

<i>Source</i>	<i>Year 1</i>	<i>Year 2</i>	<i>Year 3</i>	<i>Normal</i>
NMMA Groundwater Supply	2,900	1,350	840	2,900
NCSD Nipomo Valley Groundwater Supply	300	140	87	300
Total Supply Next Three Years	3,200	1,490	929	3,200
<i>Notes:</i> For planning purposes it is assumed that changes in groundwater levels and hence change in pumping patterns will not be reflected until a second year of a drought. In the second year of shortage, it is assumed that NCSD's normal groundwater supply would be reduced to be reflective of the severity of water shortage.				

4.4 CATASTROPHIC SUPPLY INTERRUPTION PLAN

The Urban Water Management Plan Act requires that an UWMP provide information on the vulnerability of supply and distribution systems to non-drought related events (earthquakes, regional power outages, system failures and anything specific to a given source) and supplier actions designed to minimize impacts of supply interruption on their service area. This Catastrophic Supply Interruption Plan in turn is one of six elements of the broader Water Shortage Contingency Analysis. NCSD has done so, based on planning by San Luis Obispo County and regional water purveyors (e.g., the California Department of Water Resources), and has considered the vulnerability of its existing groundwater supply as well as its planned future supplemental supply from the City of Santa Maria.

4.4.1 General Emergency Preparation

NCSD is a member of San Luis Obispo County Standardized Emergency Management System Program, an over-all County Emergency Program. NCSD has prepared, and maintains, a Water System Emergency Response Plan. The Emergency Response Management Plan provides information on procedures to be followed in the event of an emergencies or malevolent act to both secure NCSD facilities and return NCSD facilities to operation. Contents include information on the Chain of Command to be followed, contact information for public health and safety officials, inventories of equipment suitable for emergency repairs, and procedures for notifying the public, including contact information for news and radio outlets and prearranged public announcements (e.g., boil water orders, unsafe water alerts).

NCSD maintains approximately 5 million gallons of water in storage. Given NCSD's current population of approximately 12,000 people, this supply would serve this population for approximately one and a half days at maximum demand (2,500 gallons per minute), four days at average demand (1,000 gallons per minute), and approximately six days if demand was reduced to minimum health and safety standards (68 gallons per capita per day). The water in storage could reduce impacts to the service area given various types of emergencies.

Depending on the type of emergency, NCSD could receive temporary water supplies and/or equipment to facilitate water supply from adjacent water purveyors. NCSD maintains a list of the water suppliers adjacent to its service area and will enter into mutual aid agreements as necessary.

NCSD facilities have been designed and constructed to meet or exceed standards of the American Water Works Association as well as applicable local, state, and federal code. Adhering to these standards for design and construction limit potential damage during natural disasters and other emergencies. For those portions of the NCSD distribution system considered particularly vulnerable (e.g., pipeline crossing unstable soils, pipelines placed on bridges) redundant interconnections have been built. Redundant systems have also been included in NCSD's groundwater pumping operations. One of NCSD's wells operates on natural gas, the other wells operate on electrical power. However, NCSD has mobile standby generators and fuel sufficient to run production wells at a capacity of approximately 400 gallons per minute for approximately 72 hours. These generators, in addition to the natural gas powered well, provide a total capacity of 1,200 gallons per minute. It is NCSD's goal to add an additional standby generator sufficient to power a 700 to 1,000 gallon per minute well and to expand fuel storage sufficient to pump via generators for up to seven days.

4.4.2 Specific Emergencies

In its Final Draft Local Hazard Mitigation Plan (July 2005), San Luis Obispo County identifies the following non-drought hazards as having the potential to affect the Nipomo Mesa area:

- Wildfire (Very High Probability)
- Flooding (Medium Probability)
- Earthquake (Medium-High Probability)
- Fault Rupture/Liquefaction (High Probability)
- Landslides/Rockslides (Low Probability)

The probability of a given hazard was determined based on past history of similar events, and likelihood of future events given existing and future land uses and development trends.

4.4.2.1 Wildfire

Wildfires could result in minor power disruption and potentially result in temporary loss of access to some of NCSD's supply wells. Wildfire could also result in a temporary disruption to NCSD's supplemental water supply from the City of Santa Maria. However, due to the interlinked nature of the NCSD distribution system, loss of power and production in a portion of the system could be compensated for by increased production. Actions would include notifying affected customers and implementing voluntary and mandatory rationing, only if necessary, in the affected portions of the service area.

4.4.2.2 Flooding

Flooding risk in the Nipomo Mesa and NCSD service area is primarily along Nipomo Creek and its tributaries, including Deleissiques Creek and Tefft Road Creek. No NCSD water wells are located in these areas and hence not considered to be at risk of flooding. Distribution mains cross Nipomo Creek in three locations. This redundancy, and effective construction standards, minimize the potential for damage to the distribution system by flooding. The District's system is fully valved and would be isolated as needed to minimize the area affected by flooding damage. Large scale system impact is not expected from flooding events.

4.4.2.3 Earthquake/Fault Rupture/Liquefaction

Anticipated impacts from an earthquake will vary depending on the location of the earthquake.

A local earthquake could result in potential damage to the NCSD system and loss of electrical power, disrupting NCSD's groundwater production system and delivery of NCSD's supplemental water supplies from the City of Santa Maria. The Nipomo Area is geologically complex and seismically active, with a history of earthquakes. Faults in the Nipomo area include the Santa Maria River, Wilmar Avenue, Oceano, and West Huasna faults (San Luis Obispo County 2005a). The Santa Maria River and Wilmar Avenue faults are thought to generally follow Highway 101 in the Nipomo area and both are considered potentially active (San Luis Obispo County 2005a). The Oceano fault trends northwest across the Nipomo Mesa, down the near center of the NCSD service area. There is some scientific debate about whether or not the Oceano fault is active (San Luis Obispo County 2005a). The

West Huasna fault skirts the eastern side of the Nipomo Mesa (San Luis Obispo County 2005a). In the event of an earthquake on one of these faults, procedures in the emergency response plan would go into effect. These procedures would insure any damaged sections of the distribution system were isolated; customers would be notified of the need to limit use; groundwater pumping would be established using backup generators if necessary; and water supply would be supplemented using water in storage. Because NCSD has production and distribution facilities within all sections between the various faults in its service area, NCSD anticipates being able to serve any area segmented by a fault rupture.

An earthquake along the State Water Project system, depending on location, could disrupt deliveries of State Water Project water to the City of Santa Maria. Three to six weeks of “outage” are anticipated for a minor repair on the California Aqueduct system, and up to six months to repair severe damage, such as levee failure in the California Delta. Should the City of Santa Maria’s supplies be curtailed, NCSD would be asked to reduce its water use similar to other City of Santa Maria customers. NCSD would take action to limit customer use and would temporarily increase groundwater pumping to meet minimum customer demands.

4.4.2.4 Landslides/Rockslides

Though rockslides and landslides are considered within San Luis Obispo Local Hazard Mitigation Plan, given the location and nature of NCSD facilities, these events are not considered significant threats to the NCSD water production or distribution system.

4.5 ANALYSIS OF REVENUE IMPACTS OF REDUCED SALES DURING SHORTAGES

There are potential financial implications from planned consumption reduction methods, penalties, and prohibitions during a water shortage. Approximately 25 to 30 percent of NCSD’s revenues are derived from service charges and the remaining 70 to 75 percent come from commodity charges (NCSD 2005b). The majority of NCSD’s operating costs are “fixed” in nature, such as wages and benefits for employees, repair and maintenance to the distribution network, insurance, and payments of principal and interest on water revenue bonds. These fixed costs do not increase or decrease in direct proportion with increases or decreases in water use by customers. Some expenses, such as electricity for pumping, natural gas for pumping, chemicals for water treatment, do vary in proportion with customer water demand.

In the event of a water shortage and corresponding reduction in water use per the action stages described in section 4.1, the majority of NCSD’s operating costs will remain the same, even though less water is sold. This would result in a major revenue shortfall. Though NCSD does not have a specific rate stabilization fund, the water district does maintain an Operating Reserve Fund. It is the goal of NCSD to maintain Operating Reserves of 50% of annual operating and maintenance costs for the water system. The purpose of the Operating Reserve Fund is to provide working capital and funds for unplanned operating and maintenance expenditures. In Fiscal Year 04-05, the Operating Reserve was \$167,208. In August 2005, NCSD restructured its funding and adopted new water availability charges and water use charges so as to enhance the health of District finances, including the Operating Reserve Fund. By Fiscal Year 2009-2010, the Operating Reserve is anticipated to have funds of approximately \$3,067,000.

**4.6 WATER CONSERVATION AND EMERGENCY WATER SHORTAGE
REGULATIONS/DRAFT WATER SHORTAGE CONTINGENCY ORDINANCE**

NCSD's water shortage contingency ordinance, described in the preceding sections, is located in NCSD code, Chapter 3.24, "Water Conservation and Emergency Water Shortage Regulations" and for the reader's convenience is provided in Appendix C.

5.0 RECYCLED WATER PLAN

NCSD operates two wastewater treatment facilities within its boundaries, the Southland Wastewater Treatment Plant and the Blacklake Wastewater Treatment Plant. All the wastewater processed by NCSD is recycled for direct landscape irrigation or recharge to the groundwater basin. The treated water from the Southland Wastewater Treatment Facility flows into percolation ponds, which act to recharge the groundwater basin. The wastewater from the Blacklake Wastewater Treatment Facility is treated and discharged into a golf course water hazard, which is then used for golf course irrigation and percolation to the groundwater basin. Presently it is not economical to recycle the water for other uses. Table 34 shows past and future volumes of wastewater collected, treated, and recycled within the NCSD service area:

Table 34. Wastewater Collected, Treated, and Recycled within NCSD Service Area (afy)

	2000	2005	2020	2015	2020	2025
Town Division	400	500	600	700	800	800
Blacklake Division	60	75	75	75	75	75

NCSD does not intend to change these operations at this time. Groundwater recharge is a beneficial use of this water. Hence NCSD is not pursuing the development of a recycled water plan in coordination with other local water, wastewater, groundwater, or planning agencies at this time.

6.0 WATER SERVICE RELIABILITY

The Urban Water Plan Act requires that every urban water supplier include as part of its UWMP an assessment of the reliability of its water service to its customers during a normal, dry, and multiple-dry water year. This water supply and demand assessment shall compare the total water supply sources available to the water supplier with the total projected water supply over the next 20 years, in five-year increments, for a normal water year, a single dry year, and multiple dry water years.

6.1 PROJECTED NORMAL WATER YEAR SUPPLY AND DEMAND

A comparison of projected normal water year demands for Existing Land Uses compared to Normal Water Year Supply is provided in Figure 7. As shown in this figure, under an assumed growth rate of 7.8 percent, demands are anticipated to exceed existing supplies by year 2023. Tables 35 to 37 provide detail for Figure 7. Figure 8 provides similar information, but for Existing Land Uses with Amendments, and Figure 9 provides information on High Density Land Uses. Figures 7 through 9 demonstrate that the highest growth rate (7.8 percent), under each land use scenario, exceeds available supply and the High Density land use scenario exceeds available normal supply earliest of any of the scenarios (approximately as early as year 2011). Tables 35 through 43 show that, for all scenarios, a normal year supply is sufficient to serve the existing service area² through year 2030. However, should development in the sphere of influence areas be consistent with the High Density assumptions, growth could outpace supply as early as year 2011, making it necessary to acquire additional supplemental water to serve development in the sphere of influence areas (see Tables 41 and 43). Recall that NCSD's Annexation Policy, applicable to SOI areas, requires that annexations shall provide a reliable water source, other than water from the Nipomo Hydrologic Sub-Area¹ or pay for the costs of supplemental water for the area of annexation as a condition of District approval.

6.2 PROJECTED SINGLE-DRY-YEAR SUPPLY AND DEMAND COMPARISON

The single dry year supply is taken from Table 12 of this report. As described earlier, in a single dry year, no change from normal year supply is anticipated. For illustration, Tables 44 through 52 provide a comparison of the single dry-year supply to normal water use.

Tables 53 to 61 provide a comparison of demands in a single dry year to supplies in a single dry year. In Tables 53 to 61 it is assumed that in a single dry year demands for irrigation will increase by about 10 percent because dry years are associated with lower precipitation, but voluntary and other conservation measures will bring down other urban demands down by 10 percent.

Figure 10 provides a snapshot comparison of supply versus demand in a single dry year. Figure 10 assumes the single dry year occurs in either the period 2010, 2015, 2020, 2025, or 2030. In Figure 10 demands are "bracketed", the highest anticipated demand is illustrated (assuming High Density land uses and a 7.8 percent growth rate) as well as the lowest anticipated demand (assuming Existing Land Use and a 2.3 percent growth rate). Tables 53 through 61 provide the detail for Figure 10.

² Supply sufficient to serve the existing service area is defined as enough water to meet customer demand in the existing service area, groundwater recharge demands (applicable only when supplemental water supply is available), and account for an estimated eight percent system loss associated with customer demands and groundwater recharge.

Figure 7. Normal Water Year Supply and Demand Comparison
Existing Land Use

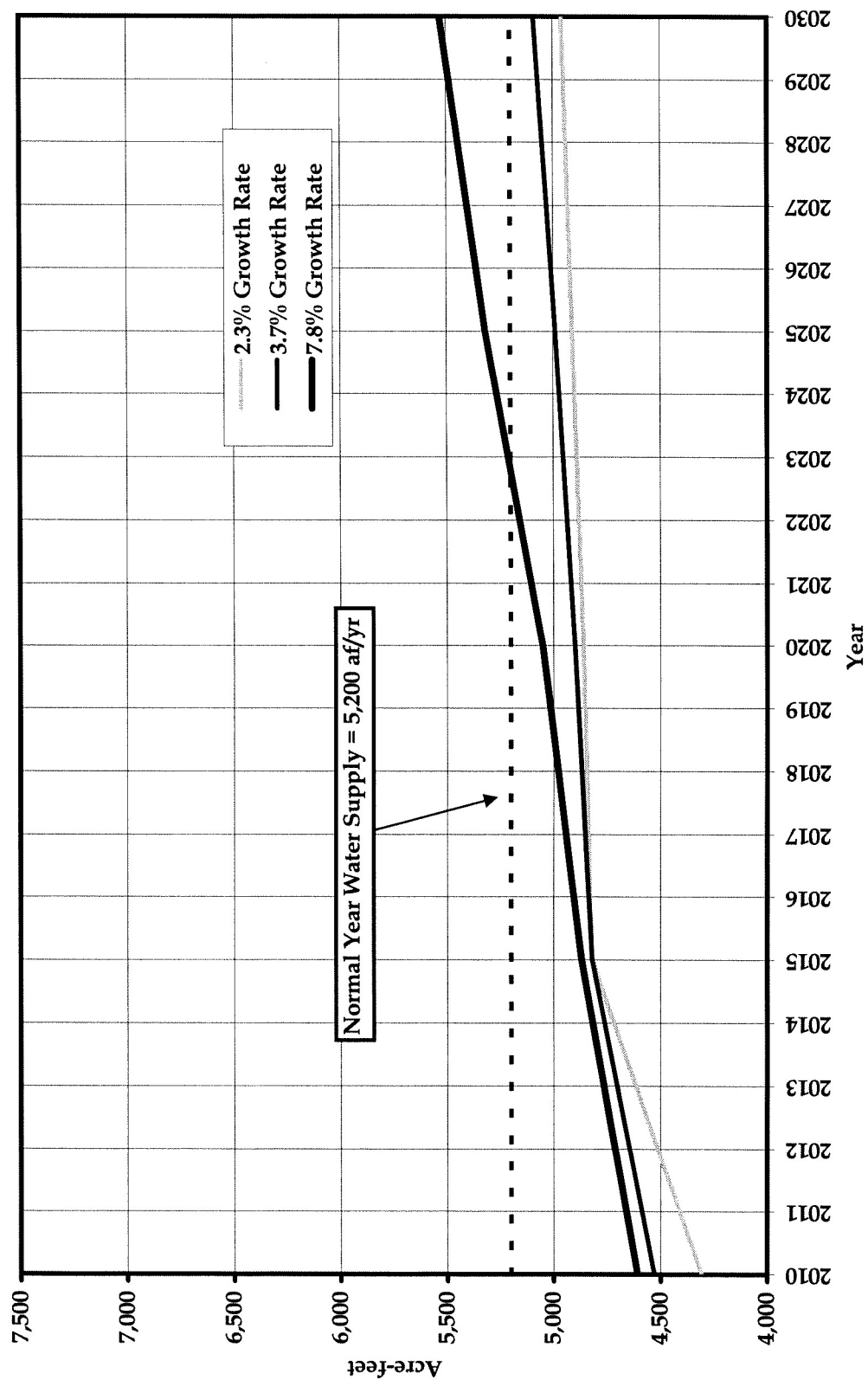


Figure 8. Normal Water Year Supply and Demand Comparison
Existing Land Use with Amendments

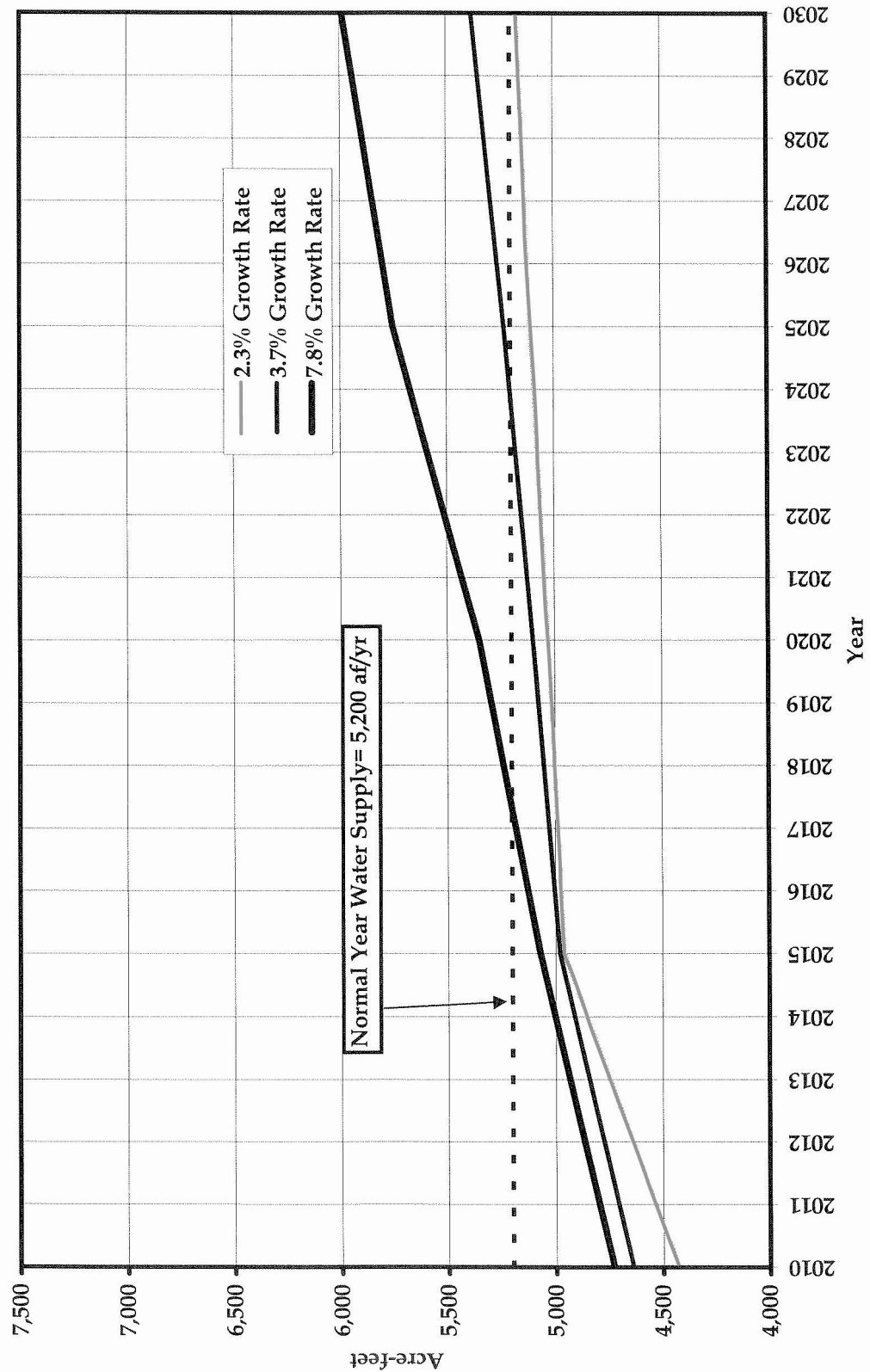


Figure 9. Normal Water Year Supply and Demand Comparison
High Density Land Use

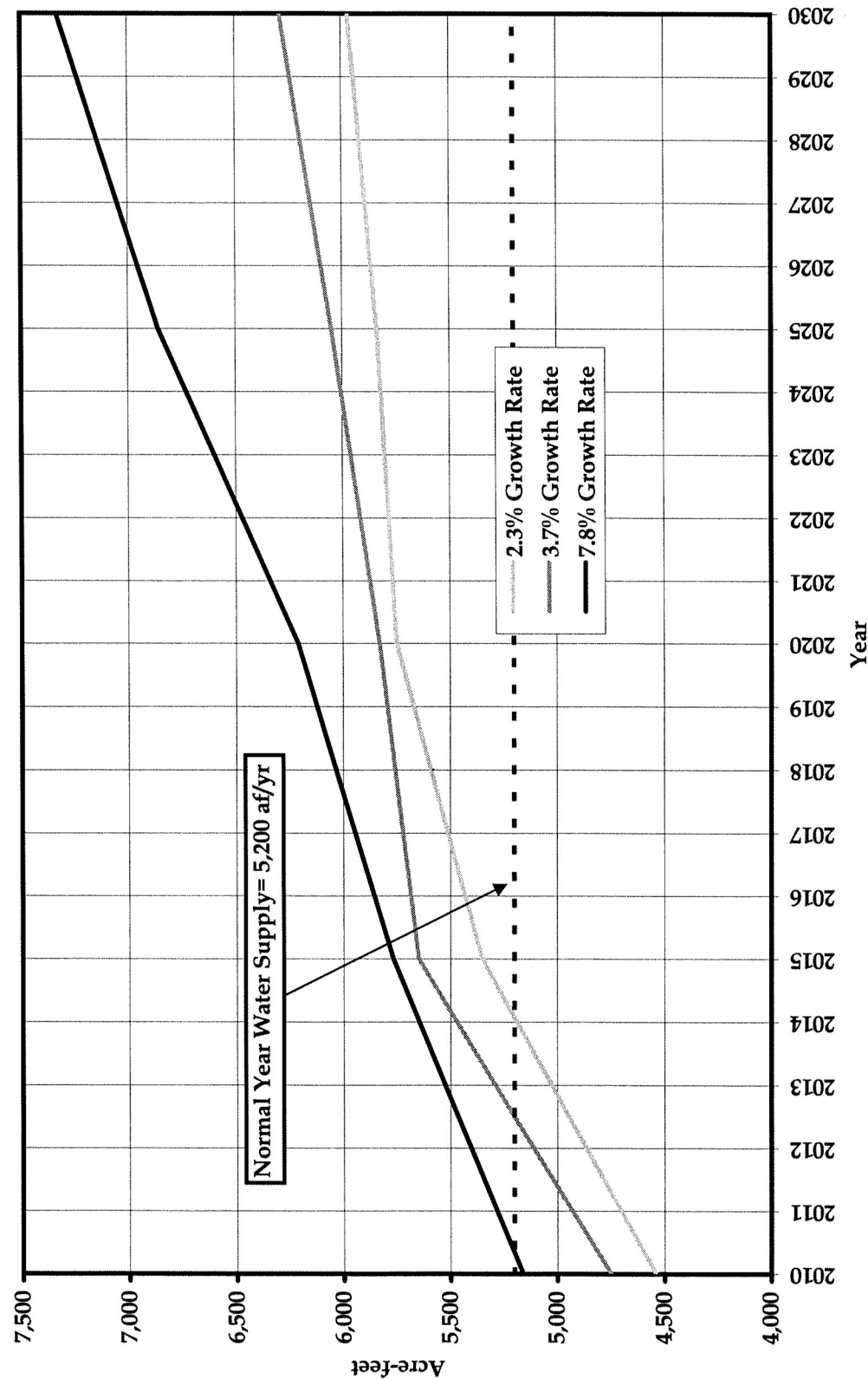


Figure 10: Single Dry Year Groundwater Mining to Meet Demands

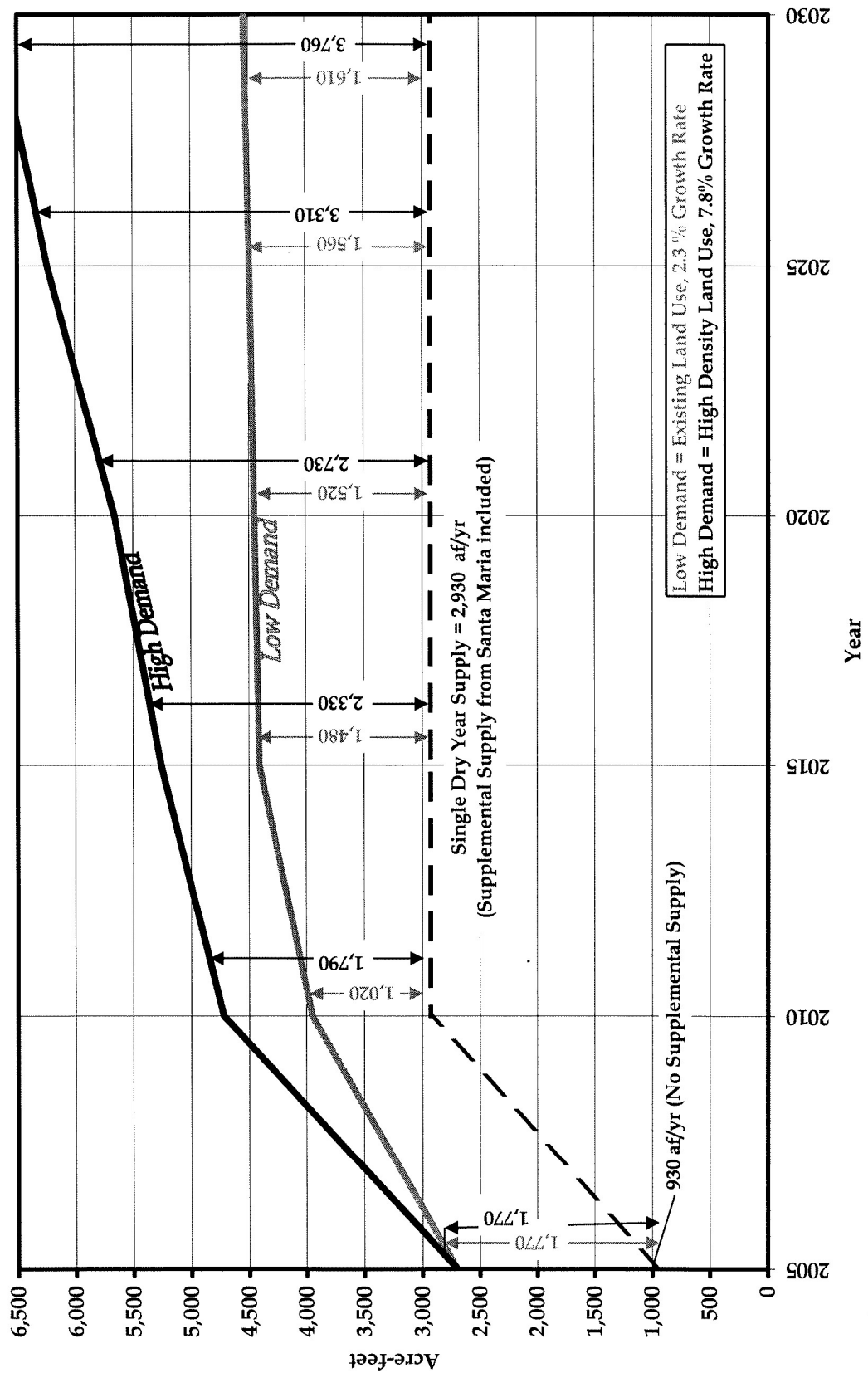


Figure 10 and Tables 53 through 61 demonstrate that in single dry year NCSD would be able to meet demands in the existing service area and sphere of influence areas under the Existing Land Use scenario and the Existing Land Use with Amendments scenario with 2.3 percent and 3.7 percent growth rates. Under the 7.8 percent growth rate, additional supplemental water is needed to serve the sphere of influence area in a single-dry year for the Existing Land Use with Amendments scenario. Figure 10 and Tables 53 to 61 also show that NCSD would be able to meet demands in the existing service area in a single dry year even under High Density Demands but will require additional supplemental water for the sphere of influence areas. However, this is due in part to the fact that in a single dry year NCSD would continue to produce groundwater as if it were a normal year, actual dry-year supply (depicted as “Single Dry Year Supply in Figure 10) would be somewhat less than normal year, so in a single dry year NCSD could extract in excess of its portion (temporarily “mine” groundwater).

6.3 PROJECTED MULTIPLE-DRY-YEAR SUPPLY AND DEMAND COMPARISON

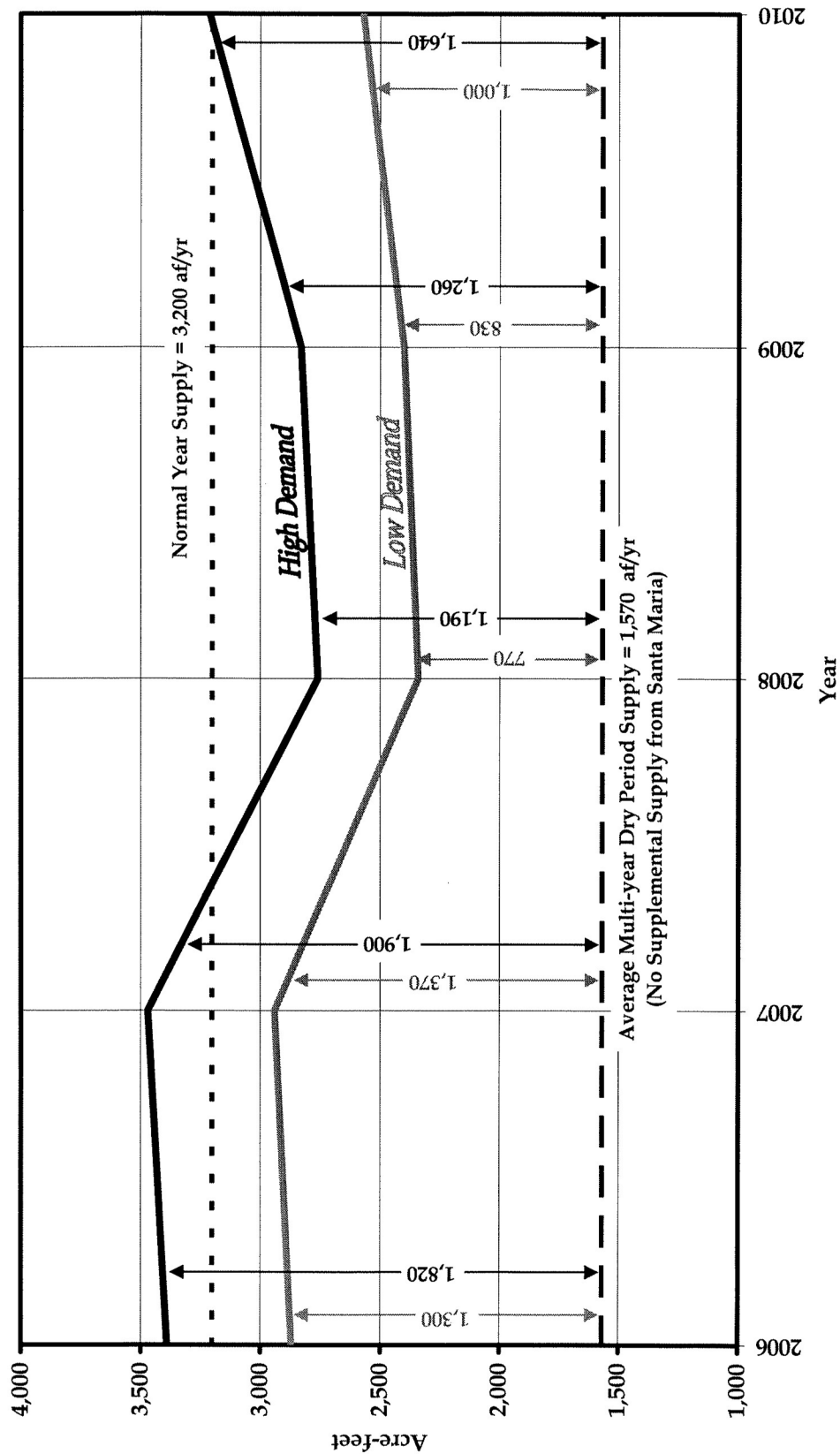
6.3.1 Projected Multiple Dry-Year Period 2006-2010

Figure 11 provides a comparison of supply versus demand in a multiple-dry year. Figure 11 assumes the multiple-dry year occurs in the period 2006 to 2010. In Figure 11 demands are “bracketed”, the highest anticipated demand is illustrated (assuming High Density land uses and a 7.8 percent growth rate) as well as the lowest anticipated demand (assuming Existing Land Use and a 2.3 percent growth rate). Tables 62 to 70 provide the detail for Figure 11. The multiple-dry year supply is consistent with the four year multiple drought reliability described in section 2.5.3 and consistent with Table 12 of this report.

For years 2006 to 2007, the early years of the drought, it has been assumed that irrigation demands (agricultural and open space land uses) would increase by 10 percent, and other urban demands would decrease by 10 percent as a result of implementation of conservation actions in the NCSD service area. In years 2008, 2009, and 2010, as the drought progresses, it has been assumed that irrigation uses will be limited and urban uses will achieve conservation of 30 percent. In order to meet even basic demands of the service area in a multiple-year drought in the period 2006-2010, it would be necessary to curtail urban demands to 50 percent of normal demands and/or increase groundwater pumping beyond the estimated annual supply in a historical dry year under the Existing Land Use and Existing Land Use with Amendments scenarios. Even large water use reductions of 50 percent are insufficient to ensure supply for the existing service area² under the High Density land use assumption and 7.8 percent growth rate.

This particular period, prior to year 2010, is susceptible to a multiple-year drought because no supplemental water supply is assumed to be available until 2010. The demand reduction that would be required to maintain supply in a multiple year drought prior to year 2010 demonstrates the need for supplemental water. A management alternative to imposing large demand reductions would be to temporarily mine groundwater. Figure 11 provides a conceptual framework of how much and in what manner groundwater could be mined. As shown in Figure 11, a comparison of the “Average Multi-Year Dry Period Supply” relative to demands under Existing Land Uses at a 2.3 percent growth rate (with conservation during the drought), shows that approximately 5,270 af of groundwater could

Figure 11: Multi-Year Dry Period Groundwater Mining to Meet Demands for 2006 through 2010



Calculation of Cumulative Groundwater Mined

Low Demand (Existing Land Use, 2.3% Growth) = $1,300 + 1,370 + 770 + 830 + 1,000 = 5,270$ af

High Demand (High Density, 7.8% Growth) = $1,820 + 1,900 + 1,190 + 1,260 + 1,640 = 7,810$ af

be “mined” from the groundwater. This in turn would require replenishment in subsequent years with additional supplemental water. Assuming High Density Land Uses and a 7.8 percent growth rate (with conservation), as much as 7,810 af of groundwater could be “mined” over the four year drought period.

Studies by DWR indicate 75,000 af of groundwater above mean sea level may be available. Thus temporary mining with subsequent replenishment would not cause sea water intrusion problems. Annual monitoring of amounts of groundwater storage, precipitation, and use would need to be part of any groundwater mining program.

6.3.2 Projected Multiple-Dry-Year Period 2011-2015

Tables 71 through 73 show a comparison of a multiple-dry year supply versus demand for years 2011 to 2015 assuming demands from Existing Land Uses and various annual growth rates. Tables 74 through 76 compare a multiple-dry year supply versus demand for years 2011 to 2015 assuming demands from Existing Land Uses with Land Use Amendments and various annual growth rates. Tables 77 through 79 compare multiple-dry supply versus demand for years 2011 to 2015 assuming High Density land uses and various annual growth rates. The multiple-dry year supply is consistent with the four year multiple drought reliability described in section 2.5.3 and consistent with Table 12 of this UWMP report.

For years 2011 to 2012, the early years of the drought, it has been assumed that irrigation demands (agricultural and open space land uses) would increase by 10 percent and other urban demands would decrease by 10 percent due to conservation actions enacted in the NCSD service area. In years 2013 to 2015, as the drought progresses, it has been assumed that irrigation uses will be held to normal year demands and urban demands would be reduced to 30 percent or less of normal year demands.

Even water use reductions of 30 percent are insufficient to ensure supply for the existing service area² in the last year of a multiple year drought requiring either additional conservation or groundwater mining. Without additional supplemental water, in a multiple-year drought supply will be insufficient to serve SOI areas in addition to the existing service area.

6.3.3 Projected Multiple-Dry-Year Period 2016-2020

Tables 80 through 88 show a comparison of a multiple-dry year supply versus demand for years 2016 to 2020 assuming different land uses and growth rates. The multiple-dry year supply shown in Tables 80 through 88 are consistent with the four year multiple drought reliability described in section 2.5.3 and consistent with Table 12 of this report.

For years 2016 to 2017, the early years of the drought, it has been assumed that irrigation demands (agricultural and open space land uses) would increase by 10 percent and other urban demands would decrease by 10 percent. In years 2018, 2019, and 2020, as the drought progresses it has been assumed that irrigation uses will be held to normal year demands and urban demands will achieve 30 percent conservation.

Even water use reductions of 30 percent are insufficient to ensure supply for the existing service area² in the last years of a multiple year drought requiring either additional conservation or groundwater mining. Without additional supplemental water, in a multiple year drought, supply will be insufficient to serve SOI areas in addition to the existing service area.

6.3.4 Projected Multiple Dry-Year Period 2021-2025

Tables 89 through 97 show a comparison of a multiple-dry year supply versus demand for years 2021 to 2025 assuming different land uses and growth rates. The multiple-dry year supply shown in Tables 89 through 97 are consistent with the four year multiple drought reliability described in section 2.5.3 and consistent with Table 12 of this report.

For years 2021 to 2022, the early years of the drought, it has been assumed that irrigation demands (agricultural and open space land uses) would increase by 10 percent, other urban demands would decrease by 10 percent. In years 2023, 2024, and 2025, as the drought progresses it has been assumed that irrigation uses will be held to normal year demands and urban demands will achieve 30 percent conservation.

Even water use reductions of 30 percent are insufficient to ensure supply for the existing service area² in the last years of a multiple year drought requiring either additional conservation or groundwater mining. Without additional supplemental water, in a multiple year drought supply will be insufficient to serve SOI areas in addition to the existing service area.

Table 35. Projected Normal Year Water Supply and Demand Comparison - Assuming Existing Land Uses and 2.3% Growth Rate

	2010	2015	2020	2025	2030
Supply (af)	5,200	5,200	5,200	5,200	5,200
Supply as % of Projected Normal	100%	100%	100%	100%	100%
Demand					
Town Division (af)	2,720	3,000	3,000	3,000	3,000
Blacklake Division (af)	530	530	530	530	530
SOI Areas (af)	140	330	370	420	460
In-Lieu NMMA Groundwater Recharge (af)	600	600	600	600	600
Unaccounted System Loss (af)	320	360	360	360	370
Total Demand (af)	4,310	4,820	4,860	4,910	4,960
Demand as % of year 2005	148%	166%	167%	169%	170%
Difference (Supply minus Demand) (af)	890	380	340	290	240
Difference as % of Supply	17%	7%	7%	6%	5%
Difference as % of Demand	21%	8%	7%	6%	5%
Supply Sufficient for Existing Service Area?	Yes	Yes	Yes	Yes	Yes
Add'l Supplemental Supply Needed for SOI Areas?	No	No	No	No	No

Table 36. Projected Normal Year Water Supply and Demand Comparison - Assuming Existing Land Uses and 3.7% Growth Rate

	2010	2015	2020	2025	2030
Supply (af)	5,200	5,200	5,200	5,200	5,200
Supply as % of Projected Normal	100%	100%	100%	100%	100%
Demand					
Town Division (af)	2,920	3,000	3,000	3,000	3,000
Blacklake Division (af)	530	530	530	530	530
SOI Areas (af)	140	330	410	490	580
In-Lieu NMMA Groundwater Recharge (af)	600	600	600	600	600
Unaccounted System Loss (af)	340	360	360	370	380
Total Demand (af)	4,530	4,820	4,900	4,990	5,090
Demand as % of year 2005	156%	166%	168%	171%	175%
Difference (Supply minus Demand) (af)	670	380	300	210	110
Difference as % of Supply	13%	7%	6%	4%	2%
Difference as % of Demand	15%	8%	6%	4%	2%
Supply Sufficient for Existing Service Area?	Yes	Yes	Yes	Yes	Yes
Add'l Supplemental Supply Needed for SOI Areas?	No	No	No	No	No

Table 37. Projected Normal Year Water Supply and Demand Comparison - Assuming Existing Land Uses and 7.8% Growth Rate

	2010	2015	2020	2025	2030
Supply (af)	5,200	5,200	5,200	5,200	5,200
Supply as % of Projected Normal	100%	100%	100%	100%	100%
Demand					
Town Division (af)	3,000	3,000	3,000	3,000	3,000
Blacklake Division (af)	530	530	530	530	530
SOI Areas (af)	140	380	550	800	990
In-Lieu NMMA Groundwater Recharge (af)	600	600	600	600	600
Unaccounted System Loss (af)	340	360	370	390	410
Total Demand (af)	4,610	4,870	5,050	5,320	5,530
Demand as % of year 2005	158%	167%	174%	183%	190%
Difference (Supply minus Demand) (af)	590	330	150	-120	-330
Difference as % of Supply	11%	6%	3%	-2%	-6%
Difference as % of Demand	13%	7%	3%	-2%	-6%
Supply Sufficient for Existing Service Area?	Yes	Yes	Yes	Yes	Yes
Add'l Supplemental Supply Needed for SOI Areas?	No	No	No	Yes	Yes

Table 38. Projected Normal Year Water Supply and Demand Comparison - Assuming Existing Land Uses with Amendments and 2.3% Growth Rate

	2010	2015	2020	2025	2030
Supply (af)	5,200	5,200	5,200	5,200	5,200
Supply as % of Projected Normal	100%	100%	100%	100%	100%
Demand					
Town Division (af)	2,720	3,000	3,000	3,000	3,000
Blacklake Division (af)	530	530	530	530	530
SOI Areas (af)	250	460	530	600	660
In-Lieu NMMA Groundwater Recharge (af)	600	600	600	600	600
Unaccounted System Loss (af)	330	370	370	380	380
Total Demand (af)	4,430	4,960	5,030	5,110	5,170
Demand as % of year 2005	152%	170%	173%	176%	178%
Difference (Supply minus Demand) (af)	770	240	170	90	30
Difference as % of Supply	15%	5%	3%	2%	1%
Difference as % of Demand	17%	5%	3%	2%	1%
Supply Sufficient for Existing Service Area?	Yes	Yes	Yes	Yes	Yes
Add'l Supplemental Supply Needed for SOI Areas?	No	No	No	No	No

Table 39. Projected Normal Year Water Supply and Demand Comparison - Assuming Existing Land Uses with Amendments and 3.7% Growth Rate

	2010	2015	2020	2025	2030
Supply (af)	5,200	5,200	5,200	5,200	5,200
Supply as % of Projected Normal	95%	95%	95%	95%	95%
Demand					
Town Division (af)	2,920	3,000	3,000	3,000	3,000
Blacklake Division (af)	530	530	530	530	530
SOI Areas (af)	250	480	590	710	850
In-Lieu NMMA Groundwater Recharge (af)	600	600	600	600	600
Unaccounted System Loss (af)	340	370	380	390	400
Total Demand (af)	4,640	4,980	5,100	5,230	5,380
Demand as % of year 2005	159%	171%	175%	180%	185%
Difference (Supply minus Demand) (af)	560	220	100	-30	-180
Difference as % of Supply	11%	4%	2%	-1%	-3%
Difference as % of Demand	12%	4%	2%	-1%	-3%
Supply Sufficient for Existing Service Area?	Yes	Yes	Yes	Yes	Yes
Add'l Supplemental Supply Needed for SOI Areas?	No	No	No	Yes	Yes

Table 40. Projected Normal Year Water Supply and Demand Comparison - Assuming Existing Land Uses with Amendments and 7.8% Growth Rate

	2010	2015	2020	2025	2030
Supply (af)	5,200	5,200	5,200	5,200	5,200
Supply as % of Projected Normal	100%	100%	100%	100%	100%
Demand					
Town Division (af)	3,000	3,000	3,000	3,000	3,000
Blacklake Division (af)	530	530	530	530	530
SOI Areas (af)	250	560	820	1,190	1,420
In-Lieu NMMA Groundwater Recharge (af)	600	600	600	600	600
Unaccounted System Loss (af)	350	380	400	430	440
Total Demand (af)	4,730	5,070	5,350	5,750	5,990
Demand as % of year 2005	163%	174%	184%	198%	206%
Difference (Supply minus Demand) (af)	470	130	-150	-550	-790
Difference as % of Supply	9%	3%	-3%	-11%	-15%
Difference as % of Demand	10%	3%	-3%	-10%	-13%
Supply Sufficient for Existing Service Area?	Yes	Yes	Yes	Yes	Yes
Add'l Supplemental Supply Needed for SOI Areas?	No	No	Yes	Yes	Yes

Table 41. Projected Normal Year Water Supply and Demand Comparison - High Density Assumption and 2.3% Growth Rate

	2010	2015	2020	2025	2030
Supply (af)	5,200	5,200	5,200	5,200	5,200
Supply as % of Projected Normal	100%	100%	100%	100%	100%
Demand					
Town Division (af)	2,720	3,050	3,300	3,300	3,300
Blacklake Division (af)	530	530	530	530	530
SOI Areas (af)	350	770	890	980	1,100
In-Lieu NMMA Groundwater Recharge (af)	600	600	600	600	600
Unaccounted System Loss (af)	340	400	430	430	440
Total Demand (af)	4,540	5,350	5,750	5,840	5,970
Demand as % of year 2005	156%	184%	198%	201%	205%
Difference (Supply minus Demand) (af)	660	-150	-550	-640	-770
Difference as % of Supply	13%	-3%	-11%	-12%	-15%
Difference as % of Demand	15%	-3%	-10%	-11%	-13%
Supply Sufficient for Existing Service Area?	Yes	Yes	Yes	Yes	Yes
Add'l Supplemental Supply Needed for SOI Areas?	No	Yes	Yes	Yes	Yes

Table 42. Projected Normal Year Water Supply and Demand Comparison - High Density Assumption and 3.7% Growth Rate

	2010	2015	2020	2025	2030
Supply (af)	5,200	5,200	5,200	5,200	5,200
Supply as % of Projected Normal	100%	100%	100%	100%	100%
Demand					
Town Division (af)	2,920	3,300	3,300	3,300	3,300
Blacklake Division (af)	530	530	530	530	530
SOI Areas (af)	350	800	970	1,170	1,390
In-Lieu NMMA Groundwater Recharge (af)	600	600	600	600	600
Unaccounted System Loss (af)	350	420	430	450	470
Total Demand (af)	4,750	5,650	5,830	6,050	6,290
Demand as % of year 2005	163%	194%	200%	208%	216%
Difference (Supply minus Demand) (af)	450	-450	-630	-850	-1,090
Difference as % of Supply	9%	-9%	-12%	-16%	-21%
Difference as % of Demand	9%	-8%	-11%	-14%	-17%
Supply Sufficient for Existing Service Area?	Yes	Yes	Yes	Yes	Yes
Add'l Supplemental Supply Needed for SOI Areas?	No	Yes	Yes	Yes	Yes

Table 43. Projected Normal Year Water Supply and Demand Comparison - High Density Assumption and 7.8% Growth Rate

	2010	2015	2020	2025	2030
Supply (af)	5,200	5,200	5,200	5,200	5,200
Supply as % of Projected Normal	100%	100%	100%	100%	100%
Demand					
Town Division (af)	3,300	3,300	3,300	3,300	3,300
Blacklake Division (af)	530	530	530	530	530
SOI Areas (af)	350	910	1,320	1,920	2,360
In-Lieu NMMA Groundwater Recharge (af)	600	600	600	600	600
Unaccounted System Loss (af)	380	430	460	510	540
Total Demand (af)	5,160	5,770	6,210	6,860	7,330
Demand as % of year 2005	177%	198%	213%	236%	252%
Difference (Supply minus Demand) (af)	40	-570	-1,010	-1,660	-2,130
Difference as % of Supply	1%	-11%	-19%	-32%	-41%
Difference as % of Demand	1%	-10%	-16%	-24%	-29%
Supply Sufficient for Existing Service Area?	Yes	Yes	Yes	Yes	Yes
Add'l Supplemental Supply Needed for SOI Areas?	No	Yes	Yes	Yes	Yes

Table 44. Projected Single-Dry Year Water Supply Compared to Normal Year Demand - Assuming Existing Land Uses and 2.3% Growth Rate					
	2010	2015	2020	2025	2030
Supply (af)	5,200	5,200	5,200	5,200	5,200
Supply as % of Projected Normal	100%	100%	100%	100%	100%
Demand					
Town Division (af)	2,720	3,000	3,000	3,000	3,000
Blacklake Division (af)	530	530	530	530	530
SOI Areas (af)	140	330	370	420	460
In-Lieu NMMA Groundwater Recharge (af)	600	600	600	600	600
Unaccounted System Loss (af)	320	360	360	360	370
<i>Total Demand (af)</i>	4,310	4,820	4,860	4,910	4,960
Demand as % of Normal	100%	100%	100%	100%	100%
Difference (Supply minus Demand)	890	380	340	290	240
Difference as % of Supply	17%	7%	7%	6%	5%
Difference as % of Demand	21%	8%	7%	6%	5%
Supply Sufficient for Existing Service Area?	Yes	Yes	Yes	Yes	Yes
Add'l Supplemental Supply Needed for SOI Areas?	No	No	No	No	No
Notes: See Table 12 for information on Supply in Single Dry Year.					

Table 45. Projected Single-Dry Year Water Supply Compared to Normal Year Demand - Assuming Existing Land Uses and 3.7% Growth Rate					
	2010	2015	2020	2025	2030
Supply (af)	5,200	5,200	5,200	5,200	5,200
Supply as % of Projected Normal	100%	100%	100%	100%	100%
Demand					
Town Division (af)	2,920	3,000	3,000	3,000	3,000
Blacklake Division (af)	530	530	530	530	530
SOI Areas (af)	140	330	410	490	580
In-Lieu NMMA Groundwater Recharge (af)	600	600	600	600	600
Unaccounted System Loss (af)	340	360	360	370	380
<i>Total Demand (af)</i>	4,530	4,820	4,900	4,990	5,090
Demand as % of Normal	100%	100%	100%	100%	100%
Difference (Supply minus Demand)	670	380	300	210	110
Difference as % of Supply	13%	7%	6%	4%	2%
Difference as % of Demand	15%	8%	6%	4%	2%
Supply Sufficient for Existing Service Area?	Yes	Yes	Yes	Yes	Yes
Add'l Supplemental Supply Needed for SOI Areas?	No	No	No	No	No
Notes: See Table 12 for information on Supply in Single Dry Year.					

Table 46. Projected Single-Dry Year Water Supply Compared to Normal Year Demand - Assuming Existing Land Uses and 7.8% Growth Rate					
	2010	2015	2020	2025	2030
Supply (af)	5,200	5,200	5,200	5,200	5,200
Supply as % of Projected Normal	100%	100%	100%	100%	100%
Demand					
Town Division (af)	3,000	3,000	3,000	3,000	3,000
Blacklake Division (af)	530	530	530	530	530
SOI Areas (af)	140	380	550	800	990
In-Lieu NMMA Groundwater Recharge (af)	600	600	600	600	600
Unaccounted System Loss (af)	340	360	370	390	410
<i>Total Demand (af)</i>	4,610	4,870	5,050	5,320	5,530
Demand as % of Normal	100%	100%	100%	100%	100%
Difference (Supply minus Demand)	590	330	150	-120	-330
Difference as % of Supply	11%	6%	3%	-2%	-6%
Difference as % of Demand	13%	7%	3%	-2%	-6%
Supply Sufficient for Existing Service Area?	Yes	Yes	Yes	Yes	Yes
Add'l Supplemental Supply Needed for SOI Areas?	No	No	No	Yes	Yes
Notes: See Table 12 for information on Supply in Single Dry Year.					

Table 47. Projected Single-Dry Year Water Supply Compared to Normal Year Demand - Assuming Existing Land Uses with Amendments and 2.3% Growth Rate					
	2010	2015	2020	2025	2030
Supply (af)	5,200	5,200	5,200	5,200	5,200
Supply as % of Projected Normal	100%	100%	100%	100%	100%
Demand					
Town Division (af)	2,720	3,000	3,000	3,000	3,000
Blacklake Division (af)	530	530	530	530	530
SOI Areas (af)	250	460	530	600	660
In-Lieu NMMA Groundwater Recharge (af)	600	600	600	600	600
Unaccounted System Loss (af)	330	370	370	380	380
<i>Total Demand (af)</i>	4,430	4,960	5,030	5,110	5,170
Demand as % of Normal	100%	100%	100%	100%	100%
Difference (Supply minus Demand)	770	240	170	90	30
Difference as % of Supply	15%	5%	3%	2%	1%
Difference as % of Demand	17%	5%	3%	2%	1%
Supply Sufficient for Existing Service Area?	Yes	Yes	Yes	Yes	Yes
Add'l Supplemental Supply Needed for SOI Areas?	No	No	No	No	No
Notes: See Table 12 for information on Supply in Single Dry Year.					

Table 48. Projected Single-Dry Year Water Supply Compared to Normal Year Demand - Assuming Existing Land Uses with Amendments and 3.7% Growth Rate					
	2010	2015	2020	2025	2030
Supply (af)	5,200	5,200	5,200	5,200	5,200
Supply as % of Projected Normal	100%	100%	100%	100%	100%
Demand					
Town Division (af)	2,920	3,000	3,000	3,000	3,000
Blacklake Division (af)	530	530	530	530	530
SOI Areas (af)	250	480	590	710	850
In-Lieu NMMA Groundwater Recharge (af)	600	600	600	600	600
Unaccounted System Loss (af)	340	370	380	390	400
<i>Total Demand (af)</i>	4,640	4,980	5,100	5,230	5,380
Demand as % of Normal	100%	100%	100%	100%	100%
Difference (Supply minus Demand)	560	220	100	-30	-180
Difference as % of Supply	11%	4%	2%	-1%	-3%
Difference as % of Demand	12%	4%	2%	-1%	-3%
Supply Sufficient for Existing Service Area?	Yes	Yes	Yes	Yes	Yes
Add'l Supplemental Supply Needed for SOI Areas?	No	No	No	Yes	Yes
Notes: See Table 12 for information on Supply in Single Dry Year.					

Table 49. Projected Single-Dry Year Water Supply Compared to Normal Year Demand - Assuming Existing Land Uses with Amendments and 7.8% Growth Rate					
	2010	2015	2020	2025	2030
Supply (af)	5,200	5,200	5,200	5,200	5,200
Supply as % of Projected Normal	100%	100%	100%	100%	100%
Demand					
Town Division (af)	3,000	3,000	3,000	3,000	3,000
Blacklake Division (af)	530	530	530	530	530
SOI Areas (af)	250	560	820	1,190	1,420
In-Lieu NMMA Groundwater Recharge (af)	600	600	600	600	600
Unaccounted System Loss (af)	350	380	400	430	440
<i>Total Demand (af)</i>	4,730	5,070	5,350	5,750	5,990
Demand as % of Normal	100%	100%	100%	100%	100%
Difference (Supply minus Demand)	470	130	-150	-550	-790
Difference as % of Supply	9%	3%	-3%	-11%	-15%
Difference as % of Demand	10%	3%	-3%	-10%	-13%
Supply Sufficient for Existing Service Area?	Yes	Yes	Yes	Yes	Yes
Add'l Supplemental Supply Needed for SOI Areas?	No	No	Yes	Yes	Yes
Notes: See Table 12 for information on Supply in Single Dry Year.					

Table 50. Projected Single-Dry Year Water Supply Compared to Normal Year Demand - High Density Assumption and 2.3% Growth Rate					
	2010	2015	2020	2025	2030
Supply (af)	5,200	5,200	5,200	5,200	5,200
Supply as % of Projected Normal	100%	100%	100%	100%	100%
Demand					
Town Division (af)	2,720	3,050	3,300	3,300	3,300
Blacklake Division (af)	530	530	530	530	530
SOI Areas (af)	350	770	890	980	1,100
In-Lieu NMMA Groundwater Recharge (af)	600	600	600	600	600
Unaccounted System Loss (af)	340	400	430	430	440
<i>Total Demand (af)</i>	4,540	5,350	5,750	5,840	5,970
Demand as % of Normal	100%	100%	100%	100%	100%
Difference (Supply minus Demand)	660	-150	-550	-640	-770
Difference as % of Supply	13%	-3%	-11%	-12%	-15%
Difference as % of Demand	15%	-3%	-10%	-11%	-13%
Supply Sufficient for Existing Service Area?	Yes	Yes	Yes	Yes	Yes
Add'l Supplemental Supply Needed for SOI Areas?	No	Yes	Yes	Yes	Yes
Notes: See Table 12 for information on Supply in Single Dry Year.					

Table 51. Projected Single-Dry Year Water Supply Compared to Normal Year Demand - High Density Assumption and 3.7% Growth Rate					
	2010	2015	2020	2025	2030
Supply (af)	5,200	5,200	5,200	5,200	5,200
Supply as % of Projected Normal	100%	100%	100%	100%	100%
Demand					
Town Division (af)	2,920	3,300	3,300	3,300	3,300
Blacklake Division (af)	530	530	530	530	530
SOI Areas (af)	350	800	970	1,170	1,390
In-Lieu NMMA Groundwater Recharge (af)	600	600	600	600	600
Unaccounted System Loss (af)	350	420	430	450	470
<i>Total Demand (af)</i>	4,750	5,650	5,830	6,050	6,290
Demand as % of Normal	100%	100%	100%	100%	100%
Difference (Supply minus Demand)	450	-450	-630	-850	-1,090
Difference as % of Supply	9%	-9%	-12%	-16%	-21%
Difference as % of Demand	9%	-8%	-11%	-14%	-17%
Supply Sufficient for Existing Service Area?	Yes	Yes	Yes	Yes	Yes
Add'l Supplemental Supply Needed for SOI Areas?	No	Yes	Yes	Yes	Yes
Notes: See Table 12 for information on Supply in Single Dry Year.					

Table 52. Projected Single-Dry Year Water Supply Compared to Normal Year Demand - High Density Assumption and 7.8% Growth Rate					
	2010	2015	2020	2025	2030
Supply (af)	5,200	5,200	5,200	5,200	5,200
Supply as % of Projected Normal	100%	100%	100%	100%	100%
Demand					
Town Division (af)	3,300	3,300	3,300	3,300	3,300
Blacklake Division (af)	530	530	530	530	530
SOI Areas (af)	350	910	1,320	1,920	2,360
In-Lieu NMMA Groundwater Recharge (af)	600	600	600	600	600
Unaccounted System Loss (af)	380	430	460	510	540
<i>Total Demand (af)</i>	5,160	5,770	6,210	6,860	7,330
Demand as % of Normal	100%	100%	100%	100%	100%
Difference (Supply minus Demand)	40	-570	-1,010	-1,660	-2,130
Difference as % of Supply	1%	-11%	-19%	-32%	-41%
Difference as % of Demand	1%	-10%	-16%	-24%	-29%
Supply Sufficient for Existing Service Area?	Yes	Yes	Yes	Yes	Yes
Add'l Supplemental Supply Needed for SOI Areas?	No	Yes	Yes	Yes	Yes
Notes: See Table 12 for information on Supply in Single Dry Year.					

Table 53. Projected Single-Dry Year Water Supply and Demand Comparison - Assuming Existing Land Uses and 2.3% Growth Rate

	2010	2015	2020	2025	2030
Supply (af)	5,200	5,200	5,200	5,200	5,200
Supply as % of Projected Normal	100%	100%	100%	100%	100%
Demand					
Town Division (af)	2,450	2,700	2,700	2,700	2,700
Blacklake Division (af)	480	480	480	480	480
SOI Areas (af)	130	300	340	380	420
In-Lieu NMMA Groundwater Recharge (af)	600	600	600	600	600
Unaccounted System Loss (af)	290	330	330	330	340
<i>Total Demand (af)</i>	3,950	4,410	4,450	4,490	4,540
Demand as % of Normal	92%	91%	92%	91%	92%
Difference (Supply minus Demand)	1,250	790	750	710	660
Difference as % of Supply	24%	15%	14%	14%	13%
Difference as % of Demand	32%	18%	17%	16%	15%
Supply Sufficient for Existing Service Area?	Yes	Yes	Yes	Yes	Yes
Add'l Supplemental Supply Needed for SOI Areas?	No	No	No	No	No
Notes: See Table 12 for information on Supply in Single Dry Year.					

Table 54. Projected Single-Dry Year Water Supply and Demand Comparison - Assuming Existing Land Uses and 3.7% Growth Rate

	2010	2015	2020	2025	2030
Supply (af)	5,200	5,200	5,200	5,200	5,200
Supply as % of Projected Normal	100%	100%	100%	100%	100%
Demand					
Town Division (af)	2,630	2,700	2,700	2,700	2,700
Blacklake Division (af)	480	480	480	480	480
SOI Areas (af)	130	300	370	440	520
In-Lieu NMMA Groundwater Recharge (af)	600	600	600	600	600
Unaccounted System Loss (af)	310	330	330	340	340
<i>Total Demand (af)</i>	4,150	4,410	4,480	4,560	4,640
Demand as % of Normal	92%	91%	91%	91%	91%
Difference (Supply minus Demand)	1,050	790	720	640	560
Difference as % of Supply	20%	15%	14%	12%	11%
Difference as % of Demand	25%	18%	16%	14%	12%
Supply Sufficient for Existing Service Area?	Yes	Yes	Yes	Yes	Yes
Add'l Supplemental Supply Needed for SOI Areas?	No	No	No	No	No
Notes: See Table 12 for information on Supply in Single Dry Year.					

Table 55. Projected Single-Dry Year Water Supply and Demand Comparison - Assuming Existing Land Uses and 7.8% Growth Rate

	2010	2015	2020	2025	2030
Supply (af)	5,200	5,200	5,200	5,200	5,200
Supply as % of Projected Normal	100%	100%	100%	100%	100%
Demand					
Town Division (af)	2,700	2,700	2,700	2,700	2,700
Blacklake Division (af)	480	480	480	480	480
SOI Areas (af)	130	340	490	730	900
In-Lieu NMMA Groundwater Recharge (af)	600	600	600	600	600
Unaccounted System Loss (af)	310	330	340	360	370
<i>Total Demand (af)</i>	4,220	4,450	4,610	4,870	5,050
Demand as % of Normal	92%	91%	91%	92%	91%
Difference (Supply minus Demand)	980	750	590	330	150
Difference as % of Supply	19%	14%	11%	6%	3%
Difference as % of Demand	23%	17%	13%	7%	3%
Supply Sufficient for Existing Service Area?	Yes	Yes	Yes	Yes	Yes
Add'l Supplemental Supply Needed for SOI Areas?	No	No	No	No	No
Notes: See Table 12 for information on Supply in Single Dry Year.					

Table 56. Projected Single-Dry Year Water Supply and Demand Comparison - Assuming Existing Land Uses with Amendments and 2.3% Growth Rate

	2010	2015	2020	2025	2030
Supply (af)	5,200	5,200	5,200	5,200	5,200
Supply as % of Projected Normal	100%	100%	100%	100%	100%
Demand					
Town Division (af)	2,450	2,700	2,700	2,700	2,700
Blacklake Division (af)	480	480	480	480	480
SOI Areas (af)	230	410	480	550	610
In-Lieu NMMA Groundwater Recharge (af)	600	600	600	600	600
Unaccounted System Loss (af)	300	340	340	350	350
<i>Total Demand (af)</i>	4,060	4,530	4,600	4,680	4,740
Demand as % of Normal	92%	91%	91%	92%	92%
Difference (Supply minus Demand)	1,140	670	600	520	460
Difference as % of Supply	22%	13%	12%	10%	9%
Difference as % of Demand	28%	15%	13%	11%	10%
Supply Sufficient for Existing Service Area?	Yes	Yes	Yes	Yes	Yes
Add'l Supplemental Supply Needed for SOI Areas?	No	No	No	No	No
Notes: See Table 12 for information on Supply in Single Dry Year.					

Table 57. Projected Single-Dry Year Water Supply and Demand Comparison - Assuming Existing Land Uses with Amendments and 3.7% Growth Rate

	2010	2015	2020	2025	2030
Supply (af)	5,200	5,200	5,200	5,200	5,200
Supply as % of Projected Normal	100%	100%	100%	100%	100%
Demand					
Town Division (af)	2,630	2,700	2,700	2,700	2,700
Blacklake Division (af)	480	480	480	480	480
SOI Areas (af)	230	430	540	640	770
In-Lieu NMMA Groundwater Recharge (af)	600	600	600	600	600
Unaccounted System Loss (af)	320	340	350	350	360
<i>Total Demand (af)</i>	4,260	4,550	4,670	4,770	4,910
Demand as % of Normal	92%	91%	92%	91%	91%
Difference (Supply minus Demand)	940	650	530	430	290
Difference as % of Supply	18%	13%	10%	8%	6%
Difference as % of Demand	22%	14%	11%	9%	6%
Supply Sufficient for Existing Service Area?	Yes	Yes	Yes	Yes	Yes
Add'l Supplemental Supply Needed for SOI Areas?	No	No	No	No	No
Notes: See Table 12 for information on Supply in Single Dry Year.					

Table 58. Projected Single-Dry Year Water Supply and Demand Comparison - Assuming Existing Land Uses with Amendments and 7.8% Growth Rate

	2010	2015	2020	2025	2030
Supply (af)	5,200	5,200	5,200	5,200	5,200
Supply as % of Projected Normal	100%	100%	100%	100%	100%
Demand					
Town Division (af)	2,700	2,700	2,700	2,700	2,700
Blacklake Division (af)	480	480	480	480	480
SOI Areas (af)	230	510	750	1,070	1,290
In-Lieu NMMA Groundwater Recharge (af)	600	600	600	600	600
Unaccounted System Loss (af)	320	340	360	390	410
<i>Total Demand (af)</i>	4,330	4,630	4,890	5,240	5,480
Demand as % of Normal	92%	91%	91%	91%	91%
Difference (Supply minus Demand)	870	570	310	-40	-280
Difference as % of Supply	17%	11%	6%	-1%	-5%
Difference as % of Demand	20%	12%	6%	-1%	-5%
Supply Sufficient for Existing Service Area?	Yes	Yes	Yes	Yes	Yes
Add'l Supplemental Supply Needed for SOI Areas?	No	No	No	Yes	Yes
Notes: See Table 12 for information on Supply in Single Dry Year.					

Table 59. Projected Single-Dry Year Water Supply and Demand Comparison - High Density Assumption and 2.3% Growth Rate

	2010	2015	2020	2025	2030
Supply (af)	5,200	5,200	5,200	5,200	5,200
Supply as % of Projected Normal	100%	100%	100%	100%	100%
Demand					
Town Division (af)	2,450	2,750	2,970	2,970	2,970
Blacklake Division (af)	480	480	480	480	480
SOI Areas (af)	320	690	810	900	1,000
In-Lieu NMMA Groundwater Recharge (af)	600	600	600	600	600
Unaccounted System Loss (af)	310	360	390	400	400
<i>Total Demand (af)</i>	4,160	4,880	5,250	5,350	5,450
Demand as % of Normal	92%	91%	91%	92%	91%
Difference (Supply minus Demand)	1,040	320	-50	-150	-250
Difference as % of Supply	20%	6%	-1%	-3%	-5%
Difference as % of Demand	25%	7%	-1%	-3%	-5%
Supply Sufficient for Existing Service Area?	Yes	Yes	Yes	Yes	Yes
Add'l Supplemental Supply Needed for SOI Areas?	No	No	Yes	Yes	Yes
Notes: See Table 12 for information on Supply in Single Dry Year.					

Table 60. Projected Single-Dry Year Water Supply and Demand Comparison - High Density Assumption and 3.7% Growth Rate

	2010	2015	2020	2025	2030
Supply (af)	5,200	5,200	5,200	5,200	5,200
Supply as % of Projected Normal	100%	100%	100%	100%	100%
Demand					
Town Division (af)	2,630	2,970	2,970	2,970	2,970
Blacklake Division (af)	480	480	480	480	480
SOI Areas (af)	320	720	880	1,050	1,250
In-Lieu NMMA Groundwater Recharge (af)	600	600	600	600	600
Unaccounted System Loss (af)	320	380	390	410	420
<i>Total Demand (af)</i>	4,350	5,150	5,320	5,510	5,720
Demand as % of Normal	92%	91%	91%	91%	91%
Difference (Supply minus Demand)	850	50	-120	-310	-520
Difference as % of Supply	16%	1%	-2%	-6%	-10%
Difference as % of Demand	20%	1%	-2%	-6%	-9%
Supply Sufficient for Existing Service Area?	Yes	Yes	Yes	Yes	Yes
Add'l Supplemental Supply Needed for SOI Areas?	No	No	Yes	Yes	Yes
Notes: See Table 12 for information on Supply in Single Dry Year.					

Table 61. Projected Single-Dry Year Water Supply and Demand Comparison - High Density Assumption and 7.8% Growth Rate

	2010	2015	2020	2025	2030
Supply (af)	5,200	5,200	5,200	5,200	5,200
Supply as % of Projected Normal	100%	100%	100%	100%	100%
Demand					
Town Division (af)	2,970	2,970	2,970	2,970	2,970
Blacklake Division (af)	480	480	480	480	480
SOI Areas (af)	320	820	1,190	1,730	2,140
In-Lieu NMMA Groundwater Recharge (af)	600	600	600	600	600
Unaccounted System Loss (af)	350	390	420	460	500
<i>Total Demand (af)</i>	4,720	5,260	5,660	6,240	6,690
Demand as % of Normal	91%	91%	91%	91%	91%
Difference (Supply minus Demand)	480	-60	-460	-1,040	-1,490
Difference as % of Supply	9%	-1%	-9%	-20%	-29%
Difference as % of Demand	10%	-1%	-8%	-17%	-22%
Supply Sufficient for Existing Service Area?	Yes	Yes	Yes	Yes	Yes
Add'l Supplemental Supply Needed for SOI Areas?	No	Yes	Yes	Yes	Yes
Notes: See Table 12 for information on Supply in Single Dry Year.					

Table 71. Projected Multiple-Dry Year Water Supply and Demand Comparison For Year Ending 2015 - Assuming Existing Land Uses and 2.3% Growth Rate

	2011	2012	2013	2014	2015
Supply (af)	5,200	5,200	3,688	3,490	2,927
Supply as % of Projected Normal	100%	100%	71%	67%	56%
Demand					
Town Division (af)	2,460	2,520	2,010	2,050	2,100
Blacklake Division (af)	480	480	370	370	370
SOI Areas (af)	130	130	110	110	240
In-Lieu NMMA Groundwater Recharge (af)	600	600	600	600	600
Unaccounted System Loss (af)	290	300	250	250	260
<i>Total Demand (af)</i>	3,960	4,030	3,340	3,380	3,570
Demand as % of Normal	92%	93%	75%	75%	75%
Difference (Supply minus Demand)	1,240	1,170	348	110	-643
Difference as % of Supply	24%	23%	9%	3%	-22%
Difference as % of Demand	31%	29%	10%	3%	-18%
Supply Sufficient for Existing Service Area?	Yes	Yes	Yes	Yes	No
Add'l Supplemental Supply Needed for SOI Areas?	No	No	No	No	Yes
1. Supply in year 2010 and thereafter is made up of up to 2,900 afy NMMA groundwater, up to 300 afy Nipomo Valley Groundwater, and up to 2,000 afy supplemental water. See also Table 12.					

Table 72. Projected Multiple-Dry Year Water Supply and Demand Comparison For Year Ending 2015 - Assuming Existing Land Uses and 3.7% Growth Rate

	2011	2012	2013	2014	2015
Supply (af)	5,200	5,200	3,688	3,490	2,927
Supply as % of Projected Normal	100%	100%	71%	67%	56%
Demand					
Town Division (af)	2,460	2,520	2,010	2,050	2,100
Blacklake Division (af)	480	480	370	370	370
SOI Areas (af)	130	130	110	110	240
In-Lieu NMMA Groundwater Recharge (af)	600	600	600	600	600
Unaccounted System Loss (af)	290	300	250	250	260
<i>Total Demand (af)</i>	3,960	4,030	3,340	3,380	3,570
Demand as % of Normal	92%	93%	75%	75%	75%
Difference (Supply minus Demand)	1,240	1,170	348	110	-643
Difference as % of Supply	24%	23%	9%	3%	-22%
Difference as % of Demand	31%	29%	10%	3%	-18%
Supply Sufficient for Existing Service Area?	Yes	Yes	Yes	Yes	No
Add'l Supplemental Supply Needed for SOI Areas?	No	No	No	No	Yes
1. Supply in year 2010 and thereafter is made up of up to 2,900 afy NMMA groundwater, up to 300 afy Nipomo Valley Groundwater, and up to 2,000 afy supplemental water. See also Table 12.					

Table 73. Projected Multiple-Dry Year Water Supply and Demand Comparison For Year Ending 2015 - Assuming Existing Land Uses and 7.8% Growth Rate

	2011	2012	2013	2014	2015
Supply (af)	5,200	5,200	3,688	3,490	2,927
Supply as % of Projected Normal	100%	100%	71%	67%	56%
Demand					
Town Division (af)	2,700	2,700	2,100	2,100	2,100
Blacklake Division (af)	480	480	370	370	370
SOI Areas (af)	180	180	140	140	260
In-Lieu NMMA Groundwater Recharge (af)	600	600	600	600	600
Unaccounted System Loss (af)	320	320	260	260	270
<i>Total Demand (af)</i>	4,280	4,280	3,470	3,470	3,600
Demand as % of Normal	93%	93%	75%	75%	75%
Difference (Supply minus Demand)	920	920	218	20	-673
Difference as % of Supply	18%	18%	6%	1%	-23%
Difference as % of Demand	21%	21%	6%	1%	-19%
Supply Sufficient for Existing Service Area?	Yes	Yes	Yes	Yes	No
Add'l Supplemental Supply Needed for SOI Areas?	No	No	No	No	Yes
1. Supply in year 2010 and thereafter is made up of up to 2,900 afy NMMA groundwater, up to 300 afy Nipomo Valley Groundwater, and up to 2,000 afy supplemental water. See also Table 12.					

Table 74. Projected Multiple-Dry Year Water Supply and Demand Comparison For Year Ending 2015 - Assuming Existing Land Uses with Amendments and 2.3% Growth Rate

	2011	2012	2013	2014	2015
Supply (af)	5,200	5,200	3,688	3,490	2,927
Supply as % of Projected Normal	100%	100%	71%	67%	56%
Demand					
Town Division (af)	2,460	2,520	2,010	2,050	2,100
Blacklake Division (af)	480	480	370	370	370
SOI Areas (af)	230	230	190	200	330
In-Lieu NMMA Groundwater Recharge (af)	600	600	600	600	600
Unaccounted System Loss (af)	300	310	250	260	270
<i>Total Demand (af)</i>	4,070	4,140	3,420	3,480	3,670
Demand as % of Normal	93%	92%	75%	75%	75%
Difference (Supply minus Demand)	1,130	1,060	268	10	-743
Difference as % of Supply	22%	20%	7%	0%	-25%
Difference as % of Demand	28%	26%	8%	0%	-20%
Supply Sufficient for Existing Service Area?	Yes	Yes	Yes	Yes	No
Add'l Supplemental Supply Needed for SOI Areas?	No	No	No	No	Yes
1. Supply in year 2010 and thereafter is made up of up to 2,900 afy NMMA groundwater, up to 300 afy Nipomo Valley Groundwater, and up to 2,000 afy supplemental water. See also Table 12.					

Table 75. Projected Multiple-Dry Year Water Supply and Demand Comparison For Year Ending 2015 - Assuming Existing Land Uses with Amendments and 3.7% Growth Rate

	2011	2012	2013	2014	2015
Supply (af)	5,200	5,200	3,688	3,490	2,927
Supply as % of Projected Normal	100%	100%	71%	67%	56%
Demand					
Town Division (af)	2,460	2,520	2,010	2,050	2,100
Blacklake Division (af)	480	480	370	370	370
SOI Areas (af)	250	250	200	210	350
In-Lieu NMMA Groundwater Recharge (af)	600	600	600	600	600
Unaccounted System Loss (af)	300	310	250	260	270
<i>Total Demand (af)</i>	4,090	4,160	3,430	3,490	3,690
Demand as % of Normal	93%	93%	75%	75%	75%
Difference (Supply minus Demand)	1,110	1,040	258	0	-763
Difference as % of Supply	21%	20%	7%	0%	-26%
Difference as % of Demand	27%	25%	8%	0%	-21%
Supply Sufficient for Existing Service Area?	Yes	Yes	Yes	Yes	No
Add'l Supplemental Supply Needed for SOI Areas?	No	No	No	Yes	Yes
1. Supply in year 2010 and thereafter is made up of up to 2,900 afy NMMA groundwater, up to 300 afy Nipomo Valley Groundwater, and up to 2,000 afy supplemental water. See also Table 12.					

Table 76. Projected Multiple-Dry Year Water Supply and Demand Comparison For Year Ending 2015 - Assuming Existing Land Uses with Amendments and 7.8% Growth Rate

	2011	2012	2013	2014	2015
Supply (af)	5,200	5,200	3,688	3,490	2,927
Supply as % of Projected Normal	100%	100%	71%	67%	56%
Demand					
Town Division (af)	2,700	2,700	2,100	2,100	2,100
Blacklake Division (af)	480	480	370	370	370
SOI Areas (af)	310	320	250	260	390
In-Lieu NMMA Groundwater Recharge (af)	600	600	600	600	600
Unaccounted System Loss (af)	330	330	270	270	280
<i>Total Demand (af)</i>	4,420	4,430	3,590	3,600	3,740
Demand as % of Normal	92%	92%	75%	75%	75%
Difference (Supply minus Demand)	780	770	98	-110	-813
Difference as % of Supply	15%	15%	3%	-3%	-28%
Difference as % of Demand	18%	17%	3%	-3%	-22%
Supply Sufficient for Existing Service Area?	Yes	Yes	Yes	Yes	No
Add'l Supplemental Supply Needed for SOI Areas?	No	No	No	Yes	Yes
1. Supply in year 2010 and thereafter is made up of up to 2,900 afy NMMA groundwater, up to 300 afy Nipomo Valley Groundwater, and up to 2,000 afy supplemental water. See also Table 12.					

Table 77. Projected Multiple-Dry Year Water Supply and Demand Comparison For Year Ending 2015 - High Density Assumption and 2.3% Growth Rate

	2011	2012	2013	2014	2015
Supply (af)	5,200	5,200	3,688	3,490	2,927
Supply as % of Projected Normal	100%	100%	71%	67%	56%
Demand					
Town Division (af)	2,500	2,560	2,040	2,090	2,140
Blacklake Division (af)	480	480	370	370	370
SOI Areas (af)	320	330	270	270	550
In-Lieu NMMA Groundwater Recharge (af)	600	600	600	600	600
Unaccounted System Loss (af)	310	320	260	270	290
<i>Total Demand (af)</i>	4,210	4,290	3,540	3,600	3,950
Demand as % of Normal	92%	93%	75%	75%	75%
Difference (Supply minus Demand)	990	910	148	-110	-1,023
Difference as % of Supply	19%	18%	4%	-3%	-35%
Difference as % of Demand	24%	21%	4%	-3%	-26%
Supply Sufficient for Existing Service Area?	Yes	Yes	Yes	Yes	No
Add'l Supplemental Supply Needed for SOI Areas?	No	No	No	Yes	Yes
1. Supply in year 2010 and thereafter is made up of up to 2,900 afy NMMA groundwater, up to 300 afy Nipomo Valley Groundwater, and up to 2,000 afy supplemental water. See also Table 12.					

Table 78. Projected Multiple-Dry Year Water Supply and Demand Comparison For Year Ending 2015 - High Density Assumption and 3.7% Growth Rate

	2011	2012	2013	2014	2015
Supply (af)	5,200	5,200	3,688	3,490	2,927
Supply as % of Projected Normal	100%	100%	71%	67%	56%
Demand					
Town Division (af)	2,710	2,770	2,210	2,260	2,310
Blacklake Division (af)	480	480	370	370	370
SOI Areas (af)	350	350	280	300	570
In-Lieu NMMA Groundwater Recharge (af)	600	600	600	600	600
Unaccounted System Loss (af)	330	340	280	280	310
<i>Total Demand (af)</i>	4,470	4,540	3,740	3,810	4,160
Demand as % of Normal	92%	92%	75%	75%	74%
Difference (Supply minus Demand)	730	660	-52	-320	-1,233
Difference as % of Supply	14%	13%	-1%	-9%	-42%
Difference as % of Demand	16%	15%	-1%	-8%	-30%
Supply Sufficient for Existing Service Area?	Yes	Yes	Yes	Yes	No
Add'l Supplemental Supply Needed for SOI Areas?	No	No	Yes	Yes	Yes
1. Supply in year 2010 and thereafter is made up of up to 2,900 afy NMMA groundwater, up to 300 afy Nipomo Valley Groundwater, and up to 2,000 afy supplemental water. See also Table 12.					

Table 79. Projected Multiple-Dry Year Water Supply and Demand Comparison For Year Ending 2015 - High Density Assumption and 7.8% Growth Rate

	2011	2012	2013	2014	2015
Supply (af)	5,200	5,200	3,688	3,490	2,927
Supply as % of Projected Normal	100%	100%	71%	67%	56%
Demand					
Town Division (af)	2,970	2,970	2,310	2,310	2,310
Blacklake Division (af)	480	480	370	370	370
SOI Areas (af)	430	450	350	360	640
In-Lieu NMMA Groundwater Recharge (af)	600	600	600	600	600
Unaccounted System Loss (af)	360	360	290	290	310
<i>Total Demand (af)</i>	4,840	4,860	3,920	3,930	4,230
Demand as % of Normal	92%	92%	74%	74%	74%
Difference (Supply minus Demand)	360	340	-232	-440	-1,303
Difference as % of Supply	7%	7%	-6%	-13%	-45%
Difference as % of Demand	7%	7%	-6%	-11%	-31%
Supply Sufficient for Existing Service Area?	Yes	Yes	Yes	No	No
Add'l Supplemental Supply Needed for SOI Areas?	No	No	Yes	Yes	Yes
1. Supply in year 2010 and thereafter is made up of up to 2,900 afy NMMA groundwater, up to 300 afy Nipomo Valley Groundwater, and up to 2,000 afy supplemental water. See also Table 12.					

Table 80. Projected Multiple-Dry Year Water Supply and Demand Comparison For Year Ending 2020 - Assuming Existing Land Uses and 2.3% Growth Rate

	2016	2017	2018	2019	2020
Supply (af)	5,200	5,200	3,688	3,490	2,927
Supply as % of Projected Normal	100%	100%	71%	67%	56%
Demand					
Town Division (af)	2,700	2,700	2,100	2,100	2,100
Blacklake Division (af)	480	480	370	370	370
SOI Areas (af)	310	310	240	250	260
In-Lieu NMMA Groundwater Recharge (af)	600	600	600	600	600
Unaccounted System Loss (af)	330	330	260	270	270
<i>Total Demand (af)</i>	4,420	4,420	3,570	3,590	3,600
Demand as % of Normal	93%	92%	74%	75%	75%
Difference (Supply minus Demand)	780	780	118	-100	-673
Difference as % of Supply	15%	15%	3%	-3%	-23%
Difference as % of Demand	18%	18%	3%	-3%	-19%
Supply Sufficient for Existing Service Area?	Yes	Yes	Yes	Yes	No
Add'l Supplemental Supply Needed for SOI Areas?	No	No	No	Yes	Yes
1. Supply in year 2010 and thereafter is made up of up to 2,900 afy NMMA groundwater, up to 300 afy Nipomo Valley Groundwater, and up to 2,000 afy supplemental water. See also Table 12.					

Table 81. Projected Multiple-Dry Year Water Supply and Demand Comparison For Year Ending 2020 - Assuming Existing Land Uses and 3.7% Growth Rate

	2016	2017	2018	2019	2020
Supply (af)	5,200	5,200	3,688	3,490	2,927
Supply as % of Projected Normal	100%	100%	71%	67%	56%
Demand					
Town Division (af)	2,700	2,700	2,100	2,100	2,100
Blacklake Division (af)	480	480	370	370	370
SOI Areas (af)	350	350	280	280	280
In-Lieu NMMA Groundwater Recharge (af)	600	600	600	600	600
Unaccounted System Loss (af)	330	330	270	270	270
<i>Total Demand (af)</i>	4,460	4,460	3,620	3,620	3,620
Demand as % of Normal	93%	92%	75%	75%	75%
Difference (Supply minus Demand)	740	740	68	-130	-693
Difference as % of Supply	14%	14%	2%	-4%	-24%
Difference as % of Demand	17%	17%	2%	-4%	-19%
Supply Sufficient for Existing Service Area?	Yes	Yes	Yes	Yes	No
Add'l Supplemental Supply Needed for SOI Areas?	No	No	No	Yes	Yes
1. Supply in year 2010 and thereafter is made up of up to 2,900 afy NMMA groundwater, up to 300 afy Nipomo Valley Groundwater, and up to 2,000 afy supplemental water. See also Table 12.					

Table 82. Projected Multiple-Dry Year Water Supply and Demand Comparison For Year Ending 2020 - Assuming Existing Land Uses and 7.8% Growth Rate

	2016	2017	2018	2019	2020
Supply (af)	5,200	5,200	3,688	3,490	2,927
Supply as % of Projected Normal	100%	100%	71%	67%	56%
Demand					
Town Division (af)	2,700	2,700	2,100	2,100	2,100
Blacklake Division (af)	480	480	370	370	370
SOI Areas (af)	440	470	370	370	380
In-Lieu NMMA Groundwater Recharge (af)	600	600	600	600	600
Unaccounted System Loss (af)	340	340	280	280	280
<i>Total Demand (af)</i>	4,560	4,590	3,720	3,720	3,730
Demand as % of Normal	92%	92%	75%	75%	75%
Difference (Supply minus Demand)	640	610	-32	-230	-803
Difference as % of Supply	12%	12%	-1%	-7%	-27%
Difference as % of Demand	14%	13%	-1%	-6%	-22%
Supply Sufficient for Existing Service Area?	Yes	Yes	Yes	Yes	No
Add'l Supplemental Supply Needed for SOI Areas?	No	No	Yes	Yes	Yes
1. Supply in year 2010 and thereafter is made up of up to 2,900 afy NMMA groundwater, up to 300 afy Nipomo Valley Groundwater, and up to 2,000 afy supplemental water. See also Table 12.					

Table 83. Projected Multiple-Dry Year Water Supply and Demand Comparison For Year Ending 2020 - Assuming Existing Land Uses with Amendments and 2.3% Growth Rate

	2016	2017	2018	2019	2020
Supply (af)	5,200	5,200	3,688	3,490	2,927
Supply as % of Projected Normal	100%	100%	71%	67%	56%
Demand					
Town Division (af)	2,700	2,700	2,100	2,100	2,100
Blacklake Division (af)	480	480	370	370	370
SOI Areas (af)	440	450	350	360	360
In-Lieu NMMA Groundwater Recharge (af)	600	600	600	600	600
Unaccounted System Loss (af)	340	340	270	270	270
<i>Total Demand (af)</i>	4,560	4,570	3,690	3,700	3,700
Demand as % of Normal	92%	92%	74%	74%	74%
Difference (Supply minus Demand)	640	630	-2	-210	-773
Difference as % of Supply	12%	12%	0%	-6%	-26%
Difference as % of Demand	14%	14%	0%	-6%	-21%
Supply Sufficient for Existing Service Area?	Yes	Yes	Yes	Yes	No
Add'l Supplemental Supply Needed for SOI Areas?	No	No	Yes	Yes	Yes
1. Supply in year 2010 and thereafter is made up of up to 2,900 afy NMMA groundwater, up to 300 afy Nipomo Valley Groundwater, and up to 2,000 afy supplemental water. See also Table 12.					

Table 84. Projected Multiple-Dry Year Water Supply and Demand Comparison For Year Ending 2020 - Assuming Existing Land Uses with Amendments and 3.7% Growth Rate

	2016	2017	2018	2019	2020
Supply (af)	5,200	5,200	3,688	3,490	2,927
Supply as % of Projected Normal	100%	100%	71%	67%	56%
Demand					
Town Division (af)	2,700	2,700	2,100	2,100	2,100
Blacklake Division (af)	480	480	370	370	370
SOI Areas (af)	490	490	400	400	410
In-Lieu NMMA Groundwater Recharge (af)	600	600	600	600	600
Unaccounted System Loss (af)	340	340	280	280	280
<i>Total Demand (af)</i>	4,610	4,610	3,750	3,750	3,760
Demand as % of Normal	92%	92%	75%	74%	74%
Difference (Supply minus Demand)	590	590	-62	-260	-833
Difference as % of Supply	11%	11%	-2%	-7%	-28%
Difference as % of Demand	13%	13%	-2%	-7%	-22%
Supply Sufficient for Existing Service Area?	Yes	Yes	Yes	Yes	No
Add'l Supplemental Supply Needed for SOI Areas?	No	No	Yes	Yes	Yes
1. Supply in year 2010 and thereafter is made up of up to 2,900 afy NMMA groundwater, up to 300 afy Nipomo Valley Groundwater, and up to 2,000 afy supplemental water. See also Table 12.					

Table 85. Projected Multiple-Dry Year Water Supply and Demand Comparison For Year Ending 2020 - Assuming Existing Land Uses with Amendments and 7.8% Growth Rate

	2016	2017	2018	2019	2020
Supply (af)	5,200	5,200	3,688	3,490	2,927
Supply as % of Projected Normal	100%	100%	71%	67%	56%
Demand					
Town Division (af)	2,700	2,700	2,100	2,100	2,100
Blacklake Division (af)	480	480	370	370	370
SOI Areas (af)	660	700	540	560	580
In-Lieu NMMA Groundwater Recharge (af)	600	600	600	600	600
Unaccounted System Loss (af)	360	360	290	290	290
<i>Total Demand (af)</i>	4,800	4,840	3,900	3,920	3,940
Demand as % of Normal	92%	92%	74%	74%	74%
Difference (Supply minus Demand)	400	360	-212	-430	-1,013
Difference as % of Supply	8%	7%	-6%	-12%	-35%
Difference as % of Demand	8%	7%	-5%	-11%	-26%
Supply Sufficient for Existing Service Area?	Yes	Yes	Yes	Yes	No
Add'l Supplemental Supply Needed for SOI Areas?	No	No	Yes	Yes	Yes
1. Supply in year 2010 and thereafter is made up of up to 2,900 afy NMMA groundwater, up to 300 afy Nipomo Valley Groundwater, and up to 2,000 afy supplemental water. See also Table 12.					

Table 86. Projected Multiple-Dry Year Water Supply and Demand Comparison For Year Ending 2020 - High Density Assumption and 2.3% Growth Rate

	2016	2017	2018	2019	2020
Supply (af)	5,200	5,200	3,688	3,490	2,927
Supply as % of Projected Normal	100%	100%	71%	67%	56%
Demand					
Town Division (af)	2,710	2,770	2,210	2,260	2,310
Blacklake Division (af)	480	480	370	370	370
SOI Areas (af)	730	750	590	270	620
In-Lieu NMMA Groundwater Recharge (af)	600	600	600	600	600
Unaccounted System Loss (af)	360	370	300	280	310
<i>Total Demand (af)</i>	4,880	4,970	4,070	3,780	4,210
Demand as % of Normal	90%	90%	72%	67%	74%
Difference (Supply minus Demand)	320	230	-382	-290	-1,283
Difference as % of Supply	6%	4%	-10%	-8%	-44%
Difference as % of Demand	7%	5%	-9%	-8%	-30%
Supply Sufficient for Existing Service Area?	Yes	Yes	Yes	Yes	No
Add'l Supplemental Supply Needed for SOI Areas?	No	No	Yes	Yes	Yes
1. Supply in year 2010 and thereafter is made up of up to 2,900 afy NMMA groundwater, up to 300 afy Nipomo Valley Groundwater, and up to 2,000 afy supplemental water. See also Table 12.					

Table 87. Projected Multiple-Dry Year Water Supply and Demand Comparison For Year Ending 2020 - High Density Assumption and 3.7% Growth Rate

	2016	2017	2018	2019	2020
Supply (af)	5,200	5,200	3,688	3,490	2,927
Supply as % of Projected Normal	100%	100%	71%	67%	56%
Demand					
Town Division (af)	2,970	2,970	2,310	2,310	2,310
Blacklake Division (af)	480	480	370	370	370
SOI Areas (af)	810	820	650	670	670
In-Lieu NMMA Groundwater Recharge (af)	600	600	600	600	600
Unaccounted System Loss (af)	390	390	310	320	320
<i>Total Demand (af)</i>	5,250	5,260	4,240	4,270	4,270
Demand as % of Normal	92%	92%	74%	74%	74%
Difference (Supply minus Demand)	-50	-60	-552	-780	-1,343
Difference as % of Supply	-1%	-1%	-15%	-22%	-46%
Difference as % of Demand	-1%	-1%	-13%	-18%	-31%
Supply Sufficient for Existing Service Area?	Yes	Yes	Yes	No	No
Add'l Supplemental Supply Needed for SOI Areas?	Yes	Yes	Yes	Yes	Yes
1. Supply in year 2010 and thereafter is made up of up to 2,900 afy NMMA groundwater, up to 300 afy Nipomo Valley Groundwater, and up to 2,000 afy supplemental water. See also Table 12.					

Table 88. Projected Multiple-Dry Year Water Supply and Demand Comparison For Year Ending 2020 - High Density Assumption and 7.8% Growth Rate

	2016	2017	2018	2019	2020
Supply (af)	5,200	5,200	3,688	3,490	2,927
Supply as % of Projected Normal	100%	100%	71%	67%	56%
Demand					
Town Division (af)	2,970	2,970	2,310	2,310	2,310
Blacklake Division (af)	480	480	370	370	370
SOI Areas (af)	1,070	1,120	880	900	920
In-Lieu NMMA Groundwater Recharge (af)	600	600	600	600	600
Unaccounted System Loss (af)	410	410	330	330	340
<i>Total Demand (af)</i>	5,530	5,580	4,490	4,510	4,540
Demand as % of Normal	92%	92%	74%	74%	74%
Difference (Supply minus Demand)	-330	-380	-802	-1,020	-1,613
Difference as % of Supply	-6%	-7%	-22%	-29%	-55%
Difference as % of Demand	-6%	-7%	-18%	-23%	-36%
Supply Sufficient for Existing Service Area?	Yes	Yes	Yes	No	No
Add'l Supplemental Supply Needed for SOI Areas?	Yes	Yes	Yes	Yes	Yes
1. Supply in year 2010 and thereafter is made up of up to 2,900 afy NMMA groundwater, up to 300 afy Nipomo Valley Groundwater, and up to 2,000 afy supplemental water. See also Table 12.					

Table 89. Projected Multiple-Dry Year Water Supply and Demand Comparison For Year Ending 2025 - Assuming Existing Land Uses and 2.3% Growth Rate					
	2021	2022	2023	2024	2025
Supply (af)	5,200	5,200	3,688	3,490	2,927
Supply as % of Projected Normal	100%	100%	71%	67%	56%
Demand					
Town Division (af)	2,700	2,700	2,100	2,100	2,100
Blacklake Division (af)	480	480	370	370	370
SOI Areas (af)	350	360	270	280	290
In-Lieu NMMA Groundwater Recharge (af)	600	600	600	600	600
Unaccounted System Loss (af)	330	330	270	270	270
Total Demand (af)	4,460	4,470	3,610	3,620	3,630
Demand as % of Normal	92%	92%	75%	75%	75%
Difference (Supply minus Demand)	740	730	78	-130	-703
Difference as % of Supply	14%	14%	2%	-4%	-24%
Difference as % of Demand	17%	16%	2%	-4%	-19%
Supply Sufficient for Existing Service Area?	Yes	Yes	Yes	Yes	No
Add'l Supplemental Supply Needed for SOI Areas?	No	No	No	Yes	Yes
1. Supply in year 2010 and thereafter is made up of up to 2,900 afy NMMA groundwater, up to 300 afy Nipomo Valley Groundwater, and up to 2,000 afy supplemental water. See also Table 12.					

Table 90. Projected Multiple-Dry Year Water Supply and Demand Comparison For Year Ending 2025 - Assuming Existing Land Uses and 3.7% Growth Rate					
	2021	2022	2023	2024	2025
Supply (af)	5,200	5,200	3,688	3,490	2,927
Supply as % of Projected Normal	100%	100%	71%	67%	56%
Demand					
Town Division (af)	2,700	2,700	2,100	2,100	2,100
Blacklake Division (af)	480	480	370	370	370
SOI Areas (af)	400	420	330	330	340
In-Lieu NMMA Groundwater Recharge (af)	600	600	600	600	600
Unaccounted System Loss (af)	330	340	270	270	270
Total Demand (af)	4,510	4,540	3,670	3,670	3,680
Demand as % of Normal	92%	93%	75%	74%	74%
Difference (Supply minus Demand)	690	660	18	-180	-753
Difference as % of Supply	13%	13%	0%	-5%	-26%
Difference as % of Demand	15%	15%	0%	-5%	-20%
Supply Sufficient for Existing Service Area?	Yes	Yes	Yes	Yes	No
Add'l Supplemental Supply Needed for SOI Areas?	No	No	No	Yes	Yes
1. Supply in year 2010 and thereafter is made up of up to 2,900 afy NMMA groundwater, up to 300 afy Nipomo Valley Groundwater, and up to 2,000 afy supplemental water. See also Table 12.					

Table 91. Projected Multiple-Dry Year Water Supply and Demand Comparison For Year Ending 2025 - Assuming Existing Land Uses and 7.8% Growth Rate					
	2021	2022	2023	2024	2025
Supply (af)	5,200	5,200	3,688	3,490	2,927
Supply as % of Projected Normal	100%	100%	71%	67%	56%
Demand					
Town Division (af)	2,700	2,700	2,100	2,100	2,100
Blacklake Division (af)	480	480	370	370	370
SOI Areas (af)	660	670	540	550	560
In-Lieu NMMA Groundwater Recharge (af)	600	600	600	600	600
Unaccounted System Loss (af)	360	360	290	290	290
Total Demand (af)	4,800	4,810	3,900	3,910	3,920
Demand as % of Normal	92%	92%	74%	74%	74%
Difference (Supply minus Demand)	400	390	-212	-420	-993
Difference as % of Supply	8%	8%	-6%	-12%	-34%
Difference as % of Demand	8%	8%	-5%	-11%	-25%
Supply Sufficient for Existing Service Area?	Yes	Yes	Yes	Yes	No
Add'l Supplemental Supply Needed for SOI Areas?	No	No	Yes	Yes	Yes
1. Supply in year 2010 and thereafter is made up of up to 2,900 afy NMMA groundwater, up to 300 afy Nipomo Valley Groundwater, and up to 2,000 afy supplemental water. See also Table 12.					

Table 92. Projected Multiple-Dry Year Water Supply and Demand Comparison For Year Ending 2025 - Assuming Existing Land Uses with Amendments and 2.3% Growth Rate					
	2021	2022	2023	2024	2025
Supply (af)	5,200	5,200	3,688	3,490	2,927
Supply as % of Projected Normal	100%	100%	71%	67%	56%
Demand					
Town Division (af)	2,700	2,700	2,100	2,100	2,100
Blacklake Division (af)	480	480	370	370	370
SOI Areas (af)	500	500	350	410	410
In-Lieu NMMA Groundwater Recharge (af)	600	600	600	600	600
Unaccounted System Loss (af)	340	340	270	280	280
Total Demand (af)	4,620	4,620	3,690	3,760	3,760
Demand as % of Normal	92%	92%	73%	75%	74%
Difference (Supply minus Demand)	580	580	-2	-270	-833
Difference as % of Supply	11%	11%	0%	-8%	-28%
Difference as % of Demand	13%	13%	0%	-7%	-22%
Supply Sufficient for Existing Service Area?	Yes	Yes	Yes	Yes	No
Add'l Supplemental Supply Needed for SOI Areas?	No	No	Yes	Yes	Yes
1. Supply in year 2010 and thereafter is made up of up to 2,900 afy NMMA groundwater, up to 300 afy Nipomo Valley Groundwater, and up to 2,000 afy supplemental water. See also Table 12.					

Table 93. Projected Multiple-Dry Year Water Supply and Demand Comparison For Year Ending 2025 - Assuming Existing Land Uses with Amendments and 3.7% Growth Rate					
	2021	2022	2023	2024	2025
Supply (af)	5,200	5,200	3,688	3,490	2,927
Supply as % of Projected Normal	100%	100%	71%	67%	56%
Demand					
Town Division (af)	2,700	2,700	2,100	2,100	2,100
Blacklake Division (af)	480	480	370	370	370
SOI Areas (af)	580	600	470	480	500
In-Lieu NMMA Groundwater Recharge (af)	600	600	600	600	600
Unaccounted System Loss (af)	350	350	280	280	290
Total Demand (af)	4,710	4,730	3,820	3,830	3,860
Demand as % of Normal	92%	92%	74%	74%	75%
Difference (Supply minus Demand)	490	470	-132	-340	-933
Difference as % of Supply	9%	9%	-4%	-10%	-32%
Difference as % of Demand	10%	10%	-3%	-9%	-24%
Supply Sufficient for Existing Service Area?	Yes	Yes	Yes	Yes	No
Add'l Supplemental Supply Needed for SOI Areas?	No	No	Yes	Yes	Yes
1. Supply in year 2010 and thereafter is made up of up to 2,900 afy NMMA groundwater, up to 300 afy Nipomo Valley Groundwater, and up to 2,000 afy supplemental water. See also Table 12.					

Table 94. Projected Multiple-Dry Year Water Supply and Demand Comparison For Year Ending 2025 - Assuming Existing Land Uses with Amendments and 7.8% Growth Rate					
	2021	2022	2023	2024	2025
Supply (af)	5,200	5,200	3,688	3,490	2,927
Supply as % of Projected Normal	100%	100%	71%	67%	56%
Demand					
Town Division (af)	2,700	2,700	2,100	2,100	2,100
Blacklake Division (af)	480	480	370	370	370
SOI Areas (af)	980	990	800	820	840
In-Lieu NMMA Groundwater Recharge (af)	600	600	600	600	600
Unaccounted System Loss (af)	380	380	310	310	310
Total Demand (af)	5,140	5,150	4,180	4,200	4,220
Demand as % of Normal	92%	92%	74%	74%	74%
Difference (Supply minus Demand)	60	50	-492	-710	-1,293
Difference as % of Supply	1%	1%	-13%	-20%	-44%
Difference as % of Demand	1%	1%	-12%	-17%	-31%
Supply Sufficient for Existing Service Area?	Yes	Yes	Yes	Yes	No
Add'l Supplemental Supply Needed for SOI Areas?	No	No	Yes	Yes	Yes
1. Supply in year 2010 and thereafter is made up of up to 2,900 afy NMMA groundwater, up to 300 afy Nipomo Valley Groundwater, and up to 2,000 afy supplemental water. See also Table 12.					

Table 95. Projected Multiple-Dry Year Water Supply and Demand Comparison For Year Ending 2025 - High Density Assumption and 2.3% Growth Rate					
	2021	2022	2023	2024	2025
Supply (af)	5,200	5,200	3,688	3,490	2,927
Supply as % of Projected Normal	100%	100%	71%	67%	56%
Demand					
Town Division (af)	2,970	2,970	2,310	2,310	2,310
Blacklake Division (af)	480	480	370	370	370
SOI Areas (af)	820	830	650	670	690
In-Lieu NMMA Groundwater Recharge (af)	600	600	600	600	600
Unaccounted System Loss (af)	390	390	310	320	320
Total Demand (af)	5,260	5,270	4,240	4,270	4,290
Demand as % of Normal	92%	92%	74%	74%	74%
Difference (Supply minus Demand)	-60	-70	-552	-780	-1,363
Difference as % of Supply	-1%	-1%	-15%	-22%	-47%
Difference as % of Demand	-1%	-1%	-13%	-18%	-32%
Supply Sufficient for Existing Service Area?	Yes	Yes	Yes	No	No
Add'l Supplemental Supply Needed for SOI Areas?	Yes	Yes	Yes	Yes	Yes
1. Supply in year 2010 and thereafter is made up of up to 2,900 afy NMMA groundwater, up to 300 afy Nipomo Valley Groundwater, and up to 2,000 afy supplemental water. See also Table 12.					

Table 96. Projected Multiple-Dry Year Water Supply and Demand Comparison For Year Ending 2025 - High Density Assumption and 3.7% Growth Rate					
	2021	2022	2023	2024	2025
Supply (af)	5,200	5,200	3,688	3,490	2,927
Supply as % of Projected Normal	100%	100%	71%	67%	56%
Demand					
Town Division (af)	2,970	2,970	2,310	2,310	2,310
Blacklake Division (af)	480	480	370	370	370
SOI Areas (af)	960	990	780	800	810
In-Lieu NMMA Groundwater Recharge (af)	600	600	600	600	600
Unaccounted System Loss (af)	400	400	320	330	330
Total Demand (af)	5,410	5,440	4,380	4,410	4,420
Demand as % of Normal	92%	92%	74%	74%	74%
Difference (Supply minus Demand)	-210	-240	-692	-920	-1,493
Difference as % of Supply	-4%	-5%	-19%	-26%	-51%
Difference as % of Demand	-4%	-4%	-16%	-21%	-34%
Supply Sufficient for Existing Service Area?	Yes	Yes	Yes	No	No
Add'l Supplemental Supply Needed for SOI Areas?	Yes	Yes	Yes	Yes	Yes
1. Supply in year 2010 and thereafter is made up of up to 2,900 afy NMMA groundwater, up to 300 afy Nipomo Valley Groundwater, and up to 2,000 afy supplemental water. See also Table 12.					

Table 97. Projected Multiple-Dry Year Water Supply and Demand Comparison For Year Ending 2025 - High Density Assumption and 7.8% Growth Rate					
	2021	2022	2023	2024	2025
Supply (af)	5,200	5,200	3,688	3,490	2,927
Supply as % of Projected Normal	100%	100%	71%	67%	56%
Demand					
Town Division (af)	2,970	2,970	2,310	2,310	2,310
Blacklake Division (af)	480	480	370	370	370
SOI Areas (af)	1,580	1,600	1,290	1,320	1,350
In-Lieu NMMA Groundwater Recharge (af)	600	600	600	600	600
Unaccounted System Loss (af)	450	450	370	370	370
Total Demand (af)	6,080	6,100	4,940	4,970	5,000
Demand as % of Normal	92%	91%	74%	73%	73%
Difference (Supply minus Demand)	-880	-900	-1,252	-1,480	-2,073
Difference as % of Supply	-17%	-17%	-34%	-42%	-71%
Difference as % of Demand	-14%	-15%	-25%	-30%	-41%
Supply Sufficient for Existing Service Area?	Yes	Yes	Yes	No	No
Add'l Supplemental Supply Needed for SOI Areas?	Yes	Yes	Yes	Yes	Yes
1. Supply in year 2010 and thereafter is made up of up to 2,900 afy NMMA groundwater, up to 300 afy Nipomo Valley Groundwater, and up to 2,000 afy supplemental water. See also Table 12.					

7.0 ADOPTION AND IMPLEMENTATION OF UWMP

7.1 ADOPTION RESOLUTION

**NIPOMO COMMUNITY SERVICES DISTRICT
RESOLUTION NO. 2006-963**

**A RESOLUTION OF THE BOARD OF DIRECTORS
OF THE NIPOMO COMMUNITY SERVICES DISTRICT
ADOPTION BY THE NIPOMO COMMUNITY SERVICES DISTRICT OF
ITS URBAN WATER MANAGEMENT PLAN 2005 UPDATE**

WHEREAS, California Water Code Section 10621(a) requires each urban water supplier to update its urban water management plan at least once every five years on or before December 31, in years ending in five and zero; and

WHEREAS, Nipomo Community Services District (NCSD) began its public outreach and community involvement in the preparation of the Draft Urban Water Management Plan 2005 Update (UWMP) on June 22, 2005, with its first scheduled public meeting to discuss the project followed by additional meetings with local governmental and community organizations; and

WHEREAS, pursuant to Water Code Section 10621(b), on June 17, 2005, NCSD notified the County of San Luis Obispo and the Local Agency Formation Commission of San Luis Obispo County that it would be preparing its 2005 UWMP, and subsequently met with, consulted with and obtained comments from the Local Agency Formation Commission, San Luis Obispo County, and the City of Santa Maria; and

WHEREAS, on December 14, 2005, the Draft UWMP 2005 Update was posted to NCSD's website; and

WHEREAS, on January 25, 2006, NCSD held a public hearing properly noticed pursuant to Water Code Section 10642 and Government Code Section 6066, at which time NCSD's Board of Directors reviewed the Draft UWMP 2005 Update and, as part of that review, considered a presentation of the Draft UWMP 2005 Update by its staff and consultants, oral and written public comments; and

WHEREAS, pursuant to Water Code Section 10620(d)(2), NCSD coordinated the preparation of its Draft UWMP 2005 Update with other appropriate agencies in the area, including other water suppliers that share a common source, water management agencies, and relevant public agencies, to the extent practicable; and

WHEREAS, pursuant to Water Code Section 10620(f), NCSD describes in the Draft UWMP 2005 Update water management tools and options used by NCSD that will maximize resources and minimize the need to import water from other regions; and

WHEREAS, pursuant to Water Code Section 10642, NCSD encouraged the active involvement of diverse social, cultural, and economic elements of the population within its service area prior to and during the preparation of the Draft UWMP 2005 Update, which included, but is not limited to, posting the Draft UWMP 2005 Update on NCSD's website; distributing the Draft UWMP 2005 Update to the Nipomo Branch of the San Luis Obispo Library for public review; distributing the Draft UWMP 2005 Update to the City of Santa Maria, the County of San Luis Obispo, the Local Agency Formation Commission of San Luis Obispo County, commencing on December 12, 2005, the NCSD initiated a broad mail/email campaign that announced to the public and various local community groups the availability of the Draft 2005 Update with an invitation for

RESOLUTION NO. 2006-963

**A RESOLUTION OF THE BOARD OF DIRECTORS
OF THE NIPOMO COMMUNITY SERVICES DISTRICT
ADOPTION BY THE NIPOMO COMMUNITY SERVICES DISTRICT OF
ITS URBAN WATER MANAGEMENT PLAN 2005 UPDATE**

written comments; holding three (3) public meetings between June 2005 and January 2006, regarding the Draft UWMP 2005 Update and coordinating the preparation of the Draft UWMP 2005 Update with the local retail water agencies; and

WHEREAS, to assure public participation in the process, NCSD has exceeded the requirements of the UWMP Act, by holding more than one public hearing; and

WHEREAS, the NCSD Board of Directors has considered the public and Board comments made at the public hearing, as well as written public comments on the Draft UWMP 2005 Update distributed to the Board of Directors; and

WHEREAS, the NCSD Board of Directors has carefully reviewed the Draft UWMP 2005 Update, the erratas and any modifications made at the hearing; and

WHEREAS, NCSD Board of Directors finds that the Revised Final Draft UWMP 2005 Update is fully adequate and complete in its compliance with the requirements of the UWMP Act, and further finds that the conclusions reached in the Revised Final Draft UWMP 2005 Update are supported by substantial evidence.

NOW, THEREFORE, BE IT RESOLVED, DETERMINED AND ORDERED BY THE BOARD OF DIRECTORS OF THE NIPOMO COMMUNITY SERVICES DISTRICT does hereby adopt the Final Draft UWMP 2005 Update attached hereto as Exhibit "A" and incorporated herein by this reference, including the erratas and modifications made at the January 25, 2006 adoption meeting as NCSD's Urban Water Management Plan 2005 Update;

RESOLVED FURTHER that NCSD shall implement the UWMP 2005 Update in accordance with the schedule set forth therein;

RESOLVED FURTHER that NCSD shall submit to the Department of Water resources, the California State Library, and the City of Santa Maria and San Luis Obispo County a copy of the UWMP 2005 Update;

RESOLVED FURTHER that NCSD shall make the UWMP 2005 Update available for public review at NCSD administrative offices at 148 South Wilson Street, Nipomo, California during normal business hours.

RESOLVED FURTHER that the above Recitals are incorporated herein and support the adoption of the Final Draft UWMP 2005 Update.

RESOLUTION NO. 2006-963

**A RESOLUTION OF THE BOARD OF DIRECTORS
OF THE NIPOMO COMMUNITY SERVICES DISTRICT
ADOPTION BY THE NIPOMO COMMUNITY SERVICES DISTRICT OF
ITS URBAN WATER MANAGEMENT PLAN 2005 UPDATE**

On the motion by Director Winn, seconded by Director Trotter, and on the following roll call vote, to wit:

AYES: Directors Winn, Trotter, Wirsing, Vierheilig
NOES: None
ABSENT: None
ABSTAIN: Director Eby

The foregoing resolution is hereby adopted this 25th day of January, 2006.


Lawrence Vierheilig, President
Nipomo Community Services District

ATTEST:


Donna K. Johnson
Secretary to the Board

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8.0 REFERENCES

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8.1 PERSONS AND AGENCIES CONTACTED

Church, David. San Luis Obispo Local Agency Formation Commission. August 25, 2005.

Euphrat, John. San Luis Obispo County Planning and Development. August 25, 2005.

Lee, Marsha. San Luis Obispo County Planning and Development. January 12, 2005.

McKenzie, John. San Luis Obispo County Planning and Development. August 25, 2005 and January 10, 2006.

Zhao, John. City of Santa Maria. November 4, 2005.

9.0 ACRONYMS

Act	Urban Water Management Plan Act
af	acre-feet
afy	acre-feet per year
CEQA	California Environmental Quality Act
CII	commercial, industrial, and institutional
CIMIS	California Irrigation Management Information System
DMMs	demand management measures
DWR	California Department of Water Resources
ETo	Evapotranspiration
gpcd	gallons per capita per day
HSA	Hydrologic Sub-Area
LAFCO	Local Agency Formation Commission
MOU	Memorandum of Understanding
NCSD	Nipomo Community Services District
NMMA	Nipomo Mesa Management Area
NPDES	National Pollutant Discharge Elimination System
SOI	Sphere of Influence
Stipulation	Settlement Stipulation in the Santa Maria Groundwater Basin Litigation
SWP	State Water Project
TDS	total dissolved solids
UWMP	Urban Water Management Plan
WRCC	Western Regional Climate Center
WY	Water Year

Appendix A

Draft California Checklist for Urban Water Management Plans

Appendix A

2005 Urban Water Management Plan Checklist

Coordination with Appropriate Agencies	(Water Code §10620 (d)(1)(2))
<div style="display: flex; justify-content: space-between; font-size: 0.8em;"> Yes No </div> <div style="display: flex; justify-content: space-between;"> <div style="width: 10%;"> <input type="checkbox"/> <input checked="" type="checkbox"/> </div> <div style="width: 80%;"> Participated in area, regional, watershed or basin wide plan </div> <div style="width: 10%; text-align: right;"> Not Applicable </div> </div> <div style="display: flex; justify-content: space-between;"> <div style="width: 10%;"> <input checked="" type="checkbox"/> <input type="checkbox"/> </div> <div style="width: 80%;"> Describe the coordination of the plan preparation and anticipated benefits </div> <div style="width: 10%; text-align: right;"> Chapter 1, Section 1.1.2, pages 1 to 4 </div> </div>	
Describe the resource maximization/import minimization plan	(Water Code §10620 (h))
<div style="display: flex; justify-content: space-between;"> <div style="width: 10%;"> <input checked="" type="checkbox"/> <input type="checkbox"/> </div> <div style="width: 80%;"> Describe how water management tools/options maximize resources & minimize need to import water </div> <div style="width: 10%; text-align: right;"> Chapter 2, Section 2.7, page 32 </div> </div>	
Plant Updated in Years Ending in Five and Zero	(Water Code §10621 (a))
<div style="display: flex; justify-content: space-between;"> <div style="width: 10%;"> <input checked="" type="checkbox"/> <input type="checkbox"/> </div> <div style="width: 80%;"> Date updated and adopted plan received _____(enter date) </div> <div style="width: 10%; text-align: right;"> Chapter 7, Section 7.1, page 91 </div> </div>	
City and County Notification and Participation	(Water Code §10621 (b))
<div style="display: flex; justify-content: space-between;"> <div style="width: 10%;"> <input checked="" type="checkbox"/> <input type="checkbox"/> </div> <div style="width: 80%;"> Notify any city or county within service area of UWMP of plan review & revision </div> <div style="width: 10%; text-align: right;"> Chapter 1, Section 1.1.2, pages 1 to 4 </div> </div> <div style="display: flex; justify-content: space-between;"> <div style="width: 10%;"> <input checked="" type="checkbox"/> <input type="checkbox"/> </div> <div style="width: 80%;"> Consult and obtain comments from cities and counties within service area </div> <div style="width: 10%; text-align: right;"> Chapter 1, Section 1.1.2, pages 1 to 4 </div> </div>	
Service Area Information	(Water Code §10631 (a))
<div style="display: flex; justify-content: space-between;"> <div style="width: 10%;"> <input checked="" type="checkbox"/> <input type="checkbox"/> </div> <div style="width: 80%;"> Include current and projected population </div> <div style="width: 10%; text-align: right;"> Chapter 1, Section 1.2.2, pages 2, 9-11 </div> </div> <div style="display: flex; justify-content: space-between;"> <div style="width: 10%;"> <input checked="" type="checkbox"/> <input type="checkbox"/> </div> <div style="width: 80%;"> Population projections were based on data from state, regional or local agency </div> <div style="width: 10%; text-align: right;"> Chapter 1, Section 1.2.2, pages 2, 9-11 </div> </div> <div style="display: flex; justify-content: space-between;"> <div style="width: 10%;"> <input checked="" type="checkbox"/> <input type="checkbox"/> </div> <div style="width: 80%;"> Describe climate characteristics that affect water management </div> <div style="width: 10%; text-align: right;"> Chapter 1, Section 1.2.3, pages 11-12 </div> </div> <div style="display: flex; justify-content: space-between;"> <div style="width: 10%;"> <input checked="" type="checkbox"/> <input type="checkbox"/> </div> <div style="width: 80%;"> Describe other demographic factors affecting water management </div> <div style="width: 10%; text-align: right;"> Chapter 1, Section 1.2, pages 2, 5, 7, 9-11 </div> </div>	
Water Sources	(Water Code §10631 (b))
<div style="display: flex; justify-content: space-between;"> <div style="width: 10%;"> <input checked="" type="checkbox"/> <input type="checkbox"/> </div> <div style="width: 80%;"> Identify existing and planned water supply sources </div> <div style="width: 10%; text-align: right;"> Chapter 2, Sections 2.1 to 2.4, pages 13 to 27 </div> </div> <div style="display: flex; justify-content: space-between;"> <div style="width: 10%;"> <input checked="" type="checkbox"/> <input type="checkbox"/> </div> <div style="width: 80%;"> Provide current water supply quantities </div> <div style="width: 10%; text-align: right;"> Chapter 2, Section 2.4, page 27 </div> </div> <div style="display: flex; justify-content: space-between;"> <div style="width: 10%;"> <input checked="" type="checkbox"/> <input type="checkbox"/> </div> <div style="width: 80%;"> Provide planned water supply quantities </div> <div style="width: 10%; text-align: right;"> Chapter 2, Section 2.4, page 27 </div> </div>	
If Groundwater identified as existing or planned source	(Water Code §10631 (b)(1-4))
<div style="display: flex; justify-content: space-between;"> <div style="width: 10%;"> <input type="checkbox"/> <input checked="" type="checkbox"/> </div> <div style="width: 80%;"> Has management plan </div> <div style="width: 10%; text-align: right;"> Not Applicable </div> </div> <div style="display: flex; justify-content: space-between;"> <div style="width: 10%;"> <input type="checkbox"/> <input checked="" type="checkbox"/> </div> <div style="width: 80%;"> Attached management plan (b)(1) </div> <div style="width: 10%; text-align: right;"> Not Applicable </div> </div> <div style="display: flex; justify-content: space-between;"> <div style="width: 10%;"> <input checked="" type="checkbox"/> <input type="checkbox"/> </div> <div style="width: 80%;"> Description of basin(s) (b)(2) </div> <div style="width: 10%; text-align: right;"> Chapter 2, Sections 2.1 and 2.3.1, pages 13-20, 26-27 </div> </div> <div style="display: flex; justify-content: space-between;"> <div style="width: 10%;"> <input type="checkbox"/> <input checked="" type="checkbox"/> </div> <div style="width: 80%;"> Basin is adjudicated If adjudicated, attached order or decree (b)(2) Quantified amount of legal pumping right (b)(2) </div> <div style="width: 10%; text-align: right;"> Chapter 2, Sections 2.1 and 2.3.1, pages 13-20, 26-27 Appendix B Chapter 2, Sections 2.1 and 2.3.1, pages 13-20, 26-27 </div> </div> <div style="display: flex; justify-content: space-between;"> <div style="width: 10%;"> <input checked="" type="checkbox"/> <input type="checkbox"/> </div> <div style="width: 80%;"> Analysis of location, amount & sufficiency, last five years (b)(3) </div> <div style="width: 10%; text-align: right;"> Chapter 2, Sections 2.2 and 2.5, pages 20-23 and 27-31 </div> </div> <div style="display: flex; justify-content: space-between;"> <div style="width: 10%;"> <input checked="" type="checkbox"/> <input type="checkbox"/> </div> <div style="width: 80%;"> Analysis of location & amount projected, 20 years (b)(4) </div> <div style="width: 10%; text-align: right;"> Chapter 2, Sections 2.2 and 2.5, pages 20-23 and 27 </div> </div>	
Reliability of Supply	(Water Code §10631 (c)(1-3))
<div style="display: flex; justify-content: space-between;"> <div style="width: 10%;"> <input checked="" type="checkbox"/> <input type="checkbox"/> </div> <div style="width: 80%;"> Describe the reliability of the water supply and vulnerability to seasonal or climatic shortage </div> <div style="width: 10%; text-align: right;"> Chapter 2, Section 2.5, pages 27-32 </div> </div>	
Water Sources Not Available on a Consistent Basis	(Water Code §10631 (c))
<div style="display: flex; justify-content: space-between;"> <div style="width: 10%;"> <input type="checkbox"/> <input checked="" type="checkbox"/> </div> <div style="width: 80%;"> Describe the reliability of the water supply due to seasonal or climatic shortages </div> <div style="width: 10%; text-align: right;"> Not Applicable </div> </div> <div style="display: flex; justify-content: space-between;"> <div style="width: 10%;"> <input type="checkbox"/> <input checked="" type="checkbox"/> </div> <div style="width: 80%;"> Describe the vulnerability of the water supply to seasonal or climatic shortages </div> <div style="width: 10%; text-align: right;"> Not Applicable </div> </div> <div style="display: flex; justify-content: space-between;"> <div style="width: 10%;"> <input type="checkbox"/> <input checked="" type="checkbox"/> </div> <div style="width: 80%;"> Describe plans to supplement/replace inconsistent sources with alternative sources/DMMs </div> <div style="width: 10%; text-align: right;"> Not Applicable </div> </div>	
Transfer or Exchange Opportunities	(Water Code §10631 (d))
<div style="display: flex; justify-content: space-between;"> <div style="width: 10%;"> <input checked="" type="checkbox"/> <input type="checkbox"/> </div> <div style="width: 80%;"> Describe short term and long term exchange or transfer opportunities </div> <div style="width: 10%; text-align: right;"> Chapter 2, Section 2.3, page 24-27 </div> </div>	
Water Use Provisions	(Water Code §10631 (e) (1-2))
<div style="display: flex; justify-content: space-between;"> <div style="width: 10%;"> <input checked="" type="checkbox"/> <input type="checkbox"/> </div> <div style="width: 80%;"> Quantify past water use by sector </div> <div style="width: 10%; text-align: right;"> Chapter 3, Section 3.1, page 34 </div> </div> <div style="display: flex; justify-content: space-between;"> <div style="width: 10%;"> <input checked="" type="checkbox"/> <input type="checkbox"/> </div> <div style="width: 80%;"> Quantify current water use by sector </div> <div style="width: 10%; text-align: right;"> Chapter 3, Section 3.1, page 34 </div> </div> <div style="display: flex; justify-content: space-between;"> <div style="width: 10%;"> <input checked="" type="checkbox"/> <input type="checkbox"/> </div> <div style="width: 80%;"> Project future water use by sector </div> <div style="width: 10%; text-align: right;"> Chapter 3, Section 3.1, page 34 to 46 </div> </div> <div style="display: flex; justify-content: space-between;"> <div style="width: 10%;"> <input type="checkbox"/> <input checked="" type="checkbox"/> </div> <div style="width: 80%;"> Identify and quantify sales to other agencies </div> <div style="width: 10%; text-align: right;"> Not Applicable </div> </div> <div style="display: flex; justify-content: space-between;"> <div style="width: 10%;"> <input checked="" type="checkbox"/> <input type="checkbox"/> </div> <div style="width: 80%;"> Identify and quantify additional water uses </div> <div style="width: 10%; text-align: right;"> Chapter 3, Section 3.1.2, page 47-48 </div> </div>	
Demand Management Measures	(Water Code §10631 (f)(g))
<div style="display: flex; justify-content: space-between;"> <div style="width: 10%;"> <input type="checkbox"/> <input checked="" type="checkbox"/> </div> <div style="width: 80%;"> Agency is a CUWCC member </div> <div style="width: 10%; text-align: right;"> Not Applicable </div> </div> <div style="display: flex; justify-content: space-between;"> <div style="width: 10%;"> <input type="checkbox"/> <input checked="" type="checkbox"/> </div> <div style="width: 80%;"> Annual BMP reports provided and considered completed by CUWCC website </div> <div style="width: 10%; text-align: right;"> Not Applicable </div> </div>	
Planned Water Supply Projects and Programs	(Water Code §10631 (h))
<div style="display: flex; justify-content: space-between;"> <div style="width: 10%;"> <input checked="" type="checkbox"/> <input type="checkbox"/> </div> <div style="width: 80%;"> Detailed description of expected future supply projects & programs </div> <div style="width: 10%; text-align: right;"> Chapter 2, Section 2.3, page 24-27 </div> </div> <div style="display: flex; justify-content: space-between;"> <div style="width: 10%;"> <input checked="" type="checkbox"/> <input type="checkbox"/> </div> <div style="width: 80%;"> Timeline for each proposed project </div> <div style="width: 10%; text-align: right;"> Chapter 2, Section 2.3, page 24-27 </div> </div> <div style="display: flex; justify-content: space-between;"> <div style="width: 10%;"> <input checked="" type="checkbox"/> <input type="checkbox"/> </div> <div style="width: 80%;"> Quantification of each projects normal yield (AFY) </div> <div style="width: 10%; text-align: right;"> Chapter 2, Section 2.5, page 31-32 </div> </div> <div style="display: flex; justify-content: space-between;"> <div style="width: 10%;"> <input checked="" type="checkbox"/> <input type="checkbox"/> </div> <div style="width: 80%;"> Quantification of each projects single dry-year yield (AFY) </div> <div style="width: 10%; text-align: right;"> Chapter 2, Section 2.5, page 31-32 </div> </div> <div style="display: flex; justify-content: space-between;"> <div style="width: 10%;"> <input checked="" type="checkbox"/> <input type="checkbox"/> </div> <div style="width: 80%;"> Quantification of each projects multiple dry-year yield (AFY) </div> <div style="width: 10%; text-align: right;"> Chapter 2, Section 2.5, page 31-32 </div> </div>	

Opportunities for development of desalinated water		(Water Code §10631 (i))
Yes	No	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Describes opportunities for development of desalinated water, including, but not limited to, ocean water, brackish water, and groundwater, as a long-term supply
		<u>Chapter 2, Section 2.6, pages 32-33</u>
If Supplier receives or projects receiving water from a wholesale supplier		(Water Code §10631 (k))
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Agency receives, or projects receiving, wholesale water
		<u>Not Applicable</u>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Agency provided written demand projections to wholesaler, 20 years
		<u>Not Applicable</u>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Wholesaler provided written water availability projections, by source, to agency, 20 years (if agency served by more than one wholesaler, duplicate this table and provide the source availability for each wholesaler)
		<u>Not Applicable</u>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Reliability of wholesale supply provided in writing by wholesale agency (if agency served by more than one wholesaler, duplicate this table and provide the source availability for each wholesaler)
		<u>Not Applicable</u>
Water Shortage Contingency Plan Section		(Water Code §10632)
Stages of Action		(Water Code §10632 (a))
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Provide stages of action
		<u>Chapter 4, Section 4.1, pages 59-61</u>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Provide the water supply conditions for each stage
		<u>Chapter 4, Section 4.1, pages 59-61</u>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Includes plan for 50 percent supply shortage
		<u>Chapter 4, Section 4.1, page 63-65</u>
Three-Year Minimum Water Supply		(Water Code §10632 (b))
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Identifies driest 3-year period
		<u>Chapter 4, Section 4.3, page 62</u>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Minimum water supply available by source for the next three years
		<u>Chapter 4, Section 4.3, page 62</u>
Preparation for catastrophic water supply interruption		(Water Code §10632 (c))
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Provided catastrophic supply interruption plan
		<u>Chapter 4, Section 4.4, page 63-65</u>
Prohibitions		(Water Code §10632 (d))
<input checked="" type="checkbox"/>	<input type="checkbox"/>	List the mandatory prohibitions against specific water use practices during water shortages
		<u>Chapter 4, Section 4.1, pages 59-61 and Appendix C</u>
Consumption Reduction Methods		(Water Code §10632 (e))
<input checked="" type="checkbox"/>	<input type="checkbox"/>	List the consumption reduction methods the water supplier will use to reduce water use in the most restrictive stages with up to a 50% reduction.
		<u>Chapter 4, Section 4.1, page 61</u>
Penalties		(Water Code §10632 (f))
<input checked="" type="checkbox"/>	<input type="checkbox"/>	List excessive use penalties or charges for excessive use
		<u>Chapter 4, Section 4.1, page 59</u>
Revenue and Expenditure Impacts		(Water Code §10632 (g))
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Describe how actions and conditions impact revenues
		<u>Chapter 4, Section 4.5, page 65</u>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Describe how actions and conditions impact expenditures
		<u>Chapter 4, Section 4.5, page 65</u>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Describe measures to overcome the revenue and expenditure impacts
		<u>Chapter 4, Section 4.5, page 65</u>
Water Shortage Contingency Ordinance/Resolution		(Water Code §10632 (h))
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Attach a copy of the draft water shortage contingency resolution or ordinance.
		<u>Chapter 4, Section 4.6, page 66 and Appendix C</u>
Reduction Measuring Mechanism		(Water Code §10632 (i))
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Provided mechanisms for determining actual reductions
		<u>Chapter 4, Section 4.2, page 62</u>
Recycling Plan Agency Coordination		(Water Code §10633)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Describe the coordination of the recycling plan preparation information to the extent available.
		<u>Chapter 5, page 67</u>
Wastewater System Description		(Water Code §10633 (a))
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Describe the wastewater collection and treatment systems in the supplier's service area
		<u>Chapter 5, page 67</u>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Quantify the volume of wastewater collected and treated
		<u>Chapter 5, page 67</u>
Wastewater Disposal and Recycled Water Uses		(Water Code §10633 (a-d))
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Describes methods of wastewater disposal
		<u>Chapter 5, page 67</u>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Describes the current type, place and use of recycled water
		<u>Chapter 5, page 67</u>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Describe and quantify potential uses of recycled water
		<u>Chapter 5, page 67</u>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Determination of technical and economic feasibility of serving the potential uses
		<u>Chapter 5, page 67</u>
Projected Uses of Recycled Water		(Water Code §10633 (e))
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Projected use of recycled water, 20 years
		<u>Chapter 5, page 67</u>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Compare UWMP 2000 projections with UWMP 2005 actual
		<u>Not Applicable, no 2000 UWMP</u>
Plan to Optimize Use of Recycled Water		(Water Code §10633 (f))
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Describe actions that might be taken to encourage recycled water uses
		<u>Chapter 5, page 67</u>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Describe projected results of these actions in terms of acre-feet of recycled water used per year
		<u>Chapter 5, page 67</u>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Provide a recycled water use optimization plan which includes actions to facilitate the use of recycled water (dual distribution systems, promote recirculating uses)
		<u>Chapter 5, page 67</u>

Water quality impacts on availability of supply		(Water Code §10634)
<input checked="" type="checkbox"/>	<input type="checkbox"/> Discusses water quality impacts (by source) upon water management strategies and supply reliability	<u>Chapter 2, Section 2.5.3, pages 29, 31</u>
Supply and Demand Comparison to 20 Years		(Water Code §10635 (a))
<input checked="" type="checkbox"/>	<input type="checkbox"/> Compare the projected single-dry year water supply to projected normal water use over the next 20 years, in 5-year increments.	<u>Chapter 6, Section 6.2, pages 68 and 79</u>
Supply and Demand Comparison: Single-dry Year Scenario		(Water Code §10635 (a))
<input checked="" type="checkbox"/>	<input type="checkbox"/> Compare the projected single-dry year water supply to projected single-dry year water use over the next 20 years, in 5-year increments.	<u>Chapter 6, Section 6.2, pages 68, 72, and 81</u>
Supply and Demand Comparison: Multiple-dry Year Scenario		(Water Code §10635 (a))
<input checked="" type="checkbox"/>	<input type="checkbox"/> Project a multiple-dry year period (as identified in Table 9) occurring between 2006-2010 and compare projected supply and demand during those years	<u>Chapter 6, Section 6.3.1, pages 73, 75, and 83</u>
<input checked="" type="checkbox"/>	<input type="checkbox"/> Project a multiple-dry year period (as identified in Table 9) occurring between 2011-2015 and compare projected supply and demand during those years	<u>Chapter 6, Section 6.3.2, pages 75 and 85</u>
<input checked="" type="checkbox"/>	<input type="checkbox"/> Project a multiple-dry year period (as identified in Table 9) occurring between 2016-2020 and compare projected supply and demand during those years	<u>Chapter 6, Section 6.3.3, pages 75, 76, and 87</u>
<input checked="" type="checkbox"/>	<input type="checkbox"/> Project a multiple-dry year period (as identified in Table 9) occurring between 2021-2025 and compare projected supply and demand during those years	<u>Chapter 6, Section 6.3.4, pages 76 and 89</u>
Provision of Water Service Reliability section to cities/counties within service area		(Water Code §10635 (b))
<input type="checkbox"/>	<input type="checkbox"/> Provided Water Service Reliability section of UWMP to cities and counties within which it provides water supplies within 60 days of UWMP submission to DWR	<u>To be provided with Final UWMP</u>
Does the Plan Include Public Participation and Plan Adoption		(Water Code §10642)
<input checked="" type="checkbox"/>	<input type="checkbox"/> Attach a copy of adoption resolution	<u>Chapter 7, Section 7.1, page 91</u>
<input checked="" type="checkbox"/>	<input type="checkbox"/> Encourage involvement of social, cultural & economic community groups	<u>Chapter 1, Section 1.1.2, pages 1-4</u>
<input type="checkbox"/>	<input type="checkbox"/> Plan available for public inspection	<u>Transmittal Letter of Final UWMP</u>
<input type="checkbox"/>	<input type="checkbox"/> Provide proof of public hearing	<u>Transmittal Letter of Final UWMP</u>
<input type="checkbox"/>	<input type="checkbox"/> Provided meeting notice to local governments	<u>Transmittal Letter of Final UWMP</u>
Review of implementation of 2000 UWMP		(Water Code §10643)
<input type="checkbox"/>	<input checked="" type="checkbox"/> Reviewed implementation plan and schedule of 2000 UWMP	<u>Not Applicable, no 2000 UWMP</u>
<input type="checkbox"/>	<input checked="" type="checkbox"/> Implemented in accordance with the schedule set forth in plan	<u>Not Applicable, no 2000 UWMP</u>
Provision of 2005 UWMP to local governments		(Water Code §10644 (a))
<input type="checkbox"/>	<input type="checkbox"/> Provide 2005 UWMP to DWR, and cities and counties within 30 days of adoption	<u>Transmittal Letter of Final UWMP</u>
Does the plan or correspondence accompanying it show where it is available for public review		(Water Code §10645)
<input type="checkbox"/>	<input type="checkbox"/> Does UWMP or correspondence accompanying it show where it is available for public review	<u>Transmittal Letter of Final UWMP</u>

Appendix B

Settlement Stipulation, *Santa Maria Valley Water Conservation District v. City of Santa Maria, et al.*

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SUPERIOR COURT OF THE STATE OF CALIFORNIA
COUNTY OF SANTA CLARA

SANTA MARIA VALLEY WATER)	SANTA MARIA GROUNDWATER
CONSERVATION DISTRICT,)	LITIGATION
)	Lead Case No. CV 770214
Plaintiff,)	(CONSOLIDATED FOR ALL PURPOSES)
)	
v.)	[Consolidated With Case Numbers:
)	CV 784900; CV 785509; CV 785522;
CITY OF SANTA MARIA, et al.,)	CV 787150; CV 784921; CV 785511;
)	CV 785936; CV 787151; CV 784926;
Defendants.)	CV 785515; CV 786791; CV 787152;
)	CV 036410]
AND RELATED CROSS-ACTIONS AND)	
ACTIONS CONSOLIDATED FOR ALL)	San Luis Obispo County Superior Court Case
PURPOSES)	Nos. 990738 and 990739
)	
)	[Assigned to Judge Jack Komar for All
)	Purposes]

STIPULATION (JUNE 30, 2005 VERSION)

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1 **I. INTRODUCTION -- ALL MANAGEMENT AREAS**

2 The Stipulating Parties hereby stipulate and agree to entry of judgment containing the
3 terms and conditions of this Stipulation.

4 **A. Parties and Jurisdiction**

5 1. Plaintiff and Cross-Defendant Santa Maria Valley Water Conservation District
6 (“District”) is a water conservation district organized under California Water Code section 74000,
7 *et seq.* The District does not pump Groundwater from the Basin.

8 2. Defendants, Cross-Complainants and Cross-Defendants the City of Santa Maria
9 (“Santa Maria”), City of Guadalupe (“Guadalupe”), Southern California Water Company
10 (“SCWC”), Nipomo Community Services District (“NCSD”), Rural Water Company (“RWC”),
11 City of Arroyo Grande (“Arroyo Grande”), City of Pismo Beach (“Pismo Beach”), City of Grover
12 Beach (“Grover Beach”) and Oceano Community Services District (“Oceano”) rely, in part, on
13 Groundwater to provide public water service to customers within the Basin.

14 3. Cross-Defendant County of San Luis Obispo (“San Luis Obispo”) is a subdivision
15 of the State of California. Cross-Defendant San Luis Obispo County Flood Control and Water
16 Conservation District (“SLO District”) is a public entity organized pursuant to the laws of the
17 State of California. Neither San Luis Obispo nor SLO District pumps Groundwater from the
18 Basin.

19 4. Cross-Defendant County of Santa Barbara (“Santa Barbara”) is a subdivision of
20 the State of California. Santa Barbara does not pump Groundwater from the Basin.

21 5. Numerous other Cross-Defendants and Cross-Complainants are Overlying
22 Owners. Many of these Overlying Owners pump Groundwater from the Basin, while others do
23 not currently exercise their Overlying Rights. Those Overlying Owners who are Stipulating
24 Parties are identified on Exhibit “A”.

25 6. This action presents an *inter se* adjudication of the claims alleged between and
26 among all Parties. This Court has jurisdiction over the subject matter of this action and over the
27 Parties herein.

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1 **B. Further Trial**

2 The Stipulating Parties recognize that not all Parties have entered into this Stipulation and
3 that a trial will be necessary as to all non-Stipulating Parties. No Stipulating Party shall interfere
4 or oppose the effort of any other Stipulating Party in the preparation and conduct of any such
5 trial. All Stipulating Parties agree to cooperate and coordinate their efforts in any trial or hearing
6 necessary to obtain entry of a judgment containing the terms and conditions of this Stipulation.
7 No Stipulating Party shall have any obligation to contribute financially to any future trial.

8 **C. Definitions**

9 As used in this Stipulation, the following terms shall have the meanings herein set forth:

- 10 1. Annual or Year – That period beginning January 1 and ending December
11 31.
- 12 2. Annual Report – The report prepared and filed with the Court annually for
13 each Management Area.
- 14 3. Appropriative Rights – The right to use surplus Native Groundwater for
15 reasonable and beneficial use.
- 16 4. Available State Water Project Water – The amount of SWP Water an
17 Importer is entitled to receive in a given Year based upon the California Department of Water
18 Resources final Table A allocation.
- 19 5. Basin - The groundwater basin described in the Phase I and II orders of the
20 Court, as modified, and presented in Exhibit “B”.
- 21 6. Developed Water – Groundwater derived from human intervention as of
22 the date of this Stipulation, which shall be limited to Twitchell Yield, Lopez Water, Return
23 Flows, and recharge resulting from storm water percolation ponds.
- 24 7. Groundwater – Twitchell Yield, Lopez Water, Return Flows, storm water
25 percolation, Native Groundwater and all other recharge percolating within the Basin.
- 26 8. Importer(s) – Any Party who brings Imported Water into the Basin. At the
27 date of this Stipulation, the Importers are Santa Maria, SCWC, Guadalupe, Pismo Beach, and
28 Oceano.

1 9. Imported Water – Water within the Basin, originating outside the Basin
2 that absent human intervention would not recharge or be used in the Basin.

3 10. Lopez Project – Lopez Dam and Reservoir located on Arroyo Grande
4 Creek, together with the associated water treatment plant, delivery pipeline and all associated
5 facilities, pursuant to State Water Resources Control Board permit No. 12814 (A-18375) and
6 pending application No. A-30826.

7 11. Lopez Water – Groundwater within the Basin derived from the operation of
8 the Lopez Project.

9 12. Management Areas – The three areas within the Basin that have sufficient
10 distinguishing characteristics to permit the water resources and facilities of each area to be
11 individually managed. The Management Areas are: the Northern Cities Management Area, the
12 Nipomo Mesa Management Area, and the Santa Maria Valley Management Area, as shown on
13 Exhibit "C".

14 13. Management Area Engineer – The individual(s) or consulting firm(s) that
15 are hired to prepare the Monitoring Plan(s) and Annual Report(s) for one or more of the
16 Management Areas.

17 14. Monitoring Parties – Those Parties responsible for conducting and funding
18 each Monitoring Program.

19 15. Monitoring Program – The data collection and analysis program to be con-
20 ducted within each Management Area sufficient to allow the preparation of the Annual Report.

21 16. Native Groundwater – Groundwater within the Basin, not derived from
22 human intervention, that replenishes the Basin through precipitation, stream channel infiltration,
23 tributary runoff, or other natural processes.

24 17. New Developed Water – Groundwater derived from human intervention
25 through programs or projects implemented after the date of this Stipulation.

26 18. New Urban Uses – Municipal and industrial use which may occur on land
27 that, as of January 1, 2005, was located: 1) within the boundaries of a municipality or its sphere of
28 influence, or within the process of inclusion in its sphere of influence; or 2) within the certificated

1 service area of a publicly regulated utility. The New Urban Use areas are identified in Exhibit
2 "D". New Urban Uses does not include the current DJ Farms development within Guadalupe
3 City limits (including Santa Barbara County APN 113-080-18, 113-080-24).

4 19. Nipomo Mesa Management Area or NMMA – That Management Area
5 shown on Exhibit "C".

6 20. Nipomo Mesa Management Area Technical Group – The committee
7 formed to administer the relevant provisions of the Stipulation regarding the Nipomo Mesa
8 Management Area.

9 21. Northern Cities Management Area – That Management Area which is part
10 of Zone #3 of the San Luis Obispo County Flood Control and Water Conservation District as
11 shown on Exhibit "C".

12 22. Northern Cities – Arroyo Grande, Pismo Beach, Grover Beach and
13 Oceano.

14 23. Northern Parties – The Northern Cities, the Overlying Owners within the
15 Northern Cities Management Area, San Luis Obispo and the SLO District.

16 24. Overlying Right – The appurtenant right of an Overlying Owner to use
17 Native Groundwater for overlying, reasonable and beneficial use.

18 25. Overlying Owner(s) – Owners of land overlying the Basin who hold an
19 Overlying Right.

20 26. Party – Each Person in this consolidated action, whether a Stipulating
21 Party or a non-Stipulating Party.

22 27. Person – Any natural person, firm, association, organization, joint venture,
23 partnership, business, trust, corporation, or public entity.

24 28. Public Hearing – A hearing after notice to all Parties and to any other
25 person legally entitled to notice.

26 29. Return Flows – Groundwater derived from use and recharge within the
27 Basin of water delivered through State Water Project facilities.

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1 30. Santa Maria Valley Management Area – That Management Area shown on
2 Exhibit “C”.

3 31. Severe Water Shortage Conditions – Those conditions, as separately
4 defined in a Severe Water Shortage Response Plan for each Management Area, that trigger
5 certain discretionary and mandatory responses by the Stipulating Parties upon order of the Court.

6 32. Severe Water Shortage Response Plan – The discretionary and mandatory
7 responses for each Management Area that are to be implemented when Severe Water Shortage
8 Conditions exist.

9 33. State Water Project Water or SWP Water – Water imported through the
10 State of California State Water Resources Development System pursuant to Division 6, Part 6,
11 Chapter 8, of the California Water Code.

12 34. Stipulating Party – A Party that has signed this Stipulation, as listed in
13 Exhibit “A”, or its heirs, executors, administrators, trustees, successors, assigns, and agents.

14 35. Storage Space – The portion of the Basin capable of holding water for sub-
15 sequent reasonable and beneficial uses.

16 36. SWP Contract(s) – Those series of contracts that entitle the Importers to
17 use SWP facilities to bring Imported Water into the Basin.

18 37. Twitchell Management Authority or TMA – The committee formed to
19 administer the relevant provisions of the Stipulation regarding the Santa Maria Valley Manage-
20 ment Area.

21 38. Twitchell Participants – Those Stipulating Parties holding rights to
22 Twitchell Yield.

23 39. Twitchell Project – Dam and reservoir authorized by Congress as the
24 “Santa Maria Project” on September 3, 1954 (Public Law 774, 83d Congress, ch. 1258, 2d
25 session, 68 Stat. 1190) and located on the Cuyama River, approximately six miles upstream from
26 its junction with the Sisquoc River, pursuant to that certain License For Diversion And Use of
27 Water, License No. 10416, issued by the State Water Resources Control Board.

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40. Twitchell Water – Groundwater derived from operation of the Twitchell Project.

41. Twitchell Yield – The total amount of Groundwater allocated annually to the Twitchell Participants.

II. EXHIBITS

The following Exhibits are attached to this Stipulation and incorporated herein:

1. *Exhibit "A"*, list identifying the Stipulating Parties and the parcels of land bound by the terms of this Stipulation.

2. *Exhibit "B"*, Phase I and II Orders, as modified, and the attached map depicting the Santa Maria Basin.

3. *Exhibit "C"*, map of the Basin and boundaries of the three Management Areas.

4. *Exhibit "D"*, map identifying those lands as of January 1, 2005: 1) within the boundaries of a municipality or its sphere of influence, or within the process of inclusion in its sphere of influence; or 2) within the certificated service area of a publicly regulated utility; and a list of selected parcels that are nearby these boundaries which are excluded from within these areas.

5. *Exhibit "E"*, 2002 Settlement Agreement between the Northern Cities and Northern Landowners.

6. *Exhibit "F"*, the agreement among Santa Maria, SCWC and Guadalupe regarding the Twitchell Project and the TMA.

7. *Exhibit "G"*, the Court's Order Concerning Electronic Service of Pleadings and Electronic Posting of Discovery Documents dated June 27, 2000.

8. *Exhibit "H"*, the form of memorandum of agreement to be recorded.

III. DECLARATION OF RIGHTS -- ALL MANAGEMENT AREAS

The terms and conditions of this Stipulation set forth a physical solution concerning Groundwater, SWP Water and Storage Space, consistent with common law water rights priorities.

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1 **A. Recognition of Priority of Overlying Rights**

2 Except as expressly modified by the settlement agreement among the Northern Parties
3 (Exhibit “E”), all Overlying Owners that are also Stipulating Parties have a prior and paramount
4 Overlying Right, whether or not yet exercised.

5 **B. Prescriptive Rights**

6 As to the Stipulating Parties, no Party has proved prescriptive rights to any Native
7 Groundwater. Future use by the Stipulating Parties will not be adverse and will not ripen into a
8 prescriptive right as between the Stipulating Parties.

9 **C. Appropriative Rights**

10 Consistent with the specific provisions governing each Management Area, the Stipulating
11 Parties owning and exercising Appropriative Rights have the right to the reasonable and bene-
12 ficial use of Native Groundwater that is surplus to the reasonable and beneficial uses of the
13 Stipulating Parties that are Overlying Owners. New appropriative uses shall be subordinate to
14 existing appropriations and shall be prioritized on a first in time, first in right basis.

15 **D. Developed Water Rights**

16 The Stipulating Parties owning Developed Water or New Developed Water have the right
17 to its reasonable and beneficial use, consistent with the specific provisions governing each
18 Management Area. The right to use Developed Water is a right to use commingled Groundwater
19 and is not limited to the corpus of that water.

20 **E. Rights to Storage Space**

21 The Court shall reserve jurisdiction over the use of the Storage Space, and any Party may
22 apply to the Court for the approval of a project using Storage Space. The Court must approve any
23 project using Storage Space before any Party can claim a right to stored water from that project.
24 The Stipulating Parties agree that Groundwater derived from Developed Water is exempt from
25 the Court approval requirements of this Paragraph.

26 **F. Other Surface Water Rights**

27 Nothing in this Stipulation affects or otherwise alters common law riparian rights or any
28 surface water rights, unless expressly provided in this Stipulation.

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IV. PHYSICAL SOLUTION – ALL MANAGEMENT AREAS

A. Authority

Pursuant to Article X, section 2 of the California Constitution, the Stipulating Parties agree that the Court has the authority to enter a judgment and physical solution containing the terms and conditions of this Stipulation. Unless the Court imposes this physical solution, potential changes in water use could affect Basin adequacy and integrity. The Declaration of Rights is a component of this physical solution.

B. Purposes and Objectives

The terms and conditions of this Stipulation are intended to impose a physical solution establishing a legal and practical means for ensuring the Basin's long-term sustainability. This physical solution governs Groundwater, SWP Water and Storage Space, and is intended to ensure that the Basin continues to be capable of supporting all existing and future reasonable and beneficial uses. This physical solution is: 1) a fair and equitable basis for the allocation of water rights in the Basin; 2) in furtherance of the mandates of the State Constitution and the water policy of the State of California; and 3) a remedy that gives due consideration to applicable common law rights and priorities to use Groundwater and Storage Space, without substantially impairing any such right.

C. Basin Management Areas

Development and use of Groundwater, SWP Water and Storage Space have historically been financed and managed separately in three Management Areas. For example, only the Northern Parties have paid for, managed, and benefited from the Lopez Project; whereas only Santa Maria Valley parties have paid for, managed, and benefited from the Twitchell Project. In contrast, the Nipomo Mesa parties have not been involved in the funding or management of either the Twitchell or Lopez Projects.

The Stipulating Parties agree that Groundwater, SWP Water and Storage Space can be more efficiently allocated and managed in three Management Areas, given the physical, geographical, political, economic, and historic conditions. The three Management Areas, as shown on Exhibit "C," are as follows: Northern Cities Management Area; Nipomo Mesa Management

1 Area; and Santa Maria Valley Management Area. The Stipulating Parties intend that manage-
2 ment through three Management Areas will preserve the Basin's integrity.

3 **D. Groundwater Monitoring**

4 1. Monitoring Program. A Monitoring Program shall be established in each
5 of the three Management Areas to collect and analyze data regarding water supply and demand
6 conditions. Data collection and monitoring shall be sufficient to determine land and water uses in
7 the Basin, sources of supply to meet those uses, groundwater conditions including groundwater
8 levels and quality, the amount and disposition of Developed Water supplies, and the amount and
9 disposition of any other sources of water supply in the Basin. The Northern Cities Management
10 Area shall not be required to include in its Monitoring Program or Annual Reports quantification
11 of groundwater recharge from the Lopez Project or storm water percolation ponds, unless the
12 Court orders inclusion of this information.

13 Within one hundred and eighty days after entry of judgment, representatives of the Moni-
14 toring Parties from each Management Area will present to the Court for its approval their
15 proposed Monitoring Program. The Management Area Engineers shall freely share available well
16 data, groundwater models, and other products and tools utilized in monitoring and analysis of
17 conditions in the three Management Areas, consistent with the confidentiality provisions of this
18 Stipulation.

19 Absent a Court order to the contrary, all Stipulating Parties shall make available relevant
20 information regarding groundwater elevations and water quality data necessary to implement the
21 Monitoring Program approved for their respective Management Area. The Monitoring Parties
22 shall coordinate with the Stipulating Parties to obtain any needed data on reasonable terms and
23 conditions. Metering may only be imposed on Stipulating Parties upon a Court order following a
24 showing that such data is necessary to monitor groundwater conditions in the Basin, and in the
25 case of an Overlying Owner, that Overlying Owner has failed to provide information comparable
26 to that provided by other Overlying Owners. The confidentiality of well data from individual
27 owners and operators will be preserved, absent a Court order or written consent.

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- 1 2. Monitoring Parties. The Monitoring Parties are as follows:
- 2 (a) Santa Maria Valley Management Area – The Twitchell Manage-
- 3 ment Authority.
- 4 (b) Northern Cities Management Area – The Northern Cities.
- 5 (c) Nipomo Mesa Management Area – The NMMA Technical Group.
- 6 3. Annual Reports. Within one hundred and twenty days after each Year, the
- 7 Management Area Engineers will file an Annual Report with the Court. The Annual Report will
- 8 summarize the results of the Monitoring Program, changes in groundwater supplies, and any
- 9 threats to Groundwater supplies. The Annual Report shall also include a tabulation of Manage-
- 10 ment Area water use, including Imported Water availability and use, Return Flow entitlement and
- 11 use, other Developed Water availability and use, and Groundwater use. Any Stipulating Party
- 12 may object to the Monitoring Program, the reported results, or the Annual Report by motion.
- 13 4. Management Area Engineer. The Monitoring Parties may hire individuals
- 14 or consulting firms to assist in the preparation of the Monitoring Programs and the Annual
- 15 Reports. Except as provided below for the Santa Maria Valley Management Area, the Moni-
- 16 toring Parties, in their sole discretion, shall select, retain and replace the Management Area
- 17 Engineer.

18 **E. New Developed Water**

- 19 1. Stipulating Parties in each Management Area may prepare and implement
- 20 plans to develop, salvage or import additional water supplies.
- 21 2. The Stipulating Parties that pay, or otherwise provide consideration, for
- 22 New Developed Water are entitled to use it to the extent the New Developed Water augments the
- 23 water supplies in that Management Area. If more than one Stipulating Party finances or partici-
- 24 pates in generating New Developed Water, rights to the supply of New Developed Water shall be
- 25 proportional to each Stipulating Party's financial contribution or other consideration, or as other-
- 26 wise mutually agreed to by the participating Stipulating Parties. This paragraph does not apply to
- 27 Return Flows.

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1 3. The Stipulating Parties who desire to claim New Developed Water supplies
2 must bring a motion, and obtain an order from the Court, quantifying and allocating the rights to
3 the New Developed Water, before they have the prior right to the New Developed Water.

4 **F. Severe Water Shortage Response**

5 This physical solution sets forth a Severe Water Shortage Plan for each Management Area
6 which is intended to provide an effective response to Severe Water Shortage Conditions that may
7 develop within each or all of the Management Areas. The specific Severe Water Shortage Plans
8 for each Management Area are incorporated herein and made a part of the physical solution.

9 **V. PHYSICAL SOLUTION: PROVISIONS SPECIFIC TO SANTA MARIA VALLEY**
10 **MANAGEMENT AREA**

11 As supplemented by the provisions of this Stipulation that apply to all Management Areas,
12 the following terms govern rights to Groundwater, SWP Water and Storage Space in the Santa
13 Maria Valley Management Area.

14 **A. Water Rights to Sources of Supply**

15 1. Overlying Rights. The Stipulating Parties who are Overlying Owners
16 within the Santa Maria Valley Management Area each have the prior and paramount right to use
17 Native Groundwater. Subject to Paragraph V(C)(2)(b)(vi), all Overlying Rights are appurtenant
18 to the overlying land and cannot be assigned or conveyed separate or apart from those lands.

19 2. Appropriative Rights. The Parties listed in Exhibit "A" are the owners of
20 Appropriative Rights exercised in the Santa Maria Valley Management Area. Each Appropriative
21 Right is limited to Native Groundwater that is surplus to reasonable and beneficial uses of the
22 Stipulating Parties that are Overlying Owners in the Santa Maria Valley Management Area. New
23 appropriative uses shall be subordinate to existing Appropriative Rights and shall be prioritized
24 on a first in time, first in right basis.

25 3. Developed Water. The Stipulating Parties owning Developed Water have
26 the right to its reasonable and beneficial use, subject only to the Severe Water Shortage Plan. On
27 an annual basis, the Stipulating Parties shall have the right to the reasonable and beneficial use of
28 Developed Water that is surplus to the reasonable and beneficial uses of the owners of that

1 Developed Water. The right to use Developed Water is a right to use commingled Groundwater
2 and is not limited to the corpus of that water.

3 (a) New Developed Water. The ownership and use of New Developed
4 Water shall be subject to Court order.

5 (b) Twitchell Water.

6 (i) *Amount*. The Twitchell Project annually provides a variable
7 amount of Developed Water that augments the Groundwater in the Santa Maria Valley Manage-
8 ment Area. Twitchell Yield is thirty-two thousand acre-feet per year (“afy”).

9 (ii) *Division of Twitchell Yield*. Twitchell Yield shall be
10 divided as follows: 80% to Santa Maria, SCWC and Guadalupe, and 20% to the Overlying
11 Owners within the District who are Stipulating Parties.

12 a. The Twitchell Yield allocated to Santa Maria,
13 SCWC and Guadalupe is suballocated pursuant to the agreement among Santa Maria, SCWC and
14 Guadalupe, as attached and incorporated herein as Exhibit “F”.

15 b. The Twitchell Yield allocated to the Overlying
16 Owners who are Stipulating Parties within the District shall be equally allocated to each acre of
17 land within the District owned by these Stipulating Parties. Concurrently with the execution of
18 this Stipulation, each of these Stipulating Parties shall report their acreage of overlying land
19 within the District on a parcel specific basis. Within one hundred and twenty days of the effec-
20 tive date of this Stipulation, the Management Area Engineer shall create a list of all the Stipu-
21 lating Parties and their respective allocation of the Twitchell Yield.

22 (iii) *Recapture of Twitchell Yield*. The right to use Twitchell
23 Yield is a right to use commingled Groundwater and is not limited to the corpus of that water.

24 (iv) *Transfer of Twitchell Yield*. Twitchell Yield may be trans-
25 ferred, temporarily or permanently, only between Stipulating Parties and the transfer market shall
26 be as open and competitive as practical. A memorandum of agreement summarizing each transfer
27 shall be filed with the Court and provided to the TMA. Any such memorandum of agreement
28 shall state the Parties to the transfer, the amount of Twitchell Yield transferred, the price per acre-

1 foot, and the Party responsible for the financial obligation associated with the Twitchell Yield.

2 (v) *Carryover.* Any portion of Twitchell Yield that is not used
3 in a given Year shall not be carried over into the following Year.

4 (c) State Water Project Water.

5 (i) *Import and Use of State Water Project Water.* Santa Maria,
6 SCWC and Guadalupe all have SWP Contracts. Santa Maria will import and use within the Santa
7 Maria Valley Management Area not less than 10,000 acre-feet each Year of Available SWP
8 Water, or the full amount of Available SWP Water if the amount physically available is less than
9 10,000 acre-feet in a given Year under Santa Maria's SWP Contract. Guadalupe will import and
10 use within the Santa Maria Valley Management Area a minimum of 75% of its Available SWP
11 Water. SCWC will import and use within the Basin all its Available SWP Water. Santa Maria,
12 SCWC and Guadalupe will not voluntarily relinquish or terminate their current SWP Contracts,
13 and shall seek renewal of these SWP Contracts.

14 (ii) *Return Flows.*

15 a. *Fixed Amount.* The Return Flows available to each
16 Importer is fixed based on a percentage of the annual amount of SWP Water the Importer uses
17 within the Basin. The fixed percentage for each importer is as follows: (a) Santa Maria 65%; (b)
18 SCWC 45%; and (c) Guadalupe 45%. The percentage provided to SCWC and Guadalupe shall
19 be adjusted through a Court order if: a) either entity increases its use of water imported into the
20 Basin, b) the applicable method of wastewater treatment and discharge to the Basin is altered, or
21 c) good cause is shown.

22 b. *Recapture.* The right to use Return Flows does not
23 attach to the corpus of SWP water deliveries or the treated SWP wastewater discharged into the
24 Basin but is a right to use the commingled Groundwater. The Importer's right to Return Flows is
25 assignable in whole or in part, subject to necessary accounting.

26 c. *Quantification of Return Flows.* Return Flows equal
27 the total amount of SWP Water used by the Importer in the prior five Years, divided by five, and
28 then multiplied by the Importer's percentage as provided in Paragraph V(A)(3)(c)(ii)(a) above.

d. Carryover. Any portion of Return Flows that is not used in a given Year shall not be carried over into the following Year.

B. Monitoring and Management

1. Status of Management Area. Current Groundwater and SWP Water supplies are sustaining existing water uses. Changes in land and water use and demographic conditions can be expected to occur, possibly resulting in changes in water supply or demand requirements.

2. Need for Monitoring. Monitoring and reporting of changes in land and water use and demographic conditions are necessary to ensure that water supplies continue to be sufficient to support water uses.

3. Monitoring Program.

(a) Annual Report: Content and Processing.

The Annual Report shall include an analysis of the relationship between projected water demands and projected water supplies.

(i) The Annual Report shall be prepared and signed by the Management Area Engineer, and shall be simultaneously submitted to the Court and the TMA.

(ii) Within forty-five days of submission, the TMA shall hold a noticed public hearing to take comments on and consider for adoption the Annual Report. No later than forty-five days from the date of the public hearing, the TMA shall submit to the Court its recommendations regarding the Annual Report.

(iii) Within one hundred and twenty days of the date of the submission of the Annual Report to the Court, it shall conduct a noticed hearing on the Annual Report. Any Party may submit comments on the Annual Report. After the hearing, the Court shall accept the Annual Report or direct its modification.

(b) Management Area Engineer

(i) Absent the unanimous consent of the TMA, the Management Area Engineer shall not concurrently be employed by any Party holding rights to use Groundwater in the Santa Maria Valley Management Area.

1 (ii) The Management Area Engineer shall initially be the engin-
2 eering firm of Luhdorff & Scalmanini. Luhdorff & Scalmanini shall be the Management Area
3 Engineer for a minimum of the shorter of five years from the date of this Stipulation or the date
4 upon which Mr. Joseph Scalmanini discontinues full time work for that firm.

5 (iii) The TMA shall employ the following process to replace the
6 Management Area Engineer:

7 a. The TMA shall solicit candidates for Management
8 Area Engineer through a public process. All submissions and candidate materials shall be avail-
9 able to any Party upon request. The TMA shall conduct its interview through a public process to
10 the extent practical, and include District and Overlying Owner representatives in the candidate
11 review process.

12 b. Once a short list of candidates (less than five) for
13 Management Area Engineer is obtained, the TMA shall hold a noticed public hearing to take
14 comments on and consider the candidates for Management Area Engineer. The TMA shall make
15 a reasonable effort to select the Management Area Engineer with a unanimous vote. If the TMA
16 unanimously endorses a candidate, that nominee shall be recommended to the Court. Otherwise,
17 the short list of candidates shall be submitted.

18 c. The Court shall appoint the Management Area
19 Engineer following a noticed hearing.

20 4. Funding. The TMA shall pay for the Monitoring Program for the Santa
21 Maria Valley Management Area, which includes the cost of the Management Area Engineer and
22 the Annual Report. The cost of the Monitoring Program shall be divided among the Twitchell
23 Participants on the same basis as the allocation of their Twitchell Yield.

24 **C. Response to Varying Conditions**

25 1. Early Response to Avoid Severe Water Shortage Conditions. If the Man-
26 agement Area Engineer determines that projected demands are expected to materially exceed
27 projected water supplies, then the Management Area Engineer may recommend programs and
28 projects to augment the Management Area's water supplies. The Stipulating Parties will collabo-

1 rate on a response based upon current conditions, but absent Severe Water Shortage Conditions,
2 implementation of programs and projects will not be mandated.

3 The Stipulating Parties may voluntarily participate in any recommended program or
4 project, either through financial or other contributions. The Stipulating Parties that contribute to
5 such a program or project shall have a priority to the water supplies generated by that program or
6 project with Court approval. The Stipulating Parties agree to aggressively pursue New
7 Developed Water sources, including necessary funding.

8 2. Severe Water Shortage Conditions and Response.

9 (a) Determination. Severe Water Shortage Conditions shall be found
10 to exist when the Management Area Engineer, based on the results of the ongoing Monitoring
11 Program, finds the following: 1) groundwater levels in the Management Area are in a condition of
12 chronic decline over a period of not less than five Years; 2) the groundwater decline has not been
13 caused by drought; 3) there has been a material increase in Groundwater use during the five-Year
14 period; and 4) monitoring wells indicate that groundwater levels in the Santa Maria Valley
15 Management Area are below the lowest recorded levels.

16 (b) Response.

17 (i) If the Management Area Engineer determines that Severe
18 Water Shortage Conditions exist within the Santa Maria Valley Management Area, the Manage-
19 ment Area Engineer shall file and serve, as part of its Annual Report, findings and recommen-
20 dations to alleviate such shortage conditions or the adverse effects caused by such water shortage.

21 (ii) Upon the filing of the Annual Report, the Court shall hold a
22 noticed hearing regarding the existence and appropriate response to the Severe Water Shortage
23 Conditions. If, after that hearing, the Court finds that Severe Water Shortage Conditions exist in
24 the Santa Maria Valley Management Area, the Court shall first order all use of Groundwater to be
25 limited to: (a) for Guadalupe, Santa Maria and SCWC, their Developed Water; (b) entitled
26 Stipulating Parties to their New Developed Water; and (c) for the Overlying Owners, the Native
27 Groundwater plus any Developed Water to which individual Overlying Owners are entitled.

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1 (iii) The Court may also order Stipulating Parties to address
2 specific adverse effects caused by the Severe Water Shortage Conditions. The responses may
3 include, but are not limited to: (a) measures recommended in the Annual Report and the related
4 Court proceedings; and (b) other measures intended to address localized problems in the Santa
5 Maria Valley Management Area directly related to the Severe Water Shortage Conditions.

6 (iv) The Court may adjust the Groundwater use limitations
7 imposed on any Stipulating Party(ies) who implement programs or projects providing additional
8 water supplies within the Santa Maria Valley Management Area.

9 (v) If the Court finds that Management Area conditions have
10 deteriorated since it first found Severe Water Shortage Conditions, the Court may impose further
11 limitations on Groundwater use. If the Court imposes further limitations on Groundwater use, a
12 Stipulating Party shall be exempt from those limitations to the extent: (a) the Stipulating Party can
13 demonstrate that it has already implemented limitations in its Groundwater use, equivalent to
14 those ordered by the Court; or (b) the Stipulating Party can demonstrate that further limitations
15 would not avoid or reduce the deteriorating conditions.

16 (vi) During Severe Water Shortage Conditions, the Stipulating
17 Parties may make agreements for temporary transfer of rights to pump Native Groundwater,
18 voluntary fallowing, or the implementation of extraordinary conservation measures. Transfers of
19 Native Groundwater must benefit the Management Area and be approved by the Court.

20 **D. Management and Administration of the Twitchell Project**

21 1. Operational Parameters. All Twitchell Project operations (operation and
22 maintenance and capital projects) will be performed consistent with the following parameters
23 (Operational Parameters):

24 (a) Maximize recharge of the Santa Maria Valley Management Area
25 from Twitchell Water, including without limitation, the avoidance of impacts on recharge
26 resulting from ongoing accumulation of silt to the maximum extent practical.

27 (b) Operate the Twitchell Project in accordance with the requirements
28 of applicable law including, without limitation, the requirements of the Bureau of Reclamation

1 and Army Corps of Engineers.

2 (c) Operate the Twitchell Project in accordance with industry standards
3 and best management practices.

4 2. Twitchell Project Manual.

5 (a) The TMA will hire and pay for a professional engineering con-
6 sulting firm with expertise in dam and reservoir operations and maintenance, acceptable to the
7 District and the TMA, to develop an integrated operation and maintenance procedure manual
8 ("Twitchell Project Manual") and provide recommendations for capital and maintenance projects
9 that are consistent with the Operational Parameters.

10 (b) The District shall hold one or more public hearings to solicit input
11 regarding the content of the Twitchell Project Manual.

12 (c) Within eighteen months of entry of the judgment, the TMA and the
13 District shall adopt a final Twitchell Project Manual.

14 (d) Any disagreement between the District and the TMA regarding the
15 content of the final Twitchell Project Manual shall be presented for Court review and determina-
16 tion pursuant to the judicial review provisions provided in this Stipulation.

17 (e) The District will exercise its discretionary authority to conduct all
18 its operation and maintenance activities for the Twitchell Project in accordance with the Twitchell
19 Project Manual.

20 3. Twitchell Project Funding.

21 (a) District will maintain its current operation and maintenance (O&M)
22 assessments. These funds will be used for District staff salaries, property, equipment, rent,
23 expenses, and other day-to-day operations, and will be expended consistent with the Twitchell
24 Project Manual to the extent it is applicable.

25 (b) The TMA will separately fund, administer, construct and manage
26 any additional Twitchell Project expenses or projects, including Capital Improvement Projects
27 (see below) and O&M, (Extraordinary Project Operations) consistent with the Twitchell Project
28 Manual. The TMA and the District will make reasonable efforts to work cooperatively to imple-

1 ment Extraordinary Project Operations.

2 (c) Consistent with the provisions of this Paragraph V(D), the District
3 and the TMA shall be responsible for ensuring the ongoing operational integrity of the Twitchell
4 Project and the maintenance of the Twitchell Yield. The Stipulating Parties expect that this
5 ongoing responsibility may involve significant expenditures. Within 120 days of the effective
6 date of this Stipulation, and annually thereafter, the Twitchell Participants shall establish an
7 operating budget for the TMA to fund its responsibilities set forth in this Stipulation. For the first
8 five years following the PUC approval as provided below, the TMA's annual budget shall be
9 established at an amount between \$500,000 to \$700,000. Following the initial budgeting period,
10 the TMA shall set its budget in three- to five-year increments, as it deems necessary to meet its
11 obligations to preserve the Twitchell Yield. Any unused revenues shall be segregated into a
12 reserve account, for future funding needs of the Twitchell Project. The Stipulating Parties agree
13 to cooperate and coordinate their efforts to enable the TMA to fulfill its responsibilities as pro-
14 vided in this Stipulation.

15 4. Twitchell Management Authority.

16 (a) The TMA shall be comprised of one representative of each of the
17 following parties: Santa Maria, Guadalupe, Southern California Water Company, the District, and
18 Overlying Landowners holding rights to Twitchell Yield.

19 (b) Only those parties holding an allocation of Twitchell Yield shall be
20 voting members of the TMA. Voting shall be based on each party's proportionate allocation of
21 Twitchell Yield.

22 (c) The TMA shall be responsible for all the Extraordinary Project
23 Operations.

24 (d) The TMA shall be responsible for developing proposals for Capital
25 Improvement Projects relating to the Twitchell Project. Capital Improvement Projects shall mean
26 projects involving the expenditure of funds for the improvement or enhancement of the Twitchell
27 Project, but shall not include normal operation, maintenance or repair activities.

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1 (e) Upon the development of a proposal for a Capital Improvement
2 Project, the TMA shall, in cooperation with the District, hold one or more public hearings to
3 solicit input.

4 (f) Following the public hearing process, the TMA may vote on
5 whether to implement the Capital Improvement Project.

6 (g) The cost of TMA-sponsored Extraordinary Project Operations and
7 Capital Improvement Projects shall be divided among Twitchell Participants on the same basis as
8 the allocation of their Twitchell Yield.

9 (h) The District shall assume operation and maintenance responsibility
10 for any TMA sponsored Capital Improvement Project to the extent practical within the District's
11 day-to-day operations.

12 5. Regulatory Compliance. The TMA or the District shall provide advance
13 notice to the Court and all Parties of the initiation of any regulatory proceeding relating to the
14 Twitchell Project.

15 6. Existing Contracts. The Twitchell Reservoir Project will continue to be
16 governed by and subject to the terms and conditions of the December 1955 agreement between
17 the District and the Santa Barbara County Water Agency and nothing in this Stipulation is
18 intended to modify the rights or obligations provided in that agreement. To the extent that the
19 approval of Santa Barbara County Water Agency or the United States Bureau of Reclamation is
20 required in connection with the implementation of this Stipulation, the Stipulating Parties agree to
21 work cooperatively to obtain such approval(s).

22 **E. New Urban Uses – Santa Maria Valley Management Area**

23 1. New Urban Uses shall obtain water service from the local public water
24 supplier. The local public water supplier shall provide water service on a reasonable and non-
25 discriminatory basis.

26 2. New municipal and industrial uses on land adjacent to or within one-
27 quarter mile of the boundary line depicted in Exhibit D shall comply with any applicable Cor-
28 porations Code provisions and negotiate in good faith to obtain water service from the local

1 public water supplier, before forming a mutual water company to provide water service.

2 3. No modification of land use authority. This Stipulation does not modify
3 the authority of the entity holding land use approval authority over the proposed New Urban
4 Uses.

5 4. New Urban Uses shall provide a source of supplemental water to offset the
6 water demand associated with that development. For the purposes of this section, supplemental
7 water shall include all sources of Developed Water, except: i) Twitchell Water, ii) storm water
8 percolation ponds existing as of the date of entry of the judgment, or iii) Overlying Owners' right
9 to use of surplus Developed Water.

10 **VI. PHYSICAL SOLUTION: PROVISIONS SPECIFIC TO NIPOMO MESA MAN-**
11 **AGEMENT AREA**

12 As supplemented by the provisions of this Stipulation that apply to all Management Areas,
13 the following terms shall apply to the Nipomo Mesa Management Area.

14 **A. Supplemental Water**

15 1. MOU. NCSD has entered into a Memorandum of Understanding
16 ("MOU") with Santa Maria which contemplates the wholesale purchase and transmission from
17 Santa Maria to the NMMA of a certain amount of water each Year (the "Nipomo Supplemental
18 Water"). All water delivered pursuant to the MOU for delivery by NCSD to its ratepayers shall
19 be applied within the NCSD or the NCSD's sphere of influence as it exists at the time of the
20 transmission of that water.

21 2. The NCSD agrees to purchase and transmit to the NMMA a minimum of
22 2,500 acre-feet of Nipomo Supplemental Water each Year. However, the NMMA Technical
23 Group may require NCSD in any given Year to purchase and transmit to the NMMA an amount
24 in excess of 2,500 acre-feet and up to the maximum amount of Nipomo Supplemental Water
25 which the NCSD is entitled to receive under the MOU if the Technical Group concludes that such
26 an amount is necessary to protect or sustain Groundwater supplies in the NMMA. The NMMA
27 Technical Group also may periodically reduce the required amount of Nipomo Supplemental
28 Water used in the NMMA so long as it finds that groundwater supplies in the NMMA are not

1 endangered in any way or to any degree whatsoever by such a reduction.

2 3. The Stipulating Parties agree to support (and, conversely, not to oppose in
3 any way or to encourage or assist any other Person or party in opposing or challenging) the imple-
4 mentation of the MOU, which includes environmental and regulatory permits and approvals, the
5 approval of a wholesale water supply agreement between Santa Maria and NCSD, and the
6 alignment and construction of a pipeline and related infrastructure necessary to deliver the
7 Nipomo Supplemental Water from Santa Maria to the NMMA ("Nipomo Supplemental Water
8 Project"). ConocoPhillips retains the right to object to or provide input on the alignment of any
9 pipelines associated with the Nipomo Supplemental Water Project if they might interfere with the
10 location of existing ConocoPhillips pipelines. The Stipulating Parties retain their rights to be
11 compensated for any interest or property acquired in implementing the Nipomo Supplemental
12 Water Project.

13 4. NCSD and Santa Maria shall employ their best efforts to timely implement
14 the Nipomo Supplemental Water Project, subject to their quasi-judicial obligations specified for
15 administrative actions and in the California Environmental Quality Act.

16 5. The enforcement of the provisions of Paragraph VI(D) below is condi-
17 tioned upon the full implementation of the Nipomo Supplemental Water Project, including the
18 Yearly use of at least 2,500 acre-feet of Nipomo Supplemental Water (subject to the provisions of
19 Paragraph VI(A)(2) above) within the NMMA. In the event that Potentially Severe Water
20 Shortage Conditions or Severe Water Shortage Conditions are triggered as referenced in Para-
21 graph VI(D) before Nipomo Supplemental Water is used in the NMMA, NCSD, SCWC,
22 Woodlands and RWC agree to develop a well management plan that is acceptable to the NMMA
23 Technical Group, and which may include such steps as imposing conservation measures, seeking
24 sources of supplemental water to serve new customers, and declaring or obtaining approval to
25 declare a moratorium on the granting of further intent to serve or will serve letters. In the event
26 that it becomes apparent that the Nipomo Supplemental Water will not be fully capable of being
27 delivered, any Stipulating Party may apply to the Court, pursuant to a noticed motion, for appro-
28 priate modifications to this portion of the Stipulation and the judgment entered based upon the

1 terms and conditions of this Stipulation, including declaring this Paragraph VI to be null and void,
2 and of no legal or binding effect.

3 6. Once the Nipomo Supplemental Water is capable of being delivered, those
4 certain Stipulating Parties listed below shall purchase the following portions of the Nipomo
5 Supplemental Water Yearly:

6 NCSD - 66.68%

7 Woodlands Mutual Water Company - 16.66%

8 SCWC - 8.33%

9 RWC - 8.33%

10 **B. Rights to Use Groundwater**

11 1. ConocoPhillips and its successors-in-interest shall have the right to the
12 reasonable and beneficial use of Groundwater on the property it owns as of the date of this Stipu-
13 lation located in the NMMA ("ConocoPhillips Property") without limitation, except in the event
14 the mandatory action trigger point (Severe Water Shortage conditions) described in Paragraph
15 VI(D) (2) below is reached. Further, any public water supplier which provides water service to
16 the ConocoPhillips Property may exercise that right subject to the limitation described in Para-
17 graph VI(D)(2).

18 2. Overlying Owners that are Stipulating Parties that own land located in the
19 NMMA as of the date of this Stipulation shall have the right to the reasonable and beneficial use
20 of Groundwater on their property within the NMMA without limitation, except in the event the
21 mandatory action trigger point (Severe Water Shortage Conditions) described in Paragraph
22 VI(D)(2) below is reached.

23 3. The Woodlands Mutual Water Company shall not be subject to restriction
24 in its reasonable and beneficial use of Groundwater, provided it is concurrently using or has made
25 arrangements for other NMMA parties to use within the NMMA, the Nipomo Supplemental
26 Water allocated to the Woodlands in Paragraph VI(A)(5). Otherwise, the Woodlands Mutual
27 Water Company shall be subject to reductions equivalent to those imposed on NCSD, RWC and
28 SCWC, as provided in Paragraph VI(D)(1-2).

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2 **C. NMMA Technical Group**

3 1. The NMMA Technical Group shall include representatives appointed by
4 NCSD, SCWC, ConocoPhillips, Woodlands Mutual Water Company and an agricultural Over-
5 lying Owner who is also a Stipulating Party.

6 2. The NMMA Technical Group shall develop a Monitoring Program for the
7 NMMA ("NMMA Monitoring Program"), which shall be consistent with the Monitoring
8 Program described in Paragraph IV(D). The NMMA Monitoring Program shall also include the
9 setting of well elevation and water quality criteria that trigger the responses set forth in Paragraph
10 D below. The Stipulating Parties shall provide monitoring and other production data to the
11 NMMA Technical Group at no charge, to the extent that such data has been generated and is
12 readily available. The NMMA Technical Group shall adopt rules and regulations concerning
13 measuring devices and production reports that are, to the extent feasible, consistent with the
14 Monitoring Programs for other Management Areas. If the NMMA Technical Group is unable to
15 agree on any aspect of the NMMA Monitoring Program, the matter may be resolved by the Court
16 pursuant to a noticed motion.

17 3. The NMMA Technical Group meetings shall be open to any Stipulating
18 Party. NMMA Technical Group files and records shall be available to any Stipulating Party upon
19 written request. Notices of the NMMA Technical Group meetings, as well as all its final work
20 product (documents) shall be posted to groups.yahoo.com/group/NipomoCommunity/

21 4. The NMMA Technical Group functions shall be funded by contribution
22 levels to be negotiated by NCSD, SCWC, RWC, ConocoPhillips, and Woodlands Mutual Water
23 Company. In-lieu contributions through engineering services may be provided, subject to agree-
24 ment by those parties. The budget of the NMMA Technical Group shall not exceed \$75,000 per
25 year without prior approval of the Court pursuant to a noticed motion.

26 5. Any final NMMA Technical Group actions shall be subject to *de novo*
27 Court review by motion.

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2 **D. Potentially Severe and Severe Water Shortage Conditions**

3 1. Caution trigger point (Potentially Severe Water Shortage Conditions)

4 (a) Characteristics. The NMMA Technical Group shall develop
5 criteria for declaring the existence of Potentially Severe Water Shortage Conditions. These
6 criteria shall be approved by the Court and entered as a modification to this Stipulation or the
7 judgment to be entered based upon this Stipulation. Such criteria shall be designed to reflect that
8 water levels beneath the NMMA as a whole are at a point at which voluntary conservation
9 measures, augmentation of supply, or other steps may be desirable or necessary to avoid further
10 declines in water levels.

11 (b) Responses. If the NMMA Technical Group determines that Poten-
12 tially Severe Water Shortage Conditions have been reached, the Stipulating Parties shall coordi-
13 nate their efforts to implement voluntary conservation measures, adopt programs to increase the
14 supply of Nipomo Supplemental Water if available, use within the NMMA other sources of
15 Developed Water or New Developed Water, or implement other measures to reduce Groundwater
16 use.

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

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

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

27 (i) For Overlying Owners other than Woodlands Mutual Water
28 Company and ConocoPhillips, a reduction in the use of Groundwater to no more than 110% of

1 the highest pooled amount previously collectively used by those Stipulating Parties in a Year,
2 prorated for any partial Year in which implementation shall occur, unless one or more of those
3 Stipulating Parties agrees to forego production for consideration received. Such forbearance shall
4 cause an equivalent reduction in the pooled allowance. The base Year from which the calculation
5 of any reduction is to be made may include any prior single Year up to the Year in which the
6 Nipomo Supplemental Water is transmitted. The method of reducing pooled production to 110%
7 is to be prescribed by the NMMA Technical Group and approved by the Court. The quantifica-
8 tion of the pooled amount pursuant to this subsection shall be determined at the time the manda-
9 tory action trigger point (Severe Water Shortage Conditions) described in Paragraph VI(D)(2) is
10 reached. The NMMA Technical Group shall determine a technically responsible and consistent
11 method to determine the pooled amount and any individual's contribution to the pooled amount.
12 If the NMMA Technical Group cannot agree upon a technically responsible and consistent
13 method to determine the pooled amount, the matter may be determined by the Court pursuant to a
14 noticed motion.

15 (ii) ConocoPhillips shall reduce its Yearly Groundwater use to
16 no more than 110% of the highest amount it previously used in a single Year, unless it agrees in
17 writing to use less Groundwater for consideration received. The base Year from which the calcu-
18 lation of any reduction is to be made may include any prior single Year up to the Year in which
19 the Nipomo Supplemental Water is transmitted. ConocoPhillips shall have discretion in deter-
20 mining how reduction of its Groundwater use is achieved.

21 (iii) NCSD, RWC, SCWC, and Woodlands (if applicable as
22 provided in Paragraph VI(B)(3) above) shall implement those mandatory conservation measures
23 prescribed by the NMMA Technical Group and approved by the Court.

24 (iv) If the Court finds that Management Area conditions have
25 deteriorated since it first found Severe Water Shortage Conditions, the Court may impose further
26 mandatory limitations on Groundwater use by NCSD, SCWC, RWC and the Woodlands. Manda-
27 tory measures designed to reduce water consumption, such as water reductions, water restrictions,
28 and rate increases for the purveyors, shall be considered.

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2 (v) During Severe Water Shortage Conditions, the Stipulating
3 Parties may make agreements for temporary transfer of rights to pump Native Groundwater,
4 voluntary fallowing, or the implementation of extraordinary conservation measures. Transfer of
5 Native Groundwater must benefit the Management Area and be approved by the Court.

6 **E. New Urban Uses**

7 1. Within the sphere of influence or service area. New Urban Uses shall
8 obtain water service from the local public water supplier. The local public water supplier shall
9 provide water service on a reasonable and non-discriminatory basis.

10 2. Outside the sphere of influence or service area. New municipal and indus-
11 trial uses on land adjacent to or within one quarter mile of the boundary line depicted in Exhibit D
12 shall comply with any applicable Corporations Code provisions, including good faith negotiations
13 with the local water purveyor(s), prior to forming a mutual water company to provide water
14 service.

15 3. The ConocoPhillips property, owned as of the date of this Stipulation and
16 located within the NMMA, is not in the sphere of influence or service area, nor is it in the process
17 of being included in the sphere of influence, of a municipality or within the certificated service
18 area of a publicly regulated utility as of the date of this Stipulation, nor is it adjacent to or in close
19 proximity to the sphere of influence of a municipality or the certificated service area of a publicly
20 regulated utility as of the date of this Stipulation, as those terms are used in Paragraphs VI(E)(1
21 and 2).

22 4. No modification of land use authority. This Stipulation does not modify the
23 authority of the entity holding land use approval authority over the proposed New Urban Uses.

24 5. New Urban Uses as provided in Paragraph VI(E)(1) above and new muni-
25 cipal and industrial uses as provided in Paragraph VI(E)(2) above shall provide a source of
26 supplemental water, or a water resource development fee, to offset the water demand associated
27 with that development. For the purposes of this Paragraph, supplemental water shall include all
28 sources of Developed Water or New Developed Water.

1 **VII. PHYSICAL SOLUTION: PROVISIONS SPECIFIC TO NORTHERN CITIES**
2 **MANAGEMENT AREA**

3 These terms, supplemented by the provisions of this Stipulation that apply to all
4 Management Areas, govern water rights and resources in the Northern Cities Management Area.

5 1. Groundwater Monitoring. Groundwater monitoring in the Northern Cities
6 Management Area will be conducted by the Northern Cities in the manner described above.

7 2. Lopez Project. The Lopez Project will continue to be managed by the SLO
8 District. The Northern Cities and Landowners will continue to bear costs of the Lopez Reservoir
9 and no costs of the Twitchell Reservoir.

10 3. Independent Management Per Settlement Agreement.

11 (a) Existing Groundwater, SWP Water and Storage Space in the
12 Northern Cities Management Area will continue to be allocated and independently managed by
13 the Northern Parties in accordance with the Northern Cities and Northern Landowners' 2002
14 Settlement Agreement (Exhibit "E") for the purpose of preserving the long-term integrity of water
15 supplies in the Northern Cities Management Area. That Settlement Agreement initially allocates
16 57% of the safe yield of groundwater in Zone 3 to the farmers and 43% to the cities; and it
17 provides *inter alia* that any increase or decrease in the safe yield will be shared by the cities and
18 landowners on a pro rata basis. That Settlement Agreement is reaffirmed as part of this Stipula-
19 tion and its terms are incorporated into this Stipulation, except that the provisions regarding con-
20 tinuing jurisdiction (§ 4), groundwater monitoring, reporting, and the Technical Oversight
21 Committee (§§ 7-20) are canceled and superseded by the provisions of this Stipulation dealing
22 with those issues.

23 (b) Without the written agreement of each of the Northern Cities, no
24 party other than Northern Parties shall have any right to:

25 (i) pump, store, or use Groundwater or surface water within the
26 Northern Cities Management Area; or

27 (ii) limit or interfere with the pumping, storage, management or
28 usage of Groundwater or surface water by the Northern Parties within the Northern Cities

1 Management Area.

2 (c) For drought protection, conservation, or other management pur-
3 poses, the Northern Parties may engage in contractual transfers, leases, licenses, or sales of any of
4 their water rights, including voluntary fallowing programs. However, no Groundwater produced
5 within the Northern Cities Management Area may be transported outside of the Northern Cities
6 Management Area without the written agreement of each of the Northern Cities.

7 4. Current and future deliveries of water within the spheres of influence of the
8 Northern Cities as they exist on January 1, 2005 shall be considered existing uses and within the
9 Northern Cities Management Area.

10 **VIII. INJUNCTION – ALL MANAGEMENT AREAS**

11 **A. Use Only Pursuant to Stipulation**

12 Each and every Stipulating Party, their officers, agents, employees, successors and
13 assigns, are enjoined and restrained from exercising the rights and obligations provided through
14 this Stipulation in a manner inconsistent with the express provisions of this Stipulation.

15 **B. Injunction Against Transportation From the Basin**

16 Except upon further order of the Court, each and every Stipulating Party and its officers,
17 agents, employees, successors and assigns, is enjoined and restrained from transporting Ground-
18 water to areas outside the Basin, except for those uses in existence as of the date of this Stipula-
19 tion; provided, however, that Groundwater may be delivered for use outside the Basin as long as
20 the wastewater generated by that use of water is discharged within the Basin, or agricultural
21 return flows resulting from that use return to the Basin.

22 **C. No Third Party Beneficiaries**

23 This Stipulation is intended to benefit the Stipulating Parties and no other Parties. Only a
24 Stipulating Party may enforce the terms of this Stipulation or assert a right to any benefits of, or
25 enforce any obligations contained in this Stipulation.

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1 **IX. RESERVED JURISDICTION – ALL MANAGEMENT AREAS**

2 **A. Reserved Jurisdiction; Modifications, Cancellations, Amendments**

3 Jurisdiction, power and authority are retained by and reserved to the Court as set forth in
4 this Paragraph. Nothing in the Court's reserved jurisdiction shall authorize modification, cancel-
5 lation or amendment of the rights provided under Paragraphs III; V(A, E); VI(A, B, D); VII(2, 3);
6 VIII(A); IX(A, C); and X(A, D) of this Stipulation. Subject to this limitation, the Court shall
7 make such further or supplemental orders as may be necessary or appropriate regarding the
8 following:

- 9 1. enforcement of this Stipulation;
- 10 2. claims regarding waste/unreasonable use of water;
- 11 3. disputes between Stipulating Parties across Management Area boundaries;
- 12 4. interpretation and enforcement of the judgment;
- 13 5. consider the content or implementation of a Monitoring Program;
- 14 6. consider the content, conclusions, or recommendations contained in an
15 Annual Report;
- 16 7. consider Twitchell Project operations, including, but not limited to: i) the
17 content of the Twitchell Project Manual; ii) TMA or District compliance
18 with the Twitchell Project Manual; iii) decisions to implement Extraor-
19 dinary Project Operations; or iv) the maintenance of Twitchell Yield;
- 20 8. claims of localized physical interference between the Stipulating Parties in
21 exercising their rights pursuant to this Stipulation; provided, however,
22 rights to use Groundwater under this Stipulation shall have equal status;
23 and
- 24 9. modify, clarify, amend or amplify the judgment and the Northern Parties
25 Settlement Agreement; Provided, however, that all of the foregoing shall
26 be consistent with the spirit and intent of this Stipulation.

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1 **B. Noticed Motion**

2 Any party that seeks the Court's exercise of reserved jurisdiction shall file a noticed
3 motion with the Court. Any noticed motion shall be made pursuant to the Court's Order Con-
4 cerning Electronic Service of Pleadings and Electronic Posting of Discovery Documents dated
5 June 27, 2000, attached and incorporated as Exhibit "G". Any request for judicial review shall be
6 filed within sixty days of the act or omission giving rise to the claim. Upon a showing of good
7 cause, the Court may extend the sixty-day time limitation.

8 **C. De Novo Nature of Proceeding**

9 The Court shall exercise *de novo* review in all proceedings. The actions or decisions of
10 any Party, the Monitoring Parties, the TMA, or the Management Area Engineer shall have no
11 heightened evidentiary weight in any proceedings before the Court.

12 **D. Filing and Notice**

13 As long as the Court's electronic filing system remains available, all Court filings shall be
14 made pursuant to Exhibit "G". If the Court's electronic filing system is eliminated and not
15 replaced, the Stipulating Parties shall promptly establish a substitute electronic filing system and
16 abide by the same rules as contained in the Court's Order.

17 **X. MISCELLANEOUS PROVISIONS – ALL MANAGEMENT AREAS**

18 **A. Unenforceable Terms**

19 The Stipulating Parties agree that if any provision of this Stipulation or the judgment
20 entered based on this Stipulation is held to be invalid, void, or unenforceable, the remaining pro-
21 visions shall nevertheless continue in full force and effect; provided, however, any order which
22 invalidates, voids, deems unenforceable, or materially alters those Paragraphs enumerated in
23 Paragraph IX(A) or any of them, shall render the entirety of the Stipulation and the judgment
24 entered based on this Stipulation voidable and unenforceable, as to any Stipulating Party who
25 files and serves a motion to be released from the Stipulation and the judgment based upon the
26 Stipulation within sixty days of entry of that order, and whose motion is granted upon a showing
27 of good cause.

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1 **B. Water Quality**

2 Nothing in the Stipulation shall be interpreted as relieving any Stipulating Party of its
3 responsibilities to comply with state or federal laws for the protection of water quality or the
4 provisions of any permits, standards, requirements, or orders promulgated thereunder.

5 **C. Duty to Cooperate**

6 The Stipulating Parties agree not to oppose, or in any way encourage or assist any other
7 party in opposing or challenging, any action, approval, or proceeding necessary to obtain
8 approval of or make effective this Stipulation or the judgment to be entered on terms consistent
9 with this Stipulation.

10 **D. Stipulating Parties Under Public Utilities Commission Regulation**

11 1. To the extent allowed by law, SCWC and RWC shall comply with this
12 Stipulation, prior to obtaining California Public Utilities Commission ("PUC") approval. If the
13 PUC fails to approve SCWC's and RWC's participation or fails to provide approval of the neces-
14 sary rate adjustments so that SCWC and RWC may meet their respective financial obligations,
15 including the participation in Developed Water projects, Monitoring Programs, TMA and as
16 otherwise provided in this Stipulation, shall render the entirety of the Stipulation and those terms
17 of any judgment based on this Stipulation invalid, void and unenforceable, as to any Stipulating
18 Party who files and serves a notice of rescission within sixty days of notice by SCWC or RWC of
19 a final PUC Order.

20 2. Any Party, or its successors or assigns, agreeing to become a new customer
21 of SCWC or RWC, or an existing customer proposing to increase its water use through a change
22 in land use requiring a discretionary land use permit or other form of land use entitlement, that
23 has not executed reservation contracts for supplemental water as specified in Exhibit F will
24 provide the following, once approved by the PUC:

25 (a) If in the Santa Maria Valley Management Area, a water resource
26 development fee as specified in Exhibit F or a source of supplemental water sufficient to offset
27 the consumptive demand associated with the new use as provided in Paragraph V(E); or

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1 (b) If in the NMMA, a water resource development fee, or a source of
2 supplemental water sufficient to offset the consumptive demand associated with the new use.

3 3. Any Person who is not engaged in a New Urban Use and who agrees to
4 become a customer of SCWC or RWC shall retain its right to contest the applicable water
5 resource development fee, should that fee ever become applicable to that Person.

6 **E. Designation of Address, for Notice and Service**

7 Each Stipulating Party shall designate the name, address and e-mail address, if any, to be
8 used for purposes of all subsequent notices and service, either by its endorsement on the Stipula-
9 tion for entry of judgment or by a separate designation to be filed within thirty days after execu-
10 tion of this Stipulation. This designation may be changed from time to time by filing a written
11 notice with the Court. Any Stipulating Party desiring to be relieved of receiving notices may file
12 a waiver of notice on a form approved by the Court. The Court shall maintain at all times a
13 current list of Parties to whom notices are to be sent and their addresses for purposes of service.
14 The Court shall also maintain a full current list of names, addresses, and e-mail addresses of all
15 Parties or their successors, as filed herein. Copies of such lists shall be available to any Person.
16 If no designation is made, a Stipulating Party's designee shall be deemed to be, in order of
17 priority: i) the Party's attorney of record; ii) if the Party does not have an attorney of record, the
18 Party itself at the address specified.

19 **F. No Loss of Rights**

20 Nothing in this Stipulation shall be interpreted to require or encourage any Stipulating
21 Party to use more water in any Year than is actually required. As between the Stipulating Parties,
22 failure to use all of the water to which a Stipulating Party is entitled hereunder shall not, no matter
23 how long continued, be deemed or constitute an abandonment or forfeiture of such Stipulating
24 Party's rights, in whole or in part.

25 **G. Intervention After Judgment**

26 Any Person who is not a Party or successor to a Party, who proposes to use Groundwater
27 or Storage Space, may seek to become a Party to the judgment through a petition for intervention.
28 The Court will consider an order confirming intervention following thirty days notice to the

1 Parties. Thereafter, if approved by the Court, such intervenor shall then be a Party bound by the
2 judgment as provided by the Court.

3 **H. Stipulation and Judgment Binding on Successors, Assigns, etc.**

4 The Stipulating Parties agree that all property owned by them within the Basin is subject
5 to this Stipulation and the judgment to be entered based upon the terms and conditions of this
6 Stipulation. This Stipulation and the judgment will be binding upon and inure to the benefit of
7 each Stipulating Party and their respective heirs, executors, administrators, trustees, successors,
8 assigns, and agents. This Stipulation and the judgment to be entered based the terms and condi-
9 tions of this Stipulation shall not bind the Stipulating Parties that cease to own property within the
10 Basin, or cease to use Groundwater. As soon as practical after the effective date of this Stipula-
11 tion, a memorandum of agreement referencing this Stipulation shall be recorded in Santa Barbara
12 and San Luis Obispo Counties by Santa Maria, in cooperation with the Northern Cities and
13 SCWC. The document to be recorded shall be in the format provided in Exhibit "H".

14 **I. Costs**

15 No Stipulating Party shall recover any costs or attorneys fees from another Stipulating
16 Party incurred prior to the entry of a judgment based on this Stipulation.

17 **J. Non-Stipulating Parties**

18 It is anticipated that the Court will enter a single judgment governing the rights of all
19 Parties in this matter. The Stipulating Parties enter into this Stipulation with the expectation that
20 the Court will enter, as a part of the judgment, the terms and conditions of this Stipulation. This
21 Stipulation shall not compromise, in any way, the Court's legal and equitable powers to enter a
22 single judgment that includes provisions applicable to the non-Stipulating Parties that may
23 impose differing rights and obligations than those applicable to the Stipulating Parties. As against
24 non-Stipulating Parties, each Stipulating Party expressly reserves and does not waive its right to
25 appeal any prior or subsequent ruling or order of the Court, and assert any and all claims and
26 defenses, including prescriptive claims. The Stipulating Parties agree they will not voluntarily
27 enter into a further settlement or stipulation with non-Stipulating Parties that provides those non-
28 Stipulating Parties with terms and conditions more beneficial than those provided to similarly

1 situated Stipulating Parties.

2 **K. Counterparts**

3 This Stipulation may be signed in any number of counterparts, including counterparts by
4 facsimile signature, each of which shall be deemed an original, but all of which shall together
5 constitute one and the same instrument. The original signature pages shall be filed with Court.

6 **L. Effective Date**

7 This Stipulation shall be effective when signed by the Stipulating Parties listed on Exhibit
8 “A” and accepted by the Court.

Party	Signature, title, and date	Parcels Subject to Stipulation
Attorney of Record	Approved as to form: By: _____ Date: _____	

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STIPULATION (06/30/05)

Appendix C

NCSD's Water Conservation and Emergency Water Shortage Regulations

Chapter 3.24 WATER CONSERVATION AND EMERGENCY WATER SHORTAGE REGULATIONS

3.24.010 Definitions.

"Applicant" means person who requests water from the district.

"Customer" means person receiving water from the district distribution system.

"District" means Nipomo Community Services District.

"HFC" means hundred cubic feet.

(Ord. 92-65 1, 1992)

3.24.020 Prohibition of certain uses.

A. No customer shall waste water.

As used herein the term "waste water" means:

1. Use of potable water to irrigate grass, lawns, groundcover, shrubbery, crops, vegetation and trees between the hours of nine a.m. and six p.m. or in such a manner as to result in run-off for more than five minutes;
2. Use of potable water to wash sidewalks, walkways, driveways, parking lots, open ground or other hard surface areas by direct application;
3. Allow potable water to escape from breaks within the customers plumbing system for more than four hours after the customer is notified or discovers the break;
4. Use of potable water for sewer system maintenance or fire protection training without prior approval by the district. (Ord. 92-65 2, 1992)

3.24.030 Water conservation stages.

A. Stage I: Voluntary Conservation. Customers of the Nipomo Community Services District are requested to voluntarily limit the amount of water used from May 15th to October 15th of each year to that amount absolutely necessary for health and business. A fifteen percent reduction in water use is requested.

B. Stage II: Mandatory Conservation. In addition to prohibitions and resolutions previously listed:

1. All outdoor irrigation of vegetation shall occur only between the hours of six p.m. and nine a.m. on designated days and must utilize hand held hoses, drip irrigation or permanently installed automatic sprinkler systems;
2. The washing of automobiles, trucks, trailers, boats and other types or mobile equipment not occurring upon the immediate premises of commercial car washes and commercial service stations and not in the immediate interest of the public health, safety and welfare shall be prohibited;
3. Use of water from fire hydrants shall be limited to fire suppression and/or other activities immediately necessary to maintaining health, safety and welfare of the citizens within the boundaries of the Nipomo Community Services District.

C. Stage III: Mandatory Conservation. In addition to prohibitions and restrictions previously listed:

1. Use of potable water to irrigate grass, lawns, groundcover, shrubbery, crops, vegetation, trees, etc., shall be prohibited;
2. Quantity of water used shall not exceed seventy-five gallons per day per person. (Ord. 92-65 3, 1992)

3.24.040 Stage implementation.

The water department and manager shall monitor the supply and demand on a weekly basis during drought conditions and recommend to the board of directors the extent of the conservation required through implementation and/or termination of a particular conservation stage as outlined in Exhibit A, set out at the end of this section, in order for the district to continue to supply adequate water to the

customers. Thereafter the board of directors may order that the appropriate phase of water conservation be implemented and/or terminated in accordance with the applicable section of this chapter.

Exhibit A
Policy for Implementing the
Emergency Conservation Plan

Section 1.

The water department and general manager shall determine that conditions warrant implementation and/or termination of the plan and present the findings to the board of directors. The triggering events for each stage shall be as follows:

Stage I. Voluntary Conservation.

Voluntary conservation shall be requested annually on May 15th.

Requirements for Termination.

Stage I

Will be rescinded on October 15th or at any time that prevailing conditions indicate a more restrictive stage is necessary.

Stage II. Mandatory Conservation.

Mandatory (Stage II) conservation shall be required when pumpage is in excess of 1.5 mgd for four consecutive days or pumpage in excess of 1.9 mgd for one day.

Upon termination of Stage II, Stage I becomes operative.

Stage III. Mandatory Conservation.

Mandatory (Stage III) conservation shall be required when pumpage is in excess of 1.9 mgd for four consecutive days; or 2.1 mgd for one day; or continually falling reservoir levels which do not refill above fifty percent overnight.

Stage III shall be terminated when all of the conditions listed as triggering events have ceased to exist for a period of five consecutive days.

Upon termination of Stage III, Stage II becomes operative.

(Ord. 92-65 4, 1992)

3.24.050 Water-saving devices.

A. All customers are encouraged to install and use the following water conservation devices:

1. Low flush toilets 1.6 gallons per flush or less;
2. Low flow shower heads 2.0 gallons per minute or less;
3. Drip irrigation.

B. No person, corporation or association shall be given relief on appeal unless the customer has installed all water-saving devices which are feasible. (Ord. 92-65 5, 1992)

3.24.060 Violation and enforcement.

A. First Violation. A copy of the notice will be left with someone at the establishment, or left in a conspicuous place, at the time of the violation observance.

B. Second Violation. A copy of the violation notice will be sent to the address of the violator by certified mail, return receipt requested, with a letter explaining the gravity of the situation and the penalties for future violations.

C. Third Violation. A one gallon per minute flow restriction will be installed at the violators meter and left in place for seventy-two hours. Installation and removal charges of thirty dollars will be assessed to the account of the violator.

D. Fourth Violation. The water meter will be removed from the premises of the violator. The meter will be reinstalled after the payment of a fifty-dollar reconnection charge. (Ord. 92-65 6, 1992)

Appendix D

Memorandum of Understanding by and between the
City of Santa Maria and Nipomo Community Serviced
District, dated September 7, 2004

COPY

**MEMORANDUM OF UNDERSTANDING BY AND BETWEEN
THE CITY OF SANTA MARIA AND
NIPOMO COMMUNITY SERVICES DISTRICT**

This MEMORANDUM OF UNDERSTANDING ("MOU") is dated and effective as of the 7th day of September, 2004, by and between the CITY OF SANTA MARIA (the "City"), a California municipal corporation, and NIPOMO COMMUNITY SERVICES DISTRICT ("NCSD"), an independent special district formed under and pursuant to Section 61000, *et seq.* of the California Government Code. City and NCSD are sometimes individually referred to herein as a "Party" and collectively as the "Parties". This MOU shall constitute the binding agreement of the Parties, subject to the terms, conditions and contingencies set forth herein.

RECITALS

This MOU is based on the following facts, understandings and intentions of the Parties:

A. NCSD provides water, sewer and solid waste service and limited street lighting and drainage service within the NCSD boundary, located in the southern portion of San Luis Obispo County. NCSD's major water supply is comprised of groundwater from the Nipomo Hydrologic Sub-Area of the greater Santa Maria Groundwater Basin (the "NHSA") as described in a draft report by SAIC entitled Water Resources Evaluation, Nipomo Mesa Management Area, and dated June 10, 2002. Due to current supply conditions and anticipated growth demands, NCSD needs to secure supplemental water supplies.

B. City serves water in the Santa Maria Valley, in northern Santa Barbara County. City has a contract with Central Coast Water Authority to receive water from the State Water Project ("SWP") and also pumps groundwater from the Santa Maria Basin. City has sufficient water resources, to meet the demands of its retail water customers and to meet NCSD's water supply needs.

C. NCSD seeks to acquire a supplemental water supply of up to three thousand (3,000) acre-feet per year to protect the NHSA from further degradation and to meet current needs and projected growth demands (the "Program"); and City is willing to sell to NCSD, on a wholesale long-term basis, the desired water supply (the "Supplemental Water").

D. The Parties desire to enter into a wholesale water supply agreement (the "Agreement") to formalize the terms and conditions by which City will provide the Supplemental Water to NCSD.

**MEMORANDUM OF UNDERSTANDING BY AND BETWEEN
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E. As set forth below, City and NCSD each have established certain conditions precedent to the delivery of the Supplemental Water and desire to enter into this MOU to identify certain key terms and conditions that will be the subject of the Agreement and certain contingencies that must be satisfied prior to any delivery of the Supplemental Water.

TERMS AND CONDITIONS

NOW, THEREFORE, in consideration of the mutual covenants, representations and other provisions contained herein, and for other valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties hereby agree as follows:

ARTICLE 1: GENERAL

1.1 Purpose.

(a) The purpose of this MOU is to acknowledge the agreement of the Parties with respect to certain basic terms and conditions of a proposed transaction, which basic terms and conditions shall form the basis upon which the Parties will negotiate in good faith the Agreement. With respect to the negotiation of the Agreement, this MOU is a statement of intent only and does not grant NCSD any rights in and to the Supplemental Water, nor shall the City have any obligation to NCSD to reserve or deliver the Supplemental Water until the Agreement has been executed by the Parties, provided, however, that the City acknowledges that this MOU represents the negotiations of the Parties with respect to the value of the Supplemental Water, which will be incorporated into the Agreement as the annual rate.

(b) Notwithstanding Subparagraph (a) above, this MOU further sets forth certain binding terms and conditions upon which the City agrees to reserve the right of NCSD to take delivery of certain Supplemental Water pending the negotiation of the Agreement and the satisfaction of certain contingencies set forth herein, as well as the allocation of certain costs and risks between the City and NCSD. These provisions are binding on the City and NCSD.

1.2 Wholesale Water Supply Agreement. The Agreement will supersede this MOU and will more specifically identify the Parties' rights and obligations regarding the delivery of water by City to NCSD. The terms of the Agreement shall not be limited by this MOU if, in the course of good faith negotiations, the Parties agree to modifications.

1.3 Contract Date. The Parties specifically recognize that the transaction contemplated by the Agreement is subject to review pursuant to California Public Resources Code Sections 21000, et seq. ("CEQA"). NCSD will serve as the CEQA lead agency and will make environmental determinations regarding the Project which includes the delivery of the Supplemental Water and the construction of facilities to deliver Supplemental Water from the interconnection to NCSD. Nothing contained in this MOU shall be construed to mean that NCSD will certify the environmental determinations, or will make such findings as may be

**MEMORANDUM OF UNDERSTANDING BY AND BETWEEN
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required to develop the Project. NCSD, as the CEQA lead agency, is responsible for determining whether the Project and the Project's environmental determinations comply with CEQA. It is the intent of both Parties that the Agreement shall be signed no later than thirty-five (35) days from the date NCSD certifies the environmental determinations and/or challenges, if any, are resolved regarding the Project. The actual date of execution by the last Party to sign the Agreement shall be considered the "Contract Date."

1.4 Term of MOU. This MOU shall be and remain in effect from the date first set forth above until the Contract Date, unless earlier terminated by the Parties as provided for in Section 1.5.

1.5 Termination of MOU.

(a) NCSD shall have the right to terminate its obligations under this MOU at any time without cause. To effect termination, NCSD shall provide written notice to the City as provided for in Section 9.6 hereof.

(b) In addition to any other termination right provided in this MOU, City shall have the right to terminate this Agreement if NCSD does not comply with the CEQA time schedule established in Section 5.1 (c). To effect termination, City shall provide written notice to NCSD as provided for in Section 9.6 hereof.

(c) Upon termination of this Agreement by either Party, neither Party shall have any further rights or obligations hereunder, except for the obligations set forth in Section 1.8 and Article 7, which shall survive the termination of this Agreement.

1.6 Reservation of Water. Upon execution of this MOU and until the Contract Date, and thereafter upon the closing of the acquisition of the Supplemental Water contemplated by this MOU, unless terminated, City will not enter into any agreement with any other corporation, government entity or other person with respect to the ownership, operation, rights or use of its water that would prevent City from (i) carrying out its obligations under this MOU; or (ii) delivering Supplemental Water to NCSD as contemplated by the Agreement. NCSD shall compensate City for the foregoing obligations to reserve water for NCSD as provided for in Section 3.1 of this MOU. Further, for the term of the Agreement, City shall not supply water to any other person or entity for use or distribution, in whole or in part, in the NHSA for a price or on any term or condition more favorable than that price and those terms and conditions provided for in the Agreement. The initial reservation payment of thirty seven thousand five hundred dollars (\$37,500) shall be paid upon execution of this MOU and shall be non-refundable to NCSD notwithstanding any termination of this MOU.

1.7 Cooperation. City agrees to provide the resources of City personnel to reasonably cooperate with and assist NCSD, without charge, in completing all necessary due diligence with respect to the calculation of anticipated supplemental water supplies and the identification of potential regulatory or environmental requirements or hurdles to the Agreement.

1.8 Indemnity under MOU.

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(a) NCSD agrees to indemnify and hold City harmless from any claims arising out of any action taken by NCSD with respect to implementation of this MOU, including any claims related to the construction of the interconnection. The foregoing indemnity obligations of NCSD shall be governed by the terms of Article 4, provided that the exclusion of regulatory claims in Section 4.1 shall not apply.

(b) City agrees to indemnify NCSD and to hold NCSD harmless from any claims arising out of any action taken by City with respect to implementation of this MOU, including any claims related to City's construction of any facilities necessary to implement the interconnection. The foregoing indemnity obligations of City shall be governed by the provisions of Article 4 hereof prescribing the conduct of the obligor whenever the same are reasonably applicable.

ARTICLE 2: PRINCIPAL TERMS OF AGREEMENT

2.1 Description. City will provide NCSD with wholesale water service from sources available to City's retail customers upon a mutually determined delivery schedule. In order to effectuate delivery of the Supplemental Water, the Parties acknowledge that certain infrastructure must be completed by NCSD. In exchange for payment of a reservation fee as provided for in Section 3.1 of this MOU, City will reserve for NCSD an exclusive right to the Supplemental Water until such time as NCSD has completed the necessary infrastructure and is able to take delivery of the Supplemental Water. Thereafter, City shall provide the Supplemental Water to NCSD as provided in the Agreement.

2.2 Term of Reservation. The "Reservation Term" shall commence on the actual date of execution by the last party to sign this MOU and shall continue until, and as long as, this MOU or the Agreement is not terminated as provided herein. The initial physical delivery of water ("Initial Delivery") to NCSD is anticipated by the Parties to occur on or before the expiration of two years subsequent to the Contract Date (the "Effective Date").

2.3 Term of Agreement. The term of the Agreement shall commence on the Effective Date and end on June 30, 2065 (the "Term"). Notwithstanding said Term, should the provisions applicable to City's extension of its contract for State Water Project water with the Central Coast Water Authority past June 30, 2035 render any term or terms of the Agreement substantially financially burdensome to City, the parties will then renegotiate the provisions of the Agreement in good faith and employ their best efforts to equitably amend the Agreement so that it remains in full force and effect during the entirety of the Term.

2.4 Early Termination of Agreement. NCSD shall have the right to terminate the Agreement (i) if City is found to be in material breach of its obligations to deliver the Supplemental Water as set forth in the Agreement; or (ii) upon five years' prior written notice to City.

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2.5 Right to Acquire Water. Subject to the terms and conditions of the Agreement, City hereby grants to NCSD the right to purchase and take delivery of Supplemental Water from City, beginning on the Effective Date and each year for the remainder of the Term of the Agreement. NCSD's right to acquire water from City shall not exceed a maximum of two hundred and fifty (250) acre-feet per month or four point two (4.2) cubic feet per second.

2.6 Minimum Delivery. NCSD agrees to acquire the following minimum quantity of Supplemental Water after initial water deliveries in the given periods (each period measuring twelve months) as follows:

Period	Quantity in AF
First	600
Second	685
Third	770
Fourth	855
Fifth	940
Sixth	1,025
Seventh	1,072
Eight	1,119
Ninth	1,166
Tenth	1,213
Eleventh thru 2035	1,260

2.7 Supply. City shall deliver the Supplemental Water to NCSD from sources used to provide water to City's retail customers.

2.8 Source Flexibility. During the term of the Agreement or any renewal, City may substitute or combine new or additional replacement sources of water for the source of Supplemental Water. Any substitute, combined or additional sources must be at least equal in deliverability, reliability, quality, pressure, and environmental impacts to the source being replaced.

2.9 Water Quality. City shall be responsible for ensuring that the quality of the Supplemental Water delivered to NCSD is of the same pressure and quality of water that City delivers to its residential customers and shall meet all federal, state, and local laws and regulations as amended from time to time. City agrees to indemnify and hold NCSD harmless from any claims arising out of any action taken by City with respect to water quality.

2.10 Delivery Mechanism. NCSD shall be responsible for constructing and operating an interconnection with City's retail distribution system. The location, plans and specifications of such connection shall be subject to prior approval by City, which approval shall not unreasonably be withheld or delayed. City shall provide easements on its property at no charge to NCSD and waive normal permit fees. NCSD shall also be responsible for obtaining any and

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all regulatory and environmental permits, licenses or other approvals necessary to construct and operate the interconnection. City will deliver the Supplemental Water to NCSD at the interconnection upon a mutually agreeable delivery schedule, subject to the provisions of Section 2.5. NCSD assumes all responsibility for delivery of the water from the interconnection.

ARTICLE 3: PAYMENT PROVISIONS

3.1 Reservation Fee. In consideration for the City's reservation of water for NCSD as provided for in Sections 1.6 and 2.1 of this MOU and to reserve capacity within City's distribution system from the date of this MOU until the Effective Date, NCSD shall pay City a reservation fee (the "Reservation Fee") of seven hundred and fifty thousand dollars (\$750,000). The Reservation Fee will be paid in four installments as follows:

Installment	Amount
1) MOU Date	\$37,500
2) Contract Date: Final and Beyond Challenge	\$187,500
3) Completion of Construction	\$225,000
4) First 300 AF Delivered @ \$1,000/AF	\$300,000

The Reservation Fee is non-refundable. The Reservation Fee will be credited against the transaction and reduce the Annual Fixed Rate (as described in Section 3.2) at the rate of fifty dollars (\$50.00) per acre-foot for the first fifteen thousand (15,000) acre-feet of Supplemental Water purchased by NCSD. City has the right to terminate the Agreement if any of the installments under the Reservation Fee are not paid on or before the due date. City shall use the Reservation Fee to cover any costs incurred under this MOU and the Agreement.

3.2 Payment for Supplemental Water.

(a) NCSD shall pay City either an Annual Fixed Rate for the Supplemental Water in the amount of one thousand two hundred and fifty dollars (\$1,250.00) per acre-foot or an Annual Variable Rate in the amount of eight hundred and ninety five dollars (\$895.00) per acre-foot adjusted each year from Initial Delivery through the end of the Term by three percent (3.0%) annually. NCSD shall choose one such rate prior to accepting the initial delivery of Supplemental Water hereunder and that rate then shall apply for the entirety of the Term, provided that the parties agree to renegotiate the rates stated herein for the period commencing with the year 2036 through the end of the Term, consistent with Section 2.3.

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(b) For water remarketed by NCSD into NHSA, City shall charge either the Annual Fixed Rate or the Annual Variable Rate stated in subsection 3.2 (a) at the choice of the end user made prior to that end user accepting the initial delivery of Supplemental Water from NCSD. That rate shall then apply for the entirety of the Term, provided that the rate is subject to renegotiation for the period commencing with the year 2036 through the end of the Term, consistent with Section 2.3. NCSD shall measure and report all deliveries of Supplemental Water remarketed by it to end users on a quarterly basis consistent with the payments due pursuant to subsection 3.4.

3.3 Remarketing of Supplemental Water. NCSD shall be free to remarket the Supplemental Water to other parties who either use or serve water within the NHSA, without restriction as to price and terms.

3.4 Payment Schedule. City shall bill NCSD on a quarterly basis in arrears for Supplemental Water delivered to NCSD's interconnection during the previous quarter. The amount payable by NCSD to City shall be based on the total quantity in acre-feet of Supplemental Water delivered during the quarter just ended multiplied by the then-current Annual Fixed Rate and Annual Variable Rate. The first invoice to NCSD will be dated within three months of the Initial Delivery and continue each calendar quarter (January 1, April 1, July 1, and October 1) through the end of the Term. The invoice shall apply to the previous quarter of actual Supplemental Water deliveries.

3.5 Construction, Regulatory/ Permit and Other Costs. NCSD shall be solely responsible for all costs related to the construction and operation of the interconnection with City's retail distribution system. NCSD shall also be solely responsible for all regulatory and/or permit compliance and costs with respect to the interconnection. Except as otherwise provided for in this Article 3, the Parties shall be responsible for their own fees and costs related to the completion of this MOU and the Agreement.

ARTICLE 4: DIVISION OF RISK RESPONSIBILITIES

4.1 Indemnity. NCSD, its successors and assigns, shall hold harmless, defend and indemnify City, its officials, employees, agents, successors and assigns (all of which are herein referred to as the "City Indemnified Parties") from and against all liabilities, obligations, claims, damages, losses, actions, judgments, suits, costs and expenses, including but not limited to reasonable attorneys' fees (collectively, "Damages"), which may be imposed on, incurred by, or asserted against City Indemnified Parties as a result of (i) a breach of NCSD's obligations; or (ii) the conduct of NCSD's operations associated with the interconnection to City's retail distribution system and the subsequent delivery of Supplemental Water to NCSD's customers. Notwithstanding the foregoing, in no event shall NCSD be liable to indemnify a City Indemnified Party for (i) any Damages resulting from the negligence or the gross negligence or willful misconduct of City; (ii) any third party claim brought in connection with regulatory approvals; or (iii) any claim brought in connection with the quality of the Supplemental Water as provided in Section 2.3 above. This indemnification shall survive termination of the Agreement.

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4.2 Third Party Claims. Promptly following notice of any "Third Party Claim" for which City is indemnified hereunder, City shall notify NCSD of such claim in writing. NCSD shall have a period of thirty (30) days following the receipt of such notice to notify City of whether NCSD elects to assume the defense thereof. If NCSD so notifies City that it elects to assume the defense, NCSD thereafter shall defend (with counsel approved by City), indemnify and hold City harmless from and against, and shall reimburse City for, the Third Party Claim.

NCSD shall not consent to entry of judgment or enter into any settlement agreement, without the consent of City, which does not include a complete and unconditional release of City or which imposes injunctive or other equitable relief against City. City shall be entitled to participate in, but not control, the defense thereof, with counsel of its choice and at its own expense.

If NCSD does not give the requisite notice, or fails to assume and diligently pursue the defense of such Third Party Claim, City may defend against such Third Party Claim in such manner as it may deem appropriate, at NCSD's expense, including without limitation settlement thereof on such terms as City may deem appropriate, and to pursue such remedies as may be available to City against NCSD. Notwithstanding the foregoing, City shall not consent to entry of a judgment or enter into any settlement agreement, without the consent of NCSD, which does not include a complete and unconditional release of NCSD.

4.3 Force Majeure. If by reason of acts of God, earthquakes, droughts, floods, storms, explosion, fires, labor troubles, strikes, insurrection, riots, acts of the public enemy, or federal, state, or local law, order, rule, or regulation, the City is prevented from delivering, in whole or in part, Supplemental Water to NCSD, as provided herein, then City may reduce delivery of Supplemental Water up to the same percentage the City reduces water delivery to its retail customers.

4.4 Suspension. The delivery of water may be suspended or curtailed during any period of public emergency or disaster that is declared by City. For the purposes of this MOU, a public emergency or disaster shall not include ordinary measures taken during periods of drought or water shortage. Should such a suspension or curtailment occur, the resulting deficit in water deliveries shall be offered to be offset by the City through excess water deliveries as soon as is practicable.

4.4 Notice of Claims. The Parties shall promptly notify each other within ten (10) days of City or NCSD becoming aware of: (1) any claims or suits brought against City or NCSD for which they seek indemnification from the other Party, (2) any Third Party Claims, and (3) any force majeure event. Any such notice shall conform to the requirements specified in Section 9.6 of this MOU.

ARTICLE 5: CONDITIONS PRECEDENT

5.1 Conditions Precedent. NCSD's obligation to consummate the transaction contemplated under this MOU and the Agreement (other than the payment of the Reservation

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Fee on the MOU Date) will be subject to the satisfaction of the following conditions (the "Conditions Precedent").

(a) General Feasibility. City will deliver to NCSD, as soon as possible following the execution of this MOU, such further documents, plans, maps, studies, reports, records, permits, licenses and contracts relating to the Supplemental Water that NCSD may deem necessary or desirable in order to assess the viability and feasibility of the Supplemental Water for NCSD's intended use. NCSD will have until the proposed Contract Date to review and approve or disapprove the same.

Additionally, during the term of the MOU, NCSD shall investigate the costs and general feasibility of constructing and operating an interconnection with City's retail distribution system. City shall provide reasonable assistance to NCSD in conducting this feasibility investigation.

(b) Due Diligence. City agrees to cooperate with NCSD's due diligence investigation of City, and to provide NCSD and its representatives with prompt and reasonable access to key employees and to books, records, contracts and other information pertaining to the Supplemental Water and that portion of City's retail distribution system affected by the contemplated transaction (the "Due Diligence Information").

(c) CEQA Compliance. NCSD will diligently pursue CEQA compliance for the delivery of the Supplemental Water and the facilities necessary to transport the Supplemental Water from City to NCSD. NCSD agrees to the following time line:

- (i) To develop a project description for the Supplemental Water Agreement contemplated in this MOU no later than one hundred and twenty (120) days from the date upon which NCSD's Board of Directors approves this MOU; and
- (ii) To retain environmental consultants within one hundred and twenty (120) days from the date upon which NCSD's Board of Directors approves this MOU; and
- (iii) To use reasonable efforts to complete all associated CEQA studies and reports.

5.2 Pre-Closing Covenants. The Agreement shall contain customary representations and warranties, including good and marketable title to the Supplemental Water. City shall further provide appropriate documentation to enable NCSD to verify City's ability to provide Supplemental Water as contemplated herein.

5.3 Conditions to Obligation. The Parties are not obligated to consummate the acquisition of the Supplemental Water contemplated hereby unless and until the Parties have reached agreement as to all of the essential terms of the acquisition, which shall be reflected in the Agreement. In addition, the Parties will not be obligated to consummate the acquisition of the Supplemental Water unless NCSD has obtained all certificates, permits and approvals that

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are required in connection with the construction and operation of the interconnection and the delivery and use of the Supplemental Water, and NCSD satisfactorily completes its due diligence investigation as described in Section 5.1 of this MOU.

ARTICLE 6: BEST EFFORTS

6.1 Best Efforts. The Parties agree to negotiate in good faith, and to use their reasonable best efforts to reach and tentatively approve the Agreement with respect to the acquisition of the Supplemental Water on or before December 31, 2004, and to close the transaction, by formal execution of the Agreement, as soon as it is reasonably practicable. In the event any Party violates the covenants contained in this Article 6 (the "Breaching Party"), the other Party may seek recovery from the Breaching Party of its actual costs and expenses incurred in connection with this MOU in reliance on the good faith of the Breaching Party. The foregoing remedy shall be the sole and exclusive remedy for a breach of this Article 6 and neither Party shall be liable to the other for any claim of lost profits or consequential damages.

ARTICLE 7: CONFIDENTIALITY

7.1 Confidentiality. NCSD shall use the Due Diligence Information solely for the purpose of investigation of the Supplemental Water and the feasibility of constructing and operating the required interconnection; and, unless and until the Parties consummate the acquisition of the Supplemental Water, NCSD, its affiliates, directors, officers, employees, advisers and agents (the "NCSD Representatives") will keep the Due Diligence Information confidential. NCSD will disclose the Due Diligence Information only to those Representatives of NCSD who need to know such information for the purpose of consummating the acquisition. NCSD agrees to be responsible for any breach of this Section 7.1 by any of the NCSD Representatives. In the event the acquisition is not consummated, NCSD will return to City any materials containing Due Diligence Information, or will certify in writing that all such materials or copies of such materials have been destroyed.

The Parties hereto agree that any information provided them in connection with the transactions contemplated by this MOU will be kept confidential by them and their respective officers, directors, employees, agents, representatives and advisors; provided, however, that disclosure of such information may be made:

(a) To the extent the same shall be or have otherwise become publicly available other than as a result of the Parties hereto, and

(b) If, in the reasonable opinion of counsel to the disclosing Party, such disclosure is required to be disclosed by law or during the course of or in connection with any litigation or proceeding, provided that the Party so disclosing notifies the other Party of its obligations to provide such confidential information and fully cooperates with the other Party to protect the confidentiality of such information.

**MEMORANDUM OF UNDERSTANDING BY AND BETWEEN
THE CITY OF SANTA MARIA AND
NIPOMO COMMUNITY SERVICES DISTRICT**

ARTICLE 8: REPRESENTATIONS OR WARRANTIES

8.1 Representations or Warranties of City. City makes the following representations, warranties and covenants to NCSD:

(a) Power and Authority to Execute and Perform this MOU. City has the power and authority to enter into this MOU and to perform its obligations, and all necessary approvals and authorizations have been obtained.

(b) Enforceability. This MOU constitutes a legal, valid and binding obligation of City, and is enforceable against City in accordance with its terms.

8.2. Representations or Warranties of NCSD. NCSD makes the following representations, warranties and covenants to City:

(a) Power and Authority to Execute and Perform this MOU. NCSD has the power and authority to enter into this MOU and to perform its obligations, and all necessary approvals and authorizations have been obtained.

(b) Enforceability. This MOU constitutes a legal, valid and binding obligation of NCSD, enforceable against NCSD in accordance with its terms.

ARTICLE 9: MISCELLANEOUS PROVISIONS

9.1 Remedies Not Exclusive. Except as provided in Article 6, remedies provided in this MOU and the Agreement for enforcement of its terms are intended and shall be construed as cumulative rather than exclusive and shall not be deemed to deprive the Party using the same from also using any other remedies provided by this MOU or the Agreement or by law.

9.2 No Transfer of Rights. The rights granted to NCSD hereunder constitute the right to take delivery of water only and shall not be interpreted as a sale, transfer, or assignment of City's water rights with respect to its SWP contract, the Santa Maria Basin, or other water sources as may be available from time to time.

9.3 Subject to Applicable Law. NCSD and City acknowledge and agree that this MOU and the rights and obligations of the Parties hereunder shall be subject to the laws governing municipal corporations as they now exists and as they may be hereafter amended or codified by the Legislature of the State of California.

9.4 Entire Agreement. This MOU contains the entire understanding between City and NCSD with respect to its subject matter, and supersedes all prior agreements, oral or written, and all prior or contemporaneous discussions or negotiations between City and NCSD. This MOU cannot be amended except in writing signed by both Parties.

**MEMORANDUM OF UNDERSTANDING BY AND BETWEEN
THE CITY OF SANTA MARIA AND
NIPOMO COMMUNITY SERVICES DISTRICT**

IN WITNESS WHEREOF, the Parties have executed this agreement as of the date first written above.

CITY:

NCSD:

City of Santa Maria
a California municipal corporation

Nipomo Community Services District
a California independent special district

By: 

Name: Tim Ness

Title: City Manager

By: 

Name: MICHAEL WINN

Title: President, NCSD

Address: 110 E. Cook Street
Santa Maria, CA 93454

Fax: (805) 349-0657

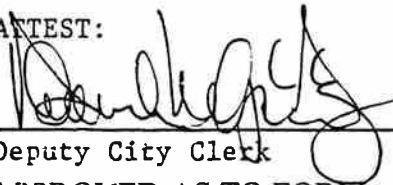
Phone: (805) 925-0951

Address: 148 S. Wilson St.
Nipomo, CA 93444

Fax: 929-1932

Phone: 929-1133

ATTEST:


Deputy City Clerk

APPROVED AS TO FORM:

Best Best & Krieger LLP

By: 

Eric Garner, Partner

RESOLUTION NO. 2004-167

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SANTA MARIA, CALIFORNIA, AUTHORIZING AND DIRECTING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE THE MEMORANDUM OF UNDERSTANDING BY AND BETWEEN THE CITY OF SANTA MARIA AND NIPOMO COMMUNITY SERVICES DISTRICT (NCSD)

WHEREAS, in 1997 the City of Santa Maria purchased State Water to improve water quality to existing City residents and provide a new water supply for planned growth; and

WHEREAS, the plan was to import sufficient water supplies to eliminate the need for home water softeners and avoid complicated wastewater treatment schemes; and

WHEREAS, the City of Santa Maria has experienced a significant reduction in the number of water softeners used by City residents, which has allowed the City to maintain its current and very cost-effective wastewater treatment practices; and

WHEREAS, the City of Santa Maria has used only a limited amount of groundwater during this seven-year period; and

WHEREAS, the City of Santa Maria has sufficient water resources to meet Nipomo Community Services District's water supply needs, and is willing to sell to Nipomo Community Services District a supplemental water supply of up to three thousand (3,000) acre-feet per year;

NOW, THEREFORE, IT IS HEREBY RESOLVED by the City Council of the City of Santa Maria, California as follows:

The City Manager, or his designee, is authorized to execute the Memorandum of Understanding by and between the City of Santa Maria and Nipomo Community Services District.

PASSED AND ADOPTED at a regular meeting of the City Council of the City of Santa Maria held September 7, 2004.

/S/ L. J. LAVAGNINO

Mayor

ATTEST:

/s/ PATRICIA A. PEREZ

Chief Deputy City Clerk

APPROVED AS TO FORM:

BY: 
CITY ATTORNEY

CONTENTS:

BY: 
DEPARTMENT HEAD

BY: 
CITY MANAGER

Appendix E

Water Demand Calculations

Blacklake Division

Existing Zoning

Existing Demand in Blacklake Division	480 af ¹
Estimated Additional Future Demand under Existing Zoning	50 af ²
<i>Total Estimated Water Demand at Buildout</i>	530 af
<p>1. Gross well production as reported by NCSD for January 1, 2003 through December 31, 2003.</p> <p>2. In 2003, NCSD surveyed the existing parcels within the service area and found that 90 percent of existing assessor's parcel numbers were being served. Thus it is assumed that existing demand (year 2004) represents approximately 90 percent of demand at buildout under existing zoning.</p>	

Land Use with Pending Amendments

Same as Existing Zoning	530 af
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High Density Assumption

Same as Existing Zoning	530 af
-------------------------	--------

Town Division

Land Use ¹	Units per acre ²	Water Duty Factor ³	Water Demand at Buildout Given Existing Land Use			Water Demand at Buildout Given Existing Land Use with Pending Amendments ⁴			Water Demand Given High Density Assumption ⁵		
			Acres	Units ²	Water Demand (afy)	Acres	Units ²	Water Demand (afy)	Acres	Units ²	Water Demand (afy)
<i>Residential</i>											
Recreation	1	0.62 af/year	631	631	390	631	631	390	631	631	390
Residential Multi-Family	15	2.19 af/year	160	2400	350	160	2400	350	160	2400	350
Residential-Rural	0.2	0.21 af/year	1404	281	300	1404	281	300	702	140	150
Residential Single-Family	3.5	1.60 af/year	686	2401	1100	686	2401	1100	698	2443	1120
Residential Suburban	1	0.62 af/year	905	905	560	905	905	560	1611	1611	990
Rural Lands	0.1	0.11 af/year	4	0	0	4	0	0	0	0	0
<i>Non-Residential</i>											
Agriculture	na	0.00 af/year	12	na	0	12	na	0	0	na	0
Commercial Retail	na	1.42 af/year	160	na	230	160	na	230	160	na	230
Commercial Service	na	0.35 af/year	94	na	30	94	na	30	94	na	30
Industrial	na	0.67 af/year	0	na	0	0	na	0	0	na	0
Office and Professional	na	0.26 af/year	33	na	10	33	na	10	33	na	10
Open Space	na	1.18 af/year	11	na	10	11	na	10	11	na	10
Public Facilities	na	0.59 af/year	38	na	20	38	na	20	38	na	20
Total Acres in Town Division			4138	6618	3000	4138	6618	3000	4138	7225	3300
Total Estimated Units In Town Division											
Total Est. Water Demand at Buildout - Town Division (afy)											

Notes:

1. Land Use data from: San Luis Obispo County. *The Land Use and Circulation Elements of the San Luis Obispo County General Plan. South County-Inland.* Revised January 1, 2003.
2. Assumptions for number of Dwelling Units are described in the Assumptions tab of this workbook.
3. Assumptions for Water Duty Factors are described in the Assumptions tab of this workbook.
4. Existing Land Use is inclusive of the Robertson (G990001T) and Summit Station (G980008N) Land Use Amendments. No other General Plan Plan Amendments were identified applicable to the Town Division Service Area.
5. This assumes all land designated Agriculture, remaining after currently pending Land Use Amendments, will convert to Residential Single-Family; all land currently designated Rural Lands will convert to Residential Suburban; and half of all land designated Residential-Rural will convert to Residential Suburban.

Sphere of Influence Study Area 1

Sphere of Influence Study Area 1 as defined by San Luis Obispo local Agency Formation Commission, adopted May 20, 2004.

Land Use ¹	Units per acre ²	Water Duty Factor ³	Water Demand at Buildout Given Existing Land Use			Water Demand at Buildout Given Existing Land Use with Pending Amendments ⁴			Water Demand Given High Density Assumption ⁵		
			Acres	Units ²	Water Demand (afy)	Acres	Units ²	Water Demand (afy)	Acres	Units ²	Water Demand (afy)
<i>Residential</i>											
Recreation	1	0.62 af/year	0	0	0	0	0	0	0	0	0
Residential Multi-Family	15	2.19 af/year	0	0	0	0	0	0	0	0	0
Residential-Rural	0.2	0.21 af/year	662	132	140	484	97	100	572	114	120
Residential Single-Family	3.5	1.60 af/year	0	0	0	0	0	0	256	896	410
Residential Suburban	1	0.62 af/year	0	0	0	14	14	10	14	14	10
Rural Lands	0.1	0.11 af/year	0	0	0	0	0	0	0	0	0
Canada Ranch Specific Plan	2	1.18 af/year	0	0	0	288	576	340	200	400	240
<i>Non-Residential</i>											
Agriculture	na	0.00 af/year	420	na	0	256	na	0	0	na	0
Commercial Retail	na	1.42 af/year	0	na	0	40	na	60	40	na	60
Commercial Service	na	0.35 af/year	0	na	0	0	na	0	0	na	0
Industrial	na	0.67 af/year	0	na	0	0	na	0	0	na	0
Office and Professional	na	0.26 af/year	0	na	0	0	na	0	0	na	0
Open Space	na	1.18 af/year	0	na	0	0	na	0	0	na	0
Public Facilities	na	0.59 af/year	0	na	0	0	na	0	0	na	0
Total Acres in SOI 1			1082	132	140	1082	687	510	1082	1424	840
Total Estimated Units In SOI 1											
Total Estimated Water Demand at Buildout - SOI 1 (afy)											

Notes:

1. Land Use data from: San Luis Obispo Local Agency Formation Commission. *Sphere of Influence Update, Municipal Service Review, Nipomo Community Services District*. Adopted May 20, 2004; and San Luis Obispo County. *The Land Use and Circulation Elements of the San Luis Obispo County General Plan*. South County-Inland. Revised January 1, 2003.
2. Assumptions for number of Dwelling Units are described in the Assumptions tab of this workbook.
3. Assumptions for Water Duty Factors are described in the Assumptions tab of this workbook.
4. Pending Land Use Amendments include (a) Nipomo Oaks/Mehlschau Property (G990013M), which would remove 164 acres from the Agriculture land use designation and make this land Rural Residential (110 acres), Residential Suburban (14 acres), and Commercial Retail (28 acres) and (b) Crystal Oaks Ranch, a proposed 288-acre mixed use development residing within the Canada Ranch Specific Plan area, to be developed consistent with Canada Ranch objectives identified in the San Luis Obispo County General Plan.
5. This assumes all land designated Agriculture, remaining after currently pending Land Use Amendments, will convert to Residential Single-Family.

Sphere of Influence Study Area 2

Sphere of Influence Study Area 2 as defined by San Luis Obispo local Agency Formation Commission, adopted May 20, 2004.

Land Use ¹	Units per acre ²	Water Duty Factor ³	Water Demand at Buildout Given Existing Land Use			Water Demand at Buildout Given Existing Land Use with Pending Amendments ⁴			Water Demand Given High Density Assumption ⁵		
			Acres	Units ²	Water Demand (afy)	Acres	Units ²	Water Demand (afy)	Acres	Units ²	Water Demand (afy)
<i>Residential</i>											
Recreation	1	0.62 af/year	0	0	0	0	0	0	0	0	0
Residential Multi-Family	15	2.19 af/year	0	0	0	0	0	0	0	0	0
Residential Rural	0.2	0.21 af/year	0	0	0	0	0	0	0	0	0
Residential Single-Family	3.5	1.60 af/year	0	0	0	0	0	0	132	462	210
Residential Suburban	1	0.62 af/year	0	0	0	0	0	0	0	0	0
Rural Lands	0.1	0.11 af/year	0	0	0	0	0	0	0	0	0
<i>Non-Residential</i>											
Agriculture	na	0.00 af/year	132	na	0	132	na	0	0	na	0
Commercial Retail	na	1.42 af/year	0	na	0	0	na	0	0	na	0
Commercial Service	na	0.35 af/year	0	na	0	0	na	0	0	na	0
Industrial	na	0.67 af/year	0	na	0	0	na	0	0	na	0
Office and Professional	na	0.26 af/year	0	na	0	0	na	0	0	na	0
Open Space	na	1.18 af/year	0	na	0	0	na	0	0	na	0
Public Facilities	na	0.59 af/year	0	na	0	0	na	0	0	na	0
Total Acres in SOI 2			132			132			132		
Total Estimated Units In SOI 2			0	0	0	0	0	0	0	462	210
Total Estimated Water Demand at Buildout - SOI 2 (afy)											

Notes:

1 Land Use data from: San Luis Obispo Local Agency Formation Commission. *Sphere of Influence Update, Municipal Service Review, Nipomo Community Services District.* Adopted May 20, 2004; and San Luis Obispo County. *The Land Use and Circulation Elements of the San Luis Obispo County General Plan.* South County-Inland. Revised January 1, 2003.

2. Assumptions for number of Dwelling Units are described in the Assumptions tab of this workbook.

3 Assumptions for Water Duty Factors are described in the Assumptions tab of this workbook.

4. No pending Land Use Amendments identified for Sphere of Influence Study Area 2.

5. This assumes all land designated Agriculture, remaining after currently pending Land Use Amendments, will convert to Residential Single-Family.

Sphere of Influence Study Area 3

Sphere of Influence Study Area 3 as defined by San Luis Obispo local Agency Formation Commission, adopted May 20, 2004.

Land Use ¹	Units per acre ²	Water Duty Factor ³	Water Demand at Buildout Given Existing Land Use			Water Demand at Buildout Given Existing Land Use with Pending Amendments ⁴			Water Demand Given High Density Assumption ⁵		
			Acres	Units ²	Water Demand (afy)	Acres	Units ²	Water Demand (afy)	Acres	Units ²	Water Demand (afy)
<i>Residential</i>											
Recreation	1	0.62 af/year	0	0	0	0	0	0	0	0	0
Residential Multi-Family	15	2.19 af/year	0	0	0	0	0	0	0	0	0
Residential-Rural	0.2	0.21 af/year	0	0	0	0	0	0	0	0	0
Residential Single-Family	3.5	1.60 af/year	91	319	150	129	452	210	187	655	300
Residential Suburban	1	0.62 af/year	84	84	50	84	84	50	84	84	50
Rural Lands	0.1	0.11 af/year	0	0	0	0	0	0	0	0	0
<i>Non-Residential</i>											
Agriculture	na	0.00 af/year	58	na	0	58	na	0	0	na	0
Commercial Retail	na	1.42 af/year	0	na	0	0	na	0	0	na	0
Commercial Service	na	0.35 af/year	0	na	0	0	na	0	0	na	0
Industrial	na	0.67 af/year	0	na	0	0	na	0	0	na	0
Office and Professional	na	0.26 af/year	0	na	0	0	na	0	0	na	0
Open Space	na	1.18 af/year	0	na	0	10	na	10	10	na	10
Public Facilities	na	0.59 af/year	5	na	0	5	na	0	5	na	0
Total Acres in SOI 3			238	403	200	286	536	270	286	739	360
Total Estimated Units In SOI 3											
Total Estimated Water Demand at Buildout - SOI 3 (afy)											

Notes:

1. Land Use data from: San Luis Obispo Local Agency Formation Commission. *Sphere of Influence Update, Municipal Service Review, Nipomo Community Services District.* Adopted May 20, 2004; and San Luis Obispo County. *The Land Use and Circulation Elements of the San Luis Obispo County General Plan.* South County-Inland. Revised January 1, 2003.
2. Assumptions for number of Dwelling Units are described in the Assumptions tab of this workbook.
3. Assumptions for Water Duty Factors are described in the Assumptions tab of this workbook.
4. Nipomo Hills Proposed Annexation. This is a proposed annexation into the NCSD sphere of influence. The overall project is 91 acres, 43 acres of which already reside within SOI 3. The annexation would add 48 acres, 10 acres of Open Space (park) and 38 acres of Single Family Residential.
5. This assumes all land designated Agriculture, remaining after currently pending Land Use Amendments, will convert to Residential Single-Family.

Sphere of Influence Study Area 4

Sphere of Influence Study Area 4 as defined by San Luis Obispo local Agency Formation Commission, adopted May 20, 2004.

Land Use ¹	Water Demand at Buildout Given Existing Land Use			Water Demand at Buildout Given Existing Land Use with Pending Amendments ⁴			Water Demand Given High Density Assumption ⁵		
	Acres	Units ²	Water Demand (afy)	Acres	Units ²	Water Demand (afy)	Acres	Units ²	Water Demand (afy)
<i>Residential</i>									
Recreation	0	0	0	0	0	0	0	0	0
Residential Multi-Family	0	0	0	0	0	0	0	0	0
Residential-Rural	0	0	0	0	0	0	0	0	0
Residential Single-Family	0	0	0	0	0	0	0	0	0
Residential Suburban	245	245	150	277	277	170	1378	1378	850
Rural Lands	1073	107	110	1073	107	110	0	0	0
Southland Specific Plan	100	100	60	0	0	0	0	0	0
<i>Non-Residential</i>									
Agriculture	0	na	0	28	na	0	0	na	0
Commercial Retail	0	na	0	0	na	0	0	na	0
Commercial Service	104	na	40	136	na	50	136	na	50
Industrial	0	na	0	0	na	0	0	na	0
Office and Professional	0	na	0	0	na	0	0	na	0
Open Space	0	na	0	8	na	10	8	na	10
Public Facilities	0	na	0	0	na	0	0	na	0
Total Acres in SOI 4	1522	452	360	1522	384	340	1522	1378	910
Total Estimated Units In SOI 4									
Total Estimated Water Demand at Buildout - SOI 4 (afy)									

Notes:

1. Land Use data from: San Luis Obispo Local Agency Formation Commission. *Final Environmental Impact Report. Sphere of Influence Update, Municipal Service Review, Nipomo Community Services District.* Adopted May 20, 2004. Table 5.1-1, and San Luis Obispo Local Agency Formation Commission. *Sphere of Influence Update, Municipal Service Review, Nipomo Community Services District.* Adopted May 20, 2004 and San Luis Obispo County. *The Land Use and Circulation Elements of the San Luis Obispo County General Plan.* South County-Inland. Revised January 1, 2003.
2. Assumptions for number of Dwelling Units are described in the Assumptions tab of this workbook.
3. Assumptions for Water Duty Factors are described in the Assumptions tab of this workbook.
4. Pending Land Use Amendments include the Brand Project (G990027M), which would remove 72 acres from the Southland Specific Plan and make this area Residential Suburban (32 acres), Commercial Service (32 acres), and 8 acres Open Space. This amendment also would eliminate the Southland Specific Plan Requirement on 72 acres and it is assumed the remaining 28 of the 100 acres in the original Southland Specific Plan would return to Agriculture land use designation.
5. This assumes all land designated Rural Lands and Agriculture remaining after currently pending Land Use Amendments, will convert to Residential Suburban.

Sphere of Influence Study Area 7

Sphere of Influence Study Area 7 as defined by San Luis Obispo local Agency Formation Commission, adopted May 20, 2004.

Land Use ¹	Units per acre ²	Water Duty Factor ³	Water Demand at Buildout Given Existing Land Use ⁴			Water Demand at Buildout Given Existing Land Use with Pending Amendments ⁵			Water Demand Given High Density Assumption ⁶		
			Acres	Units ²	Water Demand (afy)	Acres	Units ²	Water Demand (afy)	Acres	Units ²	Water Demand (afy)
<i>Residential</i>											
Recreation	1	0.62 af/year	0	0	0	16	16	10	16	16	10
Residential Multi-Family	15	2.19 af/year	0	0	0	0	0	0	0	0	0
Residential Rural	0.2	0.21 af/year	1264	253	270	1262	252	270	1262	252	270
Residential Single-Family	3.5	1.60 af/year	0	0	0	0	0	0	0	0	0
Residential Suburban	1	0.62 af/year	28	28	20	28	28	20	28	28	20
Rural Lands	0.1	0.11 af/year	0	0	0	0	0	0	0	0	0
<i>Non-Residential</i>											
Agriculture	na	0.00 af/year	83	na	0	45	na	0	45	na	0
Commercial Retail	na	1.42 af/year	0	na	0	0	na	0	0	na	0
Commercial Service	na	0.35 af/year	0	na	0	0	na	0	0	na	0
Industrial	na	0.67 af/year	0	na	0	0	na	0	0	na	0
Office and Professional	na	0.26 af/year	0	na	0	0	na	0	0	na	0
Open Space	na	1.18 af/year	0	na	0	0	na	0	0	na	0
Public Facilities	na	0.59 af/year	0	na	0	24	na	10	24	na	10
Total Acres in SOI 7			1375	281	290	1375	296	310	1375	296	310
Total Estimated Units In SOI 7											
Total Estimated Water Demand at Buildout - SOI 7 (afy)											

Notes:

1. Land Use data from: San Luis Obispo Local Agency Formation Commission. *Sphere of Influence Update, Municipal Service Review, Nipomo Community Services District*. Adopted May 20, 2004; and San Luis Obispo County. *The Land Use and Circulation Elements of the San Luis Obispo County General Plan*. South County-Inland. Revised January 1, 2003.

2. Assumptions for number of Dwelling Units are described in the Assumptions tab of this workbook.

3. Assumptions for Water Duty Factors are described in the Assumptions tab of this workbook.

4. Based on communication with San Luis Obispo County Planning staff (John McKenzie, January 2006), "Water Demand at Buildout Given Existing Land Use" includes land use consistent with the adopted Craig/Lucia Mar School District Land Use Amendment [G990025M].

5. Pending Land Use Amendments include Anderson (G02008M) which would remove 38 acres from Agricultural and make this land Residential Rural (38 acres).

6. This assumes no increase in density beyond those of currently proposed Land Use Amendments, to be consistent with MOA between San Luis Obispo County and NCSD.

Sphere of Influence Study Area 8

Sphere of Influence Study Area 8 as defined by San Luis Obispo local Agency Formation Commission, adopted May 20, 2004.

Land Use ¹	Units per acre ²	Water Duty Factor ³	Water Demand at Buildout Given Existing Land Use				Water Demand at Buildout Given Existing Land Use with Pending Amendments ⁴				Water Demand Given High Density Assumption ⁵		
			Acres	Units ²	Water Demand (afy)		Acres	Units ²	Water Demand (afy)		Acres	Units ²	Water Demand (afy)
<i>Residential</i>													
Recreation	1	0.62 af/year	0	0	0			0	0			0	0
Residential Multi-Family	15	2.19 af/year	0	0	0			0	0			0	0
Residential-Rural	0.2	0.21 af/year	181	36	40		181	36	40		181	36	40
Residential Single-Family	3.5	1.60 af/year	0	0	0			0	0			0	0
Residential Suburban	1	0.62 af/year	0	0	0			0	0			0	0
Rural Lands	0.1	0.11 af/year	0	0	0			0	0			0	0
<i>Non-Residential</i>													
Agriculture	na	0.00 af/year	0	na	0			na	0			na	0
Commercial Retail	na	1.42 af/year	0	na	0			na	0			na	0
Commercial Service	na	0.35 af/year	0	na	0			na	0			na	0
Industrial	na	0.67 af/year	0	na	0			na	0			na	0
Office and Professional	na	0.26 af/year	0	na	0			na	0			na	0
Open Space	na	1.18 af/year	0	na	0			na	0			na	0
Public Facilities	na	0.59 af/year	0	na	0			na	0			na	0
Total Acres in SOI 8			181	36	40		181	36	40		181	36	40
Total Estimated Units In SOI 8													
Total Estimated Water Demand at Buildout - SOI 8 (afy)													

Notes:

1. Land Use data from: San Luis Obispo Local Agency Formation Commission. *Sphere of Influence Update, Municipal Service Review, Nipomo Community Services District.* Adopted May 20, 2004; and San Luis Obispo County. *The Land Use and Circulation Elements of the San Luis Obispo County General Plan. South County-Inland.* Revised January 1, 2003.

2. Assumptions for Population are described in the Assumptions tab of this workbook.

3. Assumptions for Water Duty Factors are described in the Assumptions tab of this workbook.

4. No pending Land Use Amendments identified.

5. This assumes all land designated Agriculture, remaining after currently pending Land Use Amendments, will convert to Residential Suburban.

Assumptions Used to Calculate Water Demand for a Given Land Use Designation

RESIDENTIAL USES										
Type of Use	Population		Est. Use per Capita		Est. Use per Lot or Unit per day		Estimated Units/Acre		Est. Use per Acre per Year	
Residential Single-Family	3.40	per unit ¹	120	gpcd ¹	0.0013	af/unit-day	3.5	See note 5	1.60	af/year
Residential Suburban	3.15	per unit ¹	175	gpcd ¹	0.0017	af/unit-day	1	See note 6	0.62	af/year
Rural Lands	5.45	per unit ²	175	gpcd ⁴	0.0029	af/unit-day	0.1	See note 6	0.11	af/year
Residential Multi-Family	2.9	per unit ¹	45	gpcd ¹	0.0004	af/unit-day	15	See note 7	2.19	af/year
Residential-Rural	5.45	per unit ²	175	gpcd ⁴	0.0029	af/unit-day	0.2	See note 6	0.21	af/year
Recreation	3.15	per unit ¹	175	gpcd ¹	0.0017	af/unit-day	1	See note 6	0.62	af/year
Canada Ranch Spec. Plan	3	per unit ³	175	gpcd ³	0.0016	af/unit-day	2	See note 3	1.18	af/year
Southland Specific Plan	3	per unit ³	175	gpcd ³	0.0016	af/unit-day	1	See note 3	0.59	af/year
NON-RESIDENTIAL USES										
Type of Use	Est. Use per Acre per Day		Est. Use per Acre per Year							
Agriculture	0.00	gal/acre-day ⁸	0.00	af/year						
Commercial Retail	1264	gal/acre-day ¹	1.42	af/year						
Commercial Service	310	gal/acre-day ¹	0.35	af/year						
Industrial	598	gal/acre-day ⁹	0.67	af/year						
Office and Professional	230	gal/acre-day ¹	0.26	af/year						
Open Space	1049	gal/acre-day ¹⁰	1.17	af/year						
Notes:										
1. Estimated occupancy and use rate for similar land use as reported in Boyle Engineering Corporation. March 2002. <i>Water and Sewer System Master Plan 2001 Update</i> . Table 1, Page 10.										
2. Estimated occupancy rate based on assumption that a lot would contain both a primary unit of 3.15 persons and a secondary unit of 2.3 persons as reported in County of San Luis Obispo. September 2004. Final Environmental Impact Report Summit Station Land Use Ordinance Amendment. State Clearinghouse Number 2003021008. Page 2-118.										
3. San Luis Obispo Local Agency Formation Commission. Nipomo Community Services District. Sphere of Influence Update, Municipal Services Review. Adopted May 20, 2004. Pages 2-9, 2-10 and 3-39.										
4. Estimated use rate assumed to be similar to that reported for Summit Station Area as reported in County of San Luis Obispo. September 2004. Final Environmental Impact Report Summit Station Land Use Ordinance Amendment. State Clearinghouse Number 2003021008. Page 2-118.										
5. Per the County of San Luis Obispo. Department of Planning and Building. The Land Use and Circulation Elements of the San Luis Obispo County General Plan - Framework for Planning (Inland). Revised January 2003. This land use category will allow up to 7 dwelling units per acre, but for the purposes of this analysis 3.5 units per acre have been assumed.										
6. Per the County of San Luis Obispo. Department of Planning and Building. The Land Use and Circulation Elements of the San Luis Obispo County General Plan - Framework for Planning (Inland). Revised January 2003.										
7. Per the County of San Luis Obispo. Department of Planning and Building. The Land Use and Circulation Elements of the San Luis Obispo County General Plan - Framework for Planning (Inland). Revised January 2003. This land use category allows up to 38 dwellings per acre, but to be more consistent with allowed density in the developed portions of Nipomo Village, for the purposes of this study, 15 units per acre have been assumed.										
8. It is assumed that NCSD does not supply agricultural irrigation.										
9. Estimated water duty factor for "Industrial" from City of Pasadena Water System Master Plan, 2002.										
10. Based on Sept. 18, 2003 SAIC memorandum describing analysis of average use for predominantly grass area on the Nipomo Mesa.										

