2005 URBAN WATER MANAGEMENT PLAN

Prepared for:

Central Coast Water Authority

With Support From:

Santa Barbara County Flood Control and Water Conservation District

Santa Barbara County Water Agency

San Luis Obispo County Flood Control and Water Conservation District

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INTRODUCTION

This Urban Water Management Plan (UWMP) has been prepared in response to the Urban Water Management Planning Act (Act), California Water Code Sections 10610 through 10650. The Act was adopted by the California Legislature as Assembly Bill 797 during the 1983-84 session and signed into law by Governor Deukmejian on January 1, 1984. The Act requires that "every urban water supplier shall prepare and adopt an Urban Water Management Plan". Urban water supplier is defined 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 of water annually". Under this definition, the Central Coast Water Authority (CCWA) is considered an urban water supplier.

Since CCWA is a relative newcomer to the water supplier landscape, this 2005 UWMP represents its initial plan. CCWA is exclusively a water wholesaler providing potable water for municipal uses indirectly through retail urban water suppliers in Santa Barbara and San Luis Obispo Counties.

The intent of this plan is to provide DWR, participating retail agencies and the public with information on present and future water sources and demands and to provide an assessment of CCWA's water resource needs. Specifically, the UWMP must provide water supply planning for a 20-year planning period in 5-year increments, identify and quantify adequate water supplies for existing and future demands during normal, dry and drought years, and assure efficient use of urban water supplies. This UWMP addresses all Water Code requirements for such a plan.

CCWA has coordinated its UWMP planning efforts with a number of agencies to ensure that data and issues are presented accurately. CCWA's UWMP includes a broad overview of its service area and operational facilities, as well as a general description of the service area's water conservation, water recycling, and water supply and demand management activities. Being a water wholesaler, CCWA supports the water conservation efforts implemented by its retail agencies. This UWMP focuses on CCWA's own activities, and the activities of three County level agencies in Santa Barbara and San Luis Obispo Counties, due to specific contractual relationships that exist between the agency and CCWA, or due to their activities relating to urban water management planning within CCWA's service area. These agencies are the Santa Barbara County Flood Control and Water Conservation District (SBCFC&WCD), Santa Barbara County Water Agency (Water Agency), and the San Luis Obispo County Flood Control and Water Conservation District (SLOCFC&WCD). CCWA has legal relationships with SCBFC&WCD and SLOCFC&WCD that will be discussed further on page 10 of this plan. The Water Agency is a dependent special district, along with the SBCFC&WCD comprises the Water Resources Division of the Santa Barbara County Public Works Department. The Water Agency is responsible for regional water efficiency programs in Santa Barbara County, and its region wide activities will be discussed in this plan. This plan will not include a detailed description of individual retailer conservation programs, since each retailing agency is an urban water supplier and will prepare its own



urban water management plan. Similarly, details of recycled water treatment and distribution are left to the UWMP's of the urban water suppliers who perform these tasks within CCWA's service area. Because of the unique relationship between CCWA, SBCFC&WCD, the Water Agency and SLOCFC&WCD, some of the topics discussed in this plan will reflect the activities of each organization as it relates to the wholesale importation, treatment and delivery of SWP water to the Central Coast.

Urban Water Management Plans are to be adopted by each urban water supplier and submitted to the Department of Water Resources by December 31, 2005. The California Environmental Quality Act (CEQA) does not apply to the preparation and adoption of Urban Water Management Plans (Water Code Section 10652).



UWMP Checklist

This UWMP addresses the Water Code requirements for such a plan. The following is a checklist indicated where each Water Code requirement is addressed in the UWMP (in the order of the referenced Water Code Section)

Water Code Section(s)	r Code ion(s) Section									
10620(d), 10621(b), 10642	Agency Coordination and Public Participation	8								
10631(a)	Service Area Information	12								
10631(b)	Water Sources	30								
10631(b) 1-4	Water Sources - Groundwater	32								
10631(c) 1-3	Reliability of Supply	34								
10631(d)	Transfer and Exchange Opportunities	38								
10631(e) 1-2	Water Use by Customer Type	41								
10631(f) 1-4	Demand Management Measures (DMMs)	45								
10631(g)	Planned Water Supply Projects and Programs, including non-implemented DMMs	53								
10631(h)	Planned Water Supply Projects and Programs	54								
10631(i)	Development of Desalinated Water	56								
10632	Water Shortage Contingency Plan	58								
10632(b)	Three-Year Minimum Water Supply	60								
10632(c)	Catastrophic Water Supply Interruption Plan	61								
10632(d-f)	Prohibitions, Penalties and Consumption Reduction Methods	62								
10632(g)	Revenue and Expenditure Impacts Analysis	63								
10633	Recycled Water Plan	65								
10634	Water Quality Impacts on Reliability	67								
10635 (a-d)	Projected Normal Year And Dry Year Supply, Water Service Reliability	69								
10640-45	Adoption and Implementation of UWMP	73								



AGENCY COORDINATION

Water Code

Section 10620

10620. (a) Every urban water supplier shall prepare and adopt an urban water management plan in the manner set forth in Article 3 (commencing with Section 10640).

(b) Every person that becomes an urban water supplier shall adopt an urban water management plan within one year after it has become an urban water supplier.

(c) An urban water supplier indirectly providing water shall not include planning elements in its water management plan as provided in Article 2 (commencing with Section 10630) that would be applicable to urban water suppliers or public agencies directly providing water, or to their customers, without the consent of those suppliers or public agencies.

(d) (1) An urban water supplier may satisfy the requirements of this part by participation in area wide, regional, watershed, or basin wide urban water management planning where those plans will reduce preparation costs and contribute to the achievement of conservation and efficient water use.

(2) Each urban water supplier shall coordinate the preparation of its plan 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.

(e) The urban water supplier may prepare the plan with its own staff, by contract, or in cooperation with other governmental agencies.

(f) An urban water supplier shall describe in the plan water management tools and options used by that entity that will maximize resources and minimize the need to import water from other regions.

10620 (d) (2) Each urban water supplier shall coordinate the preparation of its plan 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.

The Central Coast Water Agency is a wholesaler which serves imported State Water to retail water agencies in the Santa Barbara and San Luis Obispo Counties. As a first step in the preparation of the 2005 UWMP, CCWA met with staff from Santa Barbara County Flood Control and Water Conservation District, Santa Barbara County Water Agency and San Luis Obispo County Flood Control and Water Conservation District. Through a series of meetings and conference calls, CCWA maintained lines of communication to ensure the efficient and timely transfer of relevant data needed to complete the UWMP.

The following table lists the types of organizations that were contacted. See Appendix C for additional contact information.



COORDINATION AND PUBLIC INVOLVEMENT												
Coordination and Public Involvement Actions												
Entities	Helped write the plan	Was contacte d for assistanc e	Receive d copy of the draft	Commented on the draft	Attende d public meeting s	Received a notice of intention to adopt						
County of San Luis Obispo – Flood Control and Water Conservation District	~	~	~	~	~	~						
County of Santa Barbara – Water Agency	~	~	~	~	~	~						
Retailers (Contractors in each County)			~			~						
Wastewater Agencies			~			~						
Other Relevant Public Agencies			~			~						
Environmental Organizations			~			~						



PUBLIC PARTICIPATION

Water Code

Section 10642.

Each urban water supplier shall encourage the active involvement of diverse social, cultural, and economic elements of the population within the service area prior to and during the preparation of the plan. Prior to adopting a plan, the urban water supplier shall make the plan available for public inspection and shall hold a public hearing thereon. Prior to the hearing, notice of the time and place of hearing shall be published within the jurisdiction of the publicly owned water supplier pursuant to Section 6066 of the Government Code. A privately owned water supplier shall provide an equivalent notice within its service area. After the hearing, the plan shall be adopted as prepared or as modified after the hearing.

CCWA recognizes the importance of obtaining public input on its programs and documents. To that end, CCWA mailed postcards (see copy below) to 42 agencies and individuals requesting feedback on the draft UWMP. See Appendix C for contact information. The postcard provided information regarding how to obtain a copy of the draft plan and the dates and locations of the public workshops.

The Draft Plan was made available for public inspection at local libraries, as well as on CCWA website (www.ccwa.com). In addition, a copy of the draft UWMP was available for public review at the CCWA Office in Buellton. Draft copies (on CD) were sent for review and comment to all CCWA retail water supply agencies, wastewater agencies, cities, and special interest groups before the public hearing. Public notices regarding the availability of the UWMP for public inspection were posted in the local newspapers and on the CCWA website.

Two public workshops were held – on November 7th (Buellton) and November 14th (Arroyo Grande) to provide an overview of the UWMP and solicit public feedback.

On December 22, 2005 the CCWA Board of Directors will consider adoption of the CCWA Urban Water Management Plan 2005. A copy of the Board resolution adopting the UWMP is attached as Appendix A.





For Immediate Release

The Central Coast Water Authority is pleased to release the 2005 Draft Urban Water Management Plan, as required by the Urban Water Management Planning Act; California Water Code Section 10610.

This plan covers the service area of the Central Coast Water Authority, including Santa Barbara and San Luis Obispo Counties and is sponsored by Santa Barbara and San Luis Obispo County Flood Control and Water Conservation Districts and the Santa Barbara County Water Agency.

Visit the CCWA website at <u>www.ccwa.com</u> to download a copy or call CCWA at (805) 688-2292 to request a copy of the plan. Please submit written comments to William J. Brennan at CCWA, 255 Industrial Way, Buellton, CA 93427 or by fax (805) 686-4700 no later than 5:00 p.m. November 28, 2005.

Copies are also available for viewing at the Buellton Public Library, W Hwy 246, Buellton; Santa Barbara Central Branch Library, 40 E Anapamu, Santa Barbara; San Luis Obispo Library, 995 Palm, San Luis Obispo.

Two public workshops to present the plan are scheduled for November 7, 2005 at CCWA's offices, 255 Industrial Way, Buellton at 7:00 p.m. and November 14, 2005 at the Pismo Beach City Council Chambers, 760 Mattie Rd., Pismo Beach at 6:00 p.m.

For further information, call (805) 688-2292



SERVICE AREA INFORMATION WITH TWENTY YEAR PROJECTIONS

<u>Water Code</u> Section 10631.
A plan shall be adopted in accordance with this chapter and shall do all of the following:
(a) Describe the service area of the supplier, including current and projected population, climate, and other demographic factors affecting the supplier's water management planning. The projected population estimates shall be based upon data from the state, regional, or local service agency population projections within the service area of the urban water supplier and shall be in 5-year increments to 20 years or as far as data is available.

History of the State Water Project

It is common knowledge that California's fundamental water supply challenge is that the major sources of water are found in northern California while the major urban and agricultural demands are located in central and southern California. To address this challenge, the voters and the Legislature authorized construction of extensive water storage and delivery systems known as the Central Valley Project in 1930 and the State Water Project (SWP) in 1960.

Since 1963, the State has constructed most of the SWP elements: Oroville Dam, facilities to convey the water from Lake Oroville to the Sacramento Delta, an elaborate system of pumps and other facilities to move water out of the Delta, including 660 miles of canals and pipelines, and a complex of regulating reservoirs (see Figure 1). The State has designed, engineered and constructed all of these facilities, and operates and maintains them, with funds received from its 29 contractors (see Figure 2).

Construction of the SWP was financed in large part by \$1.75 billion of general obligation bonds issued pursuant to the Burns-Porter Act and approved by California voters in 1960. The Act directs the State to enter into water contracts for the sale, delivery or use of SWP water, and 29 such contracts now exist.

From the very inception of the SWP, it was the intent of the Legislature that 100% of the costs associated with the purchase of SWP water, including construction costs, be passed through to purchasers of water. The State finances, designs, constructs and owns this extensive system; the water contractors purchase water from the State under "take or pay" contracts under which the State recovers all of its costs.





Figure 1 – State Water Project Facilities









The State Water Project in Santa Barbara and San Luis Obispo Counties

The Early Years

In 1963, anticipating a future need for supplemental water supplies, the SBCFC&WCD and the SLOCFC&WCD entered into Water Supply Contracts (State Contract) with the State. Under the State Contract, water would be delivered to Santa Barbara and San Luis Obispo Counties through the "Coastal Branch" of the SWP. Phase I of the Coastal Branch, a 15-mile aqueduct branching off the California Aqueduct in northwestern Kern County, was completed in 1968. Construction of the remainder of the Coastal Branch (designated "Phase II") was postponed from 1975 to 1991. This postponement in construction was permitted in the State Contract, which allowed Santa Barbara and San Luis Obispo Counties to delay construction indefinitely.

The 1980's and 1990's

Even though construction of the Coastal Branch Phase II project was delayed, both counties were still obligated to make certain payments to the State related to facilities (such as the Oroville Dam and the California Aqueduct) which had already been built and which would be part of the delivery system that eventually would convey SWP water to the Central Coast. Beginning in about 1979, many people in Santa Barbara County questioned whether it should continue to make payments under the State Contract. A number of water purveyors concluded it would be prudent for the County to continue to retain its Table A Amount (formerly referred to as "entitlement") is named for "Table A" in each SWP Contractor's Water Supply Contract and make payments to the State. The County was willing to retain the Table A Amount, but only if the associated costs were shifted from the countywide tax base to the ratepayers in those jurisdictions which wanted to keep the option to join the SWP. Beginning in 1982, SBCFC&WCD entered into a series of Water Supply Retention Agreements (WSRAs) with various water purveyors for the purpose of shifting responsibility for such State payments from the County taxpayers to individual purveyors and their The WSRAs included a provision stating that no revenue bond financing for ratepayers. project facilities could be issued unless authorized by a vote of the people within the jurisdiction of each participating purveyor.

In 1983, SBCFC&WCD, SLOCFC&WCD and the State commenced joint studies which found that additional water was needed to meet projected demand for the two counties. The shortage was being met by long-term overdraft of local groundwater basins. The chronic overdraft of the local groundwater basins presented a serious environmental threat. Since many of these groundwater basins are adjacent to the ocean, the risk of saltwater intrusion and permanent damage to groundwater basins weighed on the minds of local water officials. In addition, reports from other areas in California (including some from San Luis Obispo County) indicated that groundwater over drafting was causing surface soil subsidence. Local water agencies understood the significant environmental benefits that could be derived by reducing groundwater "mining" by diversifying water supplies to include additional sources, such as imported water.



In 1985, the State Department of Water Resources, in conjunction with SBCFC&WCD, completed a major "Alternatives Study" regarding the feasibility and costs of various supplemental sources of water supply for Santa Barbara County. This study determined that supplemental water from an enlarged Cachuma Reservoir (constructed by the United States Bureau of Reclamation) was the preferred alternative for the Santa Ynez Valley and the South Coast, while SWP water was preferred for the cities of Lompoc, Santa Maria and other north County entities.

In 1986, the City of Santa Maria requested SBCFC&WCD to ask the State to begin the planning and environmental studies, including preparation of an environmental impact report, needed to build the Coastal Branch Phase II project. In the same year, Santa Ynez River Water Conservation District, Improvement District No. 1 and the South Coast water purveyors asked the State and the United States Bureau of Reclamation (USBR) to begin a study for enlarging Cachuma Reservoir. This alternative raised environmental concerns that led to doubts about its ultimate feasibility.

In June 1990, DWR prepared and circulated a draft environmental impact report (DEIR) on the Coastal Branch Phase II project, pursuant to the California Environmental Quality Act, Public Resources Code Section 21091 (CEQA). Under CEQA, one purpose of a DEIR is to publicly disclose the impact, both environmental and financial, of a proposed project. The Coastal Branch DEIR was the subject of numerous public meetings in Santa Barbara County.

In May 1991, DWR issued the final environmental impact report (FEIR) for the Coastal Branch Phase II project and the Mission Hills Extension. The FEIR was sent to all of the potential participating water purveyors.

On June 4, 1991, during the extended drought of 1987-1992, elections (required by the WSRAs) were held in 14 Santa Barbara County cities, communities and water districts on a State water ballot measure. The measure asked whether voters in each city or district would approve issuance of revenue bonds to finance local facilities needed to treat and distribute SWP water once the State completed construction of the Coastal Branch Phase II project. Voters in eleven cities and districts approved the bond measures. Several San Luis Obispo County cities and districts also voted to participate in the effort.

The Central Coast Water Authority (CCWA) was formed immediately after the 1991 elections. It took over the WSRAs in Santa Barbara County and transformed them into Water Supply Agreements. It also signed a Transfer of Financial Responsibility with the SBCFC&WCD so it could interact directly with the State. SBCFC&WCD maintained its contractual relationship with the State, however, because of its ability to tax in the event of a default. SLOCFC&WCD also maintained its contractual relationship with the state and signed agreements with CCWA to treat its SWP water and to operate and maintain the pipeline and facilities in San Luis Obispo County.



Figure 3

Coastal Branch Phase II Project Map





A Commitment to Environmental Protection

Throughout the planning and construction of the project, CCWA was committed to environmental protection. CCWA formed a project team of CCWA staff, engineers, environmental consultants and attorneys charged with integrating their respective skills and treated environmental protection with the same priority given technical and financial issues. Environmental mitigation measures were incorporated into the project from inception to completion. The project team conducted regular meetings to maintain clear lines of communication and reporting. Each team member took personal responsibility for completing tasks properly and timely, resolving small problems before they became bigger problems, and staying ahead of issues to prevent problems from developing.

Before project planning began, the team met with every regulatory agency that might have had jurisdiction over the project. They discussed potential resource issues that needed to be addressed and established a dialogue that encouraged the resource agencies to call if problems were identified as the project progressed.

CCWA and its project participants complied with both CEQA and the National Environmental Protection Act (NEPA) and prepared three EIRs with Supplemental EIRs, an Environmental Assessment and a number of Negative Declarations. CCWA and its consultants coordinated closely with the California Department of Fish & Game, U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, U.S. Bureau of Reclamation and local Native American groups to formulate and implement a mitigation and monitoring program to (1) protect sensitive species and their habitats, (2) avoid impact to cultural resources, (3) restore disturbed areas to their prior condition to the extent feasible and (4) provide offsite mitigation for those areas that could not be restored, (e.g., large trees cannot be grown over the pipeline, and above ground valve vaults and similar facilities occupy surface areas which must remain clear in perpetuity).

CCWA's commitment to environmental protection resulted in a project which was virtually undetectable to the public just one year after completion due to successful revegetation efforts.

When the CCWA Board of Directors approved construction of the 42-mile CCWA pipeline, it included a number of conditions. One condition was to require each of the CCWA project participants to commit that its SWP water Table A Amount will be used first to offset its proportionate share of groundwater overdraft and then to improve water quality for its consumers. (Any remaining water would be used for future growth consistent with community general plans.) Thus, SWP water is providing the "ultimate" environmental benefit by reducing groundwater overdraft in a number of areas throughout the county.



Each Santa Barbara County project participant is a water purveyor or user located in Santa Barbara County (see Figure 4).

CCWA Project Participant Table A Amounts											
Agency	Table A Amount ¹										
City of Buellton	578										
Carpinteria Valley Water District	2,000										
Goleta Water District	4,500										
City of Guadalupe	550										
La Cumbre Mutual Water Company	1,000										
Montecito Water District	3,000										
Morehart Land Company	200										
City of Santa Barbara	3,000										
Santa Barbara Research Center	50										
City of Santa Maria	16,200										
Santa Ynez RWCD, ID#1	2,000										
Southern California Water Company	500										
Vandenberg Air Force Base	5,500										
TOTAL	39,078 ²										

Table 2

¹ In acre-feet per year.

² The amounts do not include CCWA's 3,908 acre-feet per year "drought buffer" Table A Amount and 2,500 acre-feet per year additional Table A Amount held by Goleta Water District.





Figure 4 – Location Map for Santa Barbara County Project Participants





Figure 5 - Location Map for San Luis Obispo County Water Purchasers



Each San Luis Obispo County water purchaser is a water purveyor or user located in San Luis Obispo County which has contractual rights from SLO County to receive water from the SWP (see Figure 5).

San Luis Obispo County Water Furchaser Table A Amounts										
Agency	Table A									
	Amount									
Avila Beach Community Services District	100									
Avila Valley Mutual Water Company, Inc.	20									
California Men's Colony (State)	400									
County of San Luis Obispo C.S.A. No. 16-1	100									
County of San Luis Obispo (Operations Center										
and Regional Park	425									
City of Morro Bay	1,313									
Oceano Community Services District	750									
City of Pismo Beach	1,240									
San Luis Coastal Unified School District	7									
San Miguelito Mutual Water Company	275									
San Luis Obispo County Community College										
District (Cuesta College)	200									
TOTAL	4,830									

 Table 3

 San Luis Obispo County Water Purchaser Table A Amounts



Population

Population data for each CCWA project participant is not available. Population data for individual retail service areas can be found in the UWMPs of the retail purveyors. In order to provide a population overview in both counties, however, the following data is presented.

San Luis Obispo County

The total population of San Luis Obispo County was 260,727 as of January 1, 2005, which represents a 1.0% population increase in one year, a 5.3% population increase in five years, a 13.3% population increase in ten years, and a 41.5% population increase in twenty years. Figure 6 illustrates the county's population and rate of growth from 1991 through 2004. Currently, San Luis Obispo County is the 23rd most populous of California's 58 counties and is ranked in 37rd place within the bottom third of the fastest growing counties in California.

Figure 6 - Population and Population Growth

From the UCSB Economic Forecast Project's 2005 San Luis Obispo County Economic Outlook Report



Population growth in the region has been relatively modest in recent years. In general, coastal counties have been growing more slowly than inland counties due to the high cost of housing in the coastal counties. Population growth in the region has not been homogeneous. Five of the seven incorporated cities lost population in 2004, while the City of Paso Robles and the unincorporated areas have grown at 2.8% and 1.6%, respectively. Table 4 shows the 2005 population distribution and growth rates across the County.



San Luis Obispo County Population Projections										
	Po	pulation i	n Househo	olds (Grou	p Quarters	not include	ed)			
PLANNING AREA or Community	2000	2005	2010	2015	2020	2025	2030			
	3030	3200	3638	4136	4703	5347	6079			
	7099	8152	9450	10956	12701	14723	17068			
ESTERO	28603	28730	30721	33288	35276	37394	39653			
Morro Bay	10152	10313	10759	11224	11709	12215	12743			
Cavucos	2929	3067	3176	3289	3405	3526	3651			
	14343	14160	15566	17525	18879	20338	21910			
Estero (Bural)	1170	1100	1220	1251	1282	1315	1348			
	798	808	1041	1207	1202	1622	1880			
	1313	1384	1440	1/100	1560	1622	1689			
LOS PADRES	309	318	341	365	392	420	450			
NACIMIENTO	2778	3147	3357	3563	3782	4015	4261			
NORTH COAST	7053	7344	7487	7851	8233	8634	9055			
Cambria	6210	6/05	6613	6950	7304	7677	8060			
North Coast (Bural)	8/3	8/0	875	0350 001	020	057	0003			
	61206	69702	7/921	901	929	02972	900			
SALINAS RIVER	01300	25044	27267	00709	20120	92012	22271			
Aldscauero Roso Robios	24004	20944	20007	20000	26294	20000	42100			
Faso Robles	23223	1715	2205	2001	30204	4205	42109			
Santo Morgarita	1427	1710	1204	2901	4592	4290	1027			
Santa Marganta	1224 5070	1323	7077	1409	1000	1705	1037			
Solinoo River (Rurol)	097Z	1225	1223 1911		9724 5759	10473 5652	F052			
	40767	4910	5090 5271		59507	61260	0000			
SAN LUIS BAT	40/0/	16207	17160	10025	10055	10000	04207			
Arroyo Grande	10000	10327	17100	16030	16900	19922	20930			
Aviia Beach/ Aviia Valley	12024	1104	1027	14016	1000	1007	1/0/			
Glover Beach	12924	7440	7000	14210	14040	15093	10000			
Diama Daash	7251	7446	7826	8144	8391	8040	8908			
PISMO Beach	8523	8617	9133	9680	10260	10874	11525			
	3087	3830	4120	4445	4/88	5158	50000			
SAN LUIS OBISPO	45613	46285	48741	51330	54059	50930	59969			
San Luis Obispo (City)	42188	42657	44833	47120	49523	52050	54705			
	3425	3628	3908	4210	4536	4886	5264			
SHANDON-CARRIZO	2425	2513	2781	3105	3579	4170	4911			
Shandon	984	1027	1242	1511	1929	2462	3142			
Shandon-Carrizo (Rural)	1441	1486	1539	1593	1650	1708	1769			
SOUTH COUNTY	21205	23708	26376	29357	32690	36418	40589			
Nipomo	12587	14536	16446	18607	21052	23819	26949			
South County (Rural)	8618	9172	9930	10750	11638	12599	13640			
(Households Only)	230280	244997	263564	283/17	303670	325525	340176			
Incorporated Citica	137444	244001	153756	162615	171500	180200	1009/2			
	02945	100250	100907	120002	122170	144626	150043			
GROUP OUAPTERS (2)	32040	100300	109007	120002	132170	144030	100303			
Incorporated Citica	1916	1160	1160	1160	1160	1160	1160			
	10755	4402 11279	440Z	4402 11270	440Z	440Z	4402 11279			
	10/00	113/0	070404	113/0	240540	244075	113/0			
COUNTEIOTAL	245860	260727	279404	299257	319510	341375	365016			

Table 4

Note: Shading indicates population growth that would require an amendment to the general plan



Migration continues to be the primary source of population growth for the County. In recent years, the demographics of the County have been changing as a result of aging baby boomers, the migration of retirees into the area, and the exit of younger families who cannot afford the region's high cost of housing. The affordability index for a median priced home in San Luis Obispo County is only 11%. As a result, people aged 45 to 60 make up the fastest-growing population segment in the county.

Santa Barbara County

Population forecasts provide essential pieces of data for determining future water demand. In an effort to provide the best estimates for future population within Santa Barbara County, several estimates of future population figures were consulted. Table 5 summarizes the historical and projected estimates for the incorporated cities within Santa Barbara County from a number of published reports. Population forecasts used in this report were taken from a variety of sources including:

- U.S. Census Bureau Census 2000 reports;
- Santa Barbara County State Water Project Alternatives Study by DWR and Santa Barbara County Flood Control and Water Conservation District (1985);
- Santa Barbara County Growth Inducement Potential of State Water Importation (Ahlroth and Cosby, 1991);
- Santa Barbara County Planning and Development Department's *Santa Barbara County 2030 Land and Population Newsletter*, November 2000 (2030 Newsletter);
- *Regional Growth Forecast 2000 2030* (March 2002 Santa Barbara County Association of Governments);
- General Plans from each of the cities and Community Plans for each planning area within the county;
- Urban Water Management Plans for year 2000 prepared by the City of Santa Barbara, Goleta Water District, Montecito Water District, the City of Santa Maria, the Santa Ynez River Water Conservation District ID#1, Carpinteria Valley Water District and the City of Lompoc;
- California Department of Finance reports.



Table 5
SANTA BARBARA COUNTY POPULATION DATA AND FORECASTS

CITY	1980	1990		200)0		GPBO		2020			2030		2040
	Census	Census	DOF	Forecast 00	GenPlan	Census 00		DOF	Forecast 00	2030 NWSLTR	DOF	Forecast 00	2030 NWSLTR	DOF
City of Carpinteria	10,835	13,747	14,194	14,200	14,618	14,194	17,518		15,500	18,385		16,000	19,978	
City of Santa Barbara	74,414	85,571	89,600	89,600	92,800	92,325	99,880		97,200	109,283		101,700	117,525	
City of Solvang	3,106	4,741	5,332	5,300	5,375	5,332	6,005		6,300	6,983		6,300	7,787	
City of Buellton	2,242	3,688	3,828	3,800	3,906	3,828	5,148		5,800	5,993		5,900	7,034	
City of Lompoc	26,267	37,649	41,103	41,100	41,076	41,103	49,963		47,200	57,255		49,900	64,232	
City of Santa Maria	39,685	61,284	77,423	77,400	82,400	77,423	123,700		110,800	106,694		113,700	123,591	
City of Guadalupe	3,629	5,479	5,659	5,700	6,754	5,659	8,250		6,400	NA		6,700	NA	
Unincorporated Areas	138,738	157,449	162,208	162,300	NA	159,483	NA		215,300	217,772		220,500	236,301	
County Totals	298,916	369,608	399,347	399,400	NA	399,347	NA	552,848	504,500	522,365	658,223	520,700	576,448	779,247

NOTES ON TABLE 1:

NOTES ON TABLE 1: 1) Population estimates are for offies. If water district boundaries are not coincident with city boundaries, estimates may differ significantly from the water district population shown in Table 2. 2) Census numbers for 1970 through 1980 were taken from the Santa Barbara County Growth Inducement Potential of State Water Importation. by Ahlroth and Cosby, 1991. 3) California Dept of Finance (DCP) population estimates are taken from the Regional Growth Forecast 2000 - 2030, and 2040. 4) Forecast 00 population estimates are taken from the Regional Growth Forecast 2000 - 2030 (page 34, Table 2-7) prepared by the Santa Barbara County Association of Governments. 5) "CPBO" signifies General Plan Build Out. 6) When the most current update of a city's General Plan did not include estimates for the year 2000 or GPBO, population data listed under the General Plan and GPBO columns was taken from the Santa Barbara County Planning and Development Department's Santa Barbara County 2030 Land and Population Newsletter (2030 NWSLTR). November 2000. This includes the information for City of Santa Barbara, City of Solvang, and City of Suellion (GPBO only). 7) GPBO forecasts for the City of Santa Maria were taken from personal communication with Bill Shipsey of the Community Development Department. 8) The City of Guadalupe was of updating their General Plan during the research phase of this study. Therefore, the 2000 General Plan numbers are taken from the number of water service connections documented by the City multiplied by the persons per household estimates in the Regional Growth Forecast 2000 - 2030, 2030, 2030. The GPBO forecasts for the City of Guadalupe were taken from the formation for 2030 figures in the Santa Barbara County 2030 Land and Population Newsletter, November 2020, 2030, 2031. The GPBO forecasts for the City of Guadalupe were taken from the number of water service connections documented by the City multiplied by the persons per household estimates in the Regional Growth Forecast

6/20/2005

SANTA BARBARA COUNTY WATER AGENCY AND BOYLE ENGINEERING CORPORATION

Climate

The climate in the area served by CCWA is best described as Mediterranean, characterized by hot, dry summers in inland areas with more temperate weather along the coast and cool, moist winters. Summers are dry with temperatures as high as 110°F. Winters are somewhat cool with temperatures as low as 20°F. Average annual precipitation in the region varies from 17 to 24 inches in the coastal areas to approximately 14 inches in the more arid, eastern locations. A more detailed listing of relevant weather parameters (evapo-transpiration (ETo), average high temperature and average rainfall) for selected representative areas within CCWA's service area can be found in the following tables:



					Tab	le 6						
Monthly Aver	ages f	for E1	To, Te	mpera	ature,	& Ra	infall	(Paso	Robl	es/Ata	ascade	ero)

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Total ETo (in)	2.21	2.50	3.80	5.08	5.70	6.19	6.43	6.09	4.87	4.09	2.89	2.28
Avg. Temp (F)	61.1	64.0	67.9	73.7	80.1	86.7	92.7	93.0	89.2	81.2	69.3	61.7
Avg. Rainfall (in)	3.11	3.18	2.37	1.05	0.27	0.05	0.03	0.04	0.19	0.56	1.39	2.63

Table 7

Monthly Averages for ETo, Temperature, & Rainfall (San Luis Obispo)

	Lam	Tak	Man	A	Mari	T	T1	À	Com	Oat	Ner	Dee
Month	Jan	red	Mar	Арг	way	Jun	Jui	Aug	Sep	Oci	INOV	Dec
Total Eto (in)	2 21	2 50	3.80	5.08	5 70	6 1 9	643	6.09	4 87	4 09	2.89	2.28
10000 2000 (111)	2.21	2.50	5.00	5.00	5.70	0.17	0.15	0.07	1.07	1.07	2.07	2.20
Avg. Temp (F)	613	64 9	65 7	68.4	70.8	74 9	78 3	793	79 5	767	70.4	64 5
	01.5	01.7	05.7	00.1	10.0	/ 1./	70.5	17.5	17.5	/0./	/0.1	01.5
Avg. Rainfall (in)	5 17	4 86	3 65	1 71	0.42	0.07	0.03	0.05	033	0.90	2.47	3 84
······	5.17		5.05	1.71	0.12	0.07	0.05	0.05	0.55	0.70	2.17	5.01

Table 8

Monthly Averages for ETo, Temperature, & Rainfall (Lake Cachuma/Santa Ynez)

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Total ETo (in)	1.68	2.21	3.52	5.01	5.78	6.18	6.40	6.01	4.46	3.57	2.19	1.67
Avg. Temp (F)	65.1	66.7	68.6	72.8	77.2	83.7	90.2	90.9	87.9	82.1	72.9	66.3
Avg. Rainfall (in)	4.16	4.78	3.75	1.54	0.38	0.04	0.01	0.03	0.23	0.65	2.01	3.12

Table 9

Monthly Averages for ETo, Temperature, & Rainfall (Santa Barbara)

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Total ETo (in)	1.67	2.24	3.43	4.94	4.99	5.24	5.29	5.33	3.89	3.51	2.22	1.86
Avg. Temp (F)	65.1	65.7	67.1	69.3	70.4	72.5	76.2	77.5	76.9	74.6	70.9	66.5
Avg. Rainfall (in)	3.78	4.09	2.81	1.20	0.31	0.09	0.02	0.03	0.15	0.52	1.71	3.09

Notes:

(1) ETo (evapo-transpiration) data, http://www.imis.water.ca.gov/cimis/welcome.jsp (2) Rainfall and temperature data, http://www.wrcc.dri.edu/CLIMATEDATA.html







SAN LUIS OBISPO PRECIPITATION 1870-2004 Average 22.15"





Potential Effects of Global Warming

A topic of growing concern for water planners and managers is global warming and the potential impacts it could have on California's future water supplies. DWR's Draft California Water Plan Update 2005 contains the first-ever assessment of such potential impacts in a California Water Plan. Volume 1, Chapter 4 of the California Water Plan, "Preparing for an Uncertain Future," lists some potential impacts of global warming, based on more than a decade of scientific studies on the subject:

- Could produce hydrologic conditions, variability and extremes that are different from what current water systems were designed to manage
- May occur too rapidly to allow sufficient time and information to permit managers to respond appropriately
- May require special efforts or plans to protect against surprises or uncertainties

Changes in Sierra snow pack patterns (the source of the SWP's water supply in Lake Oroville), hydrologic patterns, sea level, rainfall intensity and statewide water demand are all possible should global warming prove to be increasing through time. Computer models (such as CALVIN) have been developed to show water planners what types of effect climate change could have on the water supply. DWR has committed to continue to update and refine these models based on ongoing scientific data collection and to incorporate this information into future California Water Plans, so that agencies like CCWA can plan accordingly.



WATER SOURCES

<u>Water Code</u> Section 10631. A plan shall be adopted in accordance with this chapter and shall do all of the following: (b) Identify and quantify, to the extent practicable, the existing and planned sources of water available to the supplier over the same 5-year increments [to 20 years or as far as data is available.]

CCWA's sole water supply is imported water from the State Water Project. As such, it is subject to natural and man-made forces, ranging from drought and earthquakes to environmental regulations and water rights determinations. Some of the challenges facing California with respect to importing water include:

- A major earthquake could damage the California Aqueduct
- Questionable integrity of the levee system within the Bay-Delta.
- The demand for water used for environmental purposes is increasing, especially in the San Francisco Bay/Sacramento-San Joaquin Bay Delta (Bay-Delta), reducing the ability to convey water through the Central Valley Project or the State Water Project.
- Threats to infrastructure security

CCWA's Water Supply Agreements with each of its project participants stipulate that imported State water will be a supplemental source of water. Its first use must be to reduce ground water overdraft. Only after that condition has been satisfied, can State water be utilized for planned growth.

In February 1963, The Santa Barbara County Flood Control and Water Conservation District (SBCFC&WCD) and the San Luis Obispo County Flood Control and Water Conservation District (SLOFC&WCD) entered into a 75 year agreement with the Department of Water Resources (DWR). SWP water originates within the Feather River watershed, is captured in Lake Oroville, and flows via the Sacramento-San Joaquin Delta, the California Aqueduct and the Coastal Branch Extension into CCWA's treatment and conveyance facilities.

Originally, SBCFC&WCD requested 57,700 acre-feet of water annually. In 1980, Santa Barbara County water purveyors requested and agreed to pay for 45,486 acre-feet and SBCFC&WCD, with the concurrence of DWR, suspended the remaining 12,214 acre



feet. In 1994, Santa Barbara County water purveyors, now part of CCWA, agreed to take 39,078 acre-feet with an additional 3,908 acre-feet of drought buffer. Goleta Water District took an additional 2,500 acre-feet of drought buffer to further firm up its supply.

SLOCFC&WCD originally requested 25,000 acre-feet annually. In 1991, it decided, however, to participate in the treatment and conveyance facilities for 4,830 acre-feet only. The remaining 20,170 acre-feet remains as a drought buffer to firm up supplies.

Because CCWA is connected to the State water system, it may utilize the system for transfers to and from other water districts, exchanges, banking, off-site storage, etc. This connection to the rest of the State is of immense value to CCWA project participants as it provides opportunities to increase reliability and supplement other supplies.



WATER SOURCES – GROUNDWATER

Water Code

Section 10631.(b)

If groundwater is identified as an existing or planned source of water available to the supplier, all of the following information shall be included in the plan:

(1) A copy of any groundwater management plan adopted by the urban water supplier, including plans adopted pursuant to Part 2.75 (commencing with Section 10750), or any other specific authorization for groundwater management.

(2) A description of any groundwater basin or basins from which the urban water supplier pumps groundwater. For those basins for which a court or the board has adjudicated the rights to pump groundwater, a copy of the order or decree adopted by the court or the board and a description of the amount of groundwater the urban water supplier has the legal right to pump under the order or decree.

(3) A detailed description and analysis of the location, amount, and sufficiency of groundwater pumped by the urban water supplier for the past five years. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historic use records.

(4) A detailed description and analysis of the amount and location of groundwater that is projected to be pumped by the urban water supplier. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historic use records.

CCWA does not currently use groundwater as a supply source. It does support the efforts of its project participants to reduce overdraft, implement conjunctive use projects and groundwater storage and banking programs. As described in the previous section, CCWA member agencies must first offset groundwater overdraft with SWP water, before using their allocations to serve new customers.



Information regarding groundwater supplies being used by CCWA project participants can be found in the individual UWMPs prepared by these agencies. Information about all groundwater resources in Santa Barbara County is contained in the 2004 Santa Barbara County Groundwater Report prepared by the County Water Agency, and can be downloaded from their website at

http://www.countyofsb.org/pwd/water/downloads.htm.

Additionally, San Luis Obispo County groundwater information including the Nipomo Mesa Groundwater Resource Capacity Study, Integrated Regional Water Management Plan and the Paso Robles Groundwater Basin Study can be found at <u>http://www.slocountywater.org/reports/index.htm</u>.



RELIABILITY OF SUPPLY

<u>Water Code</u> Section 10631 A plan shall be adopted in accordance with this chapter and shall do all of the following:

(c) Describe the reliability of the water supply and vulnerability to seasonal or climatic shortage, to the extent practicable. Provide data for each of the following: (1) An average water year, (2) A single dry water year, (3) Multiple dry water years.

CCWA is a SWP contractor (through SBCFC&WCD) with an annual contractual Table A Amount of 45,486 acre-feet. SLOCFC&WCD is also a SWP contractor with an annual Table A Amount of 25,000 acre-feet. Table A Amount (formerly referred to as "entitlement") is named for "Table A" in each SWP Contractor's Water Supply Contract. It contains an annual buildup in Table A Amounts of SWP water, from the first year of the Water Supply Contract through a specific year, based on growth projections made before the Water Supply Contract was executed. For most Contractors, the maximum annual Table A Amount was reached in 1990, although both CCWA and SLOCFC&WCD did not receive SWP water until 1997. The total of all SWP Contractors' maximum Table A Amounts is currently about 4.17 million acre-feet per year. CCWA treats and delivers this imported water to **SLOCFC&WCD** and each of its project participants through both State and local facilities.

Table 10 Historical Total SWP Deliveries

Year	Allocation	Delivery Amt. CCWA (af)	Delivery Amt. SLOCFC&WCD (af)
1997	100%	7,462	228
1998	100%	18,618	3,592
1999	100%	20,110	3,770
2000	90%	22,742	2,963
2001	39%	18,946	4,283
2002	70%	27,636	4,335
2003	90%	26,970	4,451
2004	90%	29,705	4,165



Table 11SWP Supply Projections through 2030

Year	2005	2010	2015	2020	2025	2030
CCWA	45,486	45,486	45,486	45,486	45,486	45,486
Request (af)						
SLOCFC&WCD	25,000	25,000	25,000	25,000	25,000	25,000
Request (af)						

Each Contractor annually submits by October 1st of each year a request to DWR for water delivery in the following calendar year, in any amount up to the Contractor's full Table A Amount. The Water Supply Contracts provide that, in a year when DWR is unable to deliver total Contractor requests, deliveries to all Contractors will be reduced, in accordance with specified water allocation rules. The process results in deliveries that equal total available supply for that year. Some Contractors have never requested delivery of their full Table A amounts as a result of factors such as less-than-planned water demand, availability of other water supplies, and water conservation efforts that have held demand below initial demand projections for full contract amounts. Other Contractors order their full Table A Amounts nearly every year. The amount of actual water available to be delivered by DWR varies from year to year based on a combination of hydrologic conditions, water available in SWP storage reservoirs, and environmental regulations in the San Francisco Bay/Sacramento-San Joaquin River Delta. SWP water deliveries are subject to reduction when dry conditions occur in northern California.

In May 2003, DWR released its most recent State Water Project Delivery Reliability Report. The report is intended to assist SWP contractors in assessing the adequacy of the SWP component of their overall supplies. The analyses contained in the report conclude that the SWP, using existing facilities operated under current regulatory conditions, and with all contractors asking for their full Table A Amount, could deliver 76 percent of total Table A Amounts on a long-term average basis.

Updated SWP Reliability Analysis - 2005

On May 25, 2005, DWR informed the SWP Contractors that it was in the process of updating the Reliability Report and provided a recommended set of analyses to be used for preparing 2005 UWMPs. These updated analyses indicate that the SWP, using existing facilities operated under current regulatory conditions, and with all contractors asking for their full Table A Amounts in most years, could deliver 77 percent of the total Table A Amounts on a long-term average basis. These most recent analyses also project that, SWP deliveries during multiple-dry year periods would be about 25 to 40 percent of Table A Amounts, and possibly as low as 5 percent of Table A Amounts during an unusually dry single year. During wetter years, or about 25 percent of the time, 100 percent of full Table A Amounts are projected to be available.



The following two tables summarize the reliability of SWP water supplies during average/normal, single-dry, and multiple-dry years.

Table 12
Water Available to CCWA and SLOCFC&WCD During Average/Normal Years

	2005	2010	2015	2020	2025	2030
% of Table A Amount	69%	71%	73%	75%	77%	77%
CCWA (af)	31,385	32,295	33,205	34,115	35,024	35,024
% available to CCWA	80%	83%	85%	87%	90%	90%
SLOCFC&WCD (af)	17,250	25,001	18,250	18,750	19,250	19,250
% available to SLOFC&WCD	>100%	>100%	>100%	>100%	>100%	>100%

Notes:

(1) The percentages of Table A Amount projected to be available are taken from Table 6-5 of DWR's "Excerpts from Working Draft of 2005 State Water Project Delivery Reliability Report" (May 2005). Supplies are calculated by multiplying CCWA's Table A Amount of 45,486 af and SLOCFC&WCD's 25,000 af by these percentages. Note, however, that CCWA has only 39,078 af of Treatment plant and pipeline capacity and SLOC has only 4,830 af

Table 13Dry Year Supply Reliability (1)

Contractor	Single Dry Yr. (2)	Multiple Dry Yrs. (3)
2005		
CCWA (af)	1,819	14,556
% of Table A	4%	32%
SLOCFC&WCD (af)	1,000	8,000
% of Table A	4%	32%
2025-2030		
CCWA (af)	2,274	15,010
% of Table A	5%	33%
SLOCFC&WCD (af)	1,250	8,250
% of Table A	5%	33%

Notes:

(1) The percentages of Table A Amount projected to be available are taken

from Table 6-5 of DWR's "Excerpts from Working Draft of 2005 State

Water Project Delivery Reliability Report" (May 2005). Supplies are

calculated by multiplying CCWA's Table A Amount of 45,486 af and SLOCFC&WCD's 25000 af by these percentages.

(2) Based on the worst case historic single dry year of 1977.

(3) Supplies shown are annual averages over four consecutive dry years,

based on the worst case historic four-year dry period of 1931-1934 as

stated in the most recent DWR SWP Delivery Reliability Report.

The above tables do not reflect the additional water available through exchanges with other water contractors, purchases of water through DWR dry year water purchase programs, short term water transfers through DWR's Turnback Pool programs and groundwater recharge programs operated by some CCWA project participants. In any given year, additional water can be made available through the SWP system for the incremental cost of purchasing or exchanging the water from others in the State.


Additionally, retail agencies use SWP water delivered through CCWA as a supplemental water supply to augment other surface and groundwater supplies. There does not appear to be any statistical correlation between droughts that would affect the SWP watersheds and those that would affect the watersheds of Santa Barbara and San Luis Obispo Counties. Several CCWA project participants have also invested in water reclamation (recycling) projects, desalination, water transfers, exchanges, conservation measures and conjunctive use projects to increase the reliability of their overall water portfolios.



TRANSFERS AND EXCHANGE OPPORTUNITIES

Water Code

Section 10631.

A plan shall be adopted in accordance with this chapter and shall do all of the following:

(b) Identify and quantify, to the extent practicable, the existing and planned sources of water available to the supplier over the same 5-year increments [to 20 years or as far as data is available.]

(d) Describe the opportunities for exchanges or transfers of water on a short-term or long-term basis.

Additional water supplies can be purchased from other water agencies and sources, and CCWA is currently exploring opportunities. An important element to enhancing the long-term reliability of the total mix of supplies currently available to meet the needs of the Central Coast is the use of transfers, exchanges, and groundwater banking programs.

Transfers and Exchanges

CCWA can increase water supply reliability by participating in voluntary water transfer programs. Since the California drought of 1987-1992, the concept of water transfers has evolved into a viable supplemental source to improve supply reliability. The initial concept for water transfers was codified into law in 1986 when the California Legislature adopted the "Katz" Law (California Water Code, Sections 1810-1814) and the Costa-Isenberg Water Transfer Law of 1986 (California Water Code, Sections 470, 475, 480-483). These laws help define parameters for water transfers and set up a variety of approaches through which water or water rights can be transferred among individuals or agencies.

Up to 27 million acre-feet of water are delivered for agricultural use every year. Over half of this water use is in the Central Valley, and much of it is delivered by, or adjacent to, SWP and Central Valley Project (CVP) conveyance facilities. This proximity to existing water conveyance facilities could allow for the voluntary transfer of water to many urban areas, including CCWA, via the SWP. Such water transfers can involve water sales, conjunctive use and groundwater substitution, and water sharing, and usually occur as a form of spot, option, or core transfers agreements (see descriptions below). The costs of a water transfer would vary depending on the type, term, and location of the transfer. The most likely voluntary water transfer programs would probably involve the Sacramento or southern San Joaquin Valley areas.



One of the most important aspects of any resource planning process is flexibility. A flexible strategy minimizes unnecessary or redundant investments (or stranded costs). The voluntary purchase or exchange of water between willing participants can be an effective means of achieving flexibility. However, not all water transfers or exchanges have the same effectiveness in meeting resource needs.

Through the resource planning process and ultimate implementation, several different types of water transfers and exchanges could be undertaken:

- **Permanent Transfers** Agreements to purchase a defined quantity of water every year. These transfers have the benefit of more certainty in costs and supply, but in some years can be surplus to imported water (available in most years) that is already paid for.
- **Spot Market Transfers** Water that is purchased only during the time of need (usually a drought). Payments for these transfers occur only when water is actually requested and delivered, but there is usually greater uncertainty in terms of costs and availability of supply. An example of such a transfer was the Governor's Drought Water Banks of 1991 and 1992. An additional risk of spot market transfers is that the purchases may be subject to institutional limits or restricted access (e.g., requiring the purchasing agency to institute rationing before it is eligible to participate in the program).
- **Option Contracts** Agreements that specify the amount of water needed and the frequency or probability that the supply will be called upon (an option). Typically, a relatively low up-front option payment is required and, if the option is actually called upon, a subsequent payment would be made for the amount called. These transfers have the best characteristics of both core and spot transfers. With option contracts, the potential for redundant supply is minimized, as are the risks associated with cost and supply availability.
- **Exchanges** Exchanges occur when participants have different delivery requirements during certain portions of the year or during various year types (wet, normal, dry, etc.). Exchangers offer water to other participants in exchange for water at a later time. Exchanges can take place over single or several years and can be even (one af for one af) or un even (one af during a dry year for two af during a wet year).

Groundwater Banking Programs

With recent developments in conjunctive use and groundwater banking, significant opportunities exist to improve water supply reliability. Conjunctive use is the coordinated operation of multiple water supplies to achieve improved supply reliability. Most conjunctive use concepts are based on storing groundwater supplies in times of surplus



for use during dry periods and drought when surface water supplies would likely be reduced.

Groundwater banking programs can involve storing available SWP surface water supplies during wet years in groundwater basins in, for example, the San Joaquin Valley. Water would be stored either directly by surface spreading or injection, or indirectly by supplying surface water to farmers for their use in lieu of their intended groundwater pumping. During water shortages, the stored water could be pumped out and conveyed through the California Aqueduct, or used by the farmers in exchange for their surface water allocations, which would be delivered through the California Aqueduct. Several conjunctive use and groundwater banking opportunities are already in existence.

Over the last several years, CCWA has participated in several transfer and exchange programs to increase the overall and individual retailer reliability of SWP water on the Central Coast. It participated in DWR's dry year water purchase programs in 2001, entered into an exchange with the Dudley Ridge Water District in 2002, participated in the State Water Project Contractors Authority dry year option program in 2005 and has begun an ambitious program of carrying over excess SWP water into future years. CCWA is also investigating the benefits of entering into a ground water banking program. Programs in the Central Valley and possible opportunities in Santa Barbara and San Luis Obispo Counties are being considered. Formal studies are expected to commence in 2006. Individual CCWA project participants are also banking groundwater within their service areas for periods of drought.



WATER USE BY CUSTOMER TYPE PAST, CURRENT AND FUTURE

Water Code

Section 10631

(e) (1) Quantify, to the extent records are available, past and current water use, over the same five-year increments described in subdivision (a), and projected water use, identifying the uses among water use sectors including, but not necessarily limited to, all of the following uses: (A) single-family residential, (B) multi-family, (C) commercial, (D) industrial, (E) institutional and governmental, (F) landscape, (G) sales to other agencies, (H) saline water intrusion barriers, groundwater recharge, or conjunctive use, or any combination thereof,

(2) Agricultural.

CCWA's mission is "to provide Santa Barbara and San Luis Obispo Counties with reliable, high quality supplemental water." Information regarding past, current and future use by customer type will be found in each retail agency's UWMP. General information for both counties can be found below:

<u>M&I Use</u>

Municipal & Industrial use (M&I), which supplies *urban users*, includes all commercial, industrial, residential and institutional uses. Most M&I use is supplied by water purveyors, though a small number of people are served by private groundwater wells and may belong to a mutual water company that serves their water.

Per-Capita Use

Per-capita use is the average amount of water used by individual residential customers each year, including water that they do not directly use but which benefits them such as fire fighting, park and school irrigation, commercial water use and other municipal and industrial (M&I) water uses. Per-capita use is usually derived by dividing the total M&I use by the total service area population.

Per-capita demand (use) rates are typically calculated on an annual basis. Evaluating percapita use is an important way to monitor water use trends and track the effectiveness of water use efficiency programs because per-capita rates factor out the influence of growth – new customers – on fluctuations in demand.



	a operation	e onta wet	and second	reme of the tran	in	in marcin	onal testi	and sation
WATER PURVEYOR	- Set and	4.5	PC Allows	Silveste Rest	ALL CAL	CO Marth	19.5	A LELEN
City of Buellton	3,500	806	206	295	102	216	52	63
Cal-Cities Water - Orcutt	32,172	7,394	205	N/A	N/A	N/A	N/A	N/A
Carpinteria Valley Water Dist.	16,250	2,192	120	1,583	(Combined w/single family)	431	129	49
Cuyama CSD	820	166	180	117	0	9	0	40
Goleta Water District	75,000	8,863	103	3,875	2,317	2,260	0	211
City of Guadalupe	6,450	574	79	425	12	112	0	25
La Cumbre Mutual Water Co.	4,900	1,258	229	1,258	0	0	0	0
City of Lompoc	39,149	4,264*	97	2,123	1,237	660	22	201
Los Alamos CSD	1,300	238	170	136	44	24	0	31
Míssion Hílls CSD	3,200	540	151	257	0	12	0	0
Montecito Water District	13,100	3,829	261	2,989	153	402	0	285
City of Santa Barbara	95,064	11,336	111	4,994	3,176	2,087	565	1,104
City of Santa Maria	69,326	9,983	129	5,172	1,850	2,556	359	0
Santa Ynez River WCDID#1	8,298	2,482	267	2,436	0	0	0	0
City of Solvang	5,242	1,277	217	712	132	298	0	126
Vandenberg Village CSD	5,971	1,071	160	825	29	114	0	103
* Includes other water use not identified by one of the other categories listed M&I (Municipal and Industrial) refers to all urban use, not including agricultural irrigation								

Table 14 Santa Barbara County Water Use

Agricultural Use

Agricultural use refers to all water used for crop irrigation and production. Most agricultural water supplies are obtained from private groundwater wells. Some farmers on Santa Barbara County's South Coast buy some or all of their water from a water purveyor or irrigation district. Information about total agricultural water use in the county is derived from two sources: 1) water purveyors that serve farmers, and 2) estimates of irrigation water use based on consumptive use factors for each crop type (provided by the



Department of Water Resources and the U.C. Cooperative Extension) multiplied by the number of acres of various crops in the county (obtained from the annual Crop Report published by the County Agricultural Commissioner's Office).

						Table 15				
In	rigat	tion	Water	Use	for	Major Crop	s Gr	own		
Crop (acre-feet)/acre/ season	South Coast	Santa Maria/ Lompoc	Santa Ynez, Los Alamos, Sisquoc	Cuyama Valley		Crop (acre-feet)/acre/ season	South Coast	Santa Maria/ Lompoc	Santa Ynez, Los Alamos, Sisquoc	Cuyama Valley
Vegetables						Fruit and Nut Cr	ops			
Broccoli/Cabbage		1.4	1.7			Avocados	1.6	1.7		
Cauliflower		1.7	2.5			Decíduous Fruits		1.7	2.5	3.8
Carrots		2.3	2.2	3.0		Grapes		1.2	2.0	
Celery		2.2	2.2			Lemons	1.5	1.6		
Lettuce		1.1	1.5			Walnuts	1.5	1.8	3.3	
Potatoes		1.7	2.5			Nursery Product	8			
Strawberries	3.0	2.7				Cut flowers/field	1.8	1.8		
Tomatoes	1.5	1.7				Greenbouse				
Field Crops						Carnations	2.5			
Beans		1.0	1.3	1.5		Mums, pompom	4.0			
Corn, field		1.8	2.2	2.8		Mums, potted	5.5			
Grain, irrigated		0.5	0.8	1.5		Turfgrass	2.7	2.7	3.5	4.0
Sugar Beets		3.0	3.2	4.0						
Alfalfa		3.0	3.5	4.3						
Adapted from the Irrigation Water Use for Major Crops Grown in Santa Barbara County: Estimates of Amounts of Water Applied under Normal Conditions in Four Climatic Areas of Santa Barbara County. These figures are based on typical practices of local growers and show the amount of water applied in addition to rainfall (assuming average rainfall for each climatic zone). These figures allow only enough water to satisfy the plants' requirements, to leach salts, and to facilitate the application of water, without waste. The figures are for the whole season for that particular crop. For land used for several crops in one year, the water used is shown separately for each crop. The units used are acre-feet of water per acre per season.										

County wide water use in San Luis Obispo County can generally be broken down in to the following use categories:





Predicting Future Use

The amount of water used varies from one area to another and from one year to the next. Information about how and where water is used in Santa Barbara County for different purposes is collected and compiled by the Santa Barbara County Water Agency (Water Agency). Every year, the Water Agency gathers water production (how much water is produced from each source) and demand (how much water is used by metered customers) figures from water purveyors throughout the county. The data collected from each retail water purveyor includes water produced from all sources, water delivered to all customers by class (single-family, multi-family, commercial, industrial, and landscapes) and the total number of customers. In San Luis Obispo County, similar information is collected by the individual water purveyors.

Understanding water use, and predicting future water demand, is not an exact science. It is nearly impossible to account for or predict all of the variable factors that influence water use. Municipalities and water purveyors must develop estimates based on their best knowledge of water use patterns and projected growth rates in their service areas. Some communities in California have developed water use forecasting models that are designed to calculate future demand based on a variety of assumptions about population, water efficiency programs, water prices, and climate. As water becomes more scarce and expensive, these models will be refined and more communities will use such models in planning for how they will meet the future needs of their customers.



DEMAND MANAGEMENT MEASURES

Water Code

Section 10631.

(f) Provide a description of the supplier's water demand managements. This description shall include all of the following:

(1) A description of each water demand management measure that is currently being implemented, or scheduled for implementation, including the steps necessary to implement any proposed measures, including, but not limited to, all of the following [listed in the accompanying section]:

(2) A schedule of implementation for all water demand management measures proposed or described in the plan.

(3) A description of the methods, if any, that the supplier will use to evaluate the effectiveness of water demand management measures implemented or described under the plan.

(4) An estimate, if available, of existing conservation savings on water use within the suppliers' service area, and the effect of such savings on the supplier's ability to further reduce demand.

(g) An evaluation of each water demand management measure listed in paragraph (1) of subdivision (f) that is not currently being implemented or scheduled for implementation. In the course of the evaluation, first consideration shall be given to water demand management measures, or combination of measures, which offer lower incremental costs than expanded or additional water supplies.

(h) Urban water suppliers that are members of the California Urban Water Conservation Council and submit annual reports to the council in accordance with the "Memorandum of Understanding Regarding Urban Water Conservation in California", dated September 1991, may submit the annual reports identifying water demand management measures currently being implemented, or scheduled for implementation, to satisfy the requirements of subdivisions (f) and (g).

CCWA is a Joint Powers Authority with the sole mission "to supply Santa Barbara and San Luis Obispo Counties with reliable, high quality supplemental water." Our mission is to maximize imported deliveries of SWP water for the benefit of our project



participants. CCWA recognizes the importance and role of water conservation, and demand management, as a priority in any water resource strategy and supports the efforts of its retail agencies to implement programs for their customers. CCWA is a member of the California Urban Water Conservation Council (CUWCC).

Santa Barbara County

In Santa Barbara County the Santa Barbara County Water Agency (Water Agency) implements regional water demand management measures (i.e. public outreach, education, data collection, joint purchase and multi-agency grant projects, etc.) and provides technical support to local water purveyors implementing their own programs (i.e. residential water evaluations, water rate programs, system water audits, etc.) The Water Agency is one of the founding members of the California Urban Water Conservation Council (CUWCC) and is the umbrella organization for water conservation activities in Santa Barbara County. The Water Agency provides oversight for the demand management measures for all CCWA project participants in Santa Barbara County. The Water Agency manages the Regional Water Efficiency Program, which was established in December 1990 to promote the efficient use of urban and agricultural water supplies in Santa Barbara County, and to provide information and assistance to the eighteen local water purveyors within the county. The Program provides coordination for cooperative efforts among purveyors, acts as a clearinghouse for information on water efficiency technology, and monitors local, state and national legislation concerning efficient water use. The Program serves around 400,000 county residents. The following information was taken from the Water Agency's 2004 report to the CUWCC which identifies the wholesale agency measures being implemented as well as other sources of information regarding demand management measures (The full 2004 report to CUWCC can be found the in Appendices of this plan).

Beginning in 2006, CCWA intends to become an active participant with the Water Agency to assist retailers receiving State water in implementing Demand Management Measures. It will also provide leadership and assistance to retailers receiving State water in San Luis Obispo County.

Water Agency Demand Management Measures

DMM 1 – Water Survey Programs for Single-Family Residential and Multi-Family Residential Customers

The Water Agency is neither a water wholesaler nor retailer, and therefore does not have direct access to residential water customer accounts in the County. The Water Agency collects production surveys for each of the water districts within the County to provide summary information on residential water use. Beginning in 2006, CCWA will provide leadership and assistance to retailers receiving State water.



DMM 2 – Residential Plumbing Retrofit

The Water Agency is neither a water wholesaler nor retailer, and does not facilitate retrofits for water customers. The Agency does provide staffing support, funding and materials to local water purveyors and assists them in the implementation of their own conservation programs through the Regional Water Efficiency Program. Beginning in 2006, CCWA will provide leadership and assistance to retailers receiving State water.

DMM 3 – System Water Audits, Leak Detection and Repair

The Water Agency is neither a water wholesaler nor retailer. Therefore, the Agency does not have a distribution system. The Agency does provide staffing support, funding and materials to local water purveyors and assists them in the implementation of their own conservation programs through the Regional Water Efficiency Program. The Agency encourages the water purveyors to conduct system audits and provides technical materials, legislative updates and workshops regarding leak detection and repair. CCWA monitors its system water losses through its meters. All water entering or exiting the system is metered and all meters are calibrated biannually. The entire pipeline route is also physically inspected on an annual basis. Beginning in 2006, CCWA will provide leadership and assistance to retailers receiving State water.

DMM 4 – Metering With Commodity Rates for All New Connections and Retrofit of Existing Connections

The Water Agency is neither a water wholesaler nor retailer, and therefore does not have authority to modify water rates. The Water Agency provides technical support to water purveyors establishing retrofit programs in their service areas. Beginning in 2006, CCWA will provide leadership and assistance to retailers receiving State water.

DMM 5 – Large Landscape Conservation Programs and Incentives

Though the Water Agency does not have any direct customers, the Water Agency helps to fund large landscape irrigation evaluations conducted by the Cachuma Resource Conservation District. The County also supports a regional ET controller installation program with partnering water districts.

DMM 6 – High Efficiency Washing Machine Rebate Programs

The Water Agency is neither a water wholesaler nor retailer. The Water Agency provides technical support to water purveyors establishing rebate programs in their service areas. Beginning in 2006, CCWA will provide leadership and assistance to retailers receiving State water.

DMM 7 – Public Information Programs

On behalf of, and in cooperation with, water retailers in Santa Barbara County, the Water Agency conducts many public information programs. These include the Be Water Wise Campaign, a radio and newspaper ad campaign, Water Awareness Month and the Earth Day Fair in May, <u>Santa Maria River Levee Bike Path Interpretive Signs, a quarterly</u>



newsletter on water conservation activities, and the promotion and distribution of multiple publications to the public at events and workshops.

DMM 8 – School Education Programs

On behalf of, and in cooperation with, water retailers in Santa Barbara County, the Water Agency offers presentations to elementary and junior high classrooms throughout the County on water supply and water conservation. Over 3,000 students received presentation in 2003-2004. The Water Agency also facilitates a High School Video Contest on Water Awareness.

DMM 9 – Conservation Programs for Commercial, Industrial and Institutional Accounts

Though the Water Agency does not have any direct customers, the Water Agency and partnering water districts implement a rebate program for CII customers that replace high water use toilets, urinals, and clothes washers. The Water Agency does not perform retrofits, but provides staff and financial support to partnering districts for this program. The Water Agency also manages a program for Lodging Industry entities in Santa Barbara County, providing educational and training materials for employees and guests.

DMM 10 – Wholesale Agency Assistance Programs

The Water Agency provides staffing support, funding and materials to local water purveyors and assists them in the implementation of conservation programs through the Regional Water Efficiency Program. The Program provides coordination for cooperative efforts among purveyors, acts as a clearinghouse for information on water efficiency technology, and monitors local, state and national legislation concerning efficient water use. The Water Agency partners on multiple conservation programs with several water districts, as explained in other demand management measures detailed in this section. Beginning in 2006, CCWA will provide leadership and assistance to retailers receiving State water.

DMM 11 – Conservation Pricing

Although the Water Agency is neither a water wholesaler nor retailer, the Agency encourages the water purveyors in the County to adopt rate structures that support conservation and provides technical materials, legislative updates and workshops regarding rate structures. An annual survey of water rates in Santa Barbara County is distributed to local water purveyors. The information is compiled by staff and sent to all participants. Information about water rates in other areas has also been collected and made available to local water purveyors. Beginning in 2006, CCWA will provide leadership and assistance to retailers receiving State water.

DMM 12 – Conservation Coordinator

Although the Santa Barbara County Water Agency is neither a water wholesaler nor retailer, the Agency does provide staffing support to local water purveyors. A Coordinator and two Program Specialists provide a total of approximately 65 hours per



week of staff support. Beginning in 2006, CCWA will provide leadership and assistance to retailers receiving State water.

DMM 13 – Water Waste Prohibition

The Water Agency is not a retailer or wholesalers of water and does not have the authority to enact water waste prohibitions. The Water Agency works with water purveyors to encourage wise water use and the reduction of wasted water. Beginning in 2006, CCWA will provide leadership and assistance to retailers receiving State water.

DMM 14 – Residential Ultra-low Flush Toilet Replacement Program

Ultra-low flush toilet replacement programs have been implemented by the individual retail water agencies in the Santa Barbara County area. The Water Agency is not a retailer or wholesaler of water, and does not have any current programs on residential toilet replacement programs.

Additional information on demand management measures can be found in retailer UWMPs and in the Appendix of this plan.



San Luis Obispo County

SLOCFC&WCD (District) primarily relies on its individual water retailers to take appropriate demand management measures. Although most communities are small and fall below the threshold requirement for the preparation of an UWMP, they are quite active in water conservation. Each of these communities has taken different approaches that are most appropriate to their situation. The details of these measures are described within documents prepared by those agencies. For the larger communities these measures are also described within their individual UWMP.

The District, however, does encourage conservation and where feasible does cooperate with these individual retailers. The District is also currently investigating new ways to promote conservation. These efforts are more fully described in the District's Integrated Regional Water Master Plan.

As a wholesale agency with no direct customers, the District has limited authority to implement the demand management measures described within the water code.

Beginning in 2006, CCWA intends to become an active participant with the District to assist retailers receiving State water in implementing Demand Management Measures. It will also provide leadership and assistance to retailers receiving State water in Santa Barbara County.

District Demand Measurement Measures

DMM 1 – Water Survey Programs for Single-Family Residential and Multi-Family Residential Customers

The District does not have any direct customers, and does not have the authority to conduct water audits/surveys for customers within the contracting agencies' service areas. Beginning in 2006, CCWA will provide leadership and assistance to retailers receiving State water.

DMM 2 – Residential Plumbing Retrofit

The District does not have any direct customers or the authority to conduct plumbing retrofits for customers within the contracting agencies' service areas. Beginning in 2006, CCWA will provide leadership and assistance to retailers receiving State water.

DMM 3 – System Water Audits, Leak Detection and Repair

The distribution system is monitored monthly as part of the operations reporting process. As part of this process, losses due to leaks and other causes are measured. The average loss factor in the system is approximately 3.6%. CCWA monitors its system water losses through its meters. All water entering or exiting the system is metered and all meters are calibrated biannually. The entire pipeline route is also physically inspected on an annual



basis. Beginning in 2006, CCWA will provide leadership and assistance to retailers receiving State water.

DMM 4 – Metering With Commodity Rates for All New Connections and Retrofit of Existing Connections

All connections between the County and its contracting agencies are metered. The District does not have the authority to meter with commodity rates within the service areas of its contracting agencies. Beginning in 2006, CCWA will provide leadership and assistance to retailers receiving State water.

DMM 5 – Large Landscape Conservation Programs and Incentives

The District has funded and promoted the use of this service to large landscapes (schools, parks, golf courses, etc.) throughout the County. This program is performed in cooperation with the three Resource Conservation Districts in the region. Beginning in 2006, CCWA will provide leadership and assistance to retailers receiving State water.

DMM 6 – High Efficiency Washing Machine Rebate Programs

This measure is the responsibility of the individual water agencies. Beginning in 2006, CCWA will provide leadership and assistance to retailers receiving State water.

DMM 7 – Public Information Programs

In cooperation with water retailers in San Luis Obispo County, the District funds and supports many public information programs. These include the spring newsletter prepared by the Partners in Water Conservation and the distribution of pamphlets in various public events. Programs also include participation in low water landscape exhibits at the annual Home Show and Mid-State Fair. The District also participates in a public information program to distribute soil moisture meters to home owners. Additional public information on conservation is given as part of the "Sammy the Steelhead" water quality programs. Radio and newspaper ad campaigns are often considered but have been minimally effective and have been recently dropped for the time being. Beginning in 2006, CCWA will provide leadership and assistance to retailers receiving State water.

DMM 8 – School Education Programs

The District does not conduct school education programs regarding water resources or conservation. These programs are conducted at the local level by contracting water agencies.

DMM 9 – Conservation Programs for Commercial, Industrial and Institutional Accounts

As a wholesaler, the District does not have the authority to conduct commercial and industrial water conservation programs within the service areas of its contracting



agencies. These audits must be provided at the local level by the individual retail agencies. Beginning in 2006, CCWA will provide leadership and assistance to retailers receiving State water.

DMM 10 – Wholesale Agency Assistance Programs

The District has not signed the statewide MOU for urban water conservation. The District works with its contracting water agencies to determine the appropriate role for the District to play in helping local agencies implement the best management practices. Beginning in 2006, CCWA will provide leadership and assistance to retailers receiving State water.

DMM 11 – Conservation Pricing

As a wholesaler, the District does not have the authority to set rates for retail water/sewer customers. This authority lies with the individual retail water agencies and cities. Beginning in 2006, CCWA will provide leadership and assistance to retailers receiving State water.

DMM 12 – Conservation Coordinator

The District does not currently staff a full-time water conservation coordinator position because many conservation measures and practices are out of the District's jurisdiction or are the responsibility of individual retail agencies. Some of the local retail agencies have a water conservation coordinator on staff, such as Paso Robles, Tempton, Atascadero, San Luis Obispo, Pismo Beach and Grover Beach. Beginning in 2006, CCWA will provide leadership and assistance to retailers receiving State water.

DMM 13 – Water Waste Prohibition

As a wholesaler, the District does not have the authority to implement water waste prohibitions for retail water customers. This is the responsibility of the individual retail water agencies. Beginning in 2006, CCWA will provide leadership and assistance to retailers receiving State water.

DMM 14 – Residential Ultra-low Flush Toilet Replacement Program

Ultra-low flush toilet replacement programs are being implemented by the individual retail water agencies.

Additional information on demand management measures can be found in retailer UWMPs and in the District's IRWM.



EVALUATION OF DEMAND MANAGEMENT MEASURES NOT IMPLEMENTED

Water Code

Section 10631.5 The department shall take into consideration whether the urban water supplier is implementing or scheduled for implementation, the water demand management activities that the urban water supplier identified in its urban water management plan, pursuant to Section 10631, in evaluating applications for grants and loans made available pursuant to Section 79163. The urban water supplier may submit to the department copies of its annual reports and other relevant documents to assist the department in determining whether the urban water supplier is implementing or scheduling the implementation of water demand management activities.

As described in the previous section CCWA is a Joint Powers Authority with the sole mission "to supply Santa Barbara and San Luis Obispo Counties with reliable, high quality supplemental water." CCWA will continue to work with Santa Barbara and San Luis Obispo Counties to assure that its member agencies have the support and resources they need to conduct effective programs, to evaluate the measures they are implementing and conduct ongoing assessments of the measures they are not implementing.



PLANNED WATER SUPPLY PROJECTS AND PROGRAMS

Water Code

Section 10631.

(h) Include a description of all water supply projects and water supply programs that may be undertaken by the urban water supplier to meet the total projected water use as established pursuant to subdivision (a) of Section 10635. The urban water supplier shall include a detailed description of expected future projects and programs, other than the demand management programs identified pursuant to paragraph (l) of subdivision (f), that the urban water supplier may implement to increase the amount of the water supply available to the urban water supplier in average, single-dry, and multiple-dry water years. The description shall identify specific projects and include a description of the increase in water supply that is expected to be available from each project. The description shall include an estimate with regard to the implementation timeline for each project or program.

During the last year, CCWA's Board of Directors asked CCWA staff to investigate methods of increasing SWP water during dry periods. CCWA staff have, or are in the process of:

- Studying the feasibility of acquiring additional SWP Table A Amount water to be utilized as a drought buffer amount
- Investigating out-of-district storage (either surface or ground water banking)
- Investigating banking opportunities within CCWA's and/or San Luis Obispo County's service area
- Increasing treatment plant capacity by getting State Department of Health Services permission to re-rate the plant filters to accept higher flows
- Studying CCWA pipeline capacity and what can be done to move more water when opportunities exist

In 2006, CCWA will initiate a study to determine the reliability needs of each of its project participants and the pros and cons of groundwater banking and conjunctive use opportunities throughout the State. This information will assist project participants in determining the cost and risks involved in increasing the overall reliability of SWP water as a supplemental source. Currently, CCWA project participants have a 10% drought



buffer to increase reliability during dry periods. CCWA will investigate the feasibility and cost of increasing the drought buffer amount to approximately 33%.

Each project participant has a different need for SWP water as a supplemental supply and, as a result of the above outlined studies, will decide whether - and to what level - to participate in reliability enhancements. Thus, it is impossible, at this time, to estimate the single or multiple dry year benefits.



DEVELOPMENT OF DESALINATED WATER

Water Code

Section 10631

(i) Describe the opportunities for development of desalinated water, including, but not limited to, ocean water, brackish water, and groundwater, as a long-term supply.

Brackish or Groundwater Desalination

Neither CCWA's mission nor the route of its pipeline and facilities lend themselves to brackish or groundwater desalination projects. However, CCWA and its project participants could team up with other SWP Contractors and provide financial assistance in construction of other regional groundwater desalination facilities in exchange for SWP supplies. The desalinated water would be supplied to users in communities near the desalination plant and a similar amount of SWP supplies would be exchanged and allocated to CCWA from the SWP Contractor. A list summarizing the groundwater desalination plans of other SWP Contractors is not available; however, CCWA would begin this planning effort should the need arise.

In addition, should an opportunity emerge with a local agency other than an SWP Contractor, an exchange of SWP deliveries would most likely involve a third party, such as the Metropolitan Water District of Southern California. Most local groundwater desalination facilities would be projects implemented by retailers of SWP Contractors and, if an exchange program was implemented, would involve coordination and "wheeling" of water through the Contractor's facilities to CCWA.

Seawater Desalination

CCWA's mission is to import SWP water. At this time, its Board of Directors does not consider desalination to be a cost effective method of increasing the reliability of imported water. Two CCWA project participants, however, have constructed desalination facilities. The City of Morro Bay intermittently operates an 830,000 gallon per day desalination facility and the City of Santa Barbara maintains a decommissioned desalination facility for emergency use.

Similar to the brackish water and groundwater desalination opportunities described above, however, CCWA and its project participants could provide financial assistance its project participants or to other SWP Contractors in the use and/or construction of their seawater desalination facilities in exchange for SWP supplies.



CCWA has been following the existing and proposed seawater desalination projects along California's Coast. In March 2004, the California Coastal Commission released the "Seawater Desalination and the California Coastal Act." This Act provides a summary and status of the existing and proposed seawater desalination plants along California's coast.

Currently, most of the existing and proposed seawater desalination facilities are/would be operated by agencies that are not SWP Contractors. However, in these cases as described above, an exchange for SWP deliveries would most likely involve a third party (SWP Contractor), the local water agency (retailer) and CCWA.

r toposed Seawater Desannation Facilities Along the Cantol ma Coast (1)									
Facility	Maximum Capacity	Status							
	(gallons per day)								
Cambria Community Services District	500,000	Planning							
City of Santa Cruz	2,500,000	Planning							
Marina Coast water District/Fort Ord	2,680,000	Planning							
Long Beach	10,000,000	Planning							
Los Angeles Dept. of Water & Power	10,000,000	Planning							
Monterey Peninsula Water Mgmt Dist.	7,500,000	Planning							
Cal-Am/Moss Landing Power Plant	9,000,000	Planning							
Municipal Water Dist. Of Orange County/Dana Pt.	27,000,000	Planning							
Poseidon Resources/Huntington Beach	50,000,000	Draft EIR Complete							
San Diego County Water Auth./San Onofre	TBD	Planning							
San Diego County Water Auth./South County	50,000,000	Planning							
San Diego County Water auth./Poseidon/Carlsbad	50,000,000	Planning							
West Basin Municipal Water District	20,000,000	Planning							

 Table 16

 Proposed Seawater Desalination Facilities Along the California Coast (1)

Note: (1) Reference "Seawater Desalination and the California Coastal Act," California Coastal Commission March 2004



WATER SHORTAGE CONTINGENCY PLAN

Water Code

Section 10632. The Plan shall provide an urban water shortage contingency analysis that includes each of the following elements that are within the authority of the urban water supplier:

 Stages of action to be undertaken by the urban water supplier in response to water supply shortages, including up to a 50 percent reduction in water supply, and an outline of specific water supply conditions which are applicable to each stage.

Water supplies may be interrupted or reduced significantly in a number of ways, such as a drought which limits supplies, an earthquake which damages water delivery or storage facilities, or a toxic spill that affects water quality. As a wholesaler of a supplemental water supply, CCWA's obligation during water supply interruptions or reductions is limited.

According to the Water Supply Agreements signed by each project participant:

Shortage in Water Supply

- a) <u>Temporary Shortages; Delivery Priorities</u>. In any Year in which there may occur a shortage or interruption due to drought or other temporary cause in the supply of water available for delivery to the Contractor, with the result that such supply is less than the total of the annual Project Allotments of all Project Participants for that Year, the Authority Shall reduce the delivery of water to the Contractor based upon water use in accordance with the State Water Supply Contract.
- b) <u>Permanent Shortage Entitlements</u>. In the event that the State is unable to construct sufficient additional conservation facilities to prevent a reduction in the minimum State Water Project yield, or if for any other reason there is a reduction in the minimum State Water Project yield, which, notwithstanding preventive or remedial measures taken or to be taken by the State, threatens a permanent shortage in the supply of State Water Project water to be made available to the Authority under the State Water Supply Contract the Project Allotment of the Contractor shall be reduced in accordance with the State Water Supply Contract.
- c) <u>No Liability for Shortages</u>. Neither the Authority nor any of its officers, agents, or employees shall be liable for any damage, direct or indirect, arising from the shortages in the amount of water to be made available for delivery to the Contractor under this Agreement caused by non-availability of water to the Authority under the State Water Supply Contract or caused by drought, operation of area of origin statutes, or any other cause beyond its control.



d) <u>Wheeling During Shortages</u>. In the event that the Contractor's Project Allotment has been temporarily or permanently reduced, the Contractor may direct the Authority to deliver water acquired by the Contractor outside of Santa Barbara County and delivered through the Coastal Aqueduct, up to an amount equal to such reduction, subject to the Authority's overall delivery ability considering the then current delivery schedule of all Project Participants and subject to water quality requirements reasonably approved by the Authority. For purpose of Section 13 hereof, such water shall be treated as Project Allotment and the Authority shall not charge any fee in connection with the delivery of such water except Fixed O&M Costs and Variable O&M Costs which would be allocable to such Contractor's Project Allotment.

CCWA informs its project participants whenever there is a change in the DWR delivery allotment. Additionally, it makes every attempt to increase reliability in both the short and long term and to locate additional supplies to firm up deliveries.

In CCWA's short history, the lowest DWR allocation was 39% in 2001. During that year, CCWA took advantage of DWR Turnback pools and dry year water purchase programs for the benefit of its project participants. Coupled with individual project participant drought buffers, the result was that Santa Barbara County project participants received nearly 80% of the water they requested and SLOCFC&WCD received 100%.

As a wholesaler of supplemental imported water, CCWA defers the creation of water shortage action plans to the retail agencies who have the ability to rely on other sources, participate in demand management measures and institute voluntary and mandatory conservation. These shortage contingency plans are contained in their individual UWMPs. CCWA's charge is to assure that the delivery of the SWP to retail agencies is as reliable as possible each and every year.



ESTIMATE OF MINIMUM SUPPLY FOR NEXT THREE YEARS

<u>Water Code</u> Section 10632

(b) An estimate of the minimum water supply available during each of the next three water years based on the driest three-year historic sequence for the agency's water supply.

The minimum water supply available during the next three years would occur with a 3year multiple dry-year event occurring between the years 2006 and 2008. According to DWR's Excerpts from Working Draft of 2005 State Water Project Delivery Reliability <u>Report, May 2005</u>, in the worst case four year dry period, the SWP will still deliver 32% of its Table A Amount. Both Santa Barbara and San Luis Obispo Counties hold some of their Table A Amounts as drought buffer (Table A Amount water that does not have treatment plant or pipeline delivery capacity), so delivery amounts will be higher than the DWR allocation. Additionally, two Santa Barbara County project participants have an exchange agreement with the Dudley Ridge Water District that would allow them to bring in some additional water. The following table illustrates the estimate of minimum supply for the next three years.

County	Source	Table A	Delivery	Year 1	Year 2	Year 3
		Amount	Capability			
Santa Barbara	SWP	45,486	39,078	14,556	14,556	14,556
Santa Barbara	Dudley Ridge					725
	Exchange					
Santa Barbara	SWP Carryover			5,000		
TOTAL				19,556	14,556	15,821
% of Delivery				50%	37%	40%
Capability						
San Luis Obispo	SWP	25,000	4,830	4,830	4,830	4,830
TOTAL				4,830	4,830	4,830
% of Delivery				100%	100%	100%
Capability						

 Table 17

 Minimum Water Supply Availability for the Next Three Years



CATASTROPHIC SUPPLY INTERUPTION PLAN

<u>Water Code</u> Section 10632

(c) Actions to be undertaken by the urban water supplier to prepare for, and implement during, a catastrophic interruption of water supplies including, but not limited to, a regional power outage, an earthquake, or other disaster.

CCWA has prepared an Emergency Response Plan which provides detailed instructions for catastrophic interruption of its water supply including chemical spill, SCADA or other communications failure, accidental contamination of water supply, contamination of water supply threat, earthquake, fire, intrusion alarm at CCWA facilities, power failure, vandalism or other damage to CCWA facilities, water supply failure and water treatment failure.

The Emergency Response plan includes job classification-specific instructions for all the above situations, notification lists, facility specific information, chain of command/emergency operations center information, emergency contractor and supplier information and a complete set of forms to assist in emergency tracking. CCWA also maintains an inventory of essential equipment such as emergency generators, portable chlorination and de-chlorination equipment, lighting, etc. as well as long lead time supplies such as pipe sections in various diameters, valves and other critical items.

The Emergency Response plan is updated annually. Additionally, staff receive training and perform emergency response exercises on a frequent basis.



PROHIBITIONS, PENALTIES AND CONSUMPTION REDUCTION METHODS

<u>Water Code</u> Section 10632 (d-f)

(d) Additional, mandatory prohibitions against specific water use practices during water shortages, including, but not limited to, prohibiting the use of potable water for street cleaning.

(e) Consumption reduction methods in the most restrictive stages. Each urban water supplier may use any type of consumption reduction methods in its water shortage contingency analysis that would reduce water use, are appropriate for its area, and have the ability to achieve a water use reduction consistent with up to a 50 percent reduction in water supply.

(f) Penalties or charges for excessive use, where applicable.

Since CCWA is a wholesaler, it has not adopted ordinances or imposed mandatory provisions restricting the use of water and does not set or enforce consumption limits at the retail level. As a result, this urban water management plan does not include per capita allotment, penalties, or incentives for conservation for any customer sector. The development of such mechanisms is the responsibility of the retail water supply agencies. More detailed descriptions of these measures can be found in the respective UWMPs. However, CCWA fully supports such actions by the retailers.



ANALYSIS OF REVENUE IMPACTS OF REDUCED SALES DURING SHORTAGES

Water Code

Section 10632

(g) An analysis of the impacts of each of the actions and conditions described in subdivision (a) to (f), inclusive, on the revenues and expenditures of the urban water supplier, and proposed measures to overcome those impacts, such as the development of reserves and rate adjustments.

CCWA, like DWR, acts as a financial "pass through" agency. All costs and obligations associated with operating and maintaining CCWA are passed through to the project participants regardless of the amount of water delivered. According to the Water Supply Agreements signed by each project participant:

<u>Obligation Is Not Subject to Reduction</u>. The Contractor shall make payments under this Agreement whether or not the Project is completed, operable, operated or retired and notwithstanding the suspension, interruption, interference, reduction or curtailment of operation of the Project or water contracted for in whole or in part for any reason whatsoever. Such payments are not subject to any reduction, whether offset or otherwise, and are not conditioned upon performance by the Authority or any other Project Participant under this Agreement or any other Agreement.

Still, CCWA makes every attempt to provide the water and service its customers expect. CCWA also maintains a two million dollar emergency operations account to pay for repairs stemming from catastrophic events so as not to have to assess project participants without sufficient prior notice.

DRAFT ORDINANCE AND USE MONITORING PROCEDURE

The Urban Water Management Planning Act requires a mechanism for determining actual reductions in water use in response to conservation measures implemented under CCWA's Water Shortage Contingency Plan. Since CCWA operates as a wholesale water agency, it has not adopted ordinances or imposed mandatory provisions restricting the use of water and does not set or enforce consumption limits at the retail level. As a result, this contingency plan does not include per-capita allotment, penalties, or incentives for conservation for any customer sector. The development of such mechanisms is left to the authority of the retail agencies. However, CCWA has always



taken the position that as a treated water wholesaler it will work closely with local retail water agencies to implement any retailer initiated urban water shortage contingency plan.



RECYCLED WATER PLAN

Water Code

Section 10633. The Plan shall provide, to the extent available, information on recycled water and its potential for use as a water source in the service area of the urban water supplier. The preparation of the plan shall be coordinated with local water, wastewater, groundwater, and planning agencies that operate within the supplier's service area and shall include the following:

CCWA does not currently produce or distribute recycled water.

Water Code

Section 10633 (a-c)

(a) A description of the wastewater collection and treatment systems in the supplier's service area, including a quantification of the amount of wastewater collected and treated and the methods of wastewater disposal.

(b) A description of the quantity of treated wastewater that meets recycled water standards, is being discharged, and is otherwise available for use in a recycled water project.

(c) A description of the recycled water currently being used in the supplier's service area, including, but not limited to, the type, place, and quantity of use.

Recycled water treatment and distribution is managed by twelve wastewater agencies in Santa Barbara County listed in the table below.



Treatment Plant	Contact	Capacity (acre feet per year)	Level of Treatment	Recycled Water Uses	Recycled Water (acre feet per year)
Buellton Wastewater Treatment Plant	688-7547	728	secondary	groundwater recharge	
Carpinteria Sanitary District	684-7214 x.18	2,240	secondary	treatment plant landscape irrigation	
Goleta Sanitary District and Goleta West Sanitary District	967-4519, 968-2617	14,562	blended secondary/tertiary	landscape irrigation, toilet flushing	32
Laguna County Sanitation District	739-8750	3,584	secondary	pasture irrigation	
La Purisima Wastewater Treatment Plant	925-0951 x.252	448	primary	groundwater recharge; pasture/crop irrigation	
Lompoc Regional Wastewater Reclamation Plant	875-8405	5,600	advanced secondary	sewer line cleaning; dust control & compaction; city street tree irrigation	
Montecito Sanitary District	966-2271	1,680	secondary	none	
El Estero Wastewater Treatment Plant (City of Santa Barbara)	897-1910	12,321	secondary/ tertiary	landscape irrigation; toilet flushing	75
City of Santa Maria Wastewater Treatment Plant	928-5022	8,737	secondary	groundwater recharge; pasture irrigation	
Solvang Wastewater Treatment Plant	688-6997	1,120	secondary	groundwater recharge	
Summerland Sanitary District	969-4344	336	tertiary	none	

 Table 18

 Wastewater Treatment Plants in Santa Barbara County

Please note that the capacities cited above are total wastewater treatment capacities and not recycled water capability. Both the Goleta Sanitary District and the City of Santa Barbara have active recycled water programs that reuse a portion of their wastewater streams. The recycled water column shows the recycled water delivered in 2004. Both agencies are also active in encouraging recycled water use through a variety of incentive and regulatory programs.

CCWA, as well as both Santa Barbara and San Luis Obispo Counties support the use of recycled wastewater. Both counties believe that water recycling projects, however, are the responsibility of the local sanitation districts in conjunction with the local water agencies. As such, they should be addressed by individual retail agencies in their UWMPs.



WATER QUALITY IMPACTS ON RELIABILITY

<u>Water Code</u> Section 10634

The plan shall include information, to the extent practicable, relating to the quality of existing sources of water available to the supplier over the same five-year increments as described in subdivision (a) of Section 10631, and the manner in which water quality affects water management strategies and supply reliability.

CCWA provides SWP water to its project participants in Santa Barbara and San Luis Obispo Counties. The source of SWP water is rain and snow from the Sierra Nevada, Cascade, and Coastal mountain ranges. This water travels to the San Francisco Bay/Sacramento-San Joaquin River Delta (Bay Delta) through a series of rivers and various SWP structures. There it is pumped into a series of canals and reservoirs, which provides water to urban and agricultural users throughout the Bay Area and central and southern California. CCWA gets water from the Coastal Branch Extension of the California Aqueduct and distributes it to its project participants following treatment.

Of particular interest to CCWA as a supplier of supplemental SWP water is the likely presence of microbes in all surface water supplies. Surface water is exposed to a variety of microbial contaminants and as a result, the State Department of Health Services and the Environmental Protection Agency impose rigorous water quality regulations for surface water providers. CCWA operates and maintains the Polonio Pass Water Treatment Plant in the northeastern corner of its service area. The plant utilizes conventional treatment to provide a multi-barrier strategy.

The first barrier is advanced coagulation which removes organic and sediment particulates as well as dissolved organic matter. Removing particles improves the antimicrobial action of the disinfectants and the removal of dissolved organic matter removes a microbial food source as well as precursors for disinfection byproducts. The water is then passed through a second barrier of activated carbon filters to remove remaining particulate matter down to micron size. The filters also adsorb any remaining organic matter. Finally, the water enters the third barrier, a dedicated chlorine contactor. Chlorine kills any remaining microbes that have made it through the treatment process. After a sufficient chlorination contact time, ammonia is added to the water to form chloramines. Chloramines are similar to chlorine and prevent the growth of bacteria in the distribution system, which delivers water from the treatment plants to CCWA's project participants.



An important property of SWP water is the chemical make up caused by its passage through the Bay Delta. The Bay Delta is basically a very large marsh (or estuary) with large masses of plants and peat soils. These contribute organic materials (usually described as Total Organic Carbon or TOC) to the water. Salt water can also move into the Bay Delta from San Francisco Bay and the Pacific Ocean. This brings in salts, notably bromide and chloride. None of these chemicals are harmful in and of themselves; however, when bromide and TOC react with disinfectants such as, chlorine or chloramines, a reaction occurs forming substances known as disinfection byproducts (DBPs). There are a variety of health-based concerns associated with DBPs. CCWA's treatment strategy, however, is very effective in minimizing the formation of DBPs through its use of advanced coagulation, activated carbon filtration, dedicated chlorination after the filtration step and the use of chloramines as a distribution system disinfectant.

Another important property of SWP water is the mineral content. SWP water is generally low in dissolved minerals, such as calcium, magnesium, sodium, potassium, iron, manganese, nitrate, and sulfate. Most of these minerals do not have health based concerns, but "hard" water (water high in calcium, magnesium, and iron) can cause a number of problems for consumers, such as the formation of white crusts in plumbing fixtures, water spots, damage to water heaters, and excess use of soaps. Nitrate is the main exception, as it has significant health effects for infants; however, the nitrate content of SWP water is very low. Also of significance is the chloride content. Although not a human health risk, chloride can have a negative impact on agricultural activities and regulatory compliance for local sanitation agencies. The chloride content of SWP water varies widely from well over 100 mg/L to below 40 mg/L, depending on Bay Delta conditions.

All SWP water can have taste and odor problems caused by the growth of algae in the Delta, in the aqueduct and reservoirs or in various DWR facilities. Under certain conditions, algae can grow in large numbers, releasing small amounts of odor producing chemicals. Although harmless, the taste and odor causing chemicals can generally be unpleasant for sensitive consumers.

CCWA does not believe that water quality will negatively impact its ability to provide a reliable supply of water over the next twenty years, although water quality is certainly a consideration in water supply planning. CCWA's approach has been to monitor water quality both upstream and downstream of the treatment plant and to use that information to treat the water to the highest standards attainable.

SWP water has, over the last several years provided a secondary benefit to project participants. Because the SWP water is much lower in mineral content than local ground water, less treatment is required at the wastewater treatment facilities and the groundwater quality is slowly improving.



PROJECTED NORMAL YEAR AND DRY YEAR SUPPLY

<u>Water Code</u> Section 10635

(a) Every urban water supplier shall include, as part of its urban water management plan, an assessment of the reliability of its water service to its customers during normal, dry, and multiple dry water years. This water supply and demand assessment shall compare the total water supply sources available to the water supplier with the total projected water use over the next 20 years, in five-year increments, for a normal water year, a single dry water year, and multiple dry water years. The water service reliability assessment shall be based upon the information compiled pursuant to Section 10631, including available data from state, regional, or local agency population projections within the service area of the urban water supplier.

(b) The urban water supplier shall provide that portion of its urban water management plan prepared pursuant to this article to any city or county within which it provides water supplies no later than 60 days after the submission of its urban water management plan.

(c) Nothing in this article is intended to create a right or entitlement to water service or any specific level of water service.

(d) Nothing in this article is intended to change existing law concerning an urban water supplier's obligation to provide water service to its existing customers or to any potential future customers.

CCWA supplies were evaluated based on normal year (1922-1994), single driest year (1977) and multiple dry year (1931-1934) scenarios. The following tables show available CCWA SWP supplies over a twenty-five year planning period. They do not reflect the additional water available through exchanges with other water contractors, purchases of water through DWR dry year water purchase programs, short term water transfers through DWR's Turnback Pool programs and groundwater recharge programs operated by some CCWA project participants. In any given year, additional water can be made available through the SWP system for the incremental cost of purchasing or exchanging the water from others in the State.

Additionally, it should be noted that CCWA project participants use SWP water as a supplemental water supply to augment other surface and groundwater supplies. There does not appear to be any statistical correlation between droughts that would affect the



SWP watersheds and those that would affect the watersheds of Santa Barbara and San Luis Obispo Counties. Several CCWA project participants have also invested in water recycling projects, desalination, water transfers, exchanges, conservation measures and conjunctive use projects to increase the reliability of their overall water portfolios.

CCWA is currently utilizing a contract provision in the DWR Water Supply Contract that allows it to carry unused water over into the next calendar year. During normal years, CCWA more water available to it than it normally needs to take (SLOCFC&WCD has 25,000 acre-feet of Table A available but can only take delivery of 4,830 acre-feet in any given year, and SBCFC&WCD has 45,486 acre-feet available, but can only take delivery of 42,908 in any given year). Additionally, in normal years, many project participants choose to utilize local ground and surface water supplies to a greater extent. As a result, CCWA project participants typically have at least 5,000 acre-feet in each normal year to carryover into the next year. The use of carryover water is very useful in a dry year to provide additional supplies and increase State water reliability for that year.

CCWA has and expects to continue entering into exchange agreements with other State Water Contractors. Exchange provisions of the DWR Water Supply Contract allow contractors to exchange water under the condition that it be returned in a reasonable time. The most recent exchange involved CCWA and the Dudley Ridge Water District. CCWA delivered 725 acre-feet to Dudley Ridge in 2001 and has the right to request its return within ten years. CCWA continues to look for exchange partners that it can use to meet project participant reliability needs.

CCWA is actively pursuing a possible repurchase of 12,214 acre-feet of SBCFC&WCD Table A Amount that was suspended by request in 1981. DWR stated that the suspended Table A Amount could be reacquired by paying the past costs with interest associated with the water. Several project participants are interested in reacquiring this water for reliability purposes. Additionally, CCWA is also investigating groundwater banking opportunities in California's Central Valley as well as within San Luis Obispo and Santa Barbara Counties. Some project participants, such as the Goleta Water District, City of Santa Barbara, Carpinteria Valley Water District and the City of Santa Maria are already participating in groundwater banking/conjunctive use programs. Making banking opportunities available to all CCWA project participants will greatly enhance State water reliability.

The following tables assume that additional water resources such as a currently envisioned groundwater banking program and a repurchase of suspended Table A amount water by CCWA will have taken place by 2015. It should be noted, however, that until these programs have gone through the proper review process and are operational, they should not be depended upon for future supplies.



	Normal Year Supplies (from Table 12)						
County	Existing Supply	2010	2015	2020	2025	2030	
Santa Barbara	SWP	32,295	33,205	34,115	35,024	35,024	
	Carryover	5,000	5,000	5,000	5,000	5,000	
	Exchange	725					
TOTAL Existing		38,020	37,205	39,115	40,024	40,024	
% of Table A		97%	95%	>100%	>100%	>100%	
San Luis Obispo	SWP	4,830	4,830	4,830	4,830	4,830	
TOTAL Existing		4,830	4,830	4,830	4,830	4,830	
% of Table A		>100%	>100%	>100%	>100%	>100%	
	Planned Supply						
Santa Barbara	Groundwater Banking	*	0	0	0	0	
	Table A Repurchase	*	8,916	9,160	9,405	9,405	
TOTAL Planned		38,020	46,121	48,275	49,429	49,429	
% of Table A		97%	>100%	>100%	>100%	>100%	
San Luis Obispo	Groundwater Banking	*	0	0	0	0	
TOTAL Planned		4,830	4,830	4,830	4,830	4,830	
% of Table A		>100%	>100%	>100%	>100%	>100%	

Table 19 a (from Table 17) . 1.1 ът

* - Planned projects may not be completed by 2010

	Single Driest Year Supplies (from Table 13)							
County	Existing Supply	2010	2015	2020	2025	2030		
Santa Barbara	SWP	1,819	1,819	1,819	2,274	2,274		
	Carryover	5,000	5,000	5,000	5,000	5,000		
	Exchange	725						
TOTAL Existing		7,544	6,819	6,819	7,274	7,274		
% of Table A		19%	17%	17%	19%	19%		
San Luis Obispo	SWP	1,000	1,000	1,000	1,250	1,250		
TOTAL Existing		1,000	1,000	1,000	1,250	1,250		
% of Table A		21%	21%	21%	26%	26%		
	Planned Supply							
Santa Barbara	Groundwater Banking	*	10,000	10,000	10,000	10,000		
	Table A Repurchase	*	489	489	611	611		
TOTAL Planned		7,544	17,308	17,308	17,885	17,885		
% of Table A		19%	44%	44%	46%	46%		
San Luis Obispo	Groundwater Banking	*	3,000	3,000	3,000	3,000		
TOTAL Planned		1,000	4,000	4,000	4,250	4,250		
% of Table A		21%	83%	83%	88%	88%		

Table 20

* - Planned projects may not be completed by 2010



	Multiple Dry Year Supplies (from Table 13)								
County	Existing Supply	2010	2015	2020	2025	2030			
Santa Barbara	SWP	14,556	14,556	14,556	15,010	15,010			
	Carryover								
	Exchange	725							
TOTAL Existing		15,281	14,556	14,556	15,010	15,010			
% of Table A		40%	37%	37%	38%	38%			
San Luis Obispo	SWP	4,830	4,830	4,830	4,830	4,830			
TOTAL Existing		4,830	4,830	4,830	4,830	4,830			
% of Table A		>100%	>100%	>100%	>100%	<100%			
	Planned Supply								
Santa Barbara	Groundwater Banking	*	10,000	10,000	10,000	10,000			
	Table A Repurchase	*	3,908	3,908	4,031	4,031			
TOTAL Planned		20,111	33,294	33,294	33,871	33,871			
% of Table A		40%	85%	85%	87%	87%			
San Luis Obispo	Groundwater Banking	*	3,000	3,000	3,000	3,000			
TOTAL Planned		4,830	4,830	4,830	4,830	4,830			
% of Table A		>100%	>100%	>100%	>100%	<100%			

* - Planned projects may not be completed by 2010


ADOPTION AND IMPLEMENTATION OF UWMP

Water Code

Section 10640. Every urban water supplier required to prepare a plan pursuant to this part shall prepare its plan pursuant to Article 2 (commencing with Section 10630).

The supplier shall likewise periodically review the plan as required by Section 10621, and any amendments or changes required as a result of that review shall be adopted pursuant to this article.

10641. An urban water supplier required to prepare a plan may consult with, and obtain comments from, any public agency or state agency or any person who has special expertise with respect to water demand management methods and techniques.

10642. Each urban water supplier shall encourage the active involvement of diverse social, cultural, and economic elements of the population within the service area prior to and during the preparation of the plan. Prior to adopting a plan, the urban water supplier shall make the plan available for public inspection and shall hold a public hearing thereon. Prior to the hearing, notice of the time and place of hearing shall be published within the jurisdiction of the publicly owned water supplier pursuant to Section 6066 of the Government Code. The urban water supplier shall provide notice of the time and place of hearing to any city or county within which the supplier provides water supplies. A privately owned water supplier shall provide an equivalent notice within its service area. After the hearing, the plan shall be adopted as prepared or as modified after the hearing. as amended by the Act that adds this section, in determining whether the urban water supplier is eligible for funds made available pursuant to any program administered by the department. 10643. An urban water supplier shall implement its plan adopted pursuant to this chapter in accordance with the schedule ser forth in its plan. 10644. (a) An urban water supplier shall file with the department and any city or county within which the supplier provides water supplies a copy of its plan no later than 30 days after adoption. Copies of amendments or changes to the plans shall be filed with the department and any city or county within which the supplier provides water supplies within 30 days after adoption.

• The department shall prepare and submit to the Legislature, on or before December 31, in the years ending in six and one, a report summarizing the status of the plans adopted pursuant to this part. The report prepared by the department shall identify the outstanding elements of the individual plans. The department shall provide a copy of the report to each urban water supplier that has filed its plan with the department. The department shall also prepare reports and provide data for any legislative hearings designed to consider the effectiveness of plans submitted pursuant to this part.

10645. Not later than 30 days after filing a copy of its plan with the department, the urban water supplier and the department shall make the plan available for public review during normal business hours.



- 1. A copy of the adoption resolution is attached to this UWMP as Appendix A.
- 2. CCWA has reviewed and endorses the DMM implementation plan.
- 3. CCWA will provide its 2005 UWMP to DWR, the Santa Barbara County Water Agency, the SLOCFC&WCD and each project participant within 30 days of adoption.
- 4. CCWA recognizes that it must file copies of amendments or changes to the 2005 UWMP with the Santa Barbara County Water Agency, the SLOCFC&WCD and each project participant within 30 days of adoption.
- 5. CCWA will make the 2005 UWMP available for public review within 30 days of filing it with DWR.
- 6. CCWA continually encourages the involvement of all stakeholders in the affairs of water management. CCWA meets regularly with its project participants through the Operating Committee, in which the public is invited to participate, and solicits input on a variety of tasks and issues. Each month, CCWA holds a Board meeting, in which the public is invited to participate, and comment on issues related to the conduct of CCWA's business. In addition, CCWA maintains a website containing key reports for public use and to make available contacts within the agency should there be any issues. CCWA will hold a public hearing on its 2005 UWMP and will notify all stakeholders involved using standard modes of notification.



REFERENCES

The following documents were used in the preparation of the 2005 Urban Water Management Plan for the Central Coast Water Authority:

California Department of Water Resources. *Guidebook to Assist Water Suppliers in the Preparation of a 2005 Urban Water Management Plan, January 18, 2005.*

California Department of Water Resources. *Draft 2005 State Water Project Delivery Reliability Report*, May 25, 2005.

Central Coast Water Authority. Fiscal Year 2005/06 Budget, April 2005.

Bookman-Edmonston Engineering, Inc. A Review of alternatives to Improve the Reliability of CCWA's State Water Project Supply, May 1995.

Santa Barbara County Public Works Water Resources Department Water Agency Division. 2004 Santa Barbara County Groundwater Report, April 19, 2005.

Santa Barbara County Water Agency. *Water Resources of Santa Barbara County*, July 2000.

Santa Barbara County Water Agency. *Santa Barbara County Water Supply and Demand Update*, February 2003.

Santa Barbara Countywide Integrated Regional Water Management Planning Group. Santa Barbara County Integrated Regional Water Management Plan, July 2005.

San Luis Obispo County Flood Control and Water Conservation District. San Luis Obispo County Integrated Regional Water Management Plan, July 2005.

San Luis Obispo County Flood Control and Water Conservation District. Urban Water Management Plan Update Prepared for San Luis Obispo County Flood Control and Water Conservation District, Zone 3, December 2000.





APPENDIX A

Resolution of the CCWA Board of Directors Adopting the 2005 CCWA Urban Water Management Plan





RESOLUTION NO. 05-04

RESOLUTION ADOPTING THE 2005 URBAN WATER MANAGEMENT PLAN FOR THE CENTRAL COAST WATER AUTHORITY AS REQUIRED BY THE CALIFORNIA URBAN WATER MANAGEMENT PLANNING ACT, CALIFORNIA WATER CODE DIVISION 6, PART 2.6

WHEREAS, pursuant to California Water Code section 10652, the preparation and adoption of an Urban Water Management Plan is exempt from the requirements of the California Environmental Quality Act (California Public Resources Code section 21000, et seq.); and

WHEREAS, the California Legislature enacted Assembly Bill 797 (Water Code Section 10610 et seq., known as the Urban Water Management Planning Act) during the 1983-84 Regular Session, and as amended subsequently, which mandates that every retail and wholesale water supplier providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 acre feet of water annually, prepare an Urban Water Management Plan, the primary objective of which is to plan for the conservation and efficient use of water; and

WHEREAS, the Central Coast Water Authority (CCWA) is a water wholesaler providing water to retail water purveyors that serve a population of over 350,000 people; and supply over 30,000 acre-feet per year of State Water Project Water; and

WHEREAS, the Plan must be adopted by December 31, 2005, after public review and hearing, and filed with the California Department of Water Resources within thirty days of adoption; and

WHEREAS, the CCWA circulated said Plan among local retail water suppliers contracted to receive water from CCWA; and

WHEREAS, the CCWA conducted two properly noticed public hearings regarding said Plan on November 7, 2005 and November 14, 2005; and

WHEREAS, CCWA shall file said Plan with the California Department of Water Resources by January 21, 2006;

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the Central Coast Water Authority:

- 1. That the 2005 Urban Water Management Plan is hereby approved and adopted.
- 2. That the Executive Director of CCWA is hereby authorized and directed to submit the 2005 Urban Water Management Plan to the Department of Water Resources within 30 days of execution of this Resolution.



I certify that the foregoing Resolution No. 05-04 was adopted by the Board of Directors of the Central Coast Water Authority at a meeting held December 22, 2005.

ee ~

Leo Trujillo, Chairman

[Seal]

Attest:

William J. Brennan Secretary to the Board of Directors

VOTING PERCENTAGE	AYE	NAY	ABSTAIN	ABSENT
2.21%	<u> </u>			
7.64%	<u> </u>			
17.20%	<u> </u>			
1.15%				
9.50%				
11.47%	\checkmark			
43.19%	\checkmark			
7.64%	<u> </u>			
	VOTING PERCENTAGE 2.21% 7.64% 17.20% 1.15% 9.50% 11.47% 43.19% 7.64%	VOTING PERCENTAGE AYE 2.21% ✓ 7.64% ✓ 17.20% ✓ 1.15% 9.50% ✓ 11.47% ✓ 43.19% ✓	VOTING PERCENTAGE AYE NAY 2.21%	VOTING PERCENTAGE AYE NAY ABSTAIN 2.21% ✓



APPENDIX B

Santa Barbara County Water Agency 2004 Report to the California Urban Water Conservation Council





BMP 03: System Water Audits, Leak Detection and Repair

Reporting Unit: Santa Barbara County Water Agei	BMP Form Status: Yea	ar:)4
A. Implementation		
	1. Has your agency completed a pre-screening system audit for this reporting year?	no
	2. If YES, enter the values (AF/Year) used to calculate verifiable use as a percent of total production:	
	a. Determine metered sales (AF)	0
	b. Determine other system verifiable uses (AF)	0
	c. Determine total supply into the system (AF)	0
	d. Using the numbers 0.0 above, if (Metered Sales + Other Verifiable Uses) / Total Supply is < 0.9 then a full-scale system audit is required.	00
	3. Does your agency keep necessary data on file to verify the values used to calculate verifiable uses as a percent of total production?	no
	4. Did your agency complete a full-scale audit during this report year?	no
	5. Does your agency maintain in-house records of audit results or the completed AWWA audit worksheets for the completed audit?	no
	6. Does your agency operate a system leak detection program?	no
	a. If yes, describe the leak detection program:	
B. Survey Data		
	1. Total number of miles of distribution system line.	0



2. Number of miles of distribution system line surveyed.

0

C. System Audit / Leak Detection Program Expenditures

	This Year Year	xt ar
	1. Budgeted 0 Expenditures	0
	2. Actual 0 Expenditures	
D. "At Least As Effective As"		
	1. Is your AGENCY ye implementing an "at least as effective as" variant of this BMP?	€S
	a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to b "at least as effective as." Santa Barbara County Water Agency is neither a water wholesaler nor retailer. Therefore, the Agency does not have a distribution system The Agency does provide staffing support; funding and materials to local water purveyors and assists them in the implementation of their ow conservation programs throug the Regional Water Efficiency Program. The Regional Water Efficiency Program was established in December 1990 to promote the efficient use of urban and agricultural water supplies in Santa Barbara County, and to provide information and assistance to the eighteen local water purveyors within the county. The Program provides coordination for cooperative efforts among purveyors, acts as a clearinghouse for information on water efficiency technology, and monitors loca state and national legislation concerning efficient water use The Program serves around	in it in it. It is in it in it is in it in it. It is in it is in it is in it. It is in it



400,000 county residents. Three Program Specialists dedicate approximately 65 hours of staff time per week in support of this program. In reference to BMP 03, the Agency encourages the water purveyors to conduct system audits and provides technical materials, legislative updates and workshops regarding leak detection and repair.

E. Comments



BMP 07: Public Information P	Programs	
Reporting Unit: Santa Barbara County Water Agency	BMP Form Status: 100% Complete	Year: 2004
A. Implementation		
Agency A. Implementation 1. Does your agency maintain an active promote and educate customers about w a. If YES, describe the program The Santa Barbara County Wa Efficiency Program for the count fulfill - on a regional level - the o (BMPs) in the statewide Califorr Memorandum of Understanding Reclamation's water conservatio signatory to the MOU and has p water conservation criteria. Man individual water purveyors to sa the MOU and Bureau Criteria. B Be Water Wise advertising cam local water purveyors, began on promote water use efficiency fea bloated roots caused by their ow Dave who waters a number of ir and mailbox throughout his neig system. The campaign was des us overeater our landscapes an irrigate more efficiently. The Be spots, newspaper advertisement the importance of watering wise www.bewaterwise.com for tools website is a landscape watering	public information program to water conservation? and how it is organized. ter Agency oversees the Region ty. A number of the Program's a obligations for best managemen hia Urban Water Conservation O (MOU) and/or the Bureau of on criteria. The County Water A orepared a plan to meet the Bure by of the regional activities also tisfy their own conservation goa be Water Wise Advertising Cam paign, which is sponsored by a h August 4, 2003. The whimsica ature plants complaining about where objects including his of phorhood due to a mismanage igned to raise awareness of how d to highlight tools that are avai Water Wise Campaign includes the and television commercials h by. The ads direct local resident on efficient irrigation. A feature place and will generate a	yes nal Water activities t practices Council gency is a eau's assist als under paign The number of I ads that their kadaisical Iriveway d irrigation w many of lable to s radio nighlighting s to visit of the s to enter
recommended irrigation schedu Local sponsors of this campaigr Agency, City of Santa Barbara,	le based on historical local wea n include the Santa Barbara Cor Goleta Water District, California	ther data. unty Water a Cities
Water Company, Carpinteria Va District, La Cumbre Mutual Wate Community Services District, Lo and Cuyama Community Servic campaign, the number of visitors of 80% per month. During Augu	alley Water District, Montecito W er Company, Vandenberg Villag os Alamos Community Services es District. During the advertisin s to our website increased by a st, visits increased by only 8%,	/ater ge District, ng n average but in

of 80% per month. During August, visits increased by only 8%, but in September and October visits were up by 111% and 121% respectively. In addition, 590 visits to our watering calculator took place during the campaign. Visits to the sbwater.org and the watering calculator remained well above average through December of 2003. The program partners and KRUZ also co-sponsored a Waterwise Home and Garden Makeover during the campaign. The makeover included plant and irrigation



installation and maintenance from EnviroScaping, irrigation equipment from All Around Irrigation, design and construction assistance from Common Ground Landscape Architecture & Planning, a Weather TRAK ET Controller from Hydropoint Data Systems, landscape materials from AgriTurf Supplies Inc., waterwise native plants from Seaside Gardens and books on greywater and principles of ecological design from Oasis designs. Ms. Rosa Torres was selected as the lucky winner from Santa Barbara. Ô Santa Maria River Levee Bike Path Interpretive Signs Water Resources staff completed the production and installation of new interpretive signs for the Santa Maria Levee Bike Path. The signs, which were installed in June 2003, cover a number of topics including water supply, flood control and water quality and have been placed at intervals along the bike path, so that riders can learn about local water issues as they cruise the levee. Water Awareness Month: Staff participated with local water purveyors in this annual event, which is sponsored by the California Water Awareness Committee. The County Board of Supervisors adopted a resolution declaring May as Water Awareness Month in Santa Barbara County. Advertisements reminding local residents to conserve water and encouraging them to participate in local events were placed in number of local newspapers. Events included tours of the City's desalination facility and the Alice Keck Park Memorial Garden, and Goleta Water Awareness Day. In addition, Water Awareness Month displays were showcased in both north and south county facilities with information on local water supplies, water conservation and a mural produced by the Girl Scouts of Tres Condados who earned their Water Drop Patches in 2003. Goleta Water District also held their annual Water Awareness Day and Montecito Water District held an Open House. Advertising for each of these events was placed in the Santa Barbara Independent, the Montecito Journal, the Santa Barbara News Press, the South Coast Beacon and the Carpinteria Coastal View. This year's sponsors included the City of Santa Barbara, Carpinteria Valley Water District, the Santa Barbara County Water Agency, Montecito Water District, Goleta Water District and La Cumbre Mutual Water Company. Earth Day Fair: Staff coordinated local purveyor participation in this annual event in Santa Barbara, which took place on April 18, 2004. Staff displayed information on the Green Gardener Program and a Water Trivia game, and also put together a children's activity booth, which included fishing for water facts, a tooth brushing demonstration to show how kids could save water while brushing their teeth with recycled toothbrushes for prizes and a mural decorating table. Staff also participated in the Flex Your Power promotion of High Efficiency Clothes Washers and coordinated a prize giveaway in which Santa Barbara Family Care Center won a Maytag Neptune washer and dryer set. Approximately 5,000 people attended the event. Sponsors for this event included the City of Santa Barbara, Goleta Water District, Montecito Water District, La Cumbre Mutual Water Company, and the Carpinteria Valley Water District. In addition, staff attended the Santa Maria Earth Day fair on April 24 with the toothbrush demonstration and the Green Gardener program display. Girl Scouts Water Drop Patch Event Over 30 Girl Scouts from troops located in Santa Barbara, Ventura, Oxnard, Lompoc and Camarillo traveled to Santa Barbara on May 22nd for the 5th annual Water Drop Patch day extravaganza. This event is open to Brownies and Juniors in the Tres Condados Girl Scout region and explores the wonderful world of



water. Topics covered included: the water cycle, local water supply, creek & ocean water pollution, watershed wildlife, water use & conservation and more. Door prizes were awarded to the first 25 girls to arrive at the event, and pizza gift certificates were given to the troops with the most girl attendees. The Water Drop Patch program was jointly developed by the United States EPA and the Girl Scout Council of the Nation's Capital. The purpose of the project is to encourage girls to: - Make a difference in their communities by becoming watershed and wetlands stewards. - Use their skills and their knowledge to educate others in their communities about the need to protect the nation's valuable water resources. - Explore the natural world to gain an interest in science and math. This event is sponsored by the Carpinteria Valley Water District, Goleta Water District, City of Lompoc, Montecito Water District, City of Santa Barbara, and Santa Barbara County Water Agency. A similar water badge activity will be held for Santa Barbara County Girl Scouts in the fall. The next Water Drop Patch day will be held on Saturday, June 25, 2005. Water of Santa Barbara County: Staff distributed these brochures to local water purveyors, teachers, students and other interested individuals and organizations and at all public events attended by Water Agency staff. Water Resources Brochure: This 3-color poster summarizes the water supplies and uses throughout the County. The brochure is available to the public at water district offices, public events such as Earth Day and at public presentations. County Water Connection Newsletter: Three newsletters were published in 2003/2004. The newsletter covers water efficiency, water supply, and pollution prevention in Santa Barbara County. The newsletter is distributed at not cost to over 200 water purveyors, public interest groups and other interested parties. Individuals or groups are added to the mailing list by request. Conservation Requests: The County assisted local purveyors and the public by providing information about efficient water use on request, and also provided technical assistance with water conservation program elements and implementation.

2. Indicate which and how many of the following activities are included in your public information program.

Public Information Program Activity	Yes/No ^{Nu}	Imber of Events
a. Paid Advertising	yes	6
b. Public Service Announcement	yes	9
c. Bill Inserts / Newsletters / Brochures	yes	21
d. Bill showing water usage in comparison to previous year's usage	no	
e. Demonstration Gardens	yes	0
f. Special Events, Media Events	yes	6
g. Speaker's Bureau	yes	3
 h. Program to coordinate with other government agencies, industry and public interest groups and media 	yes	



B. Conservation Information Program Expen	ditures	
	This Year	Next Year
1. Budgeted Expenditures	15000	45000
2. Actual Expenditures	32668	
C. "At Least As Effective As"		
1. Is your AGENCY implementing an "at least as effect of this BMP?	ive as" variant	No
a. If YES, please explain in detail how your imp differs from Exhibit 1 and why you consider it to as."	blementation of t b be "at least as	his BMP effective

D. Comments



	Sahaal Edua	otion D			
BINIP US: 3		ation P	rograms		
Santa Bark Water Age	Dara County ncy	B 1	MP Form S 1 00% Com	Status: plete	Year: 2004
A. Impleme	entation				
1. Has your to promote v 2. Please pr	agency implement water conservation rovide information	ted a scho i? on vour so	ool informatio	n program ns (by grade le	yes
Grade	Are grade- appropriate materials distributed?	No. prese	of class entations	No. of students reached	No. of teachers' workshops
Grades K-3rd	у	es	75	1637	1
Grades 4th-6th	y	es	24	1611	1
Grades 7th-8th	y	es	4	245	1
High School	y	es	0	0	0
3. Did your requirement	Agency's materials s?	s meet stat	te education	framework	yes
4. When did	your Agency begi	n impleme	enting this pro	ogram?	12/10/1990
B. School	Education Pro	gram Ex	kpenditure	es	
				This Year	Next Year
1. Budgeted	Expenditures			18000	15000
2. Actual Ex	penditures			7974	
C. "At Leas	st As Effective	As"			
1. Is your A variant of th	GENCY implement is BMP?	ting an "at	least as effe	ctive as"	No
a. If diffe as."	YES, please explaers from Exhibit 1 a	ain in deta and why yo	il how your ir ou consider it	nplementatior t to be "at leas	of this BMP t as effective
D. Comme	nts				



BMP [·]	10: Who	lesale A	Agency	Assi	stance F	Program	าร
Report Santa Agenc	ing Unit: Barbara S y	County	Water	B	MP Form 100% Co	Status: mplete	Year: 2004
A. Imp	lementat	ion					
1. Fi	nancial S	Support I	by BMP				
BMP	Financial Incentives Offered?	Budgeted Amount	Amount Awarded	BMP	Financial Incentives Offered?	Budgeted Amount	Amount Awarded
1	No			8	yes	10000	5039
2	No			9	yes	50000	9987
3	No			10	No		
4	No			11	No		
5	yes	60000	88827	12	No		
6	No			13	No		
7	yes	15000	27642	14	No		

2. Technical Support

a. Has your agency conducted or funded workshops addressing CUWCC procedures for calculating program savings, costs and cost-effectiveness?	No
b. Has your agency conducted or funded workshops addressing retail agencies' BMP implementation reporting requirements?	No
c. Has your agency conducted or funded workshops addressing:	



1) ULFT replacement	No
2) Residential retrofits	No
3) Commercial, industrial, and institutional surveys	No
4) Residential and large turf irrigation	yes
5) Conservation-related rates and pricing	No

3. Staff Resources by BMP

BMP	Qualified Staff Available for BMP?	No. FTE Staff Assigned to BMP	BMP	Qualified Staff Available for BMP?	No. FTE Staff Assigned to BMP	
1	yes	1	8	yes	1.6	
2	yes	1	9	yes	1.6	
3	yes	1	10	yes	1	
4	yes	1	11	yes	1	
5	yes	1.6	12	yes	1.6	
6	yes	1	13	yes	1	
7	yes	1.6	14	yes	1	

4. Regional Programs by BMP

BMP	Implementation/ Management Program?	BMP	Implementation/ Management Program?
1	No	8	yes



2	No	9	yes
3	No	10	No
4	No	11	No
5	yes	12	yes
6	No	13	No
7	yes	14	No

B. Wholesale Agency Assistance Program Expenditures			
	This Year	Next Year	
1. Budgeted Expenditures	286050	320000	
2. Actual Expenditures	322228		
C. "At Least As Effective As"			

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP?

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

yes

Santa Barbara County Water Agency is not a wholesale agency so the dollar amounts listed in the "Financial Support" section do not necessarily reflect monies given to other agencies, but the amounts budgeted for the Regional Water Efficiency Program. The Water Agency provides staffing support, funding and materials to local water purveyors and assists them in the implementation of their own conservation programs through the Regional Water Efficiency Program. The Program was established in December 1990 to promote the efficient use of urban and agricultural water supplies in Santa Barbara County, and to provide information and assistance to local water purveyors, acts as a clearinghouse for information on water efficiency technology, and monitors local, state and national legislation concerning efficient water use.

D. Comments



BMP 11: Conservation Pricing		
Reporting Unit: Santa Barbara County Water Agency	BMP Form Status: 100% Complete	Year: 2004
A. Implementation		
Rate Structure Data Volumetric Rates f	or Water Service by Cus	tomer
1. Residential		
a. Water Rate Structure	Service Not Provided	
b. Sewer Rate Structure	Service Not Provided	
c. Total Revenue from Volumetric Rates	\$0	
d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources	\$0	
2. Commercial		
a. Water Rate Structure		
b. Sewer Rate Structure		
c. Total Revenue from Volumetric Rates	\$	
d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources	\$	
3. Industrial		
a. Water Rate Structure		
b. Sewer Rate Structure		
c. Total Revenue from Volumetric Rates	\$	
d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources	\$	
4. Institutional / Government		
a. Water Rate Structure		
b. Sewer Rate Structure		
c. Total Revenue from Volumetric Rates	\$	
d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources	\$	
5. Irrigation		
a. Water Rate Structure		



- b. Sewer Rate Structure
- c. Total Revenue from Volumetric Rates \$

d. Total Revenue from Non-Volumetric \$ Charges, Fees and other Revenue Sources

- 6. Other
- a. Water Rate Structure
- b. Sewer Rate Structure
- c. Total Revenue from Volumetric Rates \$

d. Total Revenue from Non-Volumetric \$ Charges, Fees and other Revenue Sources

B. Conservation Pricing Program Expenditures				
	This Year	Next Year		
1. Budgeted Expenditures	0	0		
2. Actual Expenditures	0			
C. "At Least As Effective As"				
1. Is your AGENCY implementing an "at least	as effective as"	ves		

variant of this BMP?

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

Although the Santa Barbara County Water Agency is not a water wholesaler nor retailer, the Agency does provide staffing support, funding and materials to local water purveyors and assists them in the implementation of their own conservation programs through the Regional Water Efficiency Program. The Regional Water Efficiency Program was established in December 1990 to promote the efficient use of urban and agricultural water supplies in Santa Barbara County, and to provide information and assistance to local water purveyors. The Program provides coordination for cooperative efforts among purveyors, acts as a clearinghouse for information on water efficiency technology, and monitors local, state and national legislation concerning efficient water use. A Coordinator, and two Program Specialists provide a total of approximately 65 hours per week of staff support. In reference to BMP 11, the Agency encourages the water purveyors in the County to adopt rate structures that support conservation and provides technical materials, legislative updates and workshops regarding rate structures. An annual survey of water rates in Santa Barbara County is distributed to local water purveyors. The information is compiled by staff and sent to all participants. Information about water rates in other areas has also been collected and made available to local water purveyors.

D. Comments



BMP 12: Conservation Coordina	tor		
Reporting Unit: Santa Barbara County Water Agency	rting Unit: BMP Form Status: Ye Barbara County Water 100% Complete 20		Year: 2004
A. Implementation			
1. Does your Agency have a conservation co	oordin	nator?	yes
2. Is this a full-time position?			yes
3. If no, is the coordinator supplied by anothe cooperate in a regional conservation program4. Partner agency's name:	er age n?	ency with which you	I
5. If your agency supplies the conservation of	coordi	nator:	
a. What percent is this conservation coordinator's position?		80%	
b. Coordinator's Name		Rory Lang	
c. Coordinator's Title		Regional Water E Program Coordina	fficiency tor
 d. Coordinator's Experience and Null of Years 	mber	7 years running ei programs	nvironmental
e. Date Coordinator's position was created (mm/dd/yyyy)		12/10/1990	
 Number of conservation staff, including Conservation Coordinator. 		3	
B. Conservation Staff Program Expe	ndit	ures	
		This Year	Next Year
1. Budgeted Expenditures		140000	150000
2. Actual Expenditures		125579	
C. "At Least As Effective As"			
1. Is your AGENCY implementing an "at leas of this BMP?	st as e	effective as" variant	no
 a. If YES, please explain in detail ho differs from Exhibit 1 and why you co as." 	w you onside	ur implementation o er it to be "at least a	f this BMP as effective

D. Comments



Appendix – C

Contact Information Details





Title	Company Name	Mailing Address	City	State	Zip
Planning Manager	City of Goleta	B	Goleta	CA	93117
Community					
Development Director	City of Carpinteria	5775 Carpinteria Avenue	Carpinteria	CA	93013
Assistant Director	Santa Barbara County Planning and Development Department	123 E. Anapamu St.	Santa Barbara	СА	93101
Deputy Director	Santa Barbara County Comprehensive Planning Division	123 E. Anapamu St.	Santa Barbara	СА	93101
General Manager	Santa Ynez River Water Conservation District	P.O. Box 719	Santa Ynez	CA	93460
				~ .	
Planning Director	City of Lompoc	100 Civic Center Plaza	Lompoc	CA	93438
	Santa Maria Vallov Water				
President	Conservation District	P.O. Box 364	Santa Maria	CA	93456
	Home Builders Association of the Central Coast	PO Box 13010	San Luis Obispo	CA	93406
	Citizens Planning Association	916 Anacapa St	Santa Barbara	CA	93101
	Coalition of Labor, Agriculture, and Business	PO Box 7523	Santa Maria	CA	93456
	Loogue of Momon Votore	228 E. Corrillo St #A	Santa Parhara	C 4	02101
	League of Women Voters	SZO L. Carnio St #A	Santa Darbara	UA	93101
	League of Women Voters of the Santa Maria Valley	Box 1388	Santa Maria	CA	93456
	Santa Barbara Industrial				
	Association	PO Box 21621	Santa Barbara	CA	93121
	Women's Environmental Watch	3900 Skylark	Santa Ynez	CA	93460
	Environmental Defense Center	906 Garden Street, Suite 2	Santa Barbara	CA	93101
	County of Santa Barbara Water Agency	123 E. Anapamu Street, Suite 240	Santa Barbara	СА	93101
Director of Planning & Building	San Luis Obispo County	County Government Center	San Luis Obispo	CA	93408



Community Development Director	City of Arroyo Grande	214 East Branch Street	Arroyo Grande	СА	93420
Community Development Director	Atascadero	6905 El Camino Real, Ste 6	Atascadero	CA	93422
Community Development Department	Grover Beach	154 South Eighth Street	Grover Beach	CA	93433
AICP, Director Community Development	Paso Robles	1000 Spring Street	Paso Robles	CA	93446
Director, Community Development Department	City of San Luis Obispo	990 Palm Street	San Luis Obispo	СА	93401
General Manager	Nipomo Community Services District	P.O. Box 326	Nipomo	CA	93444- 0326
Public Works Director	City of Buellton	P.O. Box 1819	Buellton	CA	93427
General Manager	Carpinteria Valley Water District	P.O. Box 578	Carpinteria	CA	93014- 0578
City Administrator	City of Guadalupe	918 Obispo Street	Guadalupe	CA	93434
Conorol					
Manager/Chief Engineer	Goleta Water District	4699 Hollister Avenue	Goleta	CA	93110- 1999
General Manager	La Cumbre Mutual Water Company	895 Via Tranquilla	Santa Barbara	CA	93110
General Manager	Montecito Water District	P.O. Box 5037	Montecito	СА	93150- 5037
			0	~ .	93014-
	Morehart Land Co.	P.O. Box 1209	Carpinteria	ĊA	1209
Water Supply					
Manager	City of Santa Barbara	P.O. Box 1990	Santa Barbara	CA	93101
Director of Litilities	City of Santa Maria	2065 East Main	Santa Maria	C 1	02454
		2000 Last Wall		UA	50404
General Manager	Santa Ynez River Water Conservation District, ID #1	P.O. Box 157	Santa Ynez	CA	93460
City Administrator	City of Solvang	P. O. Box 107	Solvang	CA	93463



	Vandenberg Air Force Base	1172 Iceland Ave. Bldg. 11439 30 CES/CEOEO 1172	Vandenberg AFB	CA	93437
District Administrator	Avila Community Services District	4115 Broad Street, Ste. B- 5	San Luis Obispo	CA	93401
	Avila Valley Water Company	6835 Avila Valley Drive	San Luis Obispo	CA	93405
Capital Projects Manager	City of Morro Bay	595 Harbor Street	Morro Bay	CA	93442
0	, ,		,		
General Manager	Oceano Community Services District	P.O. Box 599	Oceano	CA	93475- 0599
City Manager	City of Pismo Beach	760 Mattie Rod	Pismo Beach	CA	93449
Deputy Public Works Director	County of San Luis Obispo	San Luis Obispo County Government Center	San Luis Obispo	CA	93408
Director of Facilities Operations & Transportation	San Luis Coastal Unified School District	937 Southwood Drive	San Luis Obispo	СА	93401
•			•		





GLOSSARY

Urban Water Management Planning Act
Acre feet
San Francisco Bay/Sacramento-San Joaquin River Delta
Best Management Practices
California-Federal Delta Bay Program
Central Coast Water Authority
California Environmental Quality Act
California Irrigation Management Information System
15-mile aqueduct branching off the California Aqueduct in northwestern Kern County
Approximately 100 miles of pipeline from the end of the Coastal Branch Phase I to Vandenberg Air Force Base in Santa Barbara County
California Urban Water Conservation Council
Central Valley Project
Disinfection byproducts
Draft Environmental Impact Report
Demand Management Measures
Department of Water Resources
Environmental Impact Report
Evapo-transpiration
Final Environmental Impact Report



MGD:	Million Gallons per Day
M&I:	Municipal and Industrial
MOU:	Memorandum of Understanding Regarding Urban Water Conservation in California
NEPA:	National Environmental Protection Act
O&M:	Operations and Maintenance
SBCFC&WCD:	Santa Barbara County Flood Control and Water Conservation District
SLOC:	San Luis Obispo County
SLOCFC&WCD:	San Luis Obispo County Flood Control and Water Conservation District
State Contract:	Water Supply Contracts
SWP:	State Water Project
Table A Amount:	Formerly referred to as "entitlement"
TOC:	Total Organic Carbon
USBR:	United States Bureau of Reclamation
UWMP:	Urban Water Management Plan
Water Agency:	Santa Barbara County Water Agency
WSRAs:	Water Supply Retention Agreements