



CITY OF OCEANSIDE

2005
URBAN WATER
MANAGEMENT PLAN

PREPARED FOR

CITY OF OCEANSIDE
WATER UTILITIES DEPARTMENT

PREPARED BY



TETRA TECH, INC.

NOVEMBER 2005

CITY OF OCEANSIDE
2005 URBAN WATER MANAGEMENT PLAN
November 2005

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Section 1 – Agency Coordination (Section 10620)

The City of Oceanside as an “Urban Water Supplier”

The City of Oceanside (City), as defined in the California Water Code section 10617, qualifies as an “Urban Water Supplier”. The City is a public agency directly providing water for municipal purposes to more than 3,000 customers. As such, the City is required to complete an Urban Water Management Plan (UWMP) every five years. The last UWMP was completed in 2000.

The preparation of the City of Oceanside’s 2005 UWMP was contracted to Tetra Tech Inc. as provided for in the California Water Code section 10620, paragraph (e). The 2005 UWMP has been prepared in conformance with the California Urban Water management planning act, California water code division 6, part 2.6, Urban Water Management Planning. The Plan is an update to the City of Oceanside’s 2000 Urban Water Management Plan.

Public Participation

A public hearing before the Utilities Commission to discuss and receive comments regarding the City’s 2005 UWMP was held on November 15, 2005. The public hearing was advertised in the North County Times and the San Diego Union Tribune. Additionally, a public hearing notice was posted on the City’s web site (<http://www.ci.oceanside.ca.us>). The 2005 UWMP was made available for public review at the Oceanside Public Libraries and the Water Utilities Department at Oceanside City Hall.

The Oceanside City Council adopted the 2005 UWMP by resolution at its December 7, 2005 meeting.

Agency Coordination

During the preparation of the 2005 UWMP, the City coordinated information with the San Diego County Water Authority. A list of agencies is provided in **Table 1**, along with their involvement with the preparation of the City of Oceanside 2005 Urban Water Management Plan.

Coordination with Appropriate Agencies (Table 1)

	Contacted for assistance	Sent notice of intention to adopt
<i>County of San Diego</i>		X
<i>San Diego County Water Authority</i>	X	X

Resource Maximization / Import Minimization Plan

In collaboration with the SDCWA a feasibility study was conducted in the fall of 2004 to determine the possibility of a Conjunctive Use Ground Water Storage and Recovery Program. The area of interest is the Mission Groundwater Basin, and the conclusions contained in the report for the project show that the potential use as a storage and recovery plan may be feasible.

Section 2 –

Step 2: Service Area Information with 20-Year Projections (Section 10631(a))

2.1 Service Area

The City of Oceanside was incorporated as a general law city in 1888, pursuant to the California Constitution Article XI and the California Government Code. The City is governed by an elected five-member council. The City is a full service city providing water and wastewater services through its Water Utilities department, under the purview of the City Council.

The City is located 35 miles north of the City of San Diego, encompassing about 42 square miles. The city is bordered on the west by the Pacific Ocean, the north by Camp Pendleton Marine Base, the south by the City of Carlsbad, and on the east by the City of Vista and unincorporated County land. A map of the City and surrounding municipalities is shown in **Figure 1** on the following page.

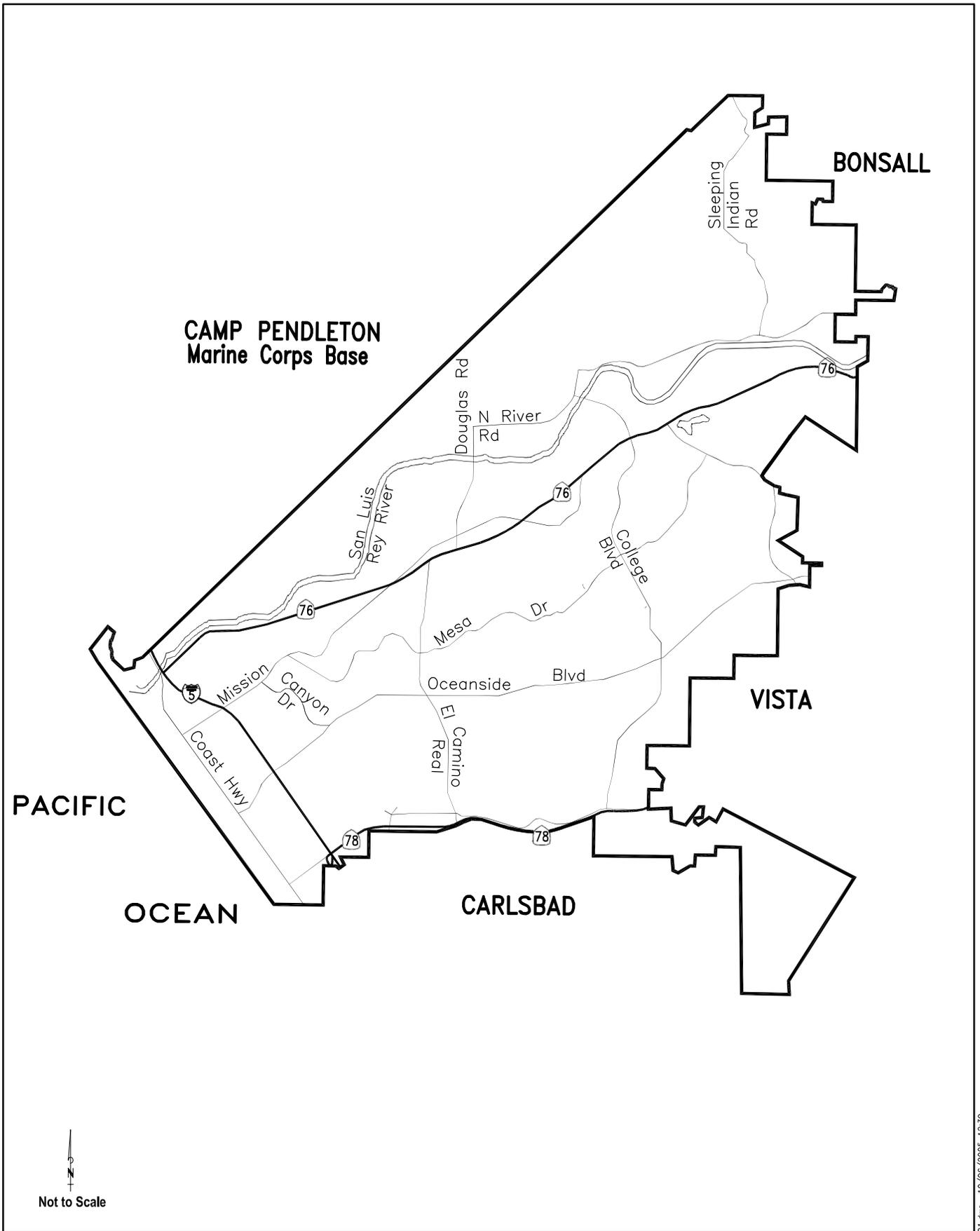
2.2 Population and Housing

Historical and projected City population and housing characteristics are shown in **Table 2a**, shown below, and on **Figure 2** on the following pages. Between 1990 and 2005, City population and total dwelling units increased 36.7 percent and 24.6 percent, respectively. As provided from the San Diego Association of Governments (SANDAG), the City's population is projected to increase 18.0 percent from 175,085 in 2005 to 206,607 in 2030, with total dwelling units (DUs) increasing 11.2 percent from 63,568 to 70,674

Historical and Projected City Population and Housing (1990 - 2030) (Table 2a)

	Historical			Projected ^(a)			
	1990	2000	2005	2010	2015	2020	2030
Population	128,090	161,039	175,085	187,491	193,681	199,870	206,607
Annual Increase (%)	-	2.05	1.69	1.38	0.65	0.63	0.33
Total Dwelling Units	51,024	59,583	63,568	67,829	68,833	69,837	70,674
Annual Increase (%)	-	2.15	1.30	1.31	0.29	0.29	0.12
Vacant DUs	4,361	3,093	3,300	3,046	2,913	2,779	2,366
Vacancy (%)	8.55	5.19	5.19	4.49	4.23	3.98	3.35
Population/Occupied DU	2.75	2.85	2.90	2.89	2.94	2.98	3.02

(a) From San Diego Association of Governments. Data for 2015 and 2020 was interpolated.



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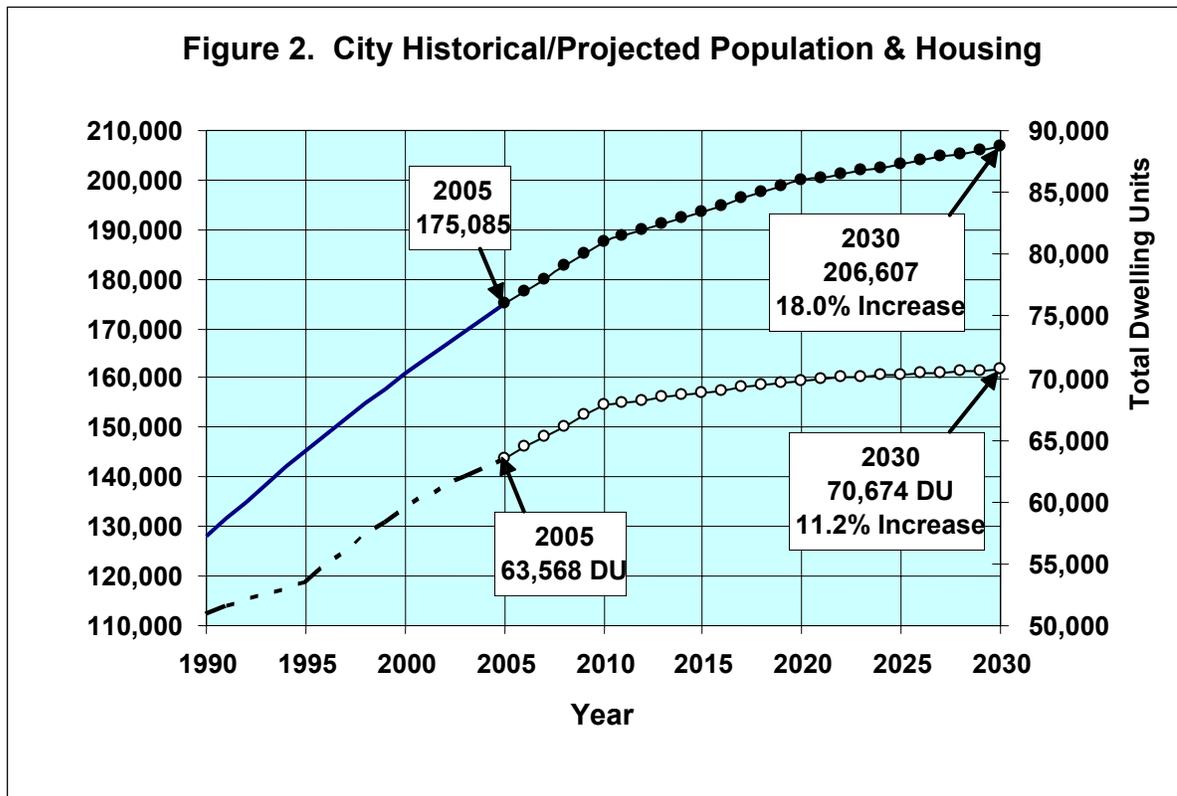


CITY OF OCEANSIDE
SERVICE AREA

FIGURE
1

Section 2 –

Step 2: Service Area Information with 20-Year Projections
(Section 10631(a))



The percentage of vacant DUs in the City decreased from 8.6 percent in 1990 to 5.2 percent in 2005. This percentage is projected to decrease to 3.6 percent by 2030. The number of people per occupied DU (population density) is projected to increase from 2.90 in 2005 to 3.02 by 2030, which is an increase of approximately 4 percent. The population and housing projections are used to help correlate water demand projections.

2.3 Land Use

There are approximately 26,812 acres of land within the City boundaries. Existing land use is tabulated in **Table 2b**, shown on the following page. The land use information comes from the City's current zoning map. Approximately 49 percent of the City is zoned for residential land use. The next largest land use category is land zoned for agricultural use, which is approximately 14 percent of the City's total land use. The majority of the agricultural land is located in the northeast area of the City.

The City has many planned developments identified on their current zoning map, and this land use accounts for approximately 10 percent of the City's total land use. The planned developments are composed of residential, non-residential, and/or open space land uses. The majority of these planned development areas have already been developed.

Section 2 –

Step 2: Service Area Information with 20-Year Projections (Section 10631(a))

City Land Use Summary (Table 2b)

Land Use Category	Total Gross Area (ac)	% Total Gross Area	Gross Vacant Area (ac)	% Total Gross Area	% Total Vacant Area
Residential	13,010	48.5	946	3.5%	33.8%
Downtown	383	1.4	21	0.1%	0.8%
Commercial	1,555	5.8	234	0.9%	8.4%
Public and Semi-Public	1,212	4.5	123	0.5%	4.4%
Industrial	1,308	4.9	322	1.2%	11.5%
Open Space	2,672	10.0	172	0.6%	6.1%
Agriculture	3,639	13.6	378	1.4%	13.5%
Caltrans	133	0.5	-	0%	0%
Harbor	107	0.4	-	0%	0%
Planned Developments	2,682	10.0	590	2.2%	21.1%
Unknown	111	0.4	12	0.0%	0.4%
Total	26,812	100	2,797	10.4%	100%

Estimated vacant developable land in the City by land use category is also shown in **Table 2b**. City vacant land parcels with the potential for future development were identified in the SANDAG (San Diego Association of Governments) 2030 Regional Growth Forecast. SANDAG's land layers were created for use in the 2030 Regional Growth Forecast to distribute projected growth for the San Diego region to suitable subareas in the region. These land layers include existing land use, planned land use, land ownership, constraints to development, land available for development, known site-specific developments, and lands available for redevelopment and infill. SANDAG updates the land layers when new information is available.

As shown in **Table 2b**, approximately 2,797 acres of vacant developable land has been identified. This represents approximately 10.4 percent of the total land area within the City. Residential is the land use category with the most vacant developable land with 946 acres followed by planned developments with 590 acres and agriculture with 378 acres.

2.4 Climate Characteristics

The City of Oceanside has a mild, coastal climate. As shown in **Table 3**, the average annual temperature is 60.7° F. Average rainfall is 10.4 inches as measured at the National Weather Service Oceanside Marina Weather Station 046377. This rainfall total is typical for Southern California, which is low compared with the national average. Evapotranspiration (ET_o) is the quantity of moisture that is both transpired by plants and evaporated by the soil plant surfaces. ET_o is important to irrigation management because crop yield relates directly to ET_o. Irrigators who are working to achieve

Section 2 –**Step 2: Service Area Information with 20-Year Projections
(Section 10631(a))**

maximum yields need to apply water to meet the crop's ETo demand. As shown, the largest ETo demands occur in the summer months.

Oceanside Climate Characteristics (Table 3)

	Jan	Feb	Mar	Apr	May	Jun
Standard Monthly Average ETo Demand (inches)	2.08	2.40	3.70	4.79	5.35	5.72
Average Rainfall (inches)	2.14	2.16	1.73	0.97	0.21	0.08
Average Temperature (Fahrenheit)	54.2	54.7	55.6	57.7	60.7	63.4

Oceanside Climate Characteristics (continued) (Table 3)

	July	Aug	Sep	Oct	Nov	Dec	Annual
Standard Monthly Average ETo Demand (inches)	6.06	5.98	4.60	3.61	2.44	1.99	48.7
Average Rainfall (inches)	0.03	0.08	0.26	0.38	1.08	1.27	10.4
Average Temperature (Fahrenheit)	67.2	68.8	67.3	63.7	58.6	54.7	60.7

The City currently has two direct sources of water; the Metropolitan Water District of Southern California through the San Diego County Water Authority (SDCWA) and the Mission Groundwater Basin of the Lower San Luis Rey River Valley.

The SDCWA supplies imported water to member agencies within San Diego County. The SDCWA boundaries and its member agencies are shown in **Figure 3** on the following page. Imported water is supplied to the SDCWA by the Metropolitan Water District of Southern California (MWD). Imported sources tapped by MWD included the Colorado River and the State Water Project.

Water purchased from the SDCWA includes both raw and treated water. Treated water is delivered directly into the City’s distribution system. Raw water is treated at the City’s Robert A. Weese Filtration Plant prior to delivery into the City’s distribution system.

In addition to water purchased from the SDCWA, water is pumped from the Mission Groundwater Basin. The City operates well fields that deliver raw groundwater to the Mission Basin Groundwater Purification Facility (MBGPF). Salts contained within the groundwater are removed at the MBGPF using a reverse osmosis treatment process. The City currently treats an average of 2,524 acre feet per year at the MBGPF.

Historical water supplies are provided in **Table 4a**.

Historical Water Supplies (Table 4a)

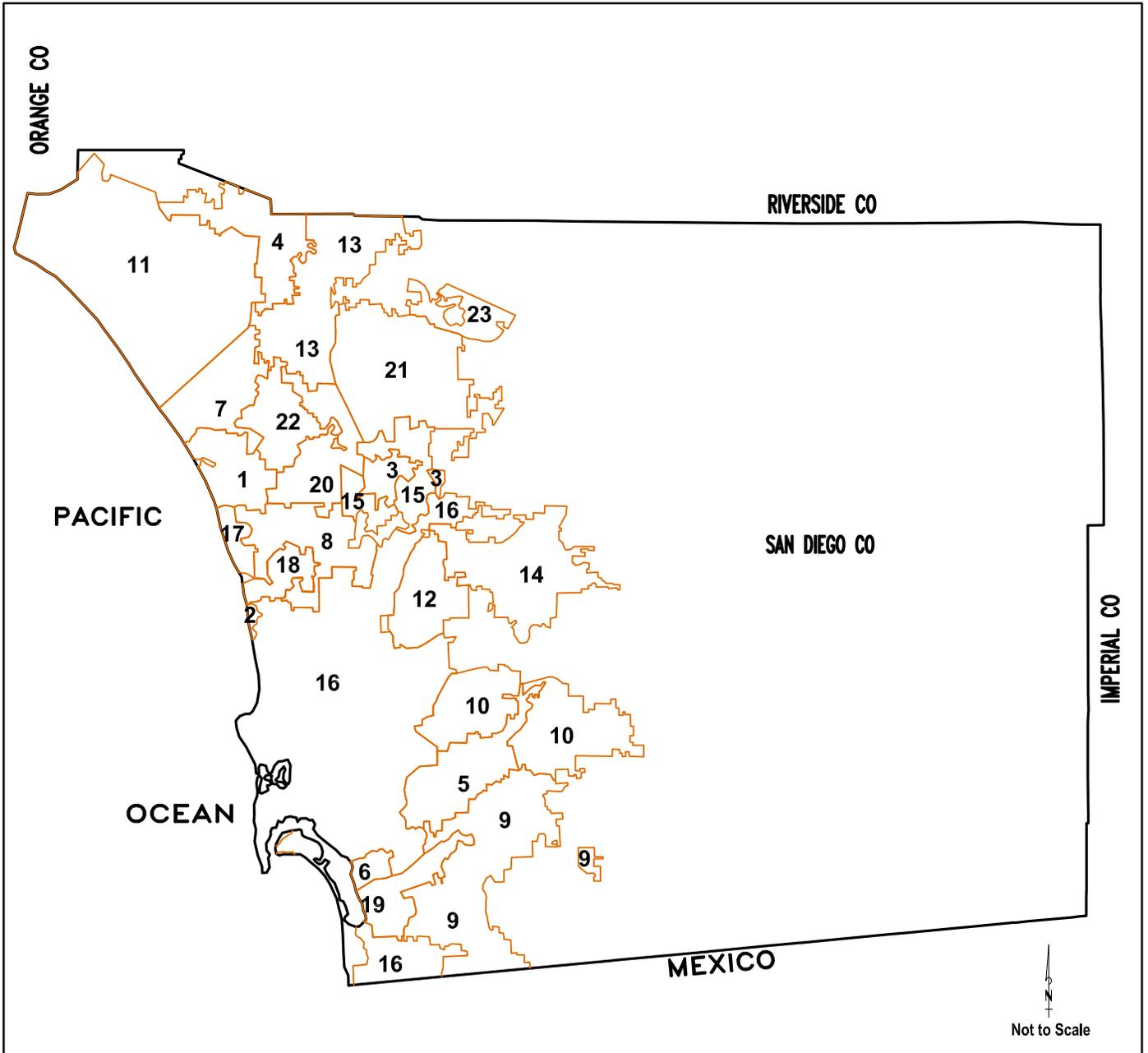
Supply Source	Supply (acre feet)						Avg	%
	1999	2000	2001	2002	2003	2004		
SDCWA Treated	10,877	10,775	9,676	11,397	9,101	12,117	10,657	33%
SDCWA Untreated - WFP ^(a)	19,530	20,586	19,334	21,527	20,578	20,288	20,307	55%
MBGPF ^(b)	2,367	2,421	2,123	2,463	3,085	2,684	2,524	7%
Recycled Water ^(c)	113	135	146	191	89	95	128	0.3%
Total	34,886	35,917	33,280	37,580	34,856	37,188	33,616	100%

(a) Untreated water purchased from SDCWA and then treated at the Weese Filtration Plant to supply City demands.

(b) Groundwater treated at the Mission Basin Groundwater Purification Facility.

(c) Recycled Water Produced at San Luis Rey Waste Water Treatment Plant.

Future water supplies include the aforementioned connections to the Water Authority, and expanded extraction and treatment of water from the Mission Groundwater Basin. The City has completed construction of additional facilities to produce up to 7,130 acre-ft per year of treated water at the MBGPF. Full operation of the MBGF is anticipated by 2007 as new wells are brought on-line.



WATER AUTHORITY MEMBER AGENCY

- | | |
|---|---|
| <ul style="list-style-type: none"> 1. Carlsbad Municipal Water District. 2. City of Del Mar. 3. City of Escondido. 4. Fallbrook Public Utility District. 5. Helix Water District. 6. City of National City.
(member of Sweetwater Authority) 7. City of Oceanside. 8. Olivenhain Municipal Water District. 9. Otay Water District. 10. Padre Dam Municipal Water District. 11. Camp Pendleton Marine Corps Base. 12. City of Poway. | <ul style="list-style-type: none"> 13. Rainbow Municipal Water District. 14. Ramona Municipal Water District. 15. Rincon del Diablo Municipal Water District. 16. City of San Diego. 17. San Dieguito Water District. 18. Santa Fe Irrigation District. 19. South Bay Irrigation District
(member of Sweetwater Authority) 20. Vallecitos Water District. 21. Valley Center Municipal Water District. 22. Vista Irrigation District. 23. Yuima Municipal Water District. |
|---|---|

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Future construction of an ocean water desalination facility is anticipated by the City. Up to 10.0 MGD is estimated from the projected development of a local desalination facility that will be available sometime between 2015 and 2020 for use by the City. Also, the City is evaluating a raw water pipeline to the Morro Hills area to irrigate landscape and agricultural land.

The City owns and operates the Robert A. Weese Water Filtration Plant located at 3885 Silverleaf Lane, Vista, California. The plant was originally designed and constructed in 1983 with a capacity of 16.5 million gallons a day (mgd). The plant is able to operate at 25 mgd with State Health Department approval.

Due to expanding growth in the City and the County, the Weese Water Filtration Plant will be expanded an additional 12.5 mgd for a total plant capacity of 37.5 mgd. Treatment processes will be updated to meet current and future state and federal regulations. Processes being evaluated include the use of sedimentation basins, ultra-violet disinfection and membrane technology.

Planned water supplies are provided in **Table 4b**.

Current and Planned Water Supplies (Table 4b)

Supply Source	Current and Planned Water Supplies (afy)					
	2005 ^(a)	2010	2015	2020	2025	2030
SDCWA						
Untreated Water ^(b)	20,288	20,288	19,362	20,291	21,220	22,105
Treated Water	13,528	9,354	0	0	0	0
MBGPF ^(c)	2,684	7,130	7,130	7,130	7,130	7,130
Desalination ^(d)	0	0	11,208	11,208	11,208	11,208
Recycled Water ^(e)	0	657	657	657	657	657
Total	36,500	37,429	38,357	39,286	40,215	41,100

(a) Year 2004 supplies estimated to be approximately the same in 2005 (Current).

(b) Untreated water purchased from SCWA and then treated at the City's Weese Filtration Plant

(c) Mission Basin Groundwater Purification Facility (MBGPF).

(d) Seawater Desalination Facility

(e) Recycled water Produced at the City's San Luis Rey Waste Water Treatment Plant.

Groundwater Pumping Rights (Table 5)

Basin Name	Pumping Rights (afy)
Mission Basin	7130

Historical Groundwater Pumped (Table 6)

Basin Name	2000	2001	2002	2003	2004
Mission Basin	2,421	2,123	2,463	3,085	2,684
% of Total Water Supply	7.1%	6.8%	6.9%	9.4%	7.6%

Projected Groundwater Pumping (Table 7)

Basin Name	2005	2010	2015	2020	2025	2030
Mission Basin	2,684	7,130	7,130	7,130	7,130	7,130
% of Total Water Supply	7.6	19.6	19.0	18.4	17.9	17.4

As shown in **Table 4a**, approximately 92 percent of the City’s water supply for the period 1999 through 2004 came from imported water purchased from SDCWA. This period is indicative of historical water supply for the City. Of this SDCWA water supply, approximately 32 percent is purchased treated water and 60 percent is purchased untreated water that is then treated at the City’s Weese Filtration Plant.

4.1 San Diego County Water Authority

In their draft 2005 UWMP, SDCWA projected normal water demands for their service area for 2005 through 2030 in 5 year increments utilizing their Water Resources-Municipal and Industrial Needs (MAIN) computer model. The MAIN model uses demographic and economic data to project sector-level water demands. The SDCWA-MAIN modeling effort utilized the latest official SANDAG demographic and economic projections and the new SANDAG 2030 (December 2003) forecast through the year 2030.

SDCWA then analyzed historic dry-year events and selected the year 1989 as the representative single-dry year event. The 1989 data was then run through the model for each five-year increment. The results indicated that dry-year demands were approximately 7 percent greater than the corresponding normal-year demands for each five year increment. The single dry year of 1989 occurred during the historic drought of 1987 through 1992. To develop multiple dry-year demand projections, the 7 percent average increase was applied to the normal year demand estimates. Projected groundwater and surface water yields were based on historic 1991 supplies during the 1987 – 1992 drought.

SDCWA concluded that if projected SDCWA and member agency supplies are developed as planned, along with Metropolitan Water District of Southern California’s (MWD) Integrated Resources Plan (IRP), no shortages are anticipated within SDCWA’s service area under normal-year, single-dry year or multiple dry water years through 2030. However, and as a safeguard, SDCWA is pursuing development of other potential supplies including seawater desalination, construction of carry-over storage and acquiring out-of-region conjunctive-use supplies

4.2 Mission Basin

The City has conducted studies to determine the impact of groundwater pumping on local groundwater levels¹. Those studies concluded that the planned expansion of the MBGPF will result in no significant impacts to existing groundwater dependent vegetation during extended dry-year periods lasting up to three years. Therefore the MBGPF is considered a reliable source of up to 7,130 acre-ft per year of potable water during multiple-dry water years.

¹ *Supplemental Groundwater Pumping Analysis, Expansion of Oceanside Mission Basin Brackish Groundwater Desalting Facility to a Potable Water Production Capacity of 6.37 MGD.*, February 1996, Michael R. Welch, Ph.D., P.E.

Section 2 – Contents of UWMP

Step 5: Transfer and Exchange Opportunities (Section 10631(d))

The City has multiple connections to an intricate outside network of water distribution systems through the SDCWA and neighboring urban water suppliers. These transfers are available during emergency outages within the City's water system.

Each of these transfer opportunities represents one or more existing physical connections between the City and identified agency. The City may supply water to neighboring urban water suppliers to supply water to each other during localized emergency situations.

The City worked with the SDCWA on an exchange agreement that allows SDCWA to develop a conjunctive use project within the Mission Basin and use the MBGPF to produce potable water from said project. The SDCWA recently released a feasibility study discussing the possible conjunctive use scenarios. Discussions are on-going and no formal proposal or time-frame has been developed.

Section 2 –

Step 6: Water Use by Customer Type - Past, Current and Future (Section 10631(e))

6.1 Historical Water Use

Historical City potable water consumption by customer type and unaccounted-for water for the six years 1999 through 2004 is shown in **Table 12a**. Water consumption was developed from City water meter and billing records. Unaccounted-for water is the difference between water production and water consumption and represents “lost” water.

Historical City Potable Water Use/Unaccounted-For Water (1999-2004) (Table 12a)

City Billing Category	Historical City Metered Potable Water Use (Acre Feet)						
	1999	2000	2001	2002	2003	2004	Avg
Single-Family Residential	13,924	14,273	13,799	14,632	14,789	15,428	14,474
Multi-Family Residential	4,656	4,846	4,769	5,330	4,361	5,303	4,878
Commercial/Institutional	2,888	3,097	2,845	2,713	2,989	3,070	2,934
Landscape Irrigation	5,278	5,427	4,779	5,118	4,686	5,370	5,110
Government/City	1,157	1,234	936	1,042	841	1,069	1,047
Agricultural Irrigation	2,329	2,718	2,370	3,255	2,480	2,169	2,554
Total Potable Water Use	30,232	31,596	29,497	32,090	30,145	32,409	30,995
Potable Water Supply ^(a)	32,854	33,862	31,212	35,467	32,845	35,167	33,568
Unaccounted-For Water	2,622	2,266	1,715	3,377	2,700	2,758	2,573
Unaccounted-For Water %	8.0%	6.7%	5.5%	9.5%	8.2%	7.8%	7.6%

Note that the percentage of unaccounted for water is typical for an agency of this size due to several variables which include the age and efficiency of the pipe system, users' practices, accuracy of the meters, etc.

Water usage for 1999 through 2004 per person in reference to annual rainfall totals are shown in **Table 12b** and on **Figure 5**, both on the following page. This is total water usage (not just residential water usage) and includes unaccounted-for water.

Water use averaged 181 gallons per capita per day (gpcd) for the six-year period and was 182 gpcd in 2004. However, per capita water use was 189 gpcd in 1997 following several years of low rainfall. As presented in the City's 2005 Water Master Plan Update, the base demand for the existing water system (year 2005) will be taken to be 36,500 afy, which is the year 2004 population of 172,800 multiplied by a per capita water usage of 189 gpcd. This water use is 3.8 percent greater than the actual water use in 2004 and factors in higher water consumption that occurs during lower-rainfall periods.

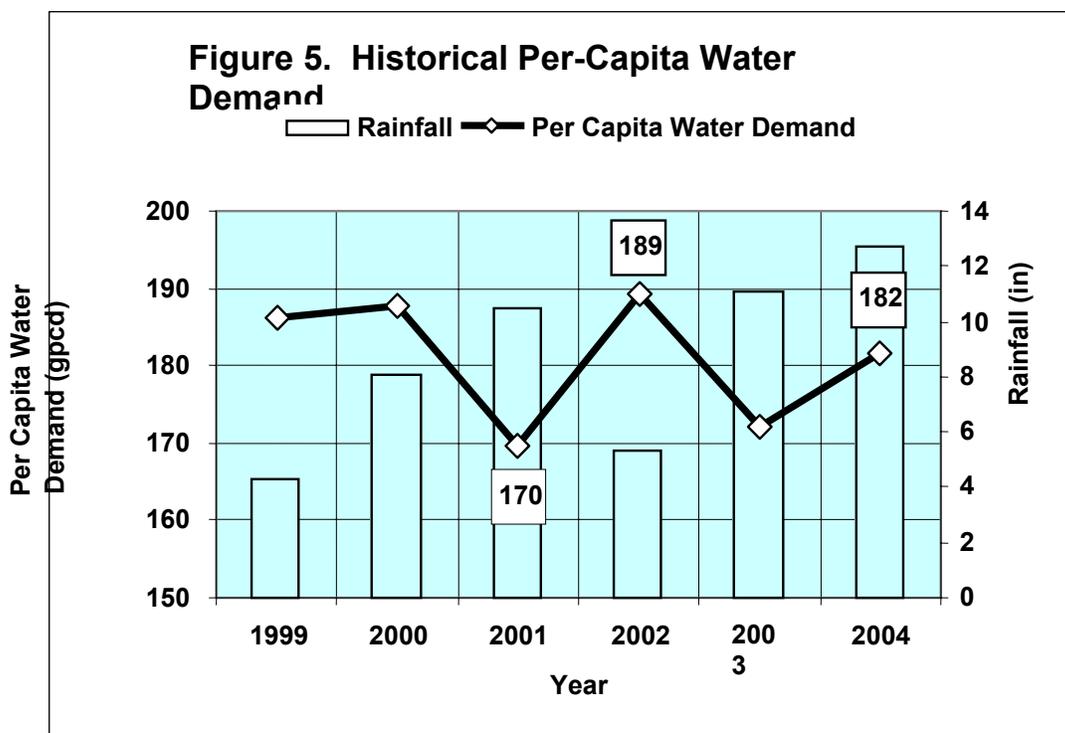
Section 2 –

Step 6: Water Use by Customer Type - Past, Current and Future (Section 10631(e))

Historical City Per-Capita Water Demands (1999-2004) (Table 12b)

	1999	2000	2001	2002	2003	2004	Avg
Demand ^(a) (af)	32,854	33,862	31,212	35,467	32,845	35,167	33,568
Population (1,000)	157.4	161.0	164.3	167.3	170.4	172.8	165.5
Per Capita Demand (gpcd)	186	188	170	189	172	182	181
Rainfall (in.)	4.3	8.1	10.5	5.3	11.0	12.7	8.7

(a) Total water demand including unaccounted-for water.



Water use factors were developed for the different customer types by matching billed water use with land use acreage for that customer type. The water use factors were then applied to developable vacant land to project year 2030 water demands. The residential water use factors determined for 2005 were increased by 2 percent to account for a projected population density increase of approximately 4 percent by the year 2030. The year 2030 demand is estimated at 41,100 afy, which represents a 12.7 percent increase relative to 2005.

Section 2 –

Step 6: Water Use by Customer Type - Past, Current and Future (Section 10631(e))

6.2 Water Use by Customer Type

Past and projected City potable water uses for the various customer types metered are shown in **Table 12c**. Water use includes unaccounted water estimated at 7.8 percent split between the customer types by percentage of use. All City accounts are metered and are expected to all be metered in the future. The number of accounts is estimated to increase one percent a year. Total water use is projected to increase to 41,100 acre feet in 2030 consistent with the projection made in the City’s 2005 Water Master Plan Update.

Past and Projected Potable Water Use by Customer Type ^(a) (Table 12c)

Year	Water Use Sectors	Single Family	Multi-Family	Commercial Industrial & Institutional	Landscape Irrigation	Agriculture Irrigation	Government	Total
2000*	Metered Accounts	34,850	1,948	1,431	941	107	249	39,526
	Water Use AF/Y	15,297	5,193	3,319	5,816	2,913	1,323	33,861
2005	Metered Accounts	38,085	1,996	1,951	1,131	146	265	43,574
	Water Use AF/Y	17,375	5,973	3,458	6,048	2,442	1,204	36,500
2010	Metered Accounts	39,989	2,096	2,049	1,188	153	278	45,753
	Water Use AF/Y	17,817	6,125	3,546	6,202	2,504	1,235	37,429
2015	Metered Accounts	41,989	2,201	2,151	1,247	161	292	48,040
	Water Use AF/Y	18,259	6,277	3,634	6,356	2,566	1,265	38,357
2020	Metered Accounts	44,088	2,311	2,259	1,309	169	307	50,442
	Water Use AF/Y	18,701	6,429	3,722	6,510	2,628	1,296	39,286
2025	Metered Accounts	46,293	2,426	2,371	1,375	177	322	52,964
	Water Use AF/Y	19,143	6,581	3,810	6,664	2,691	1,327	40,215
2030	Metered Accounts	48,607	2,547	2,490	1,443	186	338	55,613
	Water Use AF/Y	19,585	6,733	3,898	6,817	2,753	1,357	41,100

* - Water use by customer type includes 'unaccounted for' water as a % of metered water.

6.3 Recycled Water Use

The City of Oceanside has produced recycled water for many years, starting with the construction of the San Luis Rey Wastewater Treatment Plant (SLRWWTP) in 1972. Secondary effluent was used to augment the natural drainage to Whelan Lake, an important bird habitat.

In 1991, a tertiary filter and chlorine contact basin was constructed. The additional treatment level produced recycled water that meets the Title 22 requirements for unrestricted use. The recycled water is used to irrigate the Oceanside Municipal golf course as well as augment Whelan Lake. The project was implemented during drought conditions.

The 1991 recycled water facility has a rated capacity of 0.7 million gallons per day (mgd). In 2004, the maximum production was limited to 0.28 mgd due to construction activities part of SLRWWTP Interim Expansion (the construction is now completed) and only 220 acre-feet of recycled water was produced for the entire year. Recycled water distribution piping is installed at the plant but plant demands are currently being provided by potable water or chlorinated secondary effluent. This will be converted to recycled water supply as part of a Phase 1 System as discussed below.

Two recent developments in the northeast area of the City provide the opportunity to increase the use of recycled water in Oceanside. The potential recycled water demands are the Arrowood Golf Course; the Morro Hills Park, slopes, and common areas; and the Wilmont Ranch slopes and common areas. There are also medians and landscaping along Douglas Road that could be irrigated with recycled water.

As recommended in the City's 2005 Recycled Water Master Plan, a new tertiary treatment plant will be constructed at SLRWWTP as well as other system upgrades to accommodate the existing recycled water demands plus recycled water demands at the SLRWWTP (Phase 1 System). The new tertiary plant will also be sized to supply approximately 40 percent of the recycled water demands in the northeast as described above (Phase 2 System). Fallbrook Public Utility District would supply the other 60 percent of the Phase 2 demands via Title 22 recycled water that they currently produce and convey through their land outfall that is routed through Oceanside. Distribution piping and facilities will also be constructed for the Phase 2 system. The Phase 1 and 2 demands are shown in **Table 12d**. The City is continuing to evaluate the feasibility of serving recycled water to future developments beyond Phase 2 (e.g. El Corazon).

Recycled water is also being evaluated by the City for use as groundwater recharge. In collaboration with the SDCWA a feasibility study was conducted in the fall of 2004 to determine the possibility of a Conjunctive Use Ground Water Storage and Recovery Program. The area of interest is the Mission Groundwater Basin, and the conclusions contained in the report for the project show that the potential use as a storage and recovery plan may be feasible.

Section 2 –**Step 6: Water Use by Customer Type - Past, Current and Future (Section 10631(e))****6.4 Sales to Other Agencies**

The City does not regularly sell recycled water to other agencies.

6.5 Additional Recycled Water Uses

Currently all practicable uses have been identified by the City, and all uses that are economically feasible are implemented.

6.6 Total Water Use**Existing and Projected Recycled Water Demands (Table 12d)**

City User	Annual Demand (AF/yr)	Existing or Projected Demand
Phase 1		
SLRWWTP	500	Projected
Oceanside Municipal Golf Course	293	Existing
Whelan Lake	140	Existing
Total	933	-
Phase 2 ^(a)		
Arrowood Golf Course	425	Projected
Morro Hills	525	Projected
Wilmont Ranch	75	Projected
Douglas Road	32	Projected
Caltrans ^(b)	26	Existing
Total	1,083	-
Total – Both Phases	2,016	-

a) Approximately 40 percent of the Phase 2 recycled water demands would be supplied by Oceanside's SLRWWTP with Fallbrook Public Utility District supplying the other 60 percent via their water reclamation plant and land outfall.

b) Demands currently supplied by Fallbrook Public Utility District.

Section 2 – Contents of UWMP

Step : 7 Demand Management Measures (Section 10631(f through j))

The City is a member of the California Urban Water Conservation Council (Council). As such, the City has submitted annual reports to the Council in accordance with the “Memorandum of Understanding Regarding Urban Water Conservation in California,” dated September 1991. In **Appendix A and B** of this 2005 UWMP the City has included the most recent Best Management Practices (BMP) Activity Report and Coverage Report for use in satisfying subsections (f) through (g).

Section 2 – Contents of UWMP

Step 8: Evaluation of DMMS Not Implemented (Section 10631(g))

The City is a member of the California Urban Water Conservation Council (Council). As such, the City has submitted annual reports to the Council in accordance with the “Memorandum of Understanding Regarding Urban Water Conservation in California,” dated September 1991. In **Appendix A and B** of this 2005 UWMP the City has included the most recent Best Management Practices (BMP) Activity Report and Coverage Report for use in satisfying subsections (f) through (g).

Groundwater Recovery

The Mission Basin Groundwater Purification facility has recently been expanded and with the addition of new wells will have a capacity of 6.37 MGD or 7,130 acre-feet per year. This facility takes water from wells in the Mission groundwater basin and transfers them to the Purification facility. Through a reverse osmosis filtering process where water is forced under pressure through semi-permeable membranes, minerals and other impurities are removed and concentrated in brine, which is discharged to the ocean. The product is then blended with a 20 percent share of water direct from the well field and subjected to additional post-blend treatment to result in a finished, potable water supply.

The additional wells are planned to be developed by 2010. At a production level of about 7,100 acre-feet per year, the safe yield of the Mission Basin (about 9 – 10,000 acre-feet per year) is reached when accounting for water loss of about 17.5% (brine discharge) and the additional pumping of the water for blending with the purification facility water. The ultimate production of the purification facility is estimated to be 20 MGD or about 22,000 acre-feet per year. Studies of the impacts of the current expansion to 6.37 MGD will determine if the facility can be expanded to a greater capacity. Any level of production greater than 6.37 MGD will require that an additional water supply be introduced into the Mission Basin to maintain its safe yield..

Wastewater Recycling

The City owns and operates two wastewater treatment plants (WWTPs). The San Luis Rey Wastewater Treatment Plant (SLRWWTP) is located in the San Luis Rey River Valley and serves about 70 percent of the eastern portions of the City's wastewater service area and has an ultimate rated capacity of 17.4 MGD. The La Salina WWTP has a current rated capacity of 5.5 MGD and is located near the coast. The La Salina WWTP is considered to be at its ultimate capacity for its service area. Both plants currently produce a minimum of secondary treatment quality effluent, suitable for ocean discharge. Ultimate wastewater flow projections show that about 25,000 acre-feet per year of effluent would be available for recycling between the two plants.

A Recycled Master Plan was prepared for the City to investigate the feasibility of developing an extensive recycled water distribution system from both WWTPs to identified markets within the City limits. Over 160 individual potential customers were identified with an average annual demand of about 14,000 acre-feet per year. Several conceptual alternatives for significant expansion of the recycled water system were developed as part of the plan. Estimated unit costs at build out for the various alternatives ranged from about \$500 to about \$1200 per acre-foot (af). Initial system costs ranged from \$900 to about \$1500 per af. Based on these high unit costs the City determined that a large scale recycled water distribution system to serve the majority of the identified markets in the entire City was not economically feasible.

Section 2 –

Step 9: Planned Water Supply Projects and Programs

The City plans to pursue additional direct reuse opportunities for treated effluent in the future, as funding becomes available. The SLRWWTP expansion included space for increased tertiary treatment capacity of 7.5 MGD for direct reuse. The City will require dual distribution facilities to be built in new developments where recycled water is planned for use.

Local Seawater Desalination Facility

The City will build an extraction facility in the San Luis Rey River groundwater basin that will extract available groundwater and water under the influence of the ocean. The extracted water will provide additional capacity at the existing Mission Basin Groundwater Purification Facility. The ultimate production from this new water source will be determined through a pilot research and development project.

Weese Water Treatment Plant Expansion

The City Of Oceanside owns and operates the Robert A. Weese Water Filtration Plant located at 3885 Silverleaf Lane, Vista, California. The plant was originally designed and constructed in 1983 with a capacity of 16.5 million gallons a day (mgd). The plant is able to operate at 25 mgd with State Health Department approval.

Due to expanding growth in the City and the County, this facility will be expanded an additional 12.5 mgd for a total plant capacity of 37.5 mgd. Treatment processes will be updated to meet current and future state and federal regulations. Processes being evaluated include the use of sedimentation basins, ultra-violet disinfection and membrane technology.

The project will also include expansion and renovation of the existing Administration Building, sludge lagoons, and other support facilities as required.

Future Water Supply Projects (Table 17)

Project Name	Normal Year AF to City	Single Dry AF/year to City	Multiple Dry-Year AF Years to City		
			Year 1	Year 2	Year 3
Desalination Plant	11,208	11,208	11,208	11,208	11,208
Mission Basin Groundwater Purification Facility	7,130	7,130	7,130	7,130	7,130
Recycled Water	657	657	657	657	657
Weese WTP	37,805	37,805	37,805	37,805	37,805

**Section 2 – Contents of UWMP
Step 10: Development of Desalinated Water**

Opportunities for Desalinated Water (Table 18)

Sources of Water	Yield AF/Y	Start Date	Type of Use
Desalination Plant	11,208	2015	All
Mission Basin Groundwater Purification Facility	7,130 ^(a)	2010	All

(a) Year 2004 supplies of 2,524 AF/Y estimated to be approximately the same in 2005 (Current) to 2009. After expansion, yield is estimated to be 7,130 AF/Y in 2010.

Opportunities for Future Water Supplies

The City has planned for desalinated water as an expected future water supply to become less dependent upon imported water and to diversify its water resources. Future residential demands are the greatest but the City sells a significant amount of irrigation and agricultural water. The irrigation and agricultural water generally is used on high-value crops such as cut flowers, nursery stock, citrus, avocado, and other specialty tree crops. Users growing crops have the option of taking water as agricultural water, which carries a discount in exchange for doubling the risk of cutbacks in the event of shortages. Growers also can choose to take water as irrigation water but do not receive a discount and thus have the same level of service reliability as other municipal users. However many of the agricultural acreages are planned for future development. This will lead to a decreased demand for agricultural water but a larger increase in demand for residential, industrial and landscape irrigation. Overall, as noted in **Table 12c.**, the increase in demand over the next 25 years is significant making the opportunity to use desalinated water even more important in the City’s plan to rely less on imported water and to expand its own water resources.

Local Seawater Desalination Facility

The City will build an extraction facility in the San Luis Rey River groundwater basin that will extract available groundwater and water under the influence of the ocean. The extracted water will provide additional capacity at the existing Mission Basin Groundwater Purification Facility. The ultimate production from this new water source will be determined through a pilot research and development project.

Section 2 – Contents of UWMP

Step 11: Current or Projected Supply Includes Wholesale Water

Approximately 90% of the City’s water is purchased from the SDCWA. Demand projections shown in Table 19 are derived from the City’s draft 2005 Integrated Water Utility Master Plan.

Agency Demand Projections Provided to Wholesale Suppliers - AF/Y (Table 19)

Wholesaler	2010	2015	2020	2025	2030
San Diego County Water Authority	29,642	19,362	20,291	21,220	22,105

SDCWA presently purchases its water from the Metropolitan Water District. They are also beginning a transfer agreement with IID that will provide 30,000 AF in 2005 and will increase up to 200,000 in 2021.

Wholesaler Identified & Quantified the Existing and Planned Sources of Water Available to the City in -AF/Y (Table 20)

Wholesaler Sources	2010	2015	2020	2025	2030
	Existing and Planned				
SDCWA	29,642	19,362	20,291	21,220	22,105

In the Water Authority’s 2005 UWMP Section 8 the reliability of the wholesale supplies are presented as such:

“The assessment contained in the 2005 Plan projects reliability through the next 25 years to correspond with the growth forecast developed by SANDAG and ensure compliance with Senate Bills 610 and 221.”

Wholesale Supply Reliability - % of Normal (Table 21)

Wholesaler	Single Dry	Multiple Dry Water Years			
		Year 1	Year 2	Year 3	Year 4
SDCWA	116	116	117	115	115

Factors Resulting in Inconsistency of Wholesaler's Supply (Table 22)

Name of supply	Legal	Environmental	Water Quality	Climatic
SDCWA	~	Dry years	~	Dry years

Section 3 – Determination of DMM Implementation

As a California Urban Water Conservation Council (CUWCC) member, the City of Oceanside presents its 2003-2004 Best Management Practices and Coverage Reports that are submitted to the CUWCC and the California Department of Water Resources as Appendix A and B of this plan.

Section 4 – Water Shortage Contingency Plan

Step 1: Stages of Action

Section 4.1

The City of Oceanside has formally codified an ordinance establishing a water contingency plan in the Oceanside City Code, Article V. Water Conservation Program. The following water shortage contingency plan components are included in the City Code.

The water utilities director of the City of Oceanside shall from time to time, based upon all available data, determine and declare whether the city's water supply is in one of seven (7) stages and post a notice thereof. A waiver of any of the following measures or addition of other conservation measures to achieve goals in a declared stage shall be made by the water utilities director or his designee.

- Stage I.** The city is able to meet all the water demands of its customers in the immediate future. The stages below reflect the percentage of water supply shortage
- Stage II.** Effect a ten (10) percent cutback in consumption based on a three-year average of water consumption prior to a water shortage.
- Stage III.** Effect a fifteen (15) percent cutback in consumption based on a three-year average of water consumption prior to a water shortage.
- Stage IV.** Effect a twenty-two (22) percent cutback in consumption based on a three-year average of water consumption prior to a water shortage
- Stage V.** Effect a thirty (30) percent cutback in consumption based on a three-year average of water consumption prior to a water shortage
- Stage VI.** Effect a forty (40) percent cutback in consumption based on a three-year average of water consumption prior to a water shortage.
- Stage VII.** A major failure of any supply, distribution facility or a declaration by the city council of a water shortage emergency pursuant to Water Code Sections 350 et seq. Effect a fifty (50) percent cutback, or more as required, in consumption based on a three-year average of water consumption prior to a water shortage.

Section 4.2 Prohibitions by Water Shortage Stage Level

Oceanside's Water Shortage Contingency Plan provides for the following prohibitions under each shortage stage level indicated.

Stage I. When the water utilities director has declared that the city's water supply is in a Stage I condition, customers are asked to use water wisely and to practice water conservation measures so that water is not wasted. In this stage, the City of Oceanside has sufficient water supplies to meet normal and local emergency water supply needs.

Section 4 – Water Shortage Contingency Plan

Step 1: Stages of Action

To protect and to enhance the cities overall use of local water supplies, water treatment devices which waste potable water or which degrades wastewater so that it cannot be utilized for reclaimed water or local water basin recharge will not be sold to or utilized by any users unless necessary for authorized medical reasons.

Stage II. When the water utilities director has declared that the city's water supply is in a Stage II condition, in addition to all previous restrictions the following restrictions shall apply:

- (1) Water consumption shall be cut by [ten (10) percent] a three-year average of water consumption prior to a water shortage.
- (2) Irrigation is not permitted during rain.
- (3) Lawn watering and landscape irrigation is allowed only between 4:00 p.m. and 9:00 a.m. and only when necessary.
- (4) There shall be no washing down of driveways, parking lots, and other paved surfaces, except for compelling public health and safety reasons and then using a hose with a positive shut-off nozzle. Reclaimed water use is encouraged.
- (5) Washing of vehicles will be permitted only while using a bucket or while using a hand held hose with a positive shut-off nozzle, or a commercial wash facilities.
- (6) Restaurants shall not serve water to customers unless specifically requested.
- (7) Adding water to maintain the approved level of water in swimming pools shall be done only when necessary. A pool cover shall be used to conserve water at all times. Draining of pools or refilling shall be done only for health or safety reasons as determined by the health department or city building director.
- (8) Construction meters used for irrigation shall only be used between 4:00 p.m. and 9:00 a.m.
- (9) Agricultural customers and commercial nurseries shall use water only when necessary. Watering of livestock is permitted at anytime.

Stage III. When the water utilities director has declared that the city's water supply is in a Stage III condition, in addition to all previous restrictions the following restrictions shall apply:

- (1) Water consumption shall be cut by [fifteen (15) percent] a three-year average of water consumption prior to a water shortage.
- (2) Golf courses shall not irrigate roughs with potable water.

Stage IV. When the water utilities director has determined that the city's water supply is in a Stage IV condition, in addition to all previous restrictions the following restrictions shall apply:

- (1) Water consumption shall be cut overall by [twenty-two (22) percent] a three-year average of water consumption prior to a water shortage.
- (2) Irrigation of active parks, school ground areas, and road median landscaping will not be permitted more than twice a week and only if necessary.
- (3) City will not issue new construction meters or one day permits unless using reclaimed or non-potable water.

Section 4 – Water Shortage Contingency Plan

Step 1: Stages of Action

Stage V. When the water utilities director has declared the city's water supply is in a Stage V condition, in addition to all previous restrictions the following restrictions shall apply:

- (1) Water consumption shall be cut by [thirty (30) percent] a three-year average of water consumption prior to a water shortage.
- (2) No watering of ornamental turf without using a hand-held hose with a positive shut-off or micro systems/equipment. No sprinklers shall be used.
- (3) Golf courses shall not irrigate fairways with potable water.
- (4) All construction water will be reclaimed or non-potable water for earthwork or road construction unless necessary to protect the health, safety and welfare.

Stage VI. When the water utilities director has declared that the city water supply is in a Stage VI condition, in addition to all previous restrictions the following restrictions shall apply:

- (1) Water consumption shall be cut by [forty (40) percent] a three-year average of water consumption prior to a water shortage.
- (2) Outside irrigation of trees, shrubs, and other plants which are not turf or ground cover, is allowed only between 4:00 p.m. and 9:00 a.m. and only by hand held hose with positive shut-off nozzle, bucket, or micro irrigation systems/equipment. Irrigation will be permitted for ground cover for fire protection purposes and erosion control.

Stage VII. The water utilities director shall effect such cutbacks as necessary to maintain adequate water supplies for public health and safety and to comply with any declared regulatory agency requirements. In addition to all previous restrictions, the following restrictions shall apply:

- (1) Water consumption shall be cut by [fifty (50) percent or more as required,] a three-year average of water consumption prior to a water shortage.
- (2) No building permits which require new or expanded water service will be issued except to protect the public's health, safety and welfare or which meets city council adopted conservation offset requirements.
- (3) No water meters issued unless there is a building permit, except to protect the public's health, safety and welfare.
- (4) Sprinkler systems may only be used for agricultural production, watering active park and school ground areas, or for purposes of maintaining public safety.
- (5) Recreational, ornamental lakes, ponds or fountains may not be filled, refilled, or operated except with approved reclaimed water or other approved non-potable water. When using such water, signs shall be posted in conspicuous areas.
- (6) Washing of vehicles can be done with water salvaged from indoor use, e.g. warm water from showers, sinks or lavatories or by mobile high pressure/low volume service or commercial washing facilities.

Section 4 – Water Shortage Contingency Plan

Step 1: Stages of Action

Section 4.3 Public Information and Communication

The following notification measures shall be utilized by the water utilities director to implement water usage restrictions. Additional notification measures not specifically stated will be utilized as needed to ensure the effectiveness of plan implementation.

Stage I.

No public notification necessary.

Stage II.

- (1) Notification to city residents and businesses via press releases to print and broadcast media and through notices with bills advising that a "Stage II" condition is in effect.
- (2) Written and verbal notification to public services, golf courses, school districts, and restaurants.

Stage III.

- (1) Notification to city residents and businesses via press releases to print and broadcast media and through notices with bills advising that a "Stage III" condition is in effect.
- (2) Written and verbal notification to golf courses.

Stage IV.

- (1) Notification to city residents and businesses via press releases to print and broadcast media and through notices with bills advising that a "Stage IV" condition is in effect.
- (2) Written and verbal notification to public services, school district and golf courses.
- (3) Notification to developers and contractors via newsletter or print media that construction meters and one day permits will not be issued.

Stage V.

- (1) Notification to city residents and businesses via press releases to print and broadcast media and through notices with bills advising that a "Stage V" condition is in effect.
- (2) Notification to developers and contractors via newsletter and print media that all construction water used will be reclaimed or non-potable water.
- (3) Written and verbal notification to golf courses.

Stage VI.

Notification to city residents and businesses via press releases to print and broadcast media and through notices with bills advising that a "Stage VI" condition is in effect.

Stage VII.

- (1) Notification to city residents and businesses via press releases to print and broadcast media and through notices with bills advertising that a "Stage VII" condition is in effect.
- (2) Publication a minimum of one (1) time, in a daily newspaper of general circulation.

Section 4 – Water Shortage Contingency Plan
Step Two: Estimate of Minimum Supply for Next Three Years

The last major drought in California occurred between 1987 and 1992, which caused severe water supply shortages throughout the state. In 1999, Metropolitan adopted the Water Supply Drought Management (WSDM) Plan to integrate planned operational actions with respect to surplus and shortage situations. The Urban Water Management Planning Act requires an analysis of a single dry year and a three year minimum supply. If projected supplies are developed as planned there will be no shortages anticipated through 2030. Based on the planned 2015 supply, the single year estimated minimum water supply is shown in the following table.

Three-Year Estimated Minimum Water Supply – AF/Year (Table 24)

Source	Year 2002	Year 2003	Year 2004	Year 2015
SDCWA - Treated	11,397	9,101	12,117	0
SDCWA - Untreated	21,527	20,578	20,288	19,362
MBGWGPF	2,463	3,085	2,684	7,130
Oceanside Desalination	0	0	0	11,208
Recycled Water	191	89	95	657
Total	35,578	32,853	35,184	38,357

Section 4 – Water Shortage Contingency Plan

Step 3: Catastrophic Supply Interruption Plan

A catastrophic water shortage occurs when a disaster, such as an earthquake or flood, results in an insufficient supply of available water to meet the City's needs or eliminates access to imported water supplies. The City is in an active seismological region where earthquakes can rupture or break delivery system water lines or aqueducts. The City has exposure to floods within the San Luis Rey River basin and storms that can disrupt water supplies or electrical power necessary for normal water service. The Water Shortage Contingency Plan and Chapter 37 of the City Code provide for initiation of water shortage contingency stages in the event of a catastrophic system failure.

The City also has an Emergency Plan designed to provide the framework for responding to any type of emergency or disaster that might befall the City. The Plan uses a multi-hazard or all hazard planning framework and is compatible with the state's Multi-hazard Functional Planning Guidance (MHFP) and Standardized Emergency Management System (SEMS), and the federal Integrated Emergency Management System (IEMS). The planning concept assumes that emergency response functions, evacuation, firefighting, medical assistance and rescue are the same regardless of the initiating event. Water service is identified in the plan as an essential service that will receive focused recovery efforts in the event of a disaster. Recovery Units are established for these essential services out of the Emergency Operations Center to address restoration of services. Within the Emergency Operations Center command structure there is a Utilities Branch Coordinator who is responsible for managing supervisors overseeing repair and maintenance of City water delivery and wastewater treatment facilities. When necessary, the City has the ability to call on regional and state resources through the State Office of Emergency Services and services from other cities, the County of San Diego and cities and counties within Mutual Aid Region VI.

The Emergency Plan provides for three levels of emergency/disaster. Level 1 is an incident where local resources are adequate and available to mitigate the situation. Level 2 is a moderate to severe emergency where mutual aid may be required on a regional or statewide basis and level 3 is a major disaster where local resources would be overwhelmed and State and Federal declarations of emergency and disaster would be requested.

The City maintains four emergency standby generators to support minimum water service levels in the City under a power outage. It also maintains eighteen generators to support the sewer transmission and treatment system in the event of power disruption.

Section 4 – Water Shortage Contingency Plan

Step 3: Catastrophic Supply Interruption Plan

San Diego County Water Authority Emergency Response Plan

The SDCWA has an emergency response plan for failures in the imported water system. This plan describes the emergency situations and incidents that will trigger the activation of the plan and initiation of opening of the SDCWA's Emergency Operations Center in addition to providing direction and strategies for responding to a crises situation. The plan includes:

- Authorities, policies and procedures associated with emergency response activities;
- EOC activities – including EOC activation and deactivation guidelines;
- Multi-agency and multi-jurisdiction coordination between the SDCWA and its member agencies, Metropolitan in accordance with standardized Emergency Management System Guidelines;
- Emergency staffing, management, and organization required to assist in mitigating any significant emergency or disaster;
- Mutual Aid Agreements and Covenants which outline the terms and conditions under which mutual aid assistance will be provided; and
- Pre-emergency planning as well as emergency operations procedures.

The SDCWA also maintains a mutual aid agreement with all member agencies, including the City of Oceanside.

Section 4 – Water Shortage Contingency Plan
Step 4: Prohibitions, Penalties, and Consumption Reduction

The City of Oceanside’s Water Shortage Contingency Plan provides for the following prohibitions under each shortage stage level indicated.

Mandatory Prohibitions (Table 26)

Examples of Prohibitions	Stage When Prohibition Becomes Mandatory
Use or purchase of water treatment devices which waste water or degrade wastewater	Stage 1
Irrigation during rain or during restricted hours between 9:00am to 4:00pm	Stage 2
Using potable water for street, driveway, or other paved surfaces washing	Stage 2
Washing of vehicle without bucket or hand held hose with shut-off nozzle	Stage 2
Serving water to restaurant customers without being requested	Stage 2
Draining or refilling swimming pools	Stage 2
Irrigation of golf course roughs with potable water	Stage 3
Irrigation of parks, school grounds and road median landscaping more than twice a week	Stage 4
Issuance of new construction meters or one day permits for potable water	Stage 4
Use of sprinklers or watering of ornamental turf without the use of a hand held hose with a positive shut-off or micro system equipment	Stage 5
Irrigation of golf course fairways with potable water	Stage 5
Use of potable water for earthwork or road construction	Stage 5
Irrigation of trees, shrubs, and other plants which are not turf or ground cover from 9:00am to 4:00pm and without the use of a hand held hose with a positive shut-off nozzle, bucket, or micro irrigation system.	Stage 6
Issuance of building permits which require new or expanded water service unless it meets City Council adopted conservation offset requirements.	Stage 7
Issuance of water meters without a building permit	Stage 7
Use of sprinkler systems except for agricultural production, active parks, and school ground areas.	Stage 7
Filling or refilling of recreational, ornamental lakes, ponds, or fountains with potable water	Stage 7
Washing of vehicles without using salvaged indoor use water, mobile high pressure/low volume services, or commercial washing facilities.	Stage 7

The City of Oceanside’s Water Shortage Contingency Plan also provides consumption reduction methods to reduce water use in the most restrictive stages.

Section 4 – Water Shortage Contingency Plan

Step 4: Prohibitions, Penalties, and Consumption Reduction

Consumption Reduction Methods (Table 27)

Consumption Reduction Method	Stage When Method Takes Effect	Projected Reduction (%)
Reclaimed water use only for washing down of driveways, parking lots and other paved surfaces	Stage 2	10%
Irrigation is limited to between the hours of 4:00pm and 9:00am	Stage 2	10%
Reclaimed water use only for irrigation of golf course roughs	Stage 3	15%
Irrigation of parks, school grounds, and road median landscaping limited to twice a week	Stage 4	22%
New construction meters or one day permits will only be issued if using reclaimed or non-potable water	Stage 4	22%
Reclaimed water use only for irrigation of golf course fairways	Stage 5	30%
All construction water will be reclaimed or non-potable water for earthwork or road construction.	Stage 5	30%
Outside irrigation of trees, shrubs, and other plants which are not turf or ground cover is limited to the hours between 4:00pm and 9:00am	Stage 6	40%
No building permits which require new or expanded water service will be issued unless it meets City Council adopted conservation offset requirements.	Stage 7	50%
Reclaimed water or other approved non-potable water use for filling or refilling of recreational, ornamental lakes, ponds or fountains.	Stage 7	50%
Washing of vehicles can only be done with water salvaged from indoor use, such as warm water from showers, sinks or lavatories or by mobile high pressure/low volume service or commercial washing facilities.	Stage 7	50%

The City of Oceanside does have provisions for penalties and charges for excessive use and mandatory prohibition violations.

Penalties and Charges (Table 28)

Penalty or Charge	Stage When Penalty Takes Effect
Section 37.109 of the City Code provides that penalties for violation of the code sections related to water conservation are punishable as misdemeanor crimes under section 1.7 (a) (1) of the City Code with fines not to exceed \$1,000 or imprisonment for a term not exceeding six months or both.	Stage 2
The City's Water Conservation Ordinance includes provisions that water service can also be discontinued or limited to any customer who uses excessive water in a drought.	Stage 2

Section 4 – Water Shortage Contingency Plan

Step Five: Revenue and Expenditure Impacts of Water Shortage

It is difficult to precisely gauge the revenue and expenditure impacts of implementation of the water shortage contingency plan. The plan provides for prohibitions on outdoor water use and requests for indoor use reductions, enforced by misdemeanor penalties for violation. Ultimate impacts will be based upon a mix of responses to these requirements and overall public cooperation in saving water in additional ways. Revenue will be reduced through lower water sales. However, the City will see this compensated to some degree by lower water purchase, pumping and treatment charges.

For planning purposes it is assumed that City's consumption reduction targets are met for each water shortage contingency plan stage and that reductions are made in treated water purchases from the SDCWA. Revenue losses are proportional to the commodity rate revenue not received, less variable cost reductions for treated water purchases from the SDCWA. No additional costs are assumed for water shortage contingency plan (code) enforcement. While most water savings are likely to accrue from less outdoor water use there will also be revenue losses from somewhat less sewage produced and treated. For purposes here, and since the City charges a commodity charge on estimated sewage flow and can control that charge, revenue losses are assumed to be offset by collection and treatment cost reductions. Projections are based on a one-year shortage at a projected 2000 year level of demand of 30,600 acre-feet per year and 1998-99 revenue. Potential annual revenue losses for each stage are listed in **Table A**.

Annual Potential Revenue Losses by Plan Stage (Table A)

Revenue Source	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6	Stage 7
Water Sales Losses	0	\$2,266,481	\$3,399,721	\$4,986,258	\$6,799,442	\$9,065,923	\$11,332,404
Less Purchased Water Reductions	0	\$1,594,260	\$2,391,390	\$3,507,372	\$4,782,780	\$6,377,040	\$7,971,300
Net Water Revenue Reduction	0	\$672,221	\$1,008,331	\$1,478,886	\$2,016,662	\$2,688,883	\$3,361,104
% Total Annual Water System Revenue Loss	0%	2.6%	3.9%	5.7%	7.7%	10.3%	12.9%

Measures to Overcome Impacts

Impacts during Stages 1 through 7 would likely be absorbed by City reserves without requiring a rate increase provided the shortage condition did not persist for more than a year. Impacts beyond a year or impacts from a greater level of shortage would need to be individually assessed. Measures to reduce expenses would be considered during a shortage such as reduction in capital expenditures, deferring non-critical maintenance items and deferring filling of personnel vacancies. Should revenue loss impacts begin to affect essential water system operations, a temporary emergency surcharge on the commodity or fixed facility charge of the water rate could be imposed to fund City operations.

As the City's accounts are fully metered, accounting for actual consumption can be monitored. Water production records will be examined monthly and compared against historical average monthly consumption data for that period. This data will be analyzed to assess any need for alterations to the water shortage contingency plan.

Water Use Monitoring Mechanisms (Table 31)

Mechanisms (Action)	Expected Results
Increase water meters monitoring	Demand reduction
Increase production monitoring	Production reduction

SDCWA was the regional lead in the Southern California Comprehensive Water Reclamation and Reuse Study (SCCWRRS) that evaluated maximizing recycled water use through regional collaborative programs. All of the Authority's member agencies participated in the study. Oceanside, Fallbrook and Camp Pendleton were identified as potential collaboration partners. Each of the following agencies participated in the development of a plan for the use of recycled water in the Oceanside service area.

Participating Agencies (Table 32)

Participating agencies	Role in Plan Development
SDCWA	Coordinator
City of Oceanside	Participant
Fallbrook PUD	Participant
Camp Pendleton	Participant

The City of Oceanside wastewater collection and treatment system is comprised of two major systems, the San Luis Rey Wastewater Treatment Plant (SLRWWTP) service area and the La Salina WWTP.

In 1991 the City commissioned a Recycled Water Master Plan to determine the feasibility of developing a recycled water distribution system from both WWTPs and found that it was cost-prohibitive. The City looked at the possibility for reuse of the effluent from the San Luis Rey WWTP in 1998 when preparing for the plant expansion. It was again determined to be cost-prohibitive due to the level of tertiary treatment required by the potential customers.

Wastewater Collected and Treated* - AF/Year (Table 33)

	2000	2005	2010	2015	2020	2025	2030
Wastewater collected & treated in service area	16,813	16,813	20,176	20,176	24,660	24,660	24,660
Quantity that meets recycled water standard	135	128	1,120	1,120	1,120	1,120	1,120

* - 2000 through 2005: SLRWWTP = 10 MGD, LSWWTP = 5 MGD
 - 2010 through 2015: SLRWWTP = 13 MGD, LSWWTP = 5 MGD
 - 2020 on: SLRWWTP = 17 MGD, LSWWTP = 5 MGD

Methods of wastewater disposal and the quantities discharged with the typical treatment levels are shown in the following table.

Disposal of Wastewater (Non-Recycled) AF/Y (Table 34)

Disposal	Treatment Level	2005	2010	2015	2020	2025	2030
Land Outfall	secondary	16,685	19,056	19,056	23,540	23,540	23,540

The San Luis Rey WWTP currently has 0.7 mgd (784 AF/Y) of permitted tertiary treatment capacity, which provides irrigation of the Oceanside Municipal Golf Course and maintenance levels of Whelan Lake.

Section 5 – Recycled Water Plan
Step 3: Potential and Projected Use, Optimization Plan
with Incentives (10633 (d-g))

Potential uses of recycled water include agricultural irrigation landscape irrigation, wildlife habitat enhancement, and groundwater recharge.

Recycled Water Uses - Potential AF/Y (Table 35)

Type of Use	Treatment Level	2010	2015	2020	2025	2030
Agriculture ⁽¹⁾	demineralization	2,000	2,000	2,000	2,000	2,000
Landscape ⁽²⁾	tertiary	1,350	1,790	1,790	1,790	1,790
Wildlife Habitat ⁽³⁾	tertiary	140	140	140	140	140
Industry ⁽⁴⁾	Up to demineralization	500	630	630	630	630
Total		3,930	4,560	4,560	4,560	4,560

(1) Assumes non-food agriculture along Wilshire Road and Sleeping Indian Trail

(2) Assumes:

- a. Oceanside Municipal Golf Course, Arrowwood Golf Course, and public landscaping in 2010
- b. The addition of future development (including El Corazon) in 2015 and beyond

(3) Whelan Lake

(4) Assumes:

- a. Recycled Water use at SLRWWTP in 2010
- b. The addition of future development (including El Corazon) in 2015 and beyond

Economic feasibility of serving all of the potential uses listed above is doubtful. The projected use of recycled water in the City of Oceanside for the various uses previously indicated is shown in the following table.

Projected Future Use of Recycled Water in Service Area⁽¹⁾ - AF/Y (Table 36)

Type of Use	2010	2015	2020	2025	2030
Landscape	1,350	1,350	1,350	1,350	1,350
Wildlife Habitat	140	140	140	140	140
Industrial	500	500	500	500	500
Total projected use of Recycled Water⁽²⁾	1,990	1,990	1,990	1,990	1,990

(1) - Assumes service to agricultural and future development is not economically feasible.

(2) - 1,120 afy from SLRWWTP. Remainder from Fallbrook PUD.

A comparison of recycled water uses in Oceanside's 2000 UWMP and this 2005 UWMP shows there has been no change.

Recycled Water Uses - 2000 Projection Compared With 2005 Actual - AF/Y (Table 37)

Type of use	2000 Projection for 2005	2005 actual use
Landscape	748	748
Total	748	748

Actions that the city may take in order to encourage recycled water use, and the projected results of those actions in terms of recycled water use are shown in the following table.

Section 5 – Recycled Water Plan
Step 3: Potential and Projected Use, Optimization Plan
with Incentives (10633 (d-g))

Methods to Encourage Recycled Water Use (Table 38)

Actions	AF of use projected to result from this action				
	2010	2015	2020	2025	2030
Financial incentives	128	128	128	128	657
Total	128	128	128	128	657

The quality of existing sources affects water management strategies and supply reliability as indicated in the following table.

Current & Projected Water Supply Changes Due to Water Quality - Percentage (Table 39)

Water source	2005	2010	2015	2020	2025	2030
SDCWA	0	0	0	0	0	0
Mission Groundwater Basin	0	0	0	0	0	0

Section 7– Water Service Reliability (10634 (a-d))
Step Three: Projected Multiple-Dry-Year Supply and Demand Comparison

The following information must be provided to all cities and counties within the City of Oceanside’s service area within 60 days of submission of the UWMP to the DWR.

Comparison of the projected normal water supply to the projected normal water use over the next 20 years, in 5-year increments is shown below.

Projected Normal Water Year Supply - AF/Y (Table 40)

	2010	2015	2020	2025	2030
Supply	51,192	51,192	51,192	51,192	51,192
% of Normal Year*	100	100	100	100	100

Projected Normal Water Year Demand - AF/Y (Table 41)

	2010	2015	2020	2025	2030
Demand	37,429	38,357	39,286	40,215	41,100
% of year 2005	103	105	108	110	113

Projected Normal Year Supply and Demand Comparison - AF/Y (Table 42)

	2010	2015	2020	2025	2030
Supply totals	51,192	51,192	51,192	51,192	51,192
Demand totals	37,429	38,357	39,286	40,215	41,100
Difference (supply minus demand)	13,763	12,835	11,906	10,977	10,092
Difference as % of Supply	27%	25%	23%	21%	20%
Difference as % of Demand	37%	33%	30%	27%	25%

Section 7 – Water Service Reliability (10635 (a-d))

Step 3: Projected Multiple-Dry-Year Supply and Demand Comparison

Comparison of the projected single-dry year water supply to the projected single-dry year water use over the next 20 years, in 5-year increments is shown in the following tables.

Projected Single Dry Year Water Supply - AF/Y (Table 43)

	2010	2015	2020	2025	2030
Supply	51,192	51,192	51,192	51,192	51,192
% of projected normal*	141	136	132	103	125

*For projected normal use Table 40

Projected Single Dry Year Water Demand - AF/Y (Table 44)

	2010	2015	2020	2025	2030
Demand	40,798	41,809	42,822	43,834	44,799
% of projected normal*	109	109	109	109	109

*For projected normal use Table 41

Projected Single Dry Year Supply and Demand Comparison - AF/Y (Table 45)

	2010	2015	2020	2025	2030
Supply totals	51,192	51,192	51,192	51,192	51,192
Demand totals	43,200	44,624	46,000	44,670	44,670
Difference (supply minus demand)	40,798	41,809	42,822	43,834	44,799
Difference as % of Supply	10,394	6,658	5,192	6,522	6,522
Difference as % of Demand	20%	13%	10%	13%	13%

Section 7 – Water Service Reliability (10635 (a-d))

Step 3: Projected Multiple-Dry-Year Supply and Demand Comparison

Comparison of the projected multiple-dry year water supply to the projected single-dry year water use over the next 20 years, in 5-year increments is shown in the following tables.

Projected Supply During Multiple Dry Year Period Ending in 2010 - AF/Y (Table 46)

	2006	2007	2008	2009	2010
Supply	51,192	51,192	51,192	51,192	51,192
% of projected normal	141	136	132	103	125

Projected Demand Multiple Dry Year Period Ending in 2010 - AF/Y (Table 47)

	2006	2007	2008	2009	2010
Demand	41,737	42,030	42,326	42,622	42,920
% of projected normal	108	108	108	108	108

Projected Supply & Demand Comparison During Multiple Dry Year Period Ending in 2010 - AF/Y (Table 48)

	2006	2007	2008	2009	2010
Supply totals	51,192	51,192	51,192	51,192	51,192
Demand totals	41,737	42,030	42,326	42,622	42,920
Difference (supply minus demand)	9,455	9,162	8,866	8,570	8,272
Difference as % of Supply	18.5	18	17	17	16
Difference as % of Demand	23	22	21	20	19

The following tables show a comparison of projected supply and demand for a projected multiple dry year period that occurs between 2011-2015.

Projected Supply During Multiple Dry Year Period Ending in 2015 - AF/Y (Table 49)

	2011	2012	2013	2014	2015
Supply	51,192	51,192	51,192	51,192	51,192
% of projected normal	141	136	132	103	125

Projected Demand Multiple Dry Year Period Ending in 2015 - AF/Y (Table 50)

	2011	2012	2013	2014	2015
Demand	41,737	42,031	42,325	44,236	44,570
% of projected normal	109	109	109	109	109

Projected Supply & Demand Comparison During Multiple Dry Year Period Ending in 2015 - AF/Y (Table 51)

	2011	2012	2013	2014	2015
Supply totals	51,192	51,192	51,192	51,192	51,192
Demand totals	41,737	42,031	42,325	44,236	44,570
Difference (supply minus demand)	9,455	9,161	8,867	6,956	6,622
Difference as % of Supply	18.5	18	17	14	13
Difference as % of Demand	23	22	21	16	15

Section 7 – Water Service Reliability (10635 (a-d))

Step 3: Projected Multiple-Dry-Year Supply and Demand Comparison

Comparison of the projected single-dry year water supply to the projected single-dry year water use over the next 20 years, in 5-year increments is shown in the following tables.

Projected Supply During Multiple Dry Year Period Ending in 2020 - AF/Y (Table 52)

	2016	2017	2018	2019	2020
Supply	51,192	51,192	51,192	51,192	51,192
% of projected normal	141	136	132	103	125

Projected Demand Multiple Dry Year Period Ending in 2020 - AF/Y (Table 53)

	2016	2017	2018	2019	2020
Demand	44,906	42,250	45,593	45,939	46,288
% of projected normal	109	109	109	109	109

Projected Supply & Demand Comparison During Multiple Dry Year Period Ending in 2020 - AF/Y (Table 54)

	2016	2017	2018	2019	2020
Supply totals	51,192	51,192	51,192	51,192	51,192
Demand totals	44,906	42,250	45,593	45,939	46,288
Difference (supply minus demand)	6,286	8,942	5,599	5,253	4,904
Difference as % of Supply	12	17.5	11	10	9.6
Difference as % of Demand	14	21	12	11	10.6

Projected Supply During Multiple Dry Year Period Ending in 2025 - AF/Y (Table 55)

	2021	2022	2023	2024	2025
Supply	51,192	51,192	51,192	51,192	51,192
% of projected normal	141	136	132	103	125

Projected Demand Multiple Dry Year Period Ending in 2025 -AF/Y (Table 56)

	2021	2022	2023	2024	2025
Demand	46,569	46,859	47,149	45,939	46,288
% of projected normal	109	111	113	113	113

Projected Supply & Demand Comparison During Multiple Dry Year Period Ending in 2025 - AF/Y (Table 57)

	2021	2022	2023	2024	2025
Supply totals	51,192	51,192	51,192	51,192	51,192
Demand totals	46,569	46,859	47,149	45,939	46,288
Difference (supply minus demand)	4,623	4,333	4,043	5,253	4,904
Difference as % of Supply	9	8.5	8	10	9.6
Difference as % of Demand	10	9	8.6	11	10.6

APPENDIX A
Oceanside 2003-2004
Best Management Practices Report

Water Supply & Reuse

Reporting Unit:

City of Oceanside, Water Dept

Year:

2004

Water Supply Source Information

Supply Source Name	Quantity (AF) Supplied	Supply Type
San Diego County Water Authority	32006.7	Imported
Mission Basin Desalting Facility	3164.6	Groundwater

Total AF: 35171.3

Reported as of 11/14/05

Accounts & Water Use

Reporting Unit Name:
City of Oceanside, Water Dept

Submitted to
CUWCC
12/06/2004

Year:
2004

A. Service Area Population Information:

1. Total service area population 173307

B. Number of Accounts and Water Deliveries (AF)

Type	Metered		Unmetered	
	No. of Accounts	Water Deliveries (AF)	No. of Accounts	Water Deliveries (AF)
1. Single-Family	36965	17162.2	0	0
2. Multi-Family	1966	4378.8	0	0
3. Commercial	1286	2755.2	0	0
4. Industrial	0	0	0	0
5. Institutional	380	1990.1	0	0
6. Dedicated Irrigation	1040	5391.6	0	0
7. Recycled Water	1	75.33	0	0
8. Other	0	0	0	0
9. Unaccounted	NA	0	NA	0
Total	41638	31753.23	0	0

Metered

Unmetered

Reported as of 11/14/05

BMP 01: Water Survey Programs for Single-Family and Multi-Family Residential Customers

Reporting Unit: **City of Oceanside, Water Dept** BMP Form Status: **100% Complete** Year: **2004**

A. Implementation

- | | |
|--|------------|
| 1. Based on your signed MOU date, 10/15/1991, your Agency STRATEGY DUE DATE is: | 10/14/1993 |
| 2. Has your agency developed and implemented a targeting/marketing strategy for SINGLE-FAMILY residential water use surveys? | yes |
| a. If YES, when was it implemented? | 7/1/1995 |
| 3. Has your agency developed and implemented a targeting/marketing strategy for MULTI-FAMILY residential water use surveys? | yes |
| a. If YES, when was it implemented? | 7/1/1995 |

B. Water Survey Data

Survey Counts:	Single Family Accounts	Multi-Family Units
1. Number of surveys offered:	113	1
2. Number of surveys completed:	113	1

Indoor Survey:

- | | | |
|---|-----|-----|
| 3. Check for leaks, including toilets, faucets and meter checks | yes | yes |
| 4. Check showerhead flow rates, aerator flow rates, and offer to replace or recommend replacement, if necessary | yes | yes |
| 5. Check toilet flow rates and offer to install or recommend installation of displacement device or direct customer to ULFT replacement program, as necessary; replace leaking toilet flapper, as necessary | yes | yes |

Outdoor Survey:

- | | | |
|--|-----|----------|
| 6. Check irrigation system and timers | yes | yes |
| 7. Review or develop customer irrigation schedule | yes | yes |
| 8. Measure landscaped area (Recommended but not required for surveys) | yes | yes |
| 9. Measure total irrigable area (Recommended but not required for surveys) | yes | yes |
| 10. Which measurement method is typically used (Recommended but not required for surveys) | | Pacing |
| 11. Were customers provided with information packets that included evaluation results and water savings recommendations? | yes | yes |
| 12. Have the number of surveys offered and completed, survey results, and survey costs been tracked? | yes | yes |
| a. If yes, in what form are surveys tracked? | | database |

 b. Describe how your agency tracks this information.

Contractor tracks number of surveys through a database.

C. Water Survey Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	2846	2254
2. Actual Expenditures	2846	

D. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? No

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."

E. Comments

Reported as of 11/14/05

BMP 02: Residential Plumbing Retrofit

Reporting Unit: **City of Oceanside, Water Dept** BMP Form Status: **100% Complete** Year: **2004**

A. Implementation

1. Is there an enforceable ordinance in effect in your service area requiring replacement of high-flow showerheads and other water use fixtures with their low-flow counterparts? yes

a. If YES, list local jurisdictions in your service area and code or ordinance in each:

The City of Oceanside City Code Chapter 37, Article V., Water Conservation Program, Sec. 37.102, states: "All new development requiring the issuance of a building permit and corresponding issuance of a new or enlarged water meter shall be required to include low flow shower heads and ultra low flush toilets for all new construction authorized by the building permit."

2. Has your agency satisfied the 75% saturation requirement for single-family housing units? yes

3. Estimated percent of single-family households with low-flow showerheads: 75%

4. Has your agency satisfied the 75% saturation requirement for multi-family housing units? yes

5. Estimated percent of multi-family households with low-flow showerheads: 75%

6. If YES to 2 OR 4 above, please describe how saturation was determined, including the dates and results of any survey research.

The San Diego County Water Authority and its member agencies distributed over 550,000 showerheads between 1991 and 2002. The average rate of natural replacement is 4.0%, while housing demolition is 0.5%. And, effective January 1, 1994, showerheads manufactured in the U.S. must be 2.5 gpm maximum. Data gather from the Residential Survey Program (2001 and 2002) showed 80-95% saturation of showerheads in homes surveyed. The Authority was unable to secure monies for a formal saturation study on showerheads during this period, but is continuing to pursue grant-funding opportunities in the future.

B. Low-Flow Device Distribution Information

1. Has your agency developed a targeting/ marketing strategy for distributing low-flow devices? yes

a. If YES, when did your agency begin implementing this strategy? 7/1/1996

b. Describe your targeting/ marketing strategy.

Over 550,000 showerheads have been distributed in the region to date. Marketing efforts in the San Diego region include the following: Residential survey distribution; direct distribution to customers (lobby counter); distribution at community events; by customer request; distribution at CBO events.

Low-Flow Devices Distributed/ Installed	SF Accounts	MF Units
2. Number of low-flow showerheads distributed:	0	0
3. Number of toilet-displacement devices distributed:	0	0
4. Number of toilet flappers distributed:	0	0

5. Number of faucet aerators distributed: 0 0
6. Does your agency track the distribution and cost of low-flow devices? yes
- a. If YES, in what format are low-flow devices tracked? Spreadsheet
- b. If yes, describe your tracking and distribution system :

The San Diego County Water Authority documented distribution in a spreadsheet by region, rather than by specific member agency.

C. Low-Flow Device Distribution Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	0	

D. "At Least As Effective As"

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

The San Diego County Water Authority and its member agencies distributed over 550,000 showerheads between 1991 and 2002. The average rate of natural replacement is 4.0%, while housing demolition is 0.5%. And, effective January 1, 1994, showerheads manufactured in the U.S. must be 2.5 gpm maximum. Data gather from the Residential Survey Program (2001 and 2002) showed 80-95% saturation of showerheads in homes surveyed. The Authority was unable to secure monies for a formal saturation study on showerheads during this period, but is continuing to pursue grant-funding opportunities in the future.

E. Comments

Reported as of 11/14/05

BMP 03: System Water Audits, Leak Detection and Repair

Reporting Unit:	BMP Form Status:	Year:
City of Oceanside, Water Dept	100% Complete	2004

A. Implementation

- | | |
|--|---------|
| 1. Has your agency completed a pre-screening system audit for this reporting year? | yes |
| 2. If YES, enter the values (AF/Year) used to calculate verifiable use as a percent of total production: | |
| a. Determine metered sales (AF) | 33346 |
| b. Determine other system verifiable uses (AF) | 0 |
| c. Determine total supply into the system (AF) | 35171.3 |
| d. Using the numbers above, if (Metered Sales + Other Verifiable Uses) / Total Supply is < 0.9 then a full-scale system audit is required. | 0.95 |
| 3. Does your agency keep necessary data on file to verify the values used to calculate verifiable uses as a percent of total production? | yes |
| 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. | 500 |
| 2. Number of miles of distribution system line surveyed. | 0 |

C. System Audit / Leak Detection Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	0	

D. "At Least As Effective As"

- | | |
|--|----|
| 1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? | No |
| 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." | |

E. Comments

Reported as of 11/14/05

BMP 04: Metering with Commodity Rates for all New Connections and Retrofit of Existing

Reporting Unit: **City of Oceanside, Water Dept** BMP Form Status: **100% Complete** Year: **2004**

A. Implementation

- | | |
|---|-----|
| 1. Does your agency require meters for all new connections and bill by volume-of-use? | yes |
| 2. Does your agency have a program for retrofitting existing unmetered connections and bill by volume-of-use? | no |
| a. If YES, when was the plan to retrofit and bill by volume-of-use existing unmetered connections completed? | |
| b. Describe the program: | |
| 3. Number of previously unmetered accounts fitted with meters during report year. | 0 |

B. Feasibility Study

- | | |
|--|----|
| 1. Has your agency conducted a feasibility study to assess the merits of a program to provide incentives to switch mixed-use accounts to dedicated landscape meters? | no |
| a. If YES, when was the feasibility study conducted? (mm/dd/yy) | |
| b. Describe the feasibility study: | |
| 2. Number of CII accounts with mixed-use meters. | 0 |
| 3. Number of CII accounts with mixed-use meters retrofitted with dedicated irrigation meters during reporting period. | 0 |

C. Meter Retrofit Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	0	

D. "At Least As Effective As"

- | | |
|--|----|
| 1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? | No |
| 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." | |

E. Comments

The City of Oceanside requires certain commercial and industrial customers to retrofit mixed-use meters with dedicated irrigation meters upon issuance of a building or tenant improvement permit. The number of retrofitted meters has not been tracked, but a procedure is being developed to achieve this.

Reported as of 11/14/05

BMP 05: Large Landscape Conservation Programs and Incentives

Reporting Unit:
**City of Oceanside,
 Water Dept**

BMP Form Status:
100% Complete

Year:
2004

A. Water Use Budgets

- | | |
|--|------|
| 1. Number of Dedicated Irrigation Meter Accounts: | 1040 |
| 2. Number of Dedicated Irrigation Meter Accounts with Water Budgets: | 0 |
| 3. Budgeted Use for Irrigation Meter Accounts with Water Budgets (AF): | 0 |
| 4. Actual Use for Irrigation Meter Accounts with Water Budgets (AF): | 0 |
| 5. Does your agency provide water use notices to accounts with budgets each billing cycle? | no |

B. Landscape Surveys

- | | |
|--|-----------|
| 1. Has your agency developed a marketing / targeting strategy for landscape surveys? | yes |
| a. If YES, when did your agency begin implementing this strategy? | 8/10/1990 |
| b. Description of marketing / targeting strategy: | |

Potential customers are prescreened by reviewing water usage data records and comparing typical patterns of other industry or SIC water usage. Customers that exhibit unusually high water usage relative to the size of the property are sent a letter and a program brochure, inviting them to participate in the program. Dispersal of brochures and advertising to a variety of candidates, home owners associations as well as large turf customers. Conservation Coordinator's initiative Referral from customers.

- | | |
|---|-----|
| 2. Number of Surveys Offered. | 10 |
| 3. Number of Surveys Completed. | 4 |
| 4. Indicate which of the following Landscape Elements are part of your survey: | |
| a. Irrigation System Check | yes |
| b. Distribution Uniformity Analysis | yes |
| c. Review / Develop Irrigation Schedules | yes |
| d. Measure Landscape Area | yes |
| e. Measure Total Irrigable Area | yes |
| f. Provide Customer Report / Information | yes |
| 5. Do you track survey offers and results? | yes |
| 6. Does your agency provide follow-up surveys for previously completed surveys? | yes |
| a. If YES, describe below: | |

All customers receive an offer for a follow-up survey.

C. Other BMP 5 Actions

- | | |
|---|----|
| 1. An agency can provide mixed-use accounts with ETo-based landscape budgets in lieu of a large landscape survey program. | no |
|---|----|

Does your agency provide mixed-use accounts with landscape budgets?

2. Number of CII mixed-use accounts with landscape budgets.

3. Do you offer landscape irrigation training? yes

4. Does your agency offer financial incentives to improve landscape water use efficiency? yes

Type of Financial Incentive:	Budget (Dollars/Year)	Number Awarded to Customers	Total Amount Awarded
a. Rebates	0	0	0
b. Loans	0	0	0
c. Grants	0	0	0

5. Do you provide landscape water use efficiency information to new customers and customers changing services? yes

a. If YES, describe below:

Brochures.

6. Do you have irrigated landscaping at your facilities? yes

a. If yes, is it water-efficient? yes

b. If yes, does it have dedicated irrigation metering? yes

7. Do you provide customer notices at the start of the irrigation season? yes

8. Do you provide customer notices at the end of the irrigation season? yes

D. Landscape Conservation Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	3049	2760
2. Actual Expenditures	1868.25	

E. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? No

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."

F. Comments

Reported as of 11/14/05

BMP 06: High-Efficiency Washing Machine Rebate Programs

Reporting Unit: **City of Oceanside, Water Dept** BMP Form Status: **100% Complete** Year: **2004**

A. Implementation

1. Do any energy service providers or waste water utilities in your service area offer rebates for high-efficiency washers? yes

a. If YES, describe the offerings and incentives as well as who the energy/waste water utility provider is.

San Diego Gas & Electric offered tiered rebates of \$75 and \$125.

2. Does your agency offer rebates for high-efficiency washers? yes

3. What is the level of the rebate? 125

4. Number of rebates awarded. 582

B. Rebate Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	13662	13536
2. Actual Expenditures	13378.5	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? no

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."

D. Comments

Reported as of 11/14/05

BMP 07: Public Information Programs

Reporting Unit:

BMP Form Status:

Year:

City of Oceanside, Water Dept**100% Complete****2004****A. Implementation**

1. Does your agency maintain an active public information program to promote and educate customers about water conservation? yes

a. If YES, describe the program and how it's organized.

The City of Oceanside received a grant from the Metropolitan Water District to create a drought-tolerant and native plant demonstration garden. This garden, located at the Buena Vista Lagoon Nature Center, educates and informs the public about conserving water outdoors. Regional: Advertising in local newspapers Demonstration Garden. The San Diego County Water Authority is a partner in the Conservation Garden and it's available to all member agencies. Monthly public information meetings that provide a regional conservation strategy. Speakers' Bureau Water Awareness Month Irrigation and water efficiency landscape classes In Oceanside. Giveaways in lobby; cable tv appearances; North County Water Agencies Water Awareness Month 4th grade poster contest; Oceanside magazine articles; brochures sent with all customer correspondence.

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

Public Information Program Activity	Yes/No	Number of Events
a. Paid Advertising	no	
b. Public Service Announcement	no	
c. Bill Inserts / Newsletters / Brochures	yes	3
d. Bill showing water usage in comparison to previous year's usage	yes	
e. Demonstration Gardens	yes	1
f. Special Events, Media Events	yes	3
g. Speaker's Bureau	no	
h. Program to coordinate with other government agencies, industry and public interest groups and media	yes	

B. Conservation Information Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	40000	40000
2. Actual Expenditures	38442	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? No

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."

D. Comments

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BMP 08: School Education Programs

Reporting Unit: **City of Oceanside, Water Dept** BMP Form Status: **100% Complete** Year: **2004**

A. Implementation

1. Has your agency implemented a school information program to promote water conservation? yes

2. Please provide information on your school programs (by grade level):

Grade	Are grade-appropriate materials distributed?	No. of class presentations	No. of students reached	No. of teachers' workshops
Grades K-3rd	yes	33	675	0
Grades 4th-6th	yes	16	510	0
Grades 7th-8th	yes	3	100	0
High School	yes	4	120	0

3. Did your Agency's materials meet state education framework requirements? yes

4. When did your Agency begin implementing this program? 1/1/1992

B. School Education Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	1470	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? No

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."

D. Comments

Reported as of 11/14/05

BMP 09: Conservation Programs for CII Accounts

Reporting Unit:

**City of Oceanside, Water
Dept**

BMP Form Status:
100% Complete

Year:
2004

A. Implementation

- | | |
|--|-----|
| 1. Has your agency identified and ranked COMMERCIAL customers according to use? | yes |
| 2. Has your agency identified and ranked INDUSTRIAL customers according to use? | yes |
| 3. Has your agency identified and ranked INSTITUTIONAL customers according to use? | yes |

Option A: CII Water Use Survey and Customer Incentives Program

- | | |
|---|----|
| 4. Is your agency operating a CII water use survey and customer incentives program for the purpose of complying with BMP 9 under this option? | no |
|---|----|

CII Surveys	Commercial Accounts	Industrial Accounts	Institutional Accounts
a. Number of New Surveys Offered	0	0	0
b. Number of New Surveys Completed	0	0	0
c. Number of Site Follow-ups of Previous Surveys (within 1 yr)	0	0	0
d. Number of Phone Follow-ups of Previous Surveys (within 1 yr)	0	0	0
CII Survey Components	Commercial Accounts	Industrial Accounts	Institutional Accounts
e. Site Visit	no	no	no
f. Evaluation of all water-using apparatus and processes	no	no	no
g. Customer report identifying recommended efficiency measures, paybacks and agency incentives	no	no	no
Agency CII Customer Incentives	Budget (\$/Year)	No. Awarded to Customers	Total \$ Amount Awarded
h. Rebates	0	0	0
i. Loans	0	0	0
j. Grants	0	0	0
k. Others	0	0	0

Option B: CII Conservation Program Targets

5. Does your agency track CII program interventions and water savings for the purpose of complying with BMP 9 under this option?	yes
6. Does your agency document and maintain records on how savings were realized and the method of calculation for estimated savings?	yes
7. Estimated annual savings (AF/yr) from site-verified actions taken by agency since 1991.	60.79
8. Estimated annual savings (AF/yr) from non-site-verified actions taken by agency since 1991.	0

B. Conservation Program Expenditures for CII Accounts

	This Year	Next Year
1. Budgeted Expenditures	8436	8235
2. Actual Expenditures	5450	

C. "At Least As Effective As"

- | | |
|--|----|
| 1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? | No |
| 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." | |

D. Comments

Reported as of 11/14/05

BMP 09a: CII ULFT Water Savings

Reporting Unit:

**City of Oceanside,
Water Dept**

BMP Form Status:

100% Complete

Year:

2004

1. Did your agency implement a CII ULFT replacement program in the reporting year?
If No, please explain why on Line B.
10.

Yes

A. Targeting and Marketing

1. What basis does your agency use to target customers for participation in this program? Check all that apply.

Potential savings
CII Sector or subsector

- a. Describe which method you found to be the most effective overall, and which was the most effective per dollar expended.

Our CII Voucher Incentive Program contractor, HDMC, has been a significant player in the promotion of water-efficient products in San Diego County. Working in cooperation with WSA Marketing, a San Diego-based marketing and communications firm, HDMC has conducted extensive education, outreach, public relations, advertising and direct-marketing activities. HDMC and WSA Marketing have created relationships with the owners, managers and related customer service supervisors and staff at water-efficient product suppliers from Valley Center to San Ysidro for the past five years. Partnerships have been established with business owners, as well as key employees at wholesale and retail suppliers. Understanding of suppliers' business profiles, sales operations and accounting policies and procedures is key to the success of the program. Working relationships and/or qualified data has been gather on over 200 plumbers. Dealers sign contracts each year in order to participate in a program that is responsible for increasing their sales substantially.

2. How does your agency advertise this program?
Check all that apply.

Newsletter
Trade publications
Other print media
Trade shows and events

- a. Describe which method you found to be the most effective overall, and which was the most effective per dollar expended.

Extensive marketing in the region, outreach to retail and wholesale dealers with ongoing communication and training has made this program successful in this region.

B. Implementation

1. Does your agency keep and maintain customer participant information? (Read the Help information

Yes

for a complete list of all the information for this BMP.)

2. Would your agency be willing to share this information if the CUWCC did a study to evaluate the program on behalf of your agency? Yes
3. What is the total number of customer accounts participating in the program during the last year ? 0

CII Subsector	Number of Toilets Replaced					Type Not Specified
	Standard Gravity Tank	Air Assisted	Valve Floor Mount	Valve Wall Mount		
4.						
a. Offices	0	0	0	0	0	0
b. Retail / Wholesale	0	0	0	0	0	0
c. Hotels	0	0	0	0	0	0
d. Health	0	0	0	0	0	0
e. Industrial	0	0	0	0	0	0
f. Schools: K to 12	0	0	0	0	0	0
g. Eating	0	0	0	0	0	0
h. Government	0	0	0	0	0	0
i. Churches	0	0	0	0	0	0
j. Other	0	0	0	0	0	0
5. Program design.				Rebate or voucher		
6. Does your agency use outside services to implement this program?					Yes	
a. If yes, check all that apply.				Consultant		
				Plumbing contractors/subcontracts		
7. Participant tracking and follow-up.				Telephone		
				Site Visit		
8. Based on your program experience, please rank on a scale of 1 to 5, with 1 being the least frequent cause and 5 being the most frequent cause, the following reasons why customers refused to participate in the program.						
a. Disruption to business					4	
b. Inadequate payback					5	
c. Inadequate ULFT performance					3	
d. Lack of funding					5	
e. American's with Disabilities Act					2	
f. Permitting					2	
g. Other. Please describe in B. 9.						

9. Please describe general program acceptance/resistance by customers, obstacles to implementation, and other issues affecting program implementation or effectiveness.

The CII Voucher Incentive Program continues to increase in popularity in the San Diego region. Extensive marketing by our contractor, coupled with member agency support, has proven to be quite successful.

10. Please provide a general assessment of the program for this reporting year. Did your program achieve its objectives? Were your targeting and marketing approaches effective? Were program costs in line with expectations and budgeting?

Objectives were achieved. Marketing was effective and program costs matched expectations and budget.

C. Conservation Program Expenditures for CII ULFT

1. CII ULFT Program: Annual Budget & Expenditure Data

	Budgeted	Actual Expenditure
a. Labor	0	0
b. Materials	0	0
c. Marketing & Advertising	0	0
d. Administration & Overhead	0	0
e. Outside Services	0	0
f. Total	0	0

2. CII ULFT Program: Annual Cost Sharing

a. Wholesale agency contribution	0
b. State agency contribution	0
c. Federal agency contribution	0
d. Other contribution	0
e. Total	0

D. Comments

This study was a three-year study which was concluded in FY03.

Reported as of 11/14/05

BMP 11: Conservation Pricing

Reporting Unit:
City of Oceanside, Water Dept

BMP Form
 Status:
100% Complete

Year:
2004

A. Implementation**Rate Structure Data Volumetric Rates for Water Service by Customer Class****1. Residential**

a. Water Rate Structure	Increasing Block
b. Sewer Rate Structure	Uniform
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	Uniform
b. Sewer Rate Structure	Uniform
c. Total Revenue from Volumetric Rates	\$0
d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources	\$0

3. Industrial

a. Water Rate Structure	Uniform
b. Sewer Rate Structure	Uniform
c. Total Revenue from Volumetric Rates	\$0
d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources	\$0

4. Institutional / Government

a. Water Rate Structure	Uniform
b. Sewer Rate Structure	Uniform
c. Total Revenue from Volumetric Rates	\$0
d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources	\$0

5. Irrigation

a. Water Rate Structure	Uniform
b. Sewer Rate Structure	Uniform
c. Total Revenue from Volumetric Rates	\$0
d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources	\$0

6. Other

a. Water Rate Structure	Uniform
b. Sewer Rate Structure	Uniform
c. Total Revenue from Volumetric Rates	\$23332489.37
d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources	\$10342493.37

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" variant of this BMP? No

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."

D. Comments

The City of Oceanside does not have a method of separating its revenue by each customer class. Oceanside does not have a budget for conservation pricing because this is a part of our rate structure. The annual review of rates that is performed is part of our regular operations and maintenance costs.

Reported as of 11/14/05

BMP 12: Conservation Coordinator

Reporting Unit:

**City of Oceanside, Water
Dept**BMP Form Status:
100% CompleteYear:
2004**A. Implementation**

1. Does your Agency have a conservation coordinator? yes
2. Is this a full-time position? no
3. If no, is the coordinator supplied by another agency with which you cooperate in a regional conservation program ? yes
4. Partner agency's name: San Diego County Water Authority
5. If your agency supplies the conservation coordinator:
 - a. What percent is this conservation coordinator's position? 20%
 - b. Coordinator's Name Judith Ludlow
 - c. Coordinator's Title Sr. Management Analyst
 - d. Coordinator's Experience and Number of Years Development and implementation of conservation programs for 7 years
 - e. Date Coordinator's position was created (mm/dd/yyyy) 7/1/1995
6. Number of conservation staff, including Conservation Coordinator. 2

B. Conservation Staff Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	12260	12870
2. Actual Expenditures	12260	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? no
 - 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."

D. Comments

The City of Oceanside has hired an Environmental Specialist whose primary duties are to educate the public about urban runoff and storm water issues. This employee also delivers water conservation information as part of her duties. Although the San Diego County Water Authority does not provide a coordinator to Oceanside, they do provide conservation program and activities assistance.

Reported as of 11/14/05

BMP 13: Water Waste Prohibition

Reporting Unit: **City of Oceanside, Water Dept** BMP Form Status: **100% Complete** Year: **2004**

A. Requirements for Documenting BMP Implementation

1. Is a water waste prohibition ordinance in effect in your service area? yes

a. If YES, describe the ordinance:

OCEANSIDE CITY CODE, Chapter 37, Article I. In General, Section 37.3 prohibits willful or neglectful water waste. Chapter 37, Article V, Water Conservation Program, Section 37.100 through 37.109 establishes the authority of the water utilities director to determine and declare a water shortage, conditions of a water shortage, percentages of reduction, development standards, general conservation measures, conservation stages, cutback percentage targets, public notification requirements, and penalties for violation.

2. Is a copy of the most current ordinance(s) on file with CUWCC? yes

a. List local jurisdictions in your service area in the first text box and water waste ordinance citations in each jurisdiction in the second text box:

City of Oceanside	Oceanside City Code, Chapter 37, Article I, Section 37.3; Article V, Water Conservation Program
-------------------	---

B. Implementation

1. Indicate which of the water uses listed below are prohibited by your agency or service area.

- | | |
|--|-----|
| a. Gutter flooding | yes |
| b. Single-pass cooling systems for new connections | yes |
| c. Non-recirculating systems in all new conveyor or car wash systems | yes |
| d. Non-recirculating systems in all new commercial laundry systems | yes |
| e. Non-recirculating systems in all new decorative fountains | yes |
| f. Other, please name | no |

2. Describe measures that prohibit water uses listed above:

OCEANSIDE CITY CODE Section 1.7. Penalty (a) Misdemeanors. (1) Whenever in any article, section or provisions of the Oceanside City Code or other ordinance of the city any act is prohibited or is made or declared to be unlawful or an offense, or the doing of any act is mandated, or the failure to do any act is made or declared to be unlawful or an offense, then the violation of any such article, section or provision is a misdemeanor punishable by a fine not exceeding one thousand dollars (\$1,000.00) or imprisonment for a term not exceeding six (6) months, or by both such fine and imprisonment unless some other criminal penalty is specifically stated in the article, section or provision. (3) Notwithstanding subsection (a)(1) of this section, the city attorney may prosecute or authorize and direct the prosecution of any article, section or provision of the Oceanside City Code as an infraction punishable according to subsection (b) of this section. (b) Infractions. (2) Violations of any article, section or provision prosecuted as an infraction

shall be punishable by: a. A fine not exceeding one hundred dollars (\$100.00) for a first violation; b. A fine not exceeding two hundred dollars (\$200.00) for a second violation of the same article, section or provision within one year; c. A fine not exceeding five hundred dollars (\$500.00) for each violation of the same article, section or provision within one year. (3) The fourth and each additional violation of any article, section or provision punishable as an infraction within one year is a misdemeanor punishable according to subsection (a) of this section. (c) Conditional sentencing. In addition to the fines and/or imprisonment set forth above, both conditional sentencing and probation are authorized as sentencing options in accordance with Penal Code Section 1203(a). (d) Each day a separate offense. Each and every day during any portion of which a violation of a city code or ordinance is committed, continued or permitted is a separate offense. (e) Effect of conviction upon liability for fees or charges. The conviction and punishment of any person, firm, company, or corporation under this section for a violation of any article, section or provision of any city code or ordinance shall not excuse or exempt such person, firm, company or corporation from the payment of any fee, charge, rate or tax payable under the same or any similar code or ordinance. (f) Conflict with other penalty provisions. The provisions of this section shall to the greatest extent possible be construed consistently with other penalty provisions contained in various codes and ordinance of the city. The provisions of this section shall prevail over other penalty provisions in any city code or ordinance in the event of a conflict. In the event that no penalties are specified in a code or ordinance the provisions of this section shall apply. (g) Additional remedies; public nuisance; civil penalty or action. Any condition caused, maintained, existing or permitted to exist in violation of any article, section or provision of this code or of any other ordinance of the city, or in violation of any permit, license, certificate, or authorization issued or given pursuant to this code or any other ordinance of the city, is hereby declared to be public nuisance and may, in addition to imposition of the penalties established by this section, be abated as such. The city council or city manager may authorize the city attorney to commence civil action to redress or abate any such violation. Additionally, any public nuisance may be summarily abated according to procedures established by this code, other city ordinance or state statute. The civil redress for violation of this code or city ordinance includes: equitable relief; forfeiture of any permit, license, certificate or authorization of any nature granted by the city and related to the violation; civil penalties as established by the city council; and any other civil remedy allowed under the laws of the State of California. Section 37.109. Violation; remedies. (a) The penalties for violations of this article are set forth in Section 1.7 (a)(1) of the City Code. (b) No customer shall knowingly make, cause, use, or permit the use of water for residential, commercial, industrial, agricultural, governmental, or any other purpose in a manner contrary to any provision of this article, or in an amount in excess of that use permitted by the conservation stages which are in effect pursuant to the provisions of this article. (c) In addition to any other remedies which the city may have for the enforcement of this article, service of water may be discontinued or appropriately limited to any customer who willfully uses water in violation of any provision hereof.

Water Softeners:

3. Indicate which of the following measures your agency has supported in developing state law:

a. Allow the sale of more efficient, demand-initiated regenerating DIR models.

no

b. Develop minimum appliance efficiency standards that:

- i.) Increase the regeneration efficiency standard to at least 3,350 grains of hardness removed per pound of common salt used. no
- ii.) Implement an identified maximum number of gallons discharged per gallon of soft water produced. no
- c. Allow local agencies, including municipalities and special districts, to set more stringent standards and/or to ban on-site regeneration of water softeners if it is demonstrated and found by the agency governing board that there is an adverse effect on the reclaimed water or groundwater supply. no
4. Does your agency include water softener checks in home water audit programs? no
5. Does your agency include information about DIR and exchange-type water softeners in educational efforts to encourage replacement of less efficient timer models? no

C. Water Waste Prohibition Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	0	

D. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? no
- 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."

E. Comments

Oceanside does not have a budget for a water waste prohibition program because enforcement is part of our regular operations and maintenance costs.

Reported as of 11/14/05

BMP 14: Residential ULFT Replacement Programs

Reporting Unit: **City of Oceanside, Water Dept** BMP Form Status: **100% Complete** Year: **2004**

A. Implementation

	Single-Family Accounts	Multi- Family Units
1. Does your Agency have program(s) for replacing high-water-using toilets with ultra-low flush toilets?	yes	yes
Number of Toilets Replaced by Agency Program During Report Year		
Replacement Method	SF Accounts	MF Units
2. Rebate	0	0
3. Direct Install	0	0
4. CBO Distribution	0	0
5. Other	883	290
Total	883	290

6. Describe your agency's ULFT program for single-family residences.

Through this program, participating residential customers are offered a voucher redeemable for up to \$75 off the purchase price of a ULFT. The voucher can only be used to replace toilets that are 3.5 gpf or more. The ULFT Voucher Incentive Program has extensive marketing outreach.

7. Describe your agency's ULFT program for multi-family residences.

Same as above. Single-family and multi-family customers are eligible to participate. Customers must be replacing existing high-volume fixtures.

8. Is a toilet retrofit on resale ordinance in effect for your service area? no

9. List local jurisdictions in your service area in the left box and ordinance citations in each jurisdiction in the right box:

B. Residential ULFT Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	28146	37868
2. Actual Expenditures	25869.25	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? no

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."

D. Comments

APPENDIX B
Oceanside 2003-2004
Best Management Practices Coverage Report

BMP 01 Coverage: Water Survey Programs for Single-Family and Multi-Family Residential Customers

Reporting Unit:
City of Oceanside, Water Dept

Reporting Period:
03-04

MOU Exhibit 1 Coverage Requirement

No exemption request filed

Agency indicated "at least as effective as" implementation during report period? No

A Reporting Unit (RU) must meet three conditions to satisfy strict compliance for BMP 1.

Condition 1: Adopt survey targeting and marketing strategy on time

Condition 2: Offer surveys to 20% of SF accounts and 20% of MF units during report period

Condition 3: Be on track to survey 15% of SF accounts and 15% of MF units within 10 years of implementation start date.

Test for Condition 1

City of Oceanside, Water Dept to Implement Targeting/Marketing Program by:	1999		
		<u>Single-Family</u>	<u>Multi-Family</u>
Year City of Oceanside, Water Dept Reported Implementing Targeting/Marketing Program:	1996	1996	1996
City of Oceanside, Water Dept Met Targeting/Marketing Coverage Requirement:	YES	YES	YES

Test for Condition 2

			<u>Single-Family</u>	<u>Multi-Family</u>
Survey Program to Start by:	1998	Residential Survey Offers (%)	0.57%	0.10%
Reporting Period:	03-04	Survey Offers \geq 20%	NO	NO

Test for Condition 3

	Completed Residential Surveys	
	<u>Single Family</u>	<u>Multi-Family</u>
Total Completed Surveys 1999 - 2004:	328	3
Past Credit for Surveys Completed Prior to 1999 (Implementation of Reporting Database):	655	24
Total + Credit	983	27
Residential Accounts in Base Year	33,547	1,927
City of Oceanside, Water Dept Survey Coverage as % of Base Year Residential Accounts	2.93%	1.40%

Coverage Requirement by Year 7 of Implementation per Exhibit 1	7.90%	7.90%
City of Oceanside, Water Dept on Schedule to Meet 10-Year Coverage Requirement	NO	NO

BMP 1 COVERAGE STATUS SUMMARY:

Water supplier has not met one or more coverage requirements for this BMP.

BMP 02 Coverage: Residential Plumbing Retrofit

Reporting Unit:

Reporting Period:

City of Oceanside, Water Dept

03-04

MOU Exhibit 1 Coverage Requirement

No exemption request filed

Agency indicated "at least as effective as" implementation during report period?

Yes

An agency must meet one of three conditions to satisfy strict compliance for BMP 2.

Condition 1: The agency has demonstrated that 75% of SF accounts and 75% of MF units constructed prior to 1992 are fitted with low-flow showerheads.

Condition 2: An enforceable ordinance requiring the replacement of high-flow showerheads and other water use fixtures with their low-flow counterparts is in place for the agency's service area.

Condition 3: The agency has distributed or directly installed low-flow showerheads and other low-flow plumbing devices to not less than 10% of single-family accounts and 10% of multi-family units constructed prior to 1992 during the reporting period.

Test for Condition 1

Report Year	Report Period	Single-Family		Multi-Family	
		Reported Saturation	Saturation > 75%?	Reported Saturation	Saturation > 75%?
1999	99-00	75.00%	YES	75.00%	YES
2000	99-00	75.00%	YES	75.00%	YES
2001	01-02	75.00%	YES	75.00%	YES
2002	01-02	75.00%	YES	75.00%	YES
2003	03-04	75.00%	YES	75.00%	YES
2004	03-04	75.00%	YES	75.00%	YES

Test for Condition 2

Report Year	Report Period	City of Oceanside, Water Dept has ordinance requiring showerhead retrofit?
1999	99-00	YES
2000	99-00	YES
2001	01-02	YES
2002	01-02	YES
2003	03-04	YES
2004	03-04	YES

Test for Condition 3

Reporting Period: 03-04

<u>1992 SF Accounts</u>	<u>Num. Showerheads Distributed to SF Accounts</u>	<u>Single-Family Coverage Ratio</u>	<u>SF Coverage Ratio > 10%</u>
32,615			NO
<u>1992 MF Accounts</u>	<u>Num. Showerheads Distributed to MF Accounts</u>	<u>Multi-Family Coverage Ratio</u>	<u>MF Coverage Ratio > 10%</u>
16,711			NO

BMP 2 COVERAGE STATUS SUMMARY:

Water supplier is meeting coverage requirements for this BMP.

BMP 03 Coverage: System Water Audits, Leak Detection and Repair

Reporting Unit:
City of Oceanside, Water Dept

Reporting Period:
03-04

MOU Exhibit 1 Coverage Requirement

No exemption request filed

Agency indicated "at least as effective as" implementation during report period? No

An agency must meet one of two conditions to be in compliance with BMP 3:

Condition 1: Perform a prescreening audit. If the result is equal to or greater than 0.9 nothing more needs be done.

Condition 2: Perform a prescreening audit. If the result is less than 0.9, perform a full audit in accordance with AWWA's Manual of Water Supply Practices, Water Audits, and Leak Detection.

Test for Conditions 1 and 2

<u>Report Year</u>	<u>Report Period</u>	<u>Pre-Screen Completed</u>	<u>Pre-Screen Result</u>	<u>Full Audit Indicated</u>	<u>Full Audit Completed</u>
1999	99-00	NO			NO
2000	99-00	NO			NO
2001	01-02	YES	94.9%	No	NO
2002	01-02	YES	99.3%	No	NO
2003	03-04	YES	91.8%	No	NO
2004	03-04	YES	94.8%	No	NO

BMP 3 COVERAGE STATUS SUMMARY:

Water supplier is meeting coverage requirements for this BMP.

BMP 04 Coverage: Metering with Commodity Rates for all New Connections and Retrofit of Existing

Reporting Unit:
City of Oceanside, Water
 Dept

Reporting Period:
03-04

MOU Exhibit 1 Coverage Requirement

No exemption request filed

Agency indicated "at least as effective as" implementation during report period? No

An agency must be on track to retrofit 100% of its unmetered accounts within 10 years to be in compliance with BMP 4.

Test for Compliance

Total Meter Retrofits
 Reported through 2004

No. of Unmetered Accounts
 in Base Year

Meter Retrofit Coverage as
 % of Base Year Unmetered
 Accounts

Coverage Requirement by
 Year 6 of Implementation per
 Exhibit 1 42.0%

RU on Schedule to meet 10
 Year Coverage Requirement YES

BMP 4 COVERAGE STATUS SUMMARY:

Water supplier is meeting coverage requirements for this BMP.

BMP 05 Coverage: Large Landscape Conservation Programs and Incentives

Reporting Unit:
City of Oceanside, Water Dept

Reporting Period:
03-04

MOU Exhibit 1 Coverage Requirement

No exemption request filed

Agency indicated "at least as effective as" implementation during report period? No

An agency must meet three conditions to comply with BMP 5.

Condition 1: Develop water budgets for 90% of its dedicated landscape meter accounts within four years of the date implementation is to start.

Condition 2: (a) Offer landscape surveys to at least 20% of its CII accounts with mixed use meters each report cycle and be on track to survey at least 15% of its CII accounts with mixed use meters within 10 years of the date implementation is to start OR (b) Implement a dedicated landscape meter retrofit program for CII accounts with mixed use meters or assign landscape budgets to mixed use meters.

Condition 3: Implement and maintain customer incentive program(s) for irrigation equipment retrofits.

Test for Condition 1

Year	Report Period	BMP 5 Implementation Year	No. of Irrigation Meter Accounts	No. of Irrigation Accounts with Budgets	Budget Coverage Ratio	90% Coverage Met by Year 4
1999	99-00	1	887			NA
2000	99-00	2	908			NA
2001	01-02	3	941			NA
2002	01-02	4	891			No
2003	03-04	5	890			No
2004	03-04	6	1,040			No

Test for Condition 2a (survey offers)

Select Reporting Period:	03-04
Large Landscape Survey Offers as % of Mixed Use Meter CII Accounts	1.2%
Survey Offers Equal or Exceed 20% Coverage Requirement	NO

Test for Condition 2a (surveys completed)

Total Completed Landscape Surveys Reported through Credit for Surveys Completed Prior to Implementation of Reporting Database	19
Total + Credit	19
CII Accounts in Base Year	1,385
RU Survey Coverage as a % of Base Year CII Accounts	1.4%
Coverage Requirement by Year of Implementation per Exhibit 1	6.3%
RU on Schedule to Meet 10 Year Coverage Requirement	NO

Test for Condition 2b (mixed use budget or meter retrofit program)

<u>Report Year</u>	<u>Report Period</u>	<u>BMP 5 Implementation Year</u>	<u>Agency has mix-use budget program</u>	<u>No. of mixed-use budgets</u>
1999	99-00	1	NO	
2000	99-00	2	NO	
2001	01-02	3	NO	
2002	01-02	4	NO	
2003	03-04	5	NO	
2004	03-04	6	NO	

<u>Report Year</u>	<u>Report Period</u>	<u>BMP 4 Implementation Year</u>	<u>No. of mixed use CII accounts</u>	<u>No. of mixed use CII accounts fitted with irrig. meters</u>
1999	99-00	1		
2000	99-00	2		
2001	01-02	3		
2002	01-02	4		
2003	03-04	5		
2004	03-04	6		

Test for Condition 3

<u>Report Year</u>	<u>Report Period</u>	<u>BMP 5 Implementation Year</u>	<u>RU offers financial incentives?</u>	<u>No. of Loans</u>	<u>Total Amt. Loans</u>
1999	99-00	1	NO		
2000	99-00	2	YES		
2001	01-02	3	NO		
2002	01-02	4	YES		
2003	03-04	5	YES		
2004	03-04	6	YES		

<u>Report Year</u>	<u>Report Period</u>	<u>No. of Grants</u>	<u>Total Amt. Grants</u>	<u>No. of rebates</u>	<u>Total Amt. Rebates</u>
1999	99-00				
2000	99-00				
2001	01-02			1	
2002	01-02			1	1
2003	03-04				
2004	03-04				

BMP 5 COVERAGE STATUS SUMMARY:

Water supplier has not met one or more coverage requirements for this BMP.

BMP 06 Coverage: High-Efficiency Washing Machine Rebate Programs

Reporting Unit:
City of Oceanside, Water Dept

Reporting Period:
03-04

MOU Exhibit 1 Coverage Requirement

No exemption request filed

Agency indicated "at least as effective as" implementation during report period? No

An agency must meet one condition to comply with BMP 6.

Condition 1: Offer a cost-effective financial incentive for high-efficiency washers if one or more energy service providers in service area offer financial incentives for high-efficiency washers.

Test for Condition 1

<u>Year</u>	<u>Report Period</u>	<u>BMP 6 Implementation Year</u>	<u>Rebate Offered by ESP?</u>	<u>Rebate Offered by RU?</u>	<u>Rebate Amount</u>
1999	99-00	1	NO	NO	
2000	99-00	2	YES	NO	
2001	01-02	3	YES	YES	125.00
2002	01-02	4	YES	YES	125.00
2003	03-04	5	YES	YES	125.00
2004	03-04	6	YES	YES	125.00

<u>Year</u>	<u>Report Period</u>	<u>BMP 6 Implementation Year</u>	<u>No. Rebates Awarded</u>	<u>Coverage Met?</u>
1999	99-00	1		YES
2000	99-00	2	77	NO
2001	01-02	3	65	YES
2002	01-02	4	182	YES
2003	03-04	5	424	YES
2004	03-04	6	582	YES

BMP 6 COVERAGE STATUS SUMMARY:

Water supplier is meeting coverage requirements for this BMP.

BMP 07 Coverage: Public Information Programs

Reporting Unit:
City of Oceanside, Water Dept

Reporting Period:
03-04

MOU Exhibit 1 Coverage Requirement

No exemption request filed

Agency indicated "at least as effective as" implementation during report period? No

An agency must meet one condition to comply with BMP 7.

Condition 1: Implement and maintain a public information program consistent with BMP 7's definition.

Test for Condition 1

<u>Year</u>	<u>Report Period</u>	<u>BMP 7 Implementation Year</u>	<u>RU Has Public Information Program?</u>
1999	99-00	2	YES
2000	99-00	3	YES
2001	01-02	4	YES
2002	01-02	5	YES
2003	03-04	6	YES
2004	03-04	7	YES

BMP 7 COVERAGE STATUS SUMMARY:

Water supplier is meeting coverage requirements for this BMP.

BMP 08 Coverage: School Education Programs

Reporting Unit:

City of Oceanside, Water Dept

Reporting Period:

03-04

MOU Exhibit 1 Coverage Requirement

No exemption request filed

Agency indicated "at least as effective as" implementation during report period?

No

An agency must meet one condition to comply with BMP 8.

Condition 1: Implement and maintain a school education program consistent with BMP 8's definition.

Test for Condition 1

<u>Year</u>	<u>Report Period</u>	<u>BMP 8 Implementation Year</u>	<u>RU Has School Education Program?</u>
1999	99-00	2	YES
2000	99-00	3	YES
2001	01-02	4	YES
2002	01-02	5	YES
2003	03-04	6	YES
2004	03-04	7	YES

BMP 8 COVERAGE STATUS SUMMARY:

Water supplier is meeting coverage requirements for this BMP.

BMP 09 Coverage: Conservation Programs for CII Accounts

Reporting Unit:
City of Oceanside, Water Dept

Reporting Period:
03-04

MOU Exhibit 1 Coverage Requirement

No exemption request filed

Agency indicated "at least as effective as" implementation during report period? No

An agency must meet three conditions to comply with BMP 9.

Condition 1: Agency has identified and ranked by use commercial, industrial, and institutional accounts.

Condition 2(a): Agency is on track to survey 10% of commercial accounts, 10% of industrial accounts, and 10% of institutional accounts within 10 years of date implementation to commence.

OR

Condition 2(b): Agency is on track to reduce CII water use by an amount equal to 10% of baseline use within 10 years of date implementation to commence.

OR

Condition 2(c): Agency is on track to meet the combined target as described in Exhibit 1 BMP 9 documentation.

Test for Condition 1

<u>Year</u>	<u>Report Period</u>	<u>BMP 9 Implementation Year</u>	<u>Ranked Com. Use</u>	<u>Ranked Ind. Use</u>	<u>Ranked Inst. Use</u>
1999	99-00	1	YES	YES	YES
2000	99-00	2	YES	YES	YES
2001	01-02	3	YES	YES	YES
2002	01-02	4	YES	YES	YES
2003	03-04	5	YES	YES	YES
2004	03-04	6	YES	YES	YES

Test for Condition 2a

	Commercial	Industrial	Institutional
Total Completed Surveys Reported through 2004			
Credit for Surveys Completed Prior to Implementation of Reporting Databases			
Total + Credit			
CII Accounts in Base Year	1,283	8	94
RU Survey Coverage as % of Base Year CII Accounts			
Coverage Requirement by Year 6 of Implementation per Exhibit 1	4.2%	4.2%	4.2%
RU on Schedule to Meet 10 Year Coverage Requirement	NO	NO	NO

Test for Condition 2a

<u>Year</u>	<u>Report Period</u>	<u>BMP 9 Implementation Year</u>	<u>Performance Target Savings (AF/yr)</u>	<u>Performance Target Savings Coverage</u>	<u>Performance Target Savings Coverage Requirement</u>	<u>Coverage Requirement Met</u>

1999 99-00	1	21	0.7%	0.5%	YES
2000 99-00	2	31	1.1%	1.0%	YES
2001 01-02	3	164	5.7%	1.7%	YES
2002 01-02	4	164	5.7%	2.4%	YES
2003 03-04	5	53	1.9%	3.3%	NO
2004 03-04	6	61	2.1%	4.2%	NO

Test for Condition 2c

Total BMP 9 Surveys + Credit

BMP 9 Survey Coverage

BMP 9 Performance Target Coverage 2.1%

BMP 9 Survey + Performance Target Coverage 2.1%

Combined Coverage Equals or Exceeds Coverage Requirement? NO

BMP 9 COVERAGE STATUS SUMMARY:

Water supplier has not met one or more coverage requirements for this BMP.

BMP 11 Coverage: Conservation Pricing

Reporting Unit:
City of Oceanside, Water Dept

Reporting
 Period:
03-04

MOU Exhibit 1 Coverage Requirement

No exemption request filed

Agency indicated "at least as effective as" implementation during report period? No

An agency must meet one condition to comply with BMP 11.

Agency shall maintain rate structure consistent with BMP 11's definition of conservation pricing. Implementation methods shall be at least as effective as eliminating non-conserving pricing and adopting conserving pricing. For signatories supplying both water and sewer service, this BMP applies to pricing of both water and sewer service. Signatories that supply water but not sewer service shall make good faith efforts to work with sewer agencies so that those sewer agencies adopt conservation pricing for sewer service.

a) Non-conserving pricing provides no incentives to customers to reduce use. Such pricing is characterized by one or more of the following components: rates in which the unit price decreases as the quantity used increases (declining block rates); rates that involve charging customers a fixed amount per billing cycle regardless of the quantity used; pricing in which the typical bill is determined by high fixed charges and low commodity charges.

b) Conservation pricing provides incentives to customers to reduce average or peak use, or both. Such pricing includes: rates designed to recover the cost of providing service; and billing for water and sewer service based on metered water use. Conservation pricing is also characterized by one or more of the following components: rates in which the unit rate is constant regardless of the quantity used (uniform rates) or increases as the quantity used increases (increasing block rates); seasonal rates or excess-use surcharges to reduce peak demands during summer months; rates based upon the longrun marginal cost or the cost of adding the next unit of capacity to the system.

Test for Condition 1

<u>Year</u>	<u>Report Period</u>	<u>RU Employed Conserving WATER Rate Structure</u>	<u>RU Employed Conserving SEWER Rate Structure</u>	<u>RU Meets BMP 11 Coverage Requirement</u>
1999	99-00	YES	YES	YES
2000	99-00	YES	YES	YES
2001	01-02	YES	YES	YES
2002	01-02	YES	YES	YES
2003	03-04	YES	YES	YES
2004	03-04	YES	YES	YES

BMP 11 COVERAGE STATUS SUMMARY:

Water supplier is meeting coverage requirements for this BMP.

BMP 12 Coverage: Conservation Coordinator

Reporting Unit:
City of Oceanside, Water Dept

Reporting Period:
03-04

MOU Exhibit 1 Coverage Requirement

No exemption request filed

Agency indicated "at least as effective as" implementation during report period? No

Agency shall staff and maintain the position of conservation coordinator and provide support staff as necessary.

Test for Compliance

<u>Report Year</u>	<u>Report Period</u>	<u>Conservation Coordinator Position Staffed?</u>	<u>Total Staff on Team (incl. CC)</u>
1999	99-00	YES	1
2000	99-00	YES	1
2001	01-02	YES	1
2002	01-02	YES	2
2003	03-04	YES	2
2004	03-04	YES	2

BMP 12 COVERAGE STATUS SUMMARY:

Water supplier is meeting coverage requirements for this BMP.

BMP 13 Coverage: Water Waste Prohibition

Reporting Unit:

Reporting Period:

City of Oceanside, Water Dept

03-04

MOU Exhibit 1 Coverage Requirement

No exemption request filed

Agency indicated "at least as effective as" implementation during report period?

No

An agency must meet one condition to comply with BMP 13.

Implementation methods shall be enacting and enforcing measures prohibiting gutter flooding, single pass cooling systems in new connections, non-recirculating systems in all new conveyer car wash and commercial laundry systems, and non-recycling decorative water fountains.

Test for Condition 1

Agency or service area prohibits:

<u>Year</u>	<u>Gutter Flooding</u>	<u>Single-Pass Cooling Systems</u>	<u>Single-Pass Car Wash</u>	<u>Single-Pass Laundry</u>	<u>Single-Pass Fountains</u>	<u>Other</u>	<u>RU has ordinance that meets coverage requirement</u>
1999	YES	YES	YES	YES	YES	NO	YES
2000	YES	YES	YES	YES	YES	NO	YES
2001	YES	YES	YES	YES	YES	NO	YES
2002	YES	YES	YES	YES	YES	NO	YES
2003	YES	YES	YES	YES	YES	NO	YES
2004	YES	YES	YES	YES	YES	NO	YES

BMP 13 COVERAGE STATUS SUMMARY:

Water supplier is meeting coverage requirements for this BMP.

BMP 14 Coverage: Residential ULFT Replacement Programs

Reporting Unit: **City of Oceanside, Water Dept**

MOU Exhibit 1 Coverage Requirement

A Reporting Unit (RU) must meet one of the following conditions to be in compliance with BMP 14.

Condition 1: Retrofit-on-resale (ROR) ordinance in effect in service area.

Condition 2: Water savings from toilet replacement programs equal to 90% of Exhibit 6 coverage requirement.

An agency with an exemption for BMP 14 is not required to meet one of the above conditions. This report treats an agency with missing base year data required to compute the Exhibit 6 coverage requirement as out of compliance with BMP 14.

Status: Water supplier is meeting coverage requirements for this BMP. as of 2004

<u>Coverage Year</u>	<u>BMP 14 Data Submitted to CUWCC</u>	<u>Exemption Filed with CUWCC</u>	<u>ROR Ordinance in Effect</u>	<u>Exhibit 6 Coverage Req'mt (AF)</u>	<u>Toilet Replacement Program Water Savings* (AF)</u>
1998	YES			94.96	1691.25
1999	YES	NO	NO	272.47	2290.55
2000	YES	NO	NO	521.42	2948.64
2001	YES	NO	NO	831.84	3656.02
2002	YES	NO	NO	1194.82	4462.23
2003	YES	NO	NO	1602.37	5291.50
2004	YES	NO	NO	2047.39	6124.94
2005	NO	NO	NO	2523.51	
2006	NO	NO	NO	3025.08	
2007	NO	NO	NO	3547.07	

*NOTE: Program water savings listed are net of the plumbing code. Savings are cumulative (not annual) between 1991 and the given year. Residential ULFT count data from unsubmitted forms are NOT included in the calculation.

BMP 14 COVERAGE STATUS SUMMARY:

Water supplier is meeting coverage requirements for this BMP.

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APPENDIX C

City Council Resolution adopting the
2005 Oceanside Urban Water Management Plan

1 RESOLUTION NO. 05-R0694-1

2 A RESOLUTION OF THE CITY COUNCIL OF THE CITY
3 OF OCEANSIDE ADOPTING THE 2005 URBAN WATER
4 MANAGEMENT PLAN

5 WHEREAS, the California Legislature enacted Assembly Bill 797 (Water Code Section
6 10610 et seq., known as the Urban Water Management Planning Act) during the 1983-1984
7 Regular Session, and as amended subsequently, which mandates that every supplier providing
8 water for municipal purposes to more than 3,000 customers or supplying more than 3,000 acre
9 feet of water annually, prepare an Urban Water Management Plan (Plan), the primary objective
10 of which is to plan for the conservation and efficient use of water; and

11 WHEREAS, the City of Oceanside is an urban supplier of water providing water to a
12 population over 150,000;

13 WHEREAS, the Urban Water Management Plan shall be periodically reviewed at least
14 once every five years and the City shall make any amendments or changes to its plans which are
15 indicated by the review;

16 WHEREAS, the proper and cost effective conservation of our water resources is
17 essential to insuring adequate water supplies now and in the future;

18 WHEREAS, water conservation is recognized as an integral part of all water programs;

19 WHEREAS, the City of Oceanside has completed a 2005 Urban Water Management
20 Plan pursuant to the requirements of California Water Code Section 10620;

21 WHEREAS, the Plan is the formal document to discuss past, current, and projected
22 water demands; current and alternate water conservation measures; water supply deficiencies;
23 and future water management practices;

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

26 WHEREAS, the City has prepared and circulated for public review a draft 2005 Urban
27 Water Management Plan (2005 Plan) and a properly noticed public hearing regarding the 2005
28 Plan was held by the City; and

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WHEREAS, the City did prepare and shall file said 2005 Plan with the California Department of Water Resources.

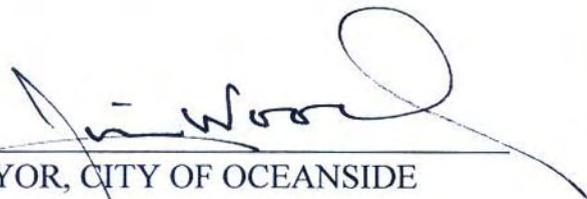
NOW, THEREFORE, the City Council of the City of Oceanside DOES RESOLVE as follows:

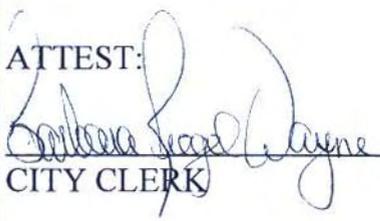
SECTION 1. The 2005 Urban Water Management Plan for the City of Oceanside, a copy of which is available in the City Clerk's office, is hereby adopted and approved.

SECTION 2. The Water Utilities Director of the City of Oceanside is hereby authorized and directed to implement the water conservation measures included in the local and regional water conservation effort made part of the Plan.

PASSED AND ADOPTED by the City Council of the City of Oceanside, California, this 7th day of December, 2005, by the following vote

AYES: WOOD, CHAVEZ, FELLER, MACKIN, SANCHEZ
NAYES: NONE
ABSENT: NONE
ABSTAIN: NONE


MAYOR, CITY OF OCEANSIDE

ATTEST:

CITY CLERK

APPROVED AS TO FORM:

CITY ATTORNEY