CITY OF COVINA

2005

URBAN WATER MANAGEMENT PLAN

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CITY OF COVINA

2005

URBAN WATER MANAGEMENT PLAN

DECEMBER 2005

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2005

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INTRODUCTION

1.1 URBAN WATER MANAGEMENT PLANNING ACT

This is the Urban Water Management Plan for the City of Covina Municipal Water Utility. This report has been prepared in compliance with the California Water Code, Division 6, Part 2.6 The Urban Water Management Planning Act (Water Code Section 10610 et. seq.), which was added by Statute 1983, Chapter 1009, and became effective on January 1, 1984. The Urban Water Management Planning Act is included in **Appendix A**.

This Act, which was Assembly Bill (AB) Number 797, requires that "...every urban water supplier providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually, to prepare and adopt, in accordance with prescribed requirements, an urban water management plan." The Act requires urban water suppliers to file plans with the California Department of Water Resources (DWR) every five years describing and evaluating reasonable and practical efficient water uses, reclamation, and conservation activities. This plan will be submitted to the California Department of Water Resources within 30 days of approval by the City Council of the City of Covina.

This Act has evolved since its passage in 1983. There have been several amendments to the Act, with the most recent being in 2004. Some of the amendments provided for additional emphasis on metering, drought contingency planning, and recycling/reclamation. The process of refining the Act continues, as efforts are being made to further develop and clarify various aspects of the Act.

A. Summary of Amendments

Established:	AB 797, Klehs, 1983
Amended:	AB 2661, Klehs, 1990
	AB 11X, Filante, 1991
	AB 1869, Speier, 1991
	AB 892, Frazee, 1993
	SB 1017, McCorquodale, 1994
	AB 2853, Cortese, 1994
	AB 1845, Cortese, 1995
	SB 1011, Polanco, 1995
	AB 2552, Bates, 2000
	SB 553, Kelley, 2000
	SB 610, Costa, 2001
	AB 901, Daucher, 2001
	SB 672, Machado, 2001
	SB 1348, Brulte, 2002
	SB 1384 Costa, 2002

SB 1518 Torlakson, 2002
AB 105, Wiggins, 2003
SB 318, Alpert, 2004

1.2 BACKGROUND OF THE CITY OF COVINA MUNICIPAL WATER UTILITY

A. Formation and Location

The City of Covina is located in the East San Gabriel Valley of Los Angeles County, at the foothills of the Sierra Madre range. The city's land area is approximately 4,480 acres or 7 square miles. As of January 2000 the latest census information provides an estimated population of 47,988 with, 16,346 housing units; however, the City of Covina Municipal Water Utility does not serve the entirety of this population or housing units. There are five water companies serving the Covina Area. The City of Azusa serves the northwest and western sections of the planning area. The City of Covina Municipal Water Utility serves the central and southeastern sections, toward the City of San Dimas. Southern California Water Company serves the northeastern section of the planning area; Suburban Water Systems serves the southern part, including the Cities of West Covina, Glendora and San Dimas; and Valencia Heights Water Company serves a small area at the southeast section of the city.

The City of Covina is served mainly (approximately 60 percent of the city) by its municipally-owned and operated water utility, although certain areas within the city limits are served by the City of Azusa, Suburban Water Systems, Southern California Water Company, and Valencia Heights Water Company. The City of Covina Municipal Water Utility also serves adjacent unincorporated Los Angeles County areas and parts of West Covina. The system's water service area covers approximately 5.16 square miles (3,302 acres). **Figure 1- 1** shows the city limits and service area boundary of the City of Covina Municipal Water Utility. This report mainly defines Covina's Municipal water system, though the entire city is targeted for the implementation of water conservation measures both by the Covina Utility and the other providers in the City.

The City of Covina Municipal Water Utility is one of the purveyors which receive wholesale imported water from the Three Valleys Municipal Water District (TVMWD). TVMWD is in turn, a member of the Metropolitan Water District of Southern California (MWD). Water purveyors within the TVMWD rely on a mix of water resources, particularly groundwater, in order to provide an adequate, reliable water supply for their regional constituencies.

B. Retail Water Purveyors

At the end of fiscal 2005, the retail water purveyors serve about 13,720 connections, as follows, within the City of Covina Municipal Water Utility:

City of Covina Water	8,274
City of Azusa Water	1,391
Southern California Water Co.	2,041
Suburban Water Systems	2,001
Valencia Heights Water Co.	13
Total Connections	**13,720**

C. Climate

The City of Covina has a semi-arid climate with hot, dry summers that reach as high as 95F and cool, wet winters with temperatures that can dip as low as 40F. The average rainfall is 14" to 18".

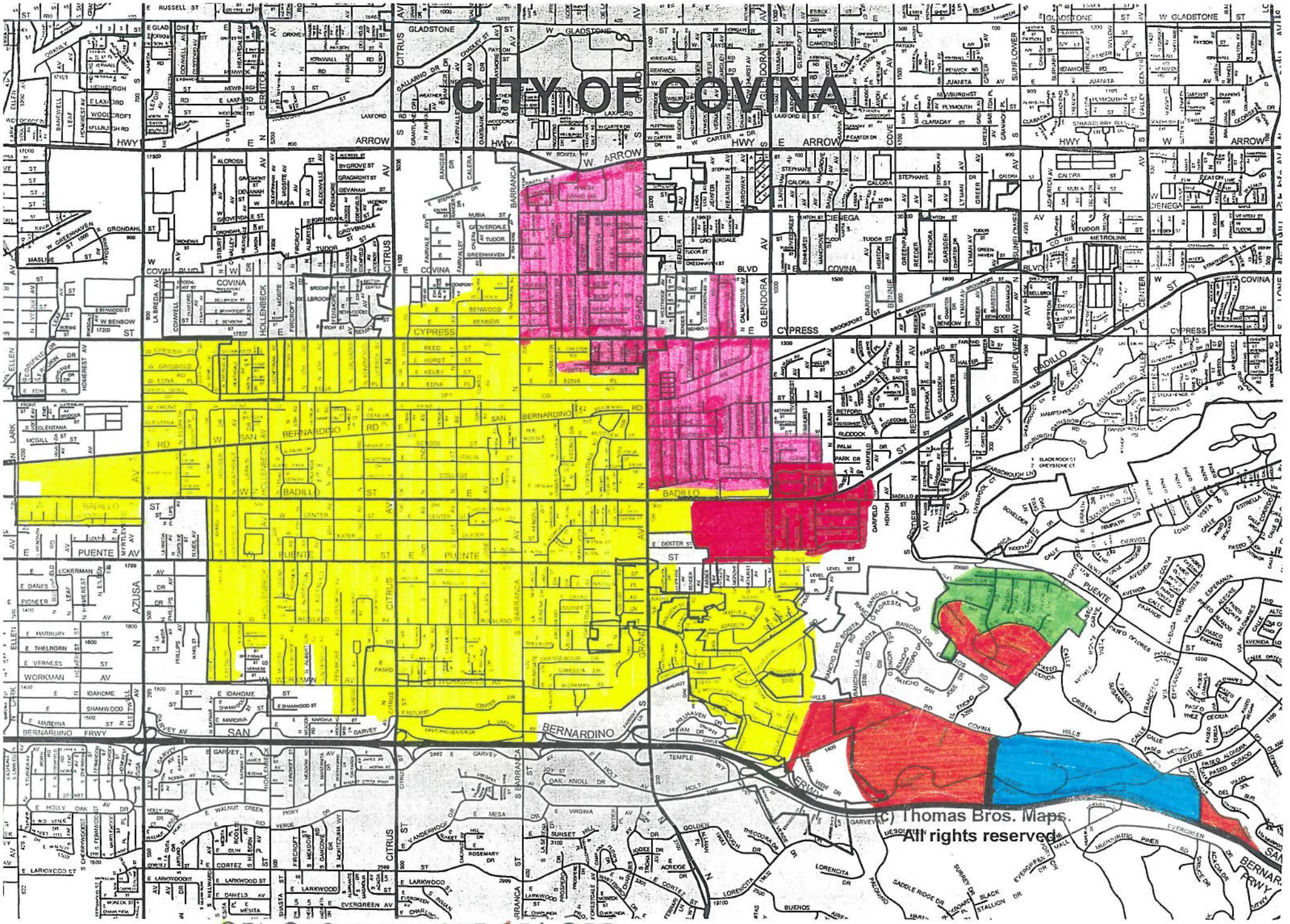
D. Management

Covina is run by the Council-manager form of government. Five Council Members are elected at-large and serve 4-year staggered terms. The Mayor's position is filled by one of the Council Members, who determine bi-annually which Member is to fill this position. Other officials include the City Manager and Public Works Director. The City Manager is appointed by the City Council.

E. Water Systems

The City of Covina Municipal Water Utility system consists of approximately 100 miles of water mains and lines. Domestic connections extend from the main lines and feeders of the system to service individual parcels. Meter sizes range from 5/8 inch to 6 inches depending on the water consumption needs of the user. The one-(1) 8 inch meter is no longer in service. A residential lot or condominium unit would have a 3/4 to 5/8-inch meter. The 1-inch, 1½-inch and 2-inch meters are generally used to serve multi-family projects with one central meter. Meters over 2 inches in size service schools, hospitals, and industrial uses. The layout of the water production facilities location is provided in **Figure 1-2** and the Water Utility Profile is shown on **Figure 1-3.**

The Utility prepared a multi-year Capital Improvement Program – **Appendix E** outlines the Utility's proposed system improvements for the remaining four years; these improvements are designed to reduce the amount of water lost through leaks and improve fire protection.


CITY OF COVINA
Z-1
Z-2
LP-Z-2
Z-3
Z-4
Z-5
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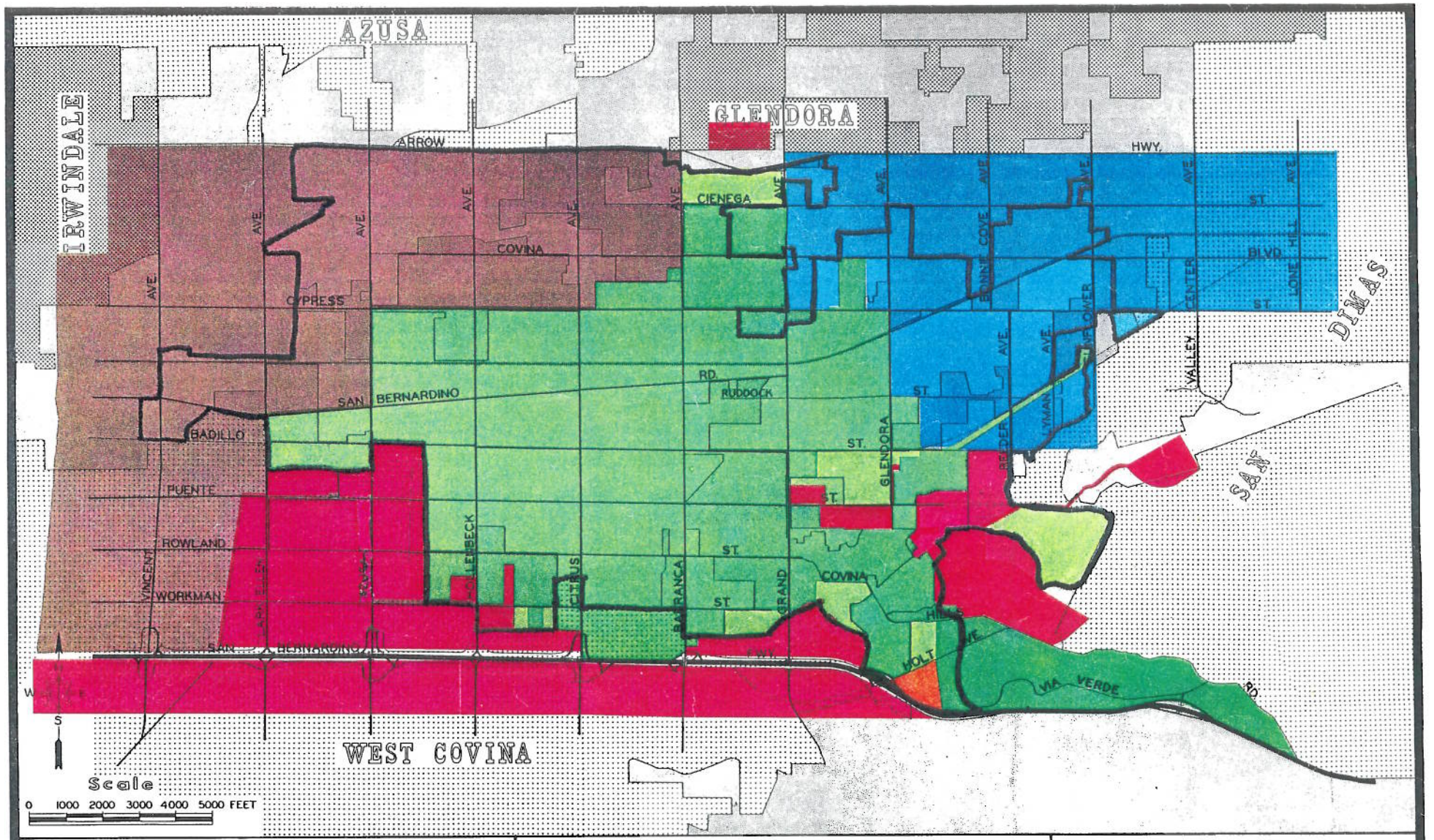

CITY OF COVINA

PUBLIC WORKS DEPARTMENT

WATER DIVISION

WATER PURVEYOR SERVICE AREA MAP

LEGEND

- CITY OF COVINA WATER
- CITY OF AZUSA WATER
- SO. CALIFORNIA WATER
- SUBURBAN WATER
- VALENCIA HEIGHTS WATER

The City of Covina Municipal Water Utility provides water service to a 5.16-square mile area. Connections with the Covina Irrigating Company (CIC) through the Forestdale booster and Cypress reservoir and with the MWD middle feeder serve as the primary sources of water to the system. The MWD connection is located at the Charter Oak reservoir site. Also, there is an emergency connection with Southern California Water and potential connections with the City of Azusa, Suburban Water and Valencia Heights Water. Each zone has a reservoir, boosters and appurtenances needed to meet peak demands on the system. The City system has a maximum storage capacity of 17.3 million gallons. **Table 1.1** Summarizes the City's pressure zone characteristics.

1.3 FORMAT OF THIS REPORT

The Chapters in this report correspond to the items presented in the Urban Water Management Planning Act (See **Appendix A** for a copy of the Act).

The Chapters of the 2005 Urban Water Management Plan are briefly described below:

Chapter 1.0 - Introduction

This chapter describes the planning process and provides an overview of the service area. The chapter also summarizes the key elements of the Plan, and can serve the reader as a quick introduction to the Plan.

Chapter 2.0 – Water Supply Resources

This chapter describes the existing and potential water supplies available to the service area. Topics are water supply production, City wells, Covina Irrigating Company, Metropolitan Water District, Southern California Water Company, Historic Water Production, water quality, and current and projected water supplies.

Chapter 3.0 – Water Use Provisions

This chapter on water demand describes historic, population growth and projections, current, and projected water usage within the service area. This chapter also describes the supply and demand comparison.

Chapter 4.0 – Reliability Planning

This chapter presents the water reliability assessment for the service area. It compares the total projected water demand with the expected water supply presented for a single dry year and multiple dry years (droughts). The conclusion of this chapter is that if projected imported and local supplies are developed as indicated, no water shortages are anticipated in the Utility's service area during the plan period and beyond.

Chapter 5.0 – Water Demand Management Measures

This chapter addresses the 14 Water Conservation measures called Demand Management Measures (DMMs). The Act was revised in 2000 to allow the DMMs to correspond with the 14 Urban Best Management Practices (BMPs).

Chapter 6.0 – Water Shortage Contingency

This chapter presents the activities currently used and to be utilized in the event of an interruption, such as drought. Stages of action are described, including existing conservation programs and proposed conservation measures. In addition, MWD's 2000 Water Surplus and Drought Management Plan (WSDM) Plan is also described.

The Department of Water Resources (DWR) has prepared a checklist that identifies items based on the Act, to be addressed in the Urban Water Management Plan. The checklist allows agencies to identify where in their plan they have addressed each item. The completed checklist is included in **Appendix B**. The appendices contain references and specific documents such as City ordinances and resolutions, etc., referred to throughout this project.

The purpose of the Plan is to achieve conservation and efficient use of urban water supplies to protect the people of the City of Covina Municipal Water Utility, their water sources and ensure that sufficient water supplies will be available for future beneficial use.

Since the City is a member of the Three Valleys Municipal Water District, which in turn is a member agency of the Metropolitan Water District of Southern California, this Plan is prepared as a supplement to the Urban Water Management Plan for the TVMWD anticipated date of December 2005 and the Draft Regional Urban Water Management Plan for the Metropolitan Water District of Southern California, anticipated date of October, 2005. The City of Covina Municipal Water Utility last prepared the Urban Water Management Plan in 2000.

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1.4 PUBLIC INVOLVEMENT

Over the years, the Utility and the City of Covina has encouraged community participation in water planning through public hearings, public study sessions, Town Hall meetings and other community events. For the existing Plan, a public hearing was held for review and comment December 6, 2005 before its adoption. Notices of public meetings were published in the local press. Copies of the draft plan were made available at City Hall and the local public library.

Table 1-1
Zone Characteristics

Zone	Service Area (acres)	Elevation Variation (feet)	Reservoir Serving Zone	Bottom Reservoir Elevation (feet)	Overflow Reservoir Elevation (feet)	Pressure Range (psi)	Storage Capacity (gallons)
I	} 269 ac	460 to 620	Forestdale Booster	595.0	611.0		0.095 million
I		460 to 620	Cypress Reservoir	628.0	643.64		1.45 million
I	2,100 ac	485 to 620	Charter Oak	723.5	749.25	35 to 93	9.0 million
II	470 ac	620 to 680	Covina Hills II	850.0	882.00	75 to 100	5.0 million
III	208 ac	700 to 800	Covina Hills III	905.0	936.00	95	1.25 million
IV	255 ac	700 to 900	Covina Knolls	1,000.0	1,029.00	43 to 130	0.5 million
V		870 to 1000	Covina Knolls *			45 to 67	
Total	**3,302 acres**						**17.3 million**

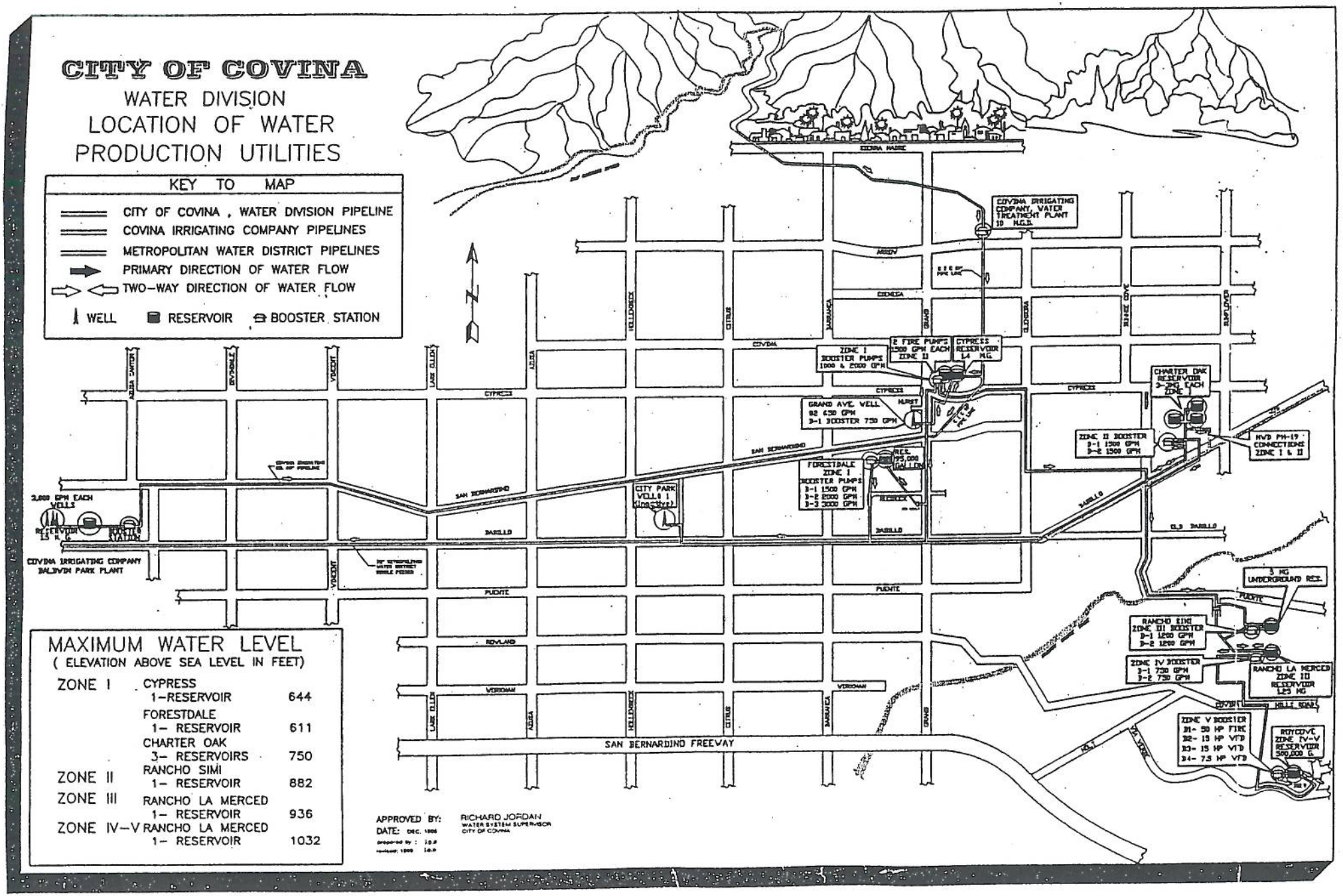

CITY OF COVINA
WATER DIVISION
LOCATION OF WATER
PRODUCTION UTILITIES
KEY TO MAP
CITY OF COVINA , WATER DIVISION PIPELINE
COVINA IRRIGATING COMPANY PIPELINES
METROPOLITAN WATER DISTRICT PIPELINES
PRIMARY DIRECTION OF WATER FLOW
TWO-WAY DIRECTION OF WATER FLOW
WELL
RESERVOIR
BOOSTER STATION
COVINA IRRIGATING COMPANY, WATER TREATMENT PLANT 10 M.G.D.
ZONE I BOOSTER PUMPS 1000 & 2000 GPM
2 FIRE PUMPS 1500 GPM EACH ZONE II
CYPRESS RESERVOIR 1.4 M.G.
GRAND AVE. WELL #2 650 GPM #-1 BOOSTER 750 GPM
CHARTER OAK RESERVOIR 3-2MG EACH ZONE
ZONE II BOOSTER #-1 1500 GPM #-2 1500 GPM
MWD PM-19 CONNECTIONS ZONE I & II
FORESTDALE ZONE I BOOSTER PUMPS #-1 1500 GPM #-2 2000 GPM #-3 3000 GPM
RES. 95,000 GALLON
CITY PARK WELL # 1 (DORMANT)
2,000 GPM EACH WELLS
RESERVOIR 1.5 M.G.
BOOSTER STATION
COVINA IRRIGATING COMPANY BALDWIN PARK PLANT
5 MG UNDERGROUND RES.
RANCHO EIMI ZONE III BOOSTER #-1 1200 GPM #-2 1200 GPM
ZONE IV BOOSTER #-1 750 GPM #-2 750 GPM
RANCHO LA MERCED ZONE III RESERVOIR 1.25 MG
ZONE V BOOSTER #1- 50 HP FIRE #2- 15 HP VFD #3- 15 HP VFD #4- 7.5 HP VFD
ROY COVE ZONE IV-V RESERVOIR 500,000 G.
SAN BERNARDINO FREEWAY
COVINA BOULEVARD
SAN BERNARDINO
PUENTE
ROWLAND
VERDUGO
CYPRESS
BADILLO
HOLLENBECK
CITRUS
GRAND
VINCENT
AZUSA
LAKE CLIFF
BARRANCA
MAXIMUM WATER LEVEL
(ELEVATION ABOVE SEA LEVEL IN FEET)
ZONE I CYPRESS 1-RESERVOIR 644
FORESTDALE 1- RESERVOIR 611
CHARTER OAK 3- RESERVOIRS 750
ZONE II RANCHO SIMI 1- RESERVOIR 882
ZONE III RANCHO LA MERCED 1- RESERVOIR 936
ZONE IV-V RANCHO LA MERCED 1- RESERVOIR 1032
APPROVED BY:
DATE:
RICHARD JORDAN
WATER SYSTEM SUPERVISOR
CITY OF COVINA

Figure 1-2

WATER SYSTEM PROFILE

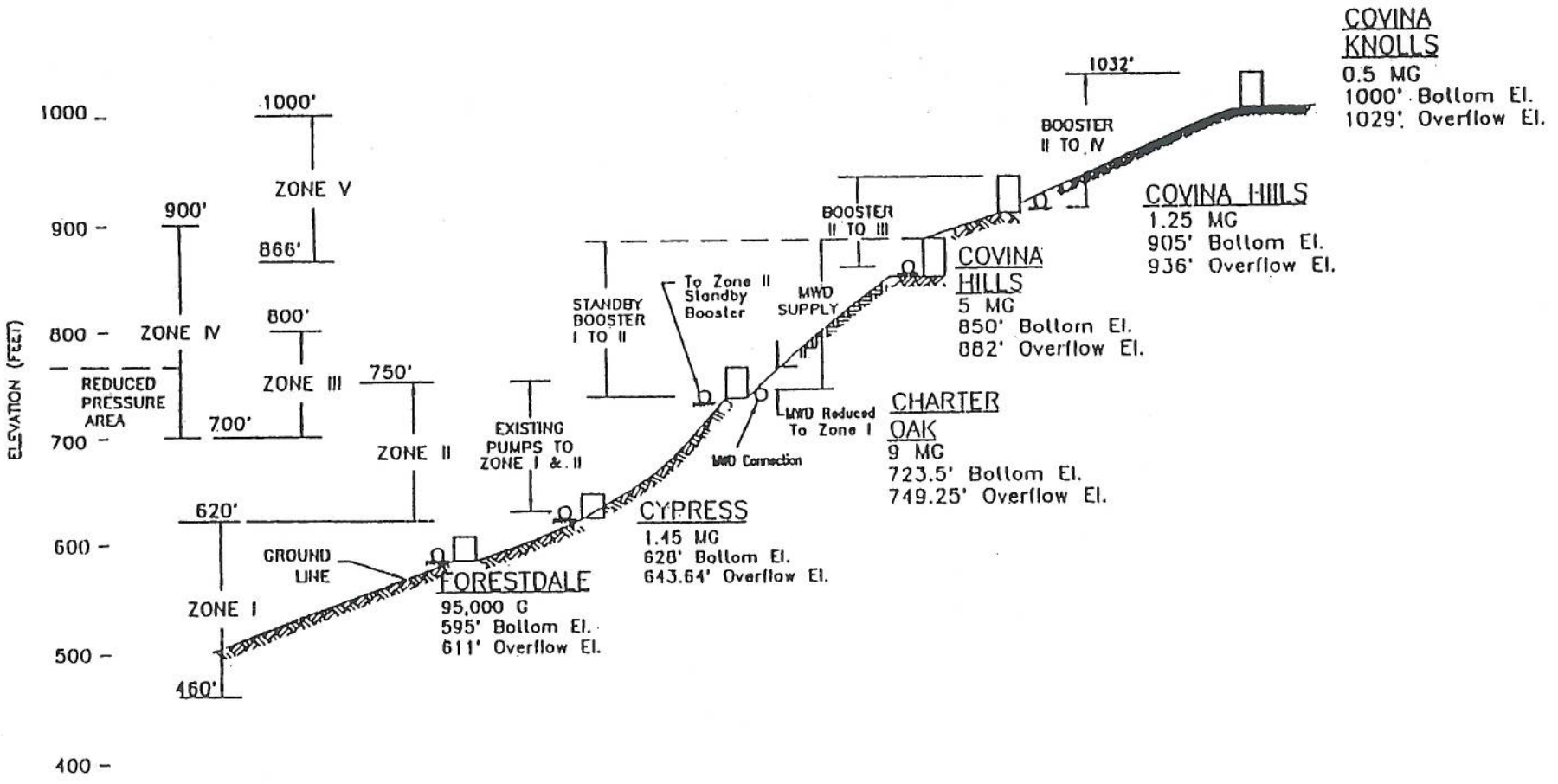


Figure 1-3

CHAPTER 2

WATER SUPPLY RESOURCES

CHAPTER 2

WATER SUPPLY RESOURCES

2.1 WATER SUPPLY AND PRODUCTION

Water used by the City of Covina Municipal Water Utility is purchased from two main sources. From July 2004 through June 2005, the Covina Irrigating Company (CIC) supplied 100 percent of the Utility system's water needs; the Metropolitan Water District of Southern California (MWD) supplied zero percent during this period. **Table 2-1** shows monthly water production and purchases for the fiscal year 2004-2005. Total water production for the fiscal year is approximately 6,991 acre feet or 2,278 million gallons (1 acre-foot is equal to approximately 325,900 gallons).

Table 2-1
Water Production (2004-2005)
(acre-feet)

Month	City Well	Covina Irrigating Company	MWD	Total
July 2004	0.00	832.76	0.00	832.76
August 2004	0.00	840.65	0.00	840.65
September 2004	0.00	801.16	0.00	801.16
October 2004	0.00	600.90	0.00	600.90
November 2004	0.00	447.75	0.00	447.75
December 2004	0.00	462.04	0.00	462.04
January 2005	0.00	403.45	0.00	403.45
February 2005	0.00	385.80	0.00	385.80
March 2005	0.00	385.21	0.00	385.21
April 2005	0.00	521.13	0.00	521.13
May 2005	0.00	616.48	0.00	616.48
June 2005	0.00	693.77	0.00	693.77
Total	**0.00**	**6991.10**	**0.00**	**6991.10**
Percent	**0.00%**	**100.00%**	**0.00%**	**100.00%**

A. City Well

The City well is located a few feet south of the intersection of Grand Avenue and Edna Place and has one pump with a 550 gallon per minute (gpm) capacity. Two other wells have been capped and are no longer in use. Because of the water quality in the area and pumping power costs, the utilization of City well water in the future is tenuous. **Table 2-**

1 indicates that no water was provided from the City wells during fiscal year 2004-2005. (Refer to **Section 2.4 Water Quality**)

B. Covina Irrigating Company

Local surface supplies from the TVMWD service area are delivered by Covina Irrigating Company (CIC). CIC gets water from the Morris and San Gabriel Dams along the San Gabriel River, as well as from local groundwater wells. The San Gabriel Dam holds 45,800 acre-feet of water and the Morris Dam holds 39,300 acre-feet. Water is directed to a treatment plant at Arrow Highway where a filtration process (sedimentation, filtration and chlorination) treats the water. CIC then wholesales water to retail agencies such as the City of Covina Municipal Water Utility (the major company shareholder), Valencia Heights Water Company, Southern California Water Company, and Suburban Water Systems. Water is delivered from the CIC treatment plant to Cypress Street reservoir and the booster station at Forestdale Avenue where it enters the City of Covina Municipal Water Utility.

The City of Covina Municipal Water Utility purchased approximately 6,991 acre-feet of water from the Covina Irrigating Company during the fiscal year 2004-2005. The Covina Irrigating Company is a mutual water company in which stock ownership in the company determines entitlement and the quantity of water that may be purchased at a base cost figure. The City of Covina owns 42 percent of the stock in Covina Irrigating Company. This entitles the City of Covina Municipal Water Utility with 42 percent of the CIC's total water production/supply. The City of Covina Municipal Water Utility leases stock from other stockholders on a year-by-year basis to augment their entitlement water supply. **Table 2-2** presents the 2004-2005 Covina Irrigating Company water distribution for the user stockholders.

Table 2-2
Covina Irrigating Company Water Distribution
Fiscal Year 2004-2005

Stockholder	Base Stock Shares	Recorded Entitlement Balance (AF/05)
1. City of Covina	4,208	3,492.64
2. City of Glendora	10	8.3
3. Southern California Water Co.	66	54.78
4. Suburban Water Systems	1,320.50	1,096.01
5. Valencia Heights Water Co.	397.25	329.53
6. Valley County Water District	111	92.13
7. Canyon Water Company	17	14.11
8. Azusa Valley Water Company	15	12.45
9. Southwest Resource Management	89	73.87
10. All Other Shareholders	3,766.25	3,125.98

Total	**10,000.00**	**8,299.98**

Source: Covina Irrigating Company, 2005

Water over entitlement is purchased at a cost of approximately 3.1 times the entitlement rate. Water rates for June 2005 were $125 per acre-foot for stock water fee and $140 per acre foot plus $246 per acre-foot of water over entitlement. When the city uses an amount within the limits of entitlement, the cost of water is less than any other source. This fact constitutes a significant incentive to conserve water and purchase water within entitlement.

C. Metropolitan Water District

The MWD is a regional water district providing water deliveries to most areas of Los Angeles County through sub-agencies such as the Three Valleys Municipal Water District (TVMWD). The City of Covina Municipal Water Utility is a member of TVMWD, allowing purchases of MWD water. MWD water sources are the Colorado River and the State Water Project. Five filtration plants process the water which is then distributed to a number of reservoirs and feeders throughout Southern California. The MWD connection with the City of Covina Municipal Water Utility is at the Charter Oak reservoir site near the intersection of Sunflower Avenue and Badillo Street. The available pressure in this MWD middle feeder is high enough to supply water to most of the water system without the need for pumping.

The MWD connection at the Charter Oak reservoir site is designed to receive water at a rate of 20 cubic feet per second (cfs) or about 8,975 gpm. MWD provides water to sub-agencies such as TVMWD which is a distributing agency to various water purveyors. At present, there is no limit on the quantity of MWD water the City of Covina may receive, subject to the design capacity of the connection.

The Metropolitan Water District can be a major supplier of water for the City of Covina Municipal Water Utility. However, during the fiscal year 2004-2005, the City obtained zero percent of water needs from MWD. The cost of MWD water is higher at $481 per acre-foot than that of CIC water, both stock and over entitlement.

The MWD Water Surplus and Drought Management (WSDM) Plan aims to attain a 100 percent supply reliability goal for the region. The WSDM Plan, in conjunction with the Integrated Resources Plan (IRP), will work to correlate shortage mitigation to surplus supplies, through the utilization of all available resources within the area. In order for MWD to implement WSDM Plan effectively, a Take or Pay Plan is also proposed. As indicated on **Table 2-4**, City of Covina will budget for 500 acre-feet per year for the undeterminable future.

D. Southern California Water Company

The Southern California Water Company (SCWC) is a private water purveyor which provides water to approximately 15 percent of the City of Covina's residents. In 1993, the City of Covina and SCWC entered into an agreement whereby SCWC would provide water to the City of Covina Municipal Water Utility through an inter-connection located at the intersection of Via Verde and Covina Hills Road. This inter-connection is only used as a back-up for the City of Covina Municipal Water Utility and when its Zone V reservoir site is out-of-service, as it was during construction of the new reservoir and at brief intervals since then. During the fiscal year 2004-2005, the City did not obtain any water from SCWC.

E. Recycled Water

Water recycling is defined as the treatment and disinfection of municipal wastewater to provide a water supply suitable for non-potable reuse. The City of Covina Municipal Water Utility currently does not have recycled water or a reclamation program. However, since the Utility is an active member of and is entitled to purchase water from MWD via TVMWD, which have such programs, the Utility is indirectly involved with water supply management programs. Reference is made to **Appendix 1** for the regional programs of the Metropolitan Water District of Southern California and Three Valleys Municipal Water District.

2.2 HISTORIC WATER PRODUCTION

Table 2-3 shows water production and purchases for the past 20 years. The average annual water bought and produced by the City of Covina Municipal Water Utility shows variations from year to year.

Table 2-3
Historic Water Supply and Production
(acre-feet)

Fiscal Year	MWD	(%)	CIC	(%)	Well	(%)	SCWC	(%)	Total
1985-86	1,079	14.11	6,085	79.63	478	6.26	0	.00	7,642
1986-87	1,367	17.98	5,693	74.89	541	7.12	0	.00	7,601
1987-88	2,861	36.79	4,392	56.47	524	6.74	0	.00	7,777
1988-89	2,586	34.77	4,430	59.56	422	5.67	0	.00	7,438
1989-90	4,772	62.28	2,745	35.82	145	1.89	0	.00	7,662
1990-91	4,363	63.44	2,063	30.00	451	6.56	0	.00	6,877
1991-92	471	7.62	5,443	88.13	262	4.25	0	.00	6,176
1992-93	1,085	16.33	5,108	76.87	357	5.38	95	1.42	6,645
1993-94	1,395	20.40	4,767	69.73	567	8.29	107	1.57	6,836
1994-95	1,620	24.76	4,277	35.35	646	9.87	2	.03	6,545
1995-96	635	8.90	6,317	88.59	179	2.51	0	.00	7,131
1996-97	298	3.96	7,191	95.57	35	.47	0	.00	7,524
1997-98	42	.63	6,587	99.28	6	.09	0	.00	6,635
1998-99	1	.01	7,052	99.98	0.23	.01	0	.00	7,053
1999-00	21	.28	7,324	99.72	0	.00	0	.00	7,345

2000-01	0	0.00	7,273	100.00	0	.00	0	.00	7,273
2001-02	131	1.73	7,433	98.27	0	.00	0	.00	7,564
2002-03	2,340	33.11	4,728	66.89	0	.00	0	.00	7,068
2003-04	1,576	20.4	6,108	79.6	0	.00	0	.00	7,684
2004-05	0	.00	6,991	100.00	0	.00	0	.00	6,991

The growth which has occurred in the City of Covina Municipal Water Utility system since 2000 is mixed e.g. involved addition of single family dwellings, the replacement of single-family homes with multiple family dwellings and some commercial development. The variations in total water production as shown in **Table 2-3** do not appear to reflect the growth of the system; but rather, climatic conditions and conservation have had a greater influence on production/demand rates than system growth. This is apparent from the inverse correlation between rainfall and the water production. When there is more rainfall in a year, water production/demand is less. The summary of the Historic Water Supply and Production is shown on **Figure 2-1**

2.3 SUMMARY OF WATER PRODUCTION

The total water production in the municipal water system has remained relatively uniform since fiscal year 1974-75. With the exception of two wet years where demand dropped to almost 6,000 acre-feet (1982-83 and 1991-92), water production has remained fairly uniform ranging from 6,600-7,600 acre-feet; averaging 7,176 acre-feet/year.

The City has adopted a policy of purchasing the majority of their water from Covina Irrigating Company. The main reason for this decision is the significant difference in the cost of CIC water as opposed to MWD water. Even with the higher costs associated with pumping CIC water, it still remains the less expensive of the two sources.

2.4 WATER QUALITY

The issue of water quality is important not only in the use of current water, but also in the development of potential water resources. Quality of the water from MWD and CIC is good, except for the City Well, where the groundwater in the area has a quality that is outside the normal average range. Additionally, the groundwater supplies did not meet the State and Federal Safe Drinking Water Act Standards. The City has decided no further groundwater from the City well will be utilized for the undeterminable future.

Water quality for CIC has surface water hardness in a range from 170 to 190 milligrams per liter (mg/l) of $CACO_3$ with the average of 175 mg/l alkalinity as $CACO_3$. On the other hand, MWD water has a hardness of range from Weymouth 142 to 206 mg/l. Thus CIC water is considered relatively soft by comparison. Test for radioactivity, organic and inorganic chemicals, bacteria, asbestos, trace metals and selenium show that CIC and MWD water are below maximum contaminant levels for all these substances. (Refer to the 2004 Consumer Confidence Report, **Appendix G)**

The City water supply is disinfected with chlorine before it is allowed to enter the distribution system. This system is continually monitored and tested to ensure that water quality is maintained until delivered to the customer's meter.

2.5 CURRENT AND PROJECTED WATER SUPPLIES

The projected supplies available throughout the City of Covina Municipal Water Utility service area are derived after allowance for system losses, as well as supplies imported from MWD. Each of these supplies is faced with both known and estimated potential future reductions in supply availability, resulting from production constraints, environmental considerations, and political and regulatory changes.

Furthermore, City of Covina Municipal Water Utility well groundwater will not be used until water quality is acceptable. However, the City is committed to implementing various conservation programs to ensure reliable water supplies in the future.

Table 2-4 represents the current and projected water supplies in 5- year increments based on fiscal years.

Table 2-4
Current and Projected Water Supplies
(acre-feet / year)

Water Supply Sources	2000	2005	2010	2015	2020	2025
Groundwater (City well)	0	0	0	0	0	0
CIC [(a)] **	7,324	6,991	7,176	7,248	7,320	7,393
MWD	21	0	*500	*500	*500	*500
Total	**7,345**	**6,991**	**7,676**	**7,748**	**7,820**	**7,893**

Notes: * Budgeted annually

(a) Based on a projected growth of residential, industrial, commercial, and landscape/recreation, the projected water supplies are assumed to have a growth rate of ± 1 percent.

** Leasing water from the San Gabriel Valley Main Basin to CIC can augment CIC supply

CHAPTER 3

WATER USE PROVISIONS

CHAPTER 3

WATER USE PROVISIONS

Water use in the City of Covina Municipal Water Utility area depends on land use types, number of users, types of water fixtures, water loss, irrigation, and availability. Changes in demand would be affected by changes in the type and intensity of land uses, household sizes, population growth, landscaped areas, rainfall, and conservation efforts. For the City of Covina Municipal Water Utility system, water consumption projections are based on historic water production patterns in the service area. Because water purchases and production have been made according to demand, they would accurately reflect water usage. Other factors were also taken into consideration, such as water loss and population growth, which can reflect demand forecasting.

With much of the land developed with urban uses, limited growth is expected. Land recycling for higher intensities may result in an increase in the demand for water. However, the replacement of single-family units with multi-family units will not increase water use per acre significantly. Thus, land recycling is not anticipated to result in substantial increases in water consumption.

As discussed earlier, rainfall will continue to be a major influence on water demand. Drought conditions will increase demand at a time when limited resources are available. Because rainfall patterns are highly variable, the quantity of rainfall is not factored into the projections for future demand.

The impact of any new water conservation efforts that may be implemented in the future will depend on the success of the Utility's conservation programs. A reduction in water demand and losses may result from the continuous practice of water conservation.

Future water consumption will continue to be met by purchases from the CIC and MWD. Unless additional CIC supply is available or the Utility's stock in CIC increases, there will continue to be a joint use of CIC and MWD water in the future. Additional water sources are not deemed necessary, although increases in water purchases are anticipated. In order to reduce the demand on the region's dwindling water resources, it is necessary to promote the conservation of water and reduce losses due to leaks and wasteful practices.

3-1 POPULATION GROWTH

The current population in the City of Covina is approximately 47,988 (water system population approximately 60 percent of City population or approximately 33,300). Covina's historic system population for the years from 1995 through 2005 and the projected population in 5-year increments through 2025 are presented in **Table 3-1.** Population growth projections for the City of Covina Municipal Water Utility service area have been made by extrapolating and interpolating of current system population (2005) and system build-out population figures (2025).

3.2 HISTORIC AND PROJECTED WATER USE

The historic and projected annual water use for the City of Covina Municipal Water Utility is shown in Table **3-2** in 5-year increments by customer type. The water demand is predicted to increase in proportion to population. However, these figures, as presented in **Table 3-2**, do not account for conservation efforts affecting water demand across the various sectors. The increase in demand is projected to primarily occur within the residential sector. While the City has planned development within Covina, all of the planned/proposed development will not affect the City of Covina Municipal Water Utility; thus the projected +/- 1 percent system growth. **Table 3-3** shows the number of service connections by customer type. Additionally, **Figure 3-1** shows the Water Supply Projections to year 2025.

Table 3-1
Population Projections

	1995	2000	2005	2010	2015	2020	2025
Service Area Population	30,402	33,000	33,300	33,633	33,960	34,200	34,400

Table 3-2
Historic and Projected Water Use
(acre-feet)(a)

Water Use Sectors	1995	2000	2005	2010	2015	2020	2025
Single Family Residential	3,687	3,973	3,627	3,753	3,884	4,020	4,160
Multi-Family Residential	379	964	1,115	1,159	1,265	1,316	1,369
Commercial	1,355	1,842	1,349	2,382	1,416	1,451	1,487
Landscape/Recreation	76	236	227	232	238	244	250
Sales to Other Agencies	36	0	8	10	10	10	10
System Loss/Other [(b) (c)]	726	329	665	620	435	279	117
Total	**6,259**	**7,344**	**6,991**	**7,176**	**7,248**	**7,320**	**7,393**

Notes:

(a) Based on a projected growth rate of 0.35 percent for Single Family Residential, .40 percent for Multi-Family Residential, 0.25 percent for Industrial, Commercial, and Landscape/Recreation

(b) In 2004-2005 there was no significant accounted for losses in the system. With conservation and proposed Capital Improvements, water loss is projected to be less than 7 percent in the future.

(c) There was a 9.5 percent water loss to the system in 2004-2005.

Table 3-3
Number of Service Connections

Customer Type	1995	2000	2005	2010	2015	2020	2025
Single Family Residential	6,686	6,722	6,529	6,557	6,560	6,560	6,560
Multi-Family Residential	566	566	632	664	669	670	670
Commercial	868	871	979	1,003	1,005	1,005	1,005
Landscape/Recreation	118	172	129	129	129	129	129
Sales to Other Agencies	6	6	1	0	0	0	0
Total	**8,244**	**8,337**	**8,270**	**8,353**	**8,363**	**8,364**	**8,364**

*** 2005 Service Connection by Type from Utility billing system**

Presented in **Table 3-4** is a summary of the 2005 Water Usage Factors.

Table 3-4
Water Usage Factors
For Year 2005

Urban	Water Usage Factors	
	Water Usage (acre-feet)	**Connection Usage (gallons/connection/day)**
Single Family Residential	3,627	496
Multi-Family Residential	1,116	1,577
Commercial	1,350	1,231
Landscape/Recreation	224	1,550
Sales to Other Agencies	9	8,035
Total	**6,326**	**12,889 (682)**

Typically, water usage consists of residential, commercial, industrial, sales to other agencies, and governmental (landscape or recreational) and other purposes, which include environmental, fire fighting, line cleaning, and system losses.

Presently, the largest sector water use in the Utility's service area is residential, accounting for approximately 86.5 percent of the total, with commercial/industrial and community landscaping making up 13.4 percent of the total, and sales to other agencies, and governmental sales accounting for 0.1 percent. The City of Covina Municipal Water Utility has no agricultural sector. **Figure 3-2** shows the breakdown for the fiscal year 2005.

3.3 WATER SUPPLY AND DEMAND COMPARISON

Water demand during the early 1990's was affected by drought conditions in the Southern California region. However, the City of Covina Municipal Water Utility did impose voluntary conservation on water system customers. Projected water demand for the next five years is expected to slightly increase from year 2005 since public opinion is that drought conditions no longer exist and conservation habits may regress. The increase is therefore not from residential growth, but from a rebound of drought conditions and a re-establishment of commercial and industrial demand.

The projected water demand may vary significantly due to weather conditions, economic conditions, and/or social conditions in the Covina Utility area. A variance of ± 10 percent can be expected.

Because almost all the water demand in the City of Covina Municipal Water Utility Sservice area is imported, the reliability of future supplies is directly dependent upon the sources of supply available to MWD and CIC. MWD's 2000 WSDM Plan expects MWD to be 100 percent reliable in meeting all non-discounted, non-interruptible demands in the future. City of Covina Municipal Water Utility will promote water conservation and endeavor to enhance supplies through water conservation measures program. These efforts within the service area will go toward ensuring the future sustainability of the region.

Table 3-5 compares the current and projected water supply and demand. It indicates that in average precipitation years, the City of Covina Municipal Water Utility has sufficient water to meet its customer's needs through 2025.

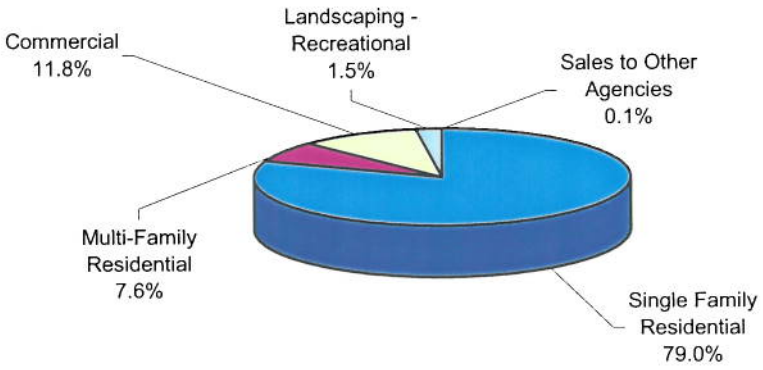
Table 3-5
Water Supply and Demand Comparison
(acre-feet)

	2000	2005	2010	2015	2020	2025
Total Supply [(a)]	7,345	7,491	7,676	7,748	7,820	7893
Total Demand [(b)]	7,344	6,991	7,176	7,248	7,520	7393
Difference	**1**	**500**	**500**	**500**	**500**	**500**

(a) From Table 2-4 * Supply for this Table includes water from MWD

(b) From Table 3-2

Figure 3-2
Water Usage Connection
City of Covina Service Area
(Year 2005)



CHAPTER 4

RELIABILITY PLANNNG

CHAPTER 4

RELIABILITY PLANNING

The Urban Water Management Planning Act requires urban water suppliers to assess water supply reliability that compares the total projected water use with the expected water supply for a single dry water year and multiple dry water years. This chapter presents the reliability assessment for the Utility's service area.

4.1 RELIABILITY

Reliability is a measure of a water service systems' expected success in managing water shortages. In addition to droughts, other factors that can cause water supply shortages are water transmission and distribution interruptions.

As part of the Utility's long-term capital improvement program, funding will be provided for the water main replacement, reservoir rehabilitation, etc. Implemented over time, these measures are expected to provide the City of Covina Municipal Water Utility water system the assurance that there will be sufficient supplies to meet water demands.

4.2 RELIABILITY COMPARISON

In order to determine the water supply reliability of the Utility's service area – that is, a comparison of existing and projected supplies and demands – three different types of comparisons were evaluated: (1) normal; (2) single dry year; and (3) multiple dry year.

Table 4-1
Basis of Water Year Data

Water Year Type	Year(s) Data is Based Upon
Average/Normal Water Year	Fiscal Year 1995-96
Single Dry Water Year	Fiscal Year 1993-94
Multiple Dry Water Years	1999, 2000, 2001

In response to potential shortages due to drought conditions, MWD developed the 2000 Water Surplus and Drought Management Plan (WSDM Plan) which outlines the stages of implementation for the Plan and guide management of regional water supplies to achieve the reliability goals of Southern California's Integrated Resources Plan (IRP). This Plan was designed to encourage member agencies to utilize surface storage reserves as well as promote local conservation efforts to reduce demand on imported supplies. Users who exceed their allotment must pay a disincentive charge in the amount of twice the interruptible rate.

Tables 4-2 through **4-4** detail estimated water supply projections associated with several water supply reliability scenarios. The Average/Normal Water Year is based on water usage, water supply, and the average rainfall for City of Covina Municipal Water Utility water system. Fiscal

year 1995-96 had an average rainfall of approximately 13 inches, and the total water usage that year was about 6,259 acre-feet (using an 11 percent unaccounted for/water loss). The Single Dry Water Year was taken from fiscal year 1993-94 with nine inches (9") of rainfall and a water usage of about 6,680 acre-feet. The Multiple Dry Water Years were 1999, 2000, 2001. The water usage for each is detailed in **Table 4-2**. The water usage for the Multiple Dry Water Years was interpolated from years 1999-2001 (refer to **Table 3-2**).

Table 4-2
Water Demands
(acre-feet)

Average/Normal Water Year	Single Dry Water Year	Multiple Dry Water Years		
		Year 1	Year 2	Year 3
6,259	6,680	7,127	7,344	7,375

Table 4-3 represents the Three-year Estimated Minimum Water Supply which is the amount of water the City of Covina Municipal Water Utility system would require as a minimum for three subsequent years, in combination with a below average rainfall, before a water shortage condition might be declared.

Table 4-3
Three-Year Minimum Water Supply
(acre-feet)

Three-Year Estimated Minimum Water Supply (acre-feet)		
Year 1	Year 2	Year 3
6,500	6,500	6,500

Table 4-4 presents a supply and demand comparison where supply does not fluctuate in conjunction with a change in demand. The demand is ompared with the average/normal, the single dry and multiple dry water years. This analysis demonstrates that if supplies were to be reduced, the existing supply would still be sufficient to meet demands. Therefore, in any one dry year, the City of Covina Municipal Water Utility will need to carefully monitor its water supply and consider a proposed voluntary reduction in water use. In the event of a major system failure, the City of Covina Municipal Water Utility would institute mandatory water use reductions depending on the seriousness of the situation. During the drought season, the City of Covina Municipal Water Utility does not anticipate the necessity of purchasing additional water; however, it does remain as an additional option in the event of an extremely serious situation.

Table 4-4
Supply Reliability and Demand Comparison
(acre-feet)

Water Supply Source	Average/Normal Water Year	Single Dry Water Year	Multiple Dry Water Years		
			Year 1	Year 2	Year 3
Projected Supplies	7,600	7,600	7,600	7,600	7,600
Demand Total	6,259	6,680	7,127	7,344	7,375
Difference	**1,341**	**920**	**473**	**256**	**225**

CHAPTER 5

WATER DEMAND MANAGEMENT MEASURES

CHAPTER 5

WATER DEMAND MANAGEMENT MEASURES

5.1 WATER DEMAND MANGEMENT MEASURES AND BEST MANAGEMENT PRACTICES

Establishing goals and choosing water conservation measures is a continuing planning process. Goals are developed, adopted and then evaluated periodically. Implementation of specific conservation measures are phased in and then evaluated for their effectiveness, achievement of desired results, and customer satisfaction. Water conservation can achieve a number of goals such as:

- Meeting legal mandates
- Reducing average annual potable water demands
- Reducing sewer flows
- Reducing demands during peak seasons
- Meeting drought restrictions

Fourteen Water Demand Management Measures (DMMs) are specified in the latest revision of the Urban Water Management Planning Act. The Act was revised in 2000 to allow the DMMs to correspond with the 14 Urban Best Management Practices (BMPs).

The California Urban Water Conservation Council (CUWCC) was formed in 1991 through the "Memorandum of Understanding (MOU) Regarding Urban Water Conservation in California." The urban water conservation Best Management Practices, or BMPs, included in the MOU are intended to reduce California's long-term urban water demands. The BMPs are currently implemented by the signatories to the MOU on a voluntary basis. However, the CALFED Bay-Delta Program has included mandatory implementation of the BMPs and certification of water use efficiency programs in its final Environmental Impact Statement/Report and Record of Decision. This certification requirement would take effect by December 2002 and would apply to any agency subject to the Urban Water Management Planning Act that is located in the CALFED solution area.

Three Valleys is one of the charter signatories of the 1992 Memorandum of Understanding Regarding Urban Water Conservation Best Management Practices (MOU), a document which established the CUWCC, as well as the initial list of Conservation Best Management Practices (BMPs). At that time and thereafter, TVMWD encouraged the signing of the MOU by all member agencies within its jurisdiction in order to expedite implementation of reasonable urban conservation measures. The City of Covina and all other TVMWD agencies conditionally signed the MOU on a "best effort" basis. This remains the intent of the City of Covina Municipal Water Utility.

The City of Covina Municipal Water Utility is currently a signatory to the Urban MOU and therefore a member of the CUWCC. While not required to implement the BMPs, local agencies have voluntarily complied with many of them, as discussed in this chapter.

5.2 IMPLEMENTATION LEVELS OF DMMs/BMPs

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

Retail agencies are required to develop a strategy for targeting and marketing water use surveys to single-family and multi-family residential customers. The City of Covina Municipal Water Utility Customer Service Representative works directly with customers on high bill complaints in order to show residents where they may conserve water and assist them in finding leaks on their property.

The Utility offers customers, at no direct cost, water conservation kits (as provided by TVMWD) that contain toilet displacement bags, toilet leak detection dye tablets and a faucet flow restrictor.

DMM 2: Residential Plumbing Retrofit

Agencies are required to identify residences constructed prior to 1992 and develop a direct-distribution, targeting and marketing strategy for water saving plumbing devices, including showerheads, toilet displacement devices and toilet flappers, and faucet aerators, as practical. The Utility participates in the distribution of water savers for showerheads, toilet displacement bags, toilet leak detection tablets, as well as information on water saving techniques. The Utility makes available water conservation kits (dye tablets, a shower flow restrictor, and a toilet tank displacement bag) at no direct charge to its customers.

DMM 3: System Water Audits, Leak Detection, and Repair

Leak detection is done on an informal basis based on visual reports from meter readers, field crew personnel, and the public. The Utility will immediately repair any leak in the distribution system after the leak is made known to or is discovered by the Utility and other staff. Unaccounted for water losses are estimated to be 9.5 percent of water production. A 15 percent water loss is considered the point at which major system repairs are advisable and a nine percent (9%) water loss indicates a system in good condition. The Utility is presently moving ahead on a major main line replacement and other programs to control leakage.

The utility billing staff tracks service leaks utilizing a High/Low Exception Report generated by the computer billing system. Excessive or irregular high water consumption by a particular service address is flagged and recorded as part of the High/Low Exception Report. The utility billing staff, with the assistance of public works field staff, investigates these addresses to determine the possibility of service leaks. Meter readers report unusual usage for the utility billing staff to prepare work orders for abnormalities detected in the field.

In an effort to upgrade its distribution system and control leaks, the City of Covina Municipal Water Utility has had an aggressive water meter and water main replacement program. The Utility has developed a water capital improvement program to replace pipelines, upgrade

reservoirs, and replace water meters and fire hydrants each year from 2005 hrough 2009. The City will continue to implement the Capital Improvement Program until the entire water delivery system is upgraded for the next 4 ears (refer to **Appendix F**, Capital Improvement Program). The effectiveness of these repairs can be measured by the decline in the percentage of water losses over the next ten years. It is projected that losses will decline to a new low. System loss projections are targeted at less than 7 percent in the near future.

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

Water agencies are required to place water meters on all new service connections per California State law. The DMM also requires retrofitting of existing unmetered connections, and charging a commodity rate for water. The Utility has incorporated this DMM into their operations and maintenance procedures.

Metering all water users and charging according to use provides a way for monitoring domestic usage. Because the user pays for all the water delivered, it serves as an indirect incentive to save water in order to decrease water bills.

The Utility is fully metered for all customer sectors, including separate meters for single family residential, commercial, and all public facilities. The commodity rate for all sectors is the same, minimum service charges are based on meter size. The Utility also meters fire service water, although there is no charge for water used to extinguish a fire (included in water loss figure).

DMM 5: Large Landscape Conservation Programs and Incentives

The DMM requires agencies to contact non-residential customers with large landscape areas and offer water use surveys; this has been completed. The City of Covina's landscape maintenance contractors and City staff monitor for leaks in sprinkler systems serving city-owned facilities and landscape medians. Necessary repairs are completed on a timely basis so as to minimize water loss.

DMM 6: High-Efficiency Washing Machine Rebate Programs

The DMM encourages agencies to offer customer rebates for the purchase of high-efficiency (horizontal-axis) clothes washers, if local energy providers or wastewater utilities also offer rebates. Efficient dishwashers reduce the amount of water required per load. Efficient washing machine use 9.5 to 12.0 gallons per load. A non-conserving washing machine uses about 14 gallons per load. Neither local energy providers nor wastewater utilities currently offer rebates, and therefore the City is exempt from implementation of this DMM.

DMM 7: Public Information Programs

The DMM encourages the Utility to participate in public information programs sponsored by themselves, TVMWD, MWD, the California Department of Water Resources, and Federal Bureau of Reclamation. The Utility is also independently active in creating public awareness programs to drought conditions and the need to continue to conserve water.

The City of Covina Water Utility encourages water conservation through public information programs, such as materials included in water bills, community programs, and local schools. Additionally, the Utility water billing system prepared water bills show previous consumption for the period being billed.

The City of Covina Water Utility also participates in all City events during each year where water conservation materials are distributed at no direct cost to the customers. The materials are always available at the City of Covina Water Utility and other City offices.

The City participates in water conservation information campaigns to increase customers' awareness of habits or procedures which waste water, as well as their awareness of water scarcity, available sources, system capacity, and treatment and distribution issues.

The City of Covina Municipal Water Utility is a member of the San Gabriel Valley Water Association that publishes quarterly newsletters disseminated widely throughout the entire San Gabriel Valley. Information on water conservation is continually included in City publications along with other water related subjects. Additionally, the Utility is a member of Three Valleys Metropolitan Water District that distributes press releases during the year and purchases occasional newspaper advertising, in addition to writing water conservation articles in both their quarterly newsletters as well as local newspapers. Throughout the year, TVMWD presents a display on conservation at several community events and fairs. TVMWD also distributes MWD's literature, its own brochures, and Sunset Magazine reprints at speaking engagements, displays, its front counter, on tours, to its member agencies, and in public buildings throughout the service area. Facility tours play an important role in increasing the comprehension of opinion leaders and the general public about water issues, particularly the necessity of conservation. Landscape conservation concepts for the general public are featured at the conservation garden at the Miramar Water and Hydroelectric Facility and Headquarters, where visitors can witness the employment of various drought tolerant plant species.

These activities can be effective in reducing water demand, especially if the public perceives a real and present need to conserve. Although it is difficult to accurately quantify the amount of water conserved as a result of public information activities, as well as ascertain the program's cost effectiveness, the formal public information program will remain as an integral element of TVMWD's and the Utility's conservation efforts.

DMM 8: School Education Programs

Metropolitan Water District of Southern California provides educational materials to the schools. The goals of the school and community education programs are to familiarize children and adult consumers with the critical importance of water within our everyday lives, while providing them with information on how to efficiently manage individual water consumption.

Through various programs, both elementary and high school students learn efficient water use habits. The City of Covina Municipal Water Utility draws upon highly effective and well-received curricula developed by the Metropolitan Water District and Water Education Foundation. The education programs employed, "Admiral Splash", "California Smith, Water Detective", "Groundwater Education", "California's Water Story", and "Water Politics", and

other programs developed and presented by the Utility staff emphasize the importance of water awareness and the efficient use of water, as well as the availability of water throughout the respective regions. In addition to the education programs, teachers are invited to attend free workshops that serve as an introduction to the material. Teachers who take advantage of this opportunity may receive other benefits such as free field trips to water facilities or borrowing privileges for a variety of videos, models and other educational tools.

In addition to supporting MWD's educational school programs, Three Valleys has developed its own school presentation, specifically targeting the elementary level. TVMWD provides this educational service in cooperation with its member agencies to the schools within its service area. The program emphasizes the water cycle, water pollution prevention, and water conservation at home. TVMWD, in cooperation with its member agencies, presents this program six to ten times annually to various schools within the region. Depending upon the age group, literature distributed during these school education programs would include 25 Ways to Do a Good Turn and Save Water, The Guzzler Gang, or A Journey Down the Colorado River Aqueduct. According to student age, educational videos used may include "Guzzler Gang", "Water Follies", and "Water for Southern California". Various decals, bumper stickers, and badges are also distributed at these programs. Three Valleys has also been involved with sponsoring local teacher participation in the National Geographic Society's "Exploring Regional Treasures" Teacher Institute, which focuses on issues such as hydrology, natural resource management, and conservation throughout the 11-day program.

The City of Covina Water Utility system focuses on the low-flush toilet program conducted in conjunction with community-based organizations as well as a continual program strictly conducted by Utility staff, which has the side benefit of education regarding water saving measures.

DMM 9: Conservation Programs for Commercial, Industrial and Institutional (CII) Accounts

This DMM calls for identification of all commercial, industrial, and institutional accounts and ranking them according to water use (MWD program). All CII accounts are to be contacted on a regular basis and offered either a) a water-use survey or customer incentives program, or b) agencies may attempt to achieve a water use reduction target in the entire CII customer sector.

These retrofits refer to alterations made to equipment and processes in order to improve water use efficiency, included are kitchen sprays, efficient toilets and urinals, cooling tower conductivity controllers, and horizontal-axis laundry washing machines. A number of these adjustments have been installed within schools, hospitals, and restaurants, as well as other CII settings. Implementation of these retrofits results in various amounts of water savings. However, the conservation savings resulting from the installation of these retrofits vary in respect to the targeted market segment. The installation of a ULFT within retail/wholesale/restaurant sites would result in average water savings of 36 to 57 gallons per day, while hotels estimate total savings of 16 gallons per day. The CII retrofit program is a two-phase operation, first requiring a number of surveys to be conducted outlining water use within various CII settings, followed by the implementation of the retrofits. Presently, the Utility conducts the ultra low flush toilet program on a continuing basis.

DMM 10: Wholesale Agency Programs

TVMWD provides assistance to retail water agencies to implement water use efficiency programs. This includes implementation of regional programs on behalf of member retail water agencies.

The Utility has not adopted a landscape water conservation ordinance; but city planning officials refer to the Model Water Efficient Landscape Ordinance developed by the Department of Water Resources. Although landscape plans for individual single family homes are not formally reviewed, city planners have the following references available to encourage homeowners and developers to use water conserving techniques in their landscaping plans.

- Brochure: "How to Have a Green Garden in a Dry State" published by Metropolitan Water District

DMM 11: Conservation Pricing

The City sells water to its customers on a flat rate method and periodically adjusts the water rates in order to reflect increases in operating costs and purchased water cost. By transferring the increases in the cost of water production and operations to the customer, the rate increases inherently result in water conservation measures being practiced more aggressively by the water customer to avoid higher billing. Currently, reduction in water consumption is encouraged through the water conservation program and the voluntary ten- percent (10%) reduction in consumption. The Utility has implemented a conservation pricing mechanism. The Utility has also implemented a rate structure for drought years based on the Safe Yield factor as established by the Water Master. Additionally, the mandatory water conservation program contains penalties for overuse of water during drought seasons (See 6.6 for excessive use penalties).

DMM 12: Water Conservation Coordinator

The Utility has designated existing staff to oversee water conservation program implementation.

DMM 13: Water Waste Prohibition

The City of Covina Municipal Water Utility adopted a resolution that addresses the wasting of water. This City Resolution No. 91-5219 is included in **Appendix D** of this report. Utility service crews, meter readers and concerned individuals report wasteful uses of water and consumers are contacted regarding leaks and sprinkler run-off.

DMM 14: Residential Ultra-Low-Flow Toilet Replacement Program

Although the California Plumbing Code and Federal Plumbing Code require the manufacturing and distribution of 1.6 gallon-per-flush toilets, existing 3.5 gpf or greater toilet fixtures remain throughout the Three Valleys service area. By installing these 1.6 gpf retrofits, 30-50 gallons of water per household is saved daily. This type of substantial water savings will have long term effects, while not requiring customers to alter their water use habits. Three Valleys has actively facilitated these retrofit projects with retail agencies in the Covina, Southern California Water Company, Pomona, La Verne, and Glendora service area, accounting for a projected 38 million gallons of water saved each year. The City of Covina Municipal Water Utility is an active participant in this program.

Several retail agencies offer incentives for the replacement of old toilets, which use an average of 3.5 gallons or more per flush, with new 1.6 gallon-per-flush (gpf) toilets. The Utility conducts a continual ultra low flush toilet program. Over the last ten years, over 4,000 low flush toilets have been distributed to customers at no direct cost to the customer in the City of Covina Municipal Water Utility system but the Utility has no other financial incentives.

5.3 SUMMARY

Table 5-1 provides an overview of the Utility's progress in the implementation of the DMM's.

Table 5-2 summarizes the economic, environmental, social health, customer impact, and technological factors of the DMM's which are not implemented by the Utility.

TABLE 5-1

WATER DEMAND MANAGEMENT MEASURES

DMM	Description	Implementation	Implementation Schedule	Methods to Evaluate Effectiveness
1	Residential Water Survey Programs	Yes	On-going	Econometric Savings Analysis
2	Residential Plumbing Retrofit	Yes	On-going	Plumbing Fixtures Saturation Study
3	System Water Audits, Leak Detection, and Repair	Yes	On-going	Monitor Pre-Screening Survey Results
4	Metering with Commodity Rates	Yes	On-going	City Policy for all New Connections
5	Large Landscape Conservation Programs and Incentives	Yes	On-going	Econometric Savings Analysis

6	High-Efficiency Washing Machine Rebate Programs	No	—	—
7	Public Information Programs	Yes	On-going	Not Measurable; Maintain Minimum Level of Implementation
8	School Education Programs	Yes	On-going	Not Measurable; Maintain Minimum Level of Implementation
9	Commercial, Industrial, and Institutional Conservation Programs	Yes	On-going	Econometric Savings Analysis
10	Wholesale Agency Programs	Yes	On-going	Not Measurable; Maintain Minimum Level of Implementation
11	Conservation Pricing	Yes	On-going	Econometric Savings Analysis
12	Water Conservation Coordinator	Yes	On-going	Not Measurable; Maintain Minimum Level of Implementation
13	Water Waste Prohibition	Yes	On-going	Econometric Savings Analysis
14	Residential ULFT Replacement Programs	Yes	On-going	Econometric Savings Analysis

TABLE 5-2

WATER DEMAND MANAGEMENT MEASURES NOT IMPLEMENTED

DMM	Description	Economic	Environmental	Social	Health	Customer Impact	Technological
6	High-Efficiency Washing Machine Rebate Program	Major	Minor	Minor	Minor	Major	Minor

CHAPTER 6

WATER SHORTAGE

CONTINGENCY PLAN

CHAPTER 6

WATER SHORTGAGE CONTINGENCY PLAN

6.1 COORDINATED PLANNING

Water supplies may be interrupted or reduced significantly in a number of ways including drought, natural disasters, and terrorism, which damages water delivery or storage facilities. This chapter of the Plan describes how the City and the Utility plan to respond to such emergencies so that emergency needs are met promptly and equitably.

The City of Covina Municipal Water Utility has coordinated efforts in the past to meet water shortages. The Utility has developed a three-stage rationing plan (**Appendix D** lists the resolution which address these goals) to invoke during declared water shortages. The rationing plan includes voluntary and mandatory rationing, depending on the causes, severity, and anticipated duration of the water supply shortage.

6.2 RESOLUTION TO ADOPT AN INTERIM WATER CONSERVATION MEASURES PROGRAM

The City of Covina has adopted certain initiatives to optimize management efficiency of its available supplies, in situations of water shortage that might be caused during a drought.

The ability to manage water supplies in times of drought or other emergencies is an important part of water resource management in a community. The community must have a program in place prior to the occurrence of these events rather than implement one in time of shortage. The City of Covina has developed and implemented a series of water conservation measures.

The Utility's two main water sources are CIC and MWD deliveries. Rationing stages may be triggered by a shortage in one source or a combination of sources, and shortages may trigger a stage at any time.

In March, 1991, the Covina City Council adopted Resolution 91-5219 for an Interim Water Conservation Measures Program. This resolution established a staged approach to water conservation enforcement, consisting of three conservation stages, in increasing order of severity. Stage 1, Moderate conservation measures, is a stage of voluntary compliance – Water Watch. During Stage 1, all elements of Stage 2 shall apply on a voluntary basis only. Stage 2, Intermediate conservation measures, and Stage 3, Intense conservation measures, are all mandatory compliance stages; Stage 2 issues a Water Alert, Stage 3 issues a Water Warning and issues a Water Emergency. In response to the continuing drought, the Covina City Council adopted a resolution declaring an Emergency Stage 2 in accordance with the Interim Water Conservation Measures Program described above. In this same resolution, the City Council also mandated all water users to reduce water usage by twenty percent (20%).

6.3 SUPPLY SHORTAGE TRIGGERING LEVELS

The City of Covina has a legal responsibility to provide for the health and safety water needs of the community. In order to minimize the social and economic impact of water shortages, the ~~City~~ Utility will manage water supplies prudently. This Plan is designed to provide a minimum of 50 percent of normal supply during a severe or extended water shortage. The rationing program triggering levels in **Table 6-1** is established to ensure that these policy statements are implemented.

Table 6-1

Water Supply Triggering Levels

Stage	Conservation Measures	Percent Shortage
1	Moderate	Voluntary – Up to 5 Percent to 10 Percent Supply Reduction
2	Intermediate	Mandatory – 11 Percent to 20 Percent Supply Reduction
3	Intense	Mandatory – Greater than 20 Percent Supply Reduction

6.4 PROPOSED CONSERVATION MEASURES

While CIC and MWD will continue to be the major suppliers of water for the City of Covina Municipal Water Utility, the availability of water resources in the region is not assured. In order to reduce future demand for water supplies from the CIC and MWD, the City of Covina Municipal Water Utility intends to continue promoting water conservation measures. In order to reduce the amount of water use in the Covina Utility service area, the following actions are proposed:

Phase 1: Voluntary Conservation

This program consists of a public information and education campaign designed to inform citizens of the water shortage conditions in the region and the careful monitoring of water consumption. By giving advice on methods of saving water, the Utility hopes to continue water conservation in the area. Since this program has been in place for nearly 15 years, it is believed that the water reduction gained from the program is significant and will continue to have an impact. It is anticipated the major benefit of this program will be the continuance of conservation efforts currently in use.

Under the Voluntary Conservation Program, the public information programs through the distribution of conservation materials with the City of Covina Municipal Water Utility at City events and with water bills. The conservation materials are available at the City Corporation Yard office at no direct cost to the customer. Also, implementation of a water record information program has been made that involves the water bill that

provides the customer with their previous usage for the period being billed. The billing system will identify customers with higher than normal consumption. A water consumer representative will call at the residence or commercial/industrial establishment to check for possible leaks or determine the reason for high water use. The representative will offer advice to the owner and provide conservation materials. No penalties will be involved in this program. The service will be provided as an information and advisory assistance for all customers. This program depends on the water conservation efforts of individual users and is therefore limited in its effectiveness.

Phase 2: Incentives

Incentives to conserve water, by the Municipal Districts serving the City of Covina, may be in the form of cash payments (rebates) if the customer installs certain water-saving appliances or in the provision of the water-saving appliance and cash incentive to interested parties.

The Utility is considering a system water audit to determine any leaks and defects in the entire Utility system. The Utility's ongoing program for leak detection and repair and the replacement of old mains may be expanded to include a regular distribution system water audit. According to the finding of the audit, the capital improvement program may be amended annually to include water system improvements.

At present, the Utility has no rate structure that specifically encourages the reduction in water use. A single rate of 93 cents per 100 cubic feet of water is charged to consumers within the city and 125 cents per 100 cubic feet for consumers outside the city. The public is informed, through the water bills and other information, that conservation will reduce their water bill since water cost is directly proportional to the amount of water used. In past years, water rates were lowered as consumption increased. This diminishing block was abandoned in 1986. **Appendix C** is the City Water Rate Schedule as adopted in April 1998.

Phase 3: Mandatory Conservation

Mandatory conservation may be imposed by adopting ordinances requiring the installation of water-saving devices, including xeriscape for all new construction and establishing increasing block rates to discourage excessive water use.

The mandatory conservation program consists of regulatory measures designed to decrease water use. There are two parts to the program: first, the passage of Building Code changes to require the installation of water saving devices including drought-resistant plants or xeriscape; and second, adoption of increasing block rates for water consumption. State law regulations require all new construction to install low flush toilets, low flow showerheads, faucet aerators and efficient dishwashers and clothes washers (refer to **Appendix F** for State Law Regulation).

The cost of initial landscaping using xeriscaping is less than conventional landscaping. The Utility may consider adopting a xeriscape ordinance to encourage drought-tolerant

plants in new developments. The ordinance may include the use of low water consuming plants such as Bermuda grasses, gravel areas, drought tolerant landscaping, the use of mulch to reduce water evaporation, and time control irrigation systems to run during the early morning or evening hours.

While it will be difficult to encourage residents to re-landscape with xeriscape methods, the ~~City~~ Utility may implement it for roadway medians, public spaces, and new residential, commercial and industrial areas.

In establishing block rates that feature increasing rates for higher water consumption, average water use figures will be used. Block rates could be structured to provide higher rates for users with above average water consumption for each land use and meter size. The Department of Water Resources estimates a two percent (2%) to a four percent (4%) reduction in water use if a ten percent (10%) increase in water rates is enforced. A 20 percent block increase is estimated to cause a reduction of up to ten percent (10%) in the next higher block.

6.5 WATER STORAGE CONTINGENCY RESOLUTION

As mentioned earlier, the City of Covina adopted a Resolution in March, 1991 establishing interim water conservation measures and penalties due to drought related unavailability of water delivery. The enforcement of the resolution merely requires the City Council to declare a water shortage emergency.

6.6 EXCESSIVE USE PENALTIES

For each occurrence of improper water use, the City shall send to the customer a Notice of Improper Water Use identifying where and when the improper use occurred.

1. First violation of any measure:
   The City shall issue a written notice of the improper water use to the customer.

2. Send violation of any measure:

Moderate Phase	-	$25/Penalty
Intermediate Phase	-	$50/Penalty
Intense Phase	-	$100/Penalty

3. Third violation of any measure:

Moderate Phase	-	$100/Penalty
Intermediate Phase	-	$200/Penalty
Intense Phase	-	$400/Penalty

4. Fourth violation of any measure:

Moderate Phase	-	$250/Penalty
Intermediate Phase	-	$500/Penalty
Intense Phase	-	$1,000/Penalty

5. Fifth violation of any measure:
   Installation of flow restrictor device to retard flow to water user to 1 gal/minute for a period of not less than 72 hours

6. Failure to pay penalties will result in discontinuation of water service until all previous penalties are paid in full. In addition, a reactivation fee will be imposed.

6.7 MECHANISM FOR DETERMINING ACTUAL REDUCTIONS

Demand. The Utility bills their customers on a bi-monthly basis. The prior year's consumption is included on the customer bills. This allows comparison of the total consumption from each billing period to the same billing period from the prior year.

Production. The Utility has the ability to prepare daily production reports. Under normal conditions, monthly production reports are reviewed and compared to production reports and pumping statistics from the same period of the prior year.

Stage 1 and 2 Water Shortages. During Stage 1 and 2 Water Shortages, the Utility will review production reports on a daily basis. Billing reports will be reviewed to identify users not abiding by the plan.

Stage 3 Water Shortages. During Stage 3 Water Shortages, the Utility will review all production reports and pumping statistics on a daily basis. Water transfers and wheeling arrangements will be implemented as needed. The Utility will continue to review billing reports to identify users not abiding by the plan.

6.8 MWD'S WATER SURPLUS AND DROUGHT MANAGEMENT PLAN (WSDM)

In April of 1999, Metropolitan's Board of Directors adopted the Water Surplus and Drought Management Plan (WSDM Plan). This Plan will guide management of regional water supplies to achieve the reliability goals of Southern California's Integrated Resources Plan (IRP). Through effective management of its water supply, Metropolitan fully expects to be 100 percent reliable in meeting all non-discounted non-interruptible demands throughout the next ten years.

Unlike Metropolitan's previous shortage management plans and the 1995 Incremental Interruption and Conservation Plan (1995 IICP), it integrates planned operational activities with respect to both conditions. The WSDM Plan continues Metropolitan's commitment to the regional planning approaches initiated in the IRP.

6.9 2000 WSDM'S SURPLUS AND SHORTAGE STAGES

The WSDM Plan distinguishes between *Surpluses, Shortages, Severe Shortages,* and *Extreme Shortages.* Within the WSDM Plan, these terms have specific meanings relating to Metropolitan's capability to delivery water to its customers.

Surplus: Metropolitan can meet full-service and interruptible program demands, and it can deliver water to local and regional storage.

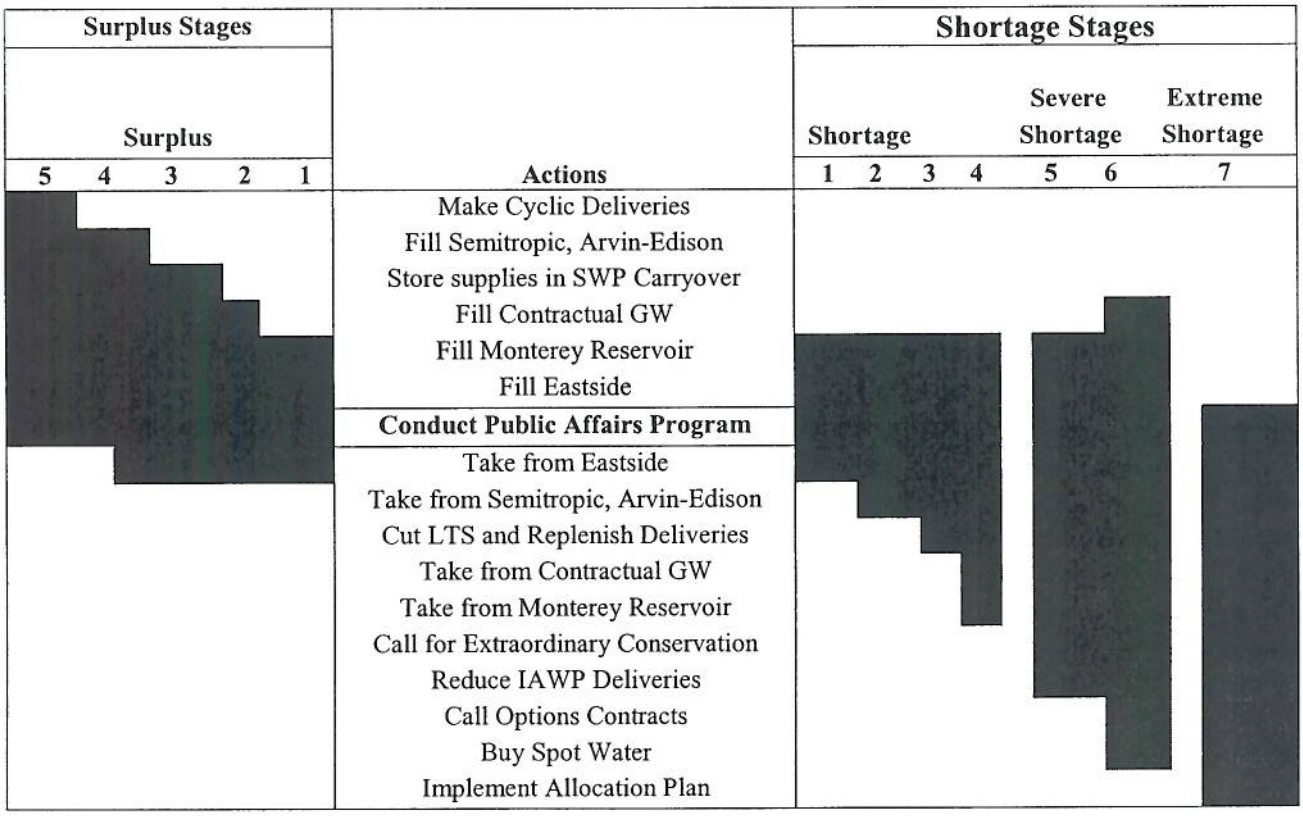
Shortage: Metropolitan can meet full-service demands and partially meet or fully meet interruptible demands, using stored water or water transfers as necessary.

Severe Shortage: Metropolitan can meet full-service demands only by using stored water, transfers, and possibly calling for extraordinary conservation. In a Severe Shortage, Metropolitan may have to curtail Interim Agricultural Water Program deliveries.

Extreme Shortage: Metropolitan must allocate available supply to full-service customers.

Figure 6-1 shows the actions under each surplus and shortage stage, as well as the transitions to each supply declaration. Metropolitan will declare a shortage whenever water supply conditions require resource management activities included in Shortage Stages 1-4. Metropolitan will declare a Severe Shortage if supply conditions require undertaking actions in Shortage Stages 5-6. Finally, Metropolitan will declare an Extreme Shortage if Shortage Stage 7 actions are required. The overriding goal of the WSDM Plan is to never reach Shortage Stage 7, an Extreme Shortage. Given present resources, Metropolitan fully expects to achieve this goal over the next ten years.

Figure 6-1
MWD's Surplus and Shortage Stages



Potential Simultaneous Actions

List of Acronyms:

SWP = State Water Project
IAWP = Interim Agriculture Water Program
LTS = Long Term Seasonal
GW = Ground Water

Implementation of the 2000 WSDM Plan would be the final step taken by MWD during a water supply shortage. The WSDM Plan was modified from the 1995 IICP so that it would have the available supply to full-service customers during even extreme shortage stage. The WSDM Plan, in conjunction with the IRP, will work to correlate shortage mitigation to surplus supplies, through the utilization of all available resources within the area.

APPENDIX 1

REFERENCES

APPREDIX 1

REFERRENCES

1. Three Valleys Municipal Water District –"Urban Water Management Plan December 2005

2. Metropolitan Water District of Southern California "Regional Urban Water Management Plan" Draft 2005

3. City of Covina Municipal Water Utility Urban Water Management Plan 2000

4. City of Covina General Plan

5. State of California, Department of Water Resources, Guidelines for Preparation of 2005 Urban Water Management Plan and Sample Plan

APPENDIX A

CALIFORNIA URBAN WATER MANAGEMENT PLANNING ACT

Appendix A
Urban Water Management Plan Act

Established: AB 797, Klehs, 1983
Amended: AB 2661, Klehs, 1990
AB 11X, Filante, 1991
AB 1869, Speier, 1991
AB 892, Frazee, 1993
SB 1017, McCorquodale, 1994
AB 2853, Cortese, 1994
AB 1845, Cortese, 1995
SB 1011, Polanco, 1995
AB 2552, Bates, 2000
SB 553, Kelley, 2000
SB 610, Costa, 2001
AB 901, Daucher, 2001
SB 672, Machado, 2001
SB 1348, Brulte, 2002
SB 1384 Costa, 2002
SB 1518 Torlakson, 2002
AB 105, Wiggins, 2003
SB 318, Alpert, 2004

CALIFORNIA WATER CODE DIVISION 6
PART 2.6. URBAN WATER MANAGEMENT PLANNING
CHAPTER 1. GENERAL DECLARATION AND POLICY

10610. This part shall be known and may be cited as the "Urban Water Management Planning Act."

10610.2. (a) The Legislature finds and declares all of the following:

(1) The waters of the state are a limited and renewable resource subject to ever-increasing demands.

(2) The conservation and efficient use of urban water supplies are of statewide concern; however, the planning for that use and the implementation of those plans can best be accomplished at the local level.

(3) A long-term, reliable supply of water is essential to protect the productivity of California's businesses and economic climate.

(4) As part of its long-range planning activities, every urban water supplier should make every effort to ensure the appropriate level of reliability in its water service sufficient to meet the needs of its various categories of customers during normal, dry, and multiple dry water years.

(5) Public health issues have been raised over a number of contaminants that have been identified in certain local and imported water supplies.

(6) Implementing effective water management strategies, including groundwater storage projects and recycled water projects, may require specific water quality and salinity targets for meeting groundwater basins water quality objectives and promoting beneficial use of recycled water.

(7) Water quality regulations are becoming an increasingly important factor in water agencies' selection of raw water sources, treatment alternatives, and modifications to existing treatment facilities.

(8) Changes in drinking water quality standards may also impact the usefulness of water supplies and may ultimately impact supply reliability.
(9) The quality of source supplies can have a significant impact on water management strategies and supply reliability.
(b) This part is intended to provide assistance to water agencies in carrying out their long-term resource planning responsibilities to ensure adequate water supplies to meet existing and future demands for water.
10610.4. The Legislature finds and declares that it is the policy of the state as follows:
(a) The management of urban water demands and efficient use of water shall be actively pursued to protect both the people of the state and their water resources.
(b) The management of urban water demands and efficient use of urban water supplies shall be a guiding criterion in public decisions.
(c) Urban water suppliers shall be required to develop water management plans to actively pursue the efficient use of available supplies.

CHAPTER 2. DEFINITIONS

10611. Unless the context otherwise requires, the definitions of this chapter govern the construction of this part.
10611.5. "Demand management" means those water conservation measures, programs, and incentives that prevent the waste of water and promote the reasonable and efficient use and reuse of available supplies.
10612. "Customer" means a purchaser of water from a water supplier who uses the water for municipal purposes, including residential, commercial, governmental, and industrial uses.
10613. "Efficient use" means those management measures that result in the most effective use of water so as to prevent its waste or unreasonable use or unreasonable method of use.
10614. "Person" means any individual, firm, association, organization, partnership, business, trust, corporation, company, public agency, or any agency of such an entity.
10615. "Plan" means an urban water management plan prepared pursuant to this part. A plan shall describe and evaluate sources of supply, reasonable and practical efficient uses, reclamation and demand management activities. The components of the plan may vary according to an individual community or area's characteristics and its capabilities to efficiently use and conserve water. The plan shall address measures for residential, commercial, governmental, and industrial water demand management as set forth in Article 2 (commencing with Section 10630) of Chapter 3. In addition, a strategy and time schedule for implementation shall be included in the plan.
10616. "Public agency" means any board, commission, county, city and county, city, regional agency, district, or other public entity.
10616.5. "Recycled water" means the reclamation and reuse of wastewater for beneficial use.
10617. "Urban water supplier" means a supplier, either publicly or privately owned, providing water for municipal purposes either directly or indirectly to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually. An urban water supplier includes a supplier or contractor for water, regardless of the basis of right, which distributes or sells for ultimate resale to customers. This part applies only to water supplied from public water systems subject to Chapter 4 (commencing with Section 116275) of Part 12 of Division 104 of the Health and Safety Code.

CHAPTER 3. URBAN WATER MANAGEMENT PLANS

Article 1. General Provisions

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

(b) Every person that becomes an urban water supplier shall adopt an urban water management plan within one year after it has become an urban water supplier.
(c) An urban water supplier indirectly providing water shall not include planning elements in its water management plan as provided in Article 2 (commencing with Section 10630) that would be applicable to urban water suppliers or public agencies directly providing water, or to their customers, without the consent of those suppliers or public agencies.
(d)(1) An urban water supplier may satisfy the requirements of this part by participation in area wide, regional, watershed, or basin wide urban water management planning where those plans will reduce preparation costs and contribute to the achievement of conservation and efficient water use.
(2) Each urban water supplier shall coordinate the preparation of its plan with other appropriate agencies in the area, including other water suppliers that share a common source, water management agencies, and relevant public agencies, to the extent practicable.
(e) The urban water supplier may prepare the plan with its own staff, by contract, or in cooperation with other governmental agencies.
(f) An urban water supplier shall describe in the plan water management tools and options used by that entity that will maximize resources and minimize the need to import water from other regions.
10621.
(a) Each urban water supplier shall update its plan at least once every five years on or before December 31, in years ending in five and zero.
(b) Every urban water supplier required to prepare a plan pursuant to this part shall notify any city or county within which the supplier provides water supplies that the urban water supplier will be reviewing the plan and considering amendments or changes to the plan. The urban water supplier may consult with, and obtain comments from, any city or county that receives notice pursuant to this subdivision.
(c) The amendments to, or changes in, the plan shall be adopted and filed in the manner set forth in Article 3 (commencing with Section 10640).

Article 2. Contents of Plans

10630. It is the intention of the Legislature, in enacting this part, to permit levels of water management planning commensurate with the numbers of customers served and the volume of water supplied.
10631. A plan shall be adopted in accordance with this chapter and shall do all of the following:
(a) Describe the service area of the supplier, including current and projected population, climate, and other demographic factors affecting the supplier's water management planning. The projected population estimates shall be based upon data from the state, regional, or local service agency population projections within the service area of the urban water supplier and shall be in five-year increments to 20 years or as far as data is available.
(b) Identify and quantify, to the extent practicable, the existing and planned sources of water available to the supplier over the same five-year increments described in subdivision (a). If groundwater is identified as an existing or planned source of water available to the supplier, all of the following information shall be included in the plan:
(1) A copy of any groundwater management plan adopted by the urban water supplier, including plans adopted pursuant to Part 2.75 (commencing with Section 10750), or any other specific authorization for groundwater management.
(2) A description of any groundwater basin or basins from which the urban water supplier pumps groundwater. For those basins for which a court or the board has adjudicated the rights to pump groundwater, a copy of the order or decree adopted by the court or the board and a description of the amount of groundwater the urban water supplier has the legal right to pump under the order or decree. For basins that have not been adjudicated, information as to whether the department has identified the basin or basins as overdrafted or has projected that the basin will become

overdrafted if present management conditions continue, in the most current official departmental bulletin that characterizes the condition of the groundwater basin, and a detailed description of the efforts being undertaken by the urban water supplier to eliminate the long-term overdraft condition.
(3) A detailed description and analysis of the location, amount, and sufficiency of groundwater pumped by the urban water supplier for the past five years. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historic use records.
(4) A detailed description and analysis of the amount and location of groundwater that is projected to be pumped by the urban water supplier. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historic use records.
(c) Describe the reliability of the water supply and vulnerability to seasonal or climatic shortage, to the extent practicable, and provide data for each of the following:
(1) An average water year.
(2) A single dry water year.
(3) Multiple dry water years.
For any water source that may not be available at a consistent level of use, given specific legal, environmental, water quality, or climatic factors, describe plans to supplement or replace that source with alternative sources or water demand management measures, to the extent practicable.
(d) Describe the opportunities for exchanges or transfers of water on a short-term or long-term basis.
(e)(1) Quantify, to the extent records are available, past and current water use, over the same five-year increments described in subdivision (a), and projected water use, identifying the uses among water use sectors including, but not necessarily limited to, all of the following uses:
(A) Single-family residential.
(B) Multifamily.
(C) Commercial.
(D) Industrial.
(E) Institutional and governmental.
(F) Landscape.
(G) Sales to other agencies.
(H) Saline water intrusion barriers, groundwater recharge, or conjunctive use, or any combination thereof.
(I) Agricultural.
(2) The water use projections shall be in the same five-year increments described in subdivision (a).
(f) Provide a description of the supplier's water demand management measures. This description shall include all of the following:
(1) A description of each water demand management measure that is currently being implemented, or scheduled for implementation, including the steps necessary to implement any proposed measures, including, but not limited to, all of the following:
(A) Water survey programs for single-family residential and multifamily residential customers.
(B) Residential plumbing retrofit.
(C) System water audits, leak detection, and repair.
(D) Metering with commodity rates for all new connections and retrofit of existing connections.
(E) Large landscape conservation programs and incentives.
(F) High-efficiency washing machine rebate programs.
(G) Public information programs.
(H) School education programs.
(I) Conservation programs for commercial, industrial, and institutional accounts.
(J) Wholesale agency programs.

(K) Conservation pricing.
(L) Water conservation coordinator.
(M) Water waste prohibition.
(N) Residential ultra-low-flush toilet replacement programs.
(2) A schedule of implementation for all water demand management measures proposed or described in the plan.
(3) A description of the methods, if any, that the supplier will use to evaluate the effectiveness of water demand management measures implemented or described under the plan.
(4) An estimate, if available, of existing conservation savings on water use within the supplier's service area, and the effect of the savings on the supplier's ability to further reduce demand.
(g) An evaluation of each water demand management measure listed in paragraph (1) of subdivision (f) that is not currently being implemented or scheduled for implementation. In the course of the evaluation, first consideration shall be given to water demand management measures, or combination of measures, that offer lower incremental costs than expanded or additional water supplies. This evaluation shall do all of the following:
(1) Take into account economic and noneconomic factors, including environmental, social, health, customer impact, and technological factors.
(2) Include a cost-benefit analysis, identifying total benefits and total costs.
(3) Include a description of funding available to implement any planned water supply project that would provide water at a higher unit cost.
(4) Include a description of the water supplier's legal authority to implement the measure and efforts to work with other relevant agencies to ensure the implementation of the measure and to share the cost of implementation.
(h) Include a description of all water supply projects and water supply programs that may be undertaken by the urban water supplier to meet the total projected water use as established pursuant to subdivision (a) of Section 10635. The urban water supplier shall include a detailed description of expected future projects and programs, other than the demand management programs identified pursuant to paragraph (1) of subdivision (f), that the urban water supplier may implement to increase the amount of the water supply available to the urban water supplier in average, single-dry, and multiple-dry water years. The description shall identify specific projects and include a description of the increase in water supply that is expected to be available from each project. The description shall include an estimate with regard to the implementation timeline for each project or program.
(i) Describe the opportunities for development of desalinated water, including, but not limited to, ocean water, brackish water, and groundwater, as a long-term supply.
(j) Urban water suppliers that are members of the California Urban Water Conservation Council and submit annual reports to that council in accordance with the "Memorandum of Understanding Regarding Urban Water Conservation in California," dated September 1991, may submit the annual reports identifying water demand management measures currently being implemented, or scheduled for implementation, to satisfy the requirements of subdivisions (f) and (g).
(k) Urban water suppliers that rely upon a wholesale agency for a source of water , shall provide the wholesale agency with water use projections from that agency for that source of water in five-year increments to 20 years or as far as data is available. The wholesale agency shall provide information to the urban water supplier for inclusion in the urban water supplier's plan that identifies and quantifies, to the extent practicable, the existing and planned sources of water as required by subdivision (b), available from the wholesale agency to the urban water supplier over the same five-year increments, and during various water -year types in accordance with subdivision (c). An urban water supplier may rely upon water supply information provided by the wholesale agency in fulfilling the plan informational requirements of subdivisions (b) and (c).

10631.5. The department shall take into consideration whether the urban water supplier is implementing or scheduled for implementation, the water demand management activities that the urban water supplier identified in its urban water management plan, pursuant to Section 10631, in evaluating applications for grants and loans made available pursuant to Section 79163. The urban water supplier may submit to the department copies of its annual reports and other relevant documents to assist the department in determining whether the urban water supplier is implementing or scheduling the implementation of water demand management activities.
10632. The plan shall provide an urban water shortage contingency analysis that includes each of the following elements that are within the authority of the urban water supplier:
(a) Stages of action to be undertaken by the urban water supplier in response to water supply shortages, including up to a 50 percent reduction in water supply, and an outline of specific water supply conditions which are applicable to each stage.
(b) An estimate of the minimum water supply available during each of the next three water years based on the driest three-year historic sequence for the agency's water supply.
(c) Actions to be undertaken by the urban water supplier to prepare for, and implement during, a catastrophic interruption of water supplies including, but not limited to, a regional power outage, an earthquake, or other disaster.
(d) Additional, mandatory prohibitions against specific water use practices during water shortages, including, but not limited to, prohibiting the use of potable water for street cleaning.
(e) Consumption reduction methods in the most restrictive stages. Each urban water supplier may use any type of consumption reduction methods in its water shortage contingency analysis that would reduce water use, are appropriate for its area, and have the ability to achieve a water use reduction consistent with up to a 50 percent reduction in water supply.
(f) Penalties or charges for excessive use, where applicable.
(g) An analysis of the impacts of each of the actions and conditions described in subdivisions (a) to (f), inclusive, on the revenues and expenditures of the urban water supplier, and proposed measures to overcome those impacts, such as the development of reserves and rate adjustments.
(h) A draft water shortage contingency resolution or ordinance.
(i) A mechanism for determining actual reductions in water use pursuant to the urban water shortage contingency analysis.10633. The plan shall provide, to the extent available, information on recycled water and its potential for use as a water source in the service area of the urban water supplier. The preparation of the plan shall be coordinated with local water, wastewater, groundwater, and planning agencies that operate within the supplier's service area, and shall include all of the following:
(a) A description of the wastewater collection and treatment systems in the supplier's service area, including a quantification of the amount of wastewater collected and treated and the methods of wastewater
disposal.
(b) A description of the recycled water currently being used in the supplier's service area, including, but not limited to, the type, place, and quantity of use.
(c) A description and quantification of the potential uses of recycled water, including, but not limited to, agricultural irrigation, landscape irrigation, wildlife habitat enhancement, wetlands, industrial reuse, groundwater recharge, and other appropriate uses, and a determination with regard to the technical and economic feasibility of serving those uses.
(d) The projected use of recycled water within the supplier's service area at the end of 5, 10, 15, and 20 years, and a description of the actual use of recycled water in comparison to uses previously projected pursuant to this subdivision.
(e) A description of actions, including financial incentives, which may be taken to encourage the use ofrecycled water, and the projected results of these actions in terms of acre-feet of recycled water used per year.
(f) A plan for optimizing the use of recycled water in the supplier's service area, including actions

to facilitate the installation of dual distribution systems, to promote recirculating uses, to facilitate the increased use of treated wastewater that meets recycled water standards, and to overcome any obstacles to achieving that increased use.

10634. The plan shall include information, to the extent practicable, relating to the quality of existing sources of water available to the supplier over the same five-year increments as described in subdivision (a) of Section 10631, and the manner in which water quality affects water management strategies and supply reliability.

Article 2.5 Water Service Reliability

10635. (a) Every urban water supplier shall include, as part of its urban water management plan, an assessment of the reliability of its water service to its customers during normal, dry, and multiple dry water years. This water supply and demand assessment shall compare the total water supply sources available to the water supplier with the total projected water use over the next 20 years, in five-year increments, for a normal water year, a single dry wateryear, and multiple dry water years. The water service reliability assessment shall be based upon the information compiled pursuant to Section 10631, including available data from state, regional, or local agency population projections within the service area of the urban water supplier.

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

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

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

Article 3. Adoption and Implementation of Plans

10640. Every urban water supplier required to prepare a plan pursuant to this part shall prepare its plan pursuant to Article 2 (commencing with Section 10630). The supplier shall likewise periodically review the plan as required by Section 10621, and any amendments or changes required as a result of that review shall be adopted pursuant to this article.10641. An urban water supplier required to prepare a plan may consult with, and obtain comments from, any public agency or state agency or any person who has special expertise with respect to water demand management methods and techniques.

10642. Each urban water supplier shall encourage the active involvement of diverse social, cultural, and economic elements of the population within the service area prior to and during the preparation of the plan. Prior to adopting a plan, the urban water supplier shall make the plan available for public inspection and shall hold a public hearing thereon. Prior to the hearing, notice of the time and place of hearing shall be published within the jurisdiction of the publicly owned water supplier pursuant to Section 6066 of the Government Code. The urban water supplier shall provide notice of the time and place of hearing to any city or county within which the supplier provides water supplies. A privately owned water supplier shall provide an equivalent notice within its service area. After the hearing, the plan shall be adopted as prepared or as modified after the hearing.

10643. An urban water supplier shall implement its plan adopted pursuant to this chapter in accordance with the schedule set forth in its plan.

10644. (a) An urban water supplier shall submit to the department, the California State Library, and any city or county within which the supplier provides water supplies a copy of its plan no later than 30 days after adoption. Copies of amendments or changes to the plans shall be submitted to the department, the California State Library, and any city or county within which the supplier provides water supplies within 30 days after adoption.

(b) The department shall prepare and submit to the Legislature, on or before December 31, in the years ending in six and one, a report summarizing the status of the plans adopted pursuant to this part. The report prepared by the department shall identify the outstanding elements of the

individual plans. The department shall provide a copy of the report to each urban water supplier that has filed its plan with the department. The shall also prepare reports and provide data for any legislative hearings designed to consider the effectiveness of plans submitted pursuant to this part.
10645. Not later than 30 days after filing a copy of its plan with the department, the urban water supplier and the department shall make the plan available for public review during normal business hours.

CHAPTER 4. MISCELLANEOUS PROVISIONS

10650. Any actions or proceedings to attack, review, set aside, void, or annul the acts or decisions of an urban water supplier on the grounds of noncompliance with this part shall be commenced as follows:
(a) An action or proceeding alleging failure to adopt a plan shall be commenced within 18 months after that adoption is required by this part.
(b) Any action or proceeding alleging that a plan, or action taken pursuant to the plan, does not comply with this part shall be commenced within 90 days after filing of the plan or amendment thereto pursuant to Section 10644 or the taking of that action.
10651. In any action or proceeding to attack, review, set aside, void, or annul a plan, or an action taken pursuant to the plan by an urban water supplier on the grounds of noncompliance with this part, the inquiry shall extend only to whether there was a prejudicial abuse of discretion. Abuse of discretion is established if the supplier has not proceeded in a manner required by law or if the action by the water supplier is not supported by substantial evidence.
10652. The California Environmental Quality Act (Division 13 (commencing with Section 21000) of the Public Resources Code) does not apply to the preparation and adoption of plans pursuant to this part or to the implementation of actions taken pursuant to Section 10632. Nothing in this part shall be interpreted as exempting from the California Environmental Quality Act any project that would significantly affect water supplies for fish and wildlife, or any project for implementation of the plan, other than projects implementing Section 10632, or any project for expanded or additional water supplies.
10653. The adoption of a plan shall satisfy any requirements of state law, regulation, or order, including those of the State Water Resources Control Board and the Public Utilities Commission, for the preparation of water management plans or conservation plans; provided, that if the State Water Resources Control Board or the Public Utilities Commission requires additional information concerning water conservation to implement its existing authority, nothing in this part shall be deemed to limit the board or the commission in obtaining that information.
The requirements of this part shall be satisfied by any urban water demand management plan prepared to meet federal laws or regulations after the effective date of this part, and which substantially meets the requirements of this part, or by any existing urban water management plan which includes the contents of a plan required under this part.
10654. An urban water supplier may recover in its rates the costs incurred in preparing its plan and implementing the reasonable water conservation measures included in the plan. Any best water management practice that is included in the plan that is identified in the "Memorandum of Understanding Regarding Urban Water Conservation in California" is deemed to be reasonable for the purposes of this section.
10655. If any provision of this part or the application thereof to any person or circumstances is held invalid, that invalidity shall not affect other provisions or applications of this part which can be given effect without the invalid provision or application thereof, and to this end the provisions of this part are severable.
10656. An urban water supplier that does not prepare, adopt, and submit its urban water management plan to the department in accordance with this part, is ineligible to receive funding pursuant to Division 24 (commencing with Section 78500) or Division 26 (commencing with Section 79000), or receive drought assistance from the state until the urban water management

plan is submitted pursuant to this article.

10657. (a) The department shall take into consideration whether the urban water supplier has submitted an updated urban water management plan that is consistent with Section 10631, as amended by the act that adds this section, in determining whether the urban water supplier is eligible for funds made available pursuant to any program administered by the department.

(b) This section shall remain in effect only until January 1, 2006, and as of that date is repealed, unless a later enacted statute, that is enacted before January 1, 2006, deletes or extends that date.

APPENDIX B

2005 CALIFORNIA URBAN WATER MANAGEMENT PLANNING ACT CHECKLIST

APPENDIX B

2000 URBAN WATER MANAGEMENT PLAN CHECKLIST

Checklist Organized According to Subject

Chapter # In Plan	Section of Law	Items to Address
1	10642	Make plan available for public inspection before its adoption.
1		Adopt a plan as prepared or as modified after the public hearing.
1	10620(d) (2)	Coordinate the preparation of its plan with other appropriate agencies, including direct and indirect suppliers, wastewater, groundwater, and planning agencies (refer to section 10633).
3	10631(a)	Provide current and projected population in 5-year increments to 20 years.
1		Describe the climate and other demographic factors.
2	10631(b)	Identify and quantify the existing and planned sources of water available in 5-year increments to 20 years.
2	10631(d)	Describe opportunities for exchanges or transfers of water on short-term or long-term basis.
3	10631(e) (1)	Quantify current and past water use in 5-year increments to 20 years.
3	10631(e) (2)	Identify projected water uses among water use sectors in 5-year increments to 20 years.
4	10631(c)	Describe average, single dry and multiple dry water year data.
4	10632(b)	Provide minimum water supply estimates based on driest three-year historic sequence.
4	10631(c)	Describe the reliability of water supply.
2		Describe the vulnerability of water supply to seasonal or climatic shortage.
--	10633(a)	Describe the wastewater collection and treatment systems in the supplier's service area.
--		Quantify the amount of wastewater collected and treated in the supplier's service area.
--		Describe the methods of wastewater disposal in the supplier's service area.
2	10633(b)	Describe the type, place, and quantity of recycled water currently used in the supplier's service area.

-- -- 	10633(c) (d)	Describe and quantify potential uses of recycled water in 5-year increments to 20 years. Describe the technical and economic feasibility of serving the potential users of recycled water.
--	10633(e)	Describe the actions that may be taken to encourage recycled water use
--	10633(e)	Provide the projected acre-feet results of recycled water used per year.
-- -- 	10633(f)	Provide a plan for optimizing the use of recycled water in the supplier's service area. Provide actions to facilitate the installation of dual distribution systems and to promote re-circulating uses.
4 2 4 	10635(a)	Provide an assessment of the reliability of the water supplier's water service to its customers during normal, single dry, and multiple dry water years. Compare the total water supply sources available to the water supplier with the total projected water use over the next 20 years, in 5-year increments. (Refer to 10631(c). Compare normal, single dry, and multiple dry water year projected water supply sources available to water supplier with the normal, single dry, multiple dry water year projected water used (Refer to 10631(c)
6	10632(c)	Provide actions a water supplier will take to prepare for a catastrophe.
6	10632(h)	Provide a copy of a draft water shortage contingency resolution or ordinance.
6	10632(a)	Provide water shortage stages of action, including up to a 50 percent reduction outlining specific water supply conditions at each stage.
6	10632(d)	Provide mandatory prohibitions.
6	10632(f)	Provide penalties or charges.
-- -- 	10632(g)	Provide an analysis of the impacts on the water supplier revenues and expenditures. Provide measures to overcome revenue and expenditure impacts.
6	10632(l)	Provide a mechanism for determining actual reductions in water use.

APPENDIX C

ORDINANCE NO. 03-1898

ORDINANCE NO. 03-1898

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF COVINA AMENDING THE COVINA MUNICIPAL CODE SECTION 13.12.200 ESTABLISHING WATER RATES EFFECTIVE FOR ALL BILLING CYCLES BEGINNING ON OR AFTER OCTOBER 16, 2003

THE CITY COUNCIL OF THE CITY OF COVINA DOES ORDAIN AS FOLLOWS:

SECTION 1. Chapter 13.12 hereby amends the Covina Municipal Code to read as follows:

CHAPTER 13.12

WATER RATES AND CHARGES

Section:

13.12.200 Water rates, compensations, charges and minimum charges to be charged and collected for domestic water and water service. The City Council: has established two Water Utility service areas known as District One and District Two; has designated District One as the Water Utility service area which includes all Water Utility customers whose residence or place of business is located within the City of Covina's Corporate boundaries; and, has designated District Two as the Water Utility service area which includes all Water District customers whose residence or place of business is located outside the City of Covina's Corporate boundaries.

The following table of rates, compensations, charges and minimum charges to be charged and collected by the City for domestic water service effective for all billing cycles beginning on or after October 16, 2003, except as modified by the City Council, from time to time, by Ordinance amendment. The rate change from normal to moderate will be when the safe yield factor as set by the Water Master is set between .80 and .71 or when the utility is 100 percent dependent on an alternate water source for 30 consecutive days and this rate will remain in place until 30 days after the alternate water source is replaced. The rate change to sever will be when the safe yield factor as set by the Water Master is set between .70 and below or when the utility is 100 percent dependent on an alternate water source for four (4) consecutive months and this rate will remain in place until four (4) months after the alternate water source is replaced.

A. DISTRICT ONE

1. Minimum Charges

There shall be a minimum monthly charge for domestic water furnished in District One as follows:

Description	FY 03/04	FY 04/05	FY 05/06	FY 06/07	FY 07/08
DISTRICT 1 METER CHARGE (Monthly)					
Meter Size					
5/8" & 3/4"	$ 10.57	$ 10.82	$ 11.01	$ 11.27	$ 11.50
1"	$ 26.43	$ 27.05	$ 27.53	$ 28.17	$ 28.74
1 1/2"	$ 52.87	$ 54.10	$ 55.05	$ 56.34	$ 57.48
2"	$ 84.59	$ 86.56	$ 88.09	$ 90.14	$ 91.97
3"	$ 158.60	$ 162.31	$ 165.16	$ 169.01	$ 172.45
4"	$ 264.33	$ 270.51	$ 275.27	$ 281.68	$ 287.41
6"	$ 528.66	$ 541.03	$ 550.53	$ 563.36	$ 574.83
8"	$ 845.85	$ 865.65	$ 880.85	$ 901.37	$ 919.72
DISTRICT 2 METER CHARGE (Monthly)					
Meter Size					
5/8" & 3/4"	$ 14.27	$ 14.61	$ 14.86	$ 15.21	$ 15.52
1"	$ 35.68	$ 36.52	$ 37.16	$ 38.03	$ 38.80
1 1/2"	$ 71.37	$ 73.04	$ 74.32	$ 76.05	$ 77.60
2"	$ 114.19	$ 116.86	$ 118.91	$ 121.69	$ 124.16
3"	$ 214.11	$ 219.12	$ 222.97	$ 228.16	$ 232.80
4"	$ 356.84	$ 365.19	$ 371.61	$ 380.27	$ 388.01
6"	$ 713.69	$ 730.39	$ 743.22	$ 760.53	$ 776.02
8"	$ 1,141.90	$ 1,168.62	$ 1,189.15	$ 1,216.85	$ 1,241.63
DISTRICT 1 CONSUMPTION CHARGE					
Non-Drought Year (per hcf)	$ 0.92	$ 0.93	$ 0.93	$ 0.94	$ 0.95
Moderate Drought Year (per	$ 1.23	$ 1.24	$ 1.25	$ 1.26	$ 1.27

hcf)					
Severe Drought Year (per hcf)	$ 1.67	$ 1.68	$ 1.69	$ 1.71	$ 1.72
DISTRICT 2 CONSUMPTION CHARGE					
Non-Drought Year (per hcf)	$ 1.24	$ 1.25	$ 1.26	$ 1.27	$ 1.28
Moderate Drought Year (per hcf)	$ 1.66	$ 1.67	$ 1.68	$ 1.70	$ 1.71
Severe Drought Year (per hcf)	$ 2.25	$ 2.27	$ 2.29	$ 2.30	$ 2.32
DISTRICT 1 CIP CHARGE (Monthly)					
Meter Size					
5/8" & 3/4"	$ 4.62	$ 4.62	$ 4.62	$ 4.62	$ 4.62
1"	$ 11.56	$ 11.56	$ 11.56	$ 11.56	$ 11.56
1 1/2"	$ 23.12	$ 23.12	$ 23.12	$ 23.12	$ 23.12
2"	$ 36.99	$ 36.99	$ 36.99	$ 36.99	$ 36.99
3"	$ 69.35	$ 69.35	$ 69.35	$ 69.35	$ 69.35
4"	$ 115.58	$ 115.58	$ 115.58	$ 115.58	$ 115.58
6"	$ 231.17	$ 231.17	$ 231.17	$ 231.17	$ 231.17
8"	$ 369.87	$ 369.87	$ 369.87	$ 369.87	$ 369.87
DISTRICT 2 CIP CHARGE (Monthly)					
Meter Size					
5/8" & 3/4"	$ 4.62	$ 4.62	$ 4.62	$ 4.62	$ 4.62
1"	$ 11.56	$ 11.56	$ 11.56	$ 11.56	$ 11.56
1 1/2"	$ 23.12	$ 23.12	$ 23.12	$ 23.12	$ 23.12
2"	$ 36.99	$ 36.99	$ 36.99	$ 36.99	$ 36.99
3"	$ 69.35	$ 69.35	$ 69.35	$ 69.35	$ 69.35
4"	$ 115.58	$ 115.58	$ 115.58	$ 115.58	$ 115.58
6"	$ 231.17	$ 231.17	$ 231.17	$ 231.17	$ 231.17
8"	$ 369.87	$ 369.87	$ 369.87	$ 369.87	$ 369.87
DISTRICT 1 FIRE SERVICE CHARGE (Monthly)					

Meter Size					
4"	$ 16.15	$ 16.15	$ 16.15	$ 16.15	$ 16.15
6"	$ 46.92	$ 46.92	$ 46.92	$ 46.92	$ 46.92
8"	$ 99.99	$ 99.99	$ 99.99	$ 99.99	$ 99.99
10"	$ 179.81	$ 179.81	$ 179.81	$ 179.81	$ 179.81
DISTRICT 2 FIRE SERVICE CHARGE (Monthly)					
Meter Size					
4"	$ 21.81	$ 21.81	$ 21.81	$ 21.81	$ 21.81
6"	$ 63.34	$ 63.34	$ 63.34	$ 63.34	$ 63.34
8"	$ 134.98	$ 134.98	$ 134.98	$ 134.98	$ 134.98
10"	$ 242.74	$ 242.74	$ 242.74	$ 242.74	$ 242.74

SECTION 2. A copy of the table or rates and elevation zone description are on file in the offices of the City Clerk and the Water Utility.

SECTION 3. This ordinance shall be in effect for all billing cycles beginning on or after October 16, 2003.

SECTION 4. The City Clerk shall certify to the passage and adoption of this Ordinance and shall cause the same to be published as required by law.

APPROVED AND PASSED this 16th day of September, 2003.

Walter Allen, III, Mayor

ATTEST:

Rosie Fabian, City Clerk

APPROVED AS TO FORM

Charles S. Vose, City Attorney

I, VERONICA J. MONTECINO, CMC, Chief Deputy City Clerk of the City of Covina, hereby CERTIFY that Ordinance No. 03-1898 was regularly introduced and placed upon its first reading at a meeting of the Covina City Council held September 16, 2003, and that thereafter said Ordinance was duly adopted at a regular meeting of the City Council held October 7, 2003, and was approved and passed by the following vote:

AYES: Council Members Delach, Hall, Lancaster, Mayor Pro Tem Stapleton, Mayor Allen

NOES: None

ABSENT: None

ABSTAIN: None

Veronica J. Montecino, CMC
Chief Deputy City Clerk

RESOLUTION NO. 91-5219

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF COVINA ESTABLISHING INTERIM WATER CONSERVATION MEASURES AND PENALTIES DUE TO DROUGHT RELATED UNAVAILABILITY OF WATER DELIVERY.

WHEREAS, the City of Covina ("City") is engaged in activities necessary to provide water services to consumers within and adjacent to the Covina City boundaries; and

WHEREAS, Covina Municipal Code Section 13.04.020 provides the City Council with the right and power to adopt rules and regulations and modify changes and penalties by resolution, concerning the operation of the water system; and

WHEREAS, in carrying out and implementing the providing of water service, the City has a connection with the Metropolitan Water District ("MWD") for a source of water supply; and

WHEREAS, due to the drought caused unavailability of water delivery from the Covina Irrigating Company (CIC), the City's other source of water supply, the City has the MWD water supply connection as its primary source of water for its consumers; and

WHEREAS, the MWD, who supplies water to the City has invoked mandatory water conservation measures enforced by economic sanctions due to the severe shortage of water caused by the drought conditions throughout the State of California, and

WHEREAS, an interim measure for water conservation to all customers is immediately necessary.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF COVINA AS FOLLOWS:

SECTION 1. MWD is hereby defined as the "Prime Supplier" of water to the City. A reduction in the current level of water supply from this Prime Supplier shall result in the imposition of certain conservation measures upon all consumers of the City's water. "Moderate" conservation measures, as defined herein, may be imposed by the City where there is a reduction or cutback in the current level of water supply from the Prime Supplier of 5% to 10%. "Intermediate" conservation measures, as defined herein, may be imposed by the City wherein there is a reduction or cutback in the current level of water supply from the Prime Supplier of 11% to 20%. "Intense" conservation measures, as defined herein, may be imposed by the City when there is a reduction or cutback in the current level of water supply from the Prime Supplier of greater than 20%. The City Council shall, in its sole discretion, establish the water conservation phase to be imposed.

SECTION 2. Moderate conservation measures shall include the following:

1. No hose washing of sidewalks, walkways, buildings, walls, patios, driveways, parking areas or other paved surfaces except to eliminate conditions hazardous to public health or safety.

2. No washing of motor vehicles, trailers, boats or other types of equipment except with a hand-held bucket or a hose equipped with a positive shutoff nozzle for a quick rinse. WASHING MAY BE DONE WITH RECLAIMED WASTEWATER OR BY A COMMERCIAL CAR WASH USING <u>RECYCLED</u> WATER.

3. No water shall be used to clean, fill or maintain levels in decorative fountains, ponds, lakes or aesthetic structures unless part of a recycling system.

4. Any establishment serving or selling food will only serve water upon request of the customer and will visibly display a notice to that effect.

5. All water leaks to either indoor or outdoor plumbing will be repaired immediately upon notice or notification.

6. Except for nurseries and public open space landscaped areas, no lawns, landscaping or turf areas shall be watered more frequently than every other day and then only between the hours of 10:00 p.m. and 8:00 a.m. unless the irrigation is accomplished by using reclaimed, recycled or gray water.

7. No water user shall cause or allow water to run off landscaped areas onto adjoining streets, sidewalks or other paved areas due to improperly directing or maintaining sprinklers or OVER WATERING.

8. Owners/managers of short term commercial lodging or indefinite term residential units shall post a notice of the water shortage and any necessary compliance measures.

SECTION 3. Intermediate conservation measures shall include the following:

Same as MODERATE conservation measures with the following modifications:

1. Watering no more frequently than every third day. Nurseries and public open space landscaped areas will be restricted to watering every other day between the hours of 10:00 p.m. and 8:00 a.m. unless utilizing reclaimed water.

2. The City will impose an interim moratorium on the construction of swimming pool, ponds or jacuzzi.

3. All new development or existing building modifications will require installation of water saving devices (low flow toilets, faucet/shower restrictors, etc.) landscaping will be drought resistant or xero-scape.

SECTION 4. Intense conservation measures shall include the following:

Same as intermediate conservation measures with the following modifications:

1. There will be no watering of residential landscaping.

2. Commercial nurseries and public open space will water no more frequently than once per week unless utilizing reclaimed water.

3. Use of water from fire hydrants will be limited to fire fighting and related activities.

4. Water use by the municipality will be limited to those activities necessary to maintain public health, safety and welfare.

5. The City will impose an interim moratorium on the filling of swimming pool, ponds or jacuzzis.

SECTION 5. During any phase, water consumption will be restricted to the allocated cut back by the primary water supply source and predicated on the water supplier base year; but at no time will the basic allotment to residential user fall below 600 cubic feet per month of 1200 cubic feet per billing period.

SECTION 6. The water user may file for relief from any provision of these water conservation measures by submitting a written request to the Water System Supervisor. The Water System Supervisor shall establish review procedures in which the granting of relief would depend upon, but not be limited to, the following factors:

1. Result in unemployment (water dependent business, home occupations, professional child care, for examples)

2. Number of member in a household

3. Increase in number of household members from base year

4. Changes in vacancy factor for multiple-family dwellings

5. Increased number of employees since base year

6. Increased business predicated on increased processed water

7. Adjustment to water use caused by emergency health or safety hazards

8. Adjustments to water use related to family health or illness

The applicant for relief must provide proof of the condition requiring relief and must demonstrate that all practical measures for water reduction have been utilized.

SECTION 7. The failure to comply with the designated water conservation measures will result in the following penalties being imposed upon the water user and the water users monthly water bill:

1. First violation of any measure - written warning

2. Second violation of any measure -
   - Moderate phase - $25.00 penalty
   - Intermediate phase - $50.00 penalty
   - Intense phase - $100.00 penalty

3. Third violation of any measure -
   - Moderate phase - $100.00 penalty
   - Intermediate phase - $200.00 penalty
   - Intense phase - $400.00 penalty

4. Fourth violation of any measure -
   - Moderate phase - $250.00 penalty
   - Intermediate phase - $500.00 penalty
   - Intense phase - $1,000.00 penalty

5. Fifth violation of any measure - Installation of flow restrictor device to retard flow to water user to 1 gal/minute for a period of not less than 72 hours.

SECTION 8. Prior to any Water Conservation Phase becoming effective, the City shall provide written notice to each water user, designating the specific phase being implemented, listing the water conservation measures being imposed, the penalties for violation, and the right of a water user to apply for relief. Any decision of the Water System Supervisor with respect to relief or the imposition of any penalty set forth herein may be appealed to the City Council by filing a written appeal with the City Clerk within ten (10) days of notice of decision or imposition of the penalty, at which time the water user may present to the City Council evidence and testimony to challenge or object to the appealed matter. If the City Council finds, upon substantial evidence, that one or more water conservation measures have been violated or that there do not exist sufficient grounds upon which to grant relief, the City Council shall deny the appeal.

SECTION 9. The City Clerk shall certify to the passage and adoption of this Resolution and the same shall thereupon take effect and be in force.

APPROVED AND ADOPTED this 5th day of March, 1991.

Mayor

ATTEST:

John R Thomson
City Clerk

APPROVED AS TO FORM:

Charles L. Vose
City Attorney

I, JOHN R. THOMSON, City Clerk, Covina, California, CERTIFY that this resolution was adopted by the City Council at a regular meeting of the City Council held March 5, 1991, and was adopted by the following vote:

AYES: Coffey, Morgan, O'Leary, Richardson, Lancaster
NOES: None
ABSENT: None

John R Thomson
City Clerk

APPENDIX D

RESOLUTION NO. 91- 5219

RESOLUTION NO. 91-5219

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF COVINA ESTABLISHING INTERIM WATER CONSERVATION MEASURES AND PENALTIES DUE TO DROUGHT RELATED UNAVAILABILITY OF WATER DELIVERY.

WHEREAS, the City of Covina ("City") is engaged in activities necessary to provide water services to consumers within and adjacent to the Covina City boundaries; and

WHEREAS, Covina Municipal Code Section 13.04.020 provides the City Council with the right and power to adopt rules and regulations and modify changes and penalties by resolution, concerning the operation of the water system; and

WHEREAS, in carrying out and implementing the providing of water service, the City has a connection with the Metropolitan Water District ("MWD") for a source of water supply; and

WHEREAS, due to the drought caused unavailability of water delivery from the Covina Irrigating Company (CIC), the City's other source of water supply, the City has the MWD water supply connection as its primary source of water for its consumers; and

WHEREAS, the MWD, who supplies water to the City has invoked mandatory water conservation measures enforced by economic sanctions due to the severe shortage of water caused by the drought conditions throughout the State of California, and

WHEREAS, an interim measure for water conservation to all customers is immediately necessary.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF COVINA AS FOLLOWS:

SECTION 1. MWD is hereby defined as the "Prime Supplier" of water to the City. A reduction in the current level of water supply from this Prime Supplier shall result in the imposition of certain conservation measures upon all consumers of the City's water. "Moderate" conservation measures, as defined herein, may be imposed by the City where there is a reduction or cutback in the current level of water supply from the Prime Supplier of 5% to 10%. "Intermediate" conservation measures, as defined herein, may be imposed by the City wherein there is a reduction or cutback in the current level of water supply from the Prime Supplier of 11% to 20%. "Intense" conservation measures, as defined herein, may be imposed by the City when there is a reduction or cutback in the current level of water supply from the Prime Supplier of greater than 20%. The City Council shall, in its sole discretion, establish the water conservation phase to be imposed.

SECTION 2. Moderate conservation measures shall include the following:

1. No hose washing of sidewalks, walkways, buildings, walls, patios, driveways, parking areas or other paved surfaces except to eliminate conditions hazardous to public health or safety.

2. No washing of motor vehicles, trailers, boats or other types of equipment except with a hand-held bucket or a hose equipped with a positive shutoff nozzle for a quick rinse. WASHING MAY BE DONE WITH RECLAIMED WASTEWATER OR BY A COMMERCIAL CAR WASH USING <u>RECYCLED</u> WATER.

3. No water shall be used to clean, fill or maintain levels in decorative fountains, ponds, lakes or aesthetic structures unless part of a recycling system.

4. Any establishment serving or selling food will only serve water upon request of the customer and will visibly display a notice to that effect.

5. All water leaks to either indoor or outdoor plumbing will be repaired immediately upon notice or notification.

6. Except for nurseries and public open space landscaped areas, no lawns, landscaping or turf areas shall be watered more frequently than every other day and then only between the hours of 10:00 p.m. and 8:00 a.m. unless the irrigation is accomplished by using reclaimed, recycled or gray water.

7. No water user shall cause or allow water to run off landscaped areas onto adjoining streets, sidewalks or other paved areas due to improperly directing or maintaining sprinklers or OVER WATERING.

8. Owners/managers of short term commercial lodging or indefinite term residential units shall post a notice of the water shortage and any necessary compliance measures.

SECTION 3. Intermediate conservation measures shall include the following:

Same as MODERATE conservation measures with the following modifications:

1. Watering no more frequently than every third day. Nurseries and public open space landscaped areas will be restricted to watering every other day between the hours of 10:00 p.m. and 8:00 a.m. unless utilizing reclaimed water.

2. The City will impose an interim moratorium on the construction of swimming pool, ponds or jacuzzi.

3. All new development or existing building modifications will require installation of water saving devices (low flow toilets, faucet/shower restrictors, etc.) landscaping will be drought resistant or xero-scape.

SECTION 4. Intense conservation measures shall include the following:

Same as intermediate conservation measures with the following modifications:

1. There will be no watering of residential landscaping.

2. Commercial nurseries and public open space will water no more frequently than once per week unless utilizing reclaimed water.

3. Use of water from fire hydrants will be limited to fire fighting and related activities.

4. Water use by the municipality will be limited to those activities necessary to maintain public health, safety and welfare.

5. The City will impose an interim moratorium on the filling of swimming pool, ponds or jacuzzis.

SECTION 5. During any phase, water consumption will be restricted to the allocated cut back by the primary water supply source and predicated on the water supplier base year; but at no time will the basic allotment to residential user fall below 600 cubic feet per month of 1200 cubic feet per billing period.

SECTION 6. The water user may file for relief from any provision of these water conservation measures by submitting a written request to the Water System Supervisor. The Water System Supervisor shall establish review procedures in which the granting of relief would depend upon, but not be limited to, the following factors:

1. Result in unemployment (water dependent business, home occupations, professional child care, for examples)

2. Number of member in a household

3. Increase in number of household members from base year

4. Changes in vacancy factor for multiple-family dwellings

5. Increased number of employees since base year

6. Increased business predicated on increased processed water

7. Adjustment to water use caused by emergency health or safety hazards

8. Adjustments to water use related to family health or illness

The applicant for relief must provide proof of the condition requiring relief and must demonstrate that all practical measures for water reduction have been utilized.

SECTION 7. The failure to comply with the designated water conservation measures will result in the following penalties being imposed upon the water user and the water users monthly water bill:

1. First violation of any measure - written warning

2. Second violation of any measure -
   - Moderate phase - $25.00 penalty
   - Intermediate phase - $50.00 penalty
   - Intense phase - $100.00 penalty

3. Third violation of any measure -
   - Moderate phase - $100.00 penalty
   - Intermediate phase - $200.00 penalty
   - Intense phase - $400.00 penalty

4. Fourth violation of any measure -
   - Moderate phase - $250.00 penalty
   - Intermediate phase - $500.00 penalty
   - Intense phase - $1,000.00 penalty

5. Fifth violation of any measure - Installation of flow restrictor device to retard flow to water user to 1 gal/minute for a period of not less than 72 hours.

SECTION 8. Prior to any Water Conservation Phase becoming effective, the City shall provide written notice to each water user, designating the specific phase being implemented, listing the water conservation measures being imposed, the penalties for violation, and the right of a water user to apply for relief. Any decision of the Water System Supervisor with respect to relief or the imposition of any penalty set forth herein may be appealed to the City Council by filing a written appeal with the City Clerk within ten (10) days of notice of decision or imposition of the penalty, at which time the water user may present to the City Council evidence and testimony to challenge or object to the appealed matter. If the City Council finds, upon substantial evidence, that one or more water conservation measures have been violated or that there do not exist sufficient grounds upon which to grant relief, the City Council shall deny the appeal.

SECTION 9. The City Clerk shall certify to the passage and adoption of this Resolution and the same shall thereupon take effect and be in force.

APPROVED AND ADOPTED this 5th day of March, 1991.

Mayor

ATTEST:

John R Thomson
City Clerk

APPROVED AS TO FORM:

Charles L. Vose
City Attorney

I, JOHN R. THOMSON, City Clerk, Covina, California, CERTIFY that this resolution was adopted by the City Council at a regular meeting of the City Council held March 5, 1991, and was adopted by the following vote:

AYES: Coffey, Morgan, O'Leary, Richardson, Lancaster
NOES: None
ABSENT: None

John R Thomson
City Clerk

APPENDIX E

CITY OF COVINA MUNICIPAL

WATER UTILITY

BUDGET AND CAPITAL IMPROVEMENT

PROGRAM

CITY OF COVINA, CALIFORNIA

2004 - 2005 Budget

Program Summary

Program: Water Utility

	2002 - 2003 Actual	2003 - 2004 Budget	2004 - 2005 Base	2004 - 2005 Adopted	2004 - 2005 Change
Revenues					
Water Revenue	4,323,149	4,582,850	5,497,220	5,497,220	-
Investment Earnings	31,768	40,000	40,000	40,000	-
Total Revenues	4,354,917	4,622,850	5,537,220	5,537,220	-
Activities					
General and Admin-Water	531,322	583,850	590,230	687,390	97,160
Utility Billing-Water	67,227	64,840	72,240	70,740	(1,500)
Customer Service	238,666	285,100	347,580	347,580	-
Sales Promotion	47,370	50,000	50,000	50,000	-
Source and Supply	2,479,259	2,070,200	1,743,890	1,743,890	-
Production and Storage	329,668	697,570	506,340	521,420	15,080
Transmission and Distribution	933,005	946,190	1,122,800	1,061,530	(61,270)
Total Activities	4,626,517	4,697,750	4,433,080	4,482,550	49,470
Appropriations					
Water Utility Fund	4,209,311	4,097,750	3,953,080	4,001,870	48,790
Water Capital Fund	417,206	600,000	480,000	480,680	680
Total Appropriations	4,626,517	4,697,750	4,433,080	4,482,550	49,470

CITY OF COVINA, CALIFORNIA

2004-2005 Budget

Activity Information

Program: Water Utility

Activity: General and Admin-Water

Purpose

Manage the supply, distribution and other activities related to potable and fire suppression water to all customers of the utility system. The system encompasses approximately 66 percent of the City of Covina and portions of the City of West Covina and unincorporated Los Angeles County.

Goals and Objectives

The goals of the division are:

- Oversight of the entire enterprise fund through sound managerial practices.
- Coordination of all other water utility activities with other City departments, governmental and water agencies, the business community and customers.
- Good record management for accurate information.
- Meet State and Federal regulations.
- Reduce unaccounted for water in the system.
- Lease and/or purchase water right to meet the customer demands.

Base Budget-Change in Service

The 2004-2005 budget reflects the elimination of the Water System Supervisor position. This position is replaced with a Public Works Superintendent accounted for in the General Fund. A portion of the new position is charged back to the Water Utility Fund.

	2002-2003 Actual	2003-2004 Budget	2004-2005 Base	2004-2005 Adopted	2004-2005 Change
Full-Time Equivalent Positions					
Full-Time Positions					
Water System Supervisor	1.00	1.00	1.00	-	(1.00)
Administrative Technician	1.00	1.00	1.00	1.00	-
Total Full-Time Positions	2.00	2.00	2.00	1.00	(1.00)
FTE Part-Time Positions					
Engineering Intern	0.50	0.50	0.50	0.50	-
Total Full-Time Equivalent Positions	2.50	2.50	2.50	1.50	(1.00)

CITY OF COVINA, CALIFORNIA
2004 - 2005 Budget
Activity Summary

Program: Water Utility

Activity: General and Admin-Water

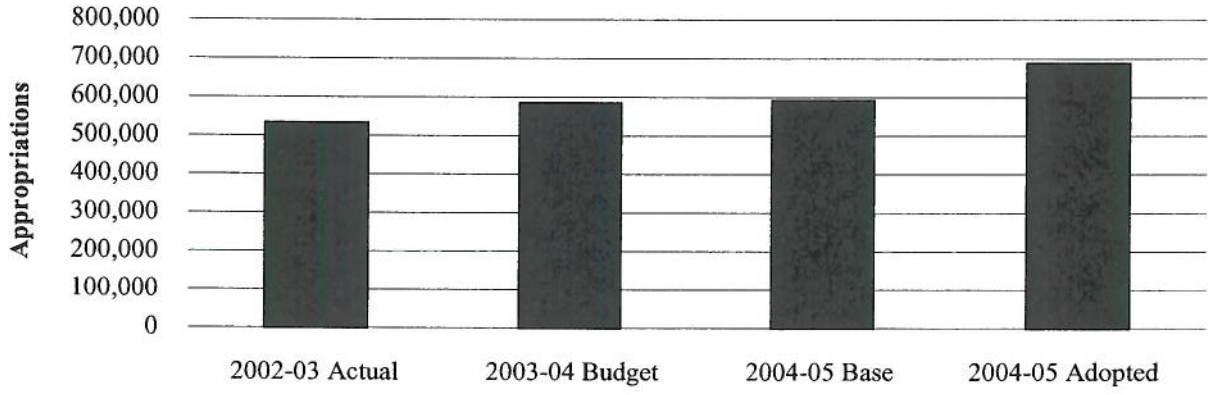
	2002 - 2003 Actual	2003 - 2004 Budget	2004 - 2005 Base	2004 - 2005 Adopted	2004 - 2005 Change
Revenues					
Water Revenue	44,402	17,500	43,050	43,050	-
Investment Earnings	11,997	25,000	25,000	25,000	-
Total Revenues	56,399	42,500	68,050	68,050	-
Expenditures					
Personal Services	90,432	136,580	148,250	65,660	(82,590)
Professional and Technical	27,107	14,860	11,540	10,770	(770)
Property Services	10,331	12,730	12,730	12,730	-
Other Services and Charges	6,104	15,020	13,950	13,950	-
Supplies	2,548	4,610	4,610	4,610	-
Interdepartmental	394,800	400,050	399,150	579,670	180,520
Total Expenditures	531,322	583,850	590,230	687,390	97,160
Appropriations					
Water Utility Fund	531,322	583,850	590,230	687,390	97,160
Total Appropriations	531,322	583,850	590,230	687,390	97,160

CITY OF COVINA, CALIFORNIA
2004 - 2005 Budget
Activity Summary

Program: Water Utility

Activity: General and Admin-Water

	2002 - 2003 Actual	2003 - 2004 Budget	2004 - 2005 Base	2004 - 2005 Adopted	2004 - 2005 Change
Revenues					
Water Revenue	44,402	17,500	43,050	43,050	-
Investment Earnings	11,997	25,000	25,000	25,000	-
Total Revenues	56,399	42,500	68,050	68,050	-
Expenditures					
Personal Services	90,432	136,580	148,250	65,660	(82,590)
Professional and Technical	27,107	14,860	11,540	10,770	(770)
Property Services	10,331	12,730	12,730	12,730	-
Other Services and Charges	6,104	15,020	13,950	13,950	-
Supplies	2,548	4,610	4,610	4,610	-
Interdepartmental	394,800	400,050	399,150	579,670	180,520
Total Expenditures	531,322	583,850	590,230	687,390	97,160
Appropriations					
Water Utility Fund	531,322	583,850	590,230	687,390	97,160
Total Appropriations	531,322	583,850	590,230	687,390	97,160



CITY OF COVINA, CALIFORNIA

2004-2005 Budget

Activity Information

Program: Water Utility

Activity: Utility Billing-Water

Purpose

Utility Billing-Water is responsible for the water customer billing process and handling individual customer inquiries. Water bills are generated on a bi-monthly basis with refuse and recycling charges (see Utility Billing-Environmental) included on the same bill. The Utility Billing-Water activity is accounted for in the Water Utility Fund.

- Establish and maintain customer files.
- Download routes from computer to meter reading devices.
- Enter water consumption from meter reading devices.
- Process and prepare bi-monthly water billings and second and final notices.
- Prepare billing and consumption reports.
- Provide special information for outside agencies.
- Coordinate water shut-off and reconnections.
- Generate and coordinate customer work orders with public works.

Goals and Objectives

The main goal for the Utility Billing-Water activity is the ongoing maintenance and training of the utility billing software application.

Base Budget-Change in Services

The 2004-2005 budget reflects the ongoing operating costs of the utility billing application. The appropriation is accounted for in the Water Utility Fund and is offset by water revenue-water connection fees. The budget includes a reduction in information technology charges.

	2002-2003 Actual	2003-2004 Budget	2004-2005 Base	2004-2005 Adopted	2004-2005 Change
Performance Workload Measurements					
Percent of second and final notices to regular utility bills	35%	35%	35%	35%	No
Percent of utility payments processed the following day	100%	100%	100%	100%	No
Percent of water/refuse utility accounts collected	98%	98%	98%	98%	No
Percent of bi-monthly routes billed the following month	100%	100%	100%	100%	No
Full-Time Equivalent Positions					
Full-Time Positions					
Account Clerk II	0.75	0.75	0.75	0.75	-
Total Full-Time Equivalent Positions	0.75	0.75	0.75	0.75	-

CITY OF COVINA, CALIFORNIA
2004 - 2005 Budget
Activity Summary

Program: Water Utility

Activity: Utility Billing-Water

	2002 - 2003 Actual	2003 - 2004 Budget	2004 - 2005 Base	2004 - 2005 Adopted	2004 - 2005 Change
Revenues					
Water Revenue	11,960	10,000	10,000	10,000	-
Total Revenues	11,960	10,000	10,000	10,000	-
Expenditures					
Personal Services	35,704	35,680	38,910	38,910	-
Professional and Technical	11,190	10,350	13,140	11,640	(1,500)
Property Services	-	-	1,380	1,380	-
Other Services and Charges	17,097	15,810	15,810	15,810	-
Supplies	3,236	3,000	3,000	3,000	-
Total Expenditures	67,227	64,840	72,240	70,740	(1,500)
Appropriations					
Water Utility Fund	67,227	64,840	72,240	70,740	(1,500)
Total Appropriations	67,227	64,840	72,240	70,740	(1,500)

CITY OF COVINA, CALIFORNIA

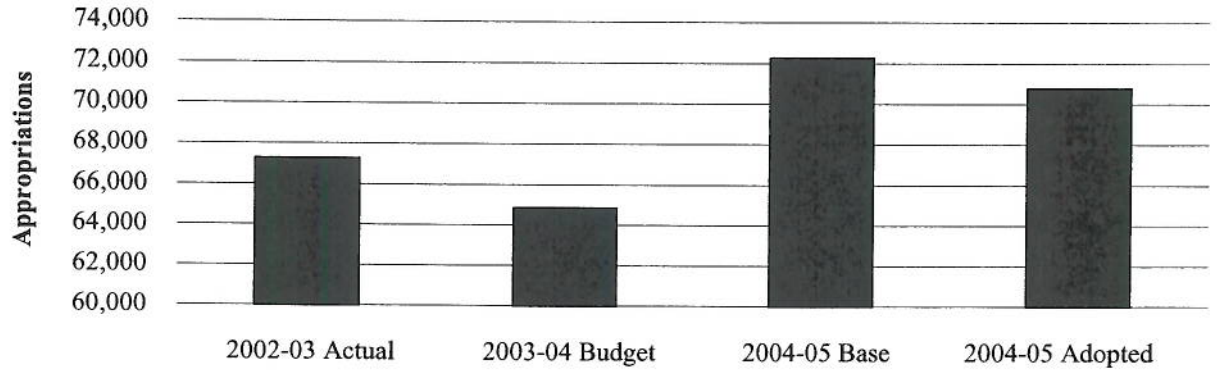
2004 - 2005 Budget

Activity Summary

Program: Water Utility

Activity: Utility Billing-Water

	2002 - 2003 Actual	2003 - 2004 Budget	2004 - 2005 Base	2004 - 2005 Adopted	2004 - 2005 Change
Revenues					
Water Revenue	11,960	10,000	10,000	10,000	-
Total Revenues	11,960	10,000	10,000	10,000	-
Expenditures					
Personal Services	35,704	35,680	38,910	38,910	-
Professional and Technical	11,190	10,350	13,140	11,640	(1,500)
Property Services	-	-	1,380	1,380	-
Other Services and Charges	17,097	15,810	15,810	15,810	-
Supplies	3,236	3,000	3,000	3,000	-
Total Expenditures	67,227	64,840	72,240	70,740	(1,500)
Appropriations					
Water Utility Fund	67,227	64,840	72,240	70,740	(1,500)
Total Appropriations	67,227	64,840	72,240	70,740	(1,500)



Program: Water Utility

Activity: Customer Service

Purpose

To provide and maintain a high quality level of service to our customers.

Goals and Objectives

The major goals of the division are:

- Accurate meter reads.
- Response to customers' inquiries.
- Test and inspect back flow devices.
- On property responses to customer need for water pressure and flow.
- Maintain water system warehouse and inventory control.

Base Budget-Change in Service

There are no changes in service for fiscal year 2004-2005.

Full-Time Equivalent Positions	2002-2003 Actual	2003-2004 Budget	2004-2005 Base	2004-2005 Adopted	2004-2005 Change
Full-Time Positions					
Water Crew Leader	1.00	1.00	1.00	1.00	-
Water Consumer Representative	1.00	1.00	1.00	1.00	-
Water Worker	1.00	1.00	1.00	1.00	-
Total Full-Time Equivalent Positions	3.00	3.00	3.00	3.00	-

CITY OF COVINA, CALIFORNIA
2004 - 2005 Budget
Activity Summary

Program: Water Utility

Activity: Customer Service

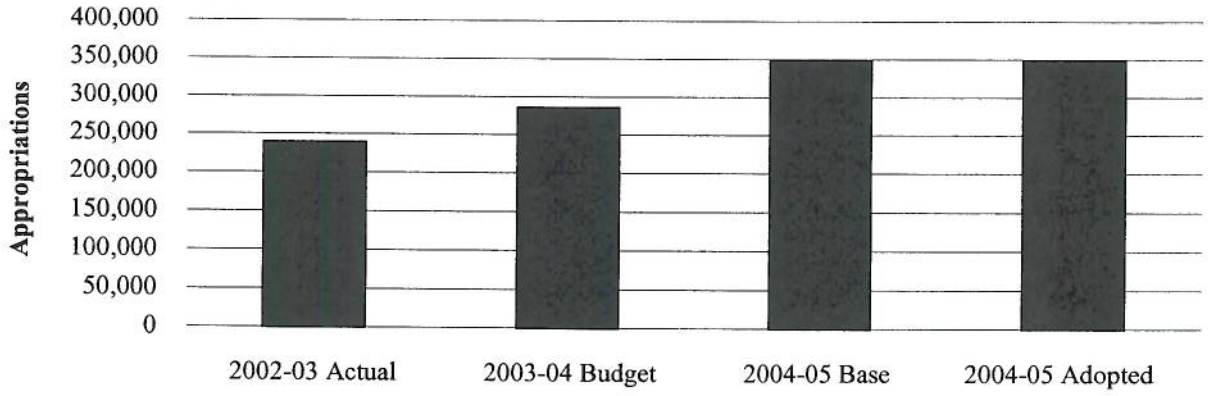
	2002 - 2003 Actual	2003 - 2004 Budget	2004 - 2005 Base	2004 - 2005 Adopted	2004 - 2005 Change
Revenues					
Water Revenue	36,442	14,500	14,500	14,500	-
Total Revenues	36,442	14,500	14,500	14,500	-
Expenditures					
Personal Services	159,135	152,990	213,860	213,860	-
Professional and Technical	285	-	-	-	-
Property Services	3,175	2,500	2,500	2,500	-
Other Services and Charges	10,492	13,440	14,990	14,990	-
Supplies	-	1,170	1,230	1,230	-
Capital Outlay	65,579	115,000	115,000	115,000	-
Total Expenditures	238,666	285,100	347,580	347,580	-
Appropriations					
Water Utility Fund	238,666	285,100	347,580	347,580	-
Total Appropriations	238,666	285,100	347,580	347,580	-

CITY OF COVINA, CALIFORNIA
2004 - 2005 Budget
Activity Summary

Program: Water Utility

Activity: Customer Service

	2002 - 2003 Actual	2003 - 2004 Budget	2004 - 2005 Base	2004 - 2005 Adopted	2004 - 2005 Change
Revenues					
Water Revenue	36,442	14,500	14,500	14,500	-
Total Revenues	36,442	14,500	14,500	14,500	-
Expenditures					
Personal Services	159,135	152,990	213,860	213,860	-
Professional and Technical	285	-	-	-	-
Property Services	3,175	2,500	2,500	2,500	-
Other Services and Charges	10,492	13,440	14,990	14,990	-
Supplies	-	1,170	1,230	1,230	-
Capital Outlay	65,579	115,000	115,000	115,000	-
Total Expenditures	238,666	285,100	347,580	347,580	-
Appropriations					
Water Utility Fund	238,666	285,100	347,580	347,580	-
Total Appropriations	238,666	285,100	347,580	347,580	-



CITY OF COVINA, CALIFORNIA

2004-2005 Budget

Capital Outlay

Program: Water Utility

Activity: Customer Service

Object Type	Appropriations	Description	2004-2005 Adopted
Water Meters	Water Utility Fund	Replace Water Meters	115,000
Total Water Meters			115,000
Total Capital Outlay			115,000

CITY OF COVINA, CALIFORNIA

2004-2005 Budget

Activity Information

Program: Water Utility

Activity: Sales Promotion

Purpose

To promote water conservation in accord with Memorandum of Understanding with the State Department of Water Resources.

Goals and Objectives

The major goals of the division are:

- One Ultra Low Flush Toilet Program in conjunction with a Community Based Organization.
- School Programs independent and/or in conjunction with a District.
- Commercial Program ICP.
- Special events.

Base Budget-Change in Service

There are no changes in service for fiscal year 2004-2005.

Full-Time Equivalent Positions	2002-2003 Actual	2003-2004 Budget	2004-2005 Base	2004-2005 Adopted	2004-2005 Change
Total Full-Time Equivalent Positions	-	-	-	-	-

CITY OF COVINA, CALIFORNIA

2004 - 2005 Budget

Activity Summary

Program: Water Utility

Activity: Sales Promotion

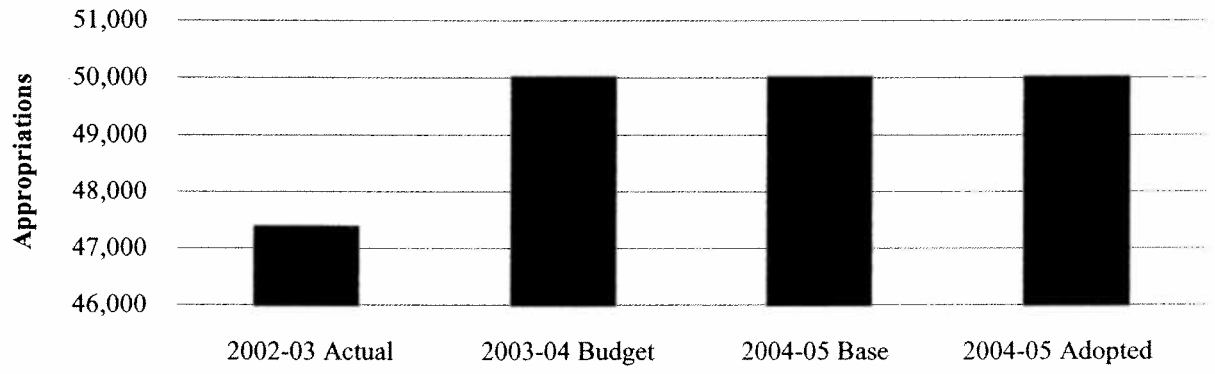
	2002 - 2003 Actual	2003 - 2004 Budget	2004 - 2005 Base	2004 - 2005 Adopted	2004 - 2005 Change
Revenues					
Total Revenues	-	-	-	-	-
Expenditures					
Other Services and Charges	359	-	-	-	-
Supplies	47,011	50,000	50,000	50,000	-
Total Expenditures	47,370	50,000	50,000	50,000	-
Appropriations					
Water Utility Fund	47,370	50,000	50,000	50,000	-
Total Appropriations	47,370	50,000	50,000	50,000	-

CITY OF COVINA, CALIFORNIA
2004 - 2005 Budget
Activity Summary

Program: Water Utility

Activity: Sales Promotion

	2002 - 2003 Actual	2003 - 2004 Budget	2004 - 2005 Base	2004 - 2005 Adopted	2004 - 2005 Change
Revenues					
Total Revenues	-	-	-	-	-
Expenditures					
Other Services and Charges	359	-	-	-	-
Supplies	47,011	50,000	50,000	50,000	-
Total Expenditures	47,370	50,000	50,000	50,000	-
Appropriations					
Water Utility Fund	47,370	50,000	50,000	50,000	-
Total Appropriations	47,370	50,000	50,000	50,000	-



Program: Water Utility

Activity: Source and Supply

Purpose

To purchase potable water for resale to the customer.

Goals and Objectives

To acquire all water produced and stored in the system from Covina Irrigating Company.

Base Budget-Change in Service

There is no change in service for fiscal year 2004-2005. However, there is a reduction in the cost for purchased water in that Covina's water entitlement was carried forward from fiscal 2003-2004 due to our extensive use of Metropolitan water in fiscal year 2003-2004. This anomaly should not occur in future years and purchased water costs will return to a normal state.

	2002-2003 Actual	2003-2004 Budget	2004-2005 Base	2004-2005 Adopted	2004-2005 Change
Full-Time Equivalent Positions					
Total Full-Time Equivalent Positions	-	-	-	-	-

CITY OF COVINA, CALIFORNIA

2004 - 2005 Budget

Activity Summary

Program: Water Utility

Activity: Source and Supply

	2002 - 2003 Actual	2003 - 2004 Budget	2004 - 2005 Base	2004 - 2005 Adopted	2004 - 2005 Change
Revenues					
Total Revenues	-	-	-	-	-
Expenditures					
Supplies	2,479,259	2,070,200	1,743,890	1,743,890	-
Total Expenditures	2,479,259	2,070,200	1,743,890	1,743,890	-
Appropriations					
Water Utility Fund	2,479,259	2,070,200	1,743,890	1,743,890	-
Total Appropriations	2,479,259	2,070,200	1,743,890	1,743,890	-

CITY OF COVINA, CALIFORNIA

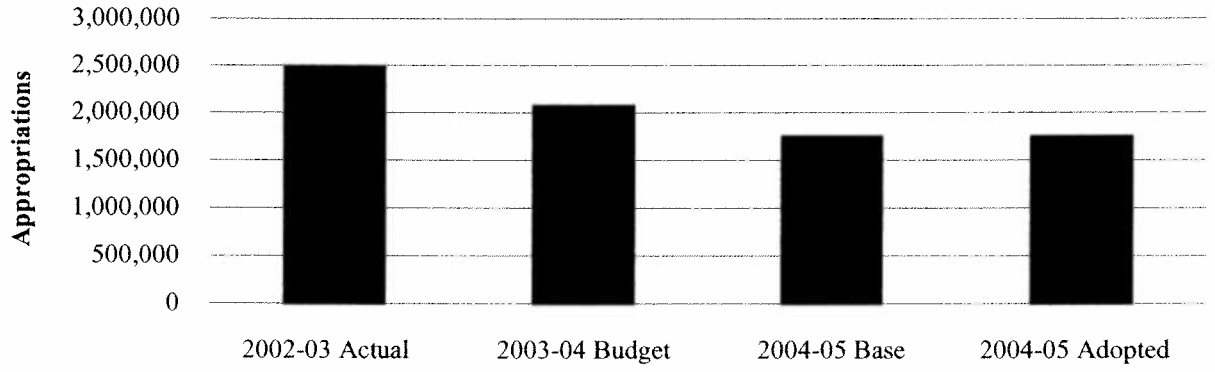
2004 - 2005 Budget

Activity Summary

Program: Water Utility

Activity: Source and Supply

	2002 - 2003 Actual	2003 - 2004 Budget	2004 - 2005 Base	2004 - 2005 Adopted	2004 - 2005 Change
Revenues					
Total Revenues	-	-	-	-	-
Expenditures					
Supplies	2,479,259	2,070,200	1,743,890	1,743,890	-
Total Expenditures	2,479,259	2,070,200	1,743,890	1,743,890	-
Appropriations					
Water Utility Fund	2,479,259	2,070,200	1,743,890	1,743,890	-
Total Appropriations	2,479,259	2,070,200	1,743,890	1,743,890	-



Program: Water Utility

Activity: Production and Storage

Purpose

To import and store the water supply in the time and manner to best serve the needs of the customers.

Goals and Objectives

The major goals of the division are:

- To produce and store water in a quantity to meet the public demand.
- To ensure water quality though outside testing.
- To purchase water at the most reasonable cost for resale.
- To use Covina Irrigating Company as the primary if not only source of water.

Base Budget-Change in Service

There is one change in service for fiscal year 2004-2005. The Water System Supervisor was required to have a Distribution 4 (D4) to operate the Water Utility. The new position of Public Works Superintendent does not have this as a requirement; therefore, the utility will be utilizing the consulting services of Covina Irrigating Company to provide the expertise and D4 certifications for the system operation. Interdepartmental charges include the new cost allocation plan.

Full-Time Equivalent Positions	2002-2003 Actual	2003-2004 Budget	2004-2005 Base	2004-2005 Adopted	2004-2005 Change
Full-Time Positions					
Water Pump Operator	2.00	2.00	2.00	2.00	-
Total Full-Time Equivalent Positions	2.00	2.00	2.00	2.00	-

CITY OF COVINA, CALIFORNIA
2004 - 2005 Budget
Activity Summary

Program: Water Utility

Activity: Production and Storage

	2002 - 2003 Actual	2003 - 2004 Budget	2004 - 2005 Base	2004 - 2005 Adopted	2004 - 2005 Change
Revenues					
Water Revenue	4,221,151	4,540,850	5,429,670	5,429,670	-
Investment Earnings	19,771	590,450	676,770	676,770	-
Total Revenues	4,240,922	5,131,300	6,106,440	6,106,440	-
Expenditures					
Personal Services	111,410	118,620	116,400	116,400	-
Professional and Technical	17,702	20,000	20,000	34,400	14,400
Property Services	186,748	297,920	291,240	291,240	-
Other Services and Charges	14,634	17,920	17,340	17,340	-
Supplies	(826)	3,110	3,160	3,160	-
Capital Outlay	-	240,000	58,200	58,200	-
Interdepartmental	-	-	-	680	680
Total Expenditures	329,668	697,570	506,340	521,420	15,080
Appropriations					
Water Utility Fund	329,668	457,570	506,340	520,740	14,400
Water Capital Fund	-	240,000	-	680	680
Total Appropriations	329,668	697,570	506,340	521,420	15,080

CITY OF COVINA, CALIFORNIA

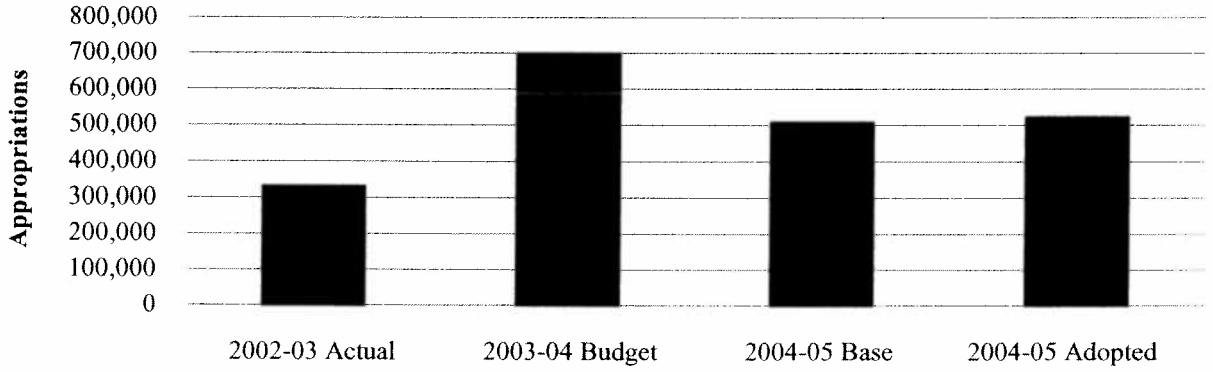
2004 - 2005 Budget

Activity Summary

Program: Water Utility

Activity: Production and Storage

	2002 - 2003 Actual	2003 - 2004 Budget	2004 - 2005 Base	2004 - 2005 Adopted	2004 - 2005 Change
Revenues					
Water Revenue	4,221,151	4,540,850	5,429,670	5,429,670	-
Investment Earnings	19,771	590,450	676,770	676,770	-
Total Revenues	4,240,922	5,131,300	6,106,440	6,106,440	-
Expenditures					
Personal Services	111,410	118,620	116,400	116,400	-
Professional and Technical	17,702	20,000	20,000	34,400	14,400
Property Services	186,748	297,920	291,240	291,240	-
Other Services and Charges	14,634	17,920	17,340	17,340	-
Supplies	(826)	3,110	3,160	3,160	-
Capital Outlay	-	240,000	58,200	58,200	-
Interdepartmental	-	-	-	680	680
Total Expenditures	329,668	697,570	506,340	521,420	15,080
Appropriations					
Water Utility Fund	329,668	457,570	506,340	520,740	14,400
Water Capital Fund	-	240,000	-	680	680
Total Appropriations	329,668	697,570	506,340	521,420	15,080



CITY OF COVINA, CALIFORNIA

2004-2005 Budget

Capital Outlay

Program: Water Utility

Activity: Production and Storage

Object Type	Appropriations	Description	2004-2005 Adopted
Buildings and Structures	Water Utility Fund	Replace vault door for vault at Rancho Simi Reservoir	3,200
		Replace 2000 gpm pump at Cypress Reservoir	55,000
Total Buildings and Structures			58,200
Total Capital Outlay			58,200

Program: Water Utility

Activity: Transmission and Distribution

Purpose

To ensure potable water is transmitted and properly distributed to all customers.

Goals and Objectives

To properly maintain the water infrastructure through:

- Lines
- Mains
- Services
- Cross connections
- Fire hydrants
- Distribution plant
- Valve system

Base Budget-Change in Service

There are no changes in service for fiscal year 2004-2005. Interdepartmental charges include the new cost allocation plan.

Full-Time Equivalent Positions	2002-2003 Actual	2003-2004 Budget	2004-2005 Base	2004-2005 Adopted	2004-2005 Change
Full-Time Positions					
Water Foreman	1.00	1.00	1.00	1.00	-
Water Crew Leader	1.00	1.00	1.00	1.00	-
Equipment Operator	1.00	1.00	1.00	1.00	-
Water Worker	3.00	3.00	3.00	3.00	-
Total Full-Time Equivalent Positions	6.00	6.00	6.00	6.00	-

CITY OF COVINA, CALIFORNIA
2004 - 2005 Budget
Activity Summary

Program: Water Utility

Activity: Transmission and Distribution

	2002 - 2003 Actual	2003 - 2004 Budget	2004 - 2005 Base	2004 - 2005 Adopted	2004 - 2005 Change
Revenues					
Water Revenue	9,194	-	-	-	-
Total Revenues	9,194	-	-	-	-
Expenditures					
Personal Services	320,654	342,420	364,870	364,870	-
Professional and Technical	45,423	20,000	20,000	20,000	-
Property Services	25,599	60,050	60,050	60,050	-
Other Services and Charges	90,470	70,360	93,300	93,300	-
Supplies	12,383	7,090	7,310	7,310	-
Capital Outlay	375,736	360,000	491,000	491,000	-
Interdepartmental	62,740	86,270	86,270	25,000	(61,270)
Total Expenditures	933,005	946,190	1,122,800	1,061,530	(61,270)
Appropriations					
Water Utility Fund	515,799	586,190	642,800	581,530	(61,270)
Water Capital Fund	417,206	360,000	480,000	480,000	-
Total Appropriations	933,005	946,190	1,122,800	1,061,530	(61,270)

CITY OF COVINA, CALIFORNIA
2004 - 2005 Budget
Activity Summary

Program: Water Utility

Activity: Transmission and Distribution

	2002 - 2003 Actual	2003 - 2004 Budget	2004 - 2005 Base	2004 - 2005 Adopted	2004 - 2005 Change
Revenues					
Water Revenue	9,194	-	-	-	-
Total Revenues	9,194	-	-	-	-
Expenditures					
Personal Services	320,654	342,420	364,870	364,870	-
Professional and Technical	45,423	20,000	20,000	20,000	-
Property Services	25,599	60,050	60,050	60,050	-
Other Services and Charges	90,470	70,360	93,300	93,300	-
Supplies	12,383	7,090	7,310	7,310	-
Capital Outlay	375,736	360,000	491,000	491,000	-
Interdepartmental	62,740	86,270	86,270	25,000	(61,270)
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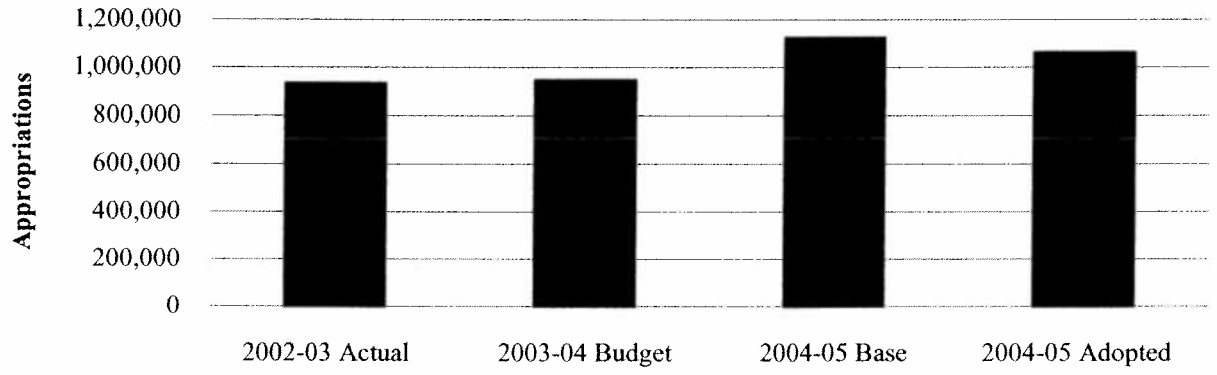
Water Capital Fund	417,206	360,000	480,000	480,000	-
Total Appropriations	933,005	946,190	1,122,800	1,061,530	(61,270)



CITY OF COVINA, CALIFORNIA

2004-2005 Budget

Capital Outlay

Program: Water Utility

Activity: Tranmission and Distribution

Object Type	Appropriations	Description	2004-2005 Adopted
Other Equipment	Water Utility Fund	Replace Roto Hammer	1,200
		Replace Pneumatic Hammer	2,200
		Replace Tapping Machine	3,200
		Additional Shoring Jacks	4,400
Total Other Equipment			11,000
Water Distribution System	Water Capital Fund	Water Main and service replacement	
		Viceroy from Cypress to Edna	120,000
		Edenfield from Cypress to Edna	120,000
		Cedar from Cypress to Edna	120,000
		Edna from Hollenbeck to Citrus	120,000
Total Water Distribution System			480,000
Total Capital Outlay			491,000

CITY OF COVINA MUNICIPAL WATER UTILITY
CAPITAL IMPROVEMENT PLAN

Street	Boundary	Length	Cost/ft	FY-05	FY-06	FY-07	FY-08	FY-09
Viceroy	Cypress-Edna	1,000	$ 78.00	$ 78,000				
Edenfield	Cypress-Edna	1,000	$ 78.00	$ 78,000				
Cedar	Cypress-Edna	1,100	$ 78.00	$ 85,800				
Edna	Hollenbeck-Citrus	2,700	$ 78.00	$ 210,600				
Vulnerability In	Various			$ 250,000				
		5,800		**$ 702,400**				
Workman Ln	Barranca-east end	1,950	$ 80.34		$ 156,663			
Peachtree Ln	Workman-Camellia	250	$ 80.34		$ 20,085			
Camellia	Peachtree-east end	950	$ 80.34		$ 76,323			
Briargate	Workman-Orangewood	500	$ 80.34		$ 40,170			
Orangewood	Briargate-east end	1,300	$ 80.34		$ 104,442			
Swanee	DeLay-Grand	550	$ 80.34		$ 44,187			
Casad	DeLay-Grand	550	$ 80.34		$ 44,187			
Navilla	DeLay-Grand	550	$ 80.34		$ 44,187			
Level	DeLay-Grand	550	$ 80.34		$ 44,187			
Puente	DeLay-east end	300	$ 80.34		$ 24,102			
DeLay	Puente-Rowland	1,300	$ 80.34		$ 104,442			
Charter Oak R	Replace inlet/outlet valve				$ 50,000			
Charter Oak/F	Pavement Rehab				$ 225,000			
Charter Oak	Valve/meter				$ 45,000			
		8,750			**$ 1,022,975**			
Front	Azusa-east end	700	$ 82.75			$ 57,925		
Front	Elspeth-Dover	250	$ 82.75			$ 20,688		
Elspeth	SB Rd-Front	850	$ 82.75			$ 70,338		
Dover	SB Rd-Front	850	$ 82.75			$ 70,338		
Iris	Grovecenter-north end	200	$ 82.75			$ 16,550		
Hycinth	Grovecenter-north end	200	$ 82.75			$ 16,550		
Waterbury	Grovecenter-north end	400	$ 82.75			$ 33,100		

CAPITAL IMPROVEMENT PLAN

Street	Boundary	Length	Cost/ft	FY-05	FY-06	FY-07	FY-08	FY-09
Leaf	Grovecenter-Badillo	500	$ 82.75			$ 41,375		
Homerest	Grovecenter-south end	100	$ 82.75			$ 8,275		
Eileen	Grovecenter-north end	150	$ 82.75			$ 12,413		
Eileen	Grovecenter-south end	100	$ 82.75			$ 8,275		
Grovecenter	Lark Ellen-Leaf	1,270	$ 82.75			$ 105,093		
Charter Oak R	Replace roof tank 1					$ 600,000		
Charter Oak R	Block Wall					$ 80,000		
		5,570				**$ 1,140,918**		
Gila	Rambling Rd-north end	140	$ 85.23				$ 11,933	
Linton	Rambling Rd-north end	240	$ 85.23				$ 20,456	
Muse	Rambling Rd-north end	160	$ 85.23				$ 13,637	
Knollcrest	Hefner Hill- west end	400	$ 85.23				$ 34,093	
Bridger	Larkin- east end	150	$ 85.23				$ 12,785	
Armel	SB Rd - Front	800	$ 85.23				$ 68,186	
Houser	SB Rd - Front	800	$ 85.23				$ 68,186	
Heathdale	SB Rd - Front	800	$ 85.23				$ 68,186	
Larkin	Front- south end	500	$ 85.23				$ 42,616	
Front	Armel-Hollenbeck	1,200	$ 85.23				$ 102,279	
Marbury	Heathdale-Hollenbeck	570	$ 85.23				$ 48,583	
Thelborn	Heathdale- east end	450	$ 85.23				$ 38,355	
Orange Cir	Loma Vista - South end	250	$ 85.23				$ 21,308	
Loma Vista	Second - east end	350	$ 85.23				$ 29,831	
Cypress Res	Replace roof						$ 800,000	
Rancho La Me	Seismic Retro/Recoat						$ 500,000	
		6,810					**$ 1,880,433**	
Valencia	SB Rd - north end	800	$ 87.79					$ 70,230
Fourth	SB Rd - north end	800	$ 87.79					$ 70,232
SP Roadway	Fourth-Fifth	650	$ 87.79					$ 57,064
Hampton	Fourth-Pollard	300	$ 87.79					$ 26,337
Pershing	Fourth-Pollard	300	$ 87.79					$ 26,337

CAPITAL IMPROVEMENT PLAN									
					FY-05	FY-06	FY-07	FY-08	FY-09
Street	**Boundary**	**Length**	**Cost/ft**						
Pollard	Hampton-Pershing	300	$ 87.79						$ 26,337
Cedar	SB Rd - Badillo	1,200	$ 87.79						$ 105,348
Palm	Cedar - Valencia	550	$ 87.79						$ 48,285
Adams Park	Cedar - Valencia	550	$ 87.79						$ 48,285
Kenoak	Cedar - Valencia	550	$ 87.79						$ 48,285
		6,000							
	Five Year Total	32,930							**$ 526,738**

APPENDIX F

STATE LAW REGULATIONS

STATE LAW REGULATIONS

State law regulations that relate to water conservation are outlined below.

- Health and Safety Code Section 17921.3---requires use of low flush toilets and urinals in all new buildings.

- Title 20 of California Administrative Code, Section 1604(f) Appliance Efficiency Standards---establishes efficiency standards that include a maximum flow rate for all new showerheads, faucets, as specified in ANSI A112.18.M.1979.

- Title 20 of California Administrative Code, Section 1606(b) Appliance Efficiency Standards---prohibits the sale of fixtures that do not comply with regulations of Section 1604(f).

- Title 24 of California Administrative Code, Section 2-5307(b) California Energy Conservation Standards for New Buildings---prohibits installation of fixtures unless the manufacturer has certified to the CEC compliance with the flow rate standards.

- Title 24 of California Administrative Code, Section 2-5352(I) and (j) California Energy Conservation---pipe insulation requirements which can reduce water used before hot water reaches equipment or fixtures. Insulation of water-heating systems is also required.

- Health and Safety Code Section 4047---prohibits the installation of residential water softening or conditioning appliances unless certain conditions are met. It includes the requirement that the installation of the appliance is accompanied by water conservation devices on fixtures using softened or conditioned water.

- Government Code Section 7800---specifies that lavatories in all public facilities constructed after January 1, 1985 be equipped with self-closing faucets that limit flow of hot water.

APPENDIX G

2004

CONSUMER CONFIDENCE REPORT

CITY OF COVINA

125 East College Street • Covina, California 91723-2199

May 2005

Dear Water Customer:

On August 19, 1998, the United States Environmental Protection Agency (EPA) adopted Title 40 Code of Federal Regulations, Parts 141 and 142, pertaining to the Consumer Confidence Reports (CCR's). In addition, the California Department of Health Services (DHS) developed similar CCR regulations dated April 23, 2001 to be added to California Code of Regulations, Title 22, Chapter 15 Domestic Water Quality and Monitoring. These regulations require all water suppliers to distribute an annual report on the quality of the water served to each of their customers by July 1st of every year.

We are pleased to notify you that the City of Covina water supply met or surpassed all State and Federal Water Quality Standards as shown in the attached 2004 Consumer Confidence Report. Explanations of several of the items contained in the following pages have also been included in an effort to better educate and inform our customers about the quality of our water.

The City of Covina supplies water to our customers from two sources, Covina Irrigating Company and the Metropolitan Water District of Southern California (MWD). The water supply you receive at your home or business is disinfected with chlorine before it enters the underground pipes of our distribution system. This system is continually monitored and tested to ensure that water quality is maintained to your property. We have installed water-sampling stations throughout the system to maintain a high degree of accuracy in the water sample tests. Approximately 50 water quality samples are collected and analyzed each month.

In addition to supplying you with quality water, we are striving to bring water to you at the lowest possible cost. In order to do this, the City needs your help. Water conservation helps to keep costs down by reducing the amount of water that must be imported into our system at a high price. We strongly encourage you to participate in any upcoming water conservation programs or to request water conservation materials from our office located at 534 North Barranca.

The City of Covina Water Division remains committed to maintaining and improving your water system so that we can continue to supply you with quality water.

If you have any questions regarding this report, please contact our office at (626) 858-7294 or by E-mail at mbuckley@ci.covina.ca.us.

Sincerely,

Monda Buckley
Public Works Manager

CITY OF COVINA

2004 WATER QUALITY TABLE

CONSTITUENT AND (UNITS)	MCL	PHG	DLR	COVINA IRRIGATING COMPANY				METROPOLITAN WATER DISTRICT		TYPICAL ORIGINS
				GROUNDWATER		SURFACE WATER		SURFACE WATER		
				Results (a)	Range (Min-Max)	Results (a)	Range (Min-Max)	Results (a)	Range (Min-Max)	
PRIMARY DRINKING WATER STANDARDS--Health-Related Standards										
CLARITY										
Filter Effluent Turbidity (NTU) (b)	0.3	NA	NA	NR	NR	0.15	100%	0.11	100%	Soil runoff
INORGANIC CHEMICALS										
Aluminum (mg/l)	1	0.6	0.05	ND	ND	0.14	(0.14 - 0.14)	ND	ND	Residue from water treatment processes
Arsenic (ug/l)	50	0.004	2	ND	ND	5	(5 - 5)	ND	ND	Erosion of natural deposits
Barium (mg/l)	1	2	1	ND	ND	0.12	(0.12 - 0.12)	ND	ND	Erosion of natural deposits
Fluoride (mg/l)	2	1	0.1	0.35	(0.3 - 0.4)	0.35	(0.32 - 0.39)	0.18	(0.16 - 0.21)	Erosion of natural deposits
Nitrate as NO3 (mg/l)	45	45	2	21	(5.0 - 30)	3.3	(2.9 - 4.2)	2.1	(ND - 3.3)	Leaching from fertilizer use
RADIOACTIVITY										
Gross Alpha Activity (pCi/l)	15	NA	3	ND	ND	ND	ND	ND	(ND - 4.3)	Erosion of natural deposits
Gross Beta Activity (pCi/l)	50	NA	4	NR	NR	7.32	(7.32 - 7.32)	ND	(ND - 5.0)	Decay of natural and man-made deposits
Uranium (pCi/l)	20	0.5	2	NR	NR	NR	NR	ND	(ND - 3.0)	Erosion of natural deposits
SECONDARY DRINKING WATER STANDARDS--Aesthetic Standards, Not Health-Related										
Aluminum (ug/l)	200	600	50	ND	ND	140	(140 - 140)	ND	ND	Residue from water treatment processes
Chloride (mg/l)	500	NA	NA	41	(38 - 51)	9.9	(8.3 - 12.0)	86	(76 - 104)	Runoff/leaching from natural deposits
Foaming Agents (MBAS) (ug/l)	500	NA	NA	ND	ND	0.02	(ND - 0.04)	ND	ND	Municipal and industrial waste discharge
Sulfate (mg/l)	500	NA	0.5	41	(29 - 53)	25	(21 - 28)	145	(104 - 189)	Runoff/leaching from natural deposits
Total Dissolved Solids (mg/l)	1,000	NA	NA	310	(220 - 370)	220	(210 - 240)	445	(371 - 515)	Runoff/leaching from natural deposits
Specific Conductance (umho/cm)	1,600	NA	NA	483	(380 - 540)	370	(340 - 400)	762	(641 - 867)	Substances that form ions in water
UNREGULATED CHEMICALS										
Boron (ug/l)	AL = 1,000	NA	100	ND	(ND - 130)	ND	ND	140	(140 - 150)	Erosion of natural deposits
Vanadium (ug/l)	AL = 50	NA	3	ND	ND	ND	(ND - 4.0)	ND	(ND - 3.6)	Erosion of natural deposits
OTHER CONSTITUENTS OF INTEREST										
Hardness as CaCO3 (mg/l)	NA	NA	NA	183	(120 - 230)	178	(170 - 190)	181	(142 - 206)	Runoff/leaching from natural deposits
Sodium (mg/l)	NA	NA	NA	32	(25 - 38)	14	(13 - 14)	82	(75 - 94)	Runoff/leaching from natural deposits

NOTES

AL = Action Level
DLR = Detection Limit for the purpose of Reporting
MCL = Maximum Contaminant Level
mg/l = parts per million or milligrams per liter
NA = No Applicable Limit
ND = Not Detected at DLR
NR = Not Required
NTU = Nephelometric Turbidity Units
pCi/l = picoCuries per liter
PHG = Public Health Goal
ug/l = parts per billion or micrograms per liter
umho/cm = micromhos per centimeter

(a) The results reported in the table are average concentrations of the constituents detected in your drinking water during year 2004 or from the most recent tests, except for filter effluent turbidity, which is described below.

(b) Turbidity is a measure of the cloudiness of the water. It is a good indicator of the effectiveness of the water filtration system. The table gives the highest single turbidity measurement that was recorded and the percentage of samples that were less that 0.3 NTU in 2004.

CITY OF COVINA DISTRIBUTION SYSTEM WATER QUALITY

Chemical	MCL or (MRDL)	MCLG or (MRDLG)	Average Amount	Range of Detections	MCL Violations?	Most Recent Sampling Date	Typical Source of Contaminant
Total Coliforms [1]	5.0%	0	1.9%	NA	No	2004	Naturally present in the environment
Total Trihalomethanes (ug/l)[2]	80	NA	54.5	(2.1 - 93.0)	No	2004	Byproducts of chlorine disinfection
Haloacetic Acids (five) (ug/l)[2]	60	NA	15	(ND - 63)	No	2004	Byproducts of chlorine disinfection
Chlorine Residuals (mg/l)	(4)	(4)	0.65	(0.01 - 1.82)	No	2004	Drinking water disinfectant
Odor (threshold odor number)[3]	3	NA	1	(1 - 1)	No	2004	Naturally occuring organic materials
Turbidity (NTU)[3]	5	NA	0.2	(0.1 - 0.8)	No	2004	Soil runoff

AL = Action Level; **MCL** = Maximum Contaminant Level; **MCLG** = federal MCL Goal; **mg/l** = parts per million or milligrams per liter; **MRDL** = Maximum Residual Disinfectant Level; **MRDLG** = Maximum Residual Disinfectant Level Goal; **NA** = not applicable; **ND** = not detected; **NTU** = nephelometric turbidity units; **PHG** = California Public Health Goal; **pCi/L** = picoCuries per liter; **ug/l** = parts per billion or micrograms per liter; **umho/cm** = micromhos per centimeter.

Eight locations in the distribution system are tested quarterly for Total Trihalomethanes, Haloacetic Acids, and twelve locations are tested monthly for odor and turbidity.

[1] The result is the highest persentage of positive samples collected in a month during year 2004. Coliforms are bacteria used as an indicator that if present, other potencially harmful bacteria may be present. In December 2004, Total Colifrms were detected in one sample collected in the distribution system. However, all follow-up samples were negative for Total Coliforms and Fecal Coliform/*E coli* bacteria. According to DHS, no more than 5.0% of the monthly samples may be Total Coliform-positive. Therefore, the MCL was not violated in 2004.

[2] The highest running annual averages are reported as average amount while the maximum and minumum of the individual results are reported as range of detections. Compliance is based on the running annual averages.

[3] This water quality is regulated by a secondary standard to maintain aesthetic characteristics (taste, odor, color).

LEAD AND COPPER AT RESIDENTAL TAPS

	Action Level	PHG	90th Percentile Value	Sites Exceeding AL/ Number of Sites	AL Violations?	Typical Source of Contaminant
Lead (ug/l)	15	2	5.2	0/36	No	Corrosion of household plumbing
Copper (mg/l)	1.3	0.17	0.38	0/36	No	Corrosion of household plumbing

PHG = California Public Health Goal; **mg/l** = parts per million or milligrams per liter; **ug/l** = parts per billion or micrograms per liter;

Every three years, 36 residences are tested for lead and copper at-the-tap. The most recent set of samples was collected in July 2004.

For more information or questions, please contact Ms. Monda Buckley, City of Covina, 125 East College Street, Covina, CA 91723 Phone: (626) 858-7294

WHAT ARE WATER QUALITY STANDARDS?

The United States Environmental Protection Agency (USEPA) and the California Department of Health Services (DHS) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems to ensure that tap water is safe to drink. DHS regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

Drinking water standards established by USEPA and DHS set limits for substances that may affect consumer health or aesthetic qualities of drinking water. The chart in this report shows the following types of water quality standards:

- **Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible.
- **Maximum Residual Disinfectant Level (MRDL):** The level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.
- **Secondary MCLs** are set to protect the odor, taste, and appearance of drinking water.
- **Primary Drinking Water Standard:** MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements and water treatment requirements.
- **Treatment Technique:** A required process intended to reduce the level of a contaminant in drinking water.
- **Regulatory Action Level (AL):** The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements that a water system must follow.

WHAT IS A WATER QUALITY GOAL?

In addition to mandatory water quality standards, USEPA and the State of California have set voluntary water quality goals for some contaminants. Water quality goals are often set at such low levels that they are not achievable in practice and are not directly measurable, but they nevertheless provide useful guideposts for water management activities. The chart in this report includes three types of water quality goals:

- **Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by USEPA.
- **Maximum Residual Disinfectant Level Goal (MRDLG):** The level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLGs are set by USEPA.
- **Public Health Goal (PHG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

WHAT CONTAMINANTS MAY BE PRESENT IN SOURCES OF DRINKING WATER?

The sources of drinking water generally include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- **Microbial contaminants,** such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- **Inorganic contaminants,** such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- **Pesticides and herbicides,** which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- **Radioactive contaminants,** which are naturally occurring or can be the result of oil and gas production and mining activities.
- **Organic chemical contaminants,** including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791).

ARE THERE ANY PRECAUTIONS THE PUBLIC SHOULD CONSIDER?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

PUBLIC PARTICIPATION OPPORTUNITY

Regularly scheduled meetings of the City of Covina City Council are held on the first and third Tuesday of each month at 7:30 PM in the City Hall Council Chambers. City Hall is located at 125 East College Street, Covina. These meetings provide an opportunity for public participation in decisions that may affect the quality of your water.

WHAT IS IN MY DRINKING WATER?

Your drinking water is regularly tested using DHS approved methods to ensure its safety. The table in this report lists all the constituents **detected** in your drinking water that have Federal and State drinking water standards. **Detected** unregulated constituents and other constituents of interest are also included.

ABOUT NITRATE

Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. Nitrate in drinking

water at levels above 45 milligrams per liter (mg/l) is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 45 mg/l may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask for advice from your health care provider.

DRINKING WATER SOURCE ASSESSMENT

In accordance with the federal Safe Drinking Water Act, an assessment of the groundwater sources for the Covina Irrigating Company (CIC), from which the City of Covina purchases water, was completed in July 2002. The purpose of the drinking water source assessment is to promote source water protection by identifying types of activities in the proximity of the drinking water sources which could pose a threat to the water quality. The assessment concluded that CIC's groundwater sources are not considered vulnerable to any activity associated with contaminants detected in the water supply. However, the groundwater sources are considered vulnerable to the following activities or facilities not associated with contaminants detected in the water supply: gas stations, known contaminant plumes and leaking underground storage tanks. In addition, a watershed sanitary survey for CIC's surface water source was completed in December 2000. The watershed sanitary survey concluded that CIC's surface water source is vulnerable to sewer lines, pesticides and herbicides application, and recreational activities. A copy of the complete assessment is available at the City of Covina at 125 East College Street, Covina, CA 91723. You may request a summary of the assessment by contacting Ms. Monda Buckley at (626) 858-7294.

The City of Covina also purchases water from MWD. In December 2002, MWD completed its source water assessment of its Colorado River and State Water Project supplies. Colorado River supplies are considered to be most vulnerable to recreation, urban/storm water runoff, increasing urbanization in the watershed and wastewater. State Water Project supplies are considered to be most vulnerable to urban/storm water runoff, wildlife, agriculture, recreation and wastewater. A copy of the assessment can be obtained by contacting MWD by phone at 213-217-6850.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

CITY OF COVINA
125 EAST COLLEGE STREET
COVINA, CALIFORNIA 91723

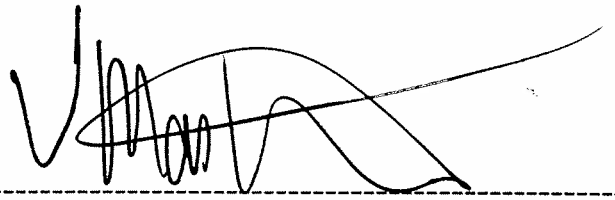
COVINA IRRIGATING COMPANY

TO: Covina Irrigating Company
SUBJECT: 2004 Annual Water Quality Report

Please be advised that I have received your 2004 Annual Water Quality Report as required under section 64463.1, Public Information, Chapter 15, Title 22, of the California Code of Regulations and Department of Health Services Guidelines.

City of Covina

Company



Mr. Vince Mastrosimone **Signature**

Public Works Director

Title

4.13.05

Date

146 E. COLLEGE STREET • POST OFFICE BOX 306 • COVINA, CA 91723
(626) 332-1502 • FAX (626) 967-5942

COVINA IRRIGATING COMPANY

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City of Covina

Company

Ms. Monday Buckley
MONDA BUCKLEY

Signature

PUBLIC WORKS MANAGER
Senior Management Analyst

Title

APRIL 13, 2005

Date

146 E. COLLEGE STREET • POST OFFICE BOX 306 • COVINA, CA 91723
(626) 332-1502 • FAX (626) 967-5942

COVINA IRRIGATING COMPANY

April 12, 2005

City Of Covina
Ms. Monda Buckley
Senior Management Analyst
125 E. College St.
Covina, CA 91723

STOCKHOLDERS OF COVINA IRRIGATING COMPANY
CONVEYING DOMESTIC (POTABLE) WATER:

Under section 64463.1, Public Information, Chapter 15, Title 22, of the California Code of Regulations and Department of Health Services Guidelines, we, as a provider of potable drinking water, are required to furnish you with the enclosed **2004 Annual Water Quality report.**

We would request the courtesy of indicating receipt of this report, by signing and dating the enclosed form and returning it to us in the self-addressed stamped envelope provided for your convenience. We also request that you send us a copy of your Consumer Confidence Report as forwarded to your consumers when completed. Thank you for your cooperation.

Sincerely,

David De Jesus
President / G.M.

cc: City of Covina
City of Glendora
Southern California Water Company
Suburban Water Systems
Valencia Heights Water Company
Valley County Water District
State Department of Health Services
Stetson Engineers

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COVINA IRRIGATING COMPANY

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COVINA IRRIGATING COMPANY

146 E. College St. P.O. Box 306 Covina, Calif. 91723
Office: 626.332.1502 - Fax: 626.967.5942

2004 ANNUAL WATER QUALITY REPORT

PARAMETER	UNITS	MCL [MRDL]	PHG (MCLG) [MRDLG]	SURFACE WATER RANGE	SURFACE WATER AVERAGE	GROUND WATER RANGE	GROUND WATER AVERAGE
PRIMARY STANDARDS - Mandatory Health Related Standards Established By The State Of California, D.H.S.							
CLARITY							
Effluent Turbidity	NTU	0.3	N/A	0.05 - 0.15	0.11	0.1 - 0.5	0.18
MICROBIOLOGICAL	% Test						
Coliform Bacteria	Positive	5	0	ND	ND	ND	ND
DISINFECTANT RESIDUALS							
Free Chlorine Residual	ppm	[4]	[4]	0.6 - 1.8	1.2	0.8 - 1.6	1.1
Total Chlorine Residual	ppm	[4]	[4]	N/A	N/A	N/A	N/A
DISINFECTANT BY-PRODUCTS							
Total Trihalomethanes (TTHM)	ppb	80	N/A	29.0 - 50.0	40.0	ND - 1.0	0.3
Total Haloacetic Acids (HAA5)	ppb	60	N/A	ND - 37.0	16.5	ND - 1.1	0.3
ORGANIC CHEMICALS							
Trichloroethylene (TCE)	ppb	5	0.8	ND	ND	ND	ND
Tetrachloroethylene (PCE)	ppb	5	0.6	ND	ND	ND	ND
Methyl tert-Butyl Ether (MTBE)	ppb	13	5	ND	ND	ND	ND
Trichlorofluoromethane (Freon 11)	ppb	150	700	ND	ND	ND	ND
(all other VOC's - non-detect)							
Atrazine	ppb	3	0.15	ND	ND	ND	ND
Chlordane	ppt	100	30	ND	ND	ND	ND
2,3,7,8-TCDD (Dioxin)	ppq	30	(0)	ND	ND	ND	ND
Diquat	ppb	20	15	ND	ND	ND	ND
Simazine	ppb	4	4	ND	ND	ND	ND
Thiobencarb	ppb	70	70	ND	ND	ND	ND
INORGANIC CHEMICALS							
Aluminum (Al)	ppb	1000	200	140	140.0	ND	ND
Antimony	ppb	6	20	ND	ND	ND	ND
Arsenic (As)	ppb	10	0.004	5	5.0	ND	ND
Asbestos	MFL	7	(7)	ND	ND	ND	ND
Barium (Ba)	ppb	1000	(2000)	120	120	ND	ND
Beryllium	ppb	4	(4)	ND	ND	ND	ND
Cadmium (Cd)	ppb	5	.07	ND	ND	ND	ND
Chromium (Total Cr)	ppb	50	(100)	ND	ND	ND	ND
Cyanide	ppb	200	150	ND	ND	ND	ND
Fluoride (Dependant On Temp. *F)	ppm	2	1	0.32 - 0.39	0.35	0.3 - 0.4	0.35
Lead (Pb)	ppb	AL = 15	2	ND	ND	ND	ND
Mercury (Hg)	ppb	2	1.2	ND	ND	ND	ND
Nickel	ppb	100	12	ND	ND	ND	ND
Nitrate (as NO3)	ppm	45	45	2.9 - 4.2	3.3	5.0 - 30	21
Nitrite (as nitrogen)	ppm	1	1	ND	ND	ND	ND
Selenium (Se)	ppb	50	(50)	ND	ND	ND	ND
Thallium	ppb	2	.1	ND	ND	ND	ND

COVINA IRRIGATING COMPANY

146 E. College St. P.O. Box 306 Covina, Calif. 91723
Office: 626.332.1502 - Fax: 626.967.5942

2004 ANNUAL WATER QUALITY REPORT (CONTINUED)

PARAMETER	UNITS	MCL [MRDL]	PHG (MCLG) [MRDLG]	SURFACE WATER RANGE	SURFACE WATER AVERAGE	GROUND WATER RANGE	GROUND WATER AVERAGE
PRIMARY STANDARDS - Mandatory Health Related Standards Established By The State Of California, D.H.S. (Con't)							
RADIOACTIVITY							
Gross Alpha Activity	pCi/l	15	N/A	0.75	0.75	0	0.0
Gross Beta Activity	pCi/l	50	N/A	NR	NR	NR	NR
Tritium	pCi/l	20,000	N/A	321	321	NR	NR
Strontium-90	pCi/l	8	N/A	0.22	0.22	NR	NR
Radium-226 & 228 Combined	pCi/l	5	N/A	NR	NR	NR	NR
Uranium	pCi/l	20	0.5	NR	NR	NR	NR
SECONDARY STANDARDS - Aesthetic Standards Established By The State Of California, D.H.S.							
Color	Units	15	N/A	ND	0	ND	ND
Odor - Threshold (at 60 F)	Units	3	N/A	1	1	1	1
Chloride	ppm	500	N/A	8.3 - 12.0	9.9	38 - 51	41
Copper (Cu)	ppm	AL = 1.3	0.17	ND	ND	ND	ND
Foaming Agents (MBAS)	ppb	500	N/A	ND - 0.04	0.02	ND	ND
Iron (Fe)	ppb	300	N/A	ND	ND	ND	ND
Manganese (Mn)	ppb	50	N/A	ND	ND	ND	ND
Silver (Ag)	ppb	100	N/A	ND	ND	ND	ND
Sulfate (SO4)	ppm	500	N/A	21 - 28	25	29 - 53	41
Zinc (Zn)	ppm	5	N/A	ND	ND	ND	ND
Total Dissolved Solids	ppm	1,000	N/A	210 - 240	220	220 - 370	310
Specific Conductance (E.C.)	umho/cm	1,600	N/A	340 - 400	370	380 - 540	483
UNREGULATED CHEMICALS							
Boron	ppb	AL=1,000	N/A	ND	ND	ND - 130	71
Chromium VI	ppb	NA	N/A	ND	ND	ND	ND
Dichlorodifluoromethane (Freon 12)	ppb	AL=1,000	N/A	ND	ND	ND	ND
Ethyl tert-Butyl Ether (ETBE)	ppb	NA	N/A	NR	NR	ND	ND
Perchlorate	ppb	AL = 6	N/A	ND	ND	ND	ND
tert-Amyl-methyl Ether (TAME)	ppb	NA	N/A	ND	ND	ND	ND
tert-Butyl alcohol (TBA)	ppb	AL = 12	N/A	ND	ND	ND	ND
1,2,3- Trichloropropane	ppt	AL = 5	N/A	ND	ND	ND	ND
Vanadium	ppb	AL = 50	N/A	ND - 4.0	1.9	ND	ND
ADDITIONAL CONSTITUENTS ANALYZED							
pH	Units	N/A	N/A	7.9 - 8.1	8.0	7.4 - 7.9	7.7
Total Hardness (as CaCo3)	ppm	N/A	N/A	170 - 190	178	120 - 230	183
Total Alkalinity (as CaCo3)	ppm	N/A	N/A	160 - 190	175	100 - 150	134
Sodium (Na)	ppm	N/A	N/A	13 - 14	14	25 - 38	32
Calcium (Ca)	ppm	N/A	N/A	54 - 58	56	39 - 77	60
Potassium (K)	ppm	N/A	N/A	3.6 - 4.3	4.0	3.0 - 4.0	3.5
Magnesium (Mg)	ppm	N/A	N/A	11 - 13	13	5.4 - 14	10
Langlier Index at 60°C		N/A	N/A	1.1 - 1.4	1.2	0.7 - 0.9	0.8

KEY TO ABBREVIATIONS

SURFACE WATER = San Gabriel River Diversion
GROUND WATER = Main San Gabriel Basin
MCL = Maximum Contaminant Level
MRDL(G) = Maximum Residual Disinfectant Level (Goal)
MCLG = Maximum Contaminant Level Goal
ppm = parts per million
umho/cm = micromhos per cm
AL = Action Level
ppb = parts per billion
MFL = Million fibers per liter
ND = None Detected
ppt = parts per trillion
NTU = Nephelometric Turbidity Units
NR = Monitoring Not Required
ppq = parts per quadrillion
< = less than
N/A = Not Applicable
pCi/l = pico curies per liter
D.H.S. = Department of Health Services

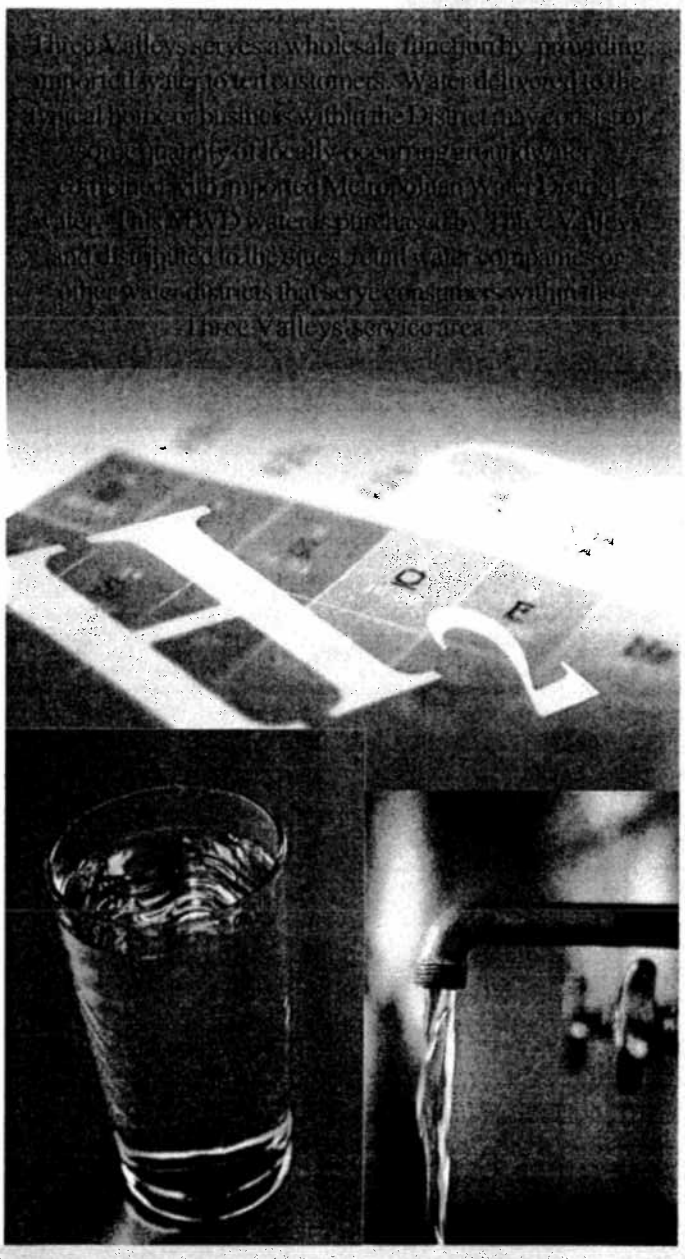
Additional Water Quality Data May Be Obtained By Contacting:
Mr. Steve Sherman - Water Quality Analyst 626.332.1502

1021 E. Miramar Avenue
Claremont, CA 91711
(909) 621-5568

THREE VALLEYS MUNICIPAL WATER DISTRICT

2004 Water Quality Report

Three Valleys, sells treated water to seven community water systems and three other institutions in the Pomona, Walnut and eastern San Gabriel Valleys. These agencies and the areas they serve include:



- Covina Department of Public Works (City of Covina)
- Glendora Department of Public Works (City of Glendora)
- La Verne Department of Public Works (City of La Verne)
- Pomona Utility Services (City of Pomona)
- Rowland Water District (Rowland Heights, a portion of the City of Industry and Hacienda Heights)
- Southern California Water Co. (Cities of Claremont, San Dimas and the Charter Oak area)
- Walnut Valley Water District (Cities of Diamond Bar, Walnut, a portion of the City of Industry, and a small area of Pomona)
- Boy Scouts of America - Firestone Reservation*
- California State Polytechnic University, Pomona (Cal Poly)*
- Mt. San Antonio College (Mt. SAC)*

* These facilities do not resell water to their consumers. They use the water purchased from Three Valleys to supplement their institutional needs.

For questions or comments, feel free to contact us at:

THREE VALLEYS MUNICIPAL WATER DISTRICT
1021 E. MIRAMAR AVENUE, CLAREMONT, CA 91711-2052 (909) 621-5568 www.threevalleys.com

Meetings of the Board of Directors are generally held the third Wednesday of each month, 8 a.m.

Three Valleys Municipal Water District
2004 WATER QUALITY REPORT TO TVMWD MEMBER AGENCIES

WEYMOUTH refers to the Metropolitan Water District's Weymouth Water Treatment Plant in the city of La Verne.
MIRAMAR refers to the Three Valleys Municipal Water District's Miramar Water Treatment Plant in the city of Claremont.

		WEYMOUTH EFFLUENT Range/Average	MIRAMAR EFFLUENT Range/Average	REGULATORY STANDARDS State MCL [MRDL]	PHG (MCLG) [MRDLG] AL=	State DLR	Major Sources in Drinking Water
SOURCE WATER							
% of State Project Water		43-77/59%	100%	NA	NA	NA	
PRIMARY STANDARDS - Mandatory Health-Related Standards							
CLARITY							
Combined Filter Effluent Turbidity (a)	NTU %<0.3%	Highest 0.11 100%	0.03-0.10/0.06 100%	0.3 NTU 95 (a)	NA	NA	Soil runoff
MICROBIOLOGICAL							
Total Coliform Bacteria (b)	%	0 distribution system-wide	0 distribution system-wide	5.0	(0)	NA	Naturally present in the environment
Fecal Coliform/*E.coli* (b)	(b)	NO ACUTE VIOLATION, 0 POSITIVE SAMPLES	NO ACUTE VIOLATION, 0 POSITIVE SAMPLES	(b)	(0)	NA	Human and animal fecal waste
Heterotrophic Plate Count (g)	CFU/mL	TT	TT	TT	NA	NA	Naturally present in the environment
Cryptosporidium (j)	Oocyst 10 or 200L	TT	TT	TT	(0)	NA	Human and animal fecal waste
Giardia (j)	Cysts 10 or 200L	TT	TT	TT	(0)	NA	Human and animal fecal waste
Total Culturable Viruses (j)	MPN/ 100L	TT	NA	TT	(0)	NA	Human and animal fecal waste
Legionella (j)	MPN/ 100L	TT distribution system-wide	NA	TT	(0)	NA	Naturally present in the environment
ORGANIC CHEMICALS							
Pesticides/PCBs (m)	*Units*						
Acrylamide	NA	TT	NA	TT	(0)	NA	Water treatment chemical impurities
Alachlor	ppb	ND	ND	2	4	1	Runoff from herbicide used on row crops
Atrazine	ppb	ND	ND	1	0.15	0.5	Runoff from herbicide used on row crops and along highways
Bentazon	ppb	ND	ND	18	200	2	Runoff/leaching from herbicide used on rice, alfalfa, grapes
Carbofuran	ppb	ND	ND	18	1.7	5	Leaching of soil fumigant used on rice, alfalfa and grape vineyards
Chlordane	ppt	ND	ND	100	30	100	Residue of banned termiticide
2,4-D	ppb	ND	ND	70	70	10	Runoff from herbicide used on row crops, range land, lawns
Dalapon	ppb	ND	ND	200	790	10	Runoff from herbicide used on rights of way, crops and landscapes
Dibromochloropropane (DBCP)	ppt	ND	ND	200	1.7	10	Banned nematocide that may still be present in soils
Dinoseb	ppb	ND	ND	7	14	2	Runoff from herbicide used on soybeans, vegetables and fruits
Diquat	ppb	ND	ND	20	15	4	Runoff from herbicide used for terrestrial and aquatic weeds
Endothall	ppb	ND	ND	100	580	45	Runoff from herbicide used for terrestrial and aquatic weeds
Endrin	ppb	ND	ND	2	1.8	0.1	Residue of banned insecticide
Epichlorohydrin	NA	TT	NA	TT	(0)	NA	Water treatment chemical impurities
Ethylene dibromode (EDB)	ppt	ND	ND	50	10	20	Discharge from petroleum refineries; underground gas tank leaks
Glyphosate	ppb	ND	ND	700	1000	25	Runoff from herbicide use
Heptachlor	ppt	ND	ND	10	8	10	Residue of banned pesticide
Heptachlor epoxide	ppt	ND	ND	10	6	10	Breakdown product of heptachlor
Lindane	ppt	ND	ND	200	32	200	Runoff/leaching from insecticide used on cattle, lumber, gardens
Methoxychlor	ppb	ND	ND	30	30	10	Runoff/leaching from insecticide uses
Molinate (Ordram)	ppb	ND	ND	20	N/A	2	Runoff/leaching from herbicide used on rice
Oxamyl (Vydate)	ppb	ND	ND	50	50	20	Runoff/leaching from insecticide uses
Pentachlorophenol (PCP)	ppb	ND	ND	1	0.4	0.2	Discharge from wood preserving factories & other insecticide uses
Picloram	ppb	ND	ND	500	500	1	Herbicide runoff
Polychlorinated Biphenyls (PCBs)	ppt	ND	ND	500	(0)	500	Runoff from landfills; discharge of waste chemicals
Simazine	ppb	ND	ND	4	4	1	Herbicide runoff
2,4,5-TP (Silvex)	ppb	ND	ND	50	25	1	Residue of banned herbicide
Thiobencarb (i)	ppb	ND	ND	70	70	1	Runoff/leaching from herbicide used on rice
Toxaphene	ppb	ND	ND	3	0.03	1	Runoff/leaching from insecticide used on cotton and cattle

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		WEYMOUTH EFFLUENT Range/Average	MIRAMAR EFFLUENT Range/Average	REGULATORY STANDARDS State MCL [MRDL]	PHG (MCLG) [MRDLG] AL=	State DLR	Major Sources in Drinking Water
SOURCE WATER							
% of State Project Water		43-77/59%	100%	NA	NA	NA	
Semi-Volatile Organic Compounds (m)							
Benzo(a)pyrene (PAH)	ppt	ND	ND	200	4	100	Leaching from linings of water storage tanks and distribution lines
Di(2-ethylhexyl) adipate	ppb	ND	ND	400	200	5	Discharge from chemical factories
Di(2-ethylhexyl) phthalate	ppb	ND	ND	4	12	3	Discharge from chemical factories; inert ingredient in pesticides
Hexachlorobenzene	ppb	ND	ND	1	0.03	0.5	Discharge from metal refineries and agricultural chemical factories
Hexachlorocyclopentadiene	ppb	ND	ND	50	50	1	Discharge from chemical factories
2,3,7,8-TCDD (Dioxin)	ppq	ND	ND	30	(0)	5	Emissions from waste incineration, discharge from chemical factories
Volatile Organic Compounds							
Benzene	ppb	ND	ND	1	0.15	0.5	Discharge from plastics factories; leaching from gas tanks and landfills
Carbon Tetrachloride	ppt	ND	ND	500	100	500	Discharge from chemical plants and other industrial activities
o-Dichlorobenzene	ppb	ND	ND	600	600	0.5	Discharge from industrial chemical factories
p-Dichlorobenzene	ppb	ND	ND	5	6	0.5	Discharge from industrial chemical factories
1,1-Dichloroethane	ppb	ND	ND	5	3	0.5	Extraction & degreasing solvent; fumigant
1,2-Dichloroethane	ppt	ND	ND	500	400	500	Discharge from industrial chemical factories
1,1-Dichloroethylene	ppb	ND	ND	6	10	0.5	Discharge from industrial chemical factories
cis-1,2-Dichloroethylene	ppb	ND	ND	6	(70)	0.5	Discharge from industrial chemical factories; products of TCE & PCE
trans-1,2-Dichloroethylene	ppb	ND	ND	10	(100)	0.5	Discharge from industrial chemical factories; product of TCE & PCE
Dichloromethane (methylene chloride)	ppb	ND	ND	5	4	0.5	Discharge from pharmaceutical and chemical factories
1,2-Dichloropropane	ppb	ND	ND	5	0.5	0.5	Discharge from industrial chemical factories; from fumigants
1,3-Dichloropropene	ppt	ND	ND	500	200	500	Runoff/leaching from nematocide used on croplands
Ethylbenzene	ppb	ND	ND	300	300	0.5	Discharge from petroleum refineries; industrial chemical factories
Methyl-*tert*-butyl-ether (MTBE) (i,k)	ppb	ND	ND	13	13	3	Gasoline discharges from watercraft engines
Monochlorobenzene	ppb	ND	ND	70	200	0.5	Discharge from industrial, agricultural chemical factories & dry cleaners
Styrene	ppb	ND	ND	100	(100)	0.5	Discharge from rubber and plastics factories; leaching from landfills
1,1,2,2-Tetrachloroethane	ppb	ND	ND	1	0.1	0.5	Discharge from industrial, agricultural chemical factories, solvent in TCE
Tetrachloroethylene (PCE)	ppb	ND	ND	5	0.06	0.5	Discharge from factories, dry cleaners and auto shops
Toluene	ppb	ND	ND	150	150	0.5	Discharge from petroleum and chemical refineries
1,2,4-Trichlorobenzene	ppb	ND	ND	5	5	0.5	Discharge from textile-finishing factories
1,1,1-Trichloroethane	ppb	ND	ND	200	(200)	0.5	Discharge from metal degreasing sites manufacture of food wrappings
1,1,2-Trichloroethane	ppb	ND	ND	5	(3)	0.5	Discharge from industrial factories; degreasing solvent; propellant
Trichloroethylene (TCE)	ppb	ND	ND	5	0.8	0.5	Discharge from metal degreasing sites and other factories
Trichlorofluoromethane	ppb	ND	ND	150	700	5	Discharge from industrial factories; degreasing solvent; propellant
1,1,2-Trichloro-1,2,2-trifluoroethane	ppm	ND	ND	1.2	4	0.01	Discharge from petroleum and chemical refineries; fuel solvent
Vinyl chloride	ppt	ND	ND	500	50	500	Leaching from PVC piping; discharge from plastics factories
Xylenes	ppm	ND	ND	1.75	1.8	0.0005	Discharge from petroleum and chemical refineries; fuel solvent

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SOURCE WATER							
% of State Project Water		43-77/59%	100%	NA	NA	NA	
INORGANIC CHEMICALS							
Aluminum (i)	ppb	ND	ND	1000	600	50	Residue from water treatment process; erosion of natural deposits
Antimony	ppb	ND	ND	6	20	6	Discharge from petroleum refineries; fire retardant; solder; electronics
Arsenic	ppb	ND	ND	50	0.004	2	Erosion of natural deposits; glass & electronics production wastes
Asbestos	MFL	ND	ND (source - raw water inlet)	7	(7)	0.2	Internal corrosion of asbestos cement pipes; erosion of natural deposits
Barium	ppb	ND	ND	1000	2000	100	Discharge from oil and metal refineries; erosion of natural deposits
Beryllium	ppb	ND	ND	4	1	1	Internal corrosion of galvanized pipes; erosion of natural deposits
Cadmium	ppb	ND	ND	5	0.07	1	Internal corrosion of galvanized pipes; erosion of natural deposits
Chromium	ppb	ND	ND	50	(100)	10	Discharge from steel and pulp mills; erosion of natural deposits
Copper (i)	ppm	ND	ND	1	0.17	0.05	Internal corrosion of household pipes; erosion of natural deposits
Cyanide	ppb	ND	ND	150	150	100	Discharge from steel/metal, plastic and fertilizer factories
Fluoride	ppm	0.16-0.21/.18	0.1	2	1	0.1	Erosion of natural deposits; water additive that promotes strong teeth
Lead	ppb	ND	NA	TT	2	5	Internal corrosion of household pipes erosion of natural deposits
Mercury	ppb	ND	ND	2	1.2	1	Erosion of natural deposits; discharge from factories; runoff from landfills
Nickel	ppb	ND	ND	100	12	10	Erosion of natural deposits; discharge from metal factories
Nitrate (as N) (d)	ppm	ND-.74/.47	ND-1.18/.96 (source - raw water inlet)	10	10	0.4	Runoff & leaching from fertilizer use; sewage; erosion of natural deposits
Nitrite (as N)	ppm	ND	ND	1	1	0.4	Runoff & leaching from fertilizer use; sewage; erosion of natural deposits
Nitrate and Nitrite (as N)	ppm	ND	1.2	10	10	0.4	Runoff & leaching from fertilizer use; sewage; erosion of natural deposits
Selenium	ppb	ND	ND	50	(50)	5	Discharge from refineries, mines and chemical manufacturers; runoff
Thallium	ppb	ND	ND	2	0.1	1	Leaching from ore-processing sites; discharge from electronics factories
RADIOLOGICALS		2002-2003	2003-2004				
Gross Alpha Particle Activity	pCi/L	ND-4.3/ND	ND	15	NA	3	Erosion of natural deposits
Gross Beta Particle Activity	pCi/L	ND-5.0/ND	ND	50	NA	4	Decay of natural and man-made deposits
Combined Radium (e)	pCi/L	ND	ND	5	NA	1.0	Erosion of natural deposits
Strontium-90	pCi/L	ND	ND	8	NA	2	Decay of natural and man-made deposits
Tritium	pCi/L	ND	ND	20,000	NA	1000	Decay of natural and man-made deposits
Uranium	pCi/L	ND-3.0/ND	ND	20	0.5	2	Erosion of natural deposits
DISINFECTION BY-PRODUCTS, DISINFECTANT RESIDUALS, AND DISINFECTION BY-PRODUCTS PRECURSORS							
Total Trihalomethanes (TTHM) (c)	ppb	30-87/60 distribution system-wide	39.6-85/65.7 distribution system-wide	80	NA	0.5	By-product of drinking water chlorination
Haloacetic Acids (HAA5) (c,l)	ppb	9.7-63/27 distribution system-wide	19-47/20.5 distribution system-wide	60	NA	1 (l)	By-product of drinking water chlorination
Total Chlorine Residual	ppm	1.7-3.0/2.4 distribution system-wide	1.7-2.8/2.50	[4]	[4]	NA	Drinking water disinfectant added for treatment
Bromate	ppb	NA	NA	10	(0)	5	By-product of drinking water ozonation
DBP Precursor Control (TOC)	ppm	TT	1.7-2.9/2.2	TT	NA	0.3	Various natural and man-made sources

Three Valleys Municipal Water District
2004 WATER QUALITY REPORT TO TVMWD MEMBER AGENCIES

WEYMOUTH refers to the Metropolitan Water District's Weymouth Water Treatment Plant in the city of La Verne.
MIRAMAR refers to the Three Valleys Municipal Water District's Miramar Water Treatment Plant in the city of Claremont.

		WEYMOUTH EFFLUENT Range/Average	MIRAMAR EFFLUENT Range/Average	REGULATORY STANDARDS State MCL [MRDL]	PHG (MCLG) [MRDLG] AL=	State DLR	Major Sources in Drinking Water
SOURCE WATER							
% of State Project Water		43-77/59%	100%	NA	NA	NA	
SECONDARY STANDARDS - Aesthetic Standards							
Aluminum (i)	ppb	ND	ND	200	600	50	Residue from water treatment processes, natural deposits, erosion
Chloride	ppm	76-104/86	61	500	NA	NA	Runoff/leaching from natural deposits; seawater influence
Color	units	1-3/2	ND	15	NA	NA	Naturally occurring organic materials
Copper (i)	ppm	ND	ND	1	0.17	0.05	Internal corrosion of household pipes; natural deposits erosion
Corrosivity	SI	0.06-0.32/0.20	0.01-0.53/0.27	non-corrosive	NA	NA	Elemental balance in water; affected by temp., other factors
Foaming Agents-MBAS	ppb	ND	30	500	NA	NA	Municipal and industrial waste discharges
Iron	ppb	ND	ND	300	NA	100	Leaching from natural deposits; industrial wastes
Manganese	ppb	ND	ND	50	AL=500	20	Leaching from natural deposits
Methyl *tert*-butyl-ether (MTBE) (i,k)	ppb	ND	ND	5	13	3	Gasoline discharges from watercraft engines
Odor Threshold	units	2/2	1	3	NA	NA	Naturally occurring organic materials
Silver	ppb	ND	ND	100	NA	10	Industrial discharges
Specific Conductance	µS/cm	641-867/762	430	1600	NA	NA	Substances that form ions when in water; seawater influence
Sulfate	ppm	104-189/145	38	500	NA	0.5	Runoff/leaching from natural deposits; industrial wastes
Thiobencarb (i)	ppb	ND	ND	1	70	1	Runoff/leaching from rice herbicide
Total Dissolved Solids	ppm	371-515/445	240-260/250	1000	NA	NA	Runoff/leaching from natural deposits; seawater influence
Turbidity (Monthly) (a)	NTU	0.06-0.07/0.06	0.03-0.10/0.06	5	NA	NA	Soil runoff
Zinc	ppm	ND	ND	5.0	NA	0.05	Runoff/leaching from natural deposits; industrial wastes
UNREGULATED CHEMICALS REQUIRING MONITORING							
Boron	ppb	140-150/140	170-180/175	NA	AL=1,000	100	Runoff/leaching from natural deposits industrial wastes
Chromium VI	ppb	ND	ND	NA	NA	1	Industrial waste discharge
Dichlorodifluoro-methane (Freon 12)	ppb	ND	ND	NA	AL=1,000	0.5	Industrial waste discharge
Ethyl-tert-butyl-ether (ETBE)	ppb	ND	ND	NA	NA	3	Used as gasoline additive
Perchlorate	ppb	ND	ND	NA	6	4	Industrial waste discharge
tert-Amyl-methyl-ether (TAME)	ppb	ND	ND	NA	NA	3	Used as gasoline additive
tert-Butyl alcohol (TBA)	ppb	ND	ND	NA	AL=12	2	MTBE breakdown product; used as gasoline additive
Trichloropropane (1,2,3-TCP)	ppt	ND	ND	NA	AL=5	5	Industrial waste discharge and pesticide uses
Vanadium	ppb	ND-3.6/ND	ND	NA	AL=50	3	Naturally occurring; industrial waste discharge

The source of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive materials. It may also pick up substances resulting from the presence of animals or human acitivity.

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		WEYMOUTH EFFLUENT Range/Average	MIRAMAR EFFLUENT Range/Average	REGULATORY STANDARDS State MCL [MRDL]	PHG (MCLG) [MRDLG] AL=	State DLR	Major Sources in Drinking Water
SOURCE WATER							
% of State Project Water		43-77/59%	100%	NA	NA	NA	
FEDERAL REGULATED CONTAMINANTS WITH NO MCLS							
List 1 - Assessment Monitoring 2002-2003							
2,4 Dinitroluene	ppb	ND	ND	NA	NA	2	Used in the production of isocyanate and explosives
2,6-Dinitroluene	ppb	ND	ND	NA	NA	2	Used as a mixture with 2,4-Dinitrotoluene (similar uses)
Acetochlor	ppb	ND	ND	NA	NA	2	Herbicide used with cabbage, citrus, coffee and corn crops
DCPA di-acid degradate	ppb	ND	ND	NA	NA	1	Degradation products of DCPA; runoff from herbicide used on weeds & crops
DCPA mono-acid degradate	ppb	ND	ND	NA	NA	1	Degradation products of DCPA; runoff from herbicide used on weeds & crops
Dichlorodiphenyldichloro-ethylene (4,4'-DDE)	ppb	ND	ND	NA	NA	0.8	Degradation product of DDT;Residue of banned pesticide
Molinate	ppb	ND	ND	NA	NA	0.9	Runoff/leaching from herbicide used on rice
MTBE	ppb	ND	ND	NA	NA	5	Gasoline discharge from watercraft engines
Nitrobenzene	ppb	ND	ND	NA	NA	10	Used in the production of aniline, which is used to make dyes, herbicides, & drugs
Perchlorate	ppb	ND	ND	NA	NA	4	Industrial waste discharge
s-ethyl dipropylthio-carbamate (EPTC)	ppb	ND	ND	NA	NA	1	Herbicide used on annual grasses, weeds, in potatoes, and corn
Terbacil	ppb	ND	ND	NA	NA	2	Herbicide used with sugarcane, alfalfa, and some fruits
ADDITIONAL PARAMETERS							
Giardia (j)	Cysts 10 or 200L	TT	TT	TT	(0)	NA	Human and animal fecal waste
Cryptosporidium A9 (j)	Oocyst 10 or 200L	TT	TT	TT	(0)	NA	Human and animal fecal waste
Total culturable viruses (j)	MPN 100L	TT	NA	TT	(0)	NA	Human and animal fecal waste
Heterotrophic Plate Count (g)	CFU/mL	<1/<1	<1-5/<1	TT	NA	NA	Naturally present in the environment
Other Additional Parameters							
Alkalinity	ppm	75-99/90	78	NA	NA	--	Measure of water quality
Calcium	ppm	32-47/41	30	NA	NA	--	Measure of water quality
Hardness (total)	ppm	142-206/181	100	NA	NA	--	Measure of water quality
Magnesium	ppm	15-21.5/19.5	8.3	NA	NA	--	Measure of water quality
N-Nitrosodimethylamine	ppm	ND-12 distribution system wide	NA	NA	AL=10	2	By-product of drinking water chlorination; industrial processes
pH	pH units	8.1-8.2/8.2	7.37-8.23/7.95	NA	NA	--	Measure of water quality
Potassium	ppm	3.0-4.1/3.6	2.3	NA	NA	--	Measure of water quality
Radon	pCi/L	ND	NA	NA	NA	100	Naturally occurring, comes from decay of uranium in nearly all soils
Sodium	ppm	75-94/82	44	NA	NA	--	Measure of water quality
Total organic carbon (TOC)	ppm	1.7-2.9/2.2	1.6-2.9/2.19	TT	NA	0.30	Various natural and man-made sources

For additional information:

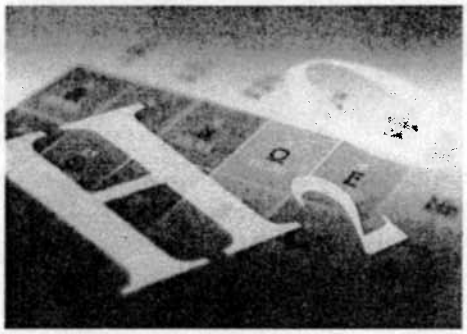
California Department of Health Services, Division of Drinking Water and Environmental Management
www.dhs.cahwnet.gov

U.S. Environmental Protection Agency
Office of Ground Water and Drinking Water
www.epa.gov

Metropolitan Water District of Southern California
(213) 217-6850
www.mwdh2o.com

KEY TO ABBREVIATIONS

NA	= Not Applicable
ND	= None Detected
TT	= Treatment Technique, A required process intended to reduce the level of a contaminant in drinking water.
AL	= Action Level, Concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a system must follow.
CFU/ml	= Colony Forming Units per Milliliter
DLR	= Detection Limits for Purposes of Reporting
MCL	= Maximum Contaminant Level
MCLG	= Maximum Contaminant Level Goal
MRDL	= Maximum Residual Disinfectant Level
MRDLG	= Maximum Residual Disinfectant Level Goal
MFL	= Million Fibers per Liter
MPN	= Most Probable Number
NTU	= Nephelometric Turbidity Units
pCi/L	= PicoCuries per Liter
PHG	= Public Health Goal (set by California EPA)
ppb	= parts per billion or micrograms per liter (μg/L)
ppm	= parts per million or milligrams per liter (mg/L)
ppt	= parts per trillion or nanograms per liter (ng/L)
Si	= Saturation Index (Langelier)



a) The turbidity level of the filtered water shall be less than or equal to 0.3 NTU in 95% of the measurements taken each month and shall not exceed 1.0 NTU for more than 1 hour. Turbidity is a measure of the cloudiness of water and is a good indicator of the water quality and filtration performance.

b) **Total coliform MCLs**: No more than 5.0% of the monthly samples may be total coliform positive. **Fecal coliform/*E.coli* MCLs**: The occurrence of 2 consectuive total coliform positive samples, one of which contains fecal coliform/*E. coli*, constitutes an acute MCL violation. These MCLs were not violated in 2004. 11,592 samples from MWD and 780 samples from TVMWD were analyzed in 2004.

c) In 2004, TVMWD was in compliance with all provisions of the State 1 Disinfection/Disinfection By-Products (D/DBP) Rule. From the 4 quarterly distribution samples collected, the 2004 running annual average for TTHM was 65.7 ppb and 30.4 ppb for HAA5. TVMWD was also in compliance with the DBP precursor control portion of the State 1 regulation.

d) State MCL is 45 mg/L as Nitrate, which equals 10 mg/L as N.

e) Standard is for Radium-226 and -228 combined.

f) Corrosivity is measured by the Langelier Stability Index. A positive index, indicating non-corrosivity, was maintained at the plant effluents.

g) Pour plate technique, 48-hour incubation at 35° C, monthly averages. The presence of HPC less than or equal to 500 CFU/mL shall be equivalent to a detectable disinfectant residual. In 2004, all total chlorine residuals wer above 0.2 mg/L.

h) Metropolitan (MWD) has developed a flavor-profile analysis methold that can more accurately detect odor occurrences. For more information contact TMVWD.

i) Aluminum, Thiobencarb, Copper and MTBE have both primary and secondary standards.

j) DHS has established treatment techniques (TT) in lieu of maximum contaminant levels (MCL) for *Giardia, Cryptosporidium*, viruses, HPC, and Legionella. MWD and TVMWD have demonstrated compliance by providing multibarrier treatment necessary to protect users from adverse health effects of mirobiological contaminants.

k) MTBE reporting level is 5 ppb.

l) DLR = 1.0 ppb for each HAA5 analyte (dichloracetic, trichloracetic, monbromoacetic, and dibromaoacetic acids) except for monochloroacetic acid which has a DLR = 2.0 ppb.

m) Results from Calendar Year 2003. Monitoring frequency once every 3 years -- next sample year 2006.

Some contaminants that may be present in source water before we treat it include:

- **Microbial contaminants such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.**
- **Inorganic contaminants such as salts and metals, which can occur naturally or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.**
- **Organic chemical contaminants, including synthetic and volatile organic chemicals, that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic sytems.**
- **Pesticides and herbicides can come from a variety of sources such as agriculture and residential uses.**

Water is a precious resource.
Please don't waste it.

The following websites can direct you to additional water saving tips:

www.threevalleys.com

www.bewaterwise.com

www.usewaterwisely.com

www.mwdh2o.com

Below are some water saving tips to help you to use water wisely:

- Use a broom, not a hose to clean driveways and walkways.
- Run sprinklers in early morning or evening hours to prevent excessive evaporation.
- Check sprinklers frequently for leaking or broken heads.
- Remember to change your irrigation controller as the seasons change and days get shorter/longer.
- Run only full loads in your dish and clothes washers.
- Plant California Native or drought tolerant plants for less landscape maintanance.

1021 E. Miramar Ave.
Claremont, CA 91711-2052

If you have additional questions, please feel free to call (909) 621-5568 or visit www.threevalleys.com