2005 URBAN WATER MANAGEMENT PLAN

CITY OF NEWPORT BEACH

December 2005

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City of Newport Beach
Utilities Department

2005 Urban Water Management Plan
Contact Sheet

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The Water supplier is a **Municipality**.
The Water Supplier is a **Retailer**.
Utility services provided by the water supplier include **water, recycled water and wastewater.**
This City is not a Bureau of Reclamation Contractor.
This City is not a State Water Project Contractor.

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ACRONYMS AND ABBREVIATIONS

Act	Urban Water Management Act
AF	acre-feet
AFY	acre-feet per year
AMP	Allen-McColloch Pipeline
BMP	best management practices
City	City of Newport Beach
CPUC	California Public Utilities Commission
CRA	Colorado River Aqueduct
CUWCC	California Urban Water Conservation Council
DHS	California Department of Health Services
DMM	Demand Management Measures
DWR	California Department of Water Resources
EIR	Environmental Impact Report
ETo	evapotransportation
GAP	Green Acres Project
GPD	gallons per day
HECW	High-Efficiency Clothes Washer
MCL	maximum containment level
Metropolitan	Metropolitan Water District of Southern California
MGD	million gallons per day
MOU	Memorandum of Understanding
MSL	mean sea level
MWDOC	Municipal Water District of Orange County
N/A	Not Applicable
NOP	Notice of Preparation
OCSD	Orange County Sanitation District
OCWD	Orange County Water District
Plan	Urban Water Management Plan
RDMD	County of Orange Resources and Development Management Department
RUWM	Metropolitan's Regional Urban Water Management Plan
RWQCB	Regional Water Quality Control Board
SWP	State Water Project
SWRCB	State Water Resources Control Board
TBD	to be determined
ULFT	Ultra Low FlushToilet
USAGE	United States Army Corp of Engineers
USGS	United States Geological Survey
UWMP	Urban Water Management Plan
WEROC	Water Emergency Response Organization of Orange County
WSCP	Water Shortage Contingency Plan
WSDM Plan	Metropolitan's Water Surplus and Drought Management Plan

1.0 INTRODUCTION

This Urban Water Management Plan (plan) addresses the City of Newport Beach (City) water system and includes a description of the water supply sources, magnitudes of historical and projected water use, and a comparison of water supply to water demands during normal, dry, and multiple dry years. The City water supplies are imported water purchased from the Municipal Water District of Orange County (MWDOC), groundwater pumped from the Orange County Groundwater Basin, and reclaimed water. Water is supplied to residences and businesses within the City's service area.

This section provides background information plan coordination with other cities and agencies in the service area, and public participation and adoption of the plan.

1.1 Urban Water Management Planning Act

The City plan has been prepared in accordance with the Urban Water Management Act (Act). The Act is defined by the California Water Code, Division 6, Part 2.6, and Sections 10610 through 10657. The Act became part of the California Water Code with the passage of Assemble Bill 797 during the 1983-1984 regular session of the California legislature. The Act requires every urban water supplier providing water for municipal purposes to more than 3,000 connections or supplying more than 3,000 acre-feet of water annually to adopt and submit a plan every five years to the California Department of Water Resources (DWR). Subsequent assembly bills have amended the Act. This plan serves as a long-range planning document for water supply.

1.2 Resource Maximization and Import Minimization

Water management tools have been used by the City to maximize water resources. To help maximize water resources, the City has developed and implemented various policies and plans, which are referenced throughout this plan. The various components of the 2005 UWMP includes evaluation and descriptions of the various sources of water supply, efficient water uses, water service efficiency, demand management measures, implementation strategy, and schedule. Information in this plan was developed from various sources, including the draft 2005 UWMPs by MWDOC and Metropolitan Water District of Southern California (Metropolitan).

1.3 Agency Coordination

The City coordinated the preparation of this plan with the appropriate agencies. The City is a member of MWDOC, a water wholesaler, and information from MWDOC's Urban Water Management Plan was used. Table 1-1 summarizes the coordination process that occurred for the preparation of this plan. A copy of the letter sent to City's Planning Department is included in Appendix A.

Table 1-1. (DWR Table 1) Coordination with Appropriate Agencies

	MWDOC	Metropolitan	City of Newport Beach	Public Involvement
Participated in UWMP	✓	✓		
Commented on the draft				
Attended public meetings				
Was contacted for assistance	✓			
Received copy of the draft plan	✓	✓	✓	✓
Was sent a notice of intention to adopt			✓	✓
Not Involved / No Information				

1.4 Public Participation and Plan Adoption

The City encouraged community and public interest involvement in the plan update through public hearings and inspection of the draft document. Public hearing notifications were distributed through utility bills and published in local newspapers. A copy of the published Notice of Public Hearing is included in Appendix B. The hearing provided an opportunity for all residents and employees in the service area to learn and ask questions about their water supply in addition to the City's plans for providing a reliable, safe, high-quality water supply. Copies of the draft plan were made available for public inspection at the City Clerk's and Utilities Department offices.

This Plan was adopted by the City Council on December 13, 2005. A copy of the adopted resolution is provided in Appendix C.

1.5 Plan Organization

This section provides a summary of the sections in the plan. Section 2 provides a description of the service area, climate, water supply facilities, and transmission system. Section 3 presents historical and projected water use. Surface and groundwater supplies are described in Section 4. Section 5 describes recycled water. Section 6 addresses water conservation. Section 7 describes water shortage contingency planning. Section 8 provides a comparison of future water supply to demand. Various appendices provide relevant supporting documents.

2.0 DESCRIPTION OF EXISTING WATER SYSTEM

This section provides a description of the City's service area, climate, and water supply facilities. Section 4 of the plan describes the quantities of water available to the City.

2.1 Description of Service Area

Located along the Orange County coast of Southern California, the City is bounded to the west by the Pacific Ocean. To the north, south, and east, the City is surrounded by the cities of Huntington Beach, Laguna Beach, Irvine and Costa Mesa.

The water service area is entirely within the City's boundaries, and covers approximately 35.77 square miles. A map of the City's service area is shown in Figure 2-1. The City supplies water to its residential and commercial customers. The City does not supply water to any agency customers.

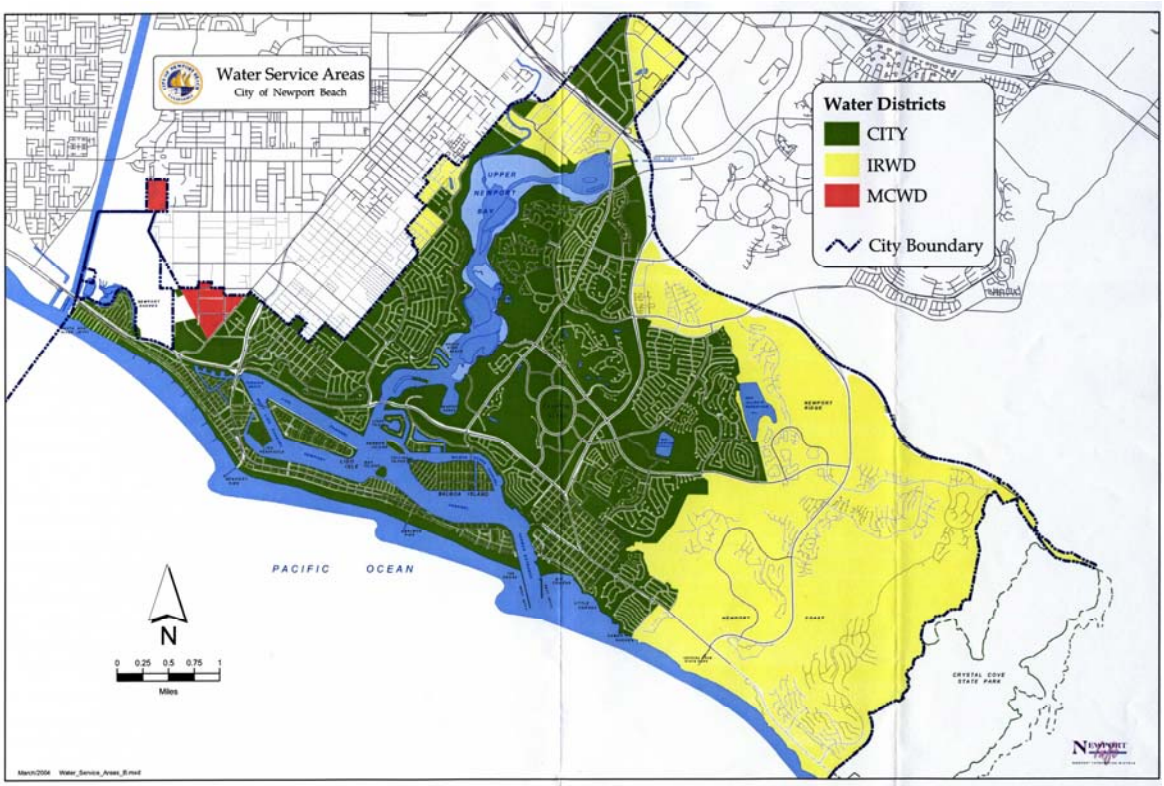

Figure 2-1. City of Newport Beach Service Area

2.2 Climate

The source of the City's imported water supplies, the State Water Project and Colorado River Project, is influenced by weather conditions in Northern California and along the Colorado River. Within the City itself, the climate is characteristically Mediterranean, with mild year-round

temperatures, sunny days, and cool evenings. The average summer and winter temperatures are 75°F and 65°F, respectively, and the average annual rainfall is just under 12 inches.

Average rainfall rates, evapotranspiration rates (ETo), and temperature in the City's service area is summarized in Table 2-1.

Table 2-1. (DWR Table 3) Climate

	Standard average ETo[b] (in.)	Average rainfall[a] (in.)	Average temperature[a] (°F)
January	1.24	2.28	55.2
February	1.68	2.47	55.9
March	3.10	1.91	56.9
April	3.90	0.93	58.9
May	4.65	0.16	61.6
June	5.10	0.06	64.2
July	4.95	0.01	67.3
August	4.65	0.06	68.5
September	3.90	0.24	67.6
October	2.79	0.30	64.3
November	1.80	1.21	59.6
December	1.24	1.77	56.0
Annual	39.0	11.40	61.3

[a] 1934-2005 data recorded from NOAA website www.wrcc.dri.edu

[b] Data recorded from wwwcimis.water.ca.gov/cimis/welcome.jsp for Zone 2 (Coastal Mixed Fog Area). ETo is equivalent to evapotranspiration, the loss of water from the soil both by evaporation and by transpiration from the plants growing thereon.

2.3 Surface Water Supply Facilities

MWDOC provides imported water to the City. MWDOC receives its water from the Metropolitan Water District of California of Southern California (Metropolitan). Most of Metropolitan's imported water supply is provided through the State Water Project (SWP) and Colorado River Aqueduct (CRA) and is treated at the Diemer and Weymouth plants. A large groundwater supply is also available, as described in Section 2.4. The use of this supply is regulated by the Basin Pumping Percentage as set by the Orange County Water District (OCWD).

All of the water supplied by the City is sold to its retail customers (residential and commercial). The City maintains its own retail distribution system. The City delivers potable water through its water system which consists of approximately 284 miles of pipelines ranging in size from 4-inch to 30-inch with various pipe materials. The City has an extensive distribution system, which includes five pressure zones and six connections along the Orange County Feeder and the East Orange County Feeder No. 2. The total available capacity is 104 cfs. The City has five pump stations which delivers water to the upper zones, and backup generation facilities ensure that the City can still deliver water to all zones during a rolling blackout.

The City also has three reservoirs with a total storage capacity of 200 MG. The Spyglass Reservoir has a storage capacity of 1.5 MG, receives water from Zone 4, and delivers water to Zones 3, 4, and 5 via the Zone 5 Pump Station. The 16th Street Reservoir receives water from the four groundwater wells in Fountain Valley, has a storage capacity of 3 MG, and delivers water to the distribution system or to the Big Canyon Reservoir via the 16th Street Pump Station. The Big Canyon Reservoir is a covered reservoir which has a storage capacity of 195.5 MG, and is used for both distribution and emergency storage for Zones 1 and 2.

The City operates the water system under the authority of Water Supply Permit No. 04-08-97P-016 that was issued by the Department of Health Services (DHS) on July 24, 1997. Permit-approved sources for supply of the system include Dolphin Shallow Well, Dolphin Deep Well, Tamura Shallow Well, Tamura Deep Well, and purchased surface water treated by Metropolitan. In 2004, an amended permit was issued to include a new floating cover and the addition of disinfection facilities at the Big Canyon Reservoir. Approved treatment facilities for the system include chlorination/ chloramination for well water at the 16th Street Reservoir and at the Big Canyon Reservoir.

2.4 Groundwater Facilities

In addition to surface water, the City receives a large percentage of its supply from groundwater. Groundwater is pumped from four wells within the City of Fountain Valley and travels through over 6 miles of the 30-inch Groundwater Transmission Main in Fountain Valley, Huntington Beach, and Costa Mesa. In addition, a pump station, a treatment facility, and a 3-MG reservoir assist in the transmission and treatment effort. The City produces up to 64 percent of its demand through groundwater, under regulations of OCWD's basin pumping percentage.

2.5 Reclaimed Water Facilities

Through an agreement with the OCWD, the City purchases between 300 and 800 AF/year for some large irrigation users. The City has no capability of treating water to produce reclaimed water, but OCWD has an elaborate system. The City began serving recycled water in 1999. OCWD provides water through the Green Acres Project, which has the capability to delivery up to 1,000 AFY. The City has investigated future sites or locations for reclaimed water, but there are limitations to the availability of reclaimed connections. The City is looking into the possibility of inter-district reclaimed water transfers to provide reclaimed water to some associations and recreation facilities.

2.6 Water Transmission System

Water is delivered to the City's customers from the Groundwater Transmission Main, and from diversions off of the Orange County Feeder and the East Orange County Feeder No. 2. The transmission system consists of pipelines, booster pump stations, and storage tanks. Figure 2-2 shows the pressure zones within the City's service area. The current capacity of the City's potable water supply is 104 cfs.

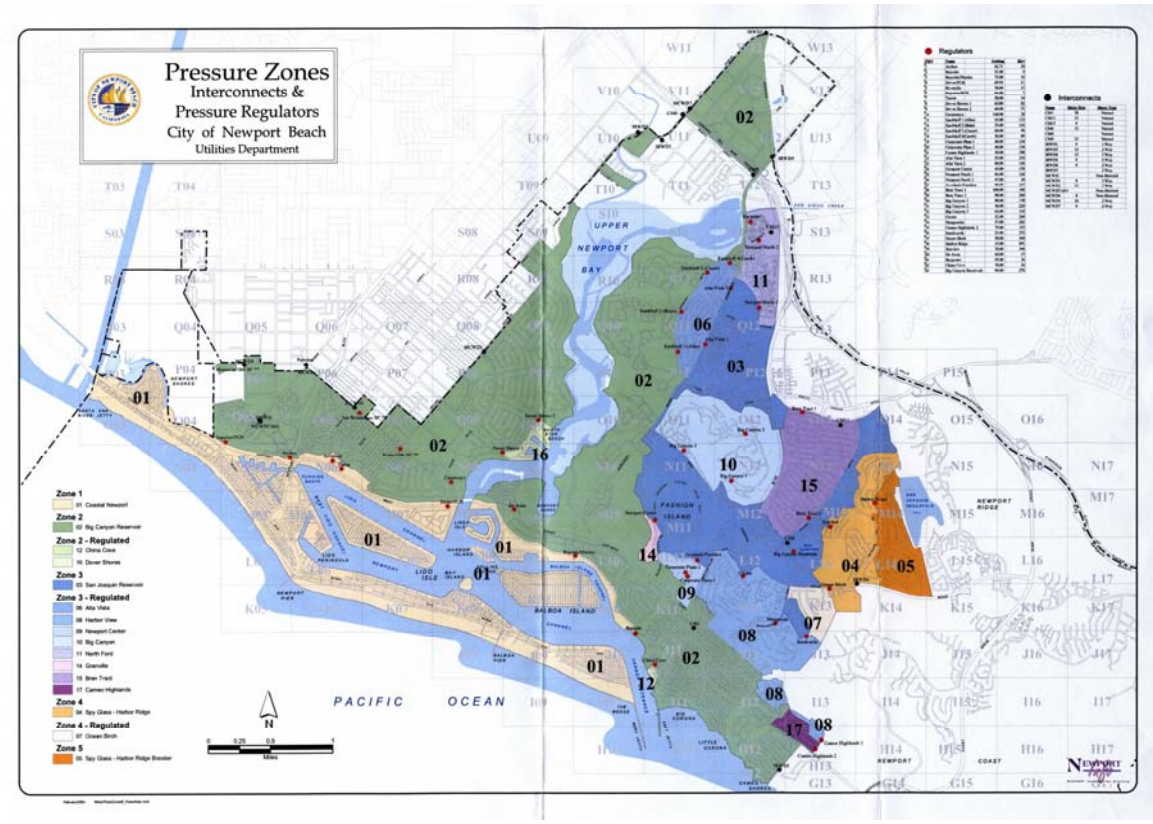

Figure 2-2. Pressure Zones within the City's Service Area

3.0 HISTORICAL AND PROJECTED WATER USE

Water use and production records, combined with projections of population, employment, and urban development, provide the basis for estimating future water demands. This section presents information regarding regional demographics, customer based unit water use, total historical water use, and projections of future City water demands.

3.1 Employment, Land Use, and Population

This section describes the City's service area employment and land use characteristics and current and future population.

3.1.1 Employment Characteristics

Over 50 percent of the City's residents are employed in professional, managerial, and administrative occupations. The median age of City residents is 40 years, and the median family income is estimated at about $62,000 per year. The average household is 2.8 persons per dwelling unit. Within the City itself, recreation and tourism is also an important industry.

3.1.2 Land Use Characteristics and Population Projections

Land use within the City's service area is characterized as mostly suburban, and the City is built-out. Table 3-1 provides current and projected population through to the year 2030 for the City's service area.

Table 3.1 (DWR Table 2) Population – Current and Projected

	2005	2010	2015	2020	2025	2030
City Water Service Area Population	79,320	80,250	81,052	81,863	82,681	83,508

Source: City staff projections

3.2 Historic and Future Water Use

The City distributes retail water supply directly to its customers, which include residential (single- and multi-family), commercial, and industrial users. Past, current, and projected water deliveries are shown in Table 3-2. No water sales are made by the City to other agencies except in the event of an emergency through emergency interconnections (Table 3-3). Table 3-4 identifies and quantifies additional water uses.

Table 3-2. (DWR Table 12) Past, Current, and Projected Water Deliveries (AFY)

Year	Water Use Sector	Single-Family	Multi-Family	Comm-ercial	Indus-trial	Instit./ Gov.	Land-scape	Agric-ultural	Total
2000 Metered	# of accounts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	deliveries (AFY)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005 Metered	# of accounts	18,419	5,048	1,863	0	397	623	0	26,350
	deliveries (AFY)	7,484	2,727	3,760	0	903	2,842	0	17,723
2010 Metered	# of accounts	18,588	5,052	1,914	0	399	638	0	26,591
	deliveries (AFY)	8,085	2,820	3,948	0	940	3,008	0	18,801
2015 Metered	# of accounts	18,747	5,096	1,931	0	402	644	0	26,820
	deliveries (AFY)	8,805	3,072	4,300	0	1,024	3,276	0	20,477
2020 Metered	# of accounts	18,909	5,140	1,948	0	405	649	0	27,051
	deliveries (AFY)	8,840	3,084	4,317	0	1,028	3,289	0	20,558
2025 Metered	# of accounts	19,071	5,184	1,964	0	409	655	0	27,283
	deliveries (AFY)	8,870	3,095	4,333	0	1,032	3,301	0	20,631
2030 Metered	# of accounts	19,071	5,184	1,964	0	409	655	0	27,283
	deliveries (AFY)	8,870	3,095	4,333	0	1,032	3,301	0	20,631

Table 3-3. (DWR Table 13) Sales to Other Agencies (AFY)

Water Distributed	2000	2005	2010	2015	2020	2025	2030
None	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Table 3-4. (DWR Table 14) Additional Water Uses and Losses (AFY)

Water Use	2000	2005	2010	2015	2020	2025
Saline barriers	0	0	0	0	0	0
Groundwater recharge	0	0	0	0	0	0
Conjunctive use	0	0	0	0	0	0
Raw water	0	0	0	0	0	0
Recycled	0	0	0	0	0	0
Unaccounted-for system losses	N/A	925	990	1,078	1,082	1,085
Total	**0**	**0**	**0**	**0**	**0**	**0**

The total amount of water distributed by the City is presented in Table 3-5.

Table 3-5. (DWR Table 15) Total Water Use (AFY)

Water Use	1999-2000	2005	2010	2015	2020	2025	2030
Total of Tables 12, 13, and 14	19,402	18,648	19,791	21,555	21,640	21,716	21,716

4.0 WATER SUPPLY

The City distributes surface water and groundwater to its end users. Water from the City is distributed via pipelines and pump stations and is used by City customers to meet their water demands. This section describes the surface water and groundwater sources, quantities, supply constraints, and the water quality of the water supply sources. In addition, this section describes desalination and water supply reliability.

4.1 Surface Water

This section describes the City's surface water supply and the physical and legal constraints. The surface water supply facilities are described in Section 2. The surface water supply quantities projected to be available in the future normal years are presented in Section 4.4. Surface water supplies in dry years are presented in Section 4.5.

4.1.1 Physical Constraints

The capacity of the City's system is limited by the size and hydraulics of the current pipeline system. Future water supply projections are dependent upon planned infrastructure improvements being approved and constructed.

4.1.2 Legal Constraints

The City's surface water supply is controlled and influenced by a variety of agreements and decisions between MWDOC, Metropolitan, and other agencies. The City is provided its surface water through agreements with MWDOC.

4.1.2.1 Water Rights. Water rights are held by the Metropolitan Water District of Southern California, which receives the majority of its water from the State Water Project and the Colorado River Aqueduct Project.

4.1.2.2 Water Supply and Transmission System Project. The current capacity of the City's potable water supply is 104 cfs. No substantial increases to the supply system are currently planned, due to the relative build-out of the City's population.

4.2 Groundwater

This section presents a description of the City's groundwater supply. The groundwater supply facilities are described in Section 2.

4.2.1 Description

Within the region, there are four main groundwater basins: the La Habra Basin, the San Juan Basin, the Laguna Canyon Basin, and the Lower Santa Ana Basin. These basins supply several cities and agencies, and is administered by Basin Pumping Percentages, as allocated by the OCWD. The City receives its groundwater from only the Lower Santa Ana Basin (Basin), which is also called Coastal Plain of Orange County Groundwater Basin (Groundwater Basin Number 8-1), as it is listed in California's 2003 Bulletin 118 (Appendix D). The Basin underlies a coastal alluvial plain in the northwestern portion of Orange County, and is bounded by consolidated rocks on the north in Puente and Chino Hills, on the east in the Santa Ana Mountains, and on the south in the San Joaquin Hills. The Basin is bounded by the Pacific Ocean on the southwest and approximately by the Orange County-Los Angeles County line on the northwest, and it underlies the lower Santa Ana River watershed. Bulletin 118 identifies the Basin as Type A, which indicates that the basin has been investigated and modeled to determine the potential effects of changes in pumping and recharge. In the Bulletin, there is no indication that the Basin is or will become overdrafted under present management.

4.2.2 Physical Constraints

The physical constraint on the current groundwater supply is the pumping capacity of the existing wells. The amount of groundwater pumped from each basin and provided to the City in the last five years is shown on Table 4-1, and the City's projected future allotment through 2030 is shown in Table 4-2.

Table 4-1. (DWR Table 6) Amount of Groundwater Pumped (AFY)

Basin Name (s)	2000	2001	2002	2003	2004
La Habra Basin	0	0	0	0	0
San Juan Basin	0	0	0	0	0
Lower Santa Ana Basin	8,279	13,809	8,093	8,773	4,903
% of Total Retail Water Supply	45%	78%	43%	50%	26%

Source: MWDOC, 2005

Table 4-2. (DWR Table 7) Amount of Groundwater Projected to be Pumped (AFY)

Basin Name(s)	2010	2015	2020	2025	2030 (opt.)
La Habra Basin	0	0	0	0	0
Laguna Canyon Basin	0	0	0	0	0
San Juan Basin	0	0	0	0	0
Lower Santa Ana Basin	13,590	14,921	14,778	14,990	14,960
% of Total Water Supply	68.7%	69.2%	68.3%	69.0%	68.9%

Source: MWDOC, 2005

4.2.3 Legal Constraints

The only legal constraints to groundwater supply are the Basin Pumping Percentages. The City's pumping rights are shown in Table 4-3.

Table 4-3. (DWR Table 5) Groundwater Pumping Rights (AFY)

Basin Name	Pumping Right
La Habra Basin	0
Laguna Canyon Basin	0
San Juan Basin	0
Lower Santa Ana Basin	64%
Total	64%

4.3 Desalination

Desalinated water is not currently perceived to be a viable option for the City water supply, and neither brackish nor impaired groundwater is pumped (Table 4-4).

Though the City is not pursuing desalination as a potential water supply, some of its neighboring agencies and its wholesale water supplier (MWDOC) are actively investigating the possibility. MWDOC has performed preliminary siting and cost analyses, and the City of Huntington Beach, in conjunction with a private entity, is exploring the possibility of providing desalinated ocean water to the region. Currently, no potential for the desalination of brackish groundwater has been identified.

Table 4-4. (DWR Table 18) Opportunities for Desalinated Water

Sources of Water	Yield AFY	Start Date	Type of Use	Other
Water purchased from:				
Ocean Water	0	N/A	N/A	N/A
Brackish Ocean Water	0	N/A	N/A	N/A
Brackish Groundwater	0	N/A	N/A	N/A
Other (such as impaired groundwater)	0	N/A	N/A	N/A
Total	**0**			

Note: Desalination is not perceived to be a viable option for the City.

4.4 Transfer and Exchange Opportunities

Currently, the City does not transfer and/or exchange any water supply to or from other entities, and it is not anticipated that transfer or exchange will occur in the future (Table 4-5).

Table 4-5. (DWR Table 11) Transfer Exchange Opportunities (AFY)

Transfer Agency	Transfer or Exchange	Short term	Proposed Quantities	Long term	Proposed Quantities
None	0	0	0	0	0
Total	**0**	**0**	**0**	**0**	**0**

4.5 Current and Projected Water Supplies

Table 4-6 shows the amount of water supply demands projected by the City. These values were provided to MWDOC, the City's wholesale water supplier. Table 4-7 shows future water supply projects.

Table 4-6. (DWR Table 19) Agency Demand Projections Provided to Wholesale Suppliers

Wholesaler	2010	2015	2020	2025	2030
MWDOC	5,758	6,157	6,362	6,226	6,256

Table 4-7. (DWR Table 17) Future Water Supply Projects

Project Name	Projected Start Date	Projected Completion Date	Normal-year AF to agency	Single-dry year yield AF	Multiple-Dry-Year 1 AF	Multiple-Dry-Year 2 AF	Multiple-Dry-Year 3 AF
N/A							

Table 4-8 on the following page summarizes the current and projected water supplies available to the City. The purchased water will meet the City's current and planned future water supply demand.

Table 4-8. (DWR Table 4) Current and Planned Water Supplies for the City of Newport Beach (AFY)

Water Supply Sources	2005	2010	2015	2020	2025	2030
Water purchased from:						
Metropolitan	0	0	0	0	0	0
MWDOC	6,404	5,758	6,157	6,362	6,226	6,256
OCWD (Lower Santa Ana Basin)	11,927	13,590	14,921	14,778	14,990	14,960
California Domestic Water Company	0	0	0	0	0	0
Supplier-produced groundwater	0	0	0	0	0	0
Supplier surface diversions	0	0	0	0	0	0
Transfers in or out	0	0	0	0	0	0
Recycled Water (projected use)	317	444	478	500	500	500
Desalination	0	0	0	0	0	0
Other	0	0	0	0	0	0
Total	**18,648**	**19,792**	**21,556**	**21,640**	**21,716**	**21,716**

Source: City projections based on historical data

4.6 Water Supply Reliability

This section describes the projected supplies available during single and multiple dry years. During short-term periods of water supply reductions, the City would implement its water shortage contingency plan, which is presented in Appendix E. Table 4-9 includes the anticipated local and imported water supplies for the City during a normal water year, a single dry water year, and multiple dry water years. The basis for the information in Table 4-9 is provided in Table 4-10. MWDOC's water balance computer model simulated the three variables (retail demand, local supplies, and imported supplies) over the 83 years from 1922 to 2004. The average of the 83 simulations represents the normal water year. The hydrologic conditions for 1961 and the period from 1959 to 1961 yielded the highest single-year and three-year demands for imported supply, respectively. These years differed from Metropolitan's draft UWMP that shows 1977 as the single driest year and 1990-1992 as the driest three-year period. However, MWDOC analysis is considered to be more conservative, as it yields higher imported demands.

Table 4-9. (DWR Table 8) Supply Reliability (AF Year)

2010	Normal Water Year (Average)	Single Dry Year (1961)	Multiple Dry Water Years		
			2008 (1959)	2009 (1960)	2010 (1961)
Local Supply	14,034	12,439	13,293	12,094	12,439
	% of Normal	88.6%	94.7%	86.2%	88.6%
Imported Supply	5,758	8,450	7,260	8,099	8,450
	% of Normal	146.8%	126.1%	140.7%	146.8%
2015	**Normal Water Year (Average)**	**Single Dry Year (1961)**	**Multiple Dry Water Years**		
			2008 (1959)	**2009 (1960)**	**2010 (1961)**
Local Supply	15,399	12,840	13,670	12,041	12,840
	% of Normal	83.4%	88.8%	78.2%	83.4%
Imported Supply	6,157	9,911	8,706	10,114	9,911
	% of Normal	161.0%	141.4%	164.3%	161.0%
2020	**Normal Water Year (Average)**	**Single Dry Year (1961)**	**Multiple Dry Water Years**		
			2008 (1959)	**2009 (1960)**	**2010 (1961)**
Local Supply	15,278	11,526	14,075	11,652	11,526
	% of Normal	75.4%	92.1%	76.3%	75.4%
Imported Supply	6,362	11,314	8,978	10,771	11,314
	% of Normal	177.8%	141.1%	169.3%	177.8%
2025	**Normal Water Year (Average)**	**Single Dry Year (1961)**	**Multiple Dry Water Years**		
			2008 (1959)	**2009 (1960)**	**2010 (1961)**
Local Supply	15,490	12,195	14,138	12,343	12,195
	% of Normal	78.7%	91.3%	79.7%	78.7%
Imported Supply	6,226	10,726	9,006	10,168	10,726
	% of Normal	172.3%	144.6%	163.3%	172.3%
2030	**Normal Water Year (Average)**	**Single Dry Year (1961)**	**Multiple Dry Water Years**		
			2008 (1959)	**2009 (1960)**	**2010 (1961)**
Local Supply	15,460	11,817	14,531	12,211	11,817
	% of Normal	76.4%	94.0%	79.0%	76.4%
Imported Supply	6,256	11,104	8,639	10,308	11,104
	% of Normal	177.5%	138.1%	164.8%	177.5%

Source: MWDOC, 2005

Table 4-10. (DWR Table 9) Basis of Water Year Data

Water Year Type			
Average Water Year	Average of Historical Hydrology from 1922 to 2004		
Single-Dry Water Year	1961		
Multiple-Dry Water Years	1959	1960	1961

Source: MWDOC, 2005

Factors resulting in inconsistency of the City's supply are summarized in Table 4-11, which shows that climatic factors are the only factors resulting in an inconsistent water supply. Water quality issues are not anticipated to have significant impact on water supply reliability. If applicable in the future, chemical contamination and the lowering of maximum contaminant levels (MCLs) for naturally occurring constituents can be mitigated by constructing new treatment facilities, which would have a significant cost.

Table 4-11. (DWR Table 10) Description of the Factors Resulting in Inconsistency of Supply

Name of Supply	Legal	Environmental	Water Quality	Climatic
Metropolitan				X
Lower Santa Ana Basin				X
Surface Diversions				X
Groundwater				X

Source: MWDOC, 2005

The City's groundwater supply is supplemented by MWDOC, a water wholesaler (Tables 4-12, 4-13 and 4-14). The MWDOC and groundwater supplies together meet the City's demand projections, as previously shown in Table 4-6.

Table 4-12. (DWR Table 20) Wholesaler Identified and Quantified the Existing and Planned Sources of Water (AFY)

Wholesaler sources	2010	2015	2020	2025	2030
MWDOC	5,758	6,157	6,362	6,226	6,256

Source: MWDOC

Based on MWDOC's water supply reliability analysis, the City's demands will be met for single and multiple dry years. As shown in Table 4-13, MWDOC can meet over 100% of the City's water demands.

Table 4-13. (DWR Table 21) Wholesaler Supply Reliability – % of Normal AFY

Wholesaler Sources	Average / Normal Water Year	Single Dry Water Year	Multiple Dry Water Years		
			Year 1 (1959)	Year 2 (1960)	Year 3 (1961)
MWDOC	2010	147%	126%	141%	147%
MWDOC	2015	161%	141%	164%	161%
MWDOC	2020	178%	141%	169%	178%
MWDOC	2025	172%	145%	163%	172%
MWDOC	2030	177%	138%	165%	177%

Source: MWDOC

Table 4-14 shows the potential factors which could result in an inconsistent supply from MWDOC. As shown, MWDOC identified only the climatic factor.

Table 4-14. (DWR Table 22) Factors Resulting in Inconsistency of Wholesaler's Supply

Name of supply	Legal	Environment	Water Quality	Climatic
MWDOC				X

Source: MWDOC

4.7 Water Quality Impacts on Future Water Supply

The quality of the City's water deliveries is regulated by the California Department of Health Services (DHS), which requires regular collection and testing of water samples and tests to ensure that the quality meets state and national regulatory standards and does not exceed MCLs. Through its approved laboratory contracts, the City performs water quality testing, which has consistently yielded results within the acceptable regulatory limits. Overall the City's water is of high quality.

The quality of the City's surface water and groundwater supply sources over the next 25 years is expected to be adequate. Surface and groundwater will continue to be treated to meet drinking water standards, and no impacts to surface water, groundwater, or recycled water supplies due to water quality deficiencies are foreseen to occur in the next 20 years. Table 4-15 summarizes the current and project water supply changes due to water quality.

Table 4-15. (DWR Table 39) Current and Projected Water Supply Changes due to Water Quality – Percentage

Water Source	2005	2010	2015	2020	2025	2030
MWDOC	0	0	0	0	0	0
Groundwater	0	0	0	0	0	0
Recycled water	0	0	0	0	0	0
Total	**0**	**0**	**0**	**0**	**0**	**0**

5.0 RECYCLED WATER

Water recycling is the treatment and management of municipal, industrial, or agricultural wastewater to produce water that can be reused for beneficial uses and offset the need for drinking water supplies. Water recycling provides an additional source of water that can be used for beneficial purposes, such as irrigation, groundwater recharge, industrial purposes, and environmental enhancement. "Recycled water" is defined in the California Water Code as "water which, as a result of treatment of waste, is suitable for a direct beneficial use or a controlled use that would not otherwise occur." The Department of Health Services sets the water quality criteria for specific uses of recycled water in Title 22 of the California Code of Regulations.

This section provides information on amount of generated wastewater and the amount available for potential reuse, existing disposal of wastewater, existing recycled water uses, and future potential water reuse.

5.1 City Coordination

The user of recycled water for irrigation and other beneficial uses reduces demands on the City's water supply system. In order to continually optimize the use of recycled water to offset demands on the potable water system, the City coordinates as needed with local authorities responsible for water supply and wastewater collection and distribution. Table 5-1 identifies these authorities.

Table 5-1 identifies the authorities with whom the City coordinates to continually optimize the use of recycled water to offset demands on the potable water supply system.

Table 5-1. (DWR Table 32) Participating Agencies

Agency Type	Agency Name	Plan Development Role
Local water wholesaler	Municipal Water District of Orange County	Provided recycled water supply and demand information
Wastewater agency	Orange County Sanitation District	Provided recycled water supply and demand information
Other	Public Constituencies	Provided recycled water supply and demand information

5.2 Wastewater Quantity and Disposal

This section provides information on the wastewater systems and the amount of wastewater collected and disposed within the City's service area. Recycled water planning efforts are lead by OCWD and OCSD, with OCWD processing recycled water to Title 22 standards. The City's irrigation customers use between 300 and 800 AF/year of recycled water.

5.2.1 Wastewater Collection and Treatment

The sewer service area covered by the City includes the majority of the City's boundary, with the exception of a couple of small areas of the city. The estimated year 2005 sewer service population is approximately the same as the number of water customers.

Within its service area, the City is responsible for wastewater collection and conveyance to the Orange County Sanitation District (OCSD) sewer treatment plant, located in Huntington Beach. OCSD also treats wastewater from several other municipalities. OCSD discharges treated water into the ocean through a 120-inch diameter ocean outfall pipe that extends five miles offshore to the discharge point. A standby 78-inch diameter outfall pipeline stretches one mile from shore. The treatment levels meet all current State and Federal requirements. OCSD also sends up to 10 mgd of treated wastewater every day to the Orange County Water District for further processing for landscape irrigation and for injection into the groundwater seawater intrusion barrier.

Table 5-2. Wastewater Treatment Within the City's Service Area

Operator	District or Plant	Wastewater Source (water supply)
None		

The approximate amounts of wastewater collected and treated and the amount that meets recycled water standards for the five primary wastewater treatment facilities are described in Table 5-3.

Table 5-3. (DWR Table 33) Amount of Wastewater Collected and Treated by each Agency (AFY)

Type of Wastewater	2000	2005	2010	2015	2020	2025	2030
Raw sewage	10,000	11,200	11,875	12,933	12,984	13,030	13,030
Total	10,000	11,200	11,875	12,933	12,984	13,030	13,030

5.2.2 Wastewater Disposal

Within the City's service area, discharge of treated wastewater is regulated by the Regional Water Quality Control Board (RWQCB). In general, the majority of the wastewater generated and treated during the summer months is used for alternative beneficial uses such as wetland habitat and restoration and irrigation for golf courses. The use of the recycled water helps supply part of the water demand during the peak summer months.

Sewage collected by OCSD at its two reclamation plants, including City discharges, is treated to a blend of advanced primary and secondary levels. By early 2011, OCSD will have completed final construction of its secondary treatment facilities at Reclamation Plant No. 2. No flows from this plant are treated to recycled water standards, and this treatment level is not anticipated to change. However, Reclamation Plant No. 1 supplies secondary treated wastewater to OCWD for further treatment to recycled water standards for non-potable use and for source water for the Groundwater Replenishment System (GWRS).

Current 2005 and future 2030 ocean discharges from Reclamation Plant No. 1 are 80,614 AF/yr and 39,187 from influent of 97,408 AF/yr and 198,175 AF/yr, respectively, with the difference being supplied to the GWRS as process water for recycling. Treatment Plant No. 2 influent is treated and ocean discharged exclusively. Current 2005 and future 2030 flows are 169,064 AF/yr and 161,227 AF/yr, respectively.

5.3 Recycled Water Use

The City of has approximately 10 miles of recycled water distribution pipeline, which currently supplies eight recycled use sites.

Recycled water is supplied to the City from the Orange County Water District (OCWD) from Fountain Valley as part of OCWD's Green Acres Project. OCWD produces approximately 7.5 mgd of tertiary treated, disinfected recycled water. Some of the sites served by recycled water include the Newport Beach County Club, the Big Canyon Country Cub, median strips, and a City-owned park.

Table 5-4 contains the actual total recycled water use for 2005 by each of the water customers. The City's 2000 Urban Water Management Plan did not contain a projected amount of water use for 2005, and is therefore not included in the table.

Table 5-4. (DWR Table 37) Recycled Water Use – 2005 Projection Compared with 2005 Actual (AFY)

	2000 Projection for 2005	2005 Actual Use
Total Recycled Water Usage	N/A	317
Total	**N/A**	317

Potential recycled water users are locations where recycled water could replace potable water use. These potential users are typically landscape or agricultural irrigation systems, or possibly water users. In 2003, the City identified potential recycled water users by looking at past studies, water and irrigation meter records, and assistance from OCWD. User types included golf courses, landscape medians, school athletic fields, a cemetery, and park irrigation. Specific potential customers were listed, along with an estimate of recycled water use at that site.

The City has identified and approached all of the cost-effective end users, and the number of users could only be increased if a neighboring agency provided the reclaimed water and wheeled it to the City. However, in most areas, the cost to install mains and services would make the conversion very expensive or cost prohibitive. The City currently serves approximately 3,336 AFY of irrigation demand using potable water, but these demands are mostly located a long distance from the existing recycled system, and it is not cost-effective to connect.

Table 5-5 describes the potential water that could be obtained by the customers within the City's service area and used for different water uses. The ultimate system will serve only 1000 AFY of recycled water in the year 2020. However, due to the limited access to the project mains and some financial impact on end users, it is not feasible to distribute all of the potential recycled water, and the City does not predict that there will be many other end users in the near future.

Table 5-5. (DWR Table 35) Recycled Water Uses – Actual and Potential (AFY)

Type of Use	Tertiary	2005	2010	2015	2020	2025	2030
Agriculture	Tertiary	N/A	N/A	N/A	N/A	N/A	N/A
Landscape	Tertiary	317	444	476	500	500	500
Wildlife Habitat	Tertiary	N/A	N/A	N/A	N/A	N/A	N/A
Wetlands	Tertiary	N/A	N/A	N/A	N/A	N/A	N/A
Industrial	Tertiary	N/A	N/A	N/A	N/A	N/A	N/A
Groundwater Recharge	Tertiary	N/A	N/A	N/A	N/A	N/A	N/A
Other	Tertiary	N/A	N/A	N/A	N/A	N/A	N/A
Total	**Tertiary**	317	444	476	500	500	500

Table 5-6 describes the projected recycled water use that is potentially feasible for City customers.

Table 5-6. Projected Recycled Water Usage by City of Newport Beach Customers

	Volume (AFY)					
Customer	**2005[a]**	**2010**	**2015**	**2020**	**2025**	**2030**
City of Newport Beach[b]	5	7	7	8	8	8
Big Canyon Country Club	184	214	231	245	245	245
Newport Beach Country Club	120	213	228	235	235	235
Newport-Mesa Unified School District	8	10	10	12	12	12
Total	317	444	476	500	500	500

Note: These totals are the current projected volumes of recycled water used only for urban reuse which has the potential to offset potable water use.

[a]Projections for year 2005 are based on actual 2004 recycled water use reported to the City by each respective water user.

[b]Projections for years 2010-2030 are based on the following source: Tim Deutsch, City of Newport Beach, Utilities Administrative Manager

The projected future use of recycled water by the City is found in Table 5-7.

Table 5-7. (DWR Table 36) Projected Future Use of Recycled Water in Service Area (AFY)

Type of Use	2010	2015	2020	2025	2030
Agriculture	N/A	N/A	N/A	N/A	N/A
Landscape	10	10	15	15	15
Wildlife Habitat	N/A	N/A	N/A	N/A	N/A
Wetlands	N/A	N/A	N/A	N/A	N/A
Industrial	N/A	N/A	N/A	N/A	N/A
Groundwater Recharge	N/A	N/A	N/A	N/A	N/A
Other (type of use)	N/A	N/A	N/A	N/A	N/A
Total projected use of Recycled Water	10	10	15	15	15

5.4 Promotion of Recycled Water Use

To promote the use of recycled water, the City provides financial incentives by offering a 20 percent discount off potable water rates. The current rate for recycled users is $1.66 per unit (one unit equals 748 gallons). Table 5-8 presents the amount of reclaimed water use anticipated to result from providing incentives and other encouragements to City customers.

Table 5-8. (DWR Table 38) Methods to Encourage Recycled Water Use

Actions	AF of use projected to result from this action		
	2010	2015	2020
Financial incentives	444	476	500
Others	0	0	0
Total	444	476	500

6.0 WATER CONSERVATION

Water conservation is a method available to reduce water demands, thereby reducing water supply needs for the City. The City implements some water conservation best management practices (BMPs).

The unpredictable water supply and ever increasing demand on California's complex water resources resulted in a coordinated effort by the DWR, water utilities, environmental organizations, and other interested groups to develop a list of urban BMPs for conserving water. The California Urban Water Conservation Council (CUWCC) was created to assist in increasing water conservation through partnerships among urban water agencies, public interest organizations, and private entities. This consensus-building effort resulted in the MOU, as amended September 16, 1999, which formalizes an agreement to implement BMPs and provide a cooperative effort to reduce the consumption of California's water resources.

Those signing the MOU have pledged to develop and implement fourteen BMPs. The MOU requires that a water utility implement only the BMPs that are economically feasible. If a BMP is not economically feasible, the utility may request an economic exemption for that BMP. The BMPs as defined in the MOU are generally recognized as standard definitions of water conservation measures.

The City became a member of the CUWCC in August 2005, but has not yet started submitting annual reports. Table 6-1 identifies the fourteen BMPs, or Demand Management Measures (DMMs).

Table 6-1. California Urban Water Conservation Council Best Management Practices

Best Management Practices, BMP
BMP 01: Water Survey Programs for Single-Family and Multi-Family Residential Customers
BMP 02: Residential Plumbing Retrofit
BMP 03: System Water Audits, Leak Detection, and Repair
BMP 04: Metering with Commodity Rates for all New Connections and Retrofit of Existing Connections
BMP 05: Large Landscape Conservation Programs and Incentives
BMP 06: High-Efficiency Washing Machine Rebate Programs
BMP 07: Public Education Programs
BMP 08: School Education Programs
BMP 09: Conservation Programs for CII Accounts
BMP 10: Wholesale Agency Assistance Programs
BMP 11: Conservation Pricing
BMP 12: Conservation Coordinator
BMP 13: Water Waste Prohibition
BMP 14: Residential ULFT Replacement Programs

6.1 Demand Management Measures – SEE ATTACHMENT WITH CHANGES

6.1.1 DMM No. 1 – Water Survey Programs for Single-Family Residential and Multi-Family Residential Customers

As part of this DMM, an agency targets single- and multi-family homes and sends out a qualified surveyor who checks water using devices within the house and evaluates landscapes and irrigation systems. MWDOC had a formal program that ended in FY 2001/02. The City does not have its own program.

In FY 2004/05, the City, along with MWDOC, participated in a regional program called the SmarTimer Rebate Program. Under the program, residential and small commercial properties are eligible for a rebate when they purchase and install a new, state-of-the-art, weather-based irrigation controller which can save 41 gallons per day per residence and can reduce runoff and pollution by 49 percent. The City is eligible to receive 1,192 valves over the life of the program, and in FY 2004/05, three residential and seventeen small commercial customers participated. The City will continue to provide on-site meetings, literature and incentives related to this program. As part of the MWDOC Grant for the SmarTimers a site audit and inspection is required and provided by contract through MWDOC.

The City is in the process of contracting for a professional/consultant that can assist the City in developing a residential and commercial site auditing program. Presently the City pays a contractor for audits as needed. Once the City has developed a program it is the desire of the City to hire a full or part-time professional staff person to do audits for residential and commercail properties as well as site measurements for public properties.

6.1.2 DMM No. 2 – Residential Plumbing Retrofit

Between 1994 and 2004, the City, in conjunction with MWDOC, distributed a total of 3,025 and 4,070 ultra low flush toilets (ULFT) to single-family and multi-family homes, respectively. In addition, through Metropolitan's mass showerhead distribution, the City installed 4,453 low-flow showerheads between 1991 and 1998, and over 75 percent of the City's single- and multi-family homes constructed prior to 1992 are fitted with low-flow showerheads. The City is meeting the requirement for this DMM, so no additional ULFT toilet or low-flow showerhead programs will occur. But through MWD/MWDOC pass-thru rebates funding is still available for rebates for these items until the requirement sunsets in 2007, which is when the field is deemed to be saturated.

6.1.3 DMM No. 3 – System Water Audits, Leak Detection, and Repair

The City records daily production and demand data and reads all meters on a bi-monthly basis. All metered sales and other verifiable uses such as backwash, flushwater, and operation and maintenance, are recorded. The unaccounted water loss varies year to year but is approximately five percent of the total water in the system. The City is meeting the requirement for this DMM.

6.1.4 DMM No. 4 – Metering with Commodity Rates for all New Connections and Retrofit of Existing Connections

All of the City's water connections are metered and billed based on commodity rates.

6.1.5 DMM No. 5 – Large Landscape Conservation Programs and Incentives

MWDOC has a program titled "Landscape Performance Certification Program", which provides a water-based budget for dedicated meters. This program involves developing water budgets based off of agency-provided consumption data, site-provided area measurement, local weather data, and contact information for the site owner, the responsible landscape company, and a property manager. On a monthly basis, the site's water budget is developed by water meter and provided back to the three involved entities in an e-mail report card format. Also included is a website where all involved can view their site for budget numbers, which illustrate whether a meter is over, under, or exactly at their budget. Included is a calculation based on individual water rates showing dollars lost. This program does not include a formal landscape survey component. Financial incentives are offered to improve landscape water use efficiency, and regional funding is available from Metropolitan.

The City participates in the Landscape Performance Certification Program, and has 32 meters for FY 2004/05 and 3 meters for FY 2005/06. Through the SmarTimer Grant the City is requiring all Commercial applicants to participate in this program as a condition of funding by the City.

6.1.6 DMM No. 6 – High-Efficiency Washing Machine Rebate Programs

The City participates in the High-Efficiency Clothes Washer (HECW) program sponsored by Metropolitan and MWDOC. Effective November 18, 2005, MWDOC began offering a $300 rebate for each HECW purchased and installed properly. Qualified machines must have a water factor of 6.0 or less to qualify. These machines typically use 15 to 25 gallons less water per load, with a potential water savings of up to 7,000 gallons per year.

Over the past 4 years, 781 residences have installed HECWs through this program, and the City continues to provide information to residences about these rebate programs.

6.1.7 DMM No. 7 – Public Information Program

The City has an active program to promote and educate its customers about water conservation and other water-related topics. For seven out of the last eight years the City has participated in the Annual Children's Water Education Festival sponsored by OCWD, The Disneyland Resort and various City's and Agency's throughout Orange County, when requested the Utilities Conservation Coordinaor goes into the classrooms and discusses various aspects of conservation. The City is also in the process of updating its website to include conservation related materials and information. Including other resources for helping meet the publics conservation needs.

Each year the City publishes and distributes its Water Quality Report, as require by DHS. In addition to water quality data, this report contains information about the City's sources of supply and potential new projects.

6.1.8 DMM No. 8 – School Education Programs

Since 1975, MWDOC has offered water education programs to Orange County public and private schools for all grade levels from kindergarten through high school. The City participates in this program, and during FY 2004/05, MWDOC made 4 presentations to 245 students.

6.1.9 DMM No. 9 – Conservation Programs for Commercial, Industrial, and Institutional Accounts

MWDOC has a rebate program for replacing highflow devices with low-flow ones but does not conduct surveys for commercial, industrial, and institutional accounts. During FY 2004/05, 25 of the City's commercial, industrial, and institutional customers installed a water-saving plumbing fixture, and a total of 182 fixtures have been installed since FY 2001/02. The City will continue to educate this account category to meet the DMM requirements. The City is also working with the Orange County Sanitation District to target CII customers in the City who could benefit from the reduction or recycling are large water using devices that MWD will help fund to upgrade.

6.1.10 DMM No. 10 – Wholesale Agency Assistance Program

The City is not a wholesale agency, so this DMM does not apply.

6.1.11 DMM No. 11 – Conservation Pricing

The City currently has uniform pricing for all water. The City is currently investigating the various tiered rate pricing schemes so it can report to the Council on the efficiency and staffing requirements to convert the current billing system to one that includes tiered pricing.

6.1.12 DMM No. 12 –Conservation Coordinator

The City has a designated water conservation coordinator, Terresa Moritz, and thus meets this DMM.

6.1.13 DMM No. 13 – Water Waste Prohibitions

The City of Newport Beach has a formal water waste prohibition. The City does attempt to promote the most reasonable, wise and efficient use of water. Some of the suggested practices include:

- New landscaping shall incorporate drought-tolerant plant materials and drip irrigation systems, wherever possible.
- Water leaving the user's property due to over-irrigation of landscape, should be minimal. If an incident such as this is reported, a customer service representative will visit the location, investigate, inform resident if possible, leave a note and in some cases shut-off the water.

- It is suggested that watering should be done during the early morning or evening hours to minimize evaporation (between 4:00 p.m. and 9:00 a.m. the following morning).
- All leaks are investigated and repaired.
- Water should not be used to clean paved surfaces, such as sidewalks, driveways, parking areas, etc., except to alleviate immediate safety or sanitation hazards.
- Reclaimed water shall be used wherever available, assuming it is economically feasible.

6.1.14 DMM No. 14 – Residential ULFT Replacement Program

Since 1994, MWDOC has had two ULFT programs: a rebate program and a distribution program. The City has participated in this program but has had limited success. Seven ULFTs were installed through MWDOC's CII ULFT program between FY 2001/02 and FY 2003/04, and through MWDOC and local agency conservation programs, the City has installed 7,091 ULFTs between FY 1995/96 and FY 2004/05. However, many of the housing units have low-flush toilets, and the City meets the coverage requirements for this DMM.

6.2 Determination of Implementation

Apart from DMM No. 10, which is not applicable to the City, the City does not have any DMMs that are not currently being implemented or that are not scheduled for implementation.

Table 6-2. (DWR Table 16) Evaluation of Unit Cost of Water Resulting from Non-implemented DMMs

Non-implemented & Not Scheduled DMM / Planned Water Supply Projects	Per-AF Cost ($)
Not Applicable	$0

Source: City staff

7.0 WATER SHORTAGE CONTINGENCY PLAN

This section describes the City's water shortage planning efforts. Water shortages may result from weather variations and catastrophes such as pipeline failures, supply contamination, and earthquakes. During periods of drought, the City will be subject to Metropolitan's and MWDOC's regional water supply plans.

Metropolitan adopted a Water Surplus and Drought Management Plan (WSDM Plan), which guides the management of regional water supplies to achieve the reliability goals of Southern California's Integrated Resources Plan. Metropolitan expects to be 100 percent reliable through the next ten years or more. MWDOC is responsible for the allocation of imported water to its member agencies, and Section 7 of MWDOC's draft 2005 UWMP indicates that they will follow Metropolitan's WSDM Plan.

The WSDM Plan's guiding principle is to minimize adverse impacts of water shortage to retail customers. The supporting principles behind the plan are to encourage efficient water use and economical local resource programs, coordinate operations with member agencies to maximize the amount of surplus water available in dry years, pursue transfer and banking programs to secure more imported water for use in dry years, and increase public awareness about water supply issues.

The WSDM Plan distinguishes between Surpluses, Shortages, Severe Shortages, and Extreme Shortages. Each of these terms has a specific meaning with regards to Metropolitan's capability to deliver water to MWDOC and its member agencies, which includes the City. Metropolitan defines Surplus as being its ability to meet full-service and interruptible program demands, and to deliver water to local and regional storage. Under a Shortage condition, Metropolitan can meet full-service demands and partially meet or fully meet interruptible demands, using stored water or water transfers as necessary. For a Severe Shortage, Metropolitan must use stored water, transfers, and possibly also call for extraordinary conservation to meet full-service demands, and Interim Agricultural Water Program deliveries may be curtailed. In the event of an Extreme Shortage, Metropolitan must allocate available supply to full-service customers.

The WSDM Plan also defines five surplus management stages and seven shortage management stages to guide resource management activities. Each year, Metropolitan considers the level of supplies available and the existing levels of water in storage to determine management actions to (a) maximize avoidance of an Extreme Shortage and (b) minimize adverse impact to retail customers in the event of an Extreme Shortage. Some of the actions that could be taken include surface storage management/withdrawal, groundwater storage/withdrawal, curtailment of groundwater replenishment storage programs, purchase of option contracts, and differing levels of conservation.

7.1 City's Water Shortage Contingency Plan

In 1992, the City adopted its Water Shortage Contingency Plan (WSCP) in response to California Assembly Bill Number 11. The WSCP is intended to conservatively manage the City's water resources to provide water to its customers on an equitable and business-sound basis, in the event of a curtailment of deliveries of up to 50 percent.

7.2 Action Stages

As summarized in Table 7-1, the City has a ten-stage plan to meet up to a 50% reduction in water supply. Table 7-1 outlines the water supply shortage stages and conditions. Further details of each phase's mandatory conservation actions are covered in Ordinance No. 92-31 adopted by the City on June 8, 1992. A copy of this ordinance is included in Appendix F.

Table 7-1 (DWR Table 23) Water Supply Shortage Stages and Conditions

Stage No.	Water Supply Conditions	% Shortage
1	Normal	10% voluntary
2	Water Alert	10% mandatory
3	Water Alert	15%
4	Water Warning	20%
5	Water Warning	25%
6	Water Warning	30%
7	Water Warning	35%
8	Water Warning	40%
9	Water Warning	45%
10	Water Warning	50%

7.3 Three-Year Minimum Supply

MWDOC has determined the minimum water supplies available for retail consumption for each of the next three years (2006-2008). Table 7-2 compares normal conditions and the historical driest three-year period (1959-1961) for MWDOC's service area. MWDOC is expected to meet the City's consumption under a three-year dry period. Similarly, Metropolitan is expected to be able to supply all of MWDOC's imported water during the same period, and Metropolitan's draft Regional Urban Water Management Plan indicates that it can provide 100% of the supply demanded by its member agencies through 2030.

Table 7-2. (DWR Table 24) Three-Year Minimum Water Supply

	Normal			Multiple Dry Year		
Source	**2006**	**2007**	**2008**	**2006**	**2007**	**2008**
Local Supplies	11,452	12,404	13,952	11,157	10,799	13,163
Imported Supply	7,371	6,672	5,310	8,927	8,983	7,168
Total	**18,823**	**19,076**	**19,263**	**20,084**	**19,781**	**20,331**

Source: MWDOC

7.4 Catastrophic Supply Interruption Plan

In 1983, the Orange County water community developed a Water Supply Emergency Preparedness Plan to respond effectively to disasters impacting the regional water distribution system. The Water Emergency Response Organization of Orange County (WEROC) was formed to coordinate emergency response on behalf of all Orange County water agencies.

The City developed its Emergency Preparedness Plan in 1998 to meet emergencies within its service area and has updated the plan as necessary. The plan provides information on City operations, assigns responsibilities, and establishes general policies and procedures associated with operations during natural disasters, technological incidents, and nuclear defense emergencies.

Table 7-3 summaries various possible catastrophes and a summary of the actions that would be taken in response.

Table 7-3. (DWR Table 25) Preparation Actions for a Catastrophe

Possible Catastrophe	Summary of Actions
Regional Power Outage	Request information from SCE to determine how long outage will be. Pump Stations will automatically utilize back-up power through an auto-transfer switch. Utilize MWD connections and emergency supply in Big Canyon Reservoir. Notify customers, media, state and local authorities if service is disrupted or significant demand management is necessary.
Earthquake	The City would activate its EOC and each Department would activate their respective DOC's. All City departments are assigned specific functions as described in the Functional Responsibility Matrix. Each department will respond to, manage, and request mutual aid resources/personnel to respond to their assigned responsibilities. Issue boil alert of "do not drink" orders as needed.
Diemer Plant Shutdown	Request information from MWD on length of shutdown. If insignificant, utilize emergency water storage or pump groundwater from wells to supply demand for all customers. Also, potentially implement water use prohibitions, depending on length and severity.
Water Contamination	Notify Newport Beach Police Department and Department of Health Services. Attempt to isolate effected areas, in known, preventing spreading to other areas. Issue a "do not drink" or boil order as necessary. Provide alternate water supply to areas affected. Activation of EOC would depend on severity.
Flooding	Request information from other City departments on the severity and location of the flooding, to determine the potential damage to facilities. Activation of DOC and potentially EOC, based on severity. Utilize portable pumps and generators at locations most affected.
Tsunami	Emergency evacuation. Subsequently, possible activation of DOC and EOC based on severity. Have not fully addressed this event.

Source: City's Emergency Preparedness Plan and MWDOC's UWMP

7.5 Prohibitions, Penalties, and Consumption Reduction

7.5.1 Mandatory Water Use Prohibitions

The City has developed and adopted a specific water shortage management plan to meet targeted reductions in total water demand during a shortage scenario. Mandatory prohibitions on water usage during water shortages established in Ordinance No. 92-31 apply to all City customers. Table 7-4 lists examples of prohibitions in the ordinance and the stage when the prohibition becomes mandatory.

Table 7-4. (DWR Table 26) Mandatory Prohibitions

Examples of Prohibitions	Stage When Prohibition Becomes Mandatory
Using potable water for washing paved areas	4
Adjust sprinklers/irrigation systems to avoid overspray/runoff/waste	1
Greenbelt areas/existing slopes watered 2 days/week during non-peak hours	6
Limit water use from fire hydrants to fire fighting (curtail construction water use)	1
Washing of vehicles/mobile equipment limited to hand-held bucket or hand-held hose with a positive shut-off nozzle for quick rinses	4
Concrete areas in development projects must be broomed	4
Restaurants shall not serve water except when specifically requested to do so	1
Water recycling system mandatory for decorative fountains	1
Failure to repair indoor/outdoor leaks	1
Use of any water for construction must be pre-approved by City Manager	1
Violation warnings issues/charge a fee to recover costs	1
Prohibit use of water for construction purposes	1

Source: City's Emergency Preparedness Plan and MWDOC's UWMP

7.5.2 Water Reduction Methods

Reductions in water consumption by the City during water shortages will reduce MWDOC's overall demands on Metropolitan. Under the ordinance, the City has the authority of allocating available supplies as deemed necessary under the water conservation phases.

The City will use the following methods during the ten phases listed in Table 7-5.

Table 7-5. (DWR Table 27) Consumption Reduction Methods

Water Use	Stage When Method Takes Effect	Projected Reduction (%)
Voluntary best efforts in general water use	1	10
Mandatory restriction in general water use	2	10
Mandatory restriction in general water use	3	15
Mandatory restrictions: - Reduce general use by 20% - Cease vehicle washing with open flow hoses - Cease exterior surface washing - Cease irrigation between 10 a.m. and 4 p.m.	4	20
Mandatory restrictions (same as Stage 4 restrictions plus): - Reduce general use by 25% - Vehicle and exterior surface washing on specific days only - Irrigation on specific days only	5	25
Mandatory restrictions (same as Stage 5 restrictions plus): - Reduce general use by 30%	6	30
Mandatory restrictions (same as Stage 6 restrictions plus): - Reduce general use by 35% - Cease irrigation between 6 a.m. and 6 p.m., except trees can be watered on Sundays	7	35
Mandatory restrictions (same as Stage 7 restrictions plus): - Reduce general use by 40% - Trees may be watered on Sundays by bucket only	8	40
Mandatory restrictions (same as Stage 8 restrictions plus): - Reduce general use by 45% - Cease irrigation between 6 a.m. and 10 p.m.	9	45
Mandatory restrictions (same as Stage 9 restrictions plus): - Reduce general use by 50% - Cease all watering except by bucket - Cease filling pools, fountains, etc.	10	50

Source: City Ordinance No. 92-31

7.5.3 Penalties for Excessive Water Use

As identified in Stage 7 of Metropolitan's WSDM Plan, during a Severe Water Shortage, Metropolitan can impose surcharges or penalty pricing on water consumption in excess of the imported water allocation. In addition, MWDOC has the authority to adjust water rates to include any Metropolitan-imposed penalties.

The City's Ordinance mandates that the Utilities Director impose surcharges/penalties on water consumption during all phases of a water emergency by establishing a four-tiered billing structure based on area consumption ranges by meter size. Averages will be based on non-peak and peak seasons. A surcharge per billing unit (100 cubic feet of water) will be assed for usage above the average for each billing type. The surcharge will be based on the penalty charged by Metropolitan. The penalties and charges are shown in Table 7-6.

Table 7-6. (DWR Table 28) Penalties and Charges

Penalty or Charge	Stage When Penalty Takes Effect
Excess use charge assessed	Stage 2
Written notice of violation	Stage 2
Fine or surcharge for excess use	Stage 3
Install flow restrictor	Stage 4

Source: City Ordinance No. 92-13 and MWDOC's UWMP

7.6 Revenue Impacts on Reduced Sales

Anticipated shortfalls in projected revenue due to water supply shortages would need to be covered through increased water rates and/or an advance from funds set aside by the City.

Table 7-7. (DWR Table 29) Proposed Measures to Overcome Revenue Impacts

Name of Measures	Summary of Effects
Rate adjustment	The existing rate structure could be adjusted to recapture a portion of the lost revenue, which would affect all water users within the City's service area.
Development of reserves	The City has a Water Rate Stabilization Fund to be used in times of drought and emergencies to offset the loss of revenue. The City could also advance funds from its General Fund for the loss of essential revenue.

Source: City staff

Measures to overcome expenditure impacts and estimated dollar savings are provided in Table 7-8.

Table 7-8. (DWR Table 30) Proposed Measures to Overcome Expenditure Impacts

Names of measures	Summary of Effects
Curb all discretionary spending	Discretionary spending is not considered to be a significant budget item.
Defer Capital Improvement Program	The FY 05/06 Capital Improvement Program totals approximately $2,500,000. Certain non-essential projects could be delayed without having an adverse effect.
Delay purchase of capital outlay budgeted items	Decrease of approximately $50,000 per year.

Source: City staff, FY 2005/06 Water Enterprise Fund Operating Budget, and Capital Improvement Program

7.7 Water Use Monitoring Procedures

As defined in Table 7-9, water use monitoring mechanisms would be put in place to record the actual reduction in water use.

Table 7-9. (DWR Table 31) Water Use Monitoring Mechanisms

Mechanisms for Determining Actual Reductions	Type and Quality of Data Expected
Water meter auditing	Actual reduction of water used for meters over one-inch
Monitor daily production/distribution records	Daily production and distribution records would be monitored. The data is recorded by zone, which would enable City staff to determine which zone was using more water than expected. Customers would be alerted to actual water use (increase/decrease).
Monitoring Employee	City Code Enforcement Staff employee would monitor all unnecessary domestic irrigation use and serve on the "dawn" patrol to verify that residences and irrigation customers are not over-watering in the early hours of the day.

8.0 WATER SUPPLY VERSUS DEMAND COMPARISON

This section provides a comparison of the projected water supply and demand for the City from 2005 through 2030. Water supply to demand comparisons are also provided for single dry year and multiple dry year scenarios. The water demands are developed in Section 3, water supplies are defined in Section 4, and recycled water supplies are presented in Section 5 of this report.

8.1 Normal Water Supply vs. Demand Comparison

Water is delivered within the City's service area by the City to residential and commercial customers to meet their demands. The City's water supplies are from both surface water and groundwater sources. The analysis compares the projected normal water supply and customer demands from 2010 to 2030, in 5-year increments.

The projected water supply is estimated to increase by approximately 9.7% percent by the year 2030 from 2005. The projected available normal water supply and comparison to 2005 requirements is presented in Table 8-1.

Table 8-1. (DWR Table 40) Projected Normal Water Supply – AFY

(from table 4)	2010	2015	2020	2025	2030
Supply	19,762	21,556	21,640	21,716	21,716
% of year 2005	106%	116%	116%	116%	116%

The projected normal demand and comparison to 2005 demand requirements is presented in Table 8-2.

Table 8-2. (DWR Table 41) Projected Normal Water Demand – AFY

(from table 15)	2010	2015	2020	2025	2030
Demand	19,791	21,555	21,640	21,716	21,716
% of year 2005	10%	116%	116%	116%	116%

The comparison of projected water supply and demand is presented in Table 8-3.

Table 8-3 (DWR Table 42) Projected Supply and Demand Comparison – AFY

	2010	2015	2020	2025	2030
Supply totals	19,792	21,556	21,640	21,716	21,716
Demand totals	19,792	21,556	21,640	21,716	21,716
Difference	0	0	0	0	0
Difference as % of Supply	0.0%	0.0%	0.0%	0.0%	0.0%
Difference as % of Demand	0.0%	0.0%	0.0%	0.0%	0.0%

8.2 Dry Year Water Supply vs. Demand Comparison

Tables 8-4 through 8-6 provide a comparison of a single dry year water supply with projected total water use over the next 25 years, in five-year increments.

Table 8-4. (DWR Table 43) Projected Single Dry Year Water Supply – AFY

	2010	2015	2020	2025	2030
Local Supply	12,439	12,840	11,526	12,195	11,817
Imported Supply	8,450	9,911	11,314	10,726	11,104
Supply Totals	20,889	22,751	22,841	22,921	22,921
% of projected normal	105.5%	105.5%	105.5%	105.5%	105.5%

Table 8-5. (DWR Table 44) Projected Single Dry Year Water Demand – AFY

	2010	2015	2020	2025	2030
Demand	20,889	22,751	22,841	22,921	22,921
% of projected normal	105.5%	105.5%	105.5%	105.5%	105.5%

Table 8-6. (DWR Table 45) Projected Single Dry Year Supply and Demand Comparison – AFY

	2010	2015	2020	2025	2030
Supply totals	20,889	22,751	22,841	22,921	22,921
Demand totals	20,889	22,751	22,841	22,921	22,921
Difference	0	0	0	0	0
Difference as % of Supply	0.0%	0.0%	0.0%	0.0%	0.0%
Difference as % of Demand	0.0%	0.0%	0.0%	0.0%	0.0%

Tables 8-7 through 8-21 compare the total water supply available in multiple dry water years with projected total water use over the next 20 years, in one-year increments.

Table 8-7. (DWR Table 46) Projected Supply During Multiple Dry Year Period Ending in 2010 – AFY

Supply	2018	2019	2020
Normal			
Local Supply	13,952	14,053	14,034
Imported Supply	5,310	5,420	5,758
Supply Totals	**19,263**	**19,473**	**19,791**
Multiple Dry Year			
Local Supply	13,293	12,094	12,439
Imported Supply	7,260	8,099	8,450
Supply Totals	**20,553**	**20,193**	**20,889**
% of projected normal	106.7%	103.7%	105.5%

Table 8-8. (DWR Table 47) Projected Demand Multiple Dry Year Period Ending in 2010 – AFY

Demand	2008	2009	2010
Normal	19,263	19,473	19,791
Multiple Dry Year	20,553	20,193	20,889
% of projected normal	106.7%	103.7%	105.5%

Table 8-9. (DWR Table 48) Projected Supply and Demand Comparison During Multiple Dry Year Period Ending in 2010 – AFY

	2006	2007	2008
Supply totals	20,553	20,193	20,889
Demand totals	20,553	20,193	20,889
Difference	0	0	0
Difference as % of Supply	0.0%	0.0%	0.0%
Difference as % of Demand	0.0%	0.0%	0.0%

Table 8-10. (DWR Table 49) Projected Supply During Multiple Dry Year Period Ending in 2015 – AFY

Supply	2018	2019	2020
Normal			
Local Supply	15,113	15,342	15,399
Imported Supply	5,858	6,023	6,157
Supply Totals	**20,972**	**21,365**	**21,555**
Multiple Dry Year			
Local Supply	13,670	12,041	12,840
Imported Supply	8,706	10,114	9,911
Supply Totals	**22,376**	**22,155**	**22,751**
% of projected normal	106.7%	103.7%	105.5%

Table 8-11. (DWR Table 50) Projected Demand Multiple Dry Year Period Ending in 2015 – AFY

Demand	2013	2014	2015
Normal	20,972	21,365	21,555
Multiple Dry Year	22,376	22,155	22,751
% of projected normal	106.7%	103.7%	105.5%

Table 8-12. (DWR Table 51) Projected Supply and Demand Comparison During Multiple Dry Year Period Ending in 2015 – AFY

	2013	2014	2015
Supply totals	22,376	22,155	22,751
Demand totals	22,376	22,155	22,751
Difference	0	0	0
Difference as % of Supply	0.0%	0.0%	0.0%
Difference as % of Demand	0.0%	0.0%	0.0%

Table 8-13. (DWR Table 52) Projected Supply During Multiple Dry Year Period Ending in 2020 – AFY

Supply	2018	2019	2020
Normal			
Local Supply	15,288	15,277	15,278
Imported Supply	6,319	6,346	6,362
Supply Totals	**21,606**	**21,623**	**21,640**
Multiple Dry Year			
Local Supply	14,075	11,652	11,526
Imported Supply	8,978	10,771	11,314
Supply Totals	**23,053**	**22,423**	**22,841**
% of projected normal	106.7%	103.7%	105.5%

Table 8-14. (DWR Table 53) Projected Demand Multiple Dry Year Period Ending in 2020 – AFY

Demand	2018	2019	2020
Normal	21,606	21,623	21,640
Multiple Dry Year	23,053	22,423	22,841
% of projected normal	106.7%	103.7%	105.5%

Table 8-15. (DWR Table 54) Projected Supply and Demand Comparison During Multiple Dry Year Period Ending in 2020 – AFY

	2018	2019	2020
Supply totals	23,053	22,423	22,841
Demand totals	23,053	22,423	22,841
Difference	0	0	0
Difference as % of Supply	0.0%	0.0%	0.0%
Difference as % of Demand	0.0%	0.0%	0.0%

Table 8-16. (DWR Table 55) Projected Supply During Multiple Dry Year Period Ending in 2025 – AF Year

Supply	2023	2024	2025
Normal			
Local Supply	15,375	15,428	15,490
Imported Supply	6,316	6,280	6,226
Supply Totals	**21,691**	**21,708**	**21,716**
Multiple Dry Year			
Local Supply	14,138	12,343	12,195
Imported Supply	9,006	10,168	10,726
Supply Totals	**23,144**	**22,511**	**22,921**
% of projected normal	106.7%	103.7%	105.5%

Table 8-17. (DWR Table 56) Projected Multiple Dry Year Period Ending in 2025 – AF Year

Demand	2023	2024	2025
Normal	21,691	21,708	21,716
Multiple Dry Year	23,144	22,511	22,921
% of projected normal	106.7%	103.7%	105.5%

Table 8-18. (DWR Table 57) Projected Supply and Demand Comparison During Multiple Dry Year Period Ending in 2025 – AF Year

Supply	2023	2024	2025
Supply Totals	23,144	22,511	22,921
Demand Totals	23,144	22,511	22,921
Difference	0	0	0
Difference as % of Supply	0.0%	0.0%	0.0%
Difference as % of Demand	0.0%	0.0%	0.0%

Table 8-19. (DWR Table 58) Projected Supply During Multiple Dry Year Period Ending in 2030 – AF Year

Supply	2028	2029	2030
Normal			
Local Supply	15,450	15,414	15,460
Imported Supply	6,266	6,302	6,256
Supply Totals	**21,716**	**1,716**	**21,716**
Multiple Dry Year			
Local Supply	14,531	12,211	11,817
Imported Supply	8,639	10,308	11,104
Supply Totals	**21,170**	**22,519**	**22,921**
% of projected normal	106.7%	103.7%	105.5%

Table 8-20. (DWR Table 59) Projected Demand During Multiple Dry Year Period Ending in 2030 – AF Year

Demand	2028	2029	2030
Normal	21,716	21,716	21,716
Multiple Dry Year	23,170	22,519	22,921
% of projected normal	106.7%	103.7%	105.5%

Table 8-21. (DWR Table 60) Projected Supply and Demand Comparison During Multiple Dry Year Period Ending in 2030 – AF Year

Supply	2028	2029	2030
Supply Totals	23,170	22,519	22,921
Demand Totals	23,170	22,519	22,921
Difference	0	0	0
Difference as % of Supply	0.0%	0.0%	0.0%
Difference as % of Demand	0.0%	0.0%	0.0%

APPENDIX A

COORDINATION WITH CITY STAFF

CITY OF NEWPORT BEACH

UTILITIES DEPARTMENT

Eldon Davidson, Director

July 11, 2005

Patty Temple, Planning Director
City of Newport Beach
Planning Department
3300 Newport Blvd.
Newport Beach, CA 92663

Dear Patty:

As you may be aware, the Utilities Department updates its Urban Water Management Plan every five years. This effort helps ensure we can provide Newport Beach with a reliable supply of high-quality water to meet current and future demand. Because comprehensive water resource planning is so critical, the California Water Code now mandates all urban water purveyors notify the city or county they serve of this planning effort.

I am sending you this letter as required by law, and to solicit your input on how land-use planning decisions Newport Beach has made may impact water consumption over the next 20 years. The Utilities Department has hired Brown & Caldwell to represent the City in developing this updated plan. In the next couple of months, either I or a representative of Brown & Caldwell may be in contact with you or your designee to collect planning information.

The information you provide will be incorporated into the City of Newport Beach's 2005 Urban Water Management Plan. The document will then be submitted to the Municipal Water District of Orange County (MWDOC), which is compiling a countywide 2005 Regional Urban Water Management Plan. In turn, MWDOC's plan will be submitted to the Metropolitan Water District of Southern California (MET) for inclusion into its comprehensive 2005 Regional Urban Water Management Plan. MET supplies imported water from Northern California and the Colorado River to nearly 18 million people in six Southern California counties. MWDOC, a MET member agency, is the water wholesaler and resource-planning agency for Orange County.

The result of our collaborative efforts will be an all-inclusive plan that will assist us in better managing one of Southern California's most precious resources.

If you have a question or comment about our regional planning effort, please contact any one of the following individuals:

Utilities Department: Tim Deutsch, Administrative Manager, (949) 644-3010
Municipal Water District: I-Wen Yang, principal engineer, (714) 593-5027
Metropolitan Water District: Brendon Goshi, Water Resource Manager, (213) 217-7384

Developing a comprehensive 2005 Regional Urban Water Management Plan is critical to Southern California, the County of Orange and the City of Newport Beach. Thank you in advance for your input.

Sincerely,

Tim Deutsch
Administrative Manager

cc: I-Wen Yang, Municipal Water District of Orange County
Brendon Goshi, Metropolitan Water District of Southern California
Lisa Spresney, Brown & Caldwell

949 West 16th Street · Post Office Box 1768 · Newport Beach, California 92658-8915
Telephone: (949) 644-3011 · Fax: (949) 646-5204 · www.city.newport-beach.ca.us

APPENDIX B

URBAN WATER MANAGEMENT PLAN PUBLIC HEARING

NOTICE OF PUBLIC HEARING

NOTICE IS HEREBY GIVEN that the City Council of the City of Newport Beach will hold a public hearing on the draft update of the City of Newport Beach 2005 Urban Water Management Plan.

NOTICE IS HEREBY FURTHER GIVEN that said public hearing will be held on the **13th** day of **December** 2005, at the hour of **7:00 p.m.** in the Council Chambers of the Newport Beach City Hall, 3300 Newport Boulevard, Newport Beach, California, at which time and place any and all persons interested may appear and be heard thereon. If you would like to review the Plan, a copy is available at the City Clerk's office and the Utilities Department. For information call Tim Deutsch at (949) 644-3011.

_____

LaVonne M. Harkless, City Clerk
City Of Newport Beach

APPENDIX C

URBAN WATER MANAGEMENT PLAN RESOLUTION

RESOLUTION NO. 2005- 62

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF NEWPORT BEACH ADOPTING THE 2005 URBAN WATER MANANAGEMENT PLAN

WHEREAS, the California Legislature enacted Assembly Bill 797 (Water Code Section 10610 et seq., known as the Urban Water Management Planning Act) during the 1983-84 Regular Session, and subsequent amendments mandate every 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 an Urban Water Management Plan (Plan), the primary objective of which is to plan for the conservation and efficient use of water; and

WHEREAS, the City of Newport Beach (City) is an urban supplier of water providing water to a population of over 79,000; and

WHEREAS, the Plan shall be periodically reviewed at least once every five years, and that the City shall make any amendments or changes to its Plan which are indicated by the review; and

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

WHEREAS, the City has therefore, prepared and circulated for public review a draft Urban Water Management Plan, and a properly noticed public hearing regarding said Plan held on December 13, 2005, and;

WHEREAS, the City did prepare and shall file said Plan with the California Department of Water Resources by December 31, 2005;

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Newport Beach that the 2005 Urban Water Management Plan is hearby adopted and order filed with the City Clerk. The Utilities Director is hereby authorized and directed to file the 2005 Urban Water Management Plan with the California Department of Water Resources within 30 days of this date and before December 31, 2005.

ADOPTED this 13th day of December 2005.

Mayor

ATTEST:

LaVonne M. Harkless

City Clerk

CITY OF NEWPORT BEACH CALIFORNIA

STATE OF CALIFORNIA }
COUNTY OF ORANGE } ss.
CITY OF NEWPORT BEACH }

I, LaVonne M. Harkless, City Clerk of the City of Newport Beach, California, do hereby certify that the whole number of members of the City Council is seven; that the foregoing resolution, being Resolution No. 2005-62 was duly and regularly introduced before and adopted by the City Council of said City at a regular meeting of said Council, duly and regularly held on the 13th day of December 2005, and that the same was so passed and adopted by the following vote, to wit:

Ayes: Heffernan, Selich, Rosansky, Ridgeway, Daigle, Nichols, Mayor Webb

Noes: None

Absent: None

Abstain: None

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed the official seal of said City this 14th day of December 2005.

LaVonne M. Harkless
City Clerk
Newport Beach, California

(Seal)

Authorized to Publish Advertisements of all kinds including public notices by Decree of the Superior Court of Orange County, California. Number A-6214, September 29, 1961, and A-24831 June 11, 1963.

PROOF OF PUBLICATION

STATE OF CALIFORNIA)
) ss.
COUNTY OF ORANGE)

I am a Citizen of the United States and a resident of the County aforesaid; I am over the age of eighteen years, and not a party to or interested in the below entitled matter. I am a principal clerk of the NEWPORT BEACH - COSTA MESA DAILY PILOT, a newspaper of general circulation, printed and published in the City of Costa Mesa, County of Orange, State of California, and that attached Notice is a true and complete copy as was printed and published on the following dates:

DECEMBER 3,2005

I declare, under penalty of perjury, that the foregoing is true and correct.

Executed on **DECEMBER 3,2005**
at Costa Mesa, California.

Signature

RECEIVED
'05 DEC -9 A8:58

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LaVonne M. Harkless,
City Clerk
City Of Newport Beach
Published Newport Beach/Costa Mesa Daily Pilot December 3, 2005
Sa943

APPENDIX D

CALIFORNIA'S GROUNDWATER BULLETIN 118

Coastal Plain of Orange County Groundwater Basin

- Groundwater Basin Number: 8-1
- County: Orange
- Surface Area: 224,000 acres (350 square miles)

Basin Boundaries and Hydrology

The Coastal Plain of Orange County Groundwater Basin (Orange County Basin) underlies a coastal alluvial plain in the northwestern portion of Orange County. The basin is bounded by consolidated rocks exposed on the north in the Puente and Chino Hills, on the east in the Santa Ana Mountains, and on the south in the San Joaquin Hills. The basin is bounded by the Pacific Ocean on the southwest and by a low topographic divide approximated by the Orange County - Los Angeles County line on the northwest. The basin underlies the lower Santa Ana River watershed.

Hydrogeologic Information

Water Bearing Formations

The Orange County Basin is dominated by a deep structural depression containing a thick accumulation of fresh water-bearing interbedded marine and continental sand, silt and clay deposits (DWR 1967). The proportion of fine material generally increases toward the coast, dividing the basin into forebay and pressure areas (DWR 1967; OCWD 1999b). Consequently, most surface waters recharge through the coarser, more interconnected and permeable forebay deposits. Strata in this basin are faulted and folded, and may show rapid changes in grain size. The Newport-Inglewood fault zone parallels the coastline and generally forms a barrier to groundwater flow. Erosional channels filled with permeable alluvium break this barrier at the Alamitos and Talbert Gaps, providing an opportunity for saline water to flow inland.

The sediments containing easily recoverable fresh water extend to about 2,000 feet in depth (OCWD 1999b). Although water-bearing aquifers exist below that level, water quality and pumping lift make these materials economically unviable at present (OCWD 1999b). Upper, middle and lower aquifer systems are recognized in the basin. Well yields range from 500 to 4,500 gallons per minute, but are generally 2,000 to 3,000 gallons per minute.

Upper Aquifer System. This system includes Holocene alluvium, older alluvium, stream terraces, and the upper Pleistocene deposits represented by the La Habra Formation. It has an average thickness of about 800 feet and consists mostly of sand, gravel, and conglomerate with some silt and clay beds. Generally, the upper aquifer system contains a lower percentage of water-bearing strata in the northwest and coastal portions of the area where clays and clayey silts dominate. Accordingly, recharge from the surface to the groundwater basin may be minor in these areas. Recharge to the upper aquifer system occurs primarily in the northeastern portions of the basin (DWR 1967). The upper aquifer provides most of the irrigation water for the basin (Sharp 2000; OCWD 1999a,b).

Middle Aquifer System. This system includes the lower Pleistocene Coyote Hills and San Pedro Formations which have an average thickness of 1,600 feet and are composed of sand, gravel, and minor amounts of clay. The primary recharge of the middle aquifer system is derived from the Santa Ana River channel in the northeast near the town of Olive (DWR 1967). The middle aquifer system provides 90 to 95 percent of the groundwater for the basin (Sharp 2000; OCWD 1999a,b).

Lower Aquifer System. This system includes the Upper Fernando Group of upper Pliocene age and is composed of sand and conglomerate 350 to 500 feet thick. Electric logs of this aquifer indicate that it

would probably yield large quantities of fresh water to wells (DWR 1967), but it is not utilized for groundwater production at present (Sharp 2000).

Restrictive Structures

There are three fault zones within this basin that impede groundwater flow (DWR 1967). The most prominent is the Newport-Inglewood fault zone, which trends northwest and is responsible for formation of the Newport-Inglewood uplift. This fault zone forms a barrier to groundwater flow to the southwest and marks the southwest edge of the thick aquifer materials important for groundwater production in the basin (DWR 1967). This barrier is breached by erosional channels filled with alluvium at the Alamitos and Talbert Gaps. Another northwest-trending system is the Whittier fault zone which forms the northeastern boundary of the basin along the Puente Hills. This fault forms a groundwater barrier except where it is breached by recent alluvial channels (DWR 1967). The Norwalk fault trends eastward along the southern edge of the Coyote Hills and is responsible for a lower groundwater level to the south (DWR 1967).

Recharge Areas

Recharge to the basin is derived from percolation of Santa Ana River flow, infiltration of precipitation, and injection into wells. The Santa Ana River flow contains natural flow, reclaimed water, and imported water that is spread in the basin forebay (OCWD 1999a,b). Historical groundwater flow was generally toward the ocean in the southwest, but modern pumping has caused water levels to drop below sea level inland of the Newport-Inglewood fault zone. This trough-shaped depression encourages sea water to migrate inland, contaminating the groundwater supply. Strategic lines of wells in the Alamitos and Talbert Gaps inject imported and reclaimed water to create a mound of water seaward of the pumping trough to protect the basin from seawater intrusion (OCWD 1999a,b).

Groundwater Level Trends

Groundwater levels are generally lower than the level in 1969, when the basin is considered to have been full (OCWD 1999a,b). The level in the forebay has generally stabilized, whereas the southern coastal area has declined steadily through time (OCWD 1999a,b). Since 1990, the magnitude of yearly groundwater level fluctuation has approximately doubled near the coast because of seasonal water demand and short-term storage programs, but has stayed the same in the forebay (OCWD 1999a). Average groundwater levels for the Orange County Basin have risen about 15 feet since 1990, with average levels in the forebay area rising about 30 feet and average levels in the coastal area dropping a few feet (OCWD 1999a).

Groundwater Storage

Groundwater Storage Capacity. The total capacity of the Orange County Basin is 38,000,000 AF (DWR 1967).

Groundwater in Storage. As of 1998 storage of fresh water within the basin amounted to 37,700,000 AF (OCWD 2000).

Groundwater Budget (Type A)

Orange County Water District manages this groundwater basin using a detailed model of the basin to determine potential effects of changes in pumping and recharge. The district strives to meet its water supply demand with about 75 percent groundwater (OCWD 1999b). The district operates the basin to maintain about 200,000 af of dry storage, though this fluctuates because of seasonal patterns in recharge and pumping. Average dry storage remained fairly steady during 1995 through 1998 (OCWD 1999b), but increased to more than 400,000 af by September 2002 (OCWD 2002) because of a cycle of less rainfall in the region. Orange County Water District (2000) reports a basin inflow of 258,413 af and an

outflow of 342,823 af for the 1998-1999 water year. The inflow includes natural recharge (29,434 af), artificial recharge (222,755 af), and return of applied water (6,224 af). The outflow includes non-irrigation extraction (334,136 af) and irrigation extraction (8,687 af).

Groundwater Quality

Characterization. Water within the basin is primarily sodium-calcium bicarbonate (DWR 1967). Total dissolved solids range from 232 - 661 mg/L and average 475 mg/L (OCWD 2000). The average TDS content of 240 public supply wells is 507 mg/l with a range of 196 – 1,470 mg/l.

Impairments. Sea water intrusion near the coast (DWR 1967; OCWD 1999b). Colored water, from natural organic materials in the lower aquifer system (OCWD 1999b). Increasing salinity, high nitrates and MTBE (OCWD 1999b).

Water Quality in Public Supply Wells

Constituent Group[1]	Number of wells sampled[2]	Number of wells with a concentration above an MCL[3]
Inorganics – Primary	249	1
Radiological	253	5
Nitrates	267	15
Pesticides	268	0
VOCs and SVOCs	268	7
Inorganics – Secondary	249	21

[1] A description of each member in the constituent groups and a generalized discussion of the relevance of these groups are included in *California's Groundwater – Bulletin 118* by DWR (2003).
[2] Represents distinct number of wells sampled as required under DHS Title 22 program from 1994 through 2000.
[3] Each well reported with a concentration above an MCL was confirmed with a second detection above an MCL. This information is intended as an indicator of the types of activities that cause contamination in a given basin. It represents the water quality at the sample location. It does not indicate the water quality delivered to the consumer. More detailed drinking water quality information can be obtained from the local water purveyor and its annual Consumer Confidence Report.

Well Characteristics

	Well yields (gal/min)	
Municipal/Irrigation	4-6,000; Average 2,020 gal/min	286 Well Completion Reports
	Total depths (ft)	
Domestic	26-1,210; Average 270 ft	270 Well Completion Reports
Municipal/Irrigation	7-1,650; Average 540 ft	540 Well Completion Reports

Active Monitoring Data

Agency	Parameter	Number of wells /measurement frequency
OCWD	Water level	521 wells measured annually (Hintlian 2000).
OCWD		411 wells measured 2-20 times/yr (Hintlian 2000).
Department of Health Services and cooperators	Title 22 water quality	240

Basin Management

Groundwater management:	Orange County Water District manages groundwater in the basin by authority granted to it in the California Water Code Appendix Chapter 40
Water agencies	
Public	City of Anaheim, City of Buena Park, East Orange CWD, City of Fountain Valley, City of Fullerton, City of Garden Grove, City of Huntington Beach, Irvine Ranch WD, City of La Palma, Mesa Consolidated WD, City of Newport Beach, City of Orange, Orange CWD, City of Santa Ana, City of Seal Beach, Serrano WD, City of Tustin, City of Westminster, Yorba Linda WD.
Private	Diamond Park MWC, Eastside Water Association, Harding Water, Liberty Park Water Association, Midway City MWC, McKesson Water Products, Oasis Drinking Waters, Page Avenue MWC, South Midway City WC, Southern California WC, Sparkletts Drinking Water Corporation, Woodbridge Village Homeowners Association.

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California Department of Water Resources (DWR). 1967. Progress Report on Ground Water Geology of the Coastal Plain of Orange County.

Hintlian, R. 2000. Orange County Water District. Written communication to Brian Moniz (DWR). August 29, 2000.

Orange County Water District (OCWD). 1999a. Engineer's Report on Ground Water Conditions, Water Supply and Basin Utilization in the Orange County Water District.

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_____. 2002. Orange County Groundwater Basin Overdrafted Due to Increased Production and Recent Dry Years. OCWD Press Release, September 23, 2002. http://www.ocwd.com/_html/_pr/_pr02/pr02_0923_overdraft.htm.

Sharp, Gwen. 2000. Orange County Water District. Written communication to Nuna Tersibashian. July 21, 2000.

Errata

Substantive changes made to the basin description will be noted here.

APPENDIX E

WATER SHORTAGE CONTINGENCY PLAN

WATER SHORTAGE CONTINGENCY PLAN
WATER CONSERVATION ACTION STAGES MUNICIPAL CODE CHAPTER 14.16

14.16.010 Findings and Purpose.

A. The City of Newport Beach delivers water to its residents through a comprehensive system of reservoirs, water mains and pipes. The water sold to Newport Beach residents comes exclusively from sources outside of the City of Newport Beach. The City relies heavily on Metropolitan Water District ("MWD") for its supply of water. MWD supplies water to many agencies, including large purveyors such as the Los Angeles Department of Water and Power. MWD's primary source of water is the Colorado River and related storage facilities. MWD's ability to supply water is contingent upon many factors, including the extent of Colorado River flows, water taken from the Colorado River by those with prior rights, the amount of water available to major purveyors such as DWP from the Los Angeles Aqueduct and the State Water Project, the amount of water available to smaller purveyors from these same sources or wells, and the demand for water from agricultural, industrial, and residential users. Southern California's demand for water is such that short-term drought may result in significant reductions in MWD's allocations of water to the City of Newport Beach and extended drought will result in drastic allocation reductions, which, in turn, require imposition of stringent measures to insure reduced consumption. This chapter provides a mechanism for quickly imposing mandatory water conservation measures ranging from voluntary consumption reductions to measures which restrict water usage to the minimum necessary for basic human health and sanitation.
B. Continued population growth in California and Arizona will, over time, dramatically reduce the amount of water available to MWD and other major water purveyors. The ability of Newport Beach to provide its residents with adequate supplies of water is contingent upon implementation of a comprehensive program, including development and implementation of plans to tap new sources of water, implementation of drastic restrictions on consumption during periods of drought, and implementation of water conservation measures during periods of normal rainfall to insure the highest beneficial use of the resource.
C. The mandatory restrictions on water use, the prohibition of activities that waste water as well as the penalties and surcharges provided by this chapter are the minimum controls necessary to insure adequate supplies of water now and in the future. The surcharges for water consumption in excess of the limits specified in the various conservation phases reflect, and will reimburse the City for, surcharges imposed by MWD for deliveries in excess of allocations. These surcharges combined with penalties for excess consumption and activities which waste water are necessary to insure the maximum beneficial use of an extremely limited resource. Restrictions on the use of revenue derived from surcharges and penalties will insure the lowest feasible basic water rate and the development of new sources of water to supplement MWD allocations in the future. (Ord. 96-22 § 1 (part), 1996: Ord. 92-31 § 4 (part), 1992)

14.16.020 Definitions.

"Base" means the amount of water, expressed in billing units used by a customer during one of the six base periods.
"Basic water rate" shall mean the charge for water, expressed in terms of billing units, established pursuant to Section 14.12.040 of the Newport Beach Municipal Code.
"Base period" means one of six billing periods used for calculating compliance with the water conservation requirements of this chapter. The base periods for the four billing groups within the City of Newport Beach are as specified below:

Group I:	
	June 8, 1989 to August 10, 1989

	August 10, 1989 to October 10, 1989
	October 10, 1989 to December 7, 1989
	December 7, 1989 to February 8, 1990
	February 8, 1990 to April 6, 1990
	April 6, 1990 to June 7, 1990
Group II:	
	June 15, 1989 to August 15, 1989
	August 15, 1989 to October 19, 1989
	October 19, 1989 to December 14, 1989
	December 14, 1989 to February 15, 1990
	February 15, 1990 to April 12, 1990
	April 12, 1990 to June 20, 1990
Group III:	
	July 13, 1989 to September 13, 1989
	September 13, 1989 to November 9, 1989
	November 9, 1989 to January 11, 1990
	January 11, 1990 to March 13, 1990
	March 13, 1990 to May 10, 1990
	May 10, 1990 to July 15, 1990
Group IV:	
	July 19, 1989 to September 19, 1989
	September 19, 1989 to November 13, 1989
	November 13, 1989 to January 15, 1990
	January 15, 1990 to March 19, 1990
	March 19, 1990 to May 16, 1990
	May 16, 1990 to July 20, 1990

“Billing period” means the time interval between two consecutive water meter readings taken for billing purposes.
“Billing unit” means one hundred (100) cubic feet of water (seven hundred forty-eight (748) gallons).
“Corresponding base period” shall mean the base period that best corresponds, in terms of number of days, to a billing period that occurs during any conservation phase described in Section 14.16.050.
“Customer” shall mean any person, group of two or more persons, partnership, corporation, trust, association or entity, receiving water service from the City of Newport Beach.
“MWD” shall mean Metropolitan Water District,
“Person” shall mean any person, group of persons, corporation, partnership, trust or business entity not receiving water service from the City of Newport Beach.
“Surcharge” shall mean the additional charges (over and above the basic water rate) imposed for consumption in excess of that permitted during any conservation phase and as specified in Section 14.16.060.

“Water consumption restrictions” shall mean those provisions of Section 14.16.050 which require customers to reduce the amount of water consumed during current billing periods in relation to the corresponding base period.
“Water usage restrictions” shall mean those provisions of Sections 14.16.045 and 14.16.050 which prohibit certain uses of water.
“Water” shall mean potable water. (Ord. 96-22 § 1 (part), 1996: Ord. 92-31 § 4 (part), 1992)

14.16.030 Prohibitions.

A. No customer shall use, or permit the use of, water supplied by the City of Newport Beach in a manner contrary to the restrictions imposed by any conservation phase then in effect.
B. For the purpose of this chapter, the use of water by a tenant, employee, agent, contractor, representative or person acting on behalf of a customer, shall be imputed to the customer. (Ord. 96-22 § 1 (part), 1996: Ord. 92-31 § 4 (part), 1992)

14.16.040 Conservation Phase Implementation.

A. The Utilities Manager shall periodically monitor and evaluate the projected supply and demand for water by customers and shall recommend to the City Council implementation of a conservation phase appropriate under then current circumstances. The City Council shall consider the recommendation at a regularly scheduled public meeting and, after hearing such testimony as may be relevant, implement the appropriate conservation phase by resolution. The provisions of the conservation phase shall become effective upon publication of the resolution in a daily newspaper of general circulation provided, however, the consumption reduction provisions shall take effect as of the first full billing period commencing on or after the effective date of the resolution.
B. In the event MWD publicly expresses the intention to reduce water allocations in a manner that would effect the amount supplied to the City of Newport Beach, the City Manager may implement a conservation phase by publication of a notice to that effect in a daily newspaper of general circulation. The order of the City Manager shall become effective upon publication and shall terminate in thirty (30) days or the publication of a resolution of the City Council implementing the same or different conservation phase, whichever shall first occur.
C. Except for the automatic termination provisions in the case of implementation by the City Manager, a resolution implementing a water conservation phase shall remain in full force and effect until repealed by the City Council, or until a subsequent resolution implementing a different conservation phase becomes effective.
D. The Utilities Manager shall, subsequent to the adoption of a resolution implementing any water conservation phase, provide periodic reports to the City Council regarding compliance with the requirements of the water conservation phase, current and anticipated allocations of water from MWD, and any change in circumstances that could warrant a position of more stringent measures or relaxation of measures then in effect. (Ord. 96-22 § 1 (part), 1996: Ord. 92-31 § 4 (part), 1992)

14.16.045 Permanent Water Usage Restrictions.

1. No person or customer shall use water to wash any sidewalk, walkway, driveway, parking area or any other hard surface.

2. No person or customer shall use water to clean, fill or maintain levels in decorative fountains, ponds, lakes or other purely aesthetic facilities, however, water may be used to fill or maintain levels if all liquid is recirculated.
3. No restaurant, hotel, cafe, cafeteria or other public place where food is sold, served or offered for sale shall serve drinking water to any person unless pursuant to an express request.
4. No person or customer shall permit water to leak from any pipe or facility connected to the meter or meters which measures the amount of water for which a customer is obligated to pay the City.
5. No person or customer shall water or irrigate any lawn, landscaping or other vegetation in a manner that causes or allows excess water to flow or run off onto an adjoining sidewalk, driveway, street, gutter or ditch.
6. No person shall use water for construction purposes with respect to any project that requires a grading permit without first having submitted a construction water plan to, and obtaining approval from, the Utilities Manager. (Ord. 96-22 § 1 (part), 1996: Ord. 92-31 § 4 (part), 1992)

14.16.050 Water Conservation Phases.

A. Phase 1. Voluntary Ten Percent Reduction. Each customer shall use their best efforts, without mandatory restrictions, to use ninety (90) percent or less of the water consumed during the base period for that customer's group.
B. Phase 2. Mandatory Ten Percent Cut-Back. No customer shall, during any billing period, consume more than ninety (90) percent of the water consumed during the corresponding base period.
C. Phase 3. Mandatory Fifteen (15) Percent Cut-Back. No customer shall, during any billing period, consume more than eighty-five (85) percent of the water consumed during the corresponding base period.
D. Phase 4. Mandatory Twenty (20) Percent Cut-Back.
1. No customer shall, during any billing period, consume more than eighty (80) percent of the water consumed during the corresponding base period.
2. No customer shall use water to wash all or any portion of a structure, motor vehicle, trailer, boat, facility or equipment, except with a hand-held bucket with a capacity of five gallons or less, or a hose equipped with a positive shut-off nozzle.
3. No customer shall use water to wash any sidewalk, walkway, driveway, parking area or other hard surface.
4. No person shall water or irrigate any lawn, soil, landscaping or vegetation between the hours of ten a.m. and four p.m.
E. Phase 5. Mandatory Twenty-Five (25) Percent Cut-Back.
1. No customer shall, during any billing period, consume more than seventy-five (75) percent of the water consumed during the corresponding base period.
2. No customer shall use water to wash all or any portion of a structure, motor vehicle, trailer, boat, facility or equipment, except in accordance with the following:
a. Washing shall be done only with a hand-held bucket with a capacity of five gallons or less, or a hose equipped with a positive shut-off nozzle; and
b. Washing is permitted only on the days specified for watering or irrigation of lawns and landscaping as specified in subsection (E)(3) of this section.
3. No person shall water or irrigate any lawn, soil, landscaping or vegetation, except in accordance with the following:
a. Customers with odd-numbered addresses shall water only on Tuesdays, Thursdays and Saturdays.
b. Customers with even-numbered addresses shall water only on Mondays, Wednesdays and Fridays.

c. Watering is permitted only between the hours of four p.m. and ten a.m. No watering or irrigation is permitted between the hours of ten a.m. and four p.m.
F. Phase 6. Mandatory Thirty (30) Percent Cut-Back.
1. No customer shall, during any billing period, consume more than seventy (70) percent of the water consumed during the corresponding base period.
2. No customer shall use water to wash all or any portion of a structure, motor vehicle, trailer, boat, facility or equipment, except in accordance with the following:
a. Washing shall be done only with a hand-held bucket with a capacity of five gallons or less, or a hose equipped with a positive shut-off nozzle; and
b. Washing is permitted only on the days specified for watering or irrigation of lawns and landscaping as specified in subsection (F)(3) of this section.
3. No person shall water or irrigate any lawn, soil, landscaping or vegetation, except in accordance with the following:
a. Customers with odd-numbered addresses shall water only on Tuesdays and Fridays.
b. Customers with even-numbered addresses shall water only on Mondays and Thursdays.
c. Watering is permitted only between the hours of four p.m. and ten a.m. Watering or irrigation is prohibited between the hours of ten a.m. and four p.m.
G. Phase 7. Mandatory Thirty-Five (35) Percent Cut-Back.
1. No customer shall, during any billing period, consume more than sixty-five (65) percent of the water consumed during the corresponding base period.
2. No customer shall use water to wash all or any portion of a structure, motor vehicle, trailer, boat, facility or equipment, except in accordance with the following:
a. Washing shall be done only with a hand-held bucket with a capacity of five gallons or less, or a hose equipped with a positive shut-off nozzle; and
b. Washing is permitted only on the days specified for watering or irrigation of lawns and landscaping as specified in subsection (G)(3) of this section.
3. No person shall water or irrigate any lawn, soil, landscaping or vegetation, except in accordance with the following:
a. Customers with odd-numbered addresses shall water only on Tuesdays.
b. Customers with even-numbered addresses shall water only on Wednesdays.
c. Watering is permitted only between the hours of six p.m. and six a.m. Watering or irrigation is prohibited between the hours of six a.m. and six p.m.
d. Trees may also be watered on Sundays.
H. Phase 8. Mandatory Forty (40) Percent Cut-Back.
1. No customer shall, during any billing period, consume more than sixty (60) percent of the water consumed during the corresponding base period.
2. No customer shall use water to wash all or any portion of a structure, motor vehicle, trailer, boat, facility or equipment, except in accordance with the following:
a. Washing shall be done only with a hand-held bucket with a capacity of five gallons or less, or a hose equipped with a positive shut-off nozzle; and
b. Washing is permitted only on the days specified for watering or irrigation of lawns and landscaping as specified in subsection (H)(3) of this section.
3. No person shall water or irrigate any lawn, soil, landscaping or vegetation, except in accordance with the following:
a. Customers with odd-numbered addresses shall water only on first and third Tuesdays.
b. Customers with even-numbered addresses shall water only on first and third Wednesdays.
c. Watering is permitted only between the hours of six p.m. and six a.m. Watering or irrigation is prohibited between the hours of six a.m. and six p.m.
d. Trees may also be watered on Sundays, but only by use of a hand-held bucket.
I. Phase 9. Mandatory Forty-Five (45) Percent Cut-Back.
1. No customer shall, during any billing period, consume more than fifty-five (55) percent of the water consumed during the corresponding base period.
2. No customer shall use water to wash all or any portion of a structure, motor vehicle, trailer, boat, facility or equipment, except in accordance with the following:

a. Washing shall be done only with a hand-held bucket with a capacity of five gallons or less, or a hose equipped with a positive shut-off nozzle; and
b. Washing is permitted only on the days specified for watering or irrigation of lawns and landscaping as specified in subsection (I)(3) of this section.
3. No person shall water or irrigate any lawn, soil, landscaping or vegetation, except in accordance with the following:
a. Customers with odd-numbered addresses shall water only on first Tuesday.
b. Customers with even-numbered addresses shall water only on first Wednesday.
c. Watering is permitted only between the hours of ten p.m. and six a.m. Watering or irrigation is prohibited between the hours of six a.m. and ten p.m.
d. Trees may also be watered on Sundays, but only by use of a hand-held bucket.
J. Phase 10. Mandatory Fifty (50) Percent Cut-Back.
1. No customer shall, during any billing period, consume more than fifty (50) percent of the water consumed during the corresponding base period.
2. Watering or irrigation of plants, landscaping, vegetation or soil is prohibited, provided, however, plants, trees and shrubs may be watered by means of a hand-held bucket.
3. No person shall fill any pool, spa, decorative fountain, pond, lake or any body of water. (Ord. 96-22 § 1 (part), 1996: Ord. 92-31 § 4 (part), 1992)

14.16.060 Surcharges.

A. The surcharges imposed by this section reflect, in part, additional charges imposed by MWD on the City of Newport Beach for the purchase of water in excess of permitted allocations. The surcharges are also intended to supplement penalties for violating water consumption restrictions by dramatically increasing the cost of water as consumption extends permitted thresholds.
B. Customer shall pay the surcharges specified in this section for all water consumed in excess of the water consumption restrictions (Phases 2 through 10, inclusive), specified in Section 14.16.050. The surcharge shall be one dollar and twenty-four cents ($1.24) per billing unit for the first ten percent increment in excess of the ration level and an additional one dollar and twenty-four cents ($1.24) for each subsequent ten percent increment above the ration level. For example, Phase 6 requires customers to use no more than seventy (70) percent of the water consumed during the corresponding base period. A customer using forty-five (45) billing units when assigned a ration level of thirty-two (32) billing units would pay the following:

32 units @ $1.34 (basic water rate)	$42.88
4 units @ $2.58 ($1.34 + $1.24)	10.32
4 units @ $3.82 ($1.34 + $2.48)	15.28
4 units @ $5.06 ($1.34 + $3.72)	20.24
1 unit @ $6.30 ($1.34 + $4.96)	6.30
45 units total	95.02

The preceding surcharge shall be imposed on the customer's next water bill and shall be in addition to the basic water rate. (Ord. 96-22 § 1 (part), 1996: Ord. 92-31 § 4 (part), 1992)

14.16.070 Exemptions.

A. The provisions of this chapter shall not apply to the following activities of a public entity:

1. The filling, operation and maintenance of a swimming pool open to the public.
2. The washing of refuse, sanitation and service vehicles owned and operated by a public entity to the extent necessary to insure public health, safety and welfare.
B. The provisions of this chapter which restrict the watering or irrigation of landscaping vegetation, and soil, and those provisions which require the reduction of consumption shall not be applicable to customers who have participated in a fuel load modification program and have received an exemption from the Utilities Manager. The Utilities Manager shall grant only that exemption necessary to mitigate the impacts of participation in the fuel load modification program such as, the need to irrigate replacement vegetation.
C. The provisions of this chapter which restrict the watering or irrigation of lawns, landscaping, vegetation and soil shall not apply to commercial nurseries or other businesses whose main stock and trade consists of plants and vegetation. Provided, however, this exemption is applicable only to those businesses which submit a water conservation plan to, and obtain the approval of, the Utilities Manager. The Utilities Manager shall approve a water conservation plan submitted pursuant to this subsection only if the plan proposes the maximum feasible reduction in consumption.
D. The provisions of this chapter that restrict the washing of vehicles, boats, and mobile equipment shall not apply to any car wash, auto detailer, or similar business that has applied for and received approval of, an exemption from the Utilities Manager. The Utilities Manager shall grant an exemption only if the plan provides for recirculation or recycling of water or otherwise proposes the maximum feasible reduction in consumption.
E. The provisions of this chapter that require customers to reduce their consumption by specified percentages shall not apply to reduce consumption below levels necessary to maintain health, safety and sanitation as determined by the Utilities Manager. (Ord. 96-22 § 1 (part), 1996: Ord. 92-31 § 4 (part), 1992)

14.16.080 Relief from Compliance.

A. Intent and Purpose. The City Council recognizes that water consumption can increase or decrease because of factors unrelated to wasteful water use practices. Many customers have installed water-saving devices and adopted water conservation practices that make it difficult to achieve the additional reductions required by this chapter. This section recognizes that base adjustments may be necessary to insure that application of this chapter to any particular customer does not produce unjust or inequitable results. As a general rule, the Utilities Manager should not grant relief to any customer for any reason in the absence of a showing that the customer has achieved the maximum practical reduction in water consumption other than in the specific area or areas for which relief is requested.
B. Procedures. An application for relief from the provisions of this chapter may be filed by any customer with the Utilities Manager. The application shall be submitted on a form supplied by the Utilities Division. The application must be filed within ninety (90) days after the effective date of this chapter or ninety (90) days after implementation of the then current conservation phase, whichever shall occur last. The Utilities Manager shall approve or disapprove the application for relief within fifteen (15) days after it is filed and deemed complete.
C. Factors. In determining whether relief should be granted, the Utilities Manager shall consider all relevant factors including, but not limited to, the following:
1. Whether compliance with the consumption and reduction provisions then in effect would result in unemployment or layoff of workers;
2. Whether additional persons are living or working in the structure or structures served by the meter or meters for which customer is responsible; 3. 3. Whether customer had, during all or a portion of the base period, reduced consumption from prior years through the use of water conservation practices;
4. Whether any current or anticipated increase in production or manufacturing will require additional water;

5. The extent to which irrigation or watering of landscaping has been made necessary by compliance with fuel load modification programs;
6. The extent to which customer needs to use water to mitigate any emergency health or safety hazards;
7. The absence of one or more persons from the structure or structures served by the meter during all or a portion of the base period;
8. The special needs and characteristics of hospitals, clinics and other medical care facilities.
D. Agreement. The Utilities Manager is empowered to enter into an agreement with any customer to resolve the application for relief. The agreement shall be memorialized in a writing signed by the customer. The agreement shall fix the rights of the customer and the City. The customer shall have no further right to seek relief pursuant to the provisions of this section.
E. Final Decision. The Utilities Manager shall notify the customer of the decision on the application for relief by mailing notice of the decision to the customer, first class, postage prepaid, to the address specified on the application. The decision of the Utilities Manager shall be final.
F. Willful Misrepresentation. Notwithstanding any other provision of law, no person shall make any willful misrepresentation of a material fact with respect to any application for relief submitted pursuant to this section. Any violation of the provisions of this subsection shall be considered a misdemeanor, punishable as otherwise provided in this Code. (Ord. 96-22 § 1 (part), 1996: Ord. 92-31 § 4 (part), 1992)

14.16.090 Failure to Comply.

A. Penalties. The penalties specified in this section are exclusive and the other penalty provisions of this Code are inapplicable.
1. The following penalties shall be imposed for each violation of the general water usage restrictions contained in Section 14.16.045:
a. For the first and second violations, the Utilities Manager shall issue a written notice of violation to the customer or person.
b. For a third violation by any customer within any twelve (12) month period, a penalty in the sum of fifty dollars ($50.00) shall be added to the customer's water bill. The third violation by any person within a twelve (12) month period shall constitute an infraction, punishable by a fine of fifty dollars ($50.00).
c. For a fourth and any subsequent violation by any customer within any twelve (12) month period, a penalty in the sum of one hundred and fifty dollars ($150.00) shall be added to the customer's water bill. The fourth and any subsequent violation by a person during any twelve (12) month period shall constitute an infraction, punishable by a fine of one hundred and fifty dollars ($150.00).
d. In addition to the penalties specified in subsection (A)(1)(c) of this section, upon a fourth violation, the Utilities Manager may install a flow restrictor on the meter or meters for which a customer is responsible and which are connected to the facility from which water was discharged in violation of Section 14.16.045.
2. Consumption Restrictions. The following penalties shall be imposed for each violation of the conservation phase restrictions then in effect:
a. For the first and second violations by any customer, the Utilities Manager shall send a written notice of violation to the customer.
b. For the third violation, a penalty shall be added to the customer's next water bill in accordance with the schedule specified below. The third violation by any person shall constitute an infraction with a fine imposed in accordance with the schedule specified below:

Meter with 3/4 inch service	$50.00
Meter with 1 inch service	100.00
Meter with 1-1/2 inch service	150.00
Meter with 2 inch service	200.00
Meter with 4 inch service	350.00
Meter with service larger than 4 inches500.00	

c. For a fourth violation by any customer, the penalties specified in subsection (A)(2)(b) shall be doubled and added to the customer's next water bill.
d. The Utilities Manager may install a flow restrictor upon or after the fourth violation by any customer. The flow restrictor shall be placed on customer's meter or meters that registered the excessive consumption or which were connected to the facility used to illegally discharge water. Customer may apply to the Utilities Manager for removal of the flow restrictor within sixty (60) days after installation, provided the customer pays fifty dollars ($50.00) for removal.
B. Notice. Prior to the imposition of any penalties or surcharge pursuant to this section and a right to a hearing to contest the validity of any such penalty and surcharge. Notice shall be deemed given when personally delivered to the customer or when deposited in the United States mail, first class postage prepaid, and addressed in the same manner as normal water billings. Notices relative to the violation of water consumption reduction requirements imposed by conservation phases may be given by specifying the violation, the facts supporting the violation, and the customer's right to a hearing in a conspicuous place on the first water bill sent to the customer for the billing period during which the violation occurred. If the penalty assessed is, or includes, the installation of a flow restrictor or the termination of water service, notice of the violation shall, in addition to that specified above, be posted in a conspicuous place on the property served by the meter or meters which recorded the excessive consumption or were connected to the facility from which water was illegally discharged.
C. Hearing. Any customer against whom a penalty is levied pursuant to this section shall have a right to hearing. The customer shall be entitled to be represented by an individual of their choice, to present oral and documentary evidence in support of their appeal, and to review and comment on all evidence offered to establish the violation. (Ord. 96-22 § 1 (part), 1996: Ord. 92-31 § 4 (part), 1992)

14.16.100 Applicability.

The provisions of this chapter shall be applicable to persons who receive water from agencies or entities other than the City of Newport Beach, and any water agency or water district serving residents of the City of Newport Beach shall enforce the provisions of this chapter. (Ord. 96-22 § 1 (part), 1996: Ord. 92-31 § 4 (part), 1992)

APPENDIX F

ORDINANCE NO. 92-31

ORDINANCE NO. 92-31

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF NEWPORT BEACH AMENDING CHAPTERS 14.04, 14.08, 14.12, 14.16 AND 14.20 OF THE NEWPORT BEACH MUNICIPAL CODE PERTAINING TO BASIC WATER RATE AND WATER CHARGES.

The City Council of the City of Newport Beach does hereby ordain as follows:

SECTION 1: Chapter 14.04 of the Newport Beach Municipal Code is amended to read:

Chapter 14.04

WATER DEPARTMENT -- GENERAL REGULATIONS

Sections:

14.04.010	Department Established.
14.04.020	Utilities Director Defined.
14.04.030	Employment Authority Of Utilities Director
14.04.040	Interference With Employees Prohibited.
14.04.050	Tampering With Pipes--Altering Water Flow.
14.04.060	Disclaimer Of Liability.
14.04.070	Maintenance And Use Of Fire Hydrants.
14.04.080	Permit To Use Fire Hydrants.
14.04.090	Cancellation Of Fire Hydrant Use Permit.
14.04.100	Obstructing Fire Hydrants.
14.04.110	Water Shut-off For Repairs Or Extension.
14.04.120	Right Of Inspection.
14.04.130	Enforcement--Report Of Violations.
14.04.140	Sale Of Water Outside City.
14.04.150	Contractual Agreement To Supply Water Outside City.
14.04.160	Sale Of Excess Water Outside City.
14.04.170	Sale To Service Area Of Acquired Agency.
14.04.180	Conditions Of Service.
14.04.190	City Relieved Of Liability.

Section 14.04.010 Department Established. The Utilities Department is hereby declared to embrace and include all property of every character, real, personal and mixed, now used in or incident to the production, storage, conveyance and delivery of water to the consumers thereof in the City, together with all other property of every character that may hereafter from time to time be added to it for such purposes.

Section 14.04.020 Utilities Director Defined. The term "Utilities Director" wherever used in this Chapter shall be held and construed to mean the Utilities Director of the Utilities Department of the City and any act in this Chapter required or authorized to be done by the Utilities Director may be done on behalf of the Utilities Director by an authorized officer or

employee of the Utilities Department.

Section 14.04.030 Employment Authority Of Utilities Director. The Utilities Director of the Utilities Department shall have full authority to employ such persons as are necessary to be employed in the maintenance and operation of the Utilities Department, and as are provided for by the City Council.

Section 14.04.040 Interference With Employees Prohibited. No person shall interfere with, or obstruct the Utilities Director, or any of his duly appointed agents or employees, in the execution of any lawful order, or the provisions of this Chapter in the maintenance and operation of the Utilities Department.

Section 14.04.050 Tampering With Pipes--Altering Water Flow. No person, other than the Utilities Director, or his duly appointed agents or employees, shall remove, change, disturb, or in any way tamper or interfere with any of the facilities, apparatus, appliances, or property used or maintained for the production, storage or supply of water by the City to consumers thereof, or without prior permission of the Utilities Director, turn the water on or off from the premises or place.

Section 14.04.060 Disclaimer Of Liability. The City shall in no way whatsoever be responsible for any damage to person or property because of any leakage, breakage or seepage from, or accident or damage to any meter or pipe situated within any private premises, and the City shall not be responsible for any leakage, breakage or seepage from any pipe situated between any meter properly installed at the curb and the private premises or loss occasioned directly or indirectly by the existence of any meter or pipe situated upon private property.

Section 14.04.070 Maintenance And Use Of Fire Hydrants. Public fire hydrants shall be placed, maintained and repaired by the Utilities Department. Any damage thereto by persons or agency other than representatives of the Fire or Utilities Departments, shall be a claim against the person or agency committing such damage, and the Utilities Director shall take such action as may be necessary to collect the same.

Fire hydrants are provided for the sole purpose of extinguishing fires and shall be used otherwise only as herein provided for, and shall be opened and used only by the Utilities and Fire Departments for such persons as may be authorized to do so by the Chief of the Fire Department, or the Utilities Director of the Utilities Department as herein provided.

Section 14.04.080 Permit To Use Fire Hydrants. All persons desiring to use water through fire hydrants, or other hydrants owned or controlled by the City, shall be required to obtain a permit, first, from the Chief of the Fire Department, and second from the Utilities Director of the Utilities Department, who shall issue no such permit to any person who has violated any of the provisions of this Chapter or whose indebtedness to the City for water used or damage to hydrants or equipment is delinquent. All such persons having permit for use of water from the fire hydrants must provide hydrant wrenches for the operation of such fire hydrants.

Section 14.04.090 Cancellation Of Fire Hydrant Use Permit. Permit for the use of water through the fire hydrants of the City may be canceled at the will of the Utilities Director on evidence that the holder thereof is or has violated the privileges conveyed thereunder. Such notice of cancellation shall be in writing delivered or mailed to the persons to be notified and shall be immediately effective and enforced.

Section 14.04.100 Obstructing Fire Hydrants. No person shall obstruct the access to any fire hydrant by placing around or thereon any stone, brick, lumber, dirt or other material, or wilfully or carelessly injure the same, or open or operate any fire hydrant, or draw or attempt to draw water therefrom, except as provided in Section 14.04.080.

Section 14.04.110 Water Shut-off For Repairs Or Extension. The City reserves the right to shut off the water from any premises, or from any part of the distributing system, as long as necessary, without notice to consumers, at any time of emergency; but in all cases of extensions or connections, the departments

shall notify occupants of the premises of the necessity of shutting off water and the probable length of time the water shall be so shut off before taking such action.

Section 14.04.120 Right Of Inspection. Any officer, employee or duly authorized representative of the Utilities Department shall at all times have the right of ingress and egress to the consumer's premises at all reasonable hours for any purpose reasonable connected with the furnishing and conservation of water, for the inspection of the entire water system upon the premises.

Section 14.04.130 Enforcement--Report Of Violations. It shall be the duty of the employees of the City to give vigilant aid to the Utilities Director in the enforcement of the provisions of this chapter, and to this end they shall report all violations thereof which come to their knowledge, to the Utilities Department; and it shall be the duty of the Chief of the Fire Department to report immediately to the Utilities Director in case of fire in premises having metered service for fire protection purposes that fire has occurred there.

Section 14.04.140 Sale Of Water Outside City. Water may be sold by the City to consumers outside the City in the manner hereinafter provided.

Section 14.04.150 Contractual Agreement To Supply Water Outside City. Subject to all restrictions on the City's power to do so, water may be sold by the City for use outside the City within the boundaries of either Coastal Municipal Water District or Orange County Municipal Water District, or both, to persons or public agencies, or the assigns of either, who own contractual rights or interests in any City transmission main or mains or to whom the City has an obligation, pursuant to any contract heretofore or hereafter approved by the voters of the City, to supply water for such use. Except when the provision of contracts heretofore made require otherwise, such sales shall be made and subject to the same rules and regulations as sales of water are made to inhabitants of the City. A written contract authorized by the City Council setting out the terms and conditions of the sale

and any special circumstances applicable thereto shall be required with each such person or agency who desires to purchase water for use outside the City.

Section 14.04.160 Sale Of Excess Water Outside City. Subject to all restrictions on the City's power to do so, the City may sell water, to the extent it has a supply in excess of that required to adequately serve the inhabitants of the City and the persons and agencies described in Section 14.04.150, to other persons or agencies for use outside the City within the boundaries of either the Coastal Municipal Water District or Orange County Municipal Water District, or both, but only so long as the excess supply continues. The City may sell on a month-to-month basis or may require a contract with each purchaser where the City determines it to be in the best interests of the City to do so. Such sales shall be subject to the same rules and regulations as for water used inside the City. The City is under no obligation to continue any such service, and no purchaser receiving such service shall acquire any right to have the service continued.

Section 14.04.170 Sale To Serve Area Of Acquired Agency. Water may be sold by the City for use outside the City within the boundaries of either Coastal Municipal Water District or Municipal Water District of Orange County, or both, and within the service area of any water distributing agency, the assets of which have been acquired by the City from such agency. Such sales shall be subject to the same rules and regulations as for water sold within the City.

Section 14.04.180 Conditions Of Service. All persons applying for or receiving water service either within or outside the City shall be required to accept and shall be deemed to have consented to such conditions of pressure and service as are provided at the location served, and as a condition of service shall be and are hereby required to hold the City harmless from any damages arising out of low pressure or high pressure conditions or interruptions of service.

Section 14.04.190 City Relieved Of Liability. The City

shall not be liable for any damage to persons or property caused in any manner by the use of water beyond its meters nor for any damage resulting from its failure or inability to deliver water for any length of time.

SECTION 2: Chapter 14.08 of the Newport Beach Municipal Code is amended to read:

Chapter 14.08

WATER CONNECTIONS

Sections:

14.08.010	Water Connection Authority.
14.08.020	Application To Connect.
14.08.030	Connection Method.
14.08.040	Separate Service Connections Required.
14.08.050	Flow Protection Devices Required.
14.08.060	Precautionary Conditions For Dangerous Or Corrosive Liquids.
14.08.070	Pressure Relief Valve.
14.08.080	Protection On Additional Supply Lines.
14.08.090	Protection For Two Or More Supply Services.
14.08.100	Inspection Of Protection Devices For Water Tightness.
14.08.110	Owners Inspection And Maintenance Of Protective Devices

Section 14.08.010 Water Connection Authority. No person is, or shall be authorized to install any pipe, apparatus, appliance or connection with the Utilities Department, except the Utilities Director thereof or his duly appointed agents or employees.

Section 14.08.020 Application To Connect. Every owner, or tenant of the premises, who shall desire to connect his property to the public water system for the purpose of having water furnished to such premises shall make a written application to the City, describing the premises to be connected therewith, the size of the pipe by which the connection is desired to be made; setting forth the address of the owner and the person to whom all notices are to be mailed; the application shall contain an express agreement on behalf of applicant that the water to be used on the premises shall in all respects be used subject and subordinate to the provisions of this Code and subsequent amendments and the order of the City Council, and lawful regulations of the City.

Section 14.08.030 Connection Method. Upon presentation at the office of the Utilities Department of the receipt for installation of fees and execution of the agreement hereinbefore

provided for, the Utilities Director shall cause the premises described in the application, if the same abut upon the street or alley upon which there is a City water main, to be connected with the City's water main by a service pipe extending from the main to the curb line on the front of the property or to the side or rear, and including a stop-cock placed, which service pipe and stop-cock shall thereafter be maintained by and kept within the exclusive control of the City. In cases of application for water service on premises not abutting upon a street or alley upon which there is a City water main, the City will lay its service pipe from the main toward the premises for a distance not to exceed one hundred feet, and permit connection by means of a union and pipes laid at the expense of and maintained by the owner of the service, or may in the discretion of the Utilities Director, upon the payment of the actual costs thereof, extend the service to the premises of the applicant along and beneath any public street of the City, but not otherwise. No service connection less than one inch in size shall be installed.

Section 14.08.040 Separate Service Connections Required. Two or more houses or buildings under the same ownership and on a single lot or on a single parcel of land may be supplied through the same service connection, or a separate service connection may be provided for each house or building. The City shall have the right, as necessary to assure efficient service and reduce practical difficulties, to limit the number of houses or buildings, or the area of land under one ownership to be supplied by one service connection. The same service connection shall not be used to supply water to property in a single ownership which is separated by a public street, alley or right-of-way or which is non-adjoining. The same service connection shall not be used to supply water to adjoining property of a different ownership. The restrictions of this subsection shall not apply to services already lawfully installed, unless in the judgment of the City compliance is necessary to settle disputes or for the protection or improvement of the particular service or the City water system.

In making application for a water service connection, the applicant shall specify the property to be served by such service connection and only the property so specified shall receive water through such service connection.

Section 14.08.050 Flow Protection Devices Required. An approved double-checked valve or other approved back flow protection devices shall be installed in all existing water systems of all consumers, at the expense of the consumer, before service will be continued or granted when any one of the following conditions apply:

(a) Where an unapproved fresh water supply is already available from a well, spring, reservoir or other source, the installation of backflow protective devices may not be required. If the consumer agrees to abandon this other supply and agrees to remove all pumps and piping necessary for the utilization of this supply.

(b) Where salt water, or water otherwise polluted, is available for industrial or fire protection purposes, or where fresh water hydrants are or may be installed on docks.

(c) Where the premises are or may be engaged in industrial processes using or producing process waters or liquid industrial wastes, or where the premises are or may be engaged in handling sewage or any other dangerous substance.

(d) Where the circumstances are such that there is special danger of backflow of sewage or other contaminated liquids through plumbing fixtures or water-using or treating equipment, or storage tanks and reservoirs.

(e) Where an approved water supply line terminates as a pier head outlet which is used to supply vessels at piers or waterfronts. These installations shall be located where they will prevent the return of any water from a vessel or any other source into the City water supply system.

(f) Where the premises are used for a trailer park.

Section 14.08.060 Precautionary Conditions For Dangerous Or Corrosive Liquids. Under special circumstances, when the consumer

is engaged in the handling of especially dangerous or corrosive liquids or industrial or process waters, the City may require the consumer to eliminate certain plumbing or piping connection as an additional precaution and as a protection to the backflow preventive devices.

Section 14.08.070 Pressure Relief Valve. As a protection to the consumer's plumbing system, a suitable pressure relief valve must be installed and maintained by him, at his expense, when check valves or other protective devices are used. The relief valve shall be installed between the check valves and the water heater.

Section 14.08.080 Protection On Additional Supply Lines. Whenever backflow protection has been found necessary on a water supply line entering a customer's premises, any and all water supply lines from the City's mains entering such premises, buildings or structures shall be protected by an approved backflow device, regardless of the use of the additional water supply lines.

Section 14.08.090 Protection For Two Or More Supply Services. Two or more services supplying water from different street mains to the same building structure or premises through which an inter-street main flow may occur, shall have an appropriate backflow prevention device installed on each water service to be located adjacent to and on the property side of the respective meters.

Section 14.08.100 Inspection Of Protection Devices For Water Tightness. The double check valve or other approved backflow protection devices may be inspected and tested periodically for water tightness by the City.

Section 14.08.110 Owners Inspection And Maintenance Of Protection Devices. The owner of any premises on which or on account of which check valves or other protective devices are installed shall inspect these devices for water tightness and reliability at least every three months. The devices shall be serviced, overhauled, or replaced whenever they are found defective and all costs of repair and maintenance shall be borne by the consumer. Certified records of such inspection and operations will

be required by the City.

SECTION 3: Chapter 14.12 of the Newport Beach Municipal Code is amended to read:

Chapter 14.12

WATER RATES AND CHARGES

Sections:

14.12.010	Service Fees.
14.12.020	Water Rates Established.
14.12.030	Readiness To Serve Charges.
14.12.035	Surcharge.
14.12.040	Quantity Charges.
14.12.050	Meter Installation.
14.12.060	Building Construction Purposes.
14.12.070	Nonspecified Uses.
14.12.080	Private Fire Lines.
14.12.090	Turn-on Charges.
14.12.100	Due Date.
14.12.110	Unpaid Charges.
14.12.120	Discontinuance Of Water Service Procedure.
14.12.130	Deposit.
14.12.140	Vacating Premises.
14.12.150	Change Of Address.
14.12.160	Renewing Service.

Section 14.12.010 Service Fees. The fees for the installation of water services, water meters, or water services including meters, or for enlarging those already in place, shall be paid in advance.

The installation fee shall be the cost to the City, including all labor and materials, plus twenty-five percent (25%) of such cost for overhead. In addition, there shall be collected the sum of Fifty Dollars ($50) for the first one inch of meter diameter, or fractional portion thereof, plus Twenty-Five Dollars ($25) for each additional one-half inch of meter diameter, or fractional portion thereof.

The installation fee shall be as established by the Utilities Department, and the cost shall be paid to the Finance Department by the person applying for such installation before the work of connecting the main with the property is begun.

The cost as established by the Utilities Department shall be the estimated average cost of doing the work, plus twenty-five percent (25%), and shall be revised from time to time to reflect experience and changes in the actual cost of performing the work.

Section 14.12.020 Water Rates Established. The following rates, fees and charges are hereby established and shall be charged and collected in accordance with the provisions of this Chapter.

Section 14.12.030 Readiness To Serve Charges. There shall be charged and collected a monthly readiness to serve charge from each customer for each meter on the basis of the following schedule:

For 3/4-inch meter or less	$ 2.00
For 1-inch meter	2.50
For 1 1/2-inch meter	4.00
For 2-inch meter	5.00
For 2 1/2-inch meter	8.00
For 3-inch meter	10.00
For 4-inch meter	15.00
For 6-inch meter	20.00
For 8-inch meter	25.00
For 10-inch meter	30.00

Readiness to serve charges shall not be subject to refund or proration if service to any customer is terminated during any bimonthly period.

Section 14.12.035 Surcharge. In addition to the readiness to serve charges set for in this Chapter, the following surcharges shall be collected:

For each living unit in excess of one per water meter, per month	$1.00
For each hotel or motel unit and each hospital or convalescent home bedroom in excess of one per water meter, per month	.50

Section 14.12.040 Quantity Charges. (a) In addition to the readiness to serve charges set forth in this Chapter, the rate for water supplied to consumers through a meter, other than pursuant to a written contract approved by the City Council, shall be $1.34 per 100 cubic feet, per month, per meter.

(b) City water rates shall be adjusted to reflect Metropolitan Water District rate changes.

(c) Should the automatic adjustments require a water rate increase, the amount of the increase shall be added to the quantity

charges and shall be equal to the Metropolitan Water District increase, raised to the next highest whole penny for each 100 cubic feet used.

Section 14.12.050 Meter Installation. The City shall have the right to install water meters on any and all water services, and the charges for water used through the meter shall be in accordance with the meter rates applicable.

Section 14.12.060 Building Construction Purposes. Service may be made to a lot or parcel of land on which a building is being constructed for construction purposes only from the time the building permit is issued until the building is completed or until the time a water meter is installed to serve such lot or parcel, whichever first occurs, for a flat rate of Twenty-Five Dollars ($25) per month for each 2000 square feet of floor space or fraction thereof of such building.

Section 14.12.070 Nonspecified Uses. Water used for all other purposes not hereinbefore enumerated shall be furnished and charged for either at meter rates or at a special rate to be fixed by the City Council under separate agreement with the consumer.

Section 14.12.080 Private Fire Lines. Fees for private fire line service shall be charged at a rate of Five Dollars ($5) per inch diameter per month per service.

If such line is found tapped for domestic use, a meter shall be installed on such service at the expense of such consumer and the regular meter rates shall be charged thereafter. The right shall be reserved to disconnect such fire service from the City's main by the direction of the City Council on recommendation of the City Manager.

Section 14.12.090 Turn-on Charges. When water service to any premises has been turned off because of nonpayment of a bill or violation of any of the provisions of this Chapter, or ordered turned off by the owner or tenant, a turn-on charge in an amount established by Resolution of the City Council shall be collected in advance.

Section 14.12.100 Due Date. All consumers whose premises

are connected to the municipal water system shall be billed on a bimonthly basis and all charges for water service shall be payable on the due date shown on the water bill.

Section 14.12.110 Unpaid Charges. The procedures for collection of unpaid charges shall be set by Resolution of the City Council of the City of Newport Beach.

Section 14.12.120 Discontinuance Of Water Service Procedure. The procedures for discontinuance of water service shall be set by Resolution of the City Council of the City of Newport Beach.

Section 14.12.130 Deposit. (a) In the event that the applicant for water service is not the owner in fee of the property to be supplied with water, or does not own the improvements thereon, a deposit shall be required equivalent to one and one-half times the average bimonthly billing for the user classification applicable to the property, as determined by the Finance Director.

(b) In the event that the water service customer has had his/her water service terminated twice, a deposit shall be required equivalent to two (2) times the average bimonthly billing for the user classification applicable to the property, as determined by the Finance Director or the turn-on charge set forth in Section 14.12.090, whichever is greater.

(c) When the deposit has been made and all other conditions of serving water have been met, water shall be supplied.

Section 14.12.140 Vacating Premises. Whenever a consumer shall vacate any premises, he shall immediately give written notice thereof to the Water Billing Division of the Finance Department. Upon the receipt of such notice, the City shall read the water meter, shut off the water from the premises and immediately present to the consumer all unpaid bills for water furnished by the City to him up to that time. Thereupon, the consumer shall pay the bills to the Finance Department. In the event that the consumer shall have made a deposit with the City, as required in Section 14.12.130, the balance, if any, of such deposit shall be returned to the consumer, after deducting therefrom the amount of the bills. Until such notice and payments shall have been made, the premises

shall be deemed occupied by such consumer and his liability continued.

Section 14.12.150 Change Of Address. Failure to receive mail will not be recognized as a valid excuse for failure to pay water rates when due. Change in occupancy of property supplied with City water and changes in mailing addresses of consumers of City water must be filed in writing at the Water Department on forms provided for that purpose.

Section 14.12.160 Renewing Service. Each owner or occupant of any premises previously connected with the City water system desiring to renew the use of water shall make application for renewal of water service and upon payment of all unpaid charges, if any, together with a turn-on charge as specified in Section 14.12.090, the water will be turned on.

SECTION 4: Chapter 14.16 of the Newport Beach Municipal Code is amended to read:

Chapter 14.16

WATER CONSERVATION

Sections:

14.16.010	Findings and Purpose.
14.16.020	Definitions.
14.16.030	Prohibitions.
14.16.040	Conservation Phase Implementation.
14.16.045	Permanent Water Usage Restrictions.
14.16.050	Water Conservation Phases.
14.16.060	Surcharges.
14.16.070	Exemptions.
14.16.080	Relief From Compliance.
14.16.090	Failure To Comply.
14.16.100	Applicability.

Section 14.16.010 Findings and Purpose.

A. The City of Newport Beach delivers water to its residents through a comprehensive system of reservoirs, water mains, and pipes. The water sold to Newport Beach residents comes exclusively from sources outside of the City of Newport Beach. The City relies heavily on Metropolitan Water District ("MWD") for its supply of water. MWD supplies water to many agencies, including large purveyors such as the Los Angeles Department of Water and Power. MWD's primary source of water is the Colorado River and related

storage facilities. MWD's ability to supply water is contingent upon many factors, including the extent of Colorado River flows, water taken from the Colorado River by those with prior rights, the amount of water available to major purveyors such as DWP from the Los Angeles Aqueduct and the State Water Project, the amount of water available to smaller purveyors from these same sources or wells, and the demand for water from agricultural, industrial, and residential users. Southern California's demand for water is such that short term drought may result in significant reductions in MWD's allocations of water to the City of Newport Beach and extended drought will result in drastic allocation reductions, which, in turn, require imposition of stringent measures to insure reduced consumption. This Ordinance provides a mechanism for quickly imposing mandatory water conservation measures ranging from voluntary consumption reductions to measures which restrict water usage to the minimum necessary for basic human health and sanitation.

B. Continued population growth in California and Arizona will, over time, dramatically reduce the amount of water available to MWD and other major water purveyors. The ability of Newport Beach to provide its residents with adequate supplies of water is contingent upon implementation of a comprehensive program, including development and implementation of plans to tap new sources of water, implementation of drastic restrictions on consumption during periods of drought, and implementation of water conservation measures during periods of normal rainfall to insure the highest beneficial use of the resource.

C. The mandatory restrictions on water use, the prohibition of activities that waste water as well as the penalties and surcharges provided by this Ordinance are the minimum controls necessary to insure adequate supplies of water now and in the future. The surcharges for water consumption in excess of the limits specified in the various conservation phases reflect, and will reimburse the City for, surcharges imposed by MWD for deliveries in excess of allocations. These surcharges combined

with penalties for excess consumption and activities which waste water are necessary to insure the maximum beneficial use of an extremely limited resource. Restrictions on the use of revenue derived from surcharges and penalties will insure the lowest feasible basic water rate and the development of new sources of water to supplement MWD allocations in the future.

Section 14.16.020 Definitions.

A. "Base" means the amount of water, expressed in Billing Units, used by a Customer during one of the six (6) Base Periods.

B. "Basic Water Rate" shall mean the charge for water, expressed in terms of billing units, established pursuant to Section 14.12.040 of the Newport Beach Municipal Code.

C. "Base Period" means one of six (6) billing periods used for calculating compliance with the water conservation requirements of this ordinance. The Base Periods for the four billing groups within the City of Newport Beach are as specified below:

Group I:	June 8, 1989 to August 10, 1989 August 10, 1989 to October 10, 1989 October 10, 1989 to December 7, 1989 December 7, 1989 to February 8, 1990 February 8, 1990 to April 6, 1990 April 6, 1990 to June 7, 1990
Group II:	June 15, 1989 to August 15, 1989 August 15, 1989 to October 19, 1989 October 19, 1989 to December 14, 1989 December 14, 1989 to February 15, 1990 February 15, 1990 to April 12, 1990 April 12, 1990 to June 20, 1990
Group III:	July 13, 1989 to September 13, 1989 September 13, 1989 to November 9, 1989 November 9, 1989 to January 11, 1990 January 11, 1990 to March 13, 1990 March 13, 1990 to May 10, 1990 May 10, 1990 to July 15, 1990
Group IV:	July 19, 1989 to September 19, 1989 September 19, 1989 to November 13, 1989 November 13, 1989 to January 15, 1990 January 15, 1990 to March 19, 1990 March 19, 1990 to May 16, 1990 May 16, 1990 to July 20, 1990

D. "Billing Period" means the time interval between two consecutive water meter readings taken for billing purposes.

E. "Billing Unit" means 100 cubic feet of water (748 gallons).

F. "Corresponding Base Period" shall mean the Base Period

that best corresponds, in terms of number of days, to a Billing Period that occurs during any conservation phase described in Section 14.16.050.

G. Customer" shall mean any person, group of two or more persons, partnership, corporation, trust, association, or entity, receiving water service from the City of Newport Beach.

H. "MWD" shall mean Metropolitan Water District.

I. "Person" shall mean any person, group of persons, corporation, partnership, trust, or business entity not receiving water service from the City of Newport Beach.

J. "Surcharge" shall mean the additional charges (over and above the Basic Water Rate) imposed for consumption in excess of that permitted during any conservation phase and as specified in Section 14.16.060.

K. "Water Consumption Restrictions" shall mean those provisions of Section 14.16.050 which require Customers to reduce the amount of water consumed during current Billing Periods in relation to the corresponding Base Period.

L. "Water Usage Restrictions" shall mean those provisions of Section 14.16.045 and 14.16.050 which prohibit certain uses of water.

M. "Water" shall mean potable water.

Section 14.16.030 Prohibitions.

A. No Customer shall use, or permit the use of, water supplied by the City of Newport Beach in a manner contrary to the restrictions imposed by any conservation phase then in effect.

B. For the purpose of this Ordinance, the use of water by a tenant, employee, agent, contractor, representative, or person acting on behalf of a customer, shall be imputed to the Customer.

Section 14.16.040 Conservation Phase Implementation.

A. The Utilities Director shall periodically monitor and evaluate the projected supply and demand for water by Customers and shall recommend to the City Council implementation of a conservation phase appropriate under then current circumstances. The City Council shall consider the recommendation at a regularly

scheduled public meeting and, after hearing such testimony as may be relevant, implement the appropriate conservation phase by resolution. The provisions of the conservation phase shall become effective upon publication of the resolution in a daily newspaper of general circulation provided, however, the consumption reduction provisions shall take effect as of the first full billing period commencing on or after the effective date of the resolution.

B. In the event MWD publicly expresses the intention to reduce water allocations in a manner that would effect the amount supplied to the City of Newport Beach, the City Manager may implement a conservation phase by publication of a notice to that effect in a daily newspaper of general circulation. The order of the City Manager shall become effective upon publication and shall terminate in thirty (30) days or the publication of a resolution of the City Council implementing the same or different conservation phase, whichever shall first occur.

C. Except for the automatic termination provisions in the case of implementation by the City Manager, a resolution implementing a water conservation phase shall remain in full force and effect until repealed by the City Council, or until a subsequent resolution implementing a different conservation phase becomes effective.

D. The Utilities Director shall, subsequent to the adoption of a resolution implementing any water conservation phase, provide periodic reports to the City Council regarding compliance with the requirements of the water conservation phase, current and anticipated allocations of water from MWD, and any change in circumstances that could warrant a position of more stringent measures or relaxation of measures then in effect.

Section 14.16.045 Permanent Water Usage Restrictions.

1. No Person or Customer shall use water to wash any sidewalk, walkway, driveway, parking area or any other hard surface.

2. No Person or Customer shall use water to clean, fill, or maintain levels in decorative fountains, ponds, lakes, or other

purely aesthetic facilities, however, water may be used to fill or maintain levels if all liquid is recirculated.

3. No restaurant, hotel, cafe, cafeteria or other public place where food is sold, served or offered for sale shall serve drinking water to any person unless pursuant to an express request.

4. No Person or Customer shall permit water to leak from any pipe or facility connected to the meter or meters which measures the amount of water for which a Customer is obligated to pay the City.

5. No Person or Customer shall water or irrigate any lawn, landscaping or other vegetation in a manner that causes or allows excess water to flow or run off onto an adjoining sidewalk, driveway, street, gutter or ditch.

6. No Person shall use water for construction purposes with respect to any project that requires a grading permit without first having submitted a construction water plan to, and obtaining approval from, the Utilities Director.

Section 14.16.050 Water Conservation Phases.

A. Phase 1. Voluntary Ten Percent (10%) Reduction. Each Customer shall use their best efforts, without mandatory restrictions, to use ninety percent (90%) or less of the water consumed during the Base Period for that Customer's group.

B. Phase 2. Mandatory Ten Percent (10%) Cut-Back. No Customer shall, during any Billing Period, consume more than ninety percent (90%) of the water consumed during the corresponding Base Period.

C. Phase 3. Mandatory Fifteen Percent (15%) Cut-Back. No Customer shall, during any Billing Period, consume more than Eighty-five percent (85%) of the water consumed during the corresponding Base Period.

D. Phase 4. Mandatory Twenty Percent (20%) Cut-Back.

1. No Customer shall, during any Billing Period, consume more than Eighty percent (80%) of the water consumed during the corresponding Base Period.

2. No Customer shall use water to wash all or any

portion of a structure, motor vehicle, trailer, boat, facility or equipment, except with a hand-held bucket with a capacity of five gallons or less, or a hose equipped with a positive shut-off nozzle.

3. No Customer shall use water to wash any sidewalk, walkway, driveway, parking area or other hard surface.

4. No person shall water or irrigate any lawn, soil, landscaping or vegetation between the hours of 10:00 a.m. and 4:00 p.m.

E. Phase 5. Mandatory Twenty-Five Percent (25%) Cut-Back.

1. No Customer shall, during any Billing Period, consume more than seventy-five percent (75%) of the water consumed during the corresponding Base Period.

2. No Customer shall use water to wash all or any portion of a structure, motor vehicle, trailer, boat, facility or equipment, except in accordance with the following:

(a) Washing shall be done only with a hand-held bucket with a capacity of five (5) gallons or less, or a hose equipped with a positive shut-off nozzle; and

(b) Washing is permitted only on the days specified for watering or irrigation of lawns and landscaping as specified in Subsection 3.

3. No person shall water or irrigate any lawn, soil, landscaping or vegetation, except in accordance with the following:

(a) Customers with odd numbered addresses shall water only on Tuesdays, Thursdays, and Saturdays.

(b) Customers with even numbered addresses shall water only on Mondays, Wednesdays, and Fridays.

(c) Watering is permitted only between the hours of 4:00 p.m. and 10:00 a.m. No watering or irrigation is permitted between the hours of 10:00 a.m. and 4:00 p.m.

F. Phase 6. Mandatory Thirty Percent (30%) Cut-Back.

1. No Customer shall, during any Billing Period, consume more than seventy percent (70%) of the water consumed during the corresponding Base Period.

2. No Customer shall use water to wash all or any portion of a structure, motor vehicle, trailer, boat, facility or equipment, except in accordance with the following:

(a) Washing shall be done only with a hand-held bucket with a capacity of five (5) gallons or less, or a hose equipped with a positive shut-off nozzle; and

(b) Washing is permitted only on the days specified for watering or irrigation of lawns and landscaping as specified in Subsection 3.

3. No person shall water or irrigate any lawn, soil, landscaping or vegetation, except in accordance with the following:

(a) Customers with odd numbered addresses shall water only on Tuesdays and Fridays.

(b) Customers with even numbered addresses shall water only on Mondays and Thursdays.

(c) Watering is permitted only between the hours of 4:00 p.m. and 10:00 a.m. Watering or irrigation is prohibited between the hours of 10:00 a.m. and 4:00 p.m.

G. Phase 7. Mandatory Thirty-Five Percent (35%) Cut-Back.

1. No Customer shall, during any Billing Period, consume more than sixty-five percent (65%) of the water consumed during the corresponding Base Period.

2. No Customer shall use water to wash all or any portion of a structure, motor vehicle, trailer, boat, facility or equipment, except in accordance with the following:

(a) Washing shall be done only with a hand-held bucket with a capacity of five (5) gallons or less, or a hose equipped with a positive shut-off nozzle; and

(b) Washing is permitted only on the days specified for watering or irrigation of lawns and landscaping as specified in Subsection 3.

3. No person shall water or irrigate any lawn, soil, landscaping or vegetation, except in accordance with the following:

(a) Customers with odd numbered addresses shall water only on Tuesdays.

(b) Customers with even numbered addresses shall water only on Wednesdays.

(c) Watering is permitted only between the hours of 6:00 p.m. and 6:00 a.m. Watering or irrigation is prohibited between the hours of 6:00 a.m. and 6:00 p.m.

(d) Trees may also be watered on Sundays.

H. Phase 8. Mandatory Forty Percent (40%) Cut-Back.

1. No Customer shall, during any Billing Period, consume more than sixty percent (60%) of the water consumed during the corresponding Base Period.

2. No Customer shall use water to wash all or any portion of a structure, motor vehicle, trailer, boat, facility or equipment, except in accordance with the following:

(a) Washing shall be done only with a hand-held bucket with a capacity of five (5) gallons or less, or a hose equipped with a positive shut-off nozzle; and

(b) Washing is permitted only on the days specified for watering or irrigation of lawns and landscaping as specified in Subsection 3.

3. No person shall water or irrigate any lawn, soil, landscaping or vegetation, except in accordance with the following:

(a) Customers with odd numbered addresses shall water only on 1st and 3rd Tuesdays.

(b) Customers with even numbered addresses shall water only on 1st and 3rd Wednesdays.

(c) Watering is permitted only between the hours of 6:00 p.m. and 6:00 a.m. Watering or irrigation is prohibited between the hours of 6:00 a.m. and 6:00 p.m.

(d) Trees may also be watered on Sundays, but only by use of a hand-held bucket.

I. Phase 9. Mandatory Forty-Five Percent (45%) Cut-Back.

1. No Customer shall, during any Billing Period, consume more than fifty-five percent (55%) of the water consumed during the corresponding Base Period.

2. No Customer shall use water to wash all or any

portion of a structure, motor vehicle, trailer, boat, facility or equipment, except in accordance with the following:

(a) Washing shall be done only with a hand-held bucket with a capacity of five (5) gallons or less, or a hose equipped with a positive shut-off nozzle; and

(b) Washing is permitted only on the days specified for watering or irrigation of lawns and landscaping as specified in Subsection 3.

3. No person shall water or irrigate any lawn, soil, landscaping or vegetation, except in accordance with the following:

(a) Customers with odd numbered addresses shall water only on 1st Tuesday.

(b) Customers with even numbered addresses shall water only on 1st Wednesday.

(c) Watering is permitted only between the hours of 10:00 p.m. and 6:00 a.m. Watering or irrigation is prohibited between the hours of 6:00 a.m. and 10:00 p.m.

(d) Trees may also be watered on Sundays, but only by use of a hand-held bucket.

J. Phase 10. Mandatory Fifty Percent (50%) Cut-Back.

1. No Customer shall, during any Billing Period, consume more than fifty percent (50%) of the water consumed during the corresponding Base Period.

2. Watering or irrigation of plants, landscaping, vegetation or soil is prohibited, provided, however, plants, trees and shrubs may be watered by means of a hand-held bucket.

3. No person shall fill any pool, spa, decorative fountain, pond, lake or any body of water.

Section 14.16.060 Surcharges.

A. The surcharges imposed by this Section reflect, in part, additional charges imposed by MWD on the City of Newport Beach for the purchase of water in excess of permitted allocations. The surcharges are also intended to supplement penalties for violating water consumption restrictions by dramatically increasing the cost of water as consumption extends permitted thresholds.

B. Customer shall pay the surcharges specified in this Section for all water consumed in excess of the water consumption restrictions (Phases 2 through 10, inclusive), specified in Section 14.16.050. The surcharge shall be One Dollar and Twenty-four Cents ($1.24) per Billing Unit for the first Ten Percent (10%) increment in excess of the ration level and an additional One Dollar and Twenty-four Cents ($1.24) for each subsequent Ten Percent (10%) increment above the ration level. For example, Phase 6 requires Customers to use no more than 70% of the water consumed during the corresponding Base Period. A Customer using 45 Billing Units when assigned a ration level of 32 Billing Units would pay the following:

32 Units	@ $1.34 (Basic Water Rate)	$42.88
4 Units	@ $2.58 ($1.34 + $1.24)	$10.32
4 Units	@ $3.82 ($1.34 + $2.48)	$15.28
4 Units	@ $5.06 ($1.34 + $3.72)	$20.24
1 Unit	@ $6.30 ($1.34 + $4.96)	$ 6.30
45 Units Total		$95.02

The following surcharge shall be imposed on the Customer's next water bill and shall be in addition to the Basic Water Rate.

Section 14.16.070 Exemptions.

A. The provisions of this Ordinance shall not apply to the following activities of a public entity:

1. The filling, operation and maintenance of a swimming pool open to the public.

2. The washing of refuse, sanitation and service vehicles owned and operated by a public entity to the extent necessary to insure public health, safety and welfare.

B. The provisions of this Ordinance which restrict the watering or irrigation of landscaping vegetation, and soil, and those provisions which require the reduction of consumption shall not be applicable to customers who have participated in a Fuel Load Modification Program and have received an exemption from the Utilities Director. The Utilities Director shall grant only that exemption necessary to mitigate the impacts of participation in the Fuel Load Modification Program such as, the need to irrigate replacement vegetation.

C. The provisions of this Ordinance which restrict the watering or irrigation of lawns, landscaping, vegetation and soil shall not apply to commercial nurseries or other businesses whose main stock and trade consists of plants and vegetation. Provided, however, this exemption is applicable only to those businesses which submit a water conservation plan to, and obtain the approval of, the Utilities Director. The Utilities Director shall approve a water conservation plan submitted pursuant to this Subsection only if the plan proposes the maximum feasible reduction in consumption.

D. The provisions of this Ordinance that restrict the washing of vehicles, boats, and mobile equipment shall not apply to any car wash, auto detailer, or similar business that has applied for and received approval of, an exemption from the Utilities Director. The Utilities Director shall grant an exemption only if the plan provides for recirculation or recycling of water or otherwise proposes the maximum feasible reduction in consumption.

E. The provisions of this Ordinance that require Customers to reduce their consumption by specified percentages shall not apply to reduce consumption below levels necessary to maintain health, safety and sanitation as determined by the Utilities Director.

Section 14.16.080 Relief from Compliance.

A. Intent and Purpose. The City Council recognizes that water consumption can increase or decrease because of factors unrelated to wasteful water use practices. Many customers have installed water-saving devices and adopted water conservation practices that make it difficult to achieve the additional reductions required by this Ordinance. This Section recognizes that base adjustments may be necessary to insure that application of this Ordinance to any particular Customer does not produce unjust or inequitable results. As a general rule, the Utilities Director should not grant relief to any Customer for any reason in the absence of a showing that the Customer has achieved the maximum practical reduction in water consumption other than in the specific

area or areas for which relief is requested.

B. Procedures. An application for relief from the provisions of this Ordinance may be filed by any Customer with the Utilities Director. The application shall be submitted on a form supplied by the Utilities Department. The application must be filed within ninety (90) days after the effective date of this Ordinance or ninety (90) days after implementation of the then current conservation phase, whichever shall occur last. The Utilities Director shall approve or disapprove the application for relief within fifteen (15) days after it is filed and deemed complete.

C. Factors. In determining whether relief should be granted, the Utilities Director shall consider all relevant factors including, but not limited to, the following:

1. Whether compliance with the consumption and reduction provisions then in effect would result in unemployment or layoff of workers;

2. Whether additional persons are living or working in the structure or structures served by the meter or meters for which Customer is responsible;

3. Whether Customer had, during all or a portion of the Base Period, reduced consumption from prior years through the use of water conservation practices;

4. Whether any current or anticipated increase in production or manufacturing will require additional water;

5. The extent to which irrigation or watering of landscaping has been made necessary by compliance with Fuel Load Modification Programs;

6. The extent to which Customer needs to use water to mitigate any emergency health or safety hazards;

7. The absence of one or more persons from the structure or structures served by the meter during all or a portion of the Base Period;

8. The special needs and characteristics of hospitals, clinics and other medical care facilities.

D. Agreement. The Utilities Director is empowered to enter into an agreement with any Customer to resolve the application for relief. The agreement shall be memorialized in a writing signed by the Customer. The agreement shall fix the rights of the Customer and the City. The Customer shall have no further right to seek relief pursuant to the provisions of this Section.

E. Final Decision. The Utilities Director shall notify the Customer of the decision on the application for relief by mailing notice of the decision to the Customer, first class, postage pre-paid, to the address specified on the application. The decision of the Utilities Director shall be final.

F. Willful Misrepresentation. Notwithstanding any other provision of law, no person shall make any willful misrepresentation of a material fact with respect to any application for relief submitted pursuant to this Section. Any violation of the provisions of this Subsection shall be considered a misdemeanor, punishable as otherwise provided in this Code.

Section 14.16.090 Failure to Comply.

A. Penalties. The penalties specified in this Section are exclusive and the other penalty provisions of this Code are inapplicable.

1. The following penalties shall be imposed for each violation of the General Water Usage Restrictions contained in Section 14.16.045:

(a) For the first and second violations, the Utilities Director shall issue a written notice of violation to the Customer or person.

(b) For a third violation by any Customer within any twelve (12) month period, a penalty in the sum of Fifty Dollars ($50.00) shall be added to the Customer's water bill. The third violation by any person within a twelve (12) month period shall constitute an infraction, punishable by a fine of Fifty Dollars ($50.00).

(c) For a fourth and any subsequent violation by any Customer within any twelve (12) month period, a penalty in the sum

of One Hundred and Fifty Dollars ($150.00) shall be added to the Customer's water bill. The fourth and any subsequent violation by a person during any twelve (12) month period shall constitute an infraction, punishable by a fine of One Hundred and Fifty Dollars ($150.00).

(d) In addition to the penalties specified in Subsection (c), upon a fourth violation, the Utilities Director may install a flow restrictor on the meter or meters for which a Customer is responsible and which are connected to the facility from which water was discharged in violation of Section 14.16.045.

2. Consumption Restrictions. The following penalties shall be imposed for each violation of the conservation phase restrictions then in effect:

(a) For the first and second violations by any Customer, the Utilities Director shall send a written notice of violation to the Customer.

(b) For the third violation, a penalty shall be added to the Customer's next water bill in accordance with the schedule specified below. The third violation by any person shall constitute an infraction with a fine imposed in accordance with the schedule specified below:

1.	Meter with 3/4 inch service -	$50.00
2.	Meter with 1 inch service -	$100.00
3.	Meter with 1-1/2 inch service -	$150.00
4.	Meter with 2 inch service -	$200.00
5.	Meter with 4 inch service -	$350.00
6.	Meter with service larger than 4 inches -	$500.00

(c) For a fourth violation by any Customer, the penalties specified in Subsection (b) shall be doubled and added to the Customer's next water bill.

(d) The Utilities Director may install a flow restrictor upon or after the fourth violation by any Customer. The flow restrictor shall be placed on Customer's meter or meters that registered the excessive consumption or which were connected to the facility used to illegally discharge water. Customer may apply to the Utilities Director for removal of the flow restrictor within sixty (60) days after installation, provided the Customer pays Fifty Dollars ($50.00) for removal.

B. Notice. Prior to the imposition of any penalties or surcharge pursuant to this Section and a right to a hearing to contest the validity of any such penalty and surcharge. Notice shall be deemed given when personally delivered to the Customer or when deposited in the United States mail, first class postage pre-paid, and addressed in the same manner as normal water billings. Notices relative to the violation of water consumption reduction requirements imposed by conservation phases may be given by specifying the violation, the facts supporting the violation, and the Customer's right to a hearing in a conspicuous place on the first water bill sent to the Customer for the Billing Period during which the violation occurred. If the penalty assessed is, or includes, the installation of a flow restrictor or the termination of water service, notice of the violation shall, in addition to that specified above, be posted in a conspicuous place on the property served by the meter or meters which recorded the excessive consumption or were connected to the facility from which water was illegally discharged.

C. Hearing. Any Customer against whom a penalty is levied pursuant to this Section shall have a right to hearing. The Customer shall be entitled to be represented by an individual of their choice, to present oral and documentary evidence in support of their appeal, and to review and comment on all evidence offered to establish the violation.

Section 14.16.100 Applicability.

The provisions of this Ordinance shall be applicable to persons who receive water from agencies or entities other than the City of Newport Beach, and any water agency or water district serving residents of the City of Newport Beach shall enforce the provisions of this Chapter.

SECTION 5: Chapter 14.20 of the Newport Beach Municipal Code is amended to read:

Chapter 14.20

WATER METERS

Sections:

14.20.010	Property Of City--Damaged Or Lost Meters
14.20.020	Meter Tests.
14.20.030	Meter Test Deposit.
14.20.040	Tampering With Meters Prohibited.
14.20.050	Meter Placement.
14.20.060	Meters Inside Premises.

Section 14.20.010 Property Of City--Damaged Or Lost Meters. All meters, unless otherwise authorized by the Utilities Director, shall be and remain the property of the City and will not be removed unless the use of water on the premises is to be entirely stopped, or the service connection discontinued or abandoned. In all cases where meters or meter boxes are lost, injured or broken by carelessness, or by the negligence of the owners or occupants of premises, they shall be replaced or repaired by the Utilities Department and the cost charged against the owner or occupant; and in the case of nonpayment, the water shall be shut off as provided in Section 14.12.110. In the event the meter is out of order, or fails to register properly, the consumer shall be charged on an estimate made by the Utilities Department on the average monthly consumption during the last three months that the meter was in good order, or from what he may consider to be the most reliable data at his command.

Section 14.20.020 Meter Tests. Where the accuracy of record of a water meter is questioned, it shall be removed at the consumer's request and shall in his present be tested in the shops of the Utilities Department by means of the apparatus there provided, and a report thereon duly made. Both parties to the test must accept the findings so made. If the test discloses an error against the consumer of more than three percent (3%) of the meter's registry, the excess of the consumption on the three previous readings shall be credited to the consumer's meter account, and the Utilities Department will bear the entire expense of the test, and the deposit required as hereinafter prescribed shall be returned. On the other hand, where no such error is found, the person who has requested the test shall pay the charges fixed for such test.

Section 14.20.030 Meter Test Deposit. Before the test of any meter is made, the person requesting the test shall at the time of filing his request therefor deposit with the City an amount as established by Resolution of the City Council.

Section 14.20.040 Tampering With Meters Prohibited. No meter shall be removed, or in any way disturbed, nor the seal broken except in the present of and under the direction of a duly authorized agent or employee of the City.

Section 14.20.050 Meter Placement. All meters of the City shall be placed at the curbline of the street or near the property line in alleys, whenever and wherever practicable, and be protected and maintained as a part of the operation of the Department.

Section 14.20.060 Meters Inside Premises. When a water meter is placed inside the premises of a consumer, for the convenience of the consumer, provisions shall be made for a convenient meter reading and repairing by representatives of the Department. Failure to make such provisions by the consumer shall be sufficient cause for removal of such meter at the option of the Director of the Department and the withholding of service until connection is made at the curbline as herein provided.

SECTION 6: That if any section, subsection, sentence, clause or phrase of this Ordinance is for any reason, held to be invalid or unconstitutional, such decision shall not affect the validity or constitutionality of the remaining portions of this Ordinance. The City Council hereby declares that it would have passed this Ordinance, and each section, subsection, clause or phrase hereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses and phrases be declared unconstitutional.

SECTION 7: The Mayor shall sign and the City Clerk shall attest to the passage of this Ordinance. The City Clerk shall cause the same to be published once in the official newspaper of the City, and it shall be effective thirty (30) days after its adoption.

SECTION 8: This Ordinance was introduced at a regular meeting of the City Council of the City of Newport Beach, held on the 8th day of June, 1992, and adopted on the 22nd day of June, 1992, by the following vote, to wit:

AYES, COUNCILMEMBERS HEDGES, WATT, TURNER, SANSONE, HART, COX, PLUMMER

NOES, COUNCILMEMBERS NONE

ABSENT COUNCILMEMBERS NONE

MAYOR Rita Sansone

ATTEST:

Wanda E. Raggio

CITY CLERK

gr/ordin/water.ord

CITY OF NEWPORT BEACH CALIFORNIA