

1.0 INTRODUCTION

1.1 Municipal Water District of Orange County's Urban Water Management Plan

This Urban Water Management Plan (Plan) has been prepared by the Municipal Water District of Orange County (MWDOC) for two purposes:

- to comply with *State of California Water Code* under the Urban Water Management Act (Act); and
- to provide information in a meaningful way so that the public can better understand water resource planning within the MWDOC service area.

MWDOC provides wholesale imported water from the Metropolitan Water District of Southern California (Metropolitan) to 30 Orange County cities and water agencies providing retail water service. MWDOC also coordinates and sponsors regional water conservation programs in cooperation with its local retail agencies, and engages in regional water resource and reliability planning in cooperation with other local and regional water, wastewater, and groundwater management agencies.

It is important to note that many of MWDOC's retail member agencies are also required to prepare Urban Water Management Plans and are doing so simultaneously. To that end, much of the information presented in this plan is based on the BEST AVAILABLE information at the time of drafting. However, the final authority of local water supply issues should be the plans prepared by each individual agency. Local supply information is included in this Plan to provide a regional summary and should not be considered in determining if local supplies are adequate for individual agencies.

The MWDOC Plan is meant to aggregate this information in a meaningful way so the public can better understand water resource planning on the regional level. Please note that MWDOC is a wholesaler of imported water for the region. For the purpose of evaluating a comprehensive assessment of the region's water services, MWDOC has taken a regional approach in compiling this Plan. This Plan documents information on all sources of supplies – imported supply, groundwater supply, surface supply, recycled supply, and wastewater, as a summary of information for the regional planning. MWDOC does not currently provide any source of water other than imported supplies from Metropolitan, and it is not responsible for any of the projects or sources other than imported supply discussed in this Plan. Every effort has been made to coordinate information with local retail agencies' plans as they were being prepared to avoid any significant discrepancies in facts, figures, and estimates contained in each local Urban Water Management Plan. To the extent that any discrepancies exist, the local retail agency plan controls.

1.1.1 Purpose of the Urban Water Management Plan

MWDOC has prepared this Plan consistent with the *State of California Water Code* Sections 10610 through 10657, known as the Urban Water Management Planning Act.

Enacted in 1983, the Act requires that every urban water supplier providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually prepare and adopt, in accordance with prescribed requirements, an urban water management plan. The Act also requires urban water suppliers to describe and evaluate sources of water supply, efficient use of water, demand management measures, implementation strategies and schedules, and other relevant information and programs.

Since its passage, many amendments have been added to the Act. A copy of the Urban Water Management Plan Act is included in *Appendix I-A*.

Today, an Urban Water Management Plan (UWMP) also serves as a foundation document and source of information for a Water Supply Assessment, *California Water Code* Section 10613, and a Written Verification of Water Supply, *California Water Code* Section 66473.7. Both statutes require detailed information regarding water availability to be provided to city and county decision makers prior to approval of specified large development projects. Additionally, an UWMP also serves as a:

- long-range planning document for water supply;
- source data for development of a regional water plan;
- source document for cities and counties, as they prepare their General Plans;
- key component of an Integrated Regional Water Management Plan; and
- condition to qualify for receipt of certain State grant funds

California Water Code 10644(a) requires urban water suppliers to file with the Department of Water Resources, the California State Library, and any city or county within which the supplier provides water supplies, a copy of its UWMP no later than 30 days after adoption. Urban water suppliers are required to file an Urban Water Management Plan at least once every five years on or before December 31, in years ending in five (5) and zero (0). The 2005 Urban Water Management Plans are due December 31, 2005.

For MWDOC, the activities associated with the update of its Plan and the benefits the Plan ultimately affords its local retailers extend far beyond the implied or stated supply-reliability goals. For example, the regional approach allows MWDOC to:

- provide a comprehensive assessment of water resource needs in its service area;
- provide guidance to coordinate implementation of water conservation programs in a cost effective manner;
- provide assistance to maximize the beneficial use of recycled water and local groundwater supplies, providing the region with new sources of local water to reduce the need for imported supplies from Metropolitan; and
- offer opportunities for public participation through publicly noticed meetings, and provide information that will allow the public to gain further understanding of the region's comprehensive water planning.

1.1.2 Coordination with Appropriate Agencies in the Preparation of the Plan

Recognizing that close coordination among other relevant public agencies is the key to the success of its Plan, MWDOC also worked closely with many other entities to develop and update this planning document. Table 1-1-2-A documents the name of the agencies with which MWDOC coordinated information for developing its Plan.

Table 1-1-2-A: Coordination with Appropriate Agencies in Preparation of this Plan

Check at least one box on each row	Participated in developing the plan	Commented on the draft	Attended public meetings	Was contacted for assistance	Was sent a copy of the draft plan	Was sent a notice of intention to Update the Plan	Was Sent a notice of Intention to Adopt the Plan
MWDOC 27 Member Agencies	✓	✓	✓	✓	✓	✓	✓
Cities within MWDOC Service Area			✓		✓	✓	✓
County of Orange			✓		✓	✓	✓
Orange County Water District	✓			✓	✓	✓	✓
San Juan Basin Authority	✓			✓	✓		
Metropolitan Water District of Southern California	✓			✓	✓	✓	✓
Orange County Sanitation District	✓			✓	✓		
South Orange County Wastewater Authority	✓			✓	✓		

MWDOC’s coordinated efforts with the relevant agencies are described in the following paragraphs.

MWDOC Member Agencies

MWDOC conducted three countywide coordination workshops and several surveys to facilitate the exchange of planning information with its member agencies. See *Appendix 1-B* for the documentation of the workshops conducted. MWDOC requested its 30 member agencies provide 25-year retail demand projections and a description of any planned development of local supplies. Methodologies and assumptions underlying these projections vary from agency to agency, but all projections reflect an in-depth knowledge of the individual agencies’ service areas. Particularly in the area of demand projections, the data MWDOC obtained primarily correlated to the General Plans prepared by the County of Orange or cities within MWDOC’s service area.

As required by *California Water Code* Section 10631(k), MWDOC provided its member agencies information that quantifies water availability to meet their projected demands for the next 25 years, in five-year increments. Based on the projections of retail demand and local supplies development done by its member agencies and the imported supply availability described in Metropolitan’s May 2005 Draft Urban Water Management Plan, MWDOC prepared an informational package with data

specific to each member agency to be used by that agency to update its own UWMP. In the informational package, MWDOC quantified the reliability of the wholesale supplies from Metropolitan and the amount expected to be delivered to each agency during normal, single-dry, and multiple-dry years. A copy of the completed set of informational packages for MWDOC member agencies is included in *Appendix 1-C*. Please note that information collected was the best available at the time, and the results should be viewed as approximation. The values reflected in member agencies' plans should govern if there are any discrepancies from their plans to MWDOC's plan.

Cities and County

As described earlier, General Plans are source documents for water suppliers as they assess their own water resource needs. When completed, an UWMP also serves as a source document for cities and counties as they prepare their General Plans. General Plans and UWMPs may be linked, as their accuracy and usefulness are interdependent.

California Water Code Section 10621(b) requires urban water suppliers to notify cities and counties in their service area of the opportunity to submit comments during the UWMP update process. To ensure the County of Orange and all cities within the MWDOC service area received notification of the UWMP updates in an efficient manner and were not bombarded with repeated notifications from numerous retail and wholesale water suppliers, MWDOC initiated a coordinated notification process with its member agencies and its wholesale supplier, Metropolitan. MWDOC created a generic letter describing the UWMP development process. The letter named all pertinent agencies that are updating their plans and requested comments and participation from cities and the county in the development of the plans. See *Appendix 1-D(i)* for a copy of the letter. MWDOC then provided a copy of the letter to each of its member agencies for use in notifying the cities in its service area and the County of Orange. *Appendix 1-D(ii)* includes copies of the letters sent by member agencies to cities within the MWDOC service area and to the County of Orange.

Groundwater Management Agencies

MWDOC also worked with the following five agencies to obtain information for the five groundwater basin resources in its service area: Orange County Water District for Lower Santa Ana River Basin, San Juan Basin Authority for San Juan Basin, City of La Habra for La Habra Basin, City of San Clemente for San Mateo Basin, and Laguna Beach County Water District for Laguna Canyon Basin. Details of the basin information are described in Section 2.2.1.1 of this Plan.

Metropolitan Water District of Southern California

As a member agency of Metropolitan, MWDOC participated in all the workshops hosted by Metropolitan to facilitate the information exchange for the development of this Plan.

To meet the requirement set forth by *California Water Code* Section 10631(k), MWDOC notified Metropolitan of the amount of water MWDOC, on behalf of its member agencies, wishes to purchase over the next 25 years. The letter documenting this formal information exchange is provided in *Appendix 1-E*.

MWDOC also worked with Metropolitan staff to develop demand projections using data from the Southern California Association of Governments (SCAG). A detailed description of the methodology and comparisons used to determine these demand projections are provided in Section 2.1 of this Plan.

Wastewater Management Agencies

To meet the requirements of the Urban Water Management Act in the preparation of this Plan, MWDOC contacted individual wastewater collection and treatment providers and other water agencies within MWDOC's service area for data on recycled water and associated projects in the region. The information MWDOC obtained was then combined with a review of several completed Orange County studies. MWDOC also reviewed operating information and interviewed staff from individual agencies. The information MWDOC obtained from wastewater collection and treatment providers allows the Plan to describe wastewater disposal methods, treatment levels, discharge volumes, and recycled use in the region. A detailed description of MWDOC's efforts, coordination, and the studies researched are discussed in Section 6 of this Plan.

1.1.3 Public Community Involvement

According to *California Water Code* Section 10642, "each urban water supplier shall encourage the active involvement of diverse social, cultural, and economic elements of the population within the service area prior to and during the preparation of the plan" (qtd. Guidebook 89).

To generate interest and encourage the public's participation in the planning process and to actively seek input from the broadest audience possible throughout the yearlong endeavor, MWDOC conducted two Community Information meetings – May 12, 2005 and August 18, 2005. These meetings were in addition to the Public Hearing on the draft Plan, which was held in November 2005.

Hundreds of invitation letters and e-mail notifications announcing the Community Information meetings were sent to individuals representing businesses, environmental groups, residents interested in water management, as well as city and county staff. MWDOC also ran ads announcing each meeting in the *Orange County Register*, which has a weekday readership of 768,000. Copies of the display ads, which ran in the Local section of the paper, are attached in *Appendix 1-F(i)*.

MWDOC videotaped each Community Information meeting as a way of accurately documenting the input of stakeholders. Copies of the videotapes are included in *Appendix 1-F(ii)*. Below is a summary of participants' comments and questions as presented to staff during the May 12th meeting:

Water Supply

- Orange County has to reduce Colorado River water from 20% of our supply to 14%. What are programs to replace (this water)?

Water Quality

- What about medications in drinking water (emerging contaminants)?

Water Reclamation

- What percentage of Orange County Sanitation District wastewater will be recycled by the Groundwater Replenishment System? Could GWR be expanded to do 100%?
- I've heard that 87% of water used in Orange County is for landscape irrigation. Can recycled water be delivered directly to homes for outdoor use?
- What about gray water systems?
- How many acre-feet a day are flushed into the ocean? How much can be reused?
- Could you extend a recycled-water line to each and every home?
- If the Groundwater Replenishment System were expanded, would there be a need for a desalination plant in Huntington Beach?

Population Growth/Water Demand

- How will growth in the Inland Empire impact Orange County?
- How can we be assured the forecasting data is accurate (for agriculture...for industrial...for urban)?
- Who is responsible for forecasting water demand? Will we have more people? Will agricultural use drop off? What about industrial use - will manufacturing plants move out of area? Can statistics be produced showing water use by sector - urban, industrial, ag?
- How much water does agriculture use in California on a percentage basis?

Other Areas of Concern

- What about the privatization of water utilities? (I learned at a recent meeting that international companies are trying to privatize our public trust resource.)
- Need to look at integrated water management. Runoff from excess irrigation has water quality impacts...meeting the Clean Water Act. When looking at the cost of water supply alternatives, the cost of water conservation should factor in Clean Water Act compliance benefits. Desal is talked about as if a silver bullet. It's a new supply that will just make the Clean Water Act even more difficult to achieve. We should take a more holistic approach and look at conservation and reclamation before desal.
- What about solar-generated electricity?
- How can we reduce urban runoff? Can we capture and reuse urban runoff?
- Isn't there a proposal for a pipeline to go through the Santa Ana Mountains?

MWDOC staff also had a unique opportunity to speak before the 2004-05 Orange County Grand Jury and obtain their input, comments, and suggestions during the planning process. Their comments/questions included:

- Since water suppliers from around the state are compiling Urban Water Management Plans, the accuracy and consistency of the data projections they use is critical. How can we be assured everyone is using the same data? How can we be assured of the data's accuracy(Ex.: population projection from the Inland Empire)?
- Who's examining the impact on water quality of runoff from agriculture?
- I've heard there were toxic dumps in Orange County that have now been covered over. What's the impact on our groundwater?
- What's the purpose of all these little water districts throughout Orange County? Boards of directors run them, but what do they do(the water districts...and the boards)?
- It doesn't seem to me that any planning is done in this county. All we read about is that another thousand homes are being built. If planning is done, we need to learn about the new development when it's still in the planning stage.
- Residents really don't know about all the planning that goes on for (water) reliability...and they should. Water agencies should do a better job of educating the public.
- Don't privatize water. Look what happened to electricity.
- Orange County needs more water storage capacity...surface water capacity.

MWDOC conducted a second Community Information meeting on Thursday, August 18th, to keep stakeholders apprised of MWDOC's progress in Plan development and to obtain their continued input. Like its predecessor, this meeting was videotaped to accurately document comments, suggestions, and questions. Copies of the videotapes are included in *Appendix 1-F(ii)*. Below is a summary of participants' comments and questions, as presented to staff during the August 18th meeting:

Water Supply

- Included “what if...” scenarios in the plan (ex. Reduction in Colorado River water).
- South County agencies need MWDOC's assistance with transfer and exchange opportunities.
- Address the impact of CALFED.
- Desalination
 - Have you considered brackish water for desalination?
 - Beach wells are preferred
 - Is there enough water for Orange County without a desalination plant in Huntington Beach?
 - Describe the benefits (if any) that private companies provide over public agencies.
 - Include energy costs.
- How do climate changes impact supply and demand?

Water Quality

- Discuss water quality, including perchlorate in the Santa Ana River, and associated monitoring efforts.

Other Areas of Concern

- Include three cities (Anaheim, Fullerton, Santa Ana) in the MWDOC Plan and house a summary at MWDOC.
- Urban runoff is a regional issue that requires regional assistance
- Water cycle:
 - Need to close the loop in the local water cycle.
 - Work toward a more natural, efficient water cycle.
 - Balance supply with demand through conservation.
 - Promote California-friendly plants.
 - Importance of water recycling.
 - Capture and recycle urban runoff.
- UWMPs should include a programmatic Environmental Impact Report.
- Best Management Practices (BMPs) should be the floor, not the ceiling.
- There is a need for collaborative education programs between public agencies and Non Governmental Organizations.
- Need to consider Total Maximum Daily Loads.

- Department Water Resource planning is top down, rather than bottom up (like Orange County is doing); Orange County’s approach makes more sense.
- Will the plan identify actions?
- How many years is the plan done?
- Do you monitor any changes from year to year?
- Growth
 - What is included?
 - Large development
 - Build out.
- Would like to know a cost comparison of all water.
- Conservation has a positive impact on water use and should be continued.

The results of our outreach efforts are notable. We were able to obtain input from a diverse population, including the environmental community (Surfrider Foundation), business owners, residents, the League of Women Voters, and others.

1.1.4 Department of Water Resource Role and Guidance for Urban Water Management Plan

California Department of Water Resource (DWR) staff reviews and determines the completeness of individual UWMPs pursuant to the Act. Agencies subject to the Act must have adopted a complete UWMP that meets the requirements of the law and submit it to DWR to be eligible for drought assistance or to receive funds through DWR. Results of the DWR review are provided to urban water suppliers through written correspondence. If necessary, water agencies with plans that do not meet DWR standards may wish to use the comments within the review letter to revise their UWMP for re-submittal. DWR provides a Legislative Report to the California Legislature one year after UWMPs are due, detailing the status and any outstanding elements of the UWMPs. DWR also prepares reports and provides data for any legislative hearings held to consider the effectiveness and/or completeness of the UWMPs in question.

DWR provides technical assistance to urban water suppliers to help them meet the requirements of the Act, and has provided guidance materials to aid water suppliers in developing 2005 UWMPs. These materials are intended both to help water districts comply with the law and to help DWR staff review submitted plans for regulatory compliance. Guidance materials consist of a series of worksheets and check lists detailing acceptable responses to the requirements set forth in the Act. MWDOC has used the guidance material in the development of this Plan. A copy of the completed review sheets with information contained in this Plan can be found in the appropriate tables in *Appendix I-G*.

Utilizing the format of the review sheets, MWDOC prepared a customized informational package for each of its 30 member agencies. In each individual informational package, which contained data specific to a particular member agency, MWDOC completed 30 of the 60 tables contained in the review sheets. Data used to complete the appropriate tables was collected through a coordinated effort in the development of this Plan. MWDOC's member agencies were encouraged to use the data contained in their customized information package to prepare individual agency UWMPs. A complete set of the informational packages for each member agency is included in *Appendix I-C*. The effort allows the resources assessed in the member agencies' plans sum to the resources assessed in MWDOC's plan.

1.1.5 Organization of this Plan

This document is divided into nine (9) Sections:

Section 1 – The introduction, which explains the purpose and development of the Plan. The introduction also describes MWDOC as an agency and its service area.

Section 2 – Assesses water service in the MWDOC service area.

Section 3 – Describes the water quality issues that exist in the MWDOC service area and addresses their impact on the reliability of providing water service.

Section 4 – Discusses programs and tools currently in place to maximize resources and minimize imported supplies to the MWDOC service area.

Section 5 – Describes water demand management programs.

Section 6 – Describes wastewater management and water recycling in the MWDOC service area.

Section 7 – Discusses the water shortage contingency plan.

Section 8 – Illustrates the adoption and implementation of the Plan.

Section 9 – Contains Appendix.

1.2 Municipal Water District of Orange County

1.2.1 Formation and Purpose

Orange County was settled around areas of surface water. San Juan Creek supplied the mission at San Juan Capistrano. Santa Ana River supplied the

early cities of Anaheim and Santa Ana. The Santa Ana River also provided water to a large aquifer underlying the northern half of the county, enabling settlers to move away from the river's edge and still obtain water by drilling wells.

By the early 1900s, Orange County residents understood that their water supply was limited, the rivers and creeks did not flow all year long, and the aquifer would eventually be degraded or even dry up if the water was not replenished on a regular basis.

In 1928, the cities of Anaheim, Santa Ana, and Fullerton joined with 10 other Southern California cities to form Metropolitan. Their objective was to build an aqueduct to the Colorado River to provide the additional water necessary to sustain the growing Southern California economy and its enviable lifestyle.

The Orange County Water District (OCWD) was formed in 1933 to protect the County's water rights on the Santa Ana River. Later that mission was expanded to manage the underground aquifer, making optimum use of local supplies and augmenting those with imported supplies provided through the Metropolitan member agencies in the County.

It was not long before other parts of Orange County also saw the need for supplemental supplies. A severe drought in the late 1940s further emphasized this need for coastal communities from Newport Beach to San Clemente. In 1948, coastal communities from Newport Beach south to the San Diego county line formed the Coastal Municipal Water District as a way to join in the benefits provided by Metropolitan.

The Municipal Water District of Orange County was formed by Orange County voters in 1951 under the Municipal Water District Act of 1911. Today, MWDOC is Metropolitan's third largest member agency, providing and managing the imported water supplies used within its service area.

The Coastal Municipal Water District became a part of MWDOC in January 2001, a move that streamlined local government and allowed MWDOC to more efficiently provide wholesale water services at a reduced cost for the benefit of residents living throughout the service area.

1.2.2 Role of the Municipal Water District of Orange County

MWDOC's Mission Statement: To provide reliable, high-quality supplies from Metropolitan Water District of Southern California and other sources to meet present and future needs, at an equitable and economical cost for all Orange County, and to promote water use efficiency.

Related water management goals and objectives include:

- Represent the interests of the public within its jurisdiction;
- Appoint its representative directors to the Board of Metropolitan;
- Inform its directors about Metropolitan;
- Guide Metropolitan in its planning efforts and act as a resource of information and advocacy for member agencies;
- Work together with Orange County water agencies and others to focus on solutions and priorities for improving Orange County's future water supply reliability;
- Cooperate with and assist OCWD and other agencies in coordinating the balanced use of the area's imported and native surface and groundwater;
- Plan and manage the allocation of imported water to its member agencies during periods of short supply;
- Coordinate and facilitate the resolution of water issues and development of joint water projects among its member agencies;
- Represent the public and assist its member agencies in dealing with other governmental entities at the local, regional, state, and federal levels on water-related issues; and
- Inform its member agencies and inform and educate the general public on matters affecting present and future water use and supply.

As a regional wholesaler, MWDOC's most significant roles are broadly applicable to all of its member agencies. A key goal of MWDOC is to provide services and programs that are broad-reaching that the retail agencies cannot reasonably provide as single entities.

In terms of water management, MWDOC became a signatory to the Memorandum of Understanding (MOU) in 1991, monitored by the California Urban Water Conservation Council, which outlines 14 Best Management Practices for urban water conservation. The urban water conservation practices are intended to reduce long-term urban demands from what they would have been without implementation of these practices, and are in addition to programs that may be instituted during occasional water supply shortages.

For more than 30 years, MWDOC's Public Information and Water Education programs have reached thousands of consumers and nearly 90,000 Orange County students annually. The programs are performed on

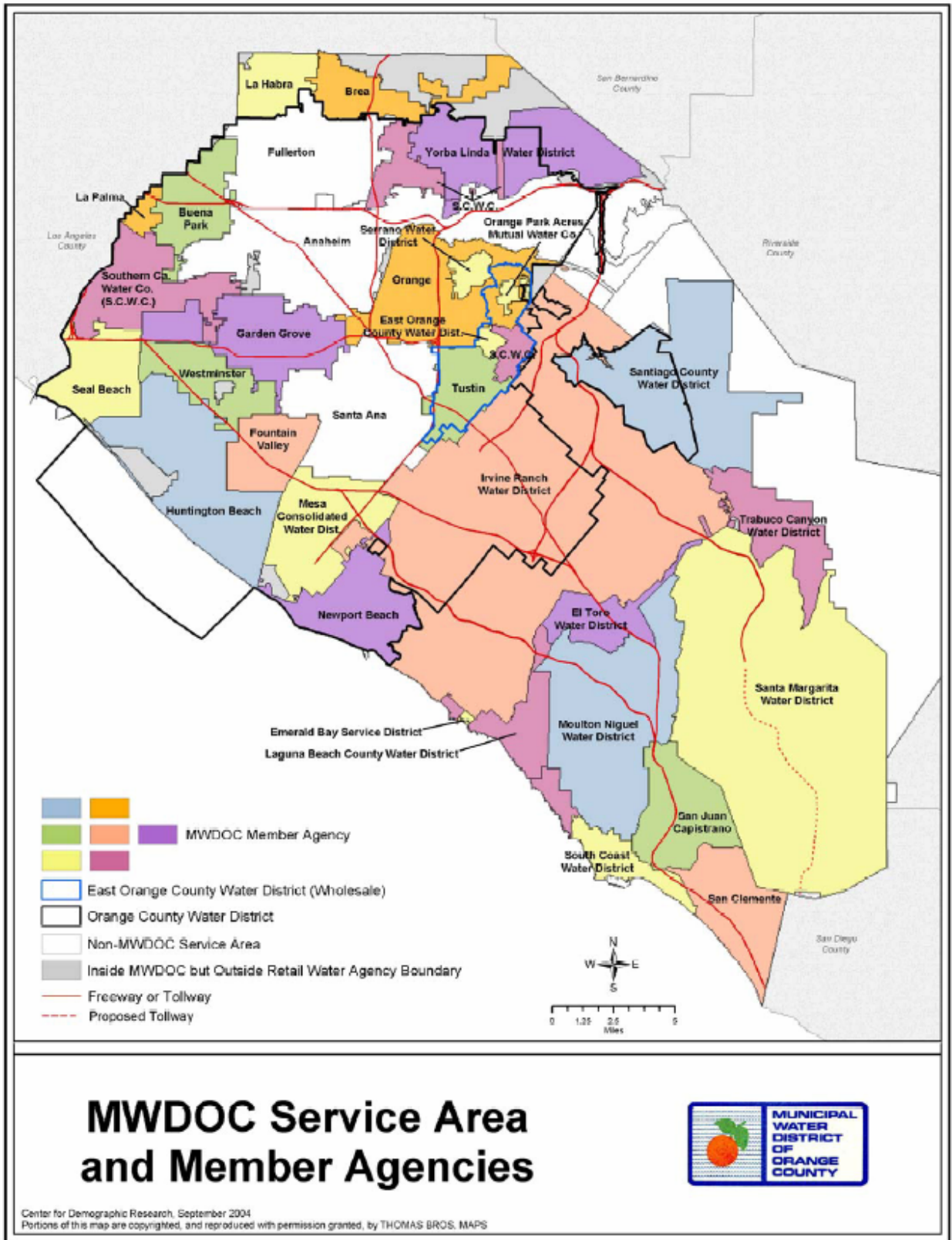
behalf of, and in coordination with, MWDOC's member agencies and are designed to facilitate a student's understanding of current water issues, as well as the challenges, opportunities, and costs involved in securing a reliable supply of high quality water.

In 2004, MWDOC formed a partnership with the Discovery Science Center to bring the School Education Program to even more students and provide them with even greater educational experiences in the areas of water and science.

1.2.3 Service Area

MWDOC is a regional water wholesaler and resource planning agency, managing all of Orange County's imported water supply with the exception of water imported to the cities of Anaheim, Fullerton, and Santa Ana. MWDOC serves more than 2.3 million residents in a 600-square-mile service area (see Figure 1-2-3-A). Its commitment is to ensure water reliability for the communities it serves. To that end, MWDOC focuses on sound planning and appropriate investments in water supply, regional delivery infrastructure and emergency preparedness.

Figure 1-2-3-A: MWDOC's Service Area and Its Member Agencies

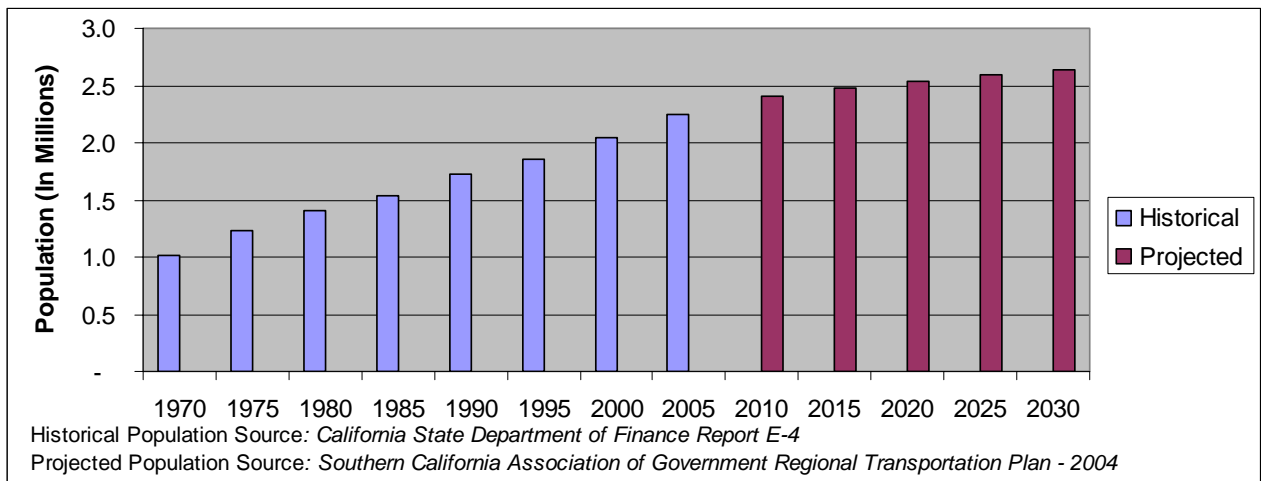


1.2.3.1 Current and Projected Population

The MWDOC service area doubled in population from 1.01 million residents in 1970 to 2.24 million by 2005, according to the California State Department of Finance. This represents an average growth rate of approximately 2.3% per year. Available housing along with a growing economy brought people to Orange County; an enviable lifestyle has kept them here.

Many older cities, especially those in north and central Orange County, anticipate reaching build-out in the near-term and, therefore, their population growth will remain relatively flat over the next 25 years. This, when combined with a relatively young and growing south Orange County population, will result in nearly 2.65 million living in the MWDOC service area by 2030 (Figure 1-2-3-1-A). This represents an average growth rate of 0.66% annually.

Figure 1-2-3-1-A: Historical and Projected Population in MWDOC’s Service Area



1.2.3.2 Climate and Rainfall

Orange County has a semi-arid climate with an average of 14 inches of rain a year. Figure 1-2-3-2-A shows the record of rainfall in the area from 1973 to 2004. The driest year recorded during that period was 2002 with less than four inches of rain. Conversely, the winter of 1998 was one of the wettest during the same period with nearly 31 inches of rain.

Table 1-2-3-2-A presents the average monthly climate characteristics: evapotranspiration rate; rainfall; and temperature in the MWDOC service area.

Figure 1-2-3-2-A: Annual Rainfall Record in Orange County

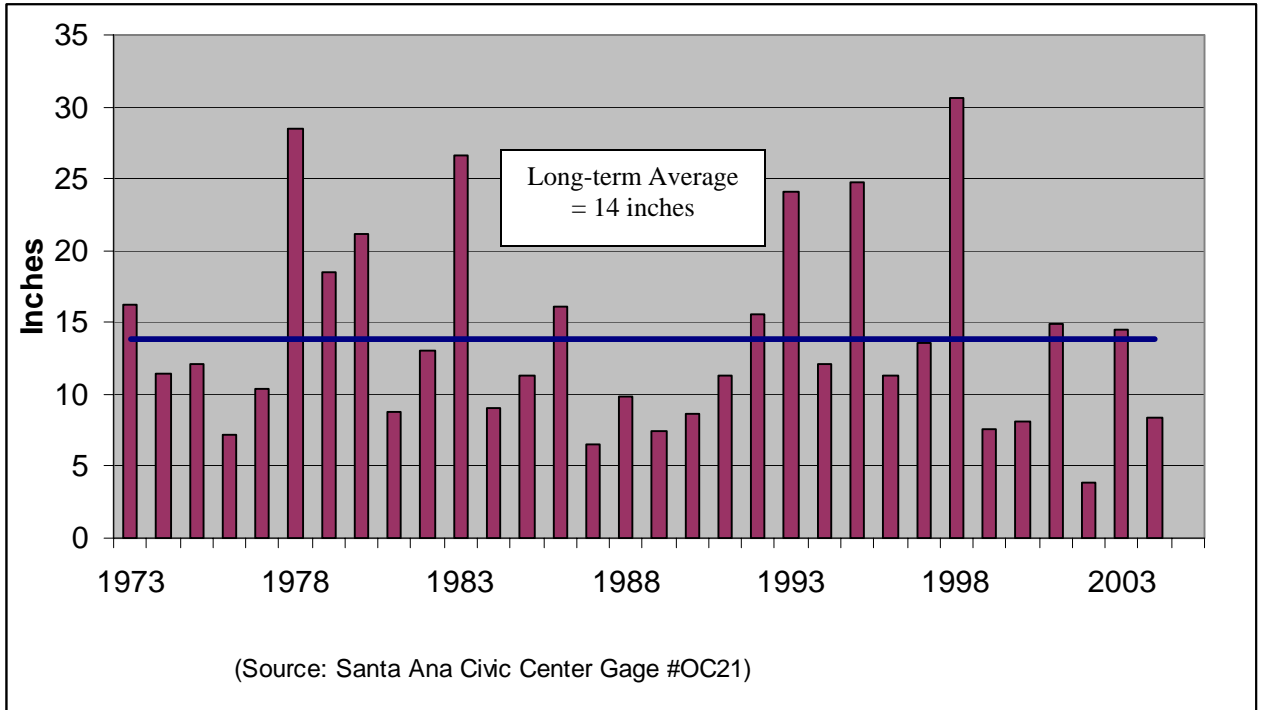


Table 1-2-3-2-A: Climate Characteristics in MWDOC’s Service Area

	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Standard Average ETo	2.18	2.49	3.67	4.71	5.18	5.87	6.29	6.17	4.57	3.66	2.59	2.25
Average Rainfall	2.53	2.73	2.21	1.01	0.26	0.07	0.01	0.08	0.27	0.36	1.32	1.99
Average Temperature	53.75	55.25	56.85	60.3	63.8	67.4	71.6	72.5	70.85	65.8	59.15	54.45

Sources:

- 1) Eto (Evapotranspiration) is based on California Irrigation Management Information System Station of Irvine South Coast Valleys
- 2) Rainfall and temperature information are based on station of Tustin Irvine Ranch
- 3) Average information are based on record from period of 12/1/1927 to 6/30/2003

1.2.3.3 Other Demographic Factors

Orange County is now home to more than 3 million people living in a 798-square-mile area. Comprised of 34 cities, from Brea in the north to San Clemente in the south, Orange County is recognized worldwide for its beaches, recreational facilities, and enviable quality of life.

Of particular note is Orange County's housing market where the median price of an existing resale single-family home is \$704,150. The average price of a new home is \$543,000. The average price of all homes sold in Orange County is nearing \$542,000. It should be noted that a relatively new phenomenon is occurring in the MWDOC service area – the emergence of high-rise condominiums. This type of housing is being marketed to homeowners tired of maintenance responsibilities.

It is estimated that of Orange County's labor force of over 1.6 million, nearly 1.55 million residents are currently

employed, making the unemployment rate a low 3.3%. The median family income is \$78,600; the per capita income is just over \$42,000 annually.

Major business sectors include:

Manufacturing;
Business and Professional;
Leisure and Hospitality;
Retail;
Government;
Education and Health;
Management; and
Information Services.

The area's gross county product is \$160.7 billion, with total taxable sales reaching \$12.7 million for the current year. Total assessed valuation for the county is just under \$312 billion.

1.2.4 Member Agencies

MWDOC serves 30 member agencies, including:

- City of Brea
- City of Buena Park
- City of Fountain Valley
- City of Garden Grove
- City of Huntington Beach
- City of La Habra
- City of La Palma
- City of Newport Beach
- City of Orange
- City of San Clemente
- City of San Juan Capistrano
- City of Seal Beach
- City of Tustin
- City of Westminster
- East Orange County Water District
- El Toro Water District
- Emerald Bay Services District
- Irvine Ranch Water District
- Laguna Beach County Water District
- Mesa Consolidated Water District
- Moulton Niguel Water District
- Orange County Water District
- Orange Park Acres Mutual Water Co.
- Santa Margarita Water District
- Santiago County Water District
- Serrano Water District

- South Coast Water District
- Golden State Water Company
- Trabuco Canyon Water District
- Yorba Linda Water District

1.2.5 Water Service Organization in MWDOC Service Area

Orange County relies on numerous sources of water and water purveyors to meet the needs of its growing population.

Imported water from Northern California and the Colorado River meet approximately half of the County's water needs. The water is provided by Metropolitan, which serves the needs of six counties – Ventura, Los Angeles, San Bernardino, Riverside, Orange, and San Diego.

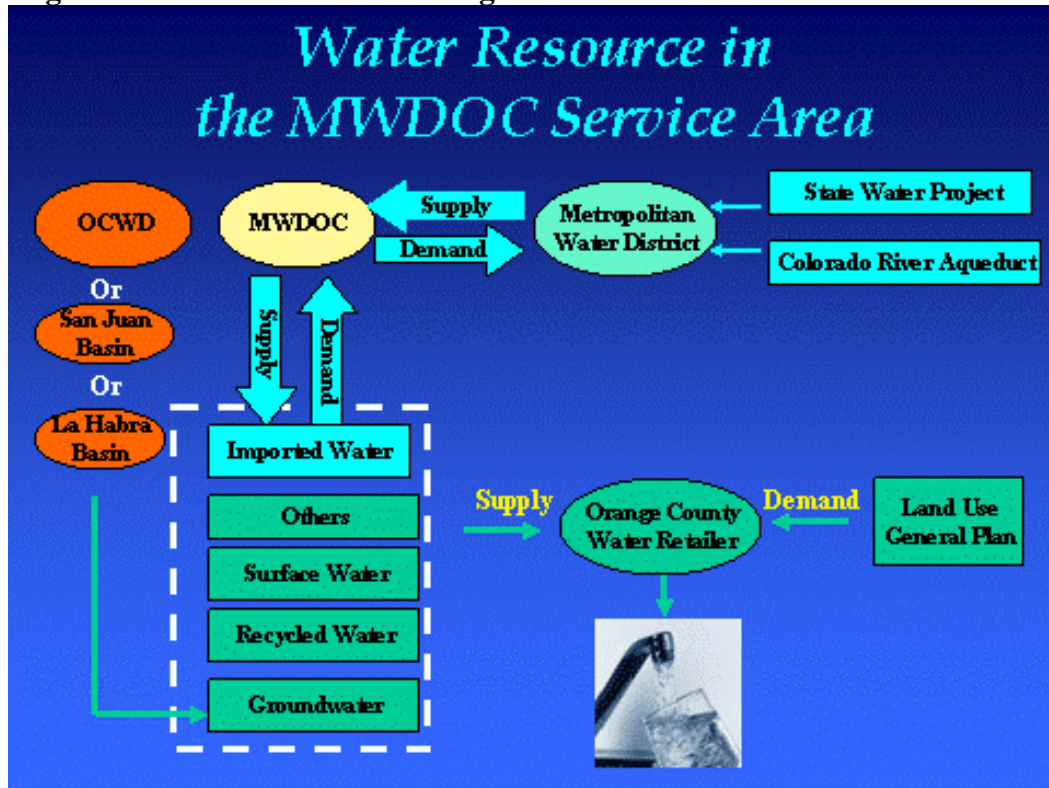
The MWDOC represents the interests of nearly all of Orange County and is Metropolitan's third largest member agency. The cities of Anaheim, Fullerton, and Santa Ana are Metropolitan member agencies and are not represented by MWDOC.

MWDOC is Orange County's imported water wholesaler, supplying 30 water retailers. These entities, comprised of cities and water districts, are referred to as MWDOC member agencies and provide water to approximately 2.3 million customers. South Orange County relies on imported water to meet approximately 95 percent of its water demand. The remaining five percent is provided by surface water, limited groundwater, and some water recycling.

The OCWD manages the Orange County groundwater basin. The groundwater basin, which underlies north and central Orange County, provides approximately 66 percent of the water needed in that area; imported water meets the balance of the water demand. Groundwater is pumped by producers before being delivered to customers.

Figure 1-2-5-A shows a diagram of the water service organization in the MWDOC service area.

Figure 1-2-5-A: Water Service Organization in MWDOC's Service Area



1.2.6 Board of Directors

MWDOC is governed by an elected seven-member Board of Directors, each board member representing a specific area of the County. Each director is elected to a four-year term by voters who reside within one of the seven divisions within the MWDOC service area.

Each director is a member of at least one of the following three working committees: Planning and Operations; Finance and Administration; and Public Affairs/MET Oversight. Each committee meets monthly. The full board convenes for its regular monthly meeting on the third Wednesday of the month.

The president of the board, vice president, and immediate past president also comprise the Executive Committee, which meets monthly with the general manager, assistant general manager, and board secretary.

References:

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

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