San Diego County Water Authority
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December 13, 2011

John V. Foley
Chairman of the Board
Metropolitan Water District of Southern California
P. O. Box 54153
Los Angeles, CA 90054-0153

Re: SB 60 Annual Public Hearing and Report to the Legislature Regarding Adequacy of MWD's Urban Water Management Plan
REQUEST TO INCLUDE INFORMATION IN REPORT TO LEGISLATURE

Dear Chairman Foley and Members of the Board of Directors:

We request that this letter and all of its attachments be made a part of today's board record and included in MWD's Annual Report to the Legislature regarding the adequacy of MWD's Urban Water Management Plan to achieve increased emphasis on cost-effective conservation, recycled water and groundwater recharge as described in the MWD Act.

As background to yesterday's public hearing on this subject, the Water Authority prepared and submitted to MWD a short PowerPoint presentation that was not allowed by Mr. Kightlinger to be shown to the board of directors. MWD staff also refused to distribute hard copies of the presentation to the board in accordance with the usual practice as stated on the speaker's request form; because of these refusals, San Diego Director Lewinger distributed the copies. We were not aware at the time of the hearing that the Water Authority's PowerPoint had already been loaded on the MWD computer, or we would have objected at that time. Water Authority staff was also informed yesterday that no presentations may be made to the MWD board unless they are first reviewed and approved by MWD management. We do not believe that MWD may place any such prior restraint on the content of material proposed to be presented at any public meeting of the MWD board of directors. As Chair, you undoubtedly know that the Brown Act expressly states that "a local agency shall not prohibit public criticism of the policies, procedures, programs, or services of the agency, or the acts or omissions of the legislative body." (Government Code § 54954.3 (c).)

Copies of the Water Authority's PowerPoint presentation, written testimony by Assistant General Manager Dennis Cushman and a report by Gordon Hess and Associates titled, *Comparison of MWD Demand Projections, Member Agency UWMPs and Local Water Supply Development Plans* (Hess Report), are attached. As you know, for the reasons described in Mr. Cushman's testimony and attachments, we believe that MWD focused on the wrong question at yesterday's public hearing and in its draft Report to the Legislature by limiting it to a report on MWD subsidy programs.

We also request that MWD inform the Legislature about its "Rate Structure Integrity" (RSI) "policy" and clause, which may be used by MWD to terminate all MWD funding agreements for conservation, recycled water and groundwater recharge in the event that agency challenges MWD's water rates in court or before the Legislature. Further, MWD should include in its SB 60 report that the MWD board has, in fact, terminated, with limited exception, all of the Water Authority's funding agreements that contain the RSI provision, and refused to enter into future funding agreements supporting conservation, recycled water and groundwater recharge in San Diego County. (A copy of MWD's June 23, 2011 to the Water Authority is attached.) MWD has essentially blackballed the Water Authority from participation in these programs, in spite of the fact that it continues to collect more than $16 million annually from San Diego County water ratepayers to pay for these programs. MWD should also inform the Legislature that the Water Authority is challenging MWD's actions and the constitutionality and legal propriety of the RSI clause in the lawsuit now pending in Superior Court in San Francisco.

For the reasons described in Mr. Cushman's testimony and in the Hess Report, we do not believe that MWD has done the analyses necessary – either in its 2010 Integrated Resources Plan (IRP) or 2010 Regional Urban Water Management Plan (RUWMP) to support and enhance water conservation, recycled water and groundwater recharge in Southern California. Indeed, the greatest impediment may be the very perpetuation of the notion that these projects will only be developed if MWD subsidizes them. Conservation is at an all-time high throughout the Southland as a result of the higher water rates being charged by MWD and its member agencies. More local water supply projects are being developed because they have become cost-competitive due to the higher water rates being charged by MWD. It is clearly time for a fresh and realistic look at MWD's demand and rate projections and to tie future resource planning directly to the willingness and firm financial commitment of its member agencies to pay.

Sincerely,

Lynne Heidel	Keith Lewinger	Fern Steiner	Doug Wilson
Director	Director	Director	Director

cc: MWD Board of Directors
Jeff Kightlinger, General Manager
San Diego County Water Authority Board of Directors

Attachments:

1. Water Authority's PowerPoint Presentation to MWD WP&R dated December 12, 2011
2. Water Authority Assistant General Manager Dennis Cushman's testimony
3. Comparison of MWD Demand Projections, MWD Member Agency UWMP's and Local Water Supply Development Plans, prepared by GH&A, Inc. December 2011
4. MWD June 23, 2011 letter to Water Authority

MWD Water Planning and Stewardship Committee Dec. 12, 2011 Agenda Item 2a:

Annual public hearing on MWD Regional Urban Water Management Plan

San Diego County Water Authority
December 2011

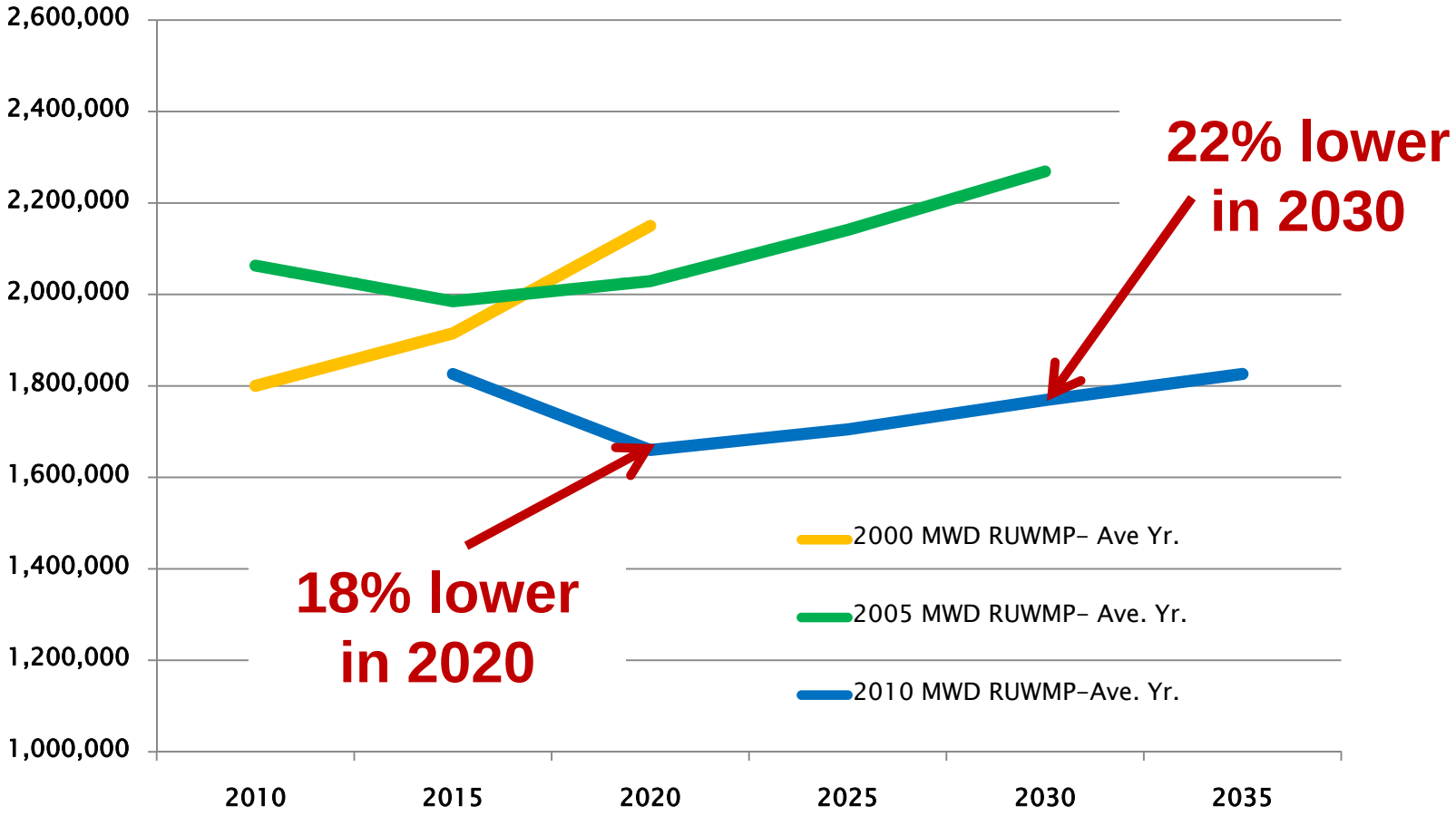
Purpose of SB 60 Annual Public Hearing is to Review MWD's RUWMP

- Legislative intent was that Southern California increase reliance on local water supplies
  - Cost-effective conservation
  - Recycling
  - Groundwater recharge
- Requirement for annual report is not limited to MWD "achievements" or only projects that receive MWD subsidies
- 1996 IRP recognized increased need for MWD to coordinate planning with its member agencies and retail water suppliers
- The report to the Legislature should include all progress and planning for Southern California's increased reliance on local supplies

San Diego County Water Authority

Comparison of Current and Past RUWMP's

MWD Average Year Firm Demands 2000 and 2005 vs. 2010 Forecasts



Source: MWD 2000, 2005 and 2010 Regional Urban Water Management Plans

San Diego County Water Authority

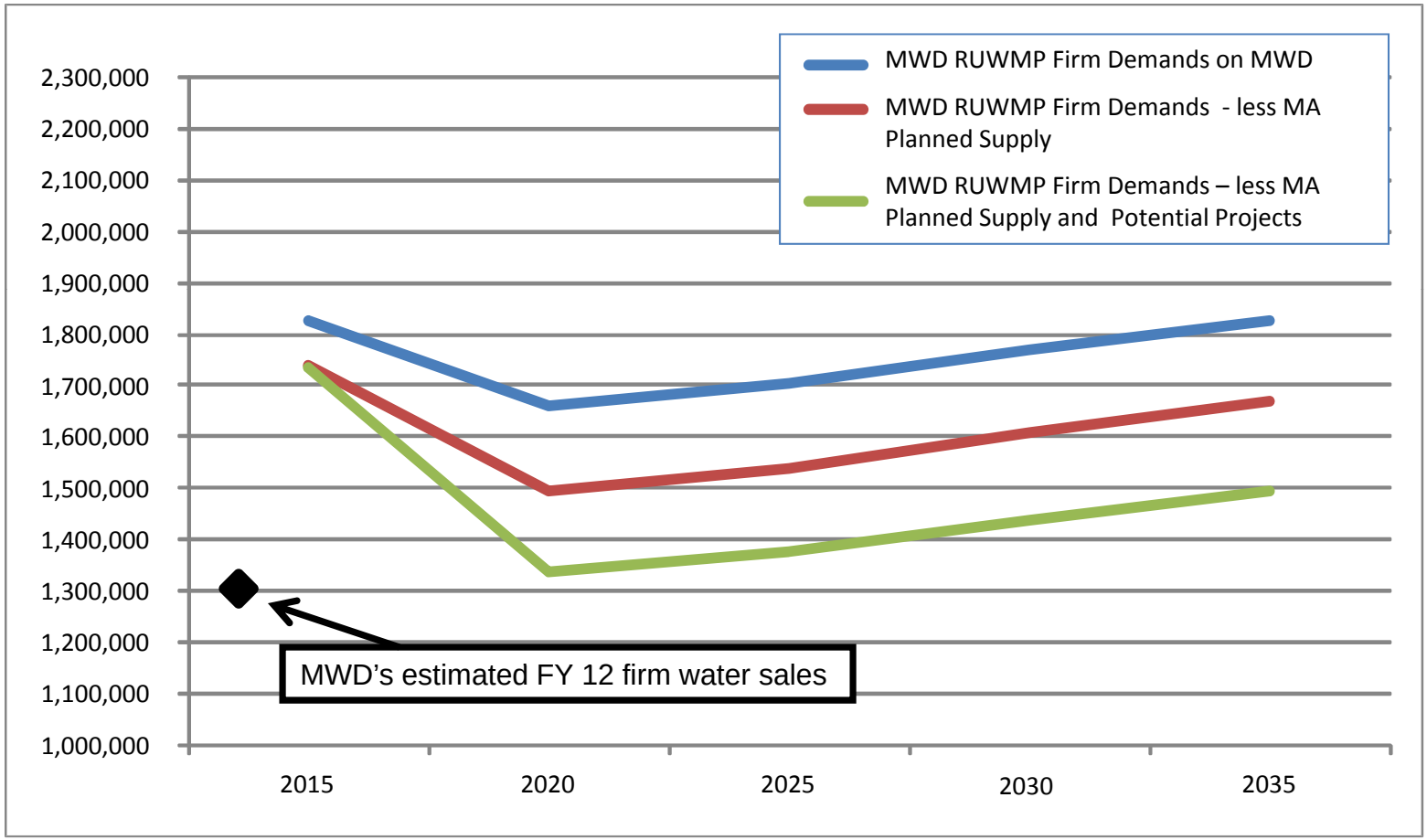
Examples of Member Agency Planned Supplies Not Included in MWD's 2010 RUWMP

Local Supply	Included in Member Agency UWMP Future Supply	Included in MWD's RUWMP	Annual Quantity
Long Beach – Seawater Desalination	Yes	No	5,000 AF beginning in 2025
SDCWA – Seawater Desalination	Yes	No	56,000 AF beginning in 2020
West Basin – Seawater Desalination	Yes	No	21,500 AF beginning in 2020
Los Angeles Aqueduct – Difference in Supply Assumptions	Yes	No	28,000 AF in 2015 decreasing to 14,000 AF in 2035
LADWP Water Transfers	Yes	No	40,000 AF beginning in 2015
Total	**Yes**	**No**	**136,500 to 150,500 AF/YR**

San Diego County Water Authority

MWD RUWMP Demands on MWD Ignores Member Agency Planned Supplies and Potential Projects

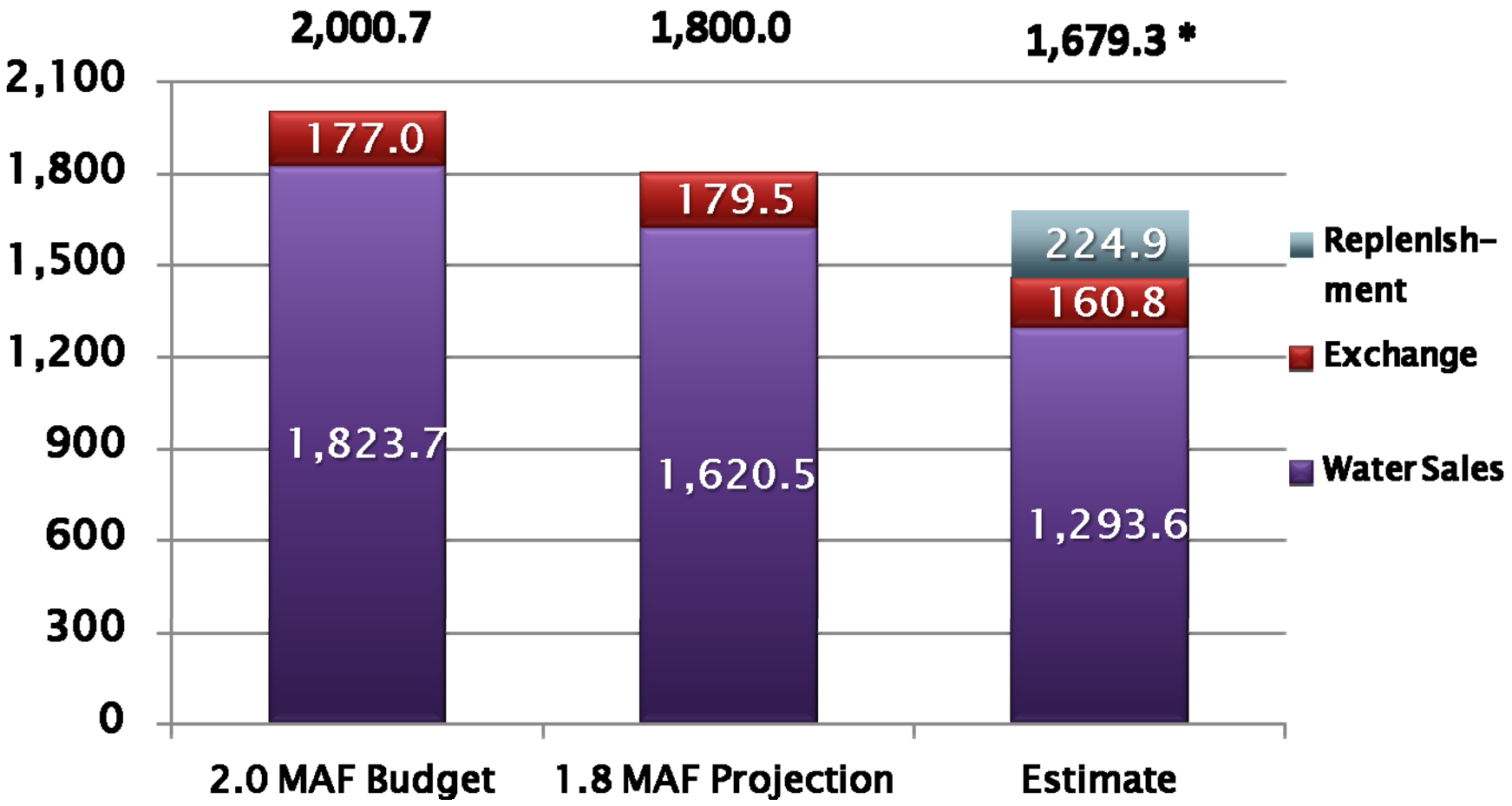
Average Year



(MWD Slide)

FY 11/12 Sales Mix

As of November 30, 2011
(AF in thousands)



* Excludes the 105,000 acre-feet Coachella Valley Water District exchange transaction

Policy and Budget Recommendations for MWD and State Legislature

- Produce special update of RUWMP
  - Reflect reduced demands
  - Strengthen coordination with member agencies and retail water suppliers
  - Pending results, implement moratorium on LRP and discounted water programs
    - Will mitigate and potentially avoid rate hikes
- Produce Long Range Finance Plan forecasts based upon new era of reduced MWD water sales
- Develop FY 2013 and future budgets based upon lower water sales projections
  - "Right-size" MWD to its new circumstances and future

San Diego County Water Authority

Testimony of Dennis Cushman
Assistant General Manager, San Diego County Water Authority
At MWD Water, Planning & Stewardship Committee
Public Hearing on SB 60
Agenda Item 2a: Annual Review of MWD's Regional UWMP

Thank you, Chairman DeJesus, and members of the Committee. I'm Dennis Cushman, assistant general manager of the San Diego County Water Authority. I have a few slides I would like to share with the Committee as part of my testimony.

[First slide please.]

Senate Bill 60 of 1999 requires that MWD hold a public hearing annually to review its Urban Water Management Plan. Today's public hearing was not noticed to review MWD's Urban Water Management Plan, but my testimony on MWD's draft SB 60 Report to the Legislature is offered in the context of SB 60 and the MWD Act and the responsibility to report on Metropolitan's 2010 Urban Water Management Plan.

First, the legislative intent of SB 60 was for MWD to report, annually, on Southern California's progress in developing local water resources and increasing conservation to reduce dependence upon imported water supplies, notably the Sacramento-San Joaquin Bay-Delta. However, the draft report before you today does not provide a comprehensive review of Southern California's progress. Instead, the draft report only reports on local water supply projects and conservation programs for which MWD provides financial subsidies. MWD leaves out from its report any mention of Southern California's local supply development and conservation that does not depend upon, nor receive subsidies from, MWD. This is a fatal flaw in the draft report before you, as it misinforms the Legislature through omission: omission of hundreds of thousands of acre-feet of local water supply development and conservation for which MWD provides

no subsidies. For this reason, we request that MWD's report be modified to include *all progress and planning for Southern California's increased reliance on local water supplies and conservation.*

[Next slide, please.]

Let's focus first on MWD's 2010 Urban Water Management Plan, as compared to its 2005 and 2000 plans. As this graphic shows, MWD's firm water sales projections are far lower than its earlier plans: 18 percent lower in 2020, and 22 percent lower in 2030. As this graph – and MWD's own projections show – there has been a seismic shift in Southern California – and it will have substantial implications for MWD's water supply planning.

[Next slide, please.]

Despite concerns expressed by the Water Authority more than one year ago, in November 2010 MWD's board of directors approved, and MWD filed its 2010 Regional Urban Water Management Plan. MWD submitted its plan nine months before it and its member agencies were required to file their UWMPs.

As a result, the Water Authority commissioned a study to compare MWD's 2010 Urban Water Management Plan with the plans of its 26 member agencies. Mr. Chairman, I request that this report be made a part of the record of this public hearing, and included as part of MWD's report to the Legislature.

So, what does this report show? First, there are significant differences between MWD's plan and those of its member agencies.

This slide shows just five member agencies' plans for local supply development that MWD failed to capture in its 2010 Urban Water Management Plan. These include

projects by Long Beach, West Basin Municipal Water District, Los Angeles and the Water Authority. As an example of local water supply development not included in MWD's RUWMP, the Water Authority is in final negotiations to purchase 56,000 acre-feet of water annually from the Carlsbad Seawater Desalination Plant. When that plant goes on line, MWD's water sales will decline by 56,000 acre-feet annually – yet its Urban Water Management Plan – and its draft SB 60 report to the Legislature – does not account for these supplies.

[Next slide, please.]

Everyone agrees that local water supply development and conservation are good public policy objectives, and the progress made to date in Southern California – and additional progress planned by local agencies – has been significant since SB 60 was passed in 1999. But MWD's draft report – focused only on local water supply development MWD has subsidized – does not fully capture this progress.

The blue line on this slide shows MWD's forecast of firm demands in average years, as contrasted against the cumulative demands of its member agencies in their Urban Water Management Plans when their planned supplies and potential supply projects are considered. It is clear from this graphic that MWD is overestimating demands of its member agencies, and therefore underestimating in its draft SB 60 report to the Legislature Southern California's plans to reduce dependence upon imported water supplies.

I want to pause here for a reality check: are the plans of MWD's member agencies unrealistic? No, they are not. I draw the Committee's attention to the black dot on the left side of the graph: that dot represents MWD staff's estimate for where

Fiscal Year 2012 firm water sales by MWD will end. MWD's firm water sales this year – today – are already more than 500,000 acre-feet below where MWD's 2010 Urban Water Management Plan projects they will be in just three years – 2015.

[Next slide, please.]

This is the slide MWD's Finance staff showed the Finance and Insurance Committee earlier this morning. It shows that current year sales of firm water are projected to end between 327,000 and 530,000 acre-feet below projections in this Board's projected and adopted budgets.

[Next slide, please.]

If there was ever a time for this Board to step back, pause and take stock of Metropolitan's future, today is that time. The Water Authority respectfully requests and recommends that the Board:

1. Produce an update of its Urban Water Management Plan and take into account the real local water supply development and conservation plans of its member agencies;
2. Produce a Long Range Finance Plan that forecasts MWD's sales and revenues based upon the updated Urban Water Management Plan; and,
3. Develop the FY 2013 and future MWD budgets based upon the lower water sales projections of the updated Urban Water Management Plan.

Thank you. I would glad to respond to any questions you may have.

Comparison of MWD Demand Projections, MWD Member Agency UWMPs and Local Water Supply Development Plans

Prepared for:
San Diego County Water Authority

Prepared by:
Gordon Hess and Associates, Inc.
December 2011

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1.0 Overview

Every urban water supplier (supplier), as defined, is required by the California Urban Water Management Planning Act to update its Urban Water Management Plan (UWMP) and submit a complete version to the California Department of Water Resources (DWR) every five years. Each supplier is required to file its 2010 plan with DWR by August 1, 2011. The urban water management plan is intended to serve as a long-term planning tool for the supplier to ensure adequate water supplies are available for the city, water district or region it serves.

The Metropolitan Water District of Southern California (MWD) is a regional provider of imported water to all or portions of six southern California counties, including Ventura, Los Angeles, Orange, San Bernardino, Riverside and San Diego. MWD is a water wholesaler with no retail customers and provides treated and untreated water to its member agencies. MWD consists of 26 member agencies, including 14 cities, 11 municipal water districts, and one county water authority. MWD's 26 member agencies deliver to their customers a combination of local groundwater, surface water, recycled water, and imported water purchased from MWD or other sources. Roughly half of the water used in MWD's service area is purchased directly or indirectly from MWD, and therefore MWD plays an important role in ensuring coordinated planning to meet existing and future demand for water in Southern California.

MWD prepared and approved its Regional Urban Water Management Plan (RUWMP) in November 2010, approximately nine months before it was due to be filed with DWR and prior to its member agencies finalizing or approving their UWMPs. Although member agencies advise MWD in April of each year how much water they anticipate they will need during the next five years, and MWD works with its member agencies to forecast future water demands (RUWMP at page 1-7), MWD's RUWMP and the member agencies' UWMPs are not formally or functionally integrated. MWD did not seek the consent of its member agencies to include planning elements in its RUWMP that might reduce demand on MWD water supplies. Rather, MWD limited its RWUMP discussion to activities by its member agencies that relate to one of MWD's own water demand or supply management programs (RUWMP at page 1-5). For this reason, assumptions of overall future demands at the member agency level differ from what MWD has assumed in its RUWMP. Additionally, assumptions by the member agencies regarding the reliability of existing local supplies in both normal and dry years differ from MWD assumptions. These differences can, and do, lead to different projected demands on MWD by MWD, on one hand, and by its member agencies and retail water suppliers, on the other.

2.0 Scope of Report

The San Diego County Water Authority retained the services of Gordon Hess and Associates, Inc. (GHA, Inc.), to summarize major elements of each MWD member agency UWMP and compare the aggregate of those plans to MWD's RUWMP. GHA Inc. provides clients with consulting services related to policy, cost, and water rate impacts of infrastructure and water supply development. Its principal, Gordon Hess, P.E. (ghess@ghawater.com), has more than 35 years of public and private sector experience in integrated water resources planning, design and construction of water infrastructure, and formulating local, regional and federal water policies.

This report provides an overview of data obtained from each MWD member agency UWMP, including current water demand, supply sources, and population. In addition, each member agency's UWMP projected future demand, population, and supply sources are presented along with per capita water use and targets. This report is not intended to be a comprehensive summary of each member agency's UWMP, but rather, an overview and comparison of certain key information relative to future water demands on MWD. Notably, this report does not include an analysis of the many other UWMPs filed by public water suppliers including cities, utilities and agencies throughout Southern California, many of which have plans to develop local water supplies in order to reduce demand on imported water. See, generally, http://www.water.ca.gov/urbanwatermanagement/2010uwmps/.

In addition to providing a summary of MWD's and its member agencies' UWMP supply and demand projections, the cumulative demand on MWD as included in the member agency plans is presented and compared to MWD's RUWMP forecast of MWD demand for normal, single dry year, and multiple dry years.[1] In a few cases, the member agency UWMP compares member agency forecasts of MWD demand to what MWD assumed for individual agency MWD demand. However, MWD's RUWMP does not provide a breakdown among individual member agencies as to demands on MWD.

All UWMPs evaluated contain detailed information regarding conservation efforts that are, or will be undertaken to accomplish SBX7-7 conservation targets for 2015 and 2020. This analysis does not summarize these efforts by MWD and its member agencies. For detailed information regarding the plans of agencies to meet conservation goals, please refer to the individual UWMPs.

3.0 UWMP Planning Act

The California Urban Water Management Planning Act requires all urban water suppliers in the state to prepare UWMPs and update them every five years. DWR provided a *Guidebook to Assist Urban Water Suppliers to Prepare a 2010 UWMP* for preparation of the plans. Since plans were last prepared in 2005, amendments were made to the UWMP Act, including:

- Water Code Section 10631.1 requires a plan by retail water suppliers to include water use projections for single- and multi-family residential housing needed for lower income and affordable households, to assist with compliance with the existing requirement under Section 65589.7 of the Government Code, that suppliers grant a priority for the provision of service to housing units affordable to lower income households.

[1] While this analysis provides information derived from individual and cumulative member agency UWMP forecasts and compares that to what is contained in MWD's plan, this report is not an evaluation of the adequacy of the member agency UWMPs, nor does it verify whether member agencies' targets or calculations for meeting SBX7-7 per capita water use goals are correct or appropriate. Each member agency has, or will submit its UWMP to DWR as required by law, and it is assumed that DWR will review the plans and note any further information that may be required to comply with applicable UWMP requirements.

- Water Code Section 10621(b) clarifies that every urban water supplier preparing a plan must give at least 60 days advanced notice to any city or county prior to the public hearing on the plan within which the supplier provides water supplies to allow for consultation on the proposed plan.
- Water Code Section 10631(j) deems water suppliers that are members of the California Urban Water Conservation Council (CUWCC) and comply with the Memorandum of Understanding (MOU), as it may be amended, to be in compliance with the requirement to describe the supplier's water demand management measures in its UWMP.
- Water Code Section 10631.7 required DWR, in consultation with the CUWCC, to convene a technical panel, no later than January 1, 2009, to provide information and recommendations to DWR and the Legislature on new demand management measures, technologies, and approaches. The panel and DWR were to report to the Legislature on their findings no later than January 1, 2010 and every five years thereafter;
- Water Code Section 10633(d) clarifies that the "indirect potable reuse" of recycled water should be described and quantified in the plan, including a determination regarding the technical and economic feasibility of serving those uses.
- Water Code Section 10644(c) requires DWR to recognize exemplary efforts by water suppliers by obligating DWR to identify and report to the technical panel, described above, and "exemplary elements" of individual water suppliers' plans, meaning any water demand management measures adopted and implemented by specific urban water suppliers that achieve water savings significantly above the levels required to meet the conditions for state grant or loan funding.
- Water Code Section 10631.5 was amended to address conditions of eligibility for grants or loans from DWR. DWR will consider whether the urban water supplier has submitted an updated plan when determining eligibility for funds made available pursuant to any program administered by the Department.

In addition to changes in the Act, the state Legislature passed Senate Bill 7 as part of the Seventh Extraordinary Session, referred to as SBX7-7, on November 10, 2009, which became effective February 3, 2010. This new law was the water conservation component of the Delta legislation package, and seeks to achieve a 20 percent statewide reduction in urban per capita water use in California by December 31, 2020. The law requires each urban retail water supplier to develop urban water use targets to help meet the 20 percent goal by 2020, and an interim water reduction target by 2015.

Urban retail water suppliers must include in their 2010 plans the following information from the bill's target setting process: (1) baseline daily per capita water use; (2) urban water use target; (3) interim water use target; (4) compliance daily per capita water use, including technical bases and supporting data for those determinations. An urban retail water supplier may update its 2020 urban water use target in its 2015 urban water management plan. (Water Code Section 10608.20.) Wholesale water suppliers must include in their 2010 Plans an assessment of their present and proposed future measures, programs and policies to help retail agencies achieve their water use reduction targets.

Additionally, Water Code Sections 10910 through 10914 and Government Code Sections 65867.5, 66455.3, and 66473.7 (commonly referred to as SB 610 and SB 221) amended state law effective January 1, 2002 to improve the link between information on water supply availability and certain land use decisions made by cities and counties. SB 610 requires that the water purveyor of the public water system prepare a water supply assessment to be included in the environmental documentation of certain large proposed projects. SB 221 requires affirmative written verification from the water purveyor of the public water system that sufficient water supplies are available for certain large residential subdivisions of property prior to approval of a tentative map. Most plans contain documentation on the existing and planned water supplies being developed by the water provider that can be used in preparing the water supply assessments and written verifications required under state law. Specific documentation on MWD supplies can be found in its RUWMP.

4.0 MWD's Regional Urban Water Management Plans – Past and Present

MWD is a water wholesaler with no retail customers, providing treated and untreated water directly to its 26 member agencies. For some member agencies, MWD supplies all the water provided by the agency within its service area, while others obtain varying amounts of water from MWD to supplement their local and other imported supplies. MWD provides between 45 and 60 percent of the municipal, industrial, and agricultural water used in its service area.

After the drought of 1987-1992, MWD faced changed conditions and the need to develop a long-term water resources strategy to fulfill the agency's stated mission of providing reliable water supplies to its service area. An integrated resources planning process was undertaken and MWD's first Integrated Resources Plan (IRP) was adopted in 1996. The plan recognized that MWD's role increasingly should be focused on coordinating its planning activities with those of its member agencies and the other retail water suppliers they serve (RUWMP at page 2-2). The plan also recognized that the region's future water supply reliability would increasingly depend on striking a balance between demand management and supply augmentation by MWD, its member agencies and other public water suppliers. The resulting IRP strategy attempted to balance demand management, imported supply augmentation and local supply development. In dry years, MWD was counting on conservation, local supplies, withdrawal from storage, and water transfers to augment available imported water supplies. From this plan, MWD developed a RUWMP in 2000. The plan estimated average year, single dry year, and multiple dry year demands on MWD to the year 2020 as follows:

Table 1- MWD 2000 Urban Water Management Plan (From MWD Table II-3)

MWD Total Demand, MAF/Yr	2005	2010	2015	2020
Average Year	1.90	1.95	2.08	2.30
Single Dry Year	1.91	1.97	2.09	2.32
Multiple Dry Years	2.20	2.25	2.36	2.57

The 2000 plan estimated groundwater replenishment as follows:

Table 2- MWD 2000 Urban Water Management Plan (From MWD Table II-3)

Groundwater Replenishment Demand, MAF/Yr	2005	2010	2015	2020
Average Year	0.16	0.16	0.17	0.18
Single Dry Year	0.17	0.17	0.18	0.19
Multiple Dry Years	0.17	0.17	0.17	0.18

From this, the net firm demand on MWD can be determined by subtracting groundwater replenishment demand from the MWD total demand:

Table 3- MWD Firm Demand from 2000 MWD Urban Water Management Plan

Net Firm MWD Demand, MAF/Yr	2005	2010	2015	2020
Average Year	1.74	1.79	1.91	2.12
Single Dry Year	1.74	1.80	1.91	2.13
Multiple Dry Years	2.04	2.08	2.19	2.39

In 2004, the MWD Board adopted an updated IRP. Legislation concerning population growth and water supply called for further planning considerations. The IRP Update had three objectives: (1) Review the goals and achievements of the 1996 IRP; (2) Identify the changed conditions for water resource development; and (3) Update resource development targets through 2025 (RUWMP at page 2-2). The 2004 IRP process also updated the long-term plan to account for the new water planning legislation. MWD's RUWMP states that, "the updated plan contained resource development targets through 2025, which reflected changed conditions; particularly increased conservation savings, planned increases in local supplies and uncertainties" (RUWMP at page 2-2). The "uncertainties" noted by MWD were "the level of population and economic growth which directly drive water demands, water quality regulations, new chemicals found to be unhealthful, endangered species affecting sources of supplies, and periodic and new changes in climate and hydrology" (RUWMP at pages 2-2 – 2-3). To address these uncertainties, MWD added a 10 percent "planning buffer" of additional water supply to be developed. Estimated MWD demands from the 2004 update were used as the basis for MWD 2005 Urban Water Management Plan. The plan estimated average year, single dry year, and multiple dry years demands on MWD to the year 2030 as follows:

Table 4- MWD 2005 Urban Water Management Plan (From MWD Tables II-5,6 and 7)

Total MWD Demand, MAF/Yr	2010	2015	2020	2025	2030
Average Year	2.262	2.191	2.234	2.341	2.460
Single Dry Year	2.523	2.414	2.457	2.565	2.671
Multiple Dry Years	2.570	2.499	2.515	2.635	2.761

For the 2005 plan, firm demand on MWD was shown as follows:

Table 5- MWD 2005 MWD Urban Water Management Plan (From MWD Tables II-5,6 and 7)

Firm MWD Demand, MAF/Yr	2010	2015	2020	2025	2030
Average Year	2.063	1.985	2.029	2.141	2.269
Single Dry Year	2.348	2.234	2.275	2.388	2.511
Multiple Dry Years	2.420	2.341	2.355	2.479	2.609

MWD again updated its IRP in 2010. MWD described the basic objectives of the 2010 IRP update as follows: "1. Review the achievements of the 1996 IRP and the 2004 Update; 2. Identify changing conditions affecting water resource management (attention will be given to emerging factors and considerations, such as the current drought, climate change, energy use, and changes in Delta pumping operations); and 3. Update resource development targets through 2030 (discussion will focus on adaptation to future uncertainties, and potential alternatives for further diversifying Metropolitan's water resource portfolio and increasing supply reliability in the face of changing circumstances" (RUWMP at page 2-3).

MWD's 2010 RUWMP was derived from the 2010 IRP update, and again estimated average year, single dry year, and multiple dry years demands on MWD as follows:

Total Demand:

Table 6- MWD 2010 Urban Water Management Plan (From MWD Tables 2-6, 7 and 8)

Total MWD Demand, MAF/Yr	2015	2020	2025	2030	2035
Average Year	1.928	1.763	1.808	1.874	1.931
Single Dry Year	2.094	1.993	2.025	2.080	2.146
Multiple Dry Years	2.154	2.049	2.106	2.163	2.224

Firm Demand:

Table 7- MWD 2010 MWD Urban Water Management Plan (From MWD Table 2-6, 7, and 8)

Firm MWD Demand, MAF/Yr	2015	2020	2025	2030	2035
Average Year	1.826	1.660	1.705	1.769	1.826
Single Dry Year	1.991	1.889	1.921	1.974	2.039
Multiple Dry Years	2.056	1.947	2.003	2.059	2.119

As can be seen in the figures below, each MWD Regional Urban Water Management, from 2000 to 2010, resulted in decreased projections of firm demands on MWD.

Figure 1

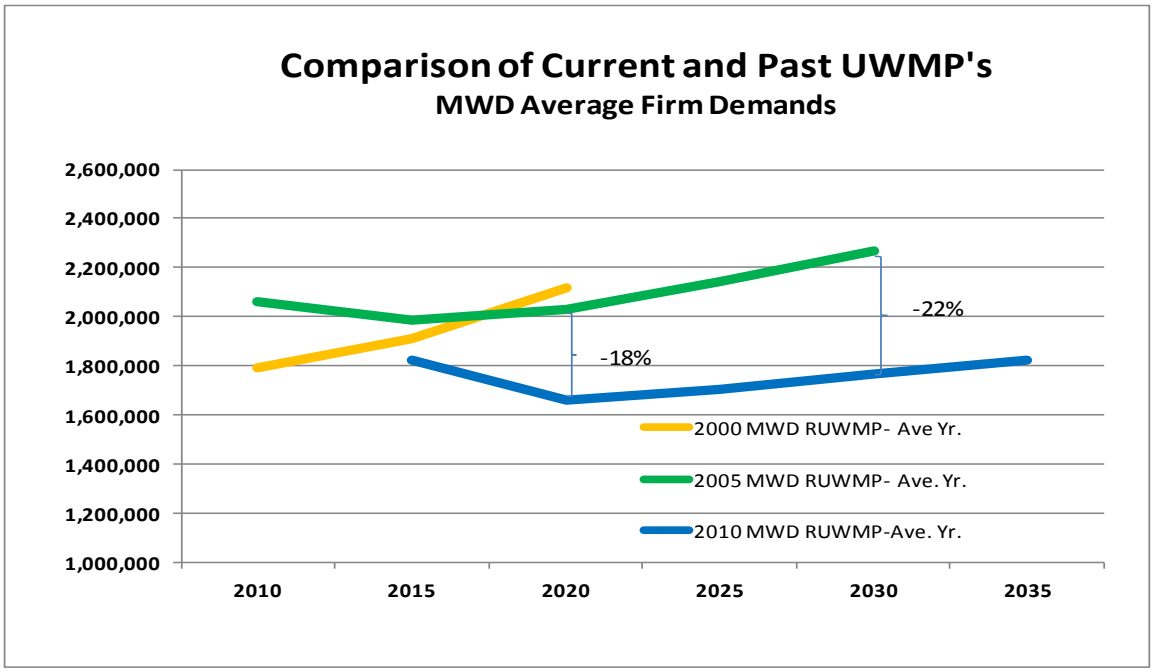
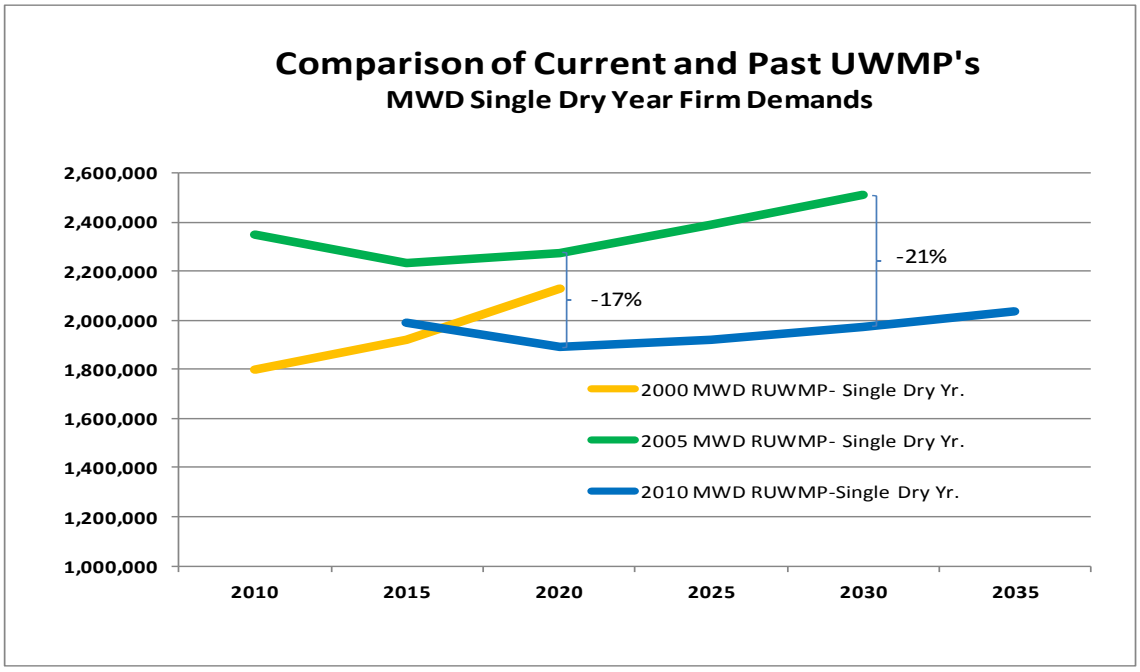


Figure 2



5.0 MWD Demands According to MWD's RUWMP

MWD's 26 member agencies deliver to their customers a combination of local groundwater, local surface water, recycled water, and imported water purchased from MWD and other sources. Some MWD member agencies provide retail water service, while others provide water to the local area as wholesalers (see RUWMP, Table 1-2 at page 1-8, reproduced below). For some member agencies, MWD supplies all the water used within that agency's service area, while others obtain varying amounts of imported water from MWD to supplement local supplies. This local supply comes from local wells, local surface water, recycling and desalination. Two agencies import water from sources other than MWD: The City of Los Angeles brings imported water from the eastern Sierra Nevada mountains through its Los Angeles Aqueduct; and the San Diego County Water Authority (SDCWA) imports conserved water from the Imperial Irrigation District and the All-American and Coachella Canal lining projects through MWD's Colorado River Aqueduct and other MWD facilities. Member agencies also have water conservation programs that reduce demand on MWD imported water supplies.

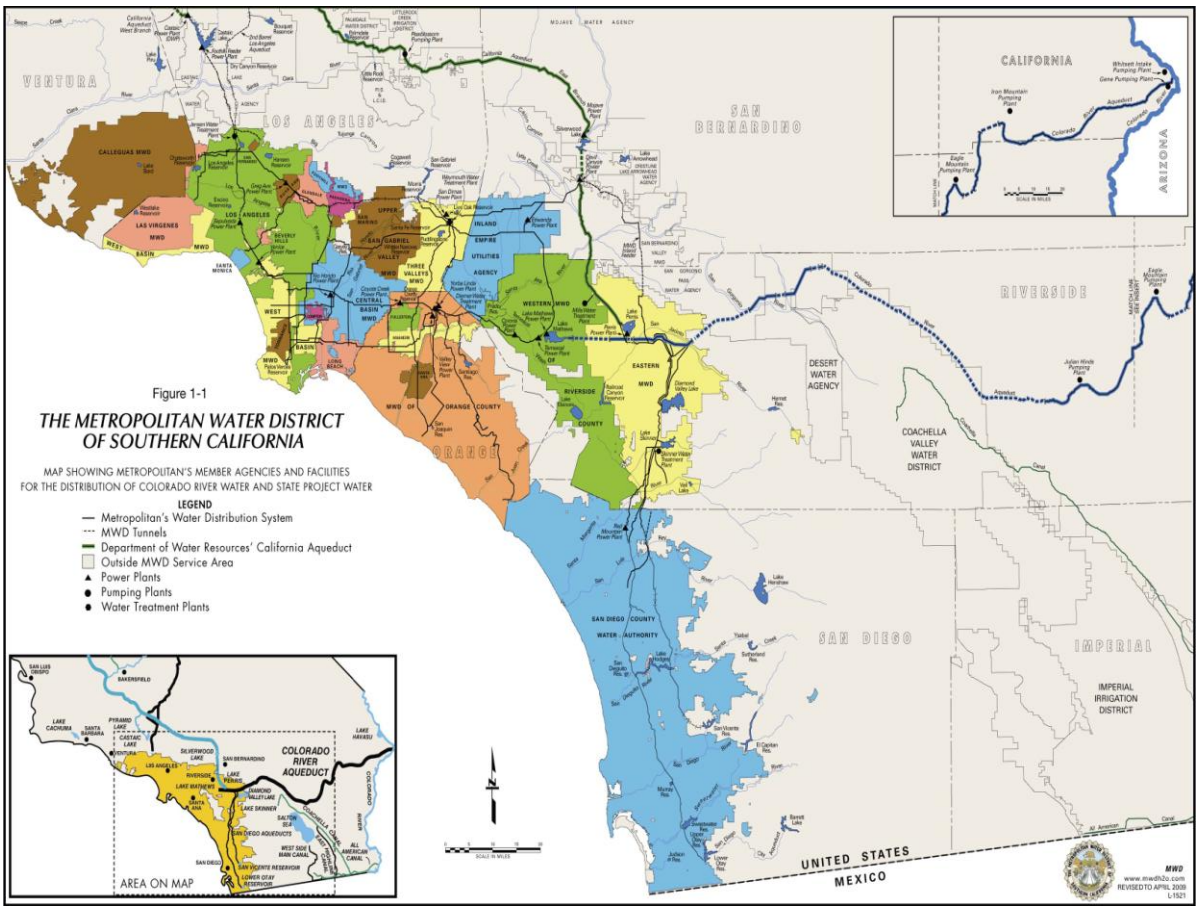
Table 8- MWD's Member Agencies and Type of Water Service Provided

County and Member Agency	**Type of Water Service**
Los Angeles County	
Beverly Hills, City of	Retail
Burbank, City of	Retail
Central Basin Municipal Water District	Wholesale
Compton, City of	Retail
Foothill Municipal Water District	Wholesale
Glendale, City of	Retail
Las Virgenes Municipal Water District	Retail
Long Beach, City of	Retail
Los Angeles, City of	Retail
Pasadena, City of	Retail
San Fernando, City	Retail
San Marino, City	Retail
Santa Monica, City	Retail
Three Valleys Municipal Water District	Wholesale
Torrance, City of	Retail
Upper San Gabriel Valley Municipal Water District	Wholesale
West Basin Municipal Water District	Wholesale
Orange County	
Anaheim, City of	Retail
Fullerton, City of	Retail
Municipal Water District of Orange County	Wholesale
Santa Ana, City of	Retail
Riverside County	
Eastern Municipal Water District	Retail and Wholesale

Western Municipal Water District	Retail and Wholesale
San Bernardino County Inland Empire Utilities Agency	Wholesale
San Diego County San Diego County Water Authority	Wholesale
Ventura County Calleguas Municipal Water District	Wholesale

Approximately 250 retail water suppliers including cities, utilities and water agencies directly serve water ratepayers throughout MWD's service area. MWD's member agencies collectively serve 152 cities and 89 unincorporated communities (RUWMP, Table 1-3 at page 1-9). As noted earlier, this report does not analyze or address the UWMPs filed by all of these retail water suppliers. However, it may be noted generally that many retail water suppliers have plans to develop local water supplies in order to reduce demand on imported water. Further, the plans of some retail agencies appear to be inconsistent with the plans of MWD member agencies. Some agencies, such as the Water Replenishment District of Southern California, that are not required to prepare and file an UWMP also have plans to reduce future purchases of imported water.

Figure 3- MWD Service Area and Member Agencies



Each of the MWD member agencies prepared a 2010 UWMP. Like MWD's RUWMP, wholesale member agencies' UWMPs are used as a planning tool to provide retail water suppliers guidance as to the demand and availability of water supplies. All member agencies stated that they coordinated with MWD in the preparation of UWMPs; however, not all agencies used the same supply and demand estimates that were the basis of the MWD RUWMP. In many cases, wholesale member agencies had separate models that estimated future demands, or received and used information provided by their own retail agencies. In some cases, such as Calleguas MWD, differences between MWD's RUWMP forecast of demands on MWD for the agency are compared to the agency's own forecast of demands. Each agency summary in Appendix A provides an overview of the member agency and how the member agency forecast its demands. Appendix B provides specific data from the member agency plans and cumulative totals for supplies and demands contained in the plans.

There are also differences between what a member agency assumes in its forecast of local supply development and what local supply development MWD assumes in its RUWMP. Examples of these differences include both the quantity of available existing supplies, such as Los Angeles Aqueduct flows during normal, dry and multiple dry year conditions and the planning assumptions of availability of future supplies. The San Diego County Water Authority, Long Beach, and West Basin MWD all include seawater desalination in their future available supplies, but MWD does not account in its 2010 RUWMP for any seawater desalination in its estimate of member agency local water supplies. This is in contrast to MWD's 2005 RUWMP, when it included in its planning 150,000 acre-feet of seawater desalination as future available local water supplies.

All MWD member agencies prepared UWMP's in accordance with DWR guidelines for plans. Each plan included discussion of demographics, available water supplies and quality, regional and local water supply programs, low income household water use, overall water supply and demands, demand management, reliability planning and emergency contingency planning. Most agencies cited and depended upon MWD's RUWMP, particularly MWD's Tables 2-9, 2-10, and 2-11 (as shown on pages 12, 13, and 14) as the basis for their conclusions that sufficient (or even surplus) imported water supplies exist to meet their future imported water demands. These MWD tables show what MWD estimates as its surplus supply in average, single dry year, and multiple dry years with the "Capability of Current Program" as follows:

Table 9- MWD's Estimated Surplus Supplies with Current Program Capability, Acre-Feet per Year

Supply Condition	2015	2020	2025	2030	2035
Average Year	1,479,000	1,877,000	2,104,000	1,898,000	1,708,000
Single Dry Year	286,000	620,000	776,000	569,000	371,000
Multiple Dry Year	12,000	229,000	237,000	120,000	16,000

MWD's projections of surplus supplies under all planning scenarios and years are not stated to be dependent upon implementation of interim or permanent Bay-Delta conveyance projects. MWD also estimated how much its surplus supply would increase should programs under development be added to its supply. These programs include adding additional in-region storage programs, programs on the California Aqueduct (Bay-Delta conveyance improvements), and additional Colorado River supplies. The Colorado River Aqueduct (CRA) is assumed to be full (1.25 MAF) under both the current program and "Programs Under Development" scenarios.

Table 10- MWD's Estimated Surplus Supplies with Capability of "Programs Under Development" Acre-Feet per Year

Supply Condition	2015	2020	2025	2030	2035
Average Year	2,067,000	2,566,000	3,155,000	2,949,000	2,759,000
Single Dry Year	1,048,000	1,482,000	1,812,000	1,605,000	1,407,000
Multiple Dry Year	416,000	782,000	970,000	875,000	771,000

Figure 4- MWD's Table 2-9 from the 2010 RUWMP

Table 2-9
Single Dry-Year
Supply Capability[1] and Projected Demands
Repeat of 1977 Hydrology
(acre-feet per year)

Forecast Year	2015	2020	2025	2030	2035
Current Programs					
In-Region Storage and Programs	685,000	931,000	1,076,000	964,000	830,000
California Aqueduct[2]	522,000	601,000	651,000	609,000	610,000
Colorado River Aqueduct					
Colorado River Aqueduct Supply[3]	1,416,000	1,824,000	1,669,000	1,419,000	1,419,000
Aqueduct Capacity Limit[4]	*1,250,000*	*1,250,000*	*1,250,000*	*1,250,000*	*1,250,000*
Colorado River Aqueduct Capability	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000
Capability of Current Programs	**2,457,000**	**2,782,000**	**2,977,000**	**2,823,000**	**2,690,000**
Demands					
Firm Demands of Metropolitan	1,991,000	1,889,000	1,921,000	1,974,000	2,039,000
IID-SDCWA Transfers and Canal Linings	180,000	273,000	280,000	280,000	280,000
Total Demands on Metropolitan[5]	**2,171,000**	**2,162,000**	**2,201,000**	**2,254,000**	**2,319,000**
Surplus	**286,000**	**620,000**	**776,000**	**569,000**	**371,000**
Programs Under Development					
In-Region Storage and Programs	206,000	306,000	336,000	336,000	336,000
California Aqueduct	556,000	556,000	700,000	700,000	700,000
Colorado River Aqueduct					
Colorado River Aqueduct Supply[3]	187,000	187,000	187,000	182,000	182,000
Aqueduct Capacity Limit[4]	*0*	*0*	*0*	*0*	*0*
Colorado River Aqueduct Capability	0	0	0	0	0
Capability of Proposed Programs	**762,000**	**862,000**	**1,036,000**	**1,036,000**	**1,036,000**
Potential Surplus	**1,048,000**	**1,482,000**	**1,812,000**	**1,605,000**	**1,407,000**

[1] Represents Supply Capability for resource programs under listed year type.

[2] California Aqueduct includes Central Valley transfers and storage program supplies conveyed by the aqueduct.

[3] Colorado River Aqueduct includes water management programs, IID-SDCWA transfers and canal linings conveyed by the aqueduct.

[4] Maximum CRA deliveries limited to 1.25 MAF including IID-SDCWA transfers and canal linings.

[5] Firm demands are adjusted to include IID-SDCWA transfers and canal linings. These supplies are calculated as local supply, but need to be shown for the purposes of CRA capacity limit calculations without double counting.

Figure 5- MWD's Table 2-10 from the 2010 RUWMP

Table 2-10
Multiple Dry-Year
Supply Capability[1] and Projected Demands
Repeat of 1990-1992 Hydrology
(acre-feet per year)

Forecast Year	2015	2020	2025	2030	2035
Current Programs					
In-Region Storage and Programs	246,000	373,000	435,000	398,000	353,000
California Aqueduct[2]	752,000	794,000	835,000	811,000	812,000
Colorado River Aqueduct					
Colorado River Aqueduct Supply[3]	1,318,000	1,600,000	1,417,000	1,416,000	1,416,000
Aqueduct Capacity Limit[4]	*1,250,000*	*1,250,000*	*1,250,000*	*1,250,000*	*1,250,000*
Colorado River Aqueduct Capability	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000
Capability of Current Programs	**2,248,000**	**2,417,000**	**2,520,000**	**2,459,000**	**2,415,000**
Demands					
Firm Demands of Metropolitan	2,056,000	1,947,000	2,003,000	2,059,000	2,119,000
IID-SDCWA Transfers and Canal Linings	180,000	241,000	280,000	280,000	280,000
Total Demands on Metropolitan[5]	**2,236,000**	**2,188,000**	**2,283,000**	**2,339,000**	**2,399,000**
Surplus	**12,000**	**229,000**	**237,000**	**120,000**	**16,000**
Programs Under Development					
In-Region Storage and Programs	162,000	280,000	314,000	336,000	336,000
California Aqueduct	242,000	273,000	419,000	419,000	419,000
Colorado River Aqueduct					
Colorado River Aqueduct Supply[3]	187,000	187,000	187,000	182,000	182,000
Aqueduct Capacity Limit[4]	*0*	*0*	*0*	*0*	*0*
Colorado River Aqueduct Capability	0	0	0	0	0
Capability of Proposed Programs	**404,000**	**553,000**	**733,000**	**755,000**	**755,000**
Potential Surplus	**416,000**	**782,000**	**970,000**	**875,000**	**771,000**

[1] Represents Supply Capability for resource programs under listed year type.

[2] California Aqueduct includes Central Valley transfers and storage program supplies conveyed by the aqueduct.

[3] Colorado River Aqueduct includes water management programs, IID-SDCWA transfers and canal linings conveyed by the aqueduct.

[4] Maximum CRA deliveries limited to 1.25 MAF including IID-SDCWA transfers and canal linings.

[5] Firm demands are adjusted to include IID-SDCWA transfers and canal linings. These supplies are calculated as local supply, but need to be shown for the purposes of CRA capacity limit calculations without double counting.

Figure 6- MWD's Table 2-11 from the 2010 RUWMP

Table 2-11
AverageYear
Supply Capability[1] and Projected Demands
Average of 1922-2004 Hydrologies
(acre-feet per year)

Forecast Year	2015	2020	2025	2030	2035
Current Programs					
In-Region Storage and Programs	685,000	931,000	1,076,000	964,000	830,000
California Aqueduct[2]	1,550,000	1,629,000	1,763,000	1,733,000	1,734,000
Colorado River Aqueduct					
Colorado River Aqueduct Supply[3]	1,507,000	1,529,000	1,472,000	1,432,000	1,429,000
Aqueduct Capacity Limit[4]	*1,250,000*	*1,250,000*	*1,250,000*	*1,250,000*	*1,250,000*
Colorado River Aqueduct Capability	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000
Capability of Current Programs	**3,485,000**	**3,810,000**	**4,089,000**	**3,947,000**	**3,814,000**
Demands					
Firm Demands of Metropolitan	1,826,000	1,660,000	1,705,000	1,769,000	1,826,000
IID-SDCWA Transfers and Canal Linings	180,000	273,000	280,000	280,000	280,000
Total Demands on Metropolitan[5]	**2,006,000**	**1,933,000**	**1,985,000**	**2,049,000**	**2,106,000**
Surplus	**1,479,000**	**1,877,000**	**2,104,000**	**1,898,000**	**1,708,000**
Programs Under Development					
In-Region Storage and Programs	206,000	306,000	336,000	336,000	336,000
California Aqueduct	382,000	383,000	715,000	715,000	715,000
Colorado River Aqueduct					
Colorado River Aqueduct Supply[3]	187,000	187,000	187,000	182,000	182,000
Aqueduct Capacity Limit[4]	*0*	*0*	*0*	*0*	*0*
Colorado River Aqueduct Capability	0	0	0	0	0
Capability of Proposed Programs	**588,000**	**689,000**	**1,051,000**	**1,051,000**	**1,051,000**
Potential Surplus	**2,067,000**	**2,566,000**	**3,155,000**	**2,949,000**	**2,759,000**

[1] Represents Supply Capability for resource programs under listed year type.

[2] California Aqueduct includes Central Valley transfers and storage program supplies conveyed by the aqueduct.

[3] Colorado River Aqueduct includes water management programs, IID-SDCWA transfers and canal linings conveyed by the aqueduct.

[4] Maximum CRA deliveries limited to 1.25 MAF including IID-SDCWA transfers and canal linings.

[5] Firm demands are adjusted to include IID-SDCWA transfers and canal linings. These supplies are calculated as local supply, but need to be shown for the purposes of CRA capacity limit calculations without double counting.

6.0 MWD Demands According to Member Agencies' UWMPs

While most MWD member agencies used a fairly consistent format in their UWMPs, each plan has differences in how data or projections are reported. Most plans show supply and demand projections for 2015 to 2035 in five year increments for normal and single dry years, the multiple (three-year) dry year scenarios are not necessarily three dry years ending in 2015, 2020, 2025, 2030, or 2035. In these cases and for the purpose of being able to cumulate data from all MWD agencies, the third year of the three year sequence is shown, and if this third year does not end on 2015, 2020, etc., then the supply and demand figures shown in the summaries are the third year of the dry year sequence closest to year 2015, 2020, etc. In cases where the member agency UWMP goes to the year 2030 rather than the year 2035, 2030 figures are also shown in 2035.

The MWD member agencies' summaries shown in Appendix A include population, overall water demands and water supply. Overall demand includes firm demands, non-firm demands such as demand for replenishment supplies and recycled water demand for direct use (does not include recycled water used for replenishment purposes). Some agencies, such as Foothill Municipal Water District, provide imported water to its customers (sub-agencies), but did not report in the UWMP use of other local supplies by these sub-agencies. It is for this reason that the accumulation of Total Water Use among each of the MWD member agency UWMPs include most, but not necessarily all of the local supplies used with the MWD service area. However, the accumulations of all MWD supply and demand among the member agencies' UWMPs does include all MWD demands from the members, subject to any assumptions as noted on each summary.

The MWD member agencies are not consistent in the way they account for available MWD (or local) supplies. Some agencies "balance" supply and demand, i.e. the total supply available equals the total demand, even if the agency has additional supplies available. Others, such as Central Basin MWD assumes that its Tier 1 purchase commitment will be available under each supply scenario and this serves as the basis for its estimated MWD demand. Other agencies estimate available MWD demands by applying the percentage of MWD surplus supplies noted in MWD's Tables 2-9, 2-10, or 2-11 towards their estimated MWD demand, thus assuming that MWD will have more than enough supplies to meet their estimated demands. In these cases, supply and demand are not "balanced" as the UWMP reports supply exceeding demands.

The following table shows the cumulative firm MWD demands as reported in the member agency UWMP's for years 2015 to 2035 for Average year, Single Dry Year, and Multiple Dry Year conditions:

Table 11- Cumulative MWD Firm Demand as Reported in Member Agency UWMPs (Acre-Feet)

Supply Condition	2015	2020	2025	2030	2035
Average Year	1,717,165	1,561,752	1,612,426	1,690,852	1,750,335
Single Dry Year	2,119,650	1,947,778	2,006,438	2,096,558	2,156,846
Multiple Dry Year	1,931,006	1,906,190	1,935,301	1,991,160	2,206,004

Average year demands represent those demands that member agencies expect to place on MWD when existing local supplies are available, planned new supplies are on-line, and accounting for expected population and demand increases after planned conservation efforts are achieved to meet SBX7-7 requirements. Some agencies expect to implement additional conservation measures that would lower expected MWD demands further. As expected, single dry year (worst case) demands on MWD are higher than average year demands, due to less availability of local supplies. The third year of a three year multiple dry year sequence is slightly less than the single dry year worst case, as public awareness and conservation efforts are increased. The UWMPs do not include MWD demands for a wet year, or multiple wet year sequence, however it would be expected that under such conditions local supplies would be more abundant, overall demands could be reduced slightly, and MWD firm demands would be significantly lower than under average year conditions.

Below, are average year and a comparison of average and dry year demands for each member agency for the year 2020, as reported in the UWMP's:

Figure 7

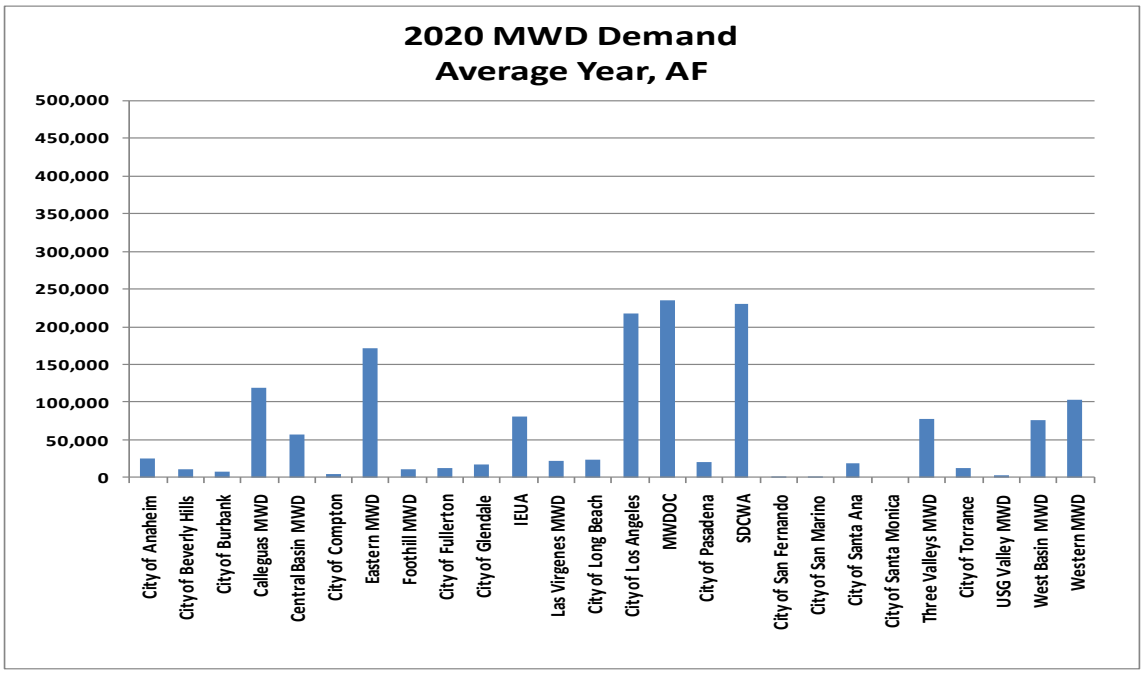
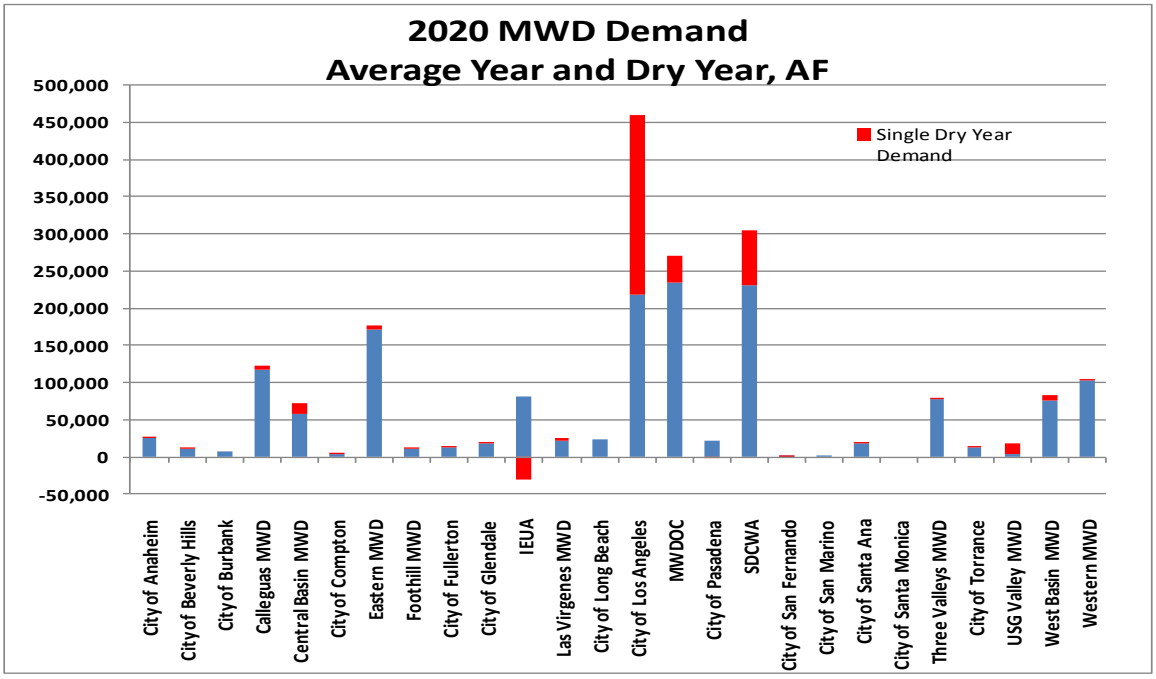


Figure 8



As shown, most agencies' UWMP dry year demands on MWD are greater than average year demands. However, the degree of dry year peaking (ratio of dry year demand to average year) on MWD varies greatly, from up to 224% for the City of Los Angeles to zero for the City of Santa Monica. The volume of water required to meet dry year peaking also varies greatly, from up to 240,980 acre-feet for the City of Los Angeles to a decrease of 31,024 for Inland Empire Utilities Agency. In the case of Inland Empire Utilities Agency, its UWMP calls for increased pumping from groundwater basins to reduce imported water demands (the reduction is shown as a negative number). In the case of the San Diego County Water Authority, the above represents only purchases of MWD supplies and not transportation services.

Each MWD member agency reports local supplies that it expects will be available in future years. While MWD's RUWMP includes local supplies in its forecasts, certain significant differences were identified between the supplies MWD assumed to be available and the supplies the MWD member agencies assumed in their plans. These supplies, if included in MWD's RUWMP, would further reduce MWD projected demands from its member agencies:

Table 12- Member Agency Planned Supplies not Included in MWD's RUWMP

Local Supply	Included in Member Agency UWMP Future Supply	Included in MWD's RUWMP as a Local Supply	Annual Quantity
Long Beach- Seawater Desalination	Yes	No	5,000 AF beginning in 2025
SDCWA- Seawater Desalination	Yes	No	56,000 AF beginning in 2020
West Basin- Seawater Desalination	Yes	No	21,500 AF beginning in 2020
Los Angeles Aqueduct- Difference in Supply Assumptions	Yes	No	28,000 AF in 2015 decreasing to 14,000 AF in 2035 for average years; In single dry year LADWP's RUWMP estimates 17,480 to 19,060 AF less than MWD's RUWMP. In multiple dry years LADWP's UWMP estimates 27,700 to 42,770 AF more than MWD's RUWMP
LADWP Water Transfers	Yes	No	40,000 AF Beginning in 2015
Total			136,500 to 150,500 AF/Yr. for average years. 99,620 to 104,200 AF/Yr for dry years and 150,320 to 165,270 AF/Yr in multiple dry years

In addition to the above, two MWD member agencies (Calleguas MWD and the City of Burbank) specifically detail how MWD's RUWMP projections are higher than their own UWMP projections. In the case of Calleguas MWD, its assumptions for future local supply is greater than what MWD considered in its RUWMP. In the case of the City of Burbank, its UWMP states that "Burbank's projections in this plan go beyond the minimum conservation required even though MWD is planning for somewhat higher demands." These specific differences result in a further estimated decrease in MWD demands of 5,750 to 18,683 acre-feet per year for Calleguas MWD and 1,350 acre-feet per year for the City of Burbank, depending on the year and hydrologic scenario.

Additional potential local water supply development was identified in the member agency UWMP's that if implemented, would further reduce both MWD's forecasted demand and member agency projections of their demand on MWD. These local supplies include:

Table 13- Potential Member Agency Local Supplies Listed in UWMP

Local Supply	Included in Member Agency UWMP as Potential Supply	Included in Member Agency UWMP or MWD RUWMP Demand Forecast	Annual Quantity
LADWP Storm water Capture and Replenishment	Yes	No	2,000 AF in 2015 and expanding to 25,000 AF by 2035
Water Replenishment District GRIP Project (Central Basin MWD)	Yes, as a CBMWD Project	No	21,000 AF
Foothill MWD Water Reclamation	Yes	No	1,280 AF Beginning in 2020
MWDOC Seawater Desalination- Huntington Beach	Yes	No	56,000 AF Beginning in 2020
MWDOC Seawater Desalination- San Juan Capistrano	Yes	No	16,000 AF Beginning in 2020
MWDOC- Irvine Ranch WD Strand Ranch- Dry Year Yield	Yes	No	16,666 AF in dry years
Three Valleys MWD- Additional Project	Yes	No	28,000 AF Beginning in 2020
Calleguas MWD- Additional Conservation	Yes	No	22,250 AF beginning in 2020
City of Torrance- Expanded Recycle Water and Goldsworthy Desalter	Yes	No	Unspecified
Total			186,200 + AF/Yr.

7.0 Comparison of MWD Demands Projected by MWD and its Member Agencies

A comparison of MWD's RUWMP forecast of its demands from member agencies shows that MWD's forecasts are higher in the average and multiple dry year scenarios than the cumulative forecasts made by its member agencies and lower in the single dry year scenario:

Figure 9

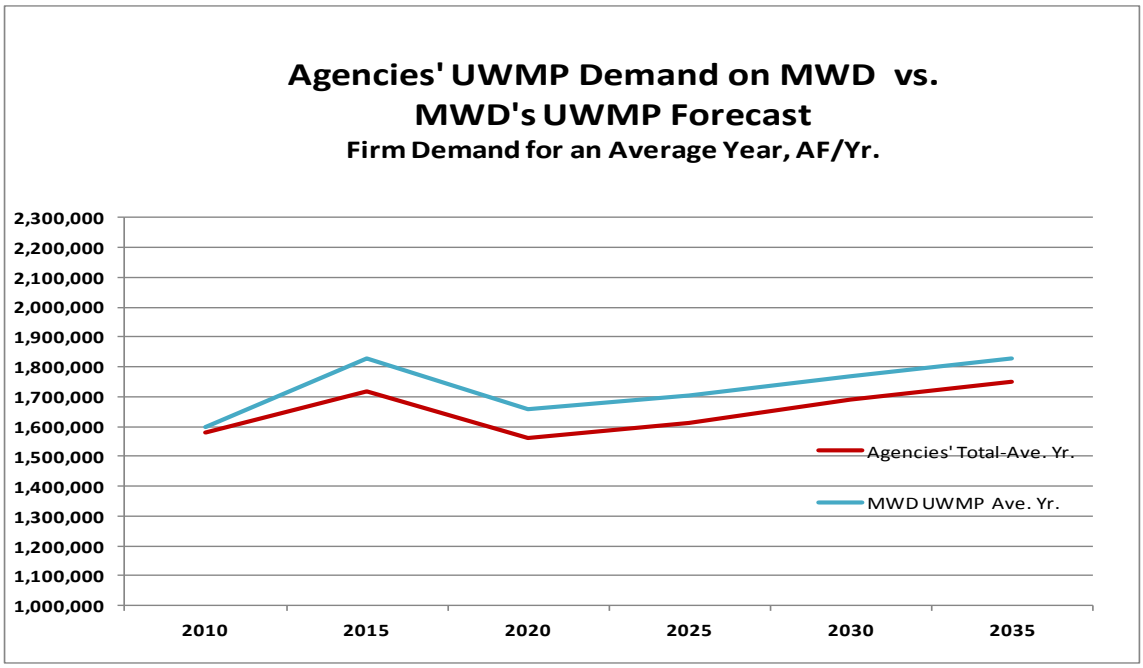


Figure 10

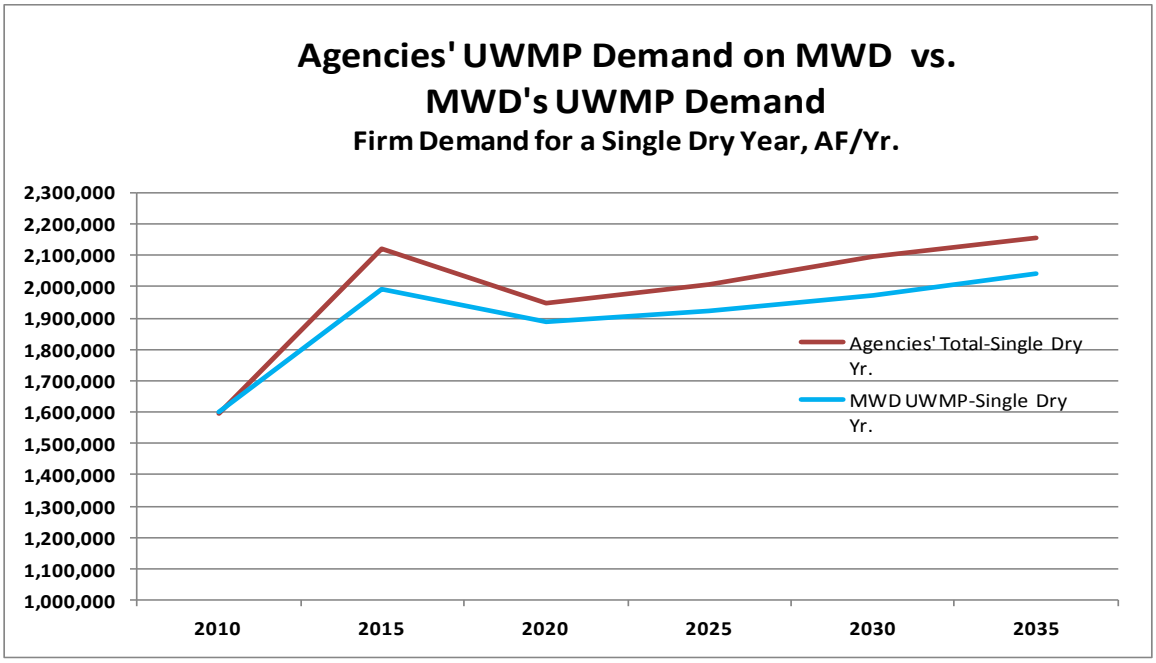
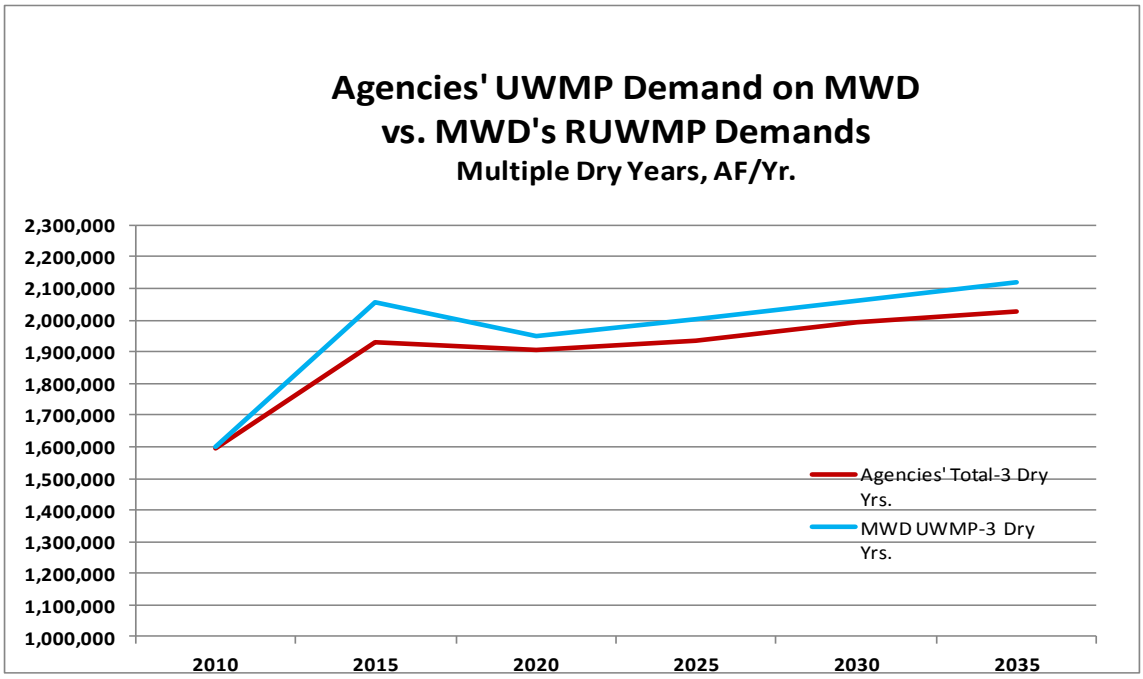


Figure 11



As noted above, MWD's 2005 RUWMP included 150,000 acre-feet per year of seawater desalination, but no seawater desalination was included in MWD's 2010 RUWMP projections as a local supply. One of these projects is a fully permitted project for the development of 56,000 acre-feet of local water supply annually. Had MWD included current member agency plans for seawater desalination in its RUWMP forecasts, its average year demands would be similar to the cumulative forecasts contained in the member agencies UWMPs. Had MWD included other identified local supplies, such as LADWP's planned water transfers and flows in the Los Angeles Aqueduct that are consistent with LADWP's UWMP, MWD's RUWMP average year demands would have been even lower than the member agencies cumulative demands.

Further reductions in MWD demand would occur if the "potential projects" identified in the member agencies UWMP's are implemented. These projects have become more cost-competitive as a result of MWD rate increases.

Figure 12

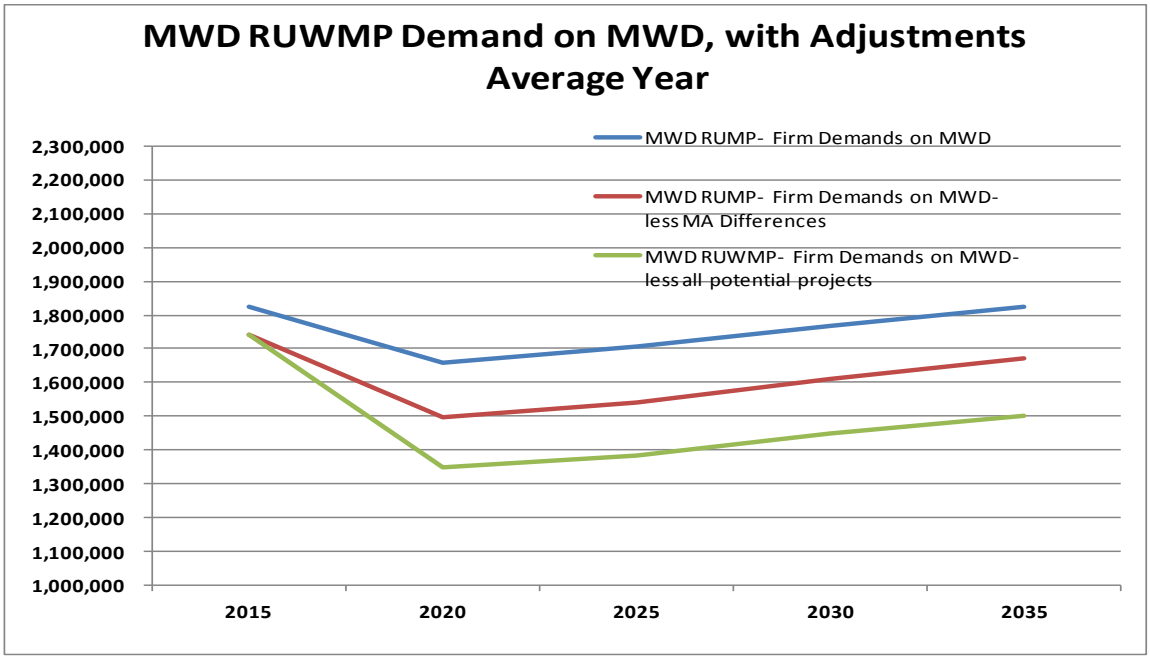


Figure 13

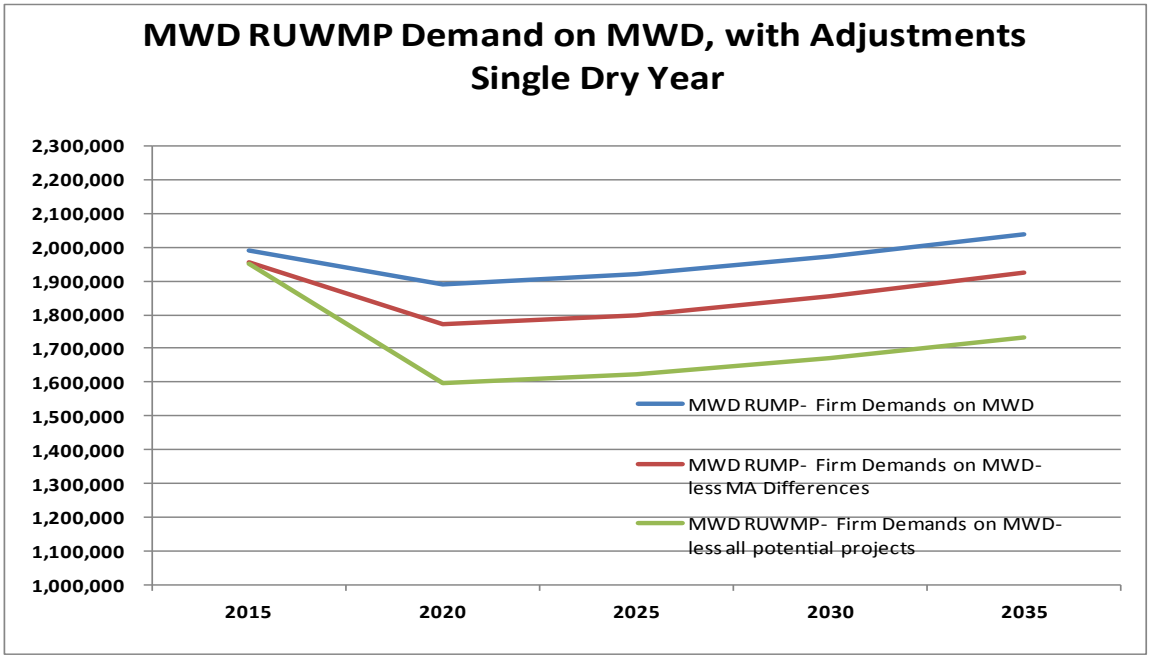
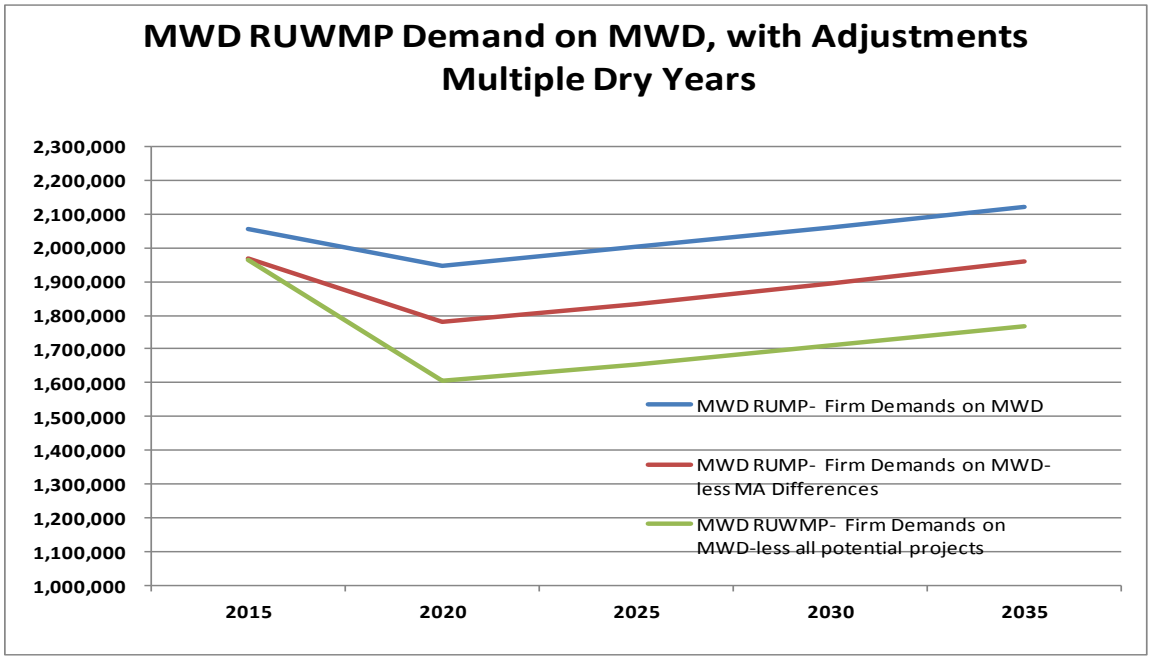


Figure 14



8.0 Findings

From MWD's 2000 RUWMP through its 2010 RUWMP, overall projected demand, and overall projected demands on MWD have decreased significantly due to conservation, significantly higher water rates and local water supply development over levels previously planned by MWD. Decreased demand generally and decreased demand specifically on MWD supplies has resulted in a "surplus" of supply during all existing supply capability and demand scenarios examined in MWD's RUWMP.

MWD projects greater firm demand in average years than its member agencies project in their UWMP's. This difference is due mainly to the fact that MWD did not consider member agency plans for significant projects such as the SDCWA, West Basin, and Long Beach seawater desalination projects and Los Angeles' planned water transfers. There is no explanation why MWD's 2005 RUWMP included 150,000 acre-feet per year of seawater desalination but did not include these supplies in its 2010 plan.

During the worst case single dry year scenario, MWD's member agency projections of MWD firm demand are slightly more than what MWD's RUWMP indicates. However, this may be explained by the fact that each member agency's single dry year demand may not occur concurrently. Each member has different demand patterns and uses, availability of local supplies, and in some cases weather characteristics that could impact demand on MWD. Therefore, peak single dry year demand may not necessarily occur in the same year for all 26 member agencies. Further, any difference could also be reduced, or eliminated, if member agencies implement some or all of the "potential projects" that are listed in their UWMPs.

For multiple dry years, the analysis shows that cumulative member agency projections (third year) are consistent with the average year in that the total projected MWD firm demand is less than MWD's projection for the multiple dry year scenario. In the multiple dry year scenario, some agencies report expected demand in each of the three "multiple" dry years, while others report only an annual figure for each year of the projected sequence.

Projected future MWD demands for all three scenarios would be reduced further by potential projects listed in the member agency UWMPs. Since UWMPs are not required to calculate wet year demands, no data is available to determine what impact wet years will have on MWD, but past trends show that MWD demands can decrease significantly during these periods. The fact that MWD member agencies are planning on purchasing less water in the future, on average, than MWD anticipates during normal (and likely wet) periods is likely to place upward pressure on MWD water rates over the longer term. Additional sales, if any, by MWD during a single dry year worst case scenario would be short lived and likely be offset by additional costs, thus having little impact on long term water rate trends when compared to impacts of lower sales during average or wet years.

Dry year peaking poses a significant planning issue for MWD and occurs to some extent in most of its member agencies. The volume of dry year peaking projected by MWD will have substantial economic impacts and require water rate increases associated with carrying additional water supplies, storage and capacity available to meet existing and future dry year peaking demands.

Tables 2-9, 2-10, and 2-11 in MWD's RUWMP state that the capability of MWD's existing programs can provide sufficient supplies to meet MWD demands in all years and all demand scenarios evaluated. Most of MWD's member agencies' UWMPs cite these tables and use them as the basis for concluding they have sufficient water supplies currently (and in many cases, surplus supplies) and will have sufficient water supplies in the future. Despite this surplus and dramatically reduced demand projections, MWD continues to pursue additional programs to increase its water supplies even further. The combination of reduced demands and increased spending on new water supply programs will continue to drive up the cost of MWD water.

Management of storage accounts plays a key role in both normal and dry years conditions, however, it is not possible to derive from MWD's RUWMP what assumptions it has made concerning the availability of water to put into storage or take during dry year conditions. MWD and its member agencies would benefit from a more detailed analysis of the expected availability of water for put and take into storage.

MWD's RUWMP also includes programs under development that will provide additional "potential surplus" supplies in the average, single dry, and multiple dry year scenarios. These programs include an interim Bay Delta measure, estimated to increase MWD's dry year supplies up to 487,000 acre-feet by 2015, and a more extensive Bay Delta solution that would increase its supply up to 628,000 acre-feet by 2025 (RUWMP Table A.3-7 at pages A.3-48 to A.3-52). These programs will result in substantial overdevelopment of water supplies for Southern California unless other projects under development by MWD, its member agencies and other water suppliers in Southern California are reduced or eliminated.

Further modeling should be done to factor in the anticipated timing and availability of Bay Delta supplies including an analysis of projects which may be deferred or eliminated in order to avoid stranded costs.

The cumulative total of water supplies being developed under the category of "Programs Under Development" for multiple dry years is as high 755,000 acre-feet, and for single dry years and average years as high as 1,036,000 and 1,051,000 acre-feet, respectively. This is exclusive of supplies not included in MWD's RUWMP being developed by member agencies and other retail water suppliers not analyzed as part of this report.

If MWD's future water sales are lower than it projects, further, unnecessary upward pressure will be placed on water rates. As MWD updates its long range finance plan and rate projections, MWD should again review the timing and emphasis of program expenditures. Given all of the changed circumstances, including reduced demands, escalating water rates and the economic downturn, MWD may wish to revisit its IRP and RUWMP now in order to enhance coordination with the plans of its member agencies and the other retail water suppliers that serve Southern California.

Appendix A

Summary of Member Agency Urban Water Management Plans

City of Anaheim

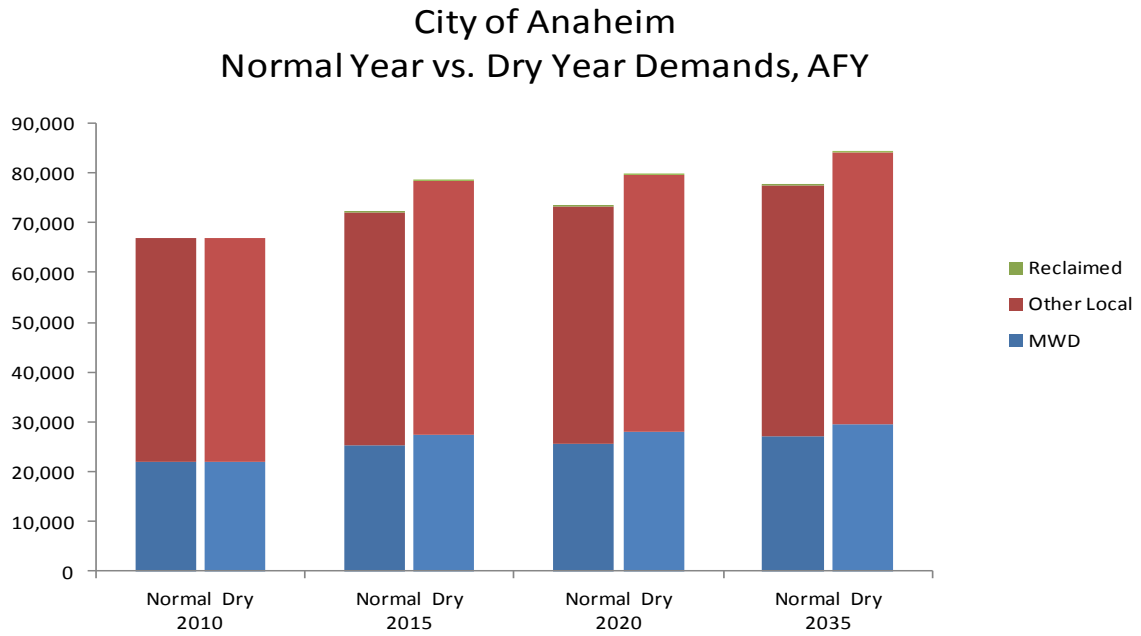
Overview

The City of Anaheim provides water to residents and businesses throughout its 49.3 square mile service area. The City receives water from two main sources: the Orange County Groundwater Basin, which is managed by the Orange County Water District and imported water from MWD. Groundwater is pumped from active wells located within the City and imported water is delivered through seven treated water connections and one untreated water connection from MWD.

Anaheim's 2010 UWMP lists its current population at 364,921 and project population to increase to 432,949 in the year 2035, an increase of 18.6%. Total Demand from the UWMP is expected to increase 16.1 % over the same period, from 66,929 acre-feet in 2010 to 77,700 acre-feet in 2035. This increased demand will be met by both increased groundwater pumping and deliveries from MWD.

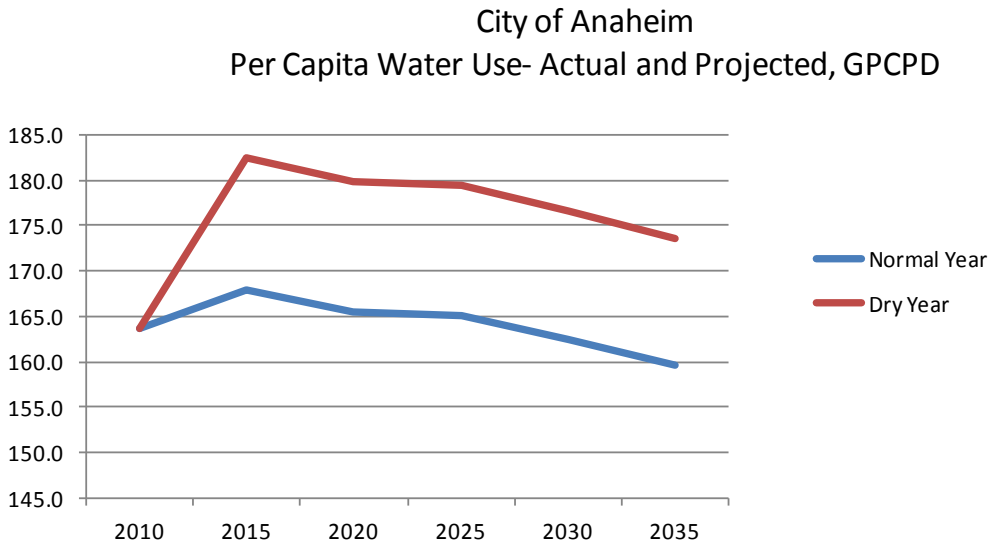
Existing and Projected Future Water Supply and Demand

Anaheim's demand projections were determined by an examination of its past water consumption by type of use or by customer classification and information provided by the Center for Demographic Research at California State University Fullerton.



Conservation and Per Capita Water Use

Anaheim is a member of an Orange County 20x2020 Regional Alliance, which is an effort to create flexibility in meeting the per capita water use reduction targets required under SBX7-7. The Regional Alliance selected as its calculation method the first DWR option, which require a simple 20% reduction from the baseline by 2020 and 10 percent reduction by 2015. The City's baseline was calculated at 201.6 GPCD. Its 2015 and 2020 targets are 181.4 and 161.2 GPCD, respectively. Using population data and average and dry year UWMP forecasts, the per capita use is projected as follows:



Water Supply Reliability

Anaheim's plan indicates that future supplies are sufficient to meet its anticipated demands. The plan relies on MWD's RUWMP as the basis for this conclusion and includes MWD's RUWMP Tables 2-11, 2-19, and 2-10 which list a potential surplus of supply in all years examined in its plan.

The plan includes a discussion of groundwater and its management within the basin. It discusses the OCWD Groundwater Replenishment System, put into operation in 2008, that provides a seawater barrier through injection wells and groundwater recharge for the City. According to the plan, Anaheim's groundwater production is expected to increase about 7 percent, or about 3,100 acre-feet. The City currently does not provide recycled water, but plans to provide up to 255 acre-feet per year beginning in 2015.

Anaheim's plan states that it intends to reduce its demand through aggressive water use efficiency programs. It also states that it has entered into an agreement to purchase GWRS water for use at the Canyon Power Plant, within its service area and includes these efforts in its demand assumptions. The plan lists desalination opportunities within MWDOC's service area, but the City does not plan to participate. The plan states that it could indirectly benefit from construction of a desalination plant because of the regional benefit that may be achieved.

City of Beverly Hills

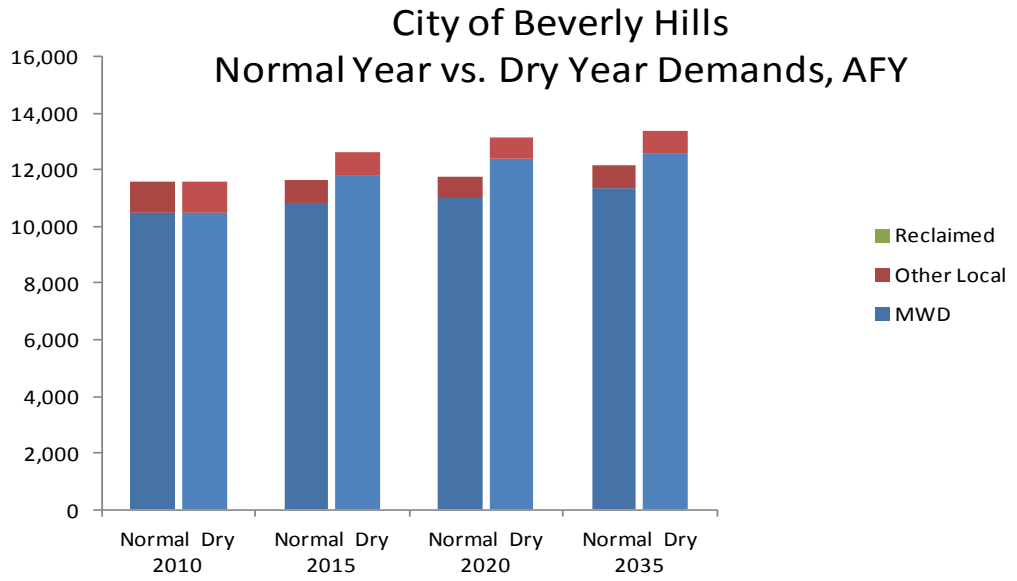
Overview

The City of Beverly Hills, located in Los Angeles County and surrounded by the City of Los Angeles, provides water to city residents within its 5.69 square mile city limits and also to a portion of the City of West Hollywood. Water is obtained from two main sources: groundwater from four groundwater wells that pump water from the Hollywood Sub basin and treated water from MWD's Weymouth Treatment Plant through the Santa Monica Feeder. All of the City's raw groundwater is treated at the City's Reverse Osmosis Treatment Plant.

Beverly Hills' 2010 RUWP lists its water service area population at about 45,000 and projects a 5.75% increase to 47,587 by the year 2035. Total Demand from the UWMP is expected to increase 5.1 % over the same period, from 11,562 acre-feet in 2010 to 12,153 acre-feet in 2035. It plans to keep pumping in the basin fairly constant to help prevent overdraft and stay within its pumping rights, thus this increased demand will be met by increased deliveries from MWD.

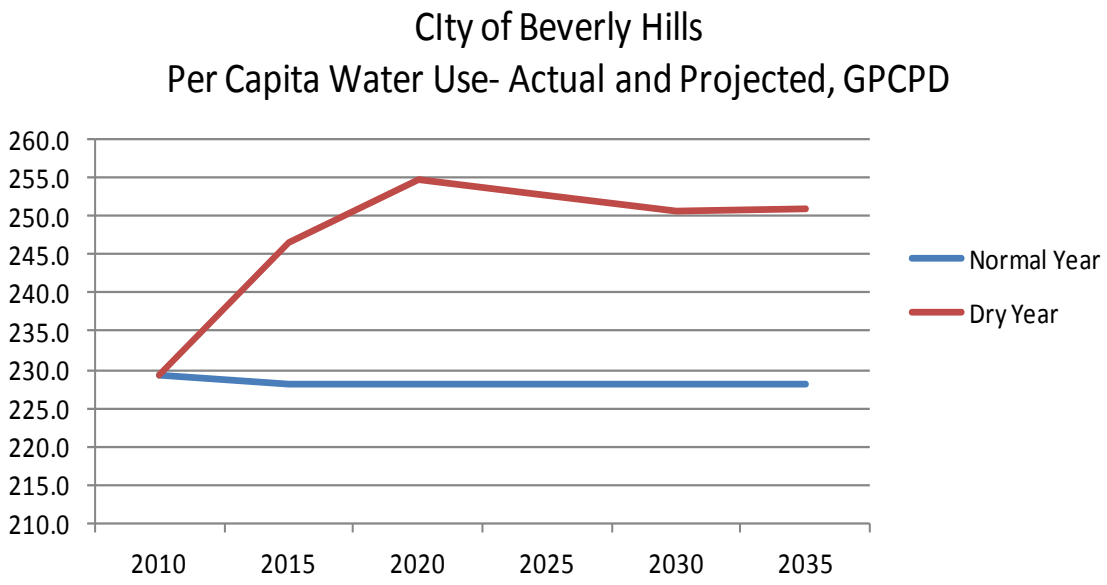
Existing and Projected Future Water Supply and Demand

Beverly Hills' demand projections were determined by an examination of its past water consumption by type of use or by customer classification, future development and redevelopment. The City is considered to be "built-out" but as population increases slightly and water conservation measures continue to be implemented, the plan states that the City should experience moderate increases in its water consumption following an overall drop in water use from 2010 to 2020 due to SBX7-7 requirements.



Conservation and Per Capita Water Use

Beverly Hills' per capita water use baseline is 277 and 284 GPCD depending on whether a 5 or 10 year baseline is used. Its Method 1 targets are 256 and 228 GPCPD for 2015 and 2020, respectively. Using population data and average and dry year UWMP forecasts, the per capita use is projected as follows:



Water Supply Reliability

Beverly Hills' UWMP indicates that future supplies are sufficient to meet its anticipated demands. According to its UWMP, available supplies exceed demand in all demand scenarios evaluated, based on MWD's RUWMP conclusion that it can meet all demands in all scenarios.

The plan states that the City "projects water demands within its service areas to remain fairly constant over the next 20 years due to minimal growth combined with water use efficiency measures. Due to this fact, the City does not have current plans for additional water supply projects other than regular maintenance and upgrades to its existing well, storage reservoirs and distribution pipelines." The plan does, however, mention that MWD is implementing water supply alternative strategies and lists several of these.

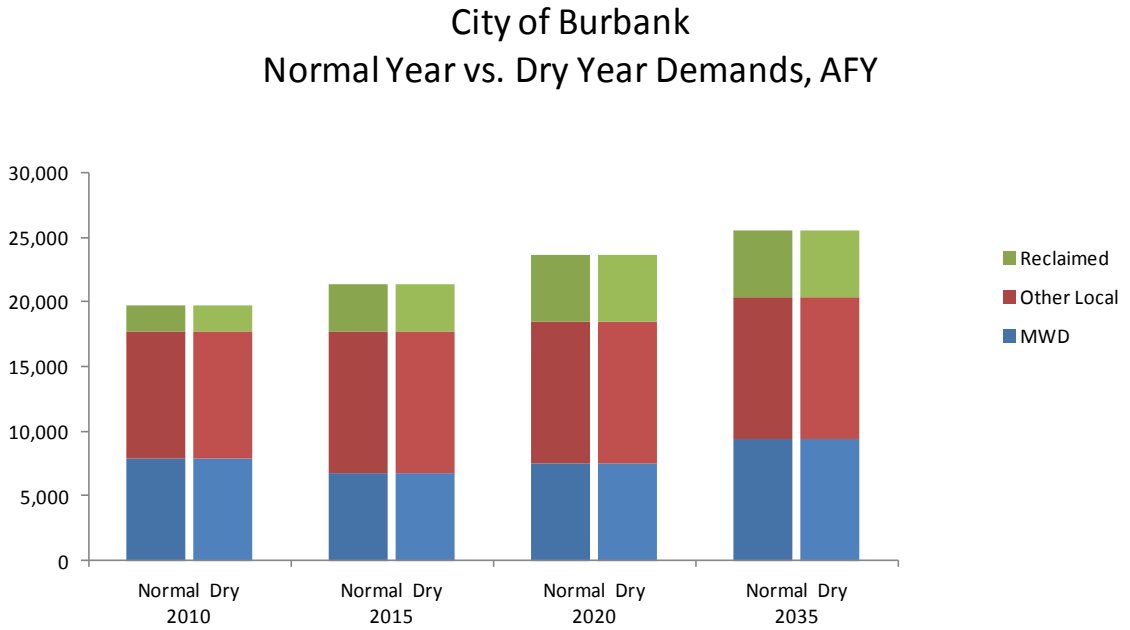
City of Burbank

Overview

The City of Burbank is located approximately 12 miles north of downtown Los Angeles. The City covers 17 square miles of the eastern end of the San Fernando Valley. The City of Los Angeles lies to the north and west, and the City of Glendale to the south and east. Burbank's 2010 RUWP lists its current population at 108,469 and projects populations to increase 24.5% to 132,877 in the year 2035. Total normal year demand from the UWMP is expected to increase 17.6% over the same period. This increased demand will be met by a combination of increase recycled water use and groundwater pumping, and increased demand from MWD.

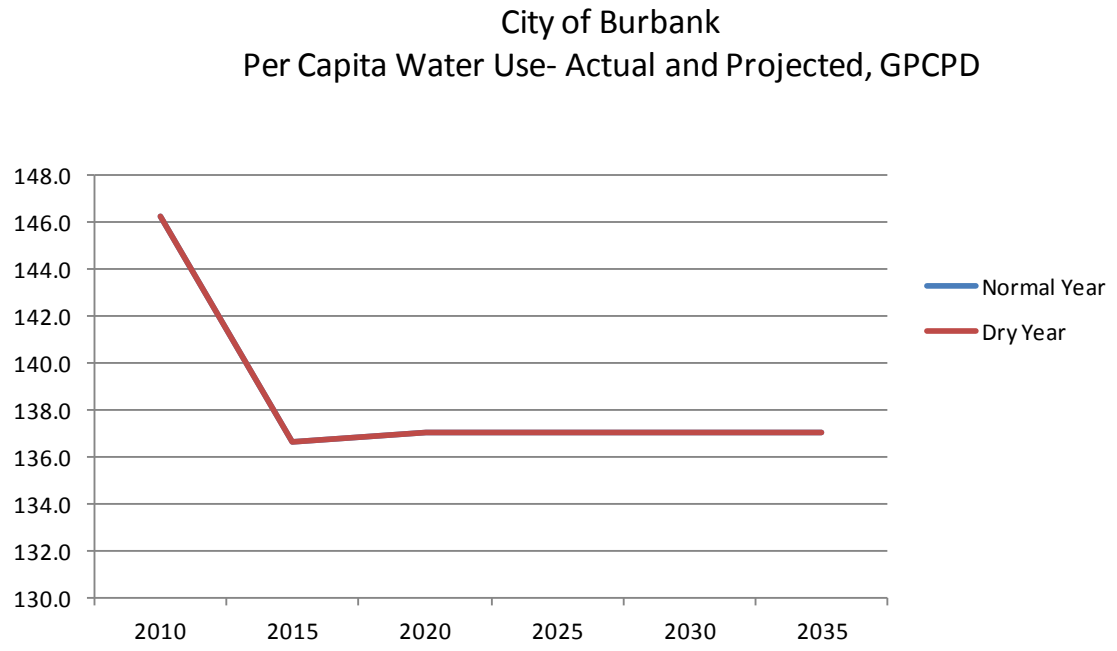
Existing and Projected Future Water Supply and Demand

According to its UWMP, Burbank's water use reached the required 20x2020 levels in 2010, although it notes that 2010 had mild weather which may have contributed to this reduction. Its FY 2011/12 financial plan projects five years of water sales which are less than its interim 2015 per capita target. Using available population projections, water use in the subsequent years to 2035 are estimated using the same GPCD rates as planned for 2015.



Conservation and Per Capita Water Use

Burbank evaluated its required SBX7-7 requirements using Method 1 and determine its per capita target to be 156 GPCD. The plan notes its interim target for 2015 to be 175 GPCD and notes that current usage is already below this target. Using population data and average and dry year UWMP forecasts, the per capita use is projected as follows:



Water Supply Reliability

Burbank's UWMP shows that future supplies are sufficient to meet its anticipated demands. In the past Burbank's groundwater supplies were reduced as a result of water quality issue caused by a number of factors including industrial releases. Together with others, Burbank embarked on a program to clean up groundwater supplies and make additional use of these supplies. The City is also implementing a storm water capture and infiltration program that will increase availability of groundwater supplies.

The plan notes that MWD estimates for Burbank's 2015 demand to be 27% greater than Burbank's 2015 estimate. According to the plan, MWD did not count future conservation from additional agency efforts to meet 20x2020 goals.

Burbank identified water exchanges, transfers and desalination as possible ways to develop additional supplies. While they do not have plans to do so, the UWMP plan states the City is supportive of these efforts by MWD or other entities. The City is looking at a chromium removal pilot study, expanded water recycling, and more aggressive conservation measures to provide additional supply or reduce demand further.

Calleguas MWD

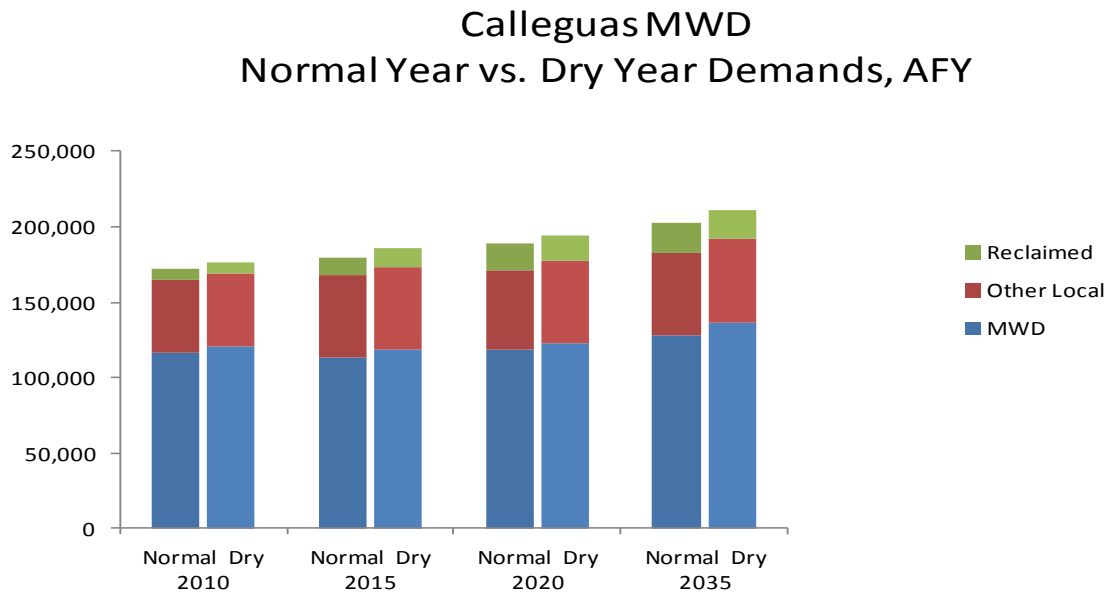
Overview

The Calleguas Municipal Water District, located in southern Ventura County, is a wholesaler water agency that distributes water to 19 local purveyors. Approximately three-quarters of Ventura County residents depend on CMWD for all or part of their water. The water supplied by CMWD represents approximately 73 percent of the total municipal and industrial water demand within its service area.

CMWD's 2010 RUWP lists its current population at 632,399 and projects populations to increase to 730,788 in the year 2035, an increase of 15.6%. Total Demand from the UWMP is expected to increase 17.6% over the same period, from 171,776 acre-feet in 2010 to 202,160 acre-feet in 2035.

Existing and Projected Future Water Supply and Demand

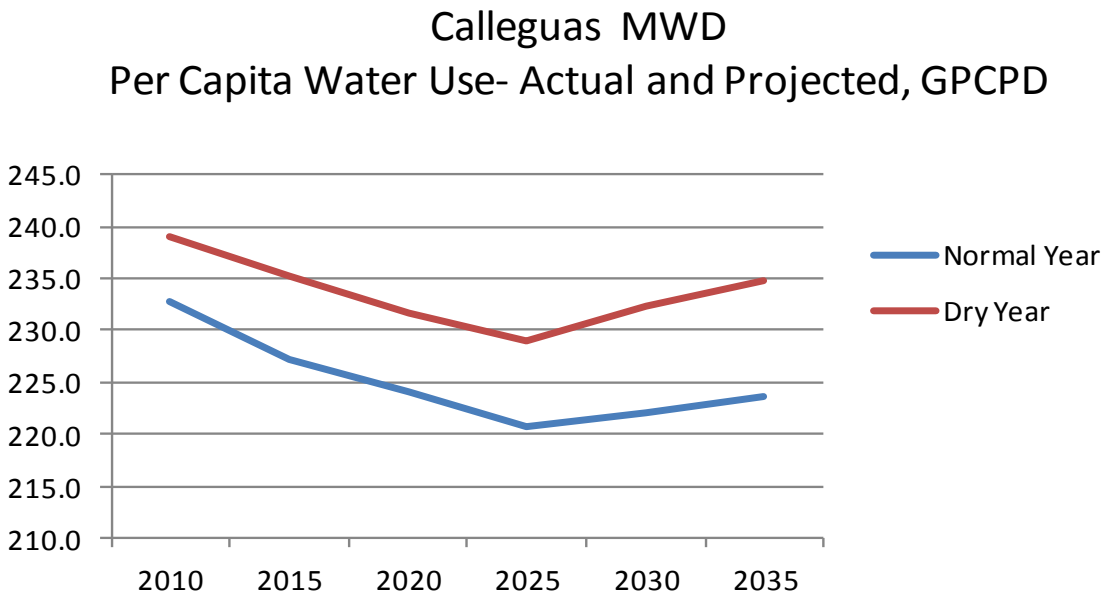
CMWD's UWMP notes that its projections for local supplies are substantially higher than the projections developed by MWD. The plan notes that "The lower local supply projections by MWD are related to MWD's policy not to include future local supply projects until funding allocations, engineering, environmental approvals, and permitting requirements are substantially complete. CMWD purveyors, however, typically include future local supplies in their projections upon completions of feasibility studies." This difference tends to decrease the amount of imported water that CMWD states it needs from MWD, whose estimates are about 15,000 to nearly 19,000 acre-feet higher (12 to 13 percent). For calculation purposes in the UWMP, Calleguas uses the local supply figures provided by its purveyors.



Graph-

Conservation and Per Capita Water Use

The Plan notes that MWD prepared a paper in 2009 titled "Estimating the Water Savings Achieved with 20 percent by 2020 Compliance at the Member Agency Level." Using method 1, the percent reduction target would be 167 GPCD. While each purveyor's target may be different, the plan compared whether CMWD's projected water supplies and uses would satisfy this overall target level. The plan found that it would not, and states that "a combination of additional recycled water projects or conservation beyond that included in current projections will be required to meet the 2020 targets. " The plan states that CMWD and MWD intend to provide support for retail agencies efforts through technical assistance and continued financial assistance to the CMWD wholesale agency assistance program. According to the plan, a combination of additional increased recycled water use or additional conservation equal to 14.8% percent of total water use may be needed. For 2020, this amounts to a 27,925 acre-foot reduction in use. Using population data and average and dry year UWMP forecasts, the per capita use is projected as follows:



Water Supply Reliability

CMWD's UWMP indicated that future supplies are sufficient to meet its anticipated demands, even though it may need to reduce demands further to be in compliance with SBX7-7 . CMWD's plan relies on MWD's RUWMP as the basis for this conclusion. Because MWD estimates that CMWD's demands for imported water are greater than the CMWD estimate (due to MWD's assumption regarding local supplies) and that MWD anticipated meeting imported water demands in all supply and demand conditions, CWMD's plan shows a surplus of supply between 5 and 16%, depending on the hydrologic condition and planning year.

Besides increasing local water through the planning horizon with brackish water desalination, conjunctive use and increased water reclamation, the CMWD plan briefly discusses DWR strategies to improve the reliability of supplies from the Bay-Delta, MWD strategies on both the SWP and Colorado River and its own strategies to increase conjunctive use, water treatment and salinity management. The plan states that the district benefits from water transfers through MWD, but does not plan to pursue these on its own.

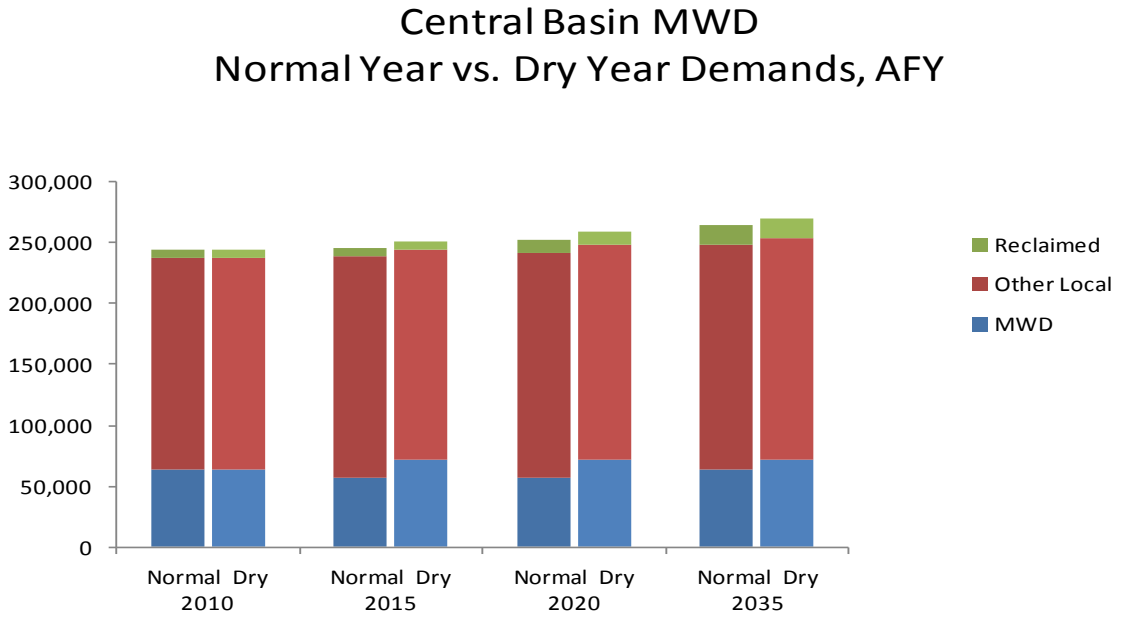
Central Basin MWD

Overview

The Central Basin Municipal Water District is located in southeast Los Angeles County and encompasses approximately 227 square miles including 24 cities and several unincorporated areas. Its current population of 1,654,866 is expected to increase 9.4% by the year 2035 to 1,809,737 persons. At the same time, water use is expected to increase by 16.6% from 244,393 acre-feet in 2010 to 285,040 acre-feet in 2035. The 2035 figure includes replenishment deliveries. When replenishment deliveries are excluded, the overall increased use of water is 8.0%. Demand on MWD is expected to remain fairly constant during this period, with the exception of the 21,000 acre-feet per year of non-firm supplies that were not available in 2010. Aside from these non-firm supplies, increased demands will be met by recycled water and increased pumping of groundwater supplies from 2010 levels.

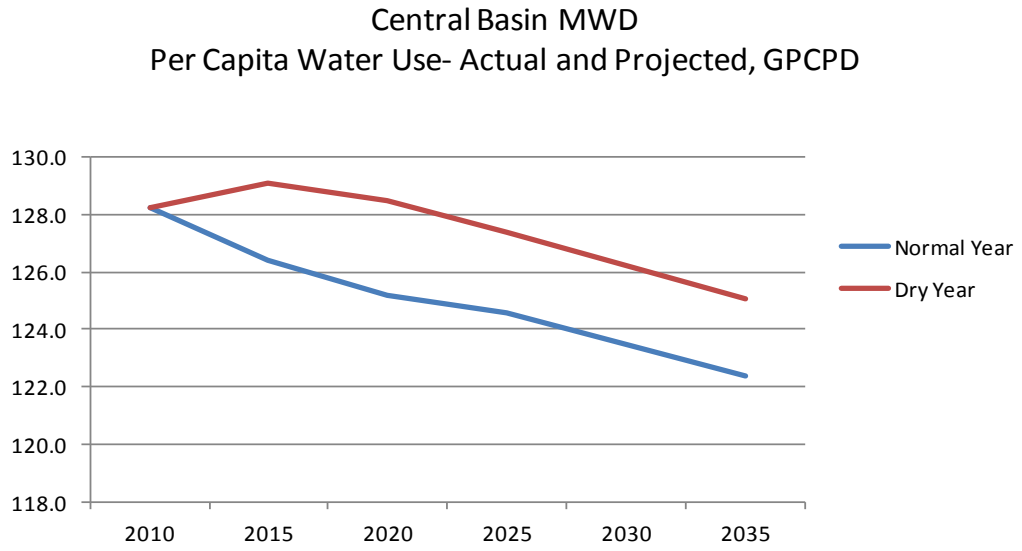
Existing and Projected Future Water Supply and Demand

CBMWD's plan states that future demand forecasts were the result of historical water use analysis, population growth, commercial and residential development, all used in combination with the MWD-MAIN forecasting model. The UWMP demands are as follows:



Conservation and Per Capita Water Use

CBMWD's UWMP states that per capita usage will remain relatively flat at 135 GPCD over the planning period. The plan discusses the South Coast hydrological region's target for 2015 as 154 GPCD and 2020 target of 137 GPCD. Since CBMWD has already reached 135 GPCD, the plan assumes it is in compliance with the SBX7-7 targets. Using population data and average and dry year UWMP forecasts, the per capita use is projected as follows:



Water Supply Reliability

CBMWD's reliability analysis assumes that its MWD Tier 1 supply allocation will be available during normal and single dry-year scenarios. CBMWD assumes that during the third year of a multiple dry year scenario, MWD supplies may be reduced 10 percent. It's reliability calculations reflect a slightly smaller decrease in MWD supplies (3.7%), but because of increased groundwater availability and recycled water, the plan still shows a surplus of available supplies during all hydrologic cases evaluated.

The plan includes a discussion of MWD supplies and efforts taken to improved reliability through its IRP. It also includes a discussion of pumping rights in the basin within its service area. The plan discusses Water Replenishment District's attempts to "define their agency as the public entity responsible for management of a conjunctive use program for the Central Groundwater Basin." It discusses the litigation that ensued and states that "Central Basin expects to roll out its Groundwater Storage Plan in early 2012." Presumably the UWMP does not include additional supplies that may be available to CBMWD from either WRD's efforts or CBMWD's future plans.

The plan states that it is the beneficiary of water transfers through MWD and that because of high costs and the fact that CBMWD is "a land locked" agency without direct access to the ocean, it is highly unlikely that it will build such a facility, but states that seawater desalination may provide water resources to others.

City of Compton

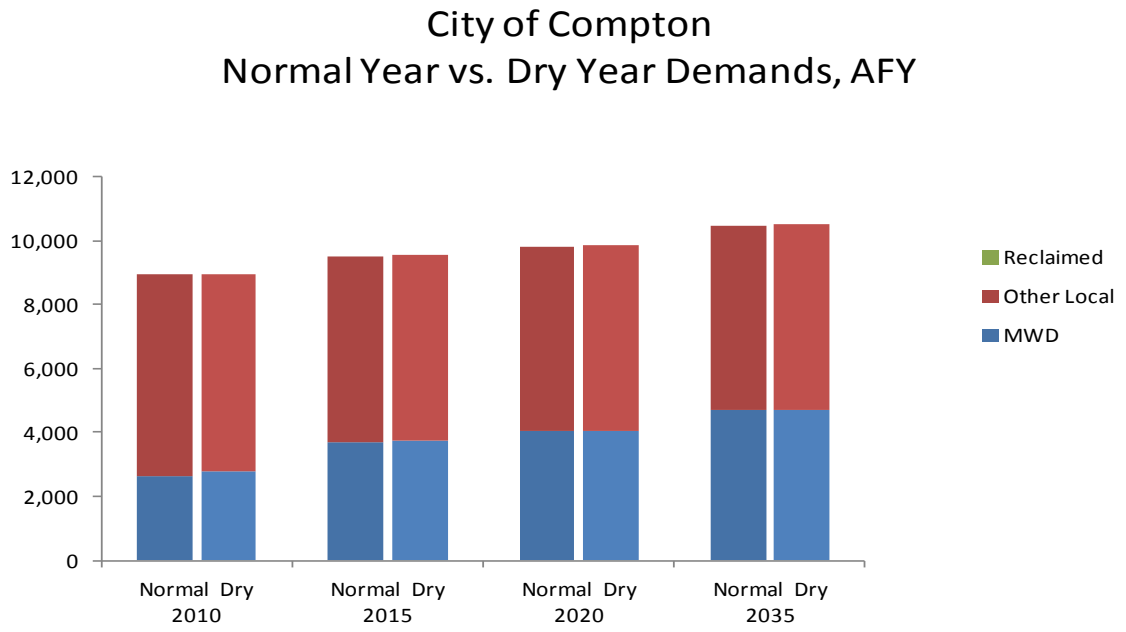
Overview

The City of Compton is located approximately six miles north of downtown Long Beach covering approximately 10.2 square miles. The Compton Municipal Water District retails water to approximately 80 percent of the City and private water companies provide service to the remaining residents. Water is obtained from two main two main sources: the Central Groundwater Basin and imported water from MWD. Groundwater is pumped from active wells located within the City and imported water is delivered through treated water connections from MWD.

Compton's 2010 RUWP lists its current population at 81,963 and projects populations to increase to 93,336 in the year 2030, an increase of 13.9%. Total Demand from the UWMP is expected to increase 7.6 % over the same period, from 8,929 acre-feet in 2010 to 10,455 acre-feet in 2030. As its rights to pump water from the groundwater basin are fixed, this increased demand will be met by increased deliveries from MWD.

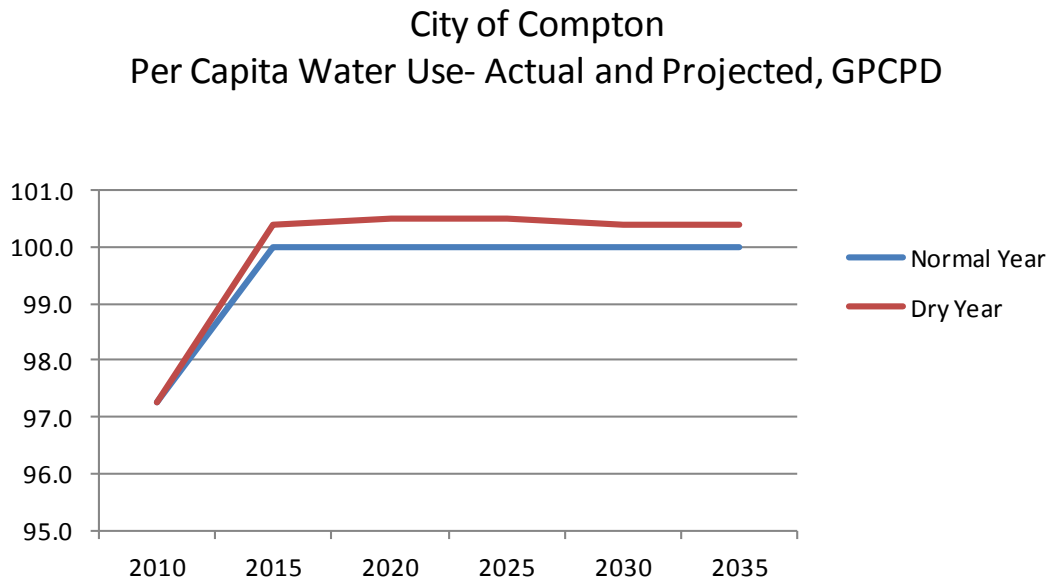
Existing and Projected Future Water Supply and Demand

Compton's demand projections were determined by an examination of its past water consumption by type of use or by customer classification. Water losses, estimated at 20% in 2010 were also included in overall projections.



Conservation and Per Capita Water Use

Compton's per capita water use is currently around 100 GPCPD and is therefore already meeting SBX7-7 requirements. Its base usage was calculated as 106 GPCPD and the City used Option 3, which is to achieve 95% of the applicable state hydrologic region target to determine its 2015 and 2020 target of 142 GPCPD. Using population data and average and dry year UWMP forecasts, the per capita use is projected as follows:



Water Supply Reliability

Compton's UWMP indicates that future supplies are sufficient to meet its anticipated demands. While its UWMP Tables 5.4.5 and 5.4.6 show demand exceeding supply by up to 15 percent in dry and multiple dry years, the plan states that Central Basin and MWD can provide additional surplus supplies to the City to meet demands, when necessary. While these supplies may be available, the plan states that the City "is still committed to water conservation in single dry and multiple dray years to help preserve precious water reserves and supplies."

The plan states that the City does not distribute recycled water in its service are at this time, and has no plans to do so in the future. It states that this is because of "alternate priorities by the recycled water wholesaler within the service areas, the Central Basin Municipal Water District (CBMWD), and a lack of funds available." The plan identifies one potential customer with a demand of 42 acre-feet per year. The plan states that it receives benefits from MWD's water transfers and desalination programs but it has no plans to pursue such options on its own.

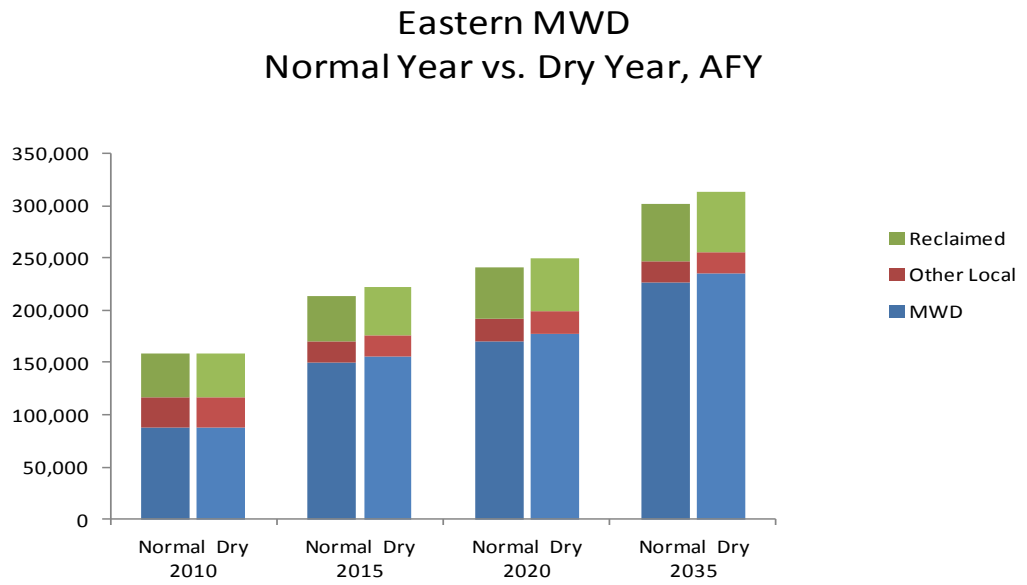
Eastern MWD

Overview

The Eastern Municipal Water District is located in western Riverside County, approximately 75 miles east of Los Angeles. The 555 square mile service area includes seven incorporated cities in addition to unincorporated areas of the County of Riverside. Eastern provides both water and sewer services to many, but not all of the areas it serves. It also provides wholesale water to three separate cities, two water companies, and two water districts including the Rancho California Water District. The population within EMWD's boundaries is 695,923 and is forecast to grow by 59.7% to 1,111,729 by the year 2035. Water use is expected to increase by 80.7% over the same period, from 159,408 acre-feet in 2010 to 288,100 acre-feet in 2035. Because 2010 was a year when MWD supplies were limited and water demands were lower than previous years, the increase in demand versus projected increase in population is somewhat distorted. According to its UWMP, the majority of this increase in water use is expected to be met by MWD, with increases in recycled water production offset by decreases in groundwater pumping.

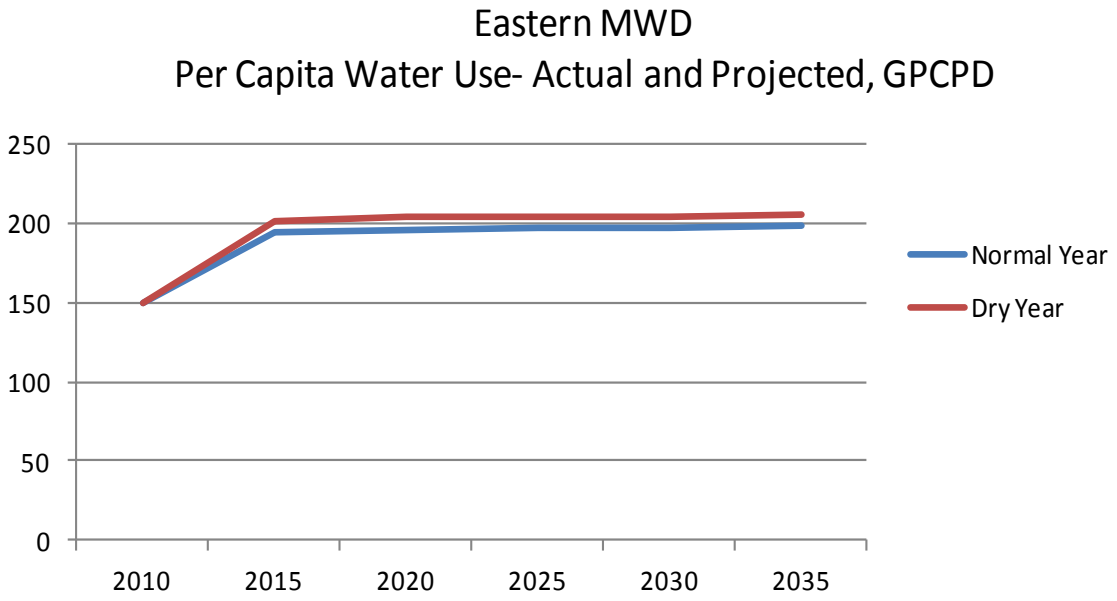
Existing and Projected Future Water Supply and Demand

Eastern's demand projections "were developed using projections provided by the Riverside County Center for demographic research." According to the plan," EMWD retail demand projections include the water savings needed to meet the Water Conservation Bill of 2007 requirements." The plan notes that the area is currently experiencing a slowdown in new development, but the area is only about 40 percent built out. EMWD tracks new developments using a special database. The UWMP demands are as follows:



Conservation and Per Capita Water Use

Eastern's UWMP includes calculations to meet SBX7-7 requirements. Its calculated baseline usage is 212 GPCD and method 2 is used to determine its 2105 target of 197.98 GPCD and 2020 target of 183.96 GPCD. To reduce its demands it plans to increase recycled water use and develop various conservation programs. The targets apply to the retail service areas; the wholesales areas may have different targets. Using population data and average and dry year UWMP forecasts, the per capita use is projected as follows:



Water Supply Reliability

Eastern's UWMP shows its water supplies as sufficient to meet its demands under all conditions evaluated. According to the plan, "The majority of EMWD's current and projected water supplies are imported through the MWD. In its 2010 RUWMP, MWD concluded that with the storage and transfers programs developed, MWD will have a reliable source of water to serve its member agencies' needs through 2035 during normal, historic single-dry and historic multiple-dry years. Unprecedented shortage will be addressed through the water supply allocation plan."

The plan states that Eastern's planned local supplies will supplement imported supplies and improve reliability for Eastern and the region. Eastern plans to expand a desalination program to desalt brackish water. The plan states that another desalter could be warranted, in addition to an indirect potable reuse project. These additional supplies are not included in supply projections. The plan also states that EMWD is proposing a targeted 30 percent reduction in outdoor demand and a 10 percent reduction in indoor demand by 2035. Presumably these reductions are not included in the demand projections. Eastern states that it is investigating opportunities for independent transfers and exchanges, but states that it cannot quantify these at this time.

Foothill MWD

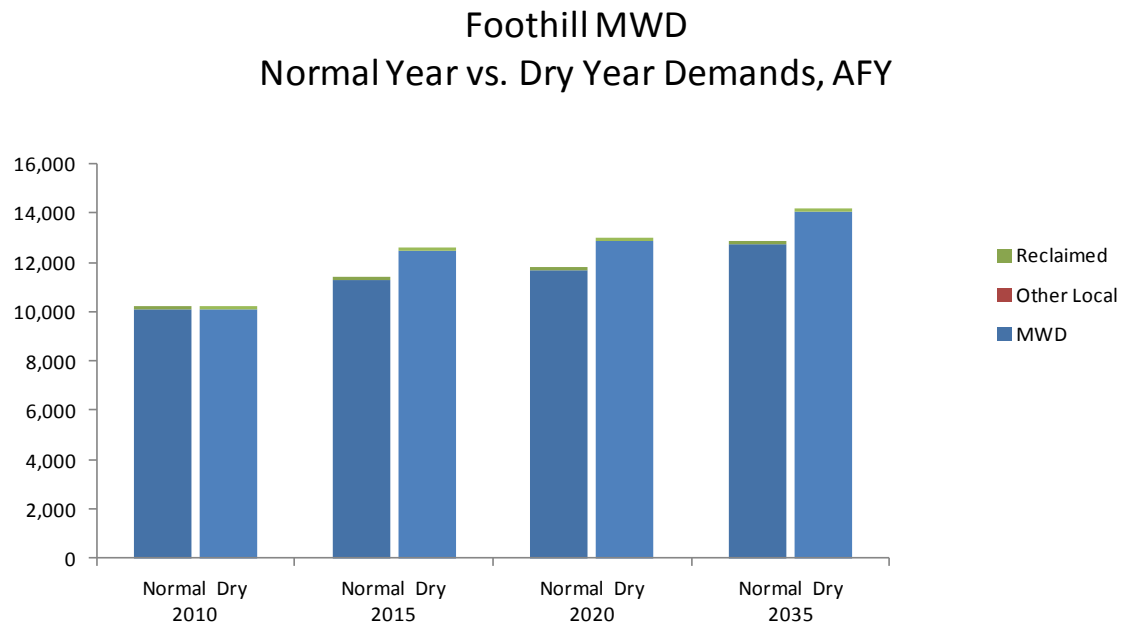
Overview

The Foothill Municipal Water District is a wholesale agency that provides imported water to retail agencies located in the foothills of the San Gabriel Mountains in Los Angeles County. While FMWD is dependent on MWD for 100 percent of its water supply, most of its retail agencies have access to their own groundwater supplies. Currently, these agencies rely on about 60 percent of their supplies to come from FMWD.

The FMWD service area covers 21.66 square miles and overlies both the Raymond and Verdugo Groundwater Basins. FMWD's 2010 RUWP lists its current population at 87,876 and projects populations to increase 16.1% to 102,003 in the year 2035. Total normal year imported demand listed the UWMP is expected to increase 25% over the same period, although this increase represents only the increase in imported water demands of the agencies that FMWD serves and not use of local supplies. The UWMP does not document or project local supply used within its service area.

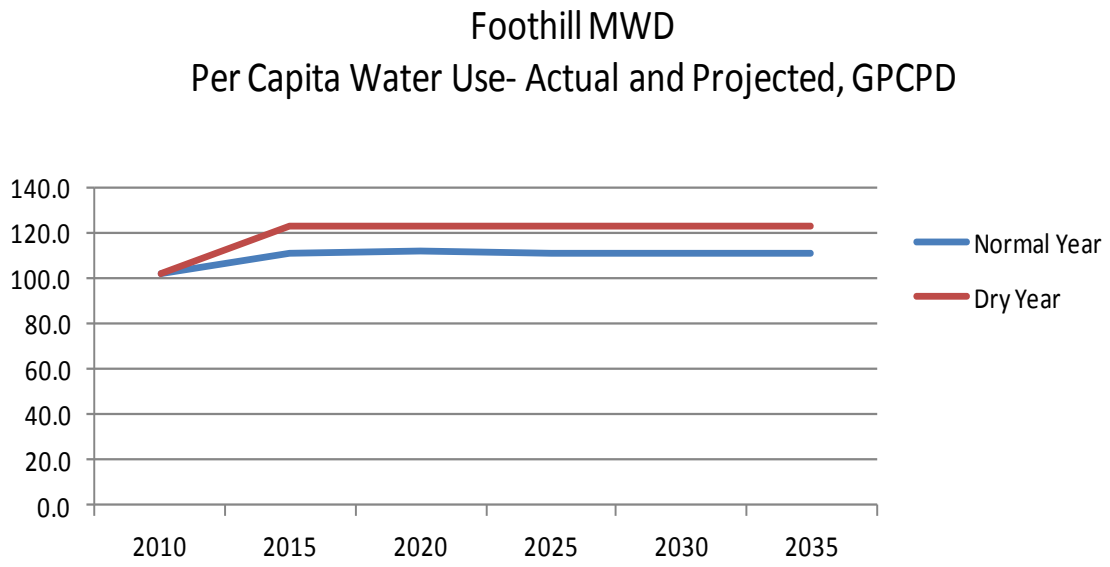
Existing and Projected Future Water Supply and Demand

FMWD's future MWD demands are the accumulation of its retailer's estimated demands for imported water. Presumably this information came from the retailers as they would have the best local knowledge of historic water use trends, demographic, and land use trends within their boundaries. The UWMP demands and supply are as follows:



Conservation and Per Capita Water Use

Foothill's UWMP states that each of its retail agencies that are required to comply with SBX7-7 requirements have chose to do so individually. Using population data contained in the plan and average and dry year UWMP imported water forecasts, the per capita imported use is projected as follows:



Water Supply Reliability

Foothill's UWMP indicates that future supplies are sufficient to meet its anticipated demands, but relies heavily on MWD's RUWMP as the basis for this conclusion. FMWD's plan includes MWD's RUWMP Tables 2-11, 2-19, and 2-10 which list a potential surplus of supply in all years examined in its plan.

FMWD's plan assumes the current level of use of reclaimed water throughout the planning period. The plan does note, however that FMWD has initiated a Local, Reliable Water Supply Program (LRWSP) to reduce dependence on imported water through development of recycled water as well as integrating storm water capture and recharge with recycled water and water conservation throughout its service area. If implemented, the plan could increase recycled water from the current estimate of 120 acre-feet per year to up to 1,400 acre-feet per year.

City of Fullerton

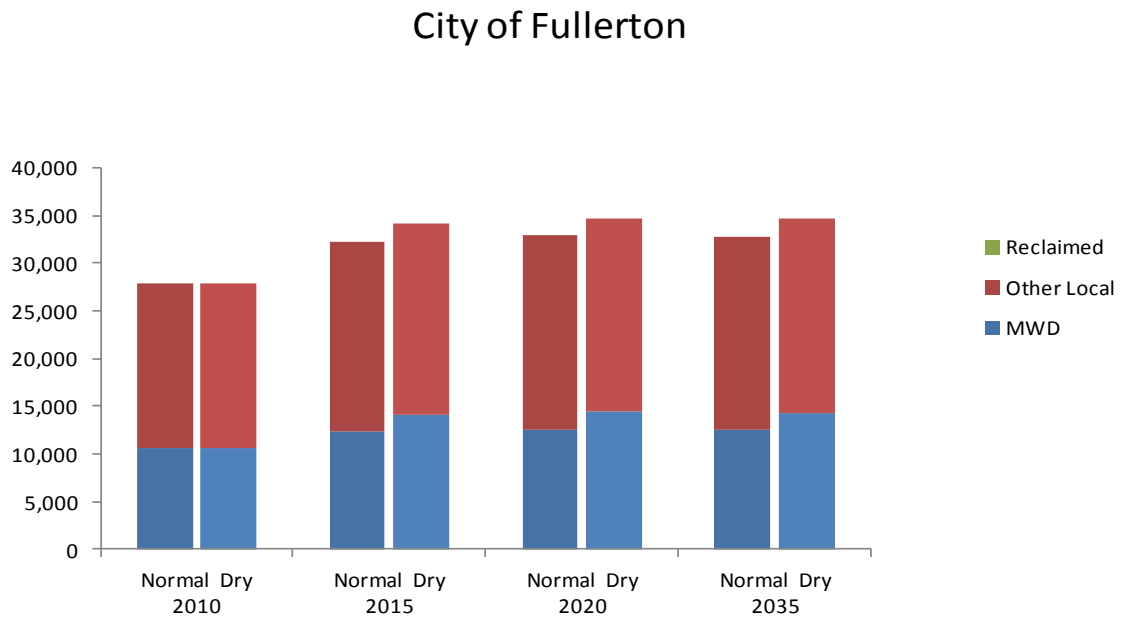
Overview

The City of Fullerton provides water to residents and businesses throughout its 22.3 square mile service area. The City receives water from two main sources: the Lower Santa Ana River Groundwater Basin, which is managed by the Orange County Water District and imported water from MWD. Groundwater is pumped from active wells located within the City and imported water is delivered through six treated water connections from MWD.

Fullerton's 2010 RUWP lists its current population at 138,600 and projects population to increase to 153,613 in the year 2035, an increase of 10.8%. Total Demand from the UWMP is expected to increase 17.7 % over the same period, from 27,860 acre-feet in 2010 to 32,792 acre-feet in 2035. This increased demand will be met by both increased groundwater pumping and deliveries from MWD.

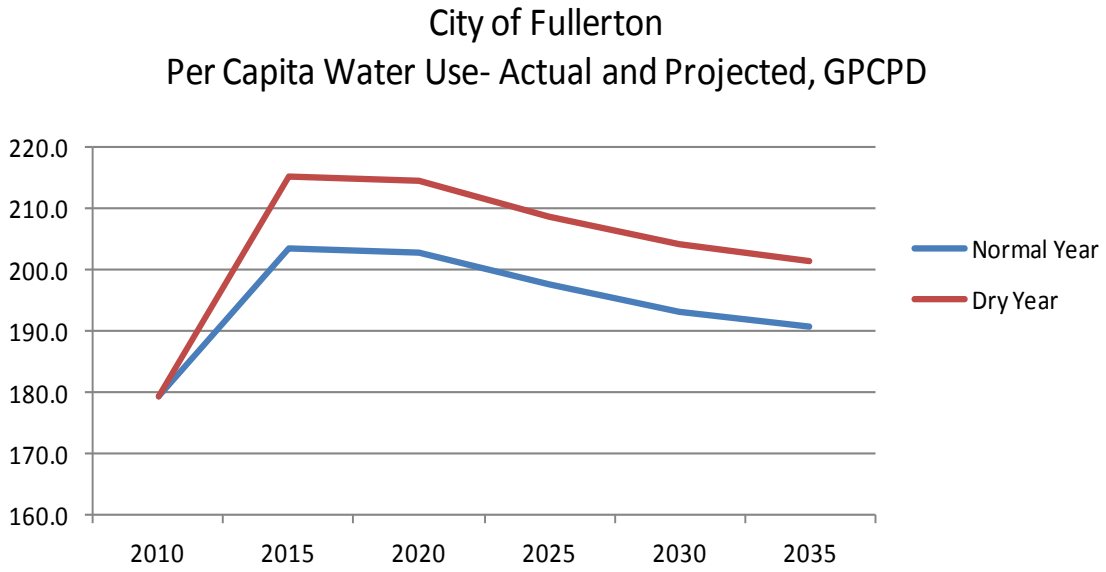
Existing and Projected Future Water Supply and Demand

Fullerton's demand projections were determined by an examination of its past water consumption by type of use or by customer classification and information provided by the Center for Demographic Research at California State University Fullerton.



Conservation and Per Capita Water Use

Fullerton is a member of an Orange County 20x2020 Regional Alliance, which is an effort to create flexibility in meeting the per capita water use reduction targets required under SBX7-7. Fullerton and members of The Regional Alliance selected as its calculation method the first DWR option, which requires a simple 20% reduction from the baseline by 2020 and 10 percent by 2015. The City's targets for 2015 and 2020 are 199.9 and 177.7 GPCD, respectively. Using population data and average and dry year UWMP forecasts, the per capita use is projected as follows:



Water Supply Reliability

Fullerton's UWMP indicates that future supplies are sufficient to meet its anticipated demands. Fullerton's plan relies on MWD's RUWMP as the basis for this conclusion and includes MWD's RUWMP Tables 2-11, 2-19, and 2-10 which list a potential surplus of supply in all years examined in its plan.

The plan includes a discussion of groundwater and its management within the basin. It assumes the Basin Pumping Percentage will remain at 62% for the planning horizon. This percentage limits the amount of water Fullerton can pump to a percentage of its total use. Use of direct recycled water within Fullerton is expected to remain constant over the planning period, at 300 acre-feet per year. The plan states that Fullerton supports OCWD's effort to increase recycled water use though its recharge of the groundwater basins, but states that past efforts to explore other recycled water use is not cost effective or beneficial to Fullerton. It has no plans to use recycled water other than what is made available through groundwater recharge from OCWD. The plan lists potential desalination projects within Orange County and states that Fullerton has a non-binding letter of intent with Poseidon Resources for 2,500 acre-feet of supply from the proposed Huntington Beach Seawater Desalination Project, but does not include this project in its projections.

City of Glendale

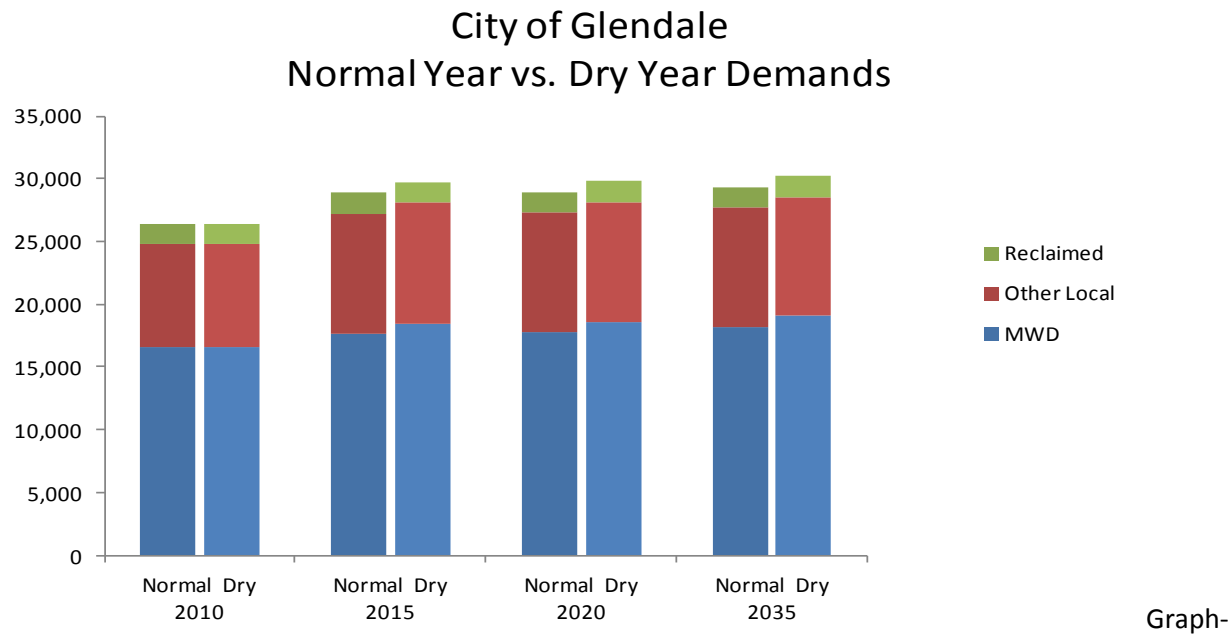
Overview

The City of Glendale's Water and Power service area is located northeast of the City of Los Angeles and adjacent to both the City of Burbank on the west and the City of Pasadena on the east, encompassing a service area of 31.58 square miles. Glendale's UWMP lists its current population at 210,293 and projects population to increase to 244,357 in the year 2035, an increase of 16.2% overall. Total normal year demand from the UWMP is expected to increase 10.9 % over the same period, from 26,448 acre-feet in 2010 to 29,323 acre-feet in 2035. This demand increase is expected to be met by additional local water and MWD supply sources.

Glendale's current water supplies include local groundwater from the San Fernando and Verdugo groundwater basins. Full use of these basins have been limited in recent years, due to water quality issues, however efforts to clean up contaminants and improve water quality and supply availability have allowed Glendale to increase production in recent years.

Existing and Projected Future Water Supply and Demand

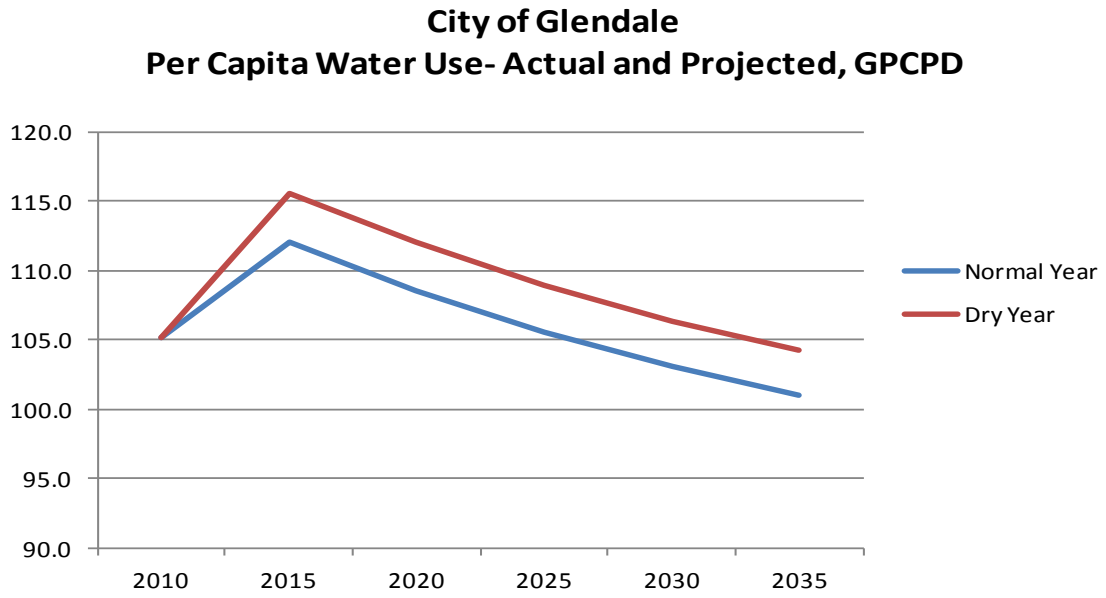
Projections of water demand for Glendale were developed by examining historical water use by major category including single-family, multi-family, commercial, industrial, irrigation, and other. According the UWMP, "Water demand by category for the next 25 years was projected per the same percentage increase used in the supply calculations." UWMP projected future demands are as follows:



Graph-

Conservation and Per Capita Water Use

Glendale evaluated its SBX7-7 requirements using Method 3 and determined its per capita target to be 137 GPCD and an interim target of 140.1 GPCD for 1015. Using population data and average and dry year UWMP forecasts, the per capita use is projected as follows:



Water Supply Reliability

Glendale's UWMP indicates that future supplies are sufficient to meet its anticipated demands. The plan relies on MWD's RUWMP as the basis for this conclusion with respect to imported water availability. According to the plan, "Glendale foresees very little change in available sources and amounts of water supply needed to meet water demands. In the next 25 years, we expect the same amount of supply from the San Fernando Basin. On the other hand, we will be utilizing the City's full water rights in the Verdugo Basin with the addition of new wells. Recycled water... will remain constant with very little addition." Imported water from MWD as stated in MWD's 2010 UWMP, "shows that the region can provide reliable water supplies under both the single driest year and the multiple dry year hydrologies."

The plan contains only a brief discussion of water transfers and desalination. Glendale may utilize short term transfers with neighboring agencies or cities. The plan states that it is supportive of MWD's efforts to secure out-of-region water transfers and (with other agencies') desalination.

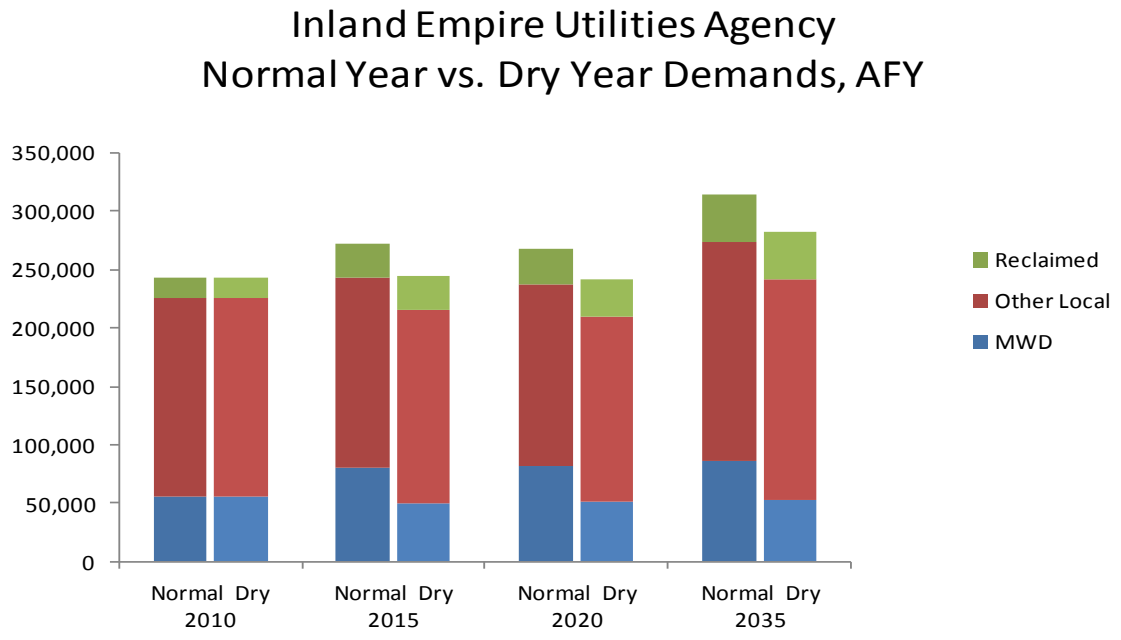
Inland Empire Utilities Agency

Overview

The Inland Empire Utilities Agency provides a number of services within the western portion of San Bernardino County, including production of recycled water, sewage collection and treatment, distribution of imported and recycled water, desalination of groundwater supplies and disposal of industrial wastewater and brine. IEUA's service area encompasses approximately 242 square miles and serves an estimated population of 846,469. The population is expected to grow 38.9% by 2035. Water use within the service area for 2010 is reported as 243,664 acre-feet, and is expected to increase 28.9% to 314,136 acre-feet by 2035. This increased demand is expected to be met by a combination of increased recycled water use (32%), increased groundwater production (24%) and increased deliveries from MWD (44%).

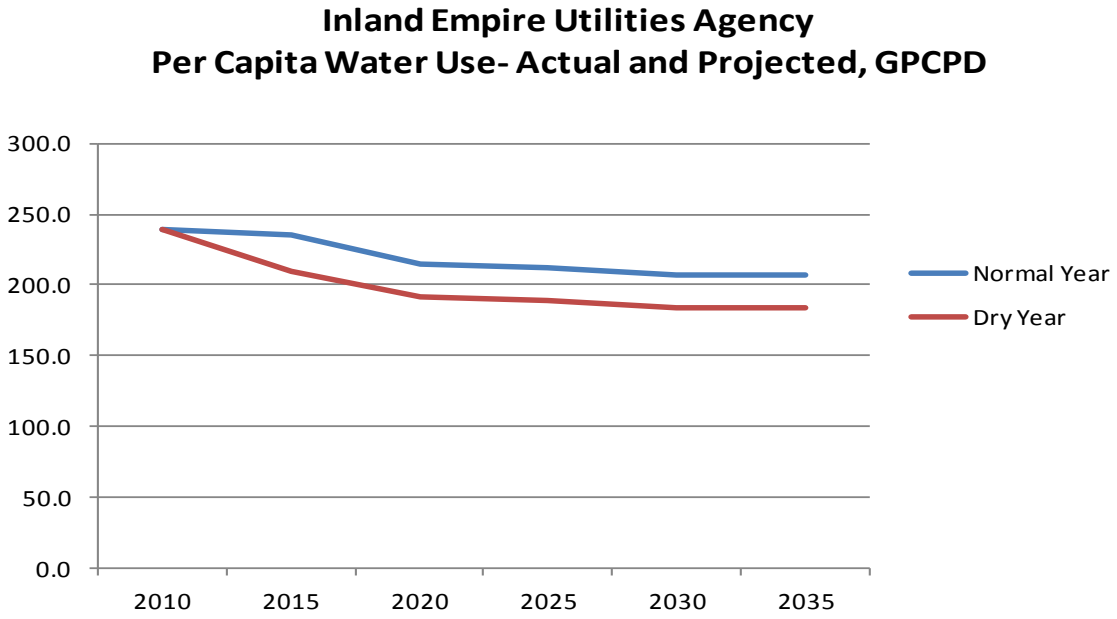
Existing and Projected Future Water Supply and Demand

IEUA's UWMP compares its estimated total water use in the future with MWD projections derived from the MWD-MAIN model. According to the UWMP, overall IEUA member agency demand projections are very similar to MWD's projections, with IEUA's demands being approximately 1% higher than MWD's in the year 2035. The UWMP demands are as follows:



Conservation and Per Capita Water Use

IEUA's UWMP includes calculations to meet SBX7-7 requirements, even though as an urban wholesale water supplier, is not required to do so. It calculated its baseline for the "IEUA territory" as 251 GPCD with 2015 and 2020 targets of 226 and 201 GPCD, respectively. The UWMP states that IEUA expects to meet or exceed both targets. Using population data and average and dry year UWMP forecasts, the per capita use is projected as follows:



Water Supply Reliability

IEUA shows its water supplies to exceed its demands under all conditions evaluated. IEUA assumes in its projections that during dry and multiple dry years demands will be reduced by 10%. The plan states that with implementation of MWD's 2010 IRP, it will have the resources to supply IEUA customers with 100 percent of their imported water demands. The plan states that with IEUA's dry year yield program in effect, several of IEUA's member agencies will reduce their imported water demands, thus reducing demands on MWD. This reduction (to 62% of the normal demand) is reflected in the single and multiple dry years imported water projections. While the plan states overall demand projections by its members are consistent with the MWD MAIN overall projections, it does not state whether both MWD and IEUA account for reduced MWD demands in the dry and multi-dry year scenarios.

The plan discusses ways in which recycled water use will increase, how groundwater programs will increase dry year yield, and also how expansion of the Chino desalter will increase local supplies to IEUA agencies.

Las Virgenes MWD

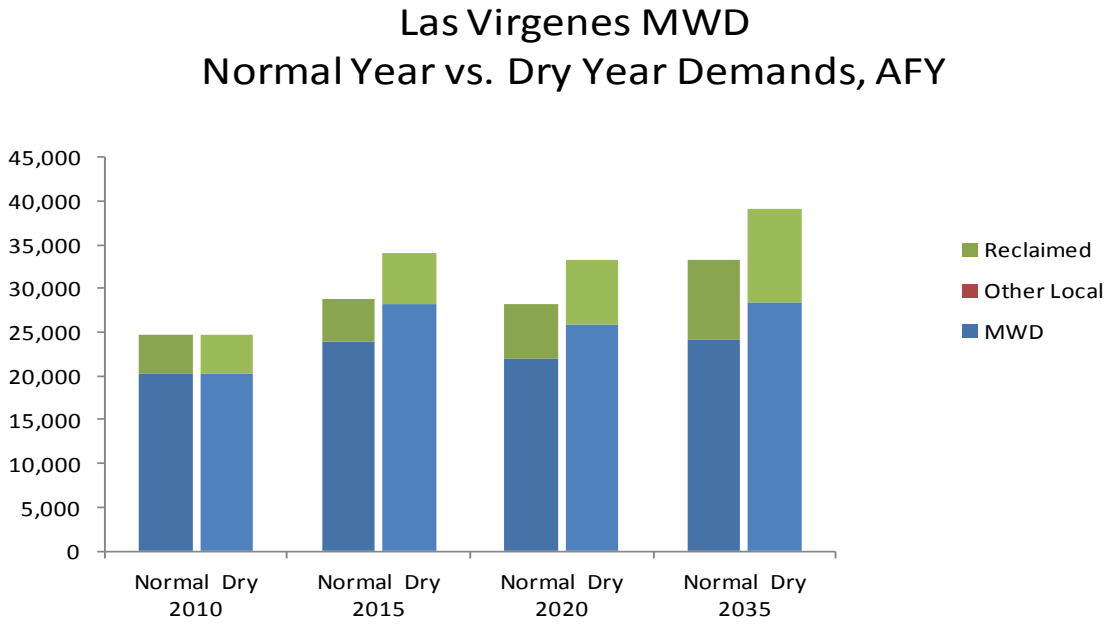
Overview

Las Virgenes Municipal Water District is a retail water supplier in western Los Angeles County and comprises a 122 square mile area. The service areas includes the incorporated cities of Agoura Hills, Calabasas, Hidden Hills and Westlake Village as well as unincorporated portions of Los Angeles County.

LVMWD's 2010 RUWP lists its current population at 75,384 and projects populations to increase to 87,811 in the year 2035, an increase of 16.5%. Total normal water year demand from the UWMP is expected to increase 34.5% over the same period, from 24,721 acre-feet in 2010 to 33,252 acre-feet in 2035. Of this increase, approximately 53% is projected to be from increased recycled water use. LVMWD notes in its plan that 2010 demands are lower than its projected demand, citing temporary conditions including penalties, weather and recession.

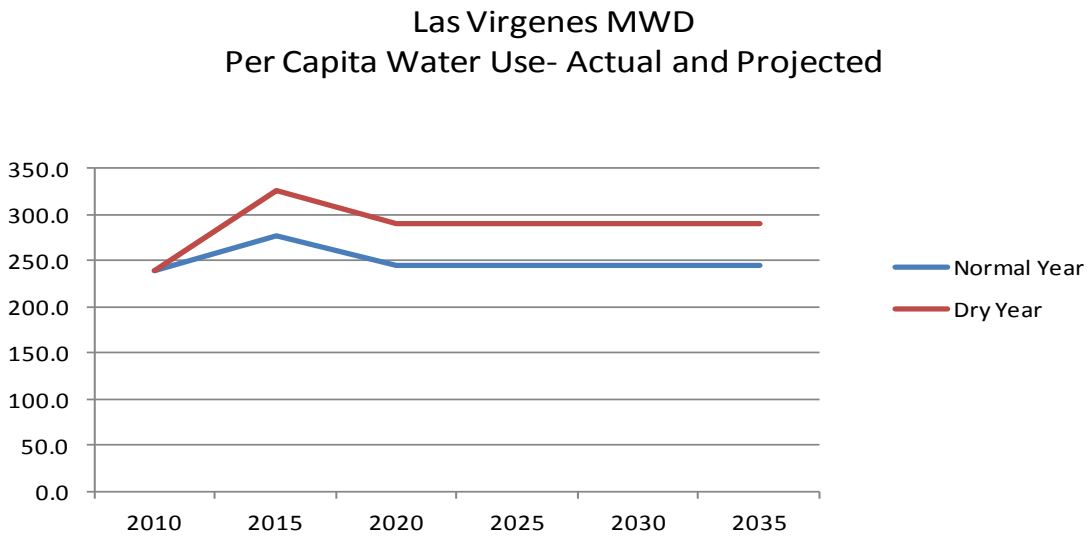
Existing and Projected Future Water Supply and Demand

LVMWD uses SCAG populations as the basis for calculating future water demands. The plan states that historical per capita consumption rate was used in combination with the population projects to estimate future water demands. The plan states that this is the same method used in LVMWD's 2007 Integrated Water System Report.



Conservation and Per Capita Water Use

LVMWD selected as its calculation method the first DWR option, which requires a simple 20% reduction from the baseline by 2010 and 10 percent by 2015. Using population data and average and dry year UWMP forecasts, the per capita use is projected as follows:



Water Supply Reliability

LVMWD 's UWMP indicated that future supplies are sufficient to meet its anticipated demands. LVMWD's plan relies on MWD's RUWMP as the basis for this conclusion. LVMWD's plan assumes that since MWD's plan lists a potential surplus of supply in normal, single dry year, and multiple dry years, the same percentage of potential surplus would be available to LVMWD for each of the years evaluated.

The plan includes a discussion of facilities LVMWD is planning to construct to enhance operations of its potable water system and expand its reclaimed water system. It also discusses a potential water transfer with Calleguas MWD to complete an intertie project to help fill its Las Virgenes reservoir. Presumably, this would not decrease overall MWD demands, as the water could likely come from MWD through Calleguas. Beyond the expansion of its reclaimed water system and use already included in its projections, no further potential reclaimed water or desalination projects are identified in the plan.

City of Long Beach

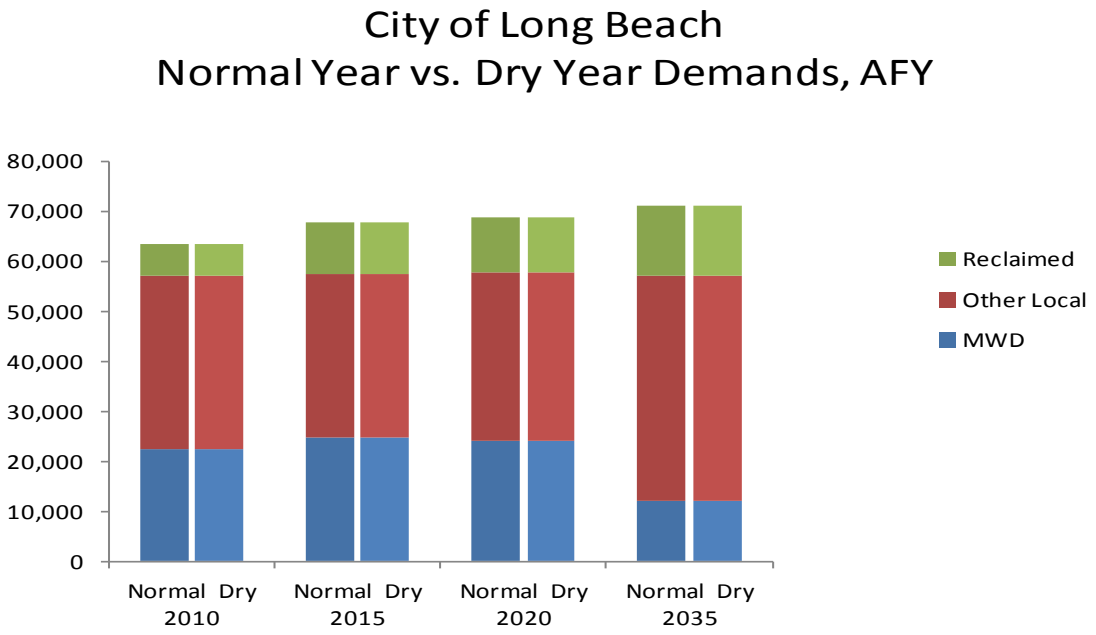
Overview

The City of Long Beach incorporates about 52 square miles in the southwest corner of the County of Los Angeles. Long Beach's UWMP lists its current population at 462,257 and projects population to increase to 508,233 in the year 2035, an increase of 9.9% overall. Total normal year demand from the UWMP is expected to increase 11.8 % over the same period, from 63,448 acre-feet in 2010 to 70,929 acre-feet in 2035. This demand increase is expected to be met by additional local water, including recycling and seawater desalination. These additional supplies are also expected to decrease MWD demands from 22,237 acre-feet in 2010 to 11,929 acre-feet in 2035.

Long Beach's current water supplies include local groundwater from the West Coast Basin. According to the UWMP, Long Beach has a right to pump 32,692 acre-feet from the basin and has and will continue to fully utilize this supply.

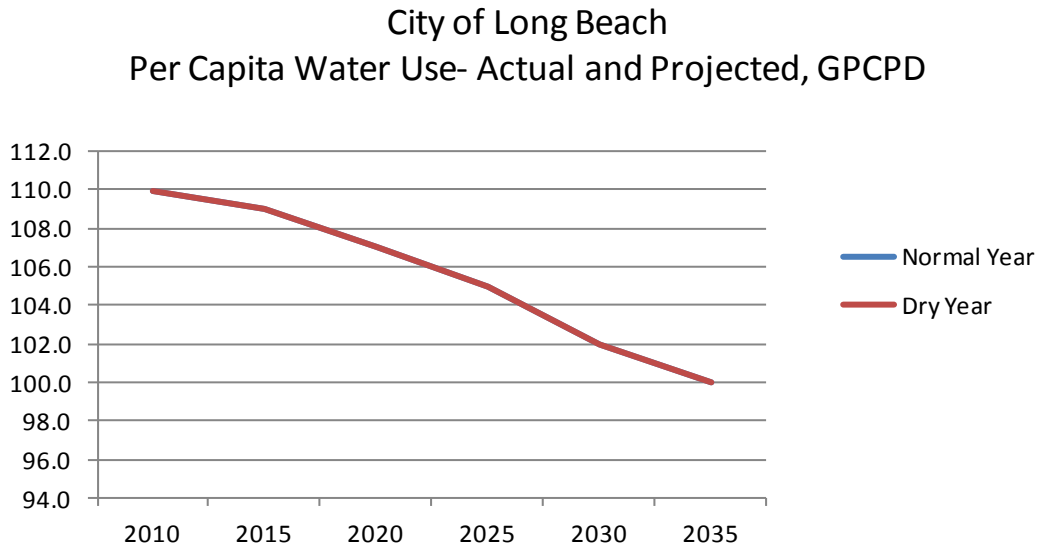
Existing and Projected Future Water Supply and Demand

According to the plan, "Future water use projections were based on estimates developed in cooperation with MWDSC (which used input from LBWD and SCAG, feed that information into MWDSC's econometric model), LBWD's expectations for additional water conservation and the SBX7-7 urban water use target for LBWD." UWMP projected future demands are as follows:



Conservation and Per Capita Water Use

Long Beach evaluated its SBX7-7 requirements using Method 1 and determined its per capita target to be 107 GPCD. The plan states that Long Beach did not account in its calculations for indirect potable reuse water that is used, in part, to charge the West Coast Basin. It reserved the right to use these supplies for calculation purposes in the future. This is because the City feels it can meet the water use target without having to account for this additional reclaimed water usage at this time. Using population data and average and dry year UWMP forecasts, the per capita use is projected as follows:



Water Supply Reliability

Long Beach's UWMP indicates that future supplies are sufficient to meet its anticipated demands. The plan relies, in part, on MWD's RUWMP as the basis for this conclusion with respect to imported water availability. The plan includes calculations of its preferential right from MWD and determines that even if MWD had only 1,500,000 acre-feet of supply, its 2.54% of preferential rights would provide 38,100 acre-feet of supply, and would sufficiently meet its current or future expected MWD demand of 22,237 and 11,929 acre-feet, respectively.

Long Beach is expanding its use of reclaimed water and has incorporated a seawater desalination plant that would provide up to 10,000 acre-feet of water , beginning in 2025. While the desalination plant's production was incorporated into Long Beach's future supplies, the plan states "If the desalination facility is not put into production LBWD will continue to purchase the same amount [as current] from MWDSC. This will have no impact of MWDSC's ability to supply reliable water to LBWD, due to the relatively minuscule amount of water involved compared to the total MWDSC supply, and for the reasons stated above [preferential right]in the discussion of imported water." Long Beach has no plans to pursue water transfers, and "will rely on MWDSC to make that determination and pursue transfers/ exchanges."

City of Los Angeles

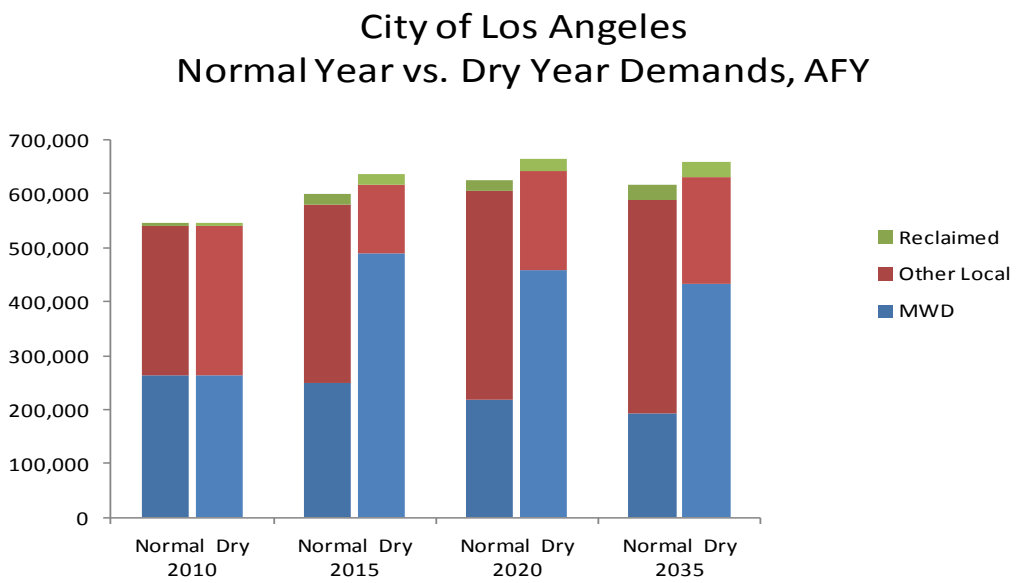
Overview

The City of Los Angeles Department of Water and Power (LADWP) provides water and power service to its 4,100,260 residents. The service area encompasses 472 square miles and residential development constitutes over 51 percent of the total land use within the City. LADWP's population is expected to grow 8.9% to 4,467,560 and water use is expected to increase 18.4%, from 545,962 acre-feet in 2010 to 646,432 acre-feet in 2035. Because 2010 was a dry year for LADWP local supplies, normal water year MWD supplies are expected to decrease from 262,538 acre-feet in 2010 to 193,027 acre-feet in 2035. However, Los Angeles has large swings in its MWD water demand depending on availability of water from its Los Angeles Aqueduct (LAA). In a single dry year LADWP estimates its 2035 demand on MWD to be 432,687 acre-feet, up 224% over it normal year demand for the same year. At the same time LAA supplies would have been reduced for a normal year of 244,000 acre-feet to 46,940 acre-feet.

LADWP also has groundwater water supplies currently providing about 77,000 acre-feet plus recycled supplies of 6,700 acre-feet.

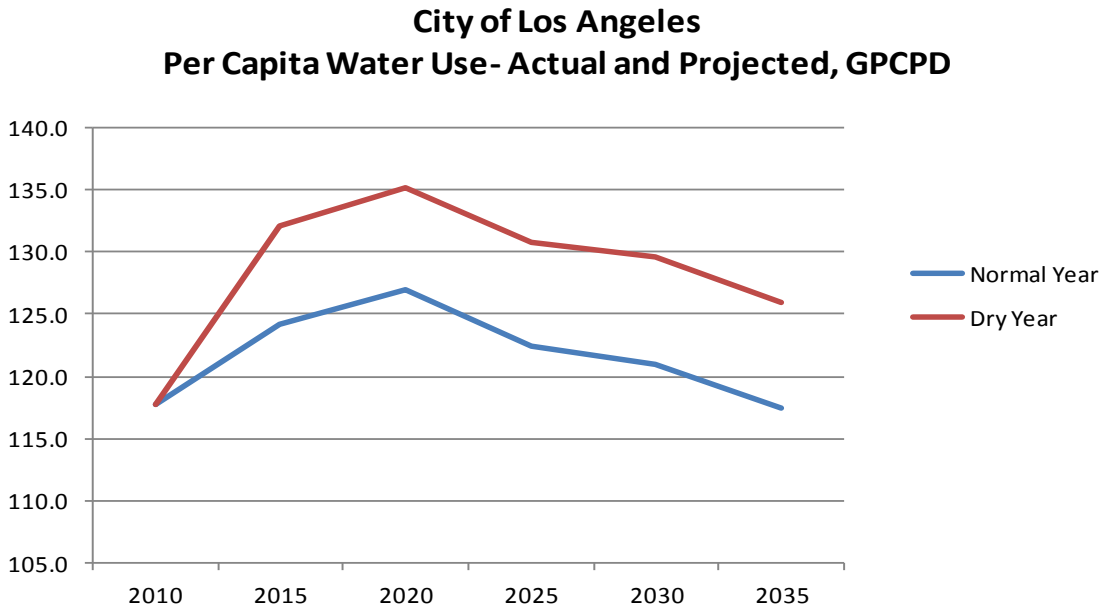
Existing and Projected Future Water Supply and Demand

LADWP developed a statistical conservation model that correlates total monthly water use in the City with population, weather, the presence of mandatory water conservation, and economic recessions. The model can be used to predict what the water demand would be under actual weather conditions, population growth, and the economy. The model was calibrated with past conservation, population, and econometric data. Using this model LADWP forecast water use as follows:



Conservation and Per Capita Water Use

LADWP evaluated its SBX7-7 requirements using Method 3 and determined its per capita baseline to be 154 GPCD. LADWP's interim target is 146 GPCD and the 2020 target is 138 GPCD. Using population data and average and dry year UWMP forecasts, the per capita use is projected as follows:



Water Supply Reliability

LADWP's UWMP indicates that future supplies are sufficient to meet its anticipated demands. The plan relies on MWD's RUWMP as the basis for this conclusion with respect to imported water availability, but states that if imported water shortages should occur, then MWD's Water Supply Allocation Plan would be implemented. The plan states that the WSAP was "designed to allocate supplies among its member agencies in a fair and efficient manner." It also states "whether LADWP can provide reliable water services to the residents of Los Angeles is highly dependent on MWD's assurances of supply reliability. It further states that "the recent water supply shortage caused by dry weather and pumping restrictions in the Delta prompted the City to develop a more sustainable water supply portfolio."

LADWP plans to reduce its normal year purchases from MWD by half, from the five-year average of 52 percent of total demands between 2006 and 2010 to 24 percent by 2035. The dry year purchases would be nearly 63 percent. The reduction in normal year purchases would be accomplished by increasing recycled water use to 59,000 acre-feet (direct and indirect), annual water transfers of 40,000 acre-feet and increased groundwater usage to 110,000 acre-feet . The water transfers would be accomplished through an interconnection that LADWP is constructing between its LAA and the State water Project's

California Aqueduct. This connection will be owned by DWR and designated as an AVEK (Antelope Valley East Kern) interconnection. The plan states that MWD is involved in the agreement to provide consent for the transferred water to enter its service territory.

Under potential supplies, the plan states that storm water capture and reuse and groundwater replenishment could provide 25,000 acre-feet by 2035. LADWP's current water resources strategy does not include seawater desalination as a water supply.

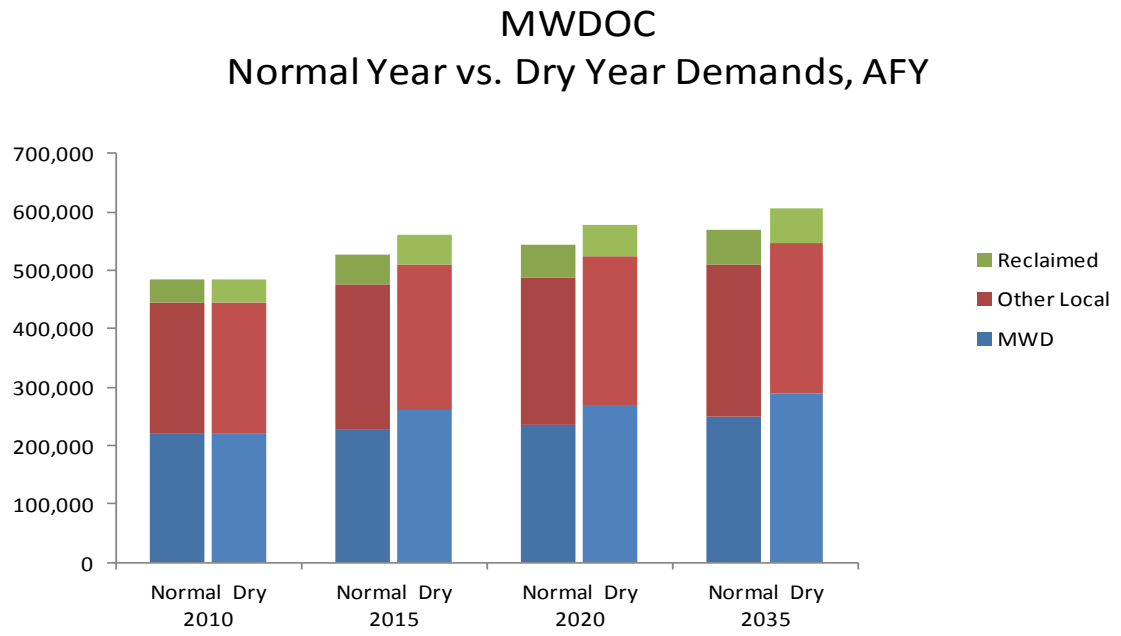
Municipal Water District of Orange County

Overview

The Municipal Water District of Orange County 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 imported water to 28 retail water agencies. MWDOC's 2010 RUWP lists its current population at 2,300,021 and projects populations to increase to 2,654,569 in the year 2035, an increase of 15.4%. Total Demand from the UWMP is expected to increase 17% over the same period, from 485,311 acre-feet in 2010 to 567,970 acre-feet in 2035.

Existing and Projected Future Water Supply and Demand

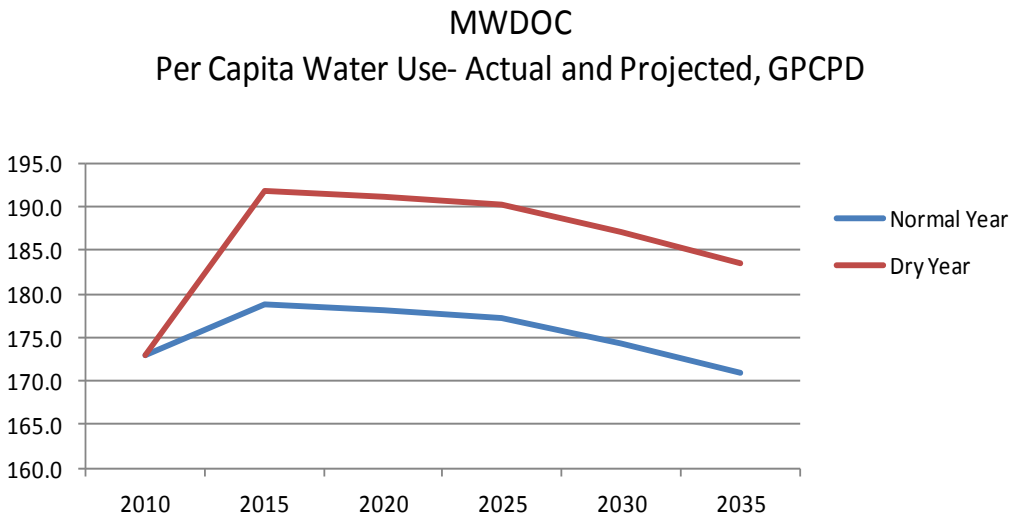
MWDOC requested that its member provide demand projections for the period 2015 to 2035, in five-year increments. The plan states that methodologies and assumptions underlying these projects vary from agency to agency, but all reflect the agencies knowledge of its service areas and "In most cases, the projections are correlated to the general plans prepared by the County of Orange or cities within MWDOC's service area."



Conservation and Per Capita Water Use

MWDOC, in collaboration with all of its retail agencies as well as the Cities of Anaheim, Fullerton, and Santa Ana, created an Orange County 20x2020 Regional Alliance in an effort to create flexibility in meeting the per capita water use reduction targets required under SBX7-7. The Regional Alliance

selected as its calculation method the first DWR option, which require a simple 20% reduction from the baseline by 2010 and 10 percent by 2015. Using population data and average and dry year UWMP forecasts, the per capita use is projected as follows:



Water Supply Reliability

MWDOC's UWMP indicates that future supplies are sufficient to meet its anticipated demands. MWDOC's plan relies on MWD's RUWMP as the basis for this conclusion. MWDOC's plan includes MWD's RUWMP Tables 2-11, 2-19, and 2-10 which list a potential surplus of supply in all years examined in its plan.

The plan includes a discussion of groundwater within MWDOC service area, including the Lower Santa Ana River Basin, San Juan Basin, La Habra Basin, Main San Gabriel, and other basins within its service area. Overall groundwater production within MWDOC service areas is projected to increase from 220,052 acre-feet in 2010 to 251,754 acre-feet in 2035. This increase includes 22,000 acre-feet of production from water quality improvement projects. From 2005 to 2009 groundwater pumping remained relatively flat, from 222,633 in 2005 to 226,967 acre-feet in 2009, with a high of 251,510 acre-feet in 2008. In January 2008 Orange County Water District's Groundwater Replenishment System (GRWS) came on line with a production capacity of up to 70 million gallons per day. The GRWS is designed to provide water to reduce seawater barrier intrusion and replenishment supplies to the basin.

MWDOC's plan lists a number of future water supply projects and programs that, if eventually implemented, might further reduce demands on MWD. Among these is Irvine Ranch Water District's (IRWD's) 50,000 acre-feet of storage capacity at the Strand Ranch in Kern County. This project could provide additional dry year supplies to IRWD. Two seawater desalination opportunities are also identified including a 50 MGD (56,000 acre-feet per year) plant in Huntington Beach and MWDOC's

proposal for a 15 MGD plant (16,000 acre-feet per year) in conjunction with Laguna Beach County Water District.

City of Pasadena

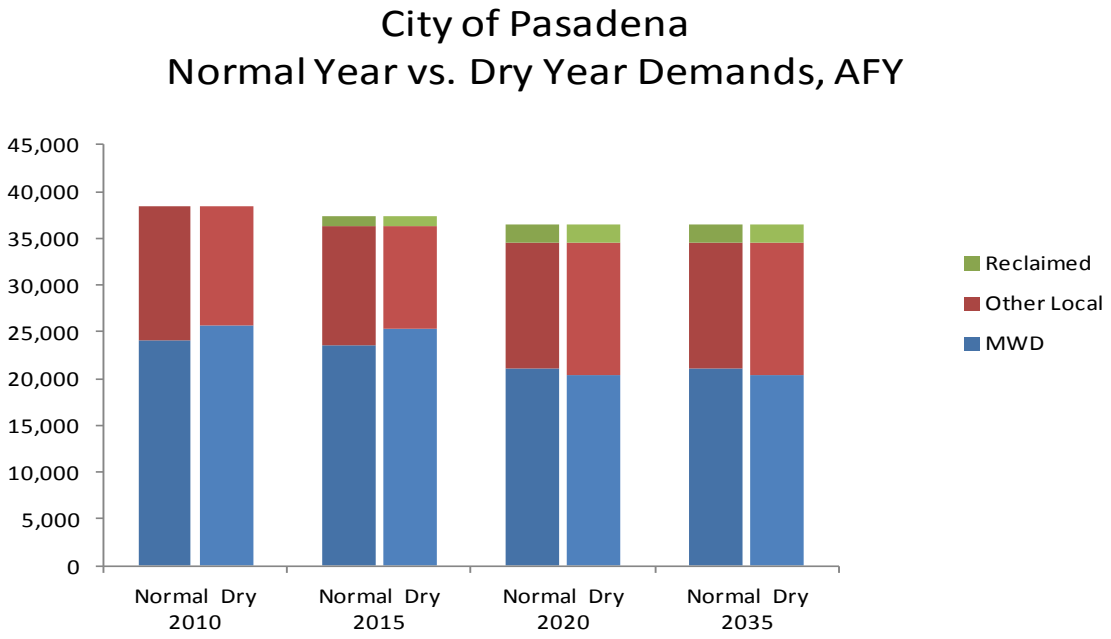
Overview

The City of Pasadena's Water and Power (PWP) service area is located within the northwest portion of the San Gabriel Valley in Los Angeles County, encompassing approximately 23 square miles, and is slightly larger than the legal boundary of the City of Pasadena. PWP's UWMP lists its current population at 175,957 and projects population to increase to 199,562 in the year 2035, an increase of 13.7% overall. Total normal year demand from the UWMP is expected to decrease 5.1 % over the same period, from 38,460 acre-feet in 2010 to 36,510 acre-feet in 2035. Because local supplies are projected to increase slightly (recycled water) during this period, the projected decrease in use would be from MWD supplies.

PWP's current water supplies include local groundwater from the Raymond Basin, surface water diversions, and purchases of imported water. Declining groundwater level have reduced PWP's pumping in the basin, and surface water is now used to augment these supplies.

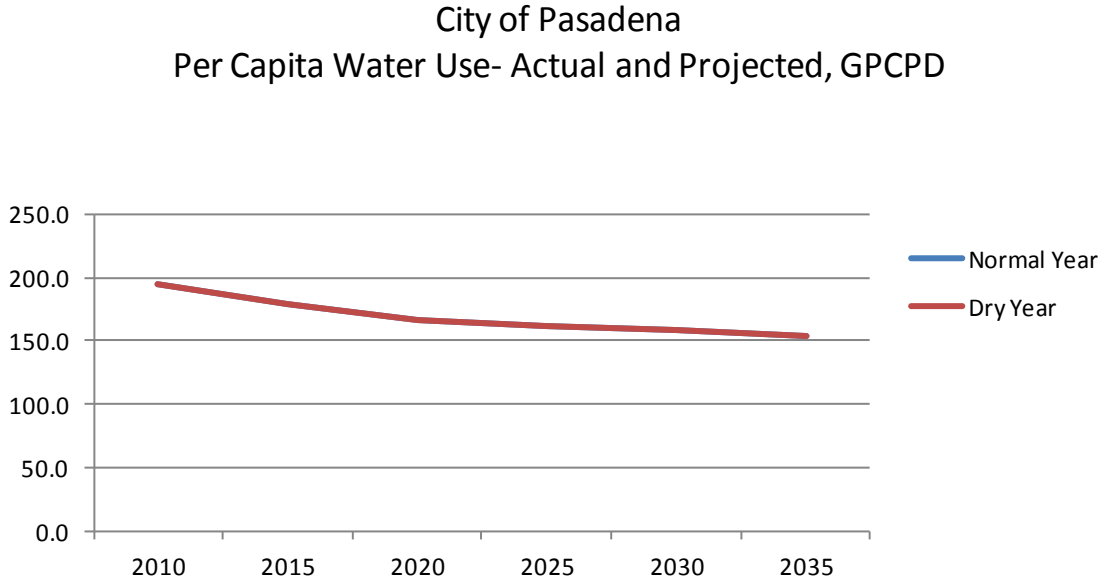
Existing and Projected Future Water Supply and Demand

Projections of water demand for Pasadena were developed as part of a recently completed Water Integrated Resources Plan based on historical water use factors, projected demographics, and passive water conservation. Demands were projected to increase from 2010 to 2035 without future active water conservation. With this conservation, the UWMP demands are as follows:



Conservation and Per Capita Water Use

Pasadena evaluated its SBX7-7 requirements using Method 1 and determined its per capita target to be 168 GPCD and an interim target of 189 GPCD for 1015. Using population data and average and dry year UWMP forecasts, the per capita use is projected as follows:



Water Supply Reliability

Pasadena's UWMP indicates that future supplies are sufficient to meet its anticipated demands. The plan relies on MWD's RUWMP as the basis for this conclusion with respect to imported water availability. Pasadena's plan discusses how recycled water will be used in the future, eventually accounting for nearly 6 percent of demands. The plan contains a brief discussion of water transfers, but in the context of receiving water from adjoining agencies or leasing additional groundwater storage space in the Raymond Basin. With respect to desalinated water, the plan states there is the potential to develop a partnership with a regional agency to develop a facility and also mentions the San Diego County Water Authority's Camp Pendleton projects as one such opportunity.

San Diego County Water Authority

Overview

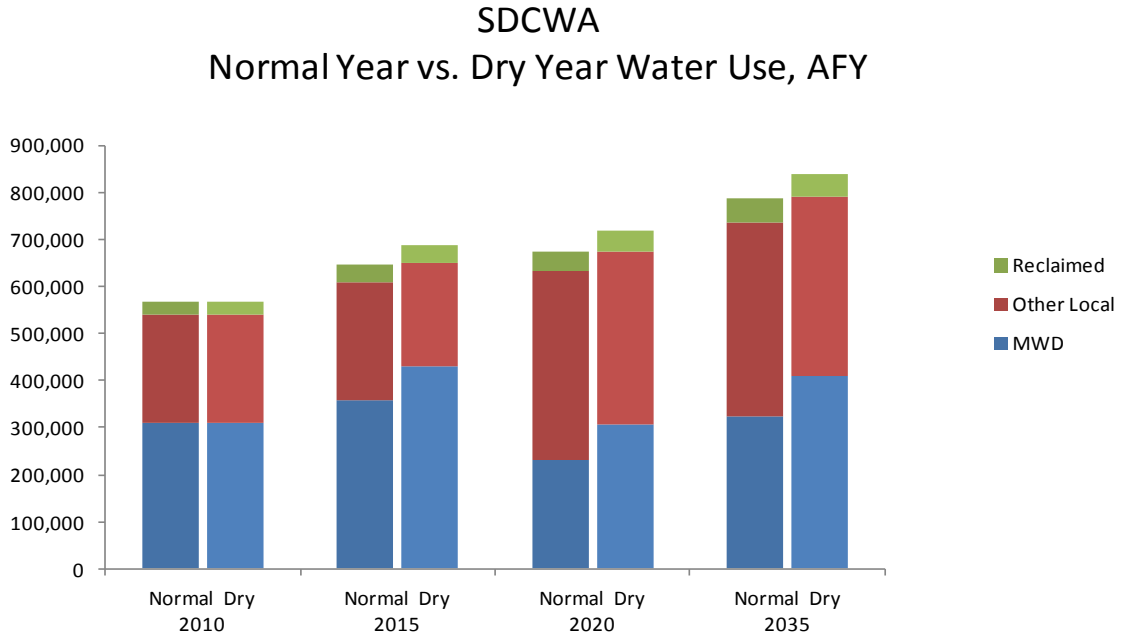
The San Diego County Water Authority is a regional water wholesaler and resource planning agency, that provides imported water to the western part of San Diego County. The remaining portion of the county is not within SDCWA's service area, nor does it receive imported water. SDCWA provides water to its 24 member agencies, supplying between 75 to 95 percent of the region's needs depending on weather conditions and yield from surface, recycled, and groundwater projects.

SDCWA's 2010 RUWP lists its current population at 3.2 million and projects populations to increase to 3,906,718 in the year 2035, an increase of 22.1 percent. Total Demand from the UWMP is expected to increase 39% over the same period, from 566,443 acre-feet in 2010 to 785,685 acre-feet in 2035. Like many MWD agencies, 2010 demands were well below average due to drought and water use restrictions. Average demands for the period 2005-2010 was 648,030 acre-feet. Using this figure, increased demand to 2035 is expected to be about 20 percent.

Existing and Projected Future Water Supply and Demand

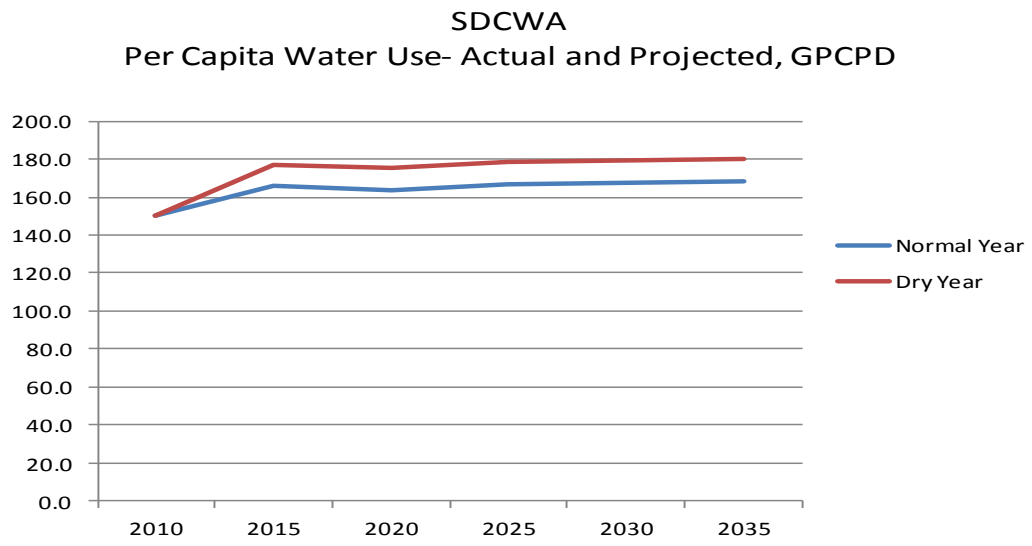
SDCWA service area demands include both agricultural and municipal uses. According to its UWMP, Municipal and Industrial (M&I) uses currently constitute about 80 to 85 percent of regional water consumption, with the remaining 15 to 20 percent being agricultural demands. In the future agricultural demand is expected to be less, and increase demands are anticipated to be in the M&I category.

M&I demands are forecast using an econometric water demand model call CWA-MAIN that has been calibrated for the region and uses various inputs regarding housing population and other significant factors provided by the San Diego Association of Governments (SANDAG). Agricultural demands are forecast using data from past trends, forecasted future efficiencies and crop and land use patterns. SDCWA incorporated anticipated climate change impacts into its forecast, which tend to suggest that the region have slight increases in demand over base conditions through 2035, but could be greater beyond this planning horizon.



Conservation and Per Capita Water Use

In its UWMP, SDCWA used urban water use targets that were calculated by each of its member agencies to determine the regional demand reductions required by SBX7-7 for inclusion in the plan. This was done in order to "clearly reflect retail compliance" with SBX7-7. For agencies that had already reach compliance, additional water use reductions were set to zero and the remaining use reductions were subtracted from the baseline derived from the CWA-MAIN model. No additional reductions are required after 2020, and SDCWA's 2025 to 2035 GPCD targets were set at agencies' 2020 GPCD targets. Using population data and average and dry year UWMP forecasts, the per capita use is projected as follows:



Water Supply Reliability

SDCWA's UWMP indicates that future supplies are sufficient to meet anticipated demands in normal and single dry years, but may be insufficient to meet its multiple dry years demands in certain instances. The potential shortages would be relatively mild and could occur by year 2015, be alleviated by the Carlsbad Desalination Project in 2016, and then begin to reoccur in by 2030 as demand and population increases. According to the plan, shortages could be up to 76,768 acre-feet (11 percent) in 2015 and up to 52,921 acre-feet (6 percent) in 2035. These potential shortages would be addressed through drought management actions.

The plan includes discussions of the SDCWA's water transfer with the Imperial Irrigation District (existing supply being ramped up to 2020), conservation of water through the lining of the All-American Canal (existing supply) and other projections such as the Carlsbad Desalination project being developed by Poseidon Resources Corporation. The region has also planned to increase use of reclaimed water and brackish water , increase use of its local and out of region groundwater storage, and is looking at additional seawater desalination at Camp Pendleton in northern San Diego County.

City of San Fernando

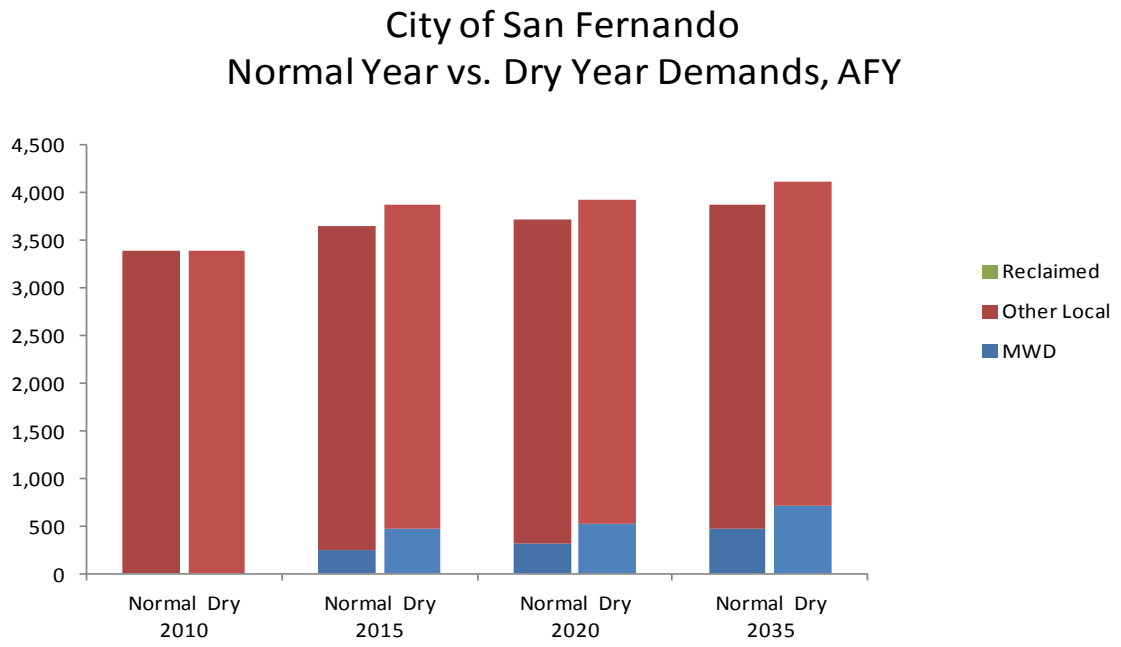
Overview

The City of San Fernando is located in the San Fernando Valley northwest of downtown Los Angeles and is bounded on all sides by the City of Los Angeles. The City's total areas is 2.42 square miles and overlies both the San Fernando and Sylmar groundwater basins.

San Fernando's 2010 RUWP lists its current population at 23,650 and projects populations to increase to 25,478 in the year 2035, an increase of 7.7%. Total normal year demand from the UWMP is expected to increase 14.3% over the same period, although this increase represents only 476 acre-feet because of the size of the City and its population. In 2010 San Fernando took no water from MWD, and projects only to use 476 acre-feet in 2035. San Fernando qualifies its projections of supply and demand, stating "[the tables for normal, dry year, and multiple dry years are] not intended to be an estimate of the City's actual groundwater production. The City may pump amounts different from its adjudicated right of 3,405 AFY based on leases to and from other agencies. The City may also overdraft up to 10% of this amount." The plan also states that actual demands are likely to be below the SBX7-7 limit of 136 GPCD in accordance with water efficiency trends in the City.

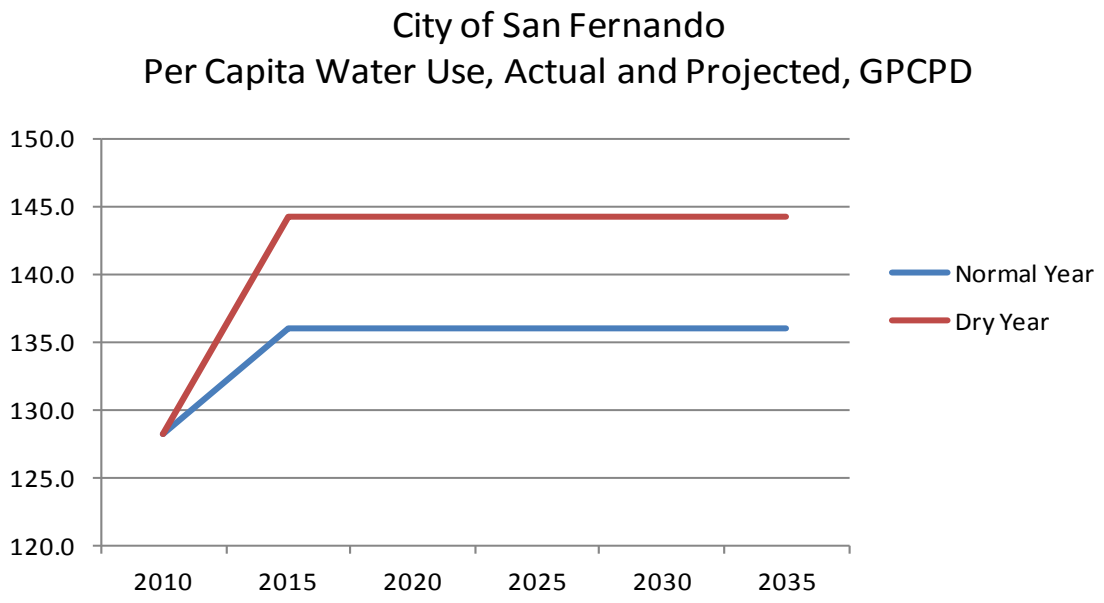
Existing and Projected Future Water Supply and Demand

San Fernando calculated its future demands based upon population forecast times 136 GPCD, which the UWMP states as less than its SBX7-7 target. Subject to the qualification shown above, the UWMP demands are as follows:



Conservation and Per Capita Water Use

San Fernando evaluated its required SBX7-7 requirements using both Method 1 and Method 3 and determined its per capita target to be 141.5 GPCD. For planning water demand, it used 136 GPCD, lower that what is required. Using population data and average and dry year UWMP forecasts, the per capita use is projected as follows:



Water Supply Reliability

San Fernando's UWMP indicates that future supplies are sufficient to meet its anticipated demands, but relies heavily on MWD's RUWMP as the basis for this conclusion. San Fernando's plan assumes that since MWD's plan lists a potential surplus of supply in normal, single dry year, and multiple dry years that the same percentage of potential surplus would be available to it for each of the years evaluated.

San Fernando's UWMP lists supplies exceeding demands in all cased evaluated. In any given year, the plan lists its local supplies as constant through a normal, single dry, and multiple dry year. MWD supplies, on the other hand vary during these various supply conditions, but still exceed the UWMP estimated demand.

San Fernando's UWMP discusses its plan to construct a denitrification plant at one of its wells. This may allow the City to increase slightly its groundwater pumping, but its purpose appears mainly intended to improve water quality and operational flexibility.

City of San Marino

Overview

The City of San Marino is located in the San Gabriel Valley, approximately 10 miles northeast of downtown Los Angeles. The City's total area is 3.77 square miles, with a population (2010) of 13,147.

San Marino is served water by California American Water Company, which prepared its 2010 Urban Water Management Plan. The plan includes the City of San Marino as part of California American's San Marino service area, which also encompasses customers in the City of Alhambra, Arcadia, El Monte, Pasadena, Rosemead, San Gabriel, East Pasadena, and East San Gabriel. California American serves a population of approximately 55,558 people with its San Marino service area.

The City of San Marino's population has remained steady over the past 10 years, growing only slightly from 12,945 to its current population. It is not expected that significant increases will occur in the future. With California American's San Marino service areas, population is expected to increase 11.8 percent, from 55,558 to 62,103 in 2030. Water deliveries by California American is expected to increase from 10,064 acre-feet in 2010 to 11,901 acre-feet in 2030, an increase of 18.2 percent.

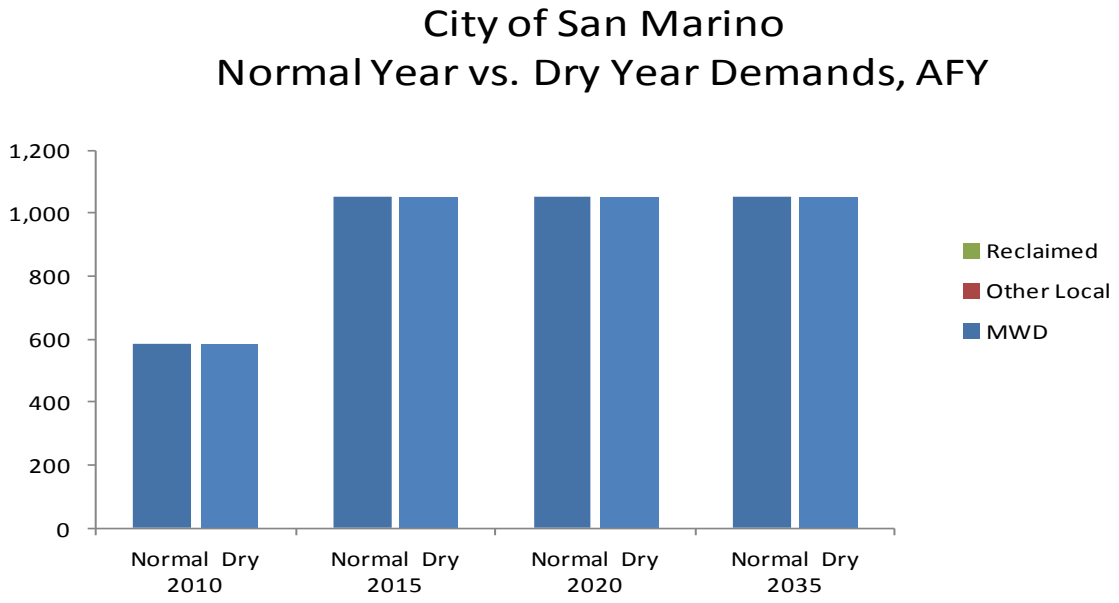
Because the California American UWMP includes areas served in addition to the City of San Marino, and includes areas service by other MWD member agencies, the future water demand for the purposes of this report must be assumed. This assumption should not impact the accuracy of this report because of the fact that San Marino's population is relatively small and not expected to grow. For the purpose of this report, future demand on MWD is estimated to be the average of the past five years, as follows:

MWD Deliveries (AF) to the City of San Marino

2006	2007	2008	2009	2010	Average
1,208.6	1,572.9	895.1	1,009.7	583.8	1,054.0

Assumed MWD Demand, Average, Dry, and Multiple Dry Years

2015	2020	2025	2030	2035
1,054.0	1,054.0	1,054.0	1,054.0	1,054.0



Water Supply Reliability

California American's UWMP indicates that future supplies are sufficient to meet its anticipated demands but relies, in part, on MWD's RUWMP as the basis for this conclusion. The plan contains MWD's Tables 2-9, 10, and 11 that show MWD has surplus supplies in each scenario condition and year that it evaluated.

City of Santa Ana

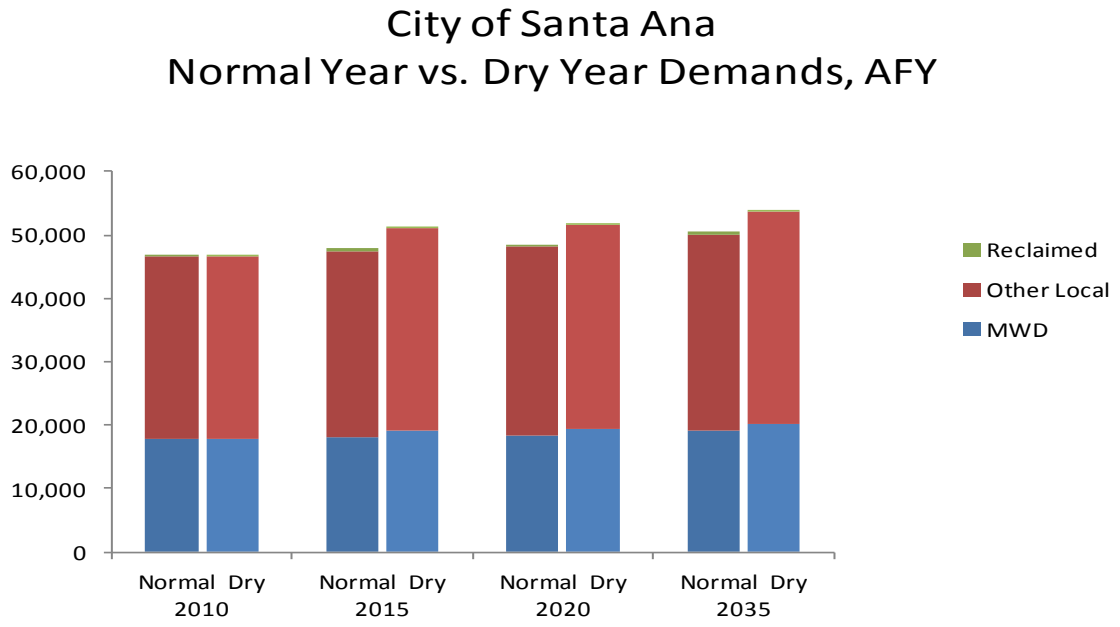
Overview

The City of Santa Ana provides water to residents and businesses throughout its 27 square mile service area. The City receives water from two main sources: the Lower Santa Ana River Groundwater Basin, which is managed by the Orange County Water District and imported water from MWD. Groundwater is pumped from active wells located within the City and imported water is delivered through seven treated water connections from MWD.

Santa Ana's 2010 RUWP lists its current population at 358,136 and projects populations to increase to 382,591 in the year 2035, an increase of 6.8%. Total Demand from the UWMP is expected to increase 7.6 % over the same period, from 46,800 acre-feet in 2010 to 50,400 acre-feet in 2035. This increased demand will be met by both increased groundwater pumping and deliveries from MWD.

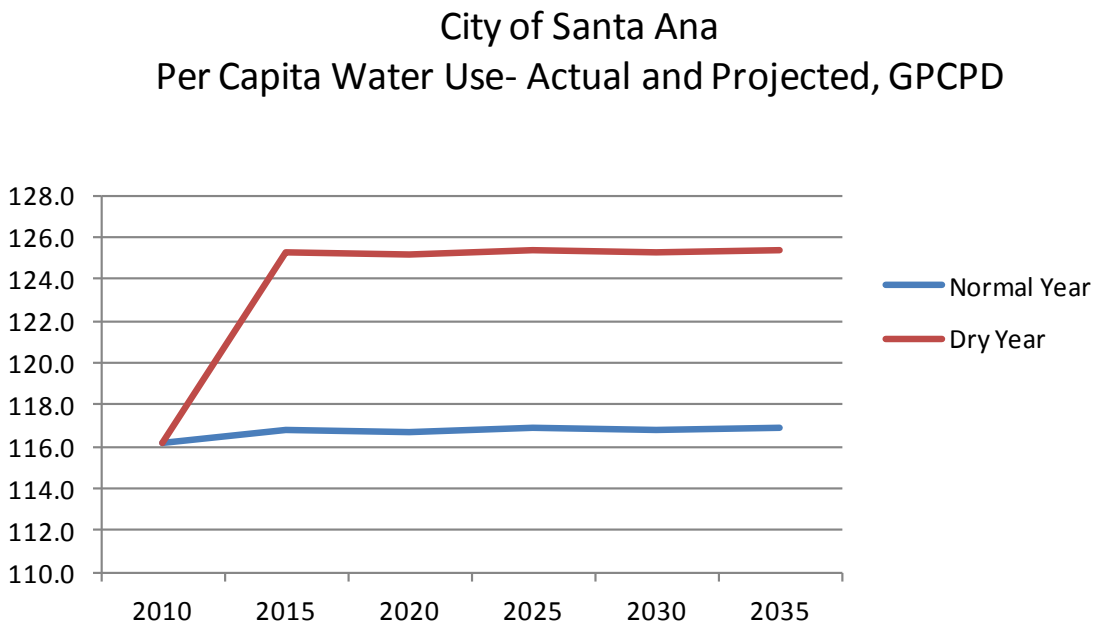
Existing and Projected Future Water Supply and Demand

Santa Ana's demand projections were determined by an examination of its past water consumption by type of use or by customer classification and information provided the Center for Demographic Research at California State University Fullerton.



Conservation and Per Capita Water Use

Santa Ana is a member of an Orange County 20x2020 Regional Alliance, which is an effort to create flexibility in meeting the per capita water use reduction targets required under SBX7-7. Most members of the Regional Alliance selected as its calculation method the first DWR option, which require a simple 20% reduction from the baseline by 2010 and 10 percent by 2015. With the assistance of MWDOC, the City chose option 3, which is to achieve 95% of the applicable state hydrologic region target. The City's targets for 2015 and 2020 are 118.5 and 108.9 GPCD, respectively. Using population data and average and dry year UWMP forecasts, the per capita use is projected as follows:



Water Supply Reliability

Santa Ana's UWMP indicates that future supplies are sufficient to meet its anticipated demands. Anaheim's plan relies on MWD's RUWMP as the basis for this conclusion and includes MWD's RUWMP Tables 2-11, 2-19, and 2-10 which list a potential surplus of supply in all years examined in its plan.

The plan includes a discussion of groundwater and its management within the basin. It assumes the Basin Pumping Percentage will remain at 62% for the planning horizon. This percentage limits the amount of water the City can pump to a percentage of its total use. Use of direct recycled water within the City is expected to remain constant over the planning period, at 300 acre-feet per year. The plan states that the City supports OCWD's effort to increase recycled water use though its recharge of the groundwater basins. The plan lists potential desalination projects within Orange County, but does not include these projects in its projections.

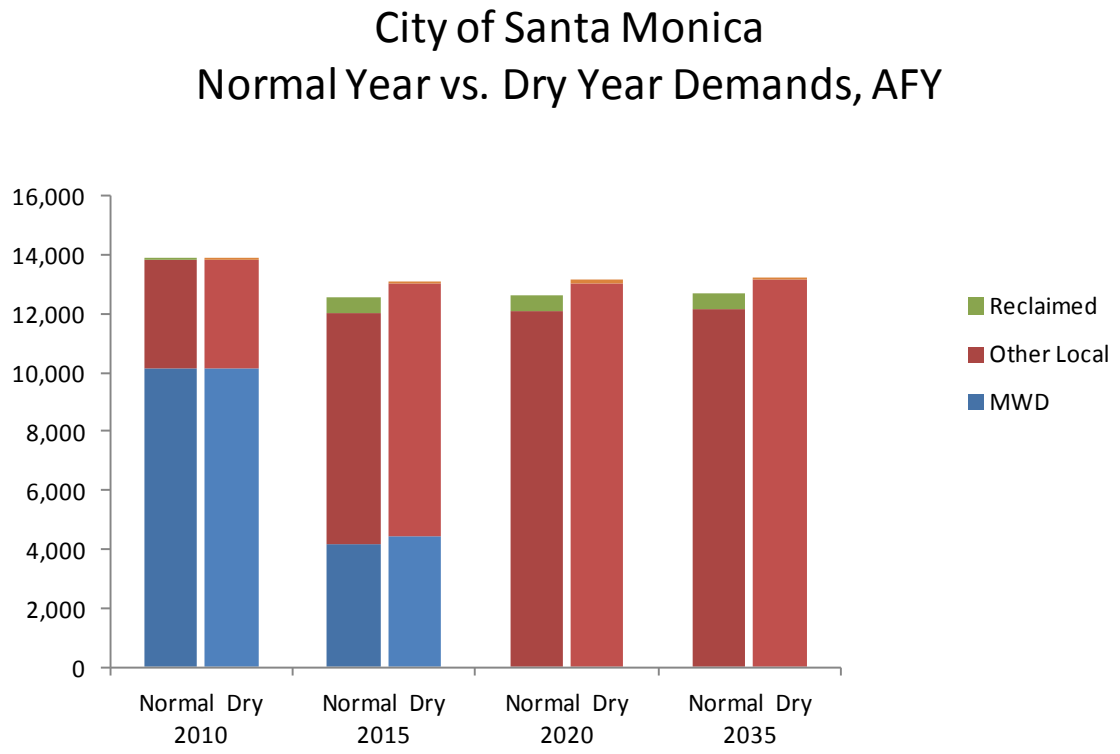
City of Santa Monica

Overview

The City of Santa Monica's service area is bordered by the Pacific ocean on the west, and the City of Los Angeles on the north, east and south. Santa Monica's 2010 RUWP lists its current population at 91,000 and projects virtually no growth, with a population of 92,124 in the year 2035. Total normal year demand reported in UWMP is expected to increase slightly, from 13,864 acre-feet in 2010 to 14,509 acre-feet in 2035. The majority of this demand increase is in recycled water. At the same time, MWD demand from Santa Monica is forecast to be zero, beginning in 2020 and throughout the remainder of the planning period. Increased groundwater production from the Santa Monica Basin accounts for this reduction in MWD demand. Santa Monica has a recycled dry weather urban runoff program that allow it to help eliminate contamination of Santa Monica Bay and capture and treat runoff for reuse in landscape irrigation and indoor plumbing.

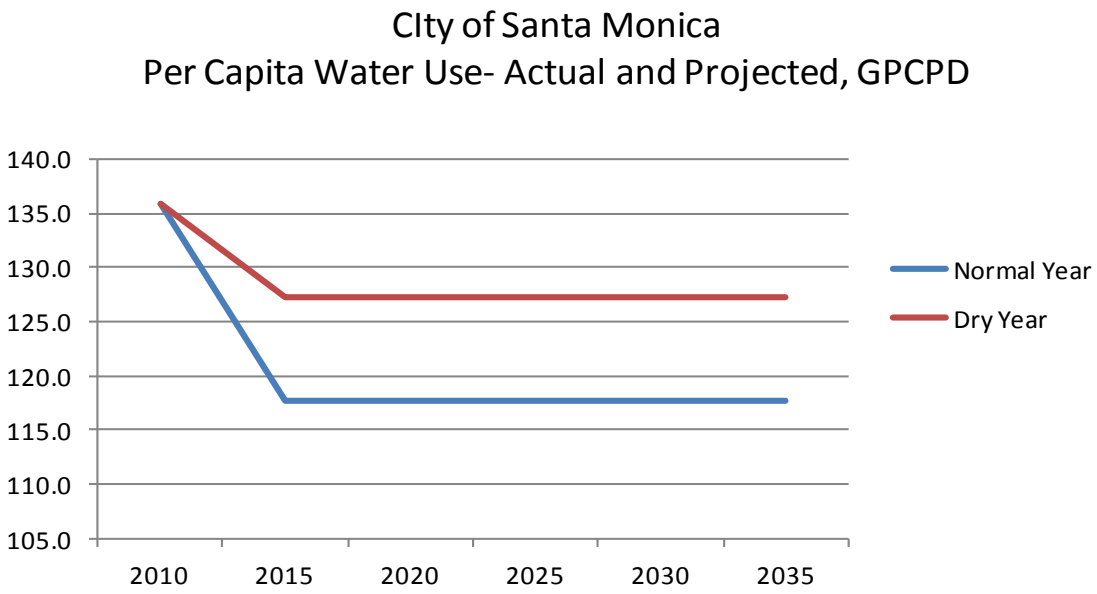
Existing and Projected Future Water Supply and Demand

Santa Monica calculated its future demands based upon the population forecast times 140.6 GPCD. Subject to the qualification shown above, the UWMP demands are as follows:



Conservation and Per Capita Water Use

Santa Monica evaluated its required SBX7-7 requirements using both Method 1 and Method 3 and determined its per capita target to be 140.6 GPCD and used this figure for planning water demand. Using population data and average and dry year UWMP forecasts, the per capita use is projected as follows:



Water Supply Reliability

Santa Monica's UWMP indicates that future supplies are sufficient to meet its anticipated demands, but relies heavily on MWD's RUWMP as the basis for this conclusion. Santa Monica assumes that since MWD's plan lists a potential surplus of supply in normal, single dry year, and multiple dry years that the same percentage of potential surplus would be available to Santa Monica for each of the years evaluated.

Santa Monica's UWMP discusses the potential to expand recycled water use beyond what is contained in the plan, but does not quantify the additional water quantity that may be available from such expansions. Because Santa Monica already plans to eliminate normal and dry year MWD deliveries, additional expansion would have no impact on MWD. The UWMP also states that graywater use could increase, and that storm water capture and seawater desalination are not being considered for Santa Monica.

Three Valleys MWD

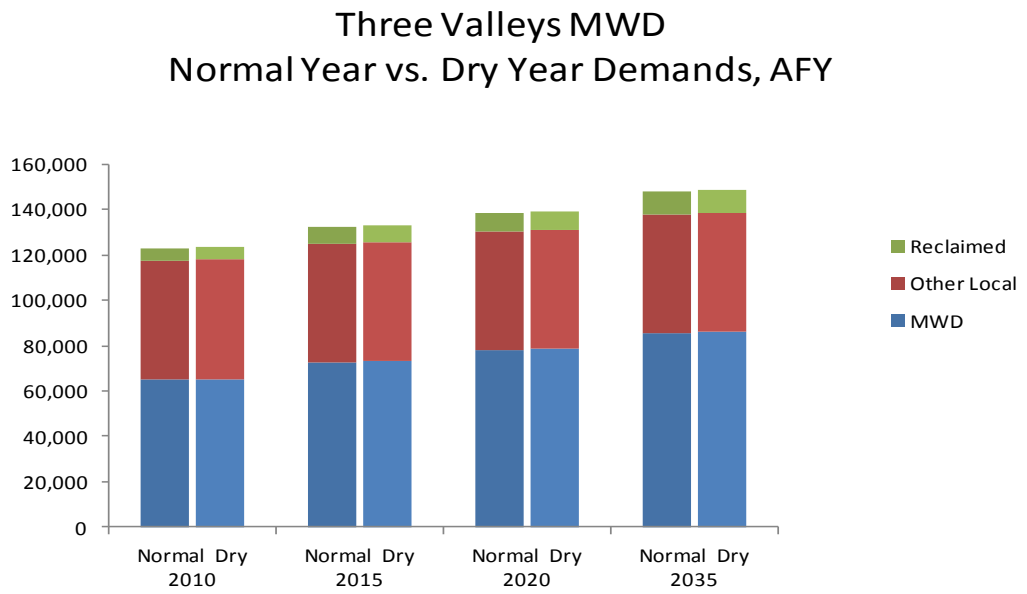
Overview

The Three Valleys MWD is a wholesale water provider to cities and water districts within the Pomona Valley, Walnut Valley, and eastern portion of the San Gabriel Valley in Los Angeles County. The district encompasses approximately 133.3 square miles and a current population of 573,799. The UWMP projects population to increase to 712,264 in the year 2035, an increase of 24.1% overall. Total normal year demand from the UWMP is expected to increase 20.8% over the same period, from 127,621 acre-feet in 2010 to 154,144 acre-feet in 2035. The projected increase of over 26,000 acre-feet is expected to come mainly from increased MWD purchases (over 21,000 acre-feet) and increased recycled water usage (5,000 acre-feet), with local groundwater pumping remaining nearly constant.

Three Valleys members current water supplies include local groundwater from the Chino, San Gabriel, Puente, Six Basins, and Spadra groundwater basins. The region also receives captured surface water from San Gabriel, San Dimas, and San Antonio canyon watersheds that provide water through Covina Irrigating Company, Golden State Water Company, and the City of Pomona. Typically, surface water provides about 5 to 8% of the total water demand within the TVMWD service area.

Existing and Projected Future Water Supply and Demand

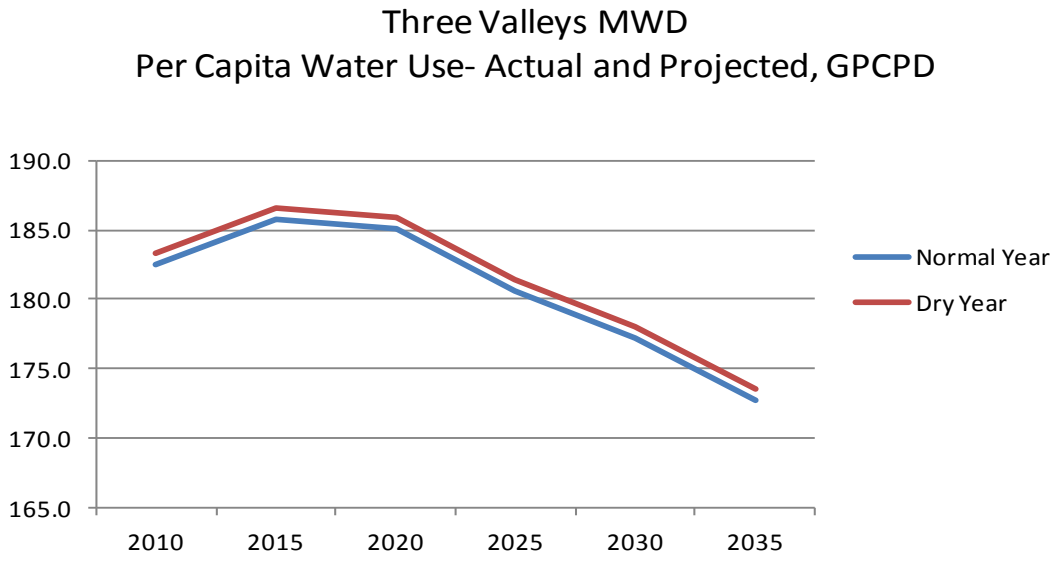
According to its UWMP, projections of future water demand for TVMWD were developed by MWD using its MWD MAIN Water Use Forecasting model, taking into consideration demographics, hydrology, and regulatory/environmental restrictions. The plan states that local resources from the TVMWD service area will be tapped first to provide initial supply to meet overall demand. The balance will be met with imported supplies through MWD. Future demands from the UWMP are as follows:



Conservation and Per Capita Water Use

TVMWD's UWMP contains a brief description of SBX7-7 requirements, including the following: "On a regional basis, the baseline water demand is estimated to be 193 gallons per capita per day (GPCD). A 20 percent reduction would lessen this to 154 GPCD. Based on population projections for 2020, this reduction translates to approximately 27,500 AF of projects and programs to lessen local dependence on potable supplies. Achieving this will require additional local and regional investments in both conservation and recycled water. TVMWD will work with its retail member agencies to develop policies and programs to address individual water reduction targets."

Using population data and average and dry year UWMP forecasts, the per capita use is projected as follows:



Water Supply Reliability

TVMWD's plan indicates that it relies "primarily on the availability of MWD supplies to gauge reliability." The plan refers to MWD's RUWMP: "wherein MWD explains the measures it has taken to try and guard against shortages in imported supplies coming from the two primary sources [SWP and Colorado River]." The plan also refers to MWD's groundwater banking/storage agreements, surface water storage, and conservation programs. The plan also discusses groundwater and conjunctive use programs within its service areas, such as the Chino Basin Dry-Year Yield Program and TVMWD's cyclic storage account in the Main San Gabriel Basin.

The plan states that there are several "avenues" that TVMWD and its member agencies can take to improved long-term water supply reliability including conjunctive use, cyclic storage, groundwater recover, and additional resource development. Specific projects are listed that could, cumulatively, provide an annual 28,000 acre-feet of additional yield into the TVMWD service area.

City of Torrance

Overview

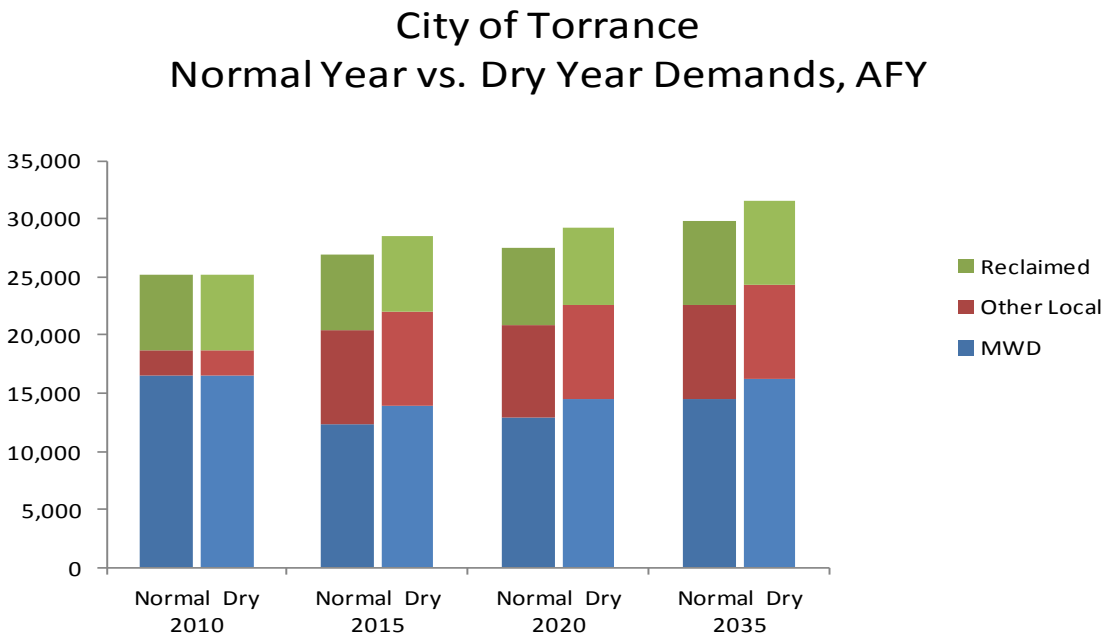
The City of Torrance's Torrance Municipal Water (TMW) service area is approximately 16.2 square miles and comprises about 78 percent of the land within the City limits. California Water Service provides water service to the remaining portion of the City.

Torrance's 2010 UWMP lists its current population within TMW at 113,500 and projects the population to increase to 116,610 in the year 2035, an increase of 2.7% overall. Total normal year demand from the UWMP is expected to decrease 2.7% over the same period, from 25,203 acre-feet in 2010 to 24,522 acre-feet in 2035. At the same time, MWD demand within TMW is shown in the UWMP to decrease from 16,471 acre-feet to 9,332 acre-feet. The decrease in MWD supply listed in the UWMP is a result of increased groundwater, brackish water and recycled water use. Torrance qualifies its projections of supply and demand, stating "[the tables for normal, dry year, and multiple dry years are] not intended to be an estimate of the City's actual supply. City may pump amounts different from its adjudicated right of 5,640 AFY based on leases & may expand its Desalter Facility. Additionally, imported supplies may or may not be reduced. [These tables are] also not intended to be a projection of the City's actual demand. Demand of 133 GPCD is a conservative estimate based on SDx7-7 limits. Actual demand is likely to be below 133 GPCD with water efficiency trends in the City."

TMW pumps its groundwater from the West Coast Basin and uses desalted groundwater produced by the Water Replenishment District's Robert W. Goldsworthy Desalter. It also purchases reclaimed water from West Basin MWD.

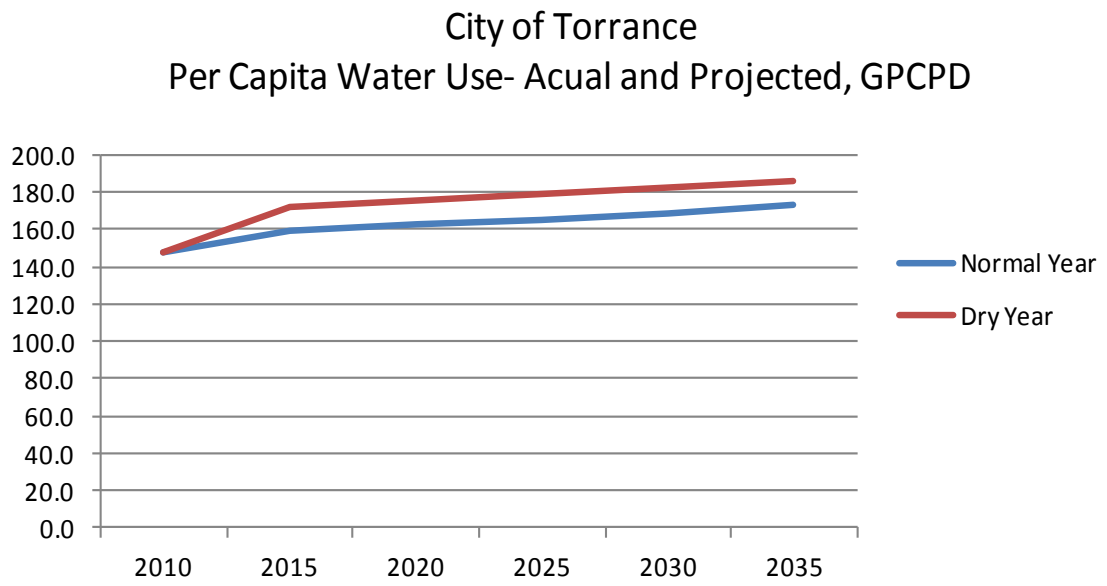
Existing and Projected Future Water Supply and Demand

Torrance calculated its future demands based on the population forecast times 133 GPCD, which the UWMP states is less that its SBX7-7 target. Subject to the qualification shown above, the UWMP demands are as follows:



Conservation and Per Capita Water Use

Torrance evaluated its required SBX7-7 requirements using both Method 1 and Method 3 and determined its per capita target to be 141.5 GPCD. For planning water demand, it used 133 GPCD, lower than what is required. Using population data and average and dry year UWMP forecasts, the per capita use is projected as follows, but it should be recognized that a portion of the water from the TWD Well #6 and the Goldsworthy Desalter may not necessarily be included in a GPCD calculation for SBX7-7 reporting purposes:



Water Supply Reliability

Torrance's UWMP indicates that future supplies are sufficient to meet its anticipated demands, but relies on MWD's RUWMP as the basis for this conclusion. Torrance's plan assumes that since MWD's plan lists a potential surplus of supply in normal, single dry year, and multiple dry years that the same percentage of potential surplus would be available to TMW for each of the years evaluated.

Torrance's UWMP lists supplies exceeding demands in all cases evaluated. In any given year, the plan lists its local supplies as constant through a normal, single dry year, and multiple dry years. MWD supplies, on the other hand, vary during these various supply conditions, but still exceed the UWMP estimated demand.

Torrance's UWMP discusses the potential to expand recycled water use and the Robert W. Goldsworthy Desalter. The plan does not quantify the additional water that may be available for such expansions. The plan also states that gray water use could increase, and that storm water capture and seawater desalination are not viable options for the TMW.

Upper San Gabriel Valley MWD

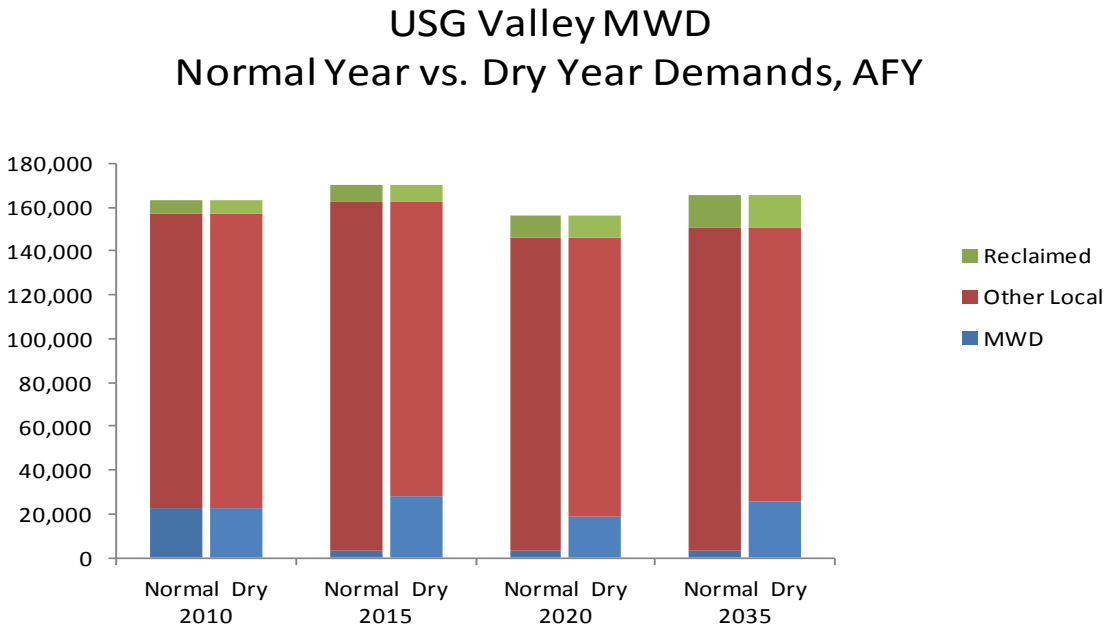
Overview

Upper San Gabriel Valley MWD (Upper District) is a wholesale water agency that supplies imported water from MWD and recycled water to its sub-agencies. Upper District is located within the San Gabriel Valley in Los Angeles County and overlies the "Main Basin." It service area is about 144 square miles and includes all or portions of 18 separate cities. The service area is largely urbanized consisting mainly of residential, light industrial, and commercial uses.

Upper District's UWMP lists its current population at 903,000 and projects population to increase to 1,025,000 in the year 2035, an increase of 13.5% overall. Total normal year demand from the UWMP is expected to increase only 1.6% over the same period, from 163,101 acre-feet in 2010 to 165,747 acre-feet in 2035. This demand increase is expected to be met by increasing reclaimed water use. Imported water constitutes a relatively small percentage of usage within the Upper District service area, accounting for 22,633 acre-feet in 2010. Under "normal" conditions Upper District expects to use 3,000 acre-feet of MWD firm supplies and 16,000 to 25,000 acre-feet of non-firm MWD supplies. Upper District's UWMP assumes that non-firm supplies would be available in both single dry and multiple dry year conditions, however for the purposes of this analysis single dry and multiple dry year MWD demands were treated as a firm demand, based on what occurred in 2010 when non-firm supplies were not available.

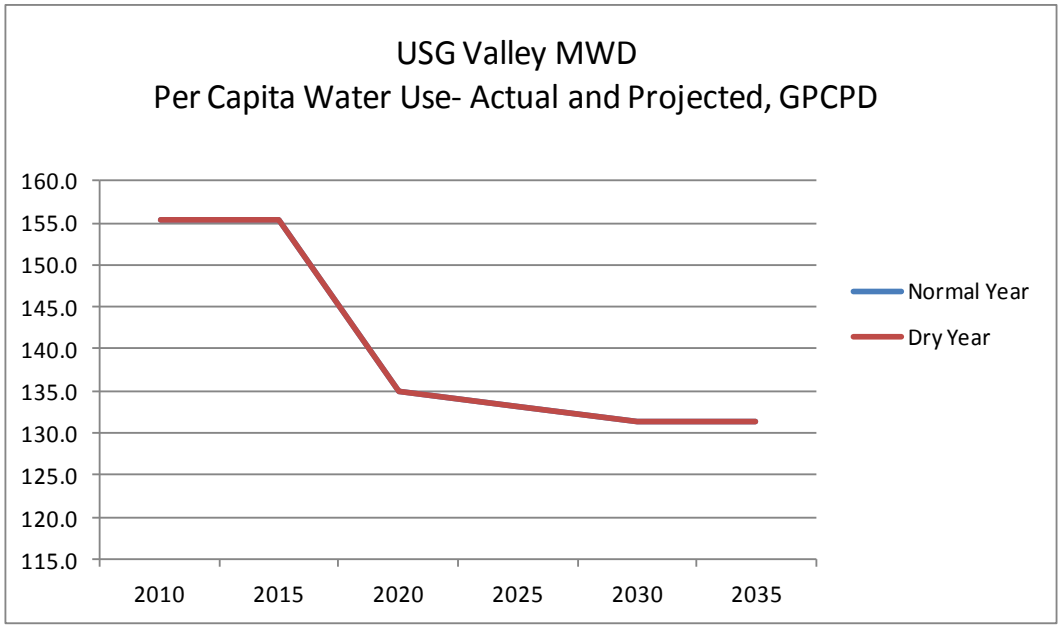
Existing and Projected Future Water Supply and Demand

According to the UWMP, Upper District is required to receive projections of water use from its retail urban water wholesalers. While not available for its plan, Upper District "reviewed projected values" based on historical trends and projected population. Upper District provides a relatively small percentage (14 to 16%) of the water in its service area. UWMP projected future demands are:



Conservation and Per Capita Water Use

Because Upper District is a wholesaler of water it is not required to set future per-capita targets. Presumably this is done individually or collectively by the 18 cities within the district. According to the plan, Upper District does have the ability to monitor water use within its boundaries. The district keeps track of local water use on a quarterly basis and imported water usage on a monthly basis. Using population data and average and dry year UWMP forecasts, the per capita use is projected as follows:



Water Supply Reliability

Upper District's plan states "Metropolitan's 2010 RUWMP has concluded that the region can provide reliable water supplies under both the single driest year and the multiple dry year hydrologies for the next 20 years. The 2010 RUWMP prepared by Metropolitan, which is incorporated by reference, should be referred to for more details on the reliability of Metropolitan's imported water supplies. With regards to groundwater from the Main Basin, Upper District plan states "As noted in Chapter 3, the Main Basin is a well-managed groundwater basin and can ensure long-term reliability of water supply."

Upper District's plan discusses projects and facilities that will increase recycled water production from 6,000 acre-feet in 2010 to 15,000 acre-feet by 2030. Included is Phase IIA- Rosemead extension and Phase IIB- Industry Project, which will provide recycled water from the Whittier Narrows Water Reclamation Plant to a golf course, schools, parks, industrial complexes, and other projects.

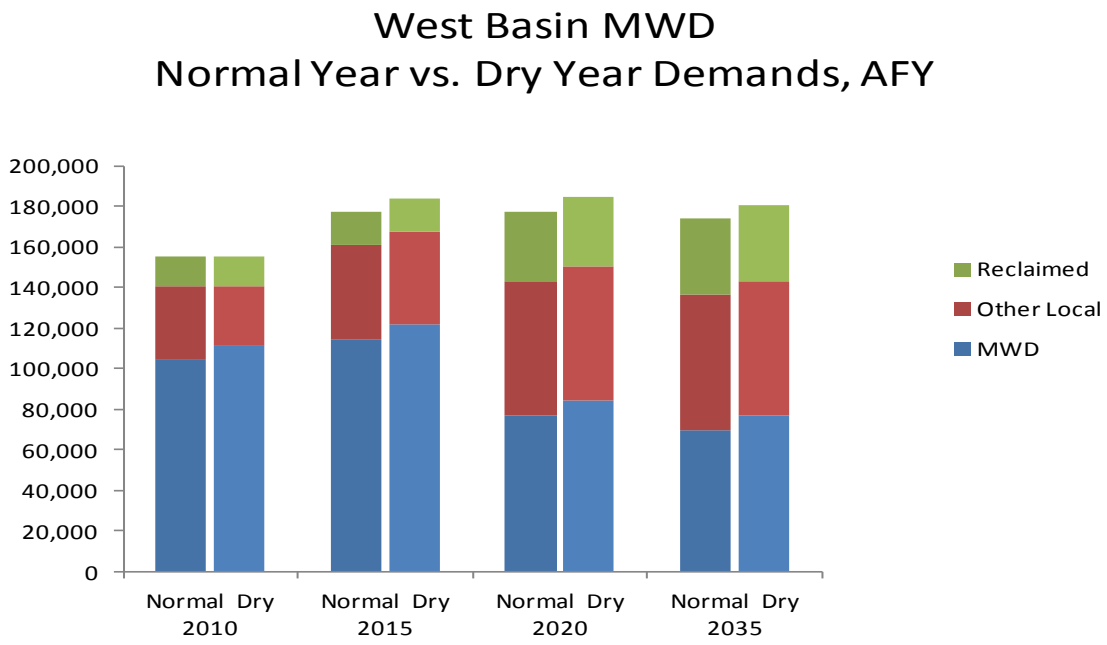
West Basin MWD

Overview

The West Basin Municipal Water District is a wholesale water agency that provides potable water and recycled water to 17 cities, investor owned utilities, water districts and private companies. It covers approximately 185 square miles and a current population of 853,377. Its current population is expected to grow 10.5% by 2035 to 942,893. Water use is also expected to increase 8.1%, from 179,507 acre-feet in 2010 to 194,123 acre-feet in 2035. While overall water use is expected to increase, use of MWD supplies is expected to decrease over 30,000 acre-feet per year, due to increased direct use of recycled water, indirect use of recycled water and construction of a seawater desalination project. WBMWD's plan shows non-firm deliveries of up to 20,480 acre-feet per year from MWD in add demand scenarios, including single dry year and multiple dry years.

Existing and Projected Future Water Supply and Demand

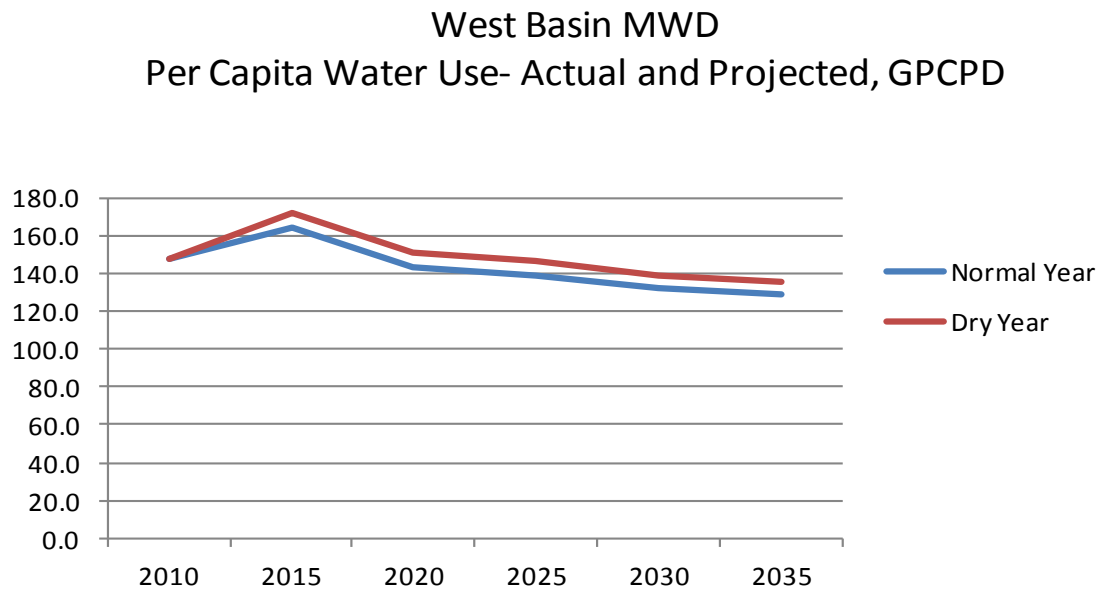
West Basin completed a Demand Forecasting Model in 2010 for use in future water supply planning. The model produces various scenarios depending on the level of conservation activities, cost of waster, economic recovery and weather changes. The UWMP demands are as follows:



Conservation and Per Capita Water Use

WBMWD's plan states that as a regional water supply wholesale area it is not required by SBX7-7 to report baseline targets, however it elected to do so as the reporting agency for a regional alliance formed by some of its customers. The base use was calculated for each member and ranges from 94.6

GPCD for California Water Service Hawthorne to 319.4 GPCD for Los Angeles County Water Works District #29. The combined base is 227.7 GPCD. Using method 1 the combined final targets are 194.1 and 160.5 GPCD for 2015 and 2020 respectively. Using population data and average and dry year UWMP forecasts, the per capita use is projected as follows:



Water Supply Reliability

WBMWD's UWMP does not anticipate future shortages in any of the scenarios evaluated. The plan cites MWD's 2010 RUWMP as being able to meet imported water demands and "as a result, there will be no anticipated shortages under any dry year scenarios. It further states "Any shortfall in supplies will be met through imported water so long as MWD manages its supply and demand balance through its Water Surplus and Drought Management Plans.

The plan describes WBMWD's intent to increase recycled water use through both direct and indirect means. Recycled water use (direct and indirect) is expected to increase from 21,888 acre-feet per year in 2010 to 57,862 acre-feet in 2035. At the same time WBMWD anticipates seawater desalination to provide 21,500 acre-feet per year. While the seawater desalination plant is included in its UWMP, the plan states that the Ocean Water Desalination Demonstration Facility will test its viability. WBMWD is current preparing a Desalination Program Master Plan.

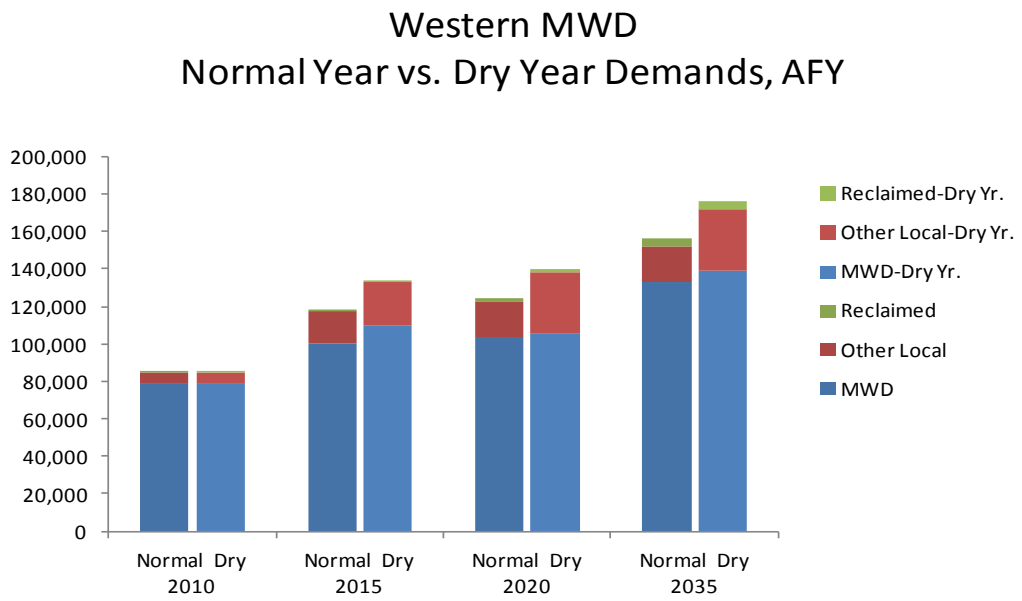
Western MWD

Overview

The Western Municipal Water District provides both wholesale and retail water service to western Riverside County. Western serves imported and local supplies on a wholesale basis to nine local area water purveyors, including a portion of the Rancho California Water District. Western also has a retail service area that it provides with similar water supplies. The general district (wholesale and retail areas combined) consists of 527 square miles and an estimated population of more than 860,000 people. Western's retail service area population is currently 85,469 and is expected to grow by 88.4% to 161,016 by 2035. The UWMP does not give estimated population growth figures for the entire service area. Water use within the retail area is expected to grow from 24,741 acre-feet in 2010 to 46,968 acre feet in 2035, an increase of 89%. However, in 2009 water use in the retail area was roughly 30,000 acre-feet, so increased usage from 2009 to 2035 is expected to be about 56.6%. 2035 demand projects include additional conservation that is expected to occur.

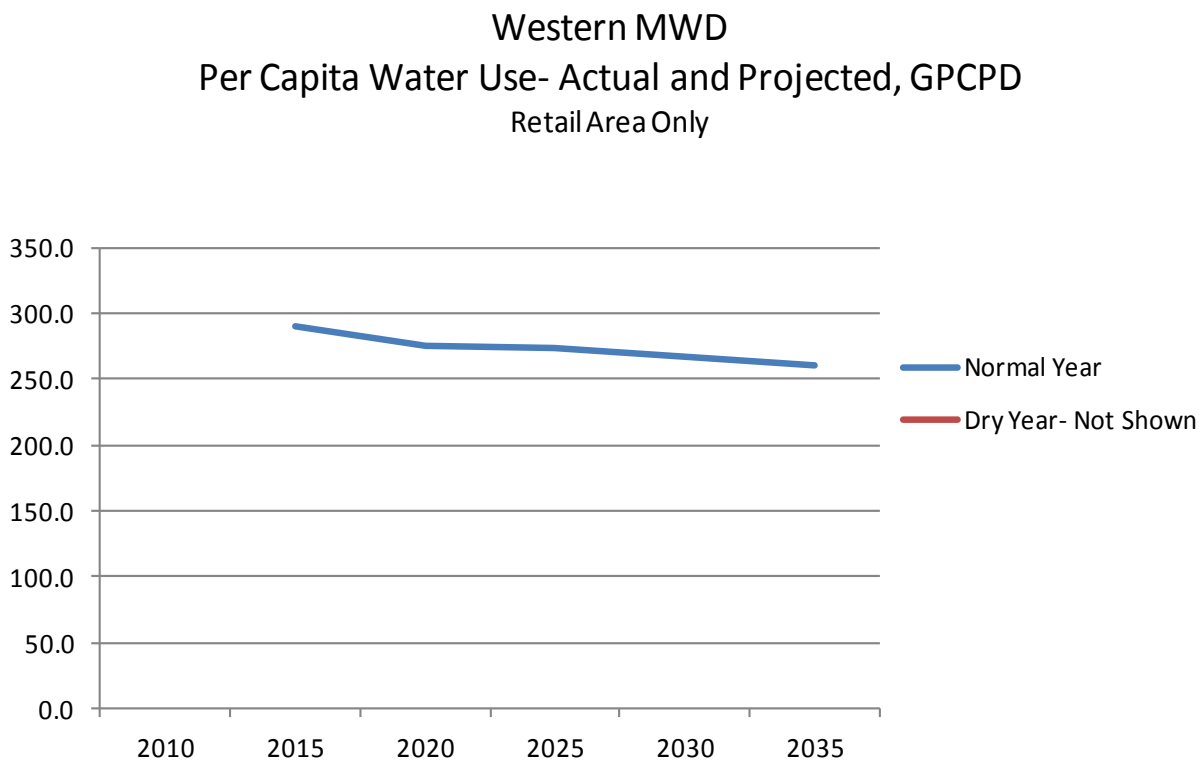
Existing and Projected Future Water Supply and Demand

Western developed its Water Demand Forecast (WDF) model to help project future water demands within the retail and wholesale service area. The WDF is a GIS based application that uses general plan land use data to project water demands. Using the underlying land use information, the WDF takes user inputs on unit demands and growth rate assumptions to project demands from the year 2006 to buildout. The WDF model results were used as the basis of water projections for Western's retail service area, and was offered to its member agencies during the UWMP public coordination process. However, a number of agencies preferred to develop their own demand projections and their results were incorporated into the Western UWMP. The UWMP demands are as follows:



Conservation and Per Capita Water Use

Western's UWMP states that it will need to reduce current water use demands in its retail areas by approximately 5 percent by 2015 and 10 percent by 2020. It is increasing its recycled water use by 730 acre-feet for a total of 1,500 acre-feet by year 2020. Western has a Water Use Efficiency Master Plan to accomplish its conservation goals. The plan describes the measures it will take to reach their goal and incorporates numerical conservation savings into its forecasted demand. The plan does not state specifically what its GPCD targets are or the method used to calculate reductions. However, the plan appears to reflect reduced per capita water usage in the future. Using population data and average year UWMP forecasts, the per capita use is projected as follows:



Water Supply Reliability

Western's UWMP shows water supplies exceeding demands under all conditions evaluated. The plan states "As part of its 2010 Regional Urban Water Management Plan, MWD evaluated the dependability of these [SWP and CRA] supplies and concluded that the combination of imported water and expanded local resource programs would ensure that its service area's demands would be met in the future. Western is relying on MWD's 2010 Regional Urban Water Management Plan to evaluate the reliability of imported supplies and the amount of imported water which will be available in the Western Service area. "

Table 3-2 in Western's UWMP shows Current and Planned Imported Water Supplies from MWD. The plan states "The demands documented in Table 3-2 have been provided to MWD and were included in MWD's 2010 Regional Urban Water Management Plan." However, the demands shown in Table 3-2 far exceed Western's Total Forecasted Demands, shown in the UWMP Table 2-15, as follows:

Year	2015	2020	2025	2030	2035
Table 2-15, Total Forecasted Demands on Western's Water Supplies, Acre-Feet	118,640	124,042	134,684	145,164	156,231
Table 3-2, Current and Planned Imported Water Supplies from MWD, Acre-Feet	160,313	174,127	184,131	195,301	208,035

According to the UWMP, the supplies shown in Table 3-2 are expected to be available to Western in single-dry and multiple dry years. Because of this, the plan shows that supplies far exceed demands in each evaluated scenario. Using normal year demands from Table 5-1 and available local supplies the actual demand on MWD is expected to be as follows:

Year	2015	2020	2025	2030	2035
Western UWMP Table 5-1 Normal Demands, Adjusted for Conservation, Acre-feet	118,640	127,879	138,982	149,922	161,450
MWD Demands, Calculated as Normal Demands less Available Local Supplies, Acre-feet	99,970	107,649	118,192	128,012	138,420

Despite the assumption that MWD will have more than sufficient supplies to meet demands, Western is developing additional reclaimed water supplies, participating in the expansion of the Arlington Desalter and expanding a groundwater banking program in the San Bernardino Basin Area (SBBA).

Appendix B

Member Agency Data from Urban Water Management Plans

City of Anaheim	Normal Water Year						Single Dry Water Year						Multiple Dry Water Year- Year 3					
	2010	2015	2020	2025	2030	2035	2010	2015	2020	2025	2030	2035	2010	2015	2020	2025	2030	2035
Population Projection	364,921	383,768	395,769	409,096	424,558	432,949	364,921	383,768	395,769	409,096	424,558	432,949	364,921	383,768	395,769	409,096	424,558	432,949
Water Demands																		
Firm Demand	66,929	72,180	73,345	75,645	77,245	77,445	66,929	78,479	79,748	82,248	83,988	84,205	66,929	78,479	79,748	82,248	83,988	84,205
Recycled Demand, Direct	-	220	255	255	255	255	-	220	255	255	255	255	-	220	255	255	255	255
Non-Firm, Replenishment																		
Total Demand	66,929	72,400	73,600	75,900	77,500	77,700	66,929	78,699	80,003	82,503	84,243	84,460	66,929	78,699	80,003	82,503	84,243	84,460
MWD Firm Demand	22,031	25,263	25,671	26,476	27,036	27,106	22,031	27,468	27,912	28,787	29,396	29,472	22,031	29,822	30,304	31,254	31,915	31,998
Water Supply																		
Imported, MWD firm	22,031	25,263	25,671	26,476	27,036	27,106	22,031	27,468	27,912	28,787	29,396	29,472	22,031	29,822	30,304	31,254	31,915	31,998
Imported, MWD non-firm																		
Imported, Other																		
Groundwater, Potable	44,898	46,917	47,674	49,169	50,209	50,339	44,898	51,011	51,836	53,461	54,592	54,733	44,898	48,657	49,444	50,994	52,072	52,207
Groundwater, Non-Potable																		
Surface Supply/Storage																		
Recycled, Direct	-	220	255	255	255	255	-	220	255	255	255	255	-	220	255	255	255	255
Recycled, Indirect																		
Brackish Water																		
Seawater																		
Other																		
Conservation																		
Total Local	44,898	47,137	47,929	49,424	50,464	50,594	44,898	51,231	52,091	53,716	54,847	54,988	44,898	48,877	49,699	51,249	52,327	52,462
Total Water Supply	66,929	72,400	73,600	75,900	77,500	77,700	66,929	78,699	80,003	82,503	84,243	84,460	66,929	78,699	80,003	82,503	84,242	84,460
Per Capita Use GPCPD	163.7	168.4	166.0	165.6	163.0	160.2	163.7	183.1	180.5	180.0	177.1	174.2	163.7	183.1	180.5	180.0	177.1	174.2
Per Capita less Recycled/Non-Firn	163.7	167.9	165.4	165.1	162.4	159.7	163.7	182.6	179.9	179.5	176.6	173.6	163.7	182.6	179.9	179.5	176.6	173.6

Notes

City of Beverly Hills	Normal Water Year						Single Dry Water Year						Multiple Dry Water Year- Year 3					
	2010	2015	2020	2025	2030	2035	2010	2015	2020	2025	2030	2035	2010	2015	2020	2025	2030	2035
Population Projection	45,000	45,632	46,148	46,646	47,126	47,587	45,000	45,632	46,148	46,646	47,126	47,587	45,000	45,632	46,148	46,646	47,126	47,587
Water Demands																		
Firm Demand	11,562	11,654	11,786	11,913	12,036	12,153	11,562	12,610	13,177	13,212	13,240	13,380	11,562	12,994	13,342	13,700	13,745	13,842
Recycled Demand, Direct																		
Non-Firm, Replenishment																		
Total Demand	11,562	11,654	11,786	11,913	12,036	12,153	11,562	12,610	13,177	13,212	13,240	13,380	11,562	12,994	13,342	13,700	13,745	13,842
MWD Firm Demand	10,473	10,854	10,986	11,113	11,236	11,353	10,473	11,810	12,377	12,412	14,440	12,580	10,473	12,194	12,542	12,900	12,945	13,042
Water Supply																		
Imported, MWD firm	10,473	18,853	21,653	22,893	21,641	20,560	10,473	14,168	15,929	16,793	15,574	14,593	10,473	12,255	13,859	14,242	13,605	13,134
Imported, MWD non-firm																		
Imported, Other																		
Groundwater, Potable	1,089	800	800	800	800	800	1,089	800	800	800	800	800	1,089	800	800	800	800	800
Groundwater, Non-Potable																		
Surface Supply/Storage																		
Recycled, Direct																		
Recycled, Indirect																		
Brackish Water																		
Seawater																		
Other																		
Conservation																		
Total Local	1,089	800	800	800	800	800	1,089	800	800	800	800	800	1,089	800	800	800	800	800
Total Water Supply	11,562	19,653	22,453	23,693	22,441	21,360	11,562	16,729	17,593	16,374	15,393	#REF!		13,055	14,659	15,042	14,405	13,934
Per Capita Water Use GPCPD	229.4	228.0	228.0	228.0	228.0	228.0	229.4	246.7	254.9	252.9	250.8	251.0	229.4	254.2	258.1	262.2	260.4	259.7
Per Capita less Recycled/Non-Firm	229.4	228.0	228.0	228.0	228.0	228.0	229.4	246.7	254.9	252.9	250.8	251.0	229.4	254.2	258.1	262.2	260.4	259.7

Notes

2010 Groundwater pumping for 2010 assumed to be the differnce between MWD deliveries and demand from UWMP

City of Burbank	Normal Water Year						Single Dry Water Year						Multiple Dry Water Year- Year 3					
	2010	2015	2020	2025	2030	2035	2010	2015	2020	2025	2030	2035	2010	2015	2020	2025	2030	2035
Population Projection	108,469	115,986	120,428	124,732	128,888	132,877	108,469	115,986	120,428	124,732	128,888	132,877	108,469	115,986	120,428	124,732	128,888	132,877
Water Demands																		
Firm Demand	17,769	17,750	18,481	19,141	19,779	20,391	17,769	17,750	18,481	19,141	19,779	20,391	17,769	16,326	18,989	19,415	20,060	20,685
Recycled Demand, Direct	2,010	3,660	5,160	5,160	5,160	5,160	2,010	3,660	5,160	5,160	5,160	5,160	2,010	3,660	5,160	5,160	5,160	5,160
Non-Firm, Replenishment	2,034	2,100	500	300	200	100	2,034	2,100	500	300	200	100	2,034	2,100	500	300	200	100
Total Demand	21,813	23,510	24,141	24,601	25,139	25,651	21,813	23,510	24,141	24,601	25,139	25,651	21,813	22,086	24,649	24,875	25,420	25,945
MWD Firm Demand	7,852	6,750	7,481	8,141	8,779	9,391	7,852	6,750	7,481	8,141	8,779	9,391	7,852	5,326	7,989	8,415	9,060	9,685
Water Supply																		
Imported, MWD firm	7,852	6,750	7,481	8,141	8,779	9,391	7,852	6,750	7,481	8,141	8,779	9,391	7,852	5,326	7,989	8,415	9,060	9,685
Imported, MWD non-firm	2,034	2,100	500	300	200	100	2,034	2,100	500	300	200	100	2,034	2,100	500	300	200	100
Imported, Other																		
Groundwater, Potable	9,917	11,000	11,000	11,000	11,000	11,000	9,917	11,000	11,000	11,000	11,000	11,000	9,917	11,000	11,000	11,000	11,000	11,000
Groundwater, Non-Potable																		
Surface Supply/Storage																		
Recycled, Direct	2,010	3,660	5,160	5,160	5,160	5,160	2,010	3,660	5,160	5,160	5,160	5,160	2,010	3,660	5,160	5,160	5,160	5,160
Recycled, Indirect																		
Brackish Water																		
Seawater																		
Other																		
Conservation																		
Total Local	11,927	14,660	16,160	16,160	16,160	16,160	11,927	14,660	16,160	16,160	16,160	16,160	11,927	14,660	16,160	16,160	16,160	16,160
Total Water Supply	21,813	23,510	24,141	24,601	25,139	25,651	21,813	23,510	24,141	24,601	25,139	25,651	21,813	22,086	24,649	24,875	25,420	25,945
Per Capita Water Use GPCPD	179.5	181.0	179.0	176.1	174.1	172.3	179.5	181.0	179.0	176.1	174.1	172.3	179.5	170.0	182.7	178.0	176.1	174.3
Per Capita less Recycled/Non-Firm	146.2	136.6	137.0	137.0	137.0	137.0	146.2	136.6	137.0	137.0	137.0	137.0	146.2	125.7	140.8	139.0	138.9	139.0

Notes

Calleguas MWD	Normal Water Year						Single Dry Water Year						Multiple Dry Water Year- Year 3					
	2010	2015	2020	2025	2030	2035	2010	2015	2020	2025	2030	2035	2010	2015	2020	2025	2030	2035
Population Projection	632,399	659,330	682,651	702,386	719,655	730,788	632,399	659,330	682,651	702,386	719,655	730,788	632,399	659,330	682,651	702,386	719,655	730,788
Water Demands																		
Firm Demand	164,829	167,809	171,414	173,664	179,073	182,985	169,336	173,685	177,168	180,127	187,205	192,110	169,336	173,349	177,610	181,122	188,145	192,708
Recycled Demand, Direct	6,947	12,009	17,273	18,457	19,091	19,175	7,212	12,275	17,531	18,716	19,351	19,437	7,212	12,305	16,720	17,326	17,411	17,497
Non-Firm, Replenishment																		
Total Demand	171,776	179,818	188,687	192,121	198,164	202,160	176,548	185,960	194,699	198,843	206,556	211,547	176,548	185,654	194,330	198,448	205,556	210,205
MWD Firm Demand	116,867	113,384	118,283	121,147	124,810	128,105	120,837	118,627	123,188	126,747	131,964	136,237	120,837	125,353	129,841	132,655	138,722	142,631
Water Supply																		
Imported, MWD firm	116,867	113,384	118,283	121,147	124,810	128,105	120,837	118,627	123,188	126,747	131,964	136,237	120,837	125,353	129,841	132,655	138,722	142,631
Imported, MWD non-firm																		
Imported, Other																		
Groundwater, Potable	40,094	33,595	31,365	30,345	31,485	31,495	40,084	33,615	31,385	30,365	31,505	31,515	40,084	26,920	25,400	25,660	25,880	25,890
Groundwater, Non-Potable	7,068	7,331	7,734	8,132	8,730	9,328	7,615	7,928	8,530	8,925	9,620	10,215	7,615	7,670	8,270	8,665	9,355	9,950
Surface Supply/Storage																		
Recycled, Direct	6,947	12,009	17,273	18,457	19,091	19,175	7,212	12,275	17,531	18,716	19,351	19,437	7,212	12,305	16,720	17,326	17,411	17,497
Recycled, Indirect																		
Brackish Water	800	13,499	14,032	14,040	14,048	14,057	800	13,515	14,065	14,090	14,116	14,143	800	13,406	14,098	14,142	14,188	14,237
Seawater																		
Other																		
Conservation																		
Total Local	54,909	66,434	70,404	70,974	73,354	74,055	55,711	67,333	71,511	72,096	74,592	75,310	55,711	60,301	64,488	65,793	66,834	67,574
Total Water Supply	171,776	179,818	188,687	192,121	198,164	202,160	176,548	185,960	194,699	198,843	206,556	211,547	176,548	185,654	194,329	198,448	205,556	210,205
Per Capita Water Use GPCPD	242.5	243.5	246.8	244.2	245.8	247.0	249.2	251.8	254.6	252.7	256.2	258.4	249.2	251.4	254.1	252.2	255.0	256.8
Per Capita less Recycled/Non-Firm	232.7	227.2	224.2	220.7	222.1	223.5	239.0	235.2	231.7	228.9	232.2	234.7	239.0	234.7	232.3	230.2	233.4	235.4

Notes

1. Population Projections based on MWD/SCAG. Alternative projection is also shown in UWMP.
2. Local supply and imported demands are based upon CMWD projections. MWD projections are higher.
3. CMWD does not separate recycled demand from firm demand. CMUD subtracts local supplies to determine imported demand

Central Basin MWD	Normal Water Year						Single Dry Water Year						Multiple Dry Water Year- Year 3					
	2010	2015	2020	2025	2030	2035	2010	2015	2020	2025	2030	2035	2010	2015	2020	2025	2030	2035
Population Projection	1,654,866	1,689,064	1,720,700	1,751,519	1,781,368	1,809,737	1,654,866	1,689,064	1,720,700	1,751,519	1,781,368	1,809,737	1,654,866	1,689,064	1,720,700	1,751,519	1,781,368	1,809,737
Water Demands																		
Firm Demand	237,761	239,125	241,285	244,470	246,355	248,040	237,761	244,287	247,604	249,940	251,864	253,585	237,761	252,425	247,604	249,940	251,864	253,585
Recycled Demand, Direct	6,632	6,700	11,000	16,000	16,000	16,000	6,632	6,700	11,000	16,000	16,000	16,000	6,632	6,700	11,000	16,000	16,000	16,000
Non-Firm, Replenishment		21,000	21,000	21,000	21,000	21,000												
Total Demand	244,393	266,825	273,285	281,470	283,355	285,040	244,393	250,987	258,604	265,940	267,864	269,585	244,393	259,125	258,604	265,940	267,864	269,585
MWD Firm Demand	63,443	56,525	57,185	59,870	61,755	63,440	63,443	72,360	72,360	72,360	72,360	72,360	63,443	69,711	69,711	69,711	69,711	69,711
Water Supply																		
Imported, MWD firm (2)	63,443	72,360	72,360	72,360	72,360	72,360	63,443	72,360	72,360	72,360	72,360	72,360	63,443	69,711	69,711	69,711	69,711	69,711
Imported, MWD non-firm		21,000	21,000	21,000	21,000	21,000												
Imported, Other																		
Groundwater, Potable	174,318	194,400	194,400	194,400	194,400	194,400	174,318	194,400	194,400	194,400	194,400	194,400	174,318	194,400	194,400	194,400	194,400	194,400
Groundwater, Non-Potable																		
Surface Supply/Storage																		
Recycled, Direct	6,632	12,900	17,900	17,900	17,900	17,900	6,632	12,900	17,900	17,900	17,900	17,900	6,632	12,900	17,900	17,900	17,900	17,900
Recycled, Indirect																		
Brackish Water																		
Seawater																		
Other																		
Conservation																		
Total Local	180,950	207,300	212,300	212,300	212,300	212,300	180,950	207,300	212,300	212,300	212,300	212,300	180,950	207,300	212,300	212,300	212,300	212,300
Total Water Supply	244,393	300,660	305,660	305,660	305,660	305,660	244,393	279,660	284,660	284,660	284,660	284,660	244,393	277,011	282,011	282,011	282,011	282,011
Total Supply, less Replenishment		279,660	284,660	284,660	284,660	284,660												
Per Capita Water Use GPCPD	131.8	141.0	141.8	143.5	142.0	140.6	131.8	132.7	134.2	135.5	134.2	133.0	131.8	137.0	134.2	135.5	134.2	133.0
Per Capita less Recycled/Non-Firm	128.3	126.4	125.2	124.6	123.5	122.4	128.3	129.1	128.5	127.4	126.2	125.1	128.3	133.4	128.5	127.4	126.2	125.1

Notes
1. Population Projections based on MWD/SCAG. Alternative projection is also shown in UWMP.
2. MWD Firm demands calculated from Table 2-4
3. MWD Demands based on MWD Tier 1 purchase order contract, per plan
4. MWD firm demand in normal years is MWD demand, less 21,000 replenishment

City of Compton	Normal Water Year						Single Dry Water Year						Multiple Dry Water Year- Year 3					
	2010	2015	2020	2025	2030	2035	2010	2015	2020	2025	2030	2035	2010	2015	2020	2025	2030	2035
Population Projection	81,963	84,669	87,465	90,353	93,336	93,336	81,963	84,669	87,465	90,353	93,336	93,336	81,963	84,669	87,465	90,353	93,336	93,336
Water Demands																		
Firm Demand	8,929	9,484	9,798	10,121	10,455	10,455	8,929	9,522	9,847	10,172	10,497	10,497	8,929	9,626	9,916	10,273	10,612	10,612
Recycled Demand, Direct																		
Non-Firm, Replenishment																		
Total Demand	8,929	9,484	9,798	10,121	10,455	10,455	8,929	9,522	9,847	10,172	10,497	10,497	8,929	9,626	9,916	10,273	10,612	10,612
MWD Firm Demand	2,603	3,704	4,018	4,341	4,675	4,675	2,803	3,742	4,067	4,392	4,717	4,717	2,803	3,846	4,136	4,493	4,832	4,832
Water Supply																		
Imported, MWD firm	2,803	3,704	4,018	4,341	4,675	4,675	2,803	3,742	4,067	4,392	4,717	4,717	2,803	3,846	4,136	4,493	4,832	4,832
Imported, MWD non-firm																		
Imported, Other																		
Groundwater, Potable	6,326	5,780	5,780	5,780	5,780	5,780	6,326	5,780	5,780	5,780	5,780	5,780	6,326	5,780	5,780	5,780	5,780	5,780
Groundwater, Non-Potable																		
Surface Supply/Storage																		
Recycled, Direct																		
Recycled, Indirect																		
Brackish Water																		
Seawater																		
Other																		
Conservation																		
Total Local	6,326	5,780	5,780	5,780	5,780	5,780	6,326	5,780	5,780	5,780	5,780	5,780	6,326	5,780	5,780	5,780	5,780	5,780
Total Water Supply	9,129	9,484	9,798	10,121	10,455	10,455	9,129	9,522	9,847	10,172	10,497	10,497	9,129	9,626	9,916	10,273	10,612	10,612
Per Capita Water Use GPCPD	97.3	100.0	100.0	100.0	100.0	100.0	97.3	100.4	100.5	100.5	100.4	100.4	97.3	101.5	101.2	101.5	101.5	101.5
Per Capita less Recycled/Non-Firm	97.3	100.0	100.0	100.0	100.0	100.0	97.3	100.4	100.5	100.5	100.4	100.4	97.3	101.5	101.2	101.5	101.5	101.5

Notes
Population, Supply and Demand for 2035 is 2030 data
Supplies for Dry and Multiple Dry are listed as same for average year. UWMP states that additional MWD surplus water would be available, although conservation would be in effect.

Eastern MWD	Normal Water Year						Single Dry Water Year						Multiple Dry Water Year- Year 3					
	2010	2015	2020	2025	2030	2035	2010	2015	2020	2025	2030	2035	2010	2015	2020	2025	2030	2035
Population Projection	695,923	779,857	870,603	960,053	1,043,818	1,111,729	695,923	779,857	870,603	960,053	1,043,818	1,111,729	695,923	779,857	870,603	960,053	1,043,818	1,111,729
Water Demands																		
Firm Demand	116,561	170,000	191,400	211,400	230,700	246,900	116,561	176,000	198,300	219,000	239,000	255,800	116,561	177,300	199,700	220,500	240,600	257,600
Recycled Demand, Direct	41,500	43,900	50,000	53,900	54,900	55,300	41,500	45,500	51,800	55,800	56,900	57,300	41,500	45,800	52,200	56,200	57,300	57,700
Non-Firm, Replenishment																		
Total Demand	158,061	213,900	241,400	265,300	285,600	302,200	158,061	221,500	250,100	274,800	295,900	313,100	158,061	223,100	251,900	276,700	297,900	315,300
MWD Firm Demand	88,391	149,300	170,700	190,700	210,000	226,200	88,391	155,300	177,600	198,300	218,300	235,100	88,391	156,600	179,000	199,800	219,900	236,900
Water Supply																		
Imported, MWD firm	88,391	149,300	170,700	190,700	210,000	226,200	88,391	155,300	177,600	198,300	218,300	235,100	88,391	156,600	179,000	199,800	219,900	236,900
Imported, MWD non-firm																		
Imported, Other																		
Groundwater, Potable	22,383	13,200	13,200	13,200	13,200	13,200	22,383	13,200	13,200	13,200	13,200	13,200	22,383	13,200	13,200	13,200	13,200	13,200
Groundwater, Non-Potable																		
Surface Supply/Storage																		
Recycled, Direct	41,500	43,900	50,000	53,900	54,900	55,300	41,500	45,500	51,800	55,800	56,900	57,300	41,500	45,800	52,200	56,200	57,300	57,700
Recycled, Indirect																		
Brackish Water	5,787	7,500	7,500	7,500	7,500	7,500	5,787	7,500	7,500	7,500	7,500	7,500	5,787	7,500	7,500	7,500	7,500	7,500
Seawater																		
Other																		
Conservation																		
Total Local	69,670	64,600	70,700	74,600	75,600	76,000	69,670	66,200	72,500	76,500	77,600	78,000	69,670	66,500	72,900	76,900	78,000	78,400
Total Water Supply	158,061	213,900	241,400	265,300	285,600	302,200	158,061	221,500	250,100	274,800	295,900	313,100	158,061	223,100	251,900	276,700	297,900	315,300
Per Capita Water Use GPCPD	202.8	244.9	247.5	246.7	244.3	242.7	202.8	253.6	256.5	255.5	253.1	251.4	202.8	255.4	258.3	257.3	254.8	253.2
Per Capita less Recycled/Non-Firm	149.5	194.6	196.3	196.6	197.3	198.3	149.5	201.5	203.3	203.6	204.4	205.4	149.5	203.0	204.8	205.0	205.8	206.9

Notes

2010 Supply figures from MWD and Table 3.1
Population is for entire service area. Per capita is calculated based on retail area.
All figures included sales to others
2010 GW figures calculated

Foothill MWD	Normal Water Year						Single Dry Water Year						Multiple Dry Water Year- Year 3					
	2010	2015	2020	2025	2030	2035	2010	2015	2020	2025	2030	2035	2010	2015	2020	2025	2030	2035
Population Projection	87,876	90,538	93,283	96,103	99,012	102,003	87,876	90,538	93,283	96,103	99,012	102,003	87,876	90,538	93,283	96,103	99,012	102,003
Water Demands																		
Firm Demand	10,090	11,294	11,659	12,006	12,362	12,735	10,090	12,481	12,884	13,267	13,660	14,072	10,090	11,294	11,659	12,006	12,362	12,735
Recycled Demand, Direct	104	120	120	120	120	120	104	120	120	120	120	120	104	120	120	120	120	120
Non-Firm, Replenishment																		
Total Demand	10,194	11,414	11,779	12,126	12,482	12,855	10,194	12,601	13,004	13,387	13,780	14,192	10,194	11,414	11,779	12,126	12,482	12,855
MWD Firm Demand	10,090	11,043	11,259	11,711	12,139	12,621	10,090	12,204	12,442	12,941	13,414	13,946	10,090	11,414	11,779	12,126	12,482	12,855
Water Supply																		
Imported, MWD firm	10,090	11,294	11,659	12,006	12,362	12,735	10,090	12,481	12,884	13,267	13,660	14,072	10,090	11,294	11,659	12,006	12,362	12,735
Imported, MWD non-firm																		
Imported, Other																		
Groundwater, Potable																		
Groundwater, Non-Potable																		
Surface Supply/Storage																		
Recycled, Direct	104	120	120	120	120	120	104	120	120	120	120	120	104	120	120	120	120	120
Recycled, Indirect																		
Brackish Water																		
Seawater																		
Other																		
Conservation																		
Total Local	104	120	120	120	120	120	104	120	120	120	120	120	104	120	120	120	120	120
Total Water Supply	10,194	11,414	11,779	12,126	12,482	12,855	10,194	12,601	13,004	13,387	13,780	14,192		11,414	11,779	12,126	12,482	12,855
Per Capita Water Use GPCPD	103.6	112.5	112.7	112.6	112.5	112.5	103.6	124.3	124.5	124.4	124.2	124.2	103.6	112.5	112.7	112.6	112.5	112.5
Per Capita less Recycled/Non-Firm	102.5	111.4	111.6	111.5	111.5	111.5	102.5	123.1	123.3	123.2	123.2	123.2	102.5	111.4	111.6	111.5	111.5	111.5

Notes
Population Provided by member retail agencies
Recycled water shown is produced by LA County San and delivered to golf course.

City of Fullerton	Normal Water Year						Single Dry Water Year						Multiple Dry Water Year- Year 3					
	2010	2015	2020	2025	2030	2035	2010	2015	2020	2025	2030	2035	2010	2015	2020	2025	2030	2035
Population Projection	138,600	141,603	144,605	147,608	150,610	153,613	138,600	141,603	144,605	147,608	150,610	153,613	138,600	141,603	144,605	147,608	150,610	153,613
Water Demands																		
Firm Demand	27,860	32,305	32,881	32,658	32,602	32,792	27,860	34,146	34,755	34,520	34,460	34,661	27,860	34,146	34,755	34,520	34,460	34,661
Recycled Demand, Direct																		
Non-Firm, Replenishment																		
Total Demand	27,860	32,305	32,881	32,658	32,602	32,792	27,860	34,146	34,755	34,520	34,460	34,661	27,860	34,146	34,755	34,520	34,460	34,661
MWD Firm Demand	10,587	12,276	12,495	12,410	12,389	12,461	10,587	14,117	14,369	14,272	14,247	14,330	10,587	14,117	14,369	14,272	14,247	14,330
Water Supply																		
Imported, MWD firm	10,587	12,276	12,495	12,410	12,389	12,461	10,587	14,117	14,369	14,272	14,247	14,330	10,587	14,117	14,369	14,272	14,247	14,330
Imported, MWD non-firm																		
Imported, Other																		
Groundwater, Potable	17,273	20,029	20,386	20,248	20,213	20,331	17,273	20,029	20,386	20,248	20,213	20,331	17,273	20,029	20,386	20,248	20,213	20,331
Groundwater, Non-Potable																		
Surface Supply/Storage																		
Recycled, Direct																		
Recycled, Indirect																		
Brackish Water																		
Seawater																		
Other																		
Conservation																		
Total Local	17,273	20,029	20,386	20,248	20,213	20,331	17,273	20,029	20,386	20,248	20,213	20,331	17,273	20,029	20,386	20,248	20,213	20,331
Total Water Supply	27,860	32,305	32,881	32,658	32,602	32,792	27,860	34,146	34,755	34,520	34,460	34,661	27,860	34,146	34,755	34,520	34,460	34,661
Per Capita Water Use GPCPD	179.4	203.7	203.0	197.5	193.2	190.6	179.4	215.3	214.6	208.8	204.3	201.4	179.4	215.3	214.6	208.8	204.3	201.4
Per Capita less Recycled/Non-Firm	179.4	203.7	203.0	197.5	193.2	190.6	179.4	215.3	214.6	208.8	204.3	201.4	179.4	215.3	214.6	208.8	204.3	201.4

Notes

City of Glendale	Normal Water Year						Single Dry Water Year						Multiple Dry Water Year- Year 3					
	2010	2015	2020	2025	2030	2035	2010	2015	2020	2025	2030	2035	2010	2015	2020	2025	2030	2035
Population Projection	210,293	216,797	224,285	231,864	238,406	244,357	210,293	216,797	224,285	231,864	238,406	244,357	210,293	216,797	224,285	231,864	238,406	244,357
Water Demands																		
Firm Demand	24,786	27,204	27,284	27,408	27,536	27,661	24,786	28,070	28,153	28,280	28,412	28,541	24,786	28,070	28,153	28,280	28,412	28,541
Recycled Demand, Direct	1,662	1,662	1,662	1,662	1,662	1,662	1,662	1,662	1,662	1,662	1,662	1,662	1,662	1,662	1,662	1,662	1,662	1,662
Non-Firm, Replenishment																		
Total Demand	26,448	28,866	28,946	29,070	29,198	29,323	26,448	29,732	29,815	29,942	30,074	30,203	26,448	29,732	29,815	29,942	30,074	30,203
MWD Firm Demand	16,550	17,620	17,755	17,890	18,025	18,162	16,550	18,498	18,637	18,776	18,916	19,056	16,550	18,498	18,637	18,776	18,916	19,056
Water Supply																		
Imported, MWD firm	16,550	17,620	17,755	17,890	18,025	18,162	16,550	18,498	18,637	18,776	18,916	19,056	16,550	18,498	18,637	18,776	18,916	19,056
Imported, MWD non-firm																		
Imported, Other																		
Groundwater, Potable	9,788	11,656	11,656	11,656	11,656	11,656	9,788	11,656	11,656	11,656	11,656	11,656	9,788	11,656	11,656	11,656	11,656	11,656
Groundwater, Non-Potable																		
Surface Supply/Storage																		
Recycled, Direct	1,662	1,662	1,662	1,662	1,662	1,662	1,662	1,662	1,662	1,662	1,662	1,662	1,662	1,662	1,662	1,662	1,662	1,662
Recycled, Indirect																		
Brackish Water																		
Seawater																		
Other																		
Conservation																		
Total Local	11,450	13,318	13,318	13,318	13,318	13,318	11,450	13,318	13,318	13,318	13,318	13,318	11,450	13,318	13,318	13,318	13,318	13,318
Total Water Supply	28,000	30,938	31,073	31,208	31,343	31,480	28,000	31,816	31,955	32,094	32,234	32,374	28,000	31,816	31,955	32,094	32,234	32,374
Per Capita Water Use GPCPD	112.3	118.9	115.2	111.9	109.3	107.1	112.3	122.4	118.7	115.3	112.6	110.3	112.3	122.4	118.7	115.3	112.6	110.3
Per Capita less Recycled/Non-Firm	105.2	112.0	108.6	105.5	103.1	101.1	105.2	115.6	112.1	108.9	106.4	104.3	105.2	115.6	112.1	108.9	106.4	104.3

Notes
MWD Demand shown is from available MWD supplies in RUWMP. These figures are less than MWD projections as pointed out in Plan.
MWD Demand could be less, if City uses its local supplies to the extent they are available.

Inland Empire Utilities Agency	Normal Water Year						Single Dry Water Year						Multiple Dry Water Year- Year 3					
	2010	2015	2020	2025	2030	2035	2010	2015	2020	2025	2030	2035	2010	2015	2020	2025	2030	2035
Population Projection	846,469	919,771	981,651	1,040,521	1,108,234	1,176,066	846,469	919,771	981,651	1,040,521	1,108,234	1,176,066	846,469	919,771	981,651	1,040,521	1,108,234	1,176,066
Water Demands																		
Firm Demand	226,366	243,006	236,803	247,969	256,877	273,233	226,366	215,819	209,957	219,736	227,484	241,819	226,366	212,932	206,790	216,300	223,778	237,729
Recycled Demand, Direct	17,298	28,865	31,662	34,359	37,056	40,903	17,298	28,865	31,662	34,359	37,056	40,903	17,298	31,752	34,828	37,795	40,762	44,993
Non-Firm, Replenishment																		
Total Demand	243,664	271,871	268,465	282,328	293,933	314,136	243,664	244,684	241,619	254,095	264,540	282,722	243,664	244,684	241,619	254,095	264,540	282,722
MWD Demand from UWMP	54,934	80,556	81,641	82,725	83,809	85,978	54,934	49,945	50,617	51,290	51,962	53,306	54,934	49,945	50,617	51,290	51,962	53,306
Water Supply																		
Imported, MWD firm	54,934	80,556	81,641	82,725	83,809	85,978	54,934	49,945	50,617	51,290	51,962	53,306	54,934	49,945	50,617	51,290	51,962	53,306
Imported, MWD non-firm																		
Imported, Other																		
Groundwater, Potable	130,907	162,345	156,484	164,848	170,747	183,109	130,907	189,357	182,617	192,235	199,019	213,235	130,907	187,556	180,874	190,409	197,134	211,227
Groundwater, Non-Potable																		
Surface Supply/Storage	25,652	28,490	28,490	28,490	28,490	28,490	25,652	8,832	8,832	8,832	8,832	8,832	25,652	21,937	21,937	21,937	21,937	21,937
Recycled, Direct	17,298	28,865	31,662	34,359	37,056	40,903	17,298	28,865	31,662	34,359	37,056	40,903	17,298	31,752	34,828	37,795	40,762	44,993
Recycled, Indirect		7,208	20,000	21,000	21,000	21,000		7,208	20,000	21,000	21,000	21,000		7,208	20,000	21,000	21,000	21,000
Brackish Water-CDA	14,737	17,733	17,733	17,733	17,733	17,733	14,737	17,733	17,733	17,733	17,733	17,733	14,737	17,733	17,733	17,733	17,733	17,733
Seawater																		
Other	7,208	30,168	18,729	19,043	20,828	21,533	7,208	30,168	18,729	19,043	20,828	21,533	7,208	33,906	22,602	23,047	25,011	25,786
Conservation																		
Total Local	195,802	274,809	273,098	285,473	295,854	312,768	195,802	282,163	279,573	293,202	304,468	323,236	195,802	300,091	297,974	311,921	323,577	342,676
Total Water Supply	250,736	355,365	354,739	368,198	379,663	398,746	250,736	332,108	330,190	344,492	356,430	376,542		350,036	348,591	363,211	375,539	395,982
Per Capita Water Use GPCPD	257.0	263.9	244.1	242.2	236.8	238.5	257.0	237.5	219.7	218.0	213.1	214.6	257.0	237.5	219.7	218.0	213.1	214.6
Per Capita less Recycled/Non-Firm	238.7	235.9	215.4	212.8	206.9	207.4	238.7	209.5	190.9	188.5	183.2	183.6	238.7	206.7	188.1	185.6	180.3	180.5

Notes
Recycled water direct use from table 3-15
Recycled, indirect includes recharge potential
Other includes balance of recycled supply available
Demand figures include slight ag usage

Las Virgenes MWD	Normal Water Year						Single Dry Water Year						Multiple Dry Water Year- Year 3					
	2010	2015	2020	2025	2030	2035	2010	2015	2020	2025	2030	2035	2010	2015	2020	2025	2030	2035
Population Projection	75,384	77,285	79,984	82,718	85,323	87,811	75,384	77,285	79,984	82,718	85,323	87,811	75,384	77,285	79,984	82,718	85,323	87,811
Water Demands																		
Firm Demand	20,199	23,951	22,034	22,787	23,504	24,190	20,199	28,231	25,971	26,858	27,704	28,512	20,199	27,327	26,326	27,197	28,027	28,845
Recycled Demand, Direct	4,522	4,878	6,185	7,493	8,800	9,062	4,522	5,750	7,290	8,832	10,372	10,681	4,522	6,366	7,907	9,448	10,496	10,808
Non-Firm, Replenishment																		
Total Demand	24,721	28,829	28,219	30,280	32,304	33,252	24,721	33,981	33,261	35,690	38,076	39,193	24,721	33,693	34,233	36,645	38,523	39,653
MWD Firm Demand	20,199	23,951	22,034	22,787	23,504	24,190	20,199	28,231	25,971	26,858	27,704	28,512	20,199	27,327	26,326	27,197	28,027	28,845
Water Supply																		
Imported, MWD firm	20,199	41,675	43,406	46,941	45,363	43,783	20,199	31,950	33,418	36,328	34,698	33,074	20,199	27,474	29,081	30,020	29,465	29,037
Imported, MWD non-firm																		
Imported, Other																		
Groundwater, Potable																		
Groundwater, Non-Potable																		
Surface Supply/Storage																		
Recycled, Direct	4,522	4,878	6,185	7,493	8,800	9,062	4,522	5,750	7,290	8,832	10,372	10,681	4,522	6,366	7,907	9,448	10,496	10,808
Recycled, Indirect																		
Brackish Water																		
Seawater																		
Other																		
Conservation																		
Total Local	4,522	4,878	6,185	7,493	8,800	9,062	4,522	5,750	7,290	8,832	10,372	10,681	4,522	6,366	7,907	9,448	10,496	10,808
Total Water Supply	24,721	46,553	49,591	54,434	54,163	52,845	24,721	37,700	40,708	45,160	45,070	43,755	24,721	33,840	36,988	39,468	39,961	39,845
Conservation from UWMP	-	2,662	5,508	5,696	5,876	6,047	-	2,662	5,508	5,696	5,876	6,047	-	2,662	5,508	5,696	5,876	6,047
Per Capita Water Use GPCPD	292.8	333.0	315.0	326.8	338.0	338.1	292.8	392.5	371.2	385.2	398.4	398.5	292.8	389.2	382.1	395.5	403.1	403.1
Per Capita less Recycled/Non-Firm	239.2	276.7	245.9	245.9	245.9	245.9	239.2	326.1	289.9	289.9	289.9	289.9	239.2	315.7	293.8	293.5	293.2	293.3

Notes
Population Projections by SCAG
MWD supply vs. MWD demand calculated by using percentages on LVMWD table 7.9
Firm Demand includes recycled water

Conservation shown is from Table 5.5

City of Long Beach	Normal Water Year						Single Dry Water Year						Multiple Dry Water Year- Year 3					
	2010	2015	2020	2025	2030	2035	2010	2015	2020	2025	2030	2035	2010	2015	2020	2025	2030	2035
Population Projection	462,257	471,107	480,126	489,318	498,686	508,233	462,257	471,107	480,126	489,318	498,686	508,233	462,257	471,107	480,126	489,318	498,686	508,233
Water Demands																		
Firm Demand	56,892	57,520	57,546	57,551	56,977	56,929	56,892	57,520	57,546	57,551	56,977	56,929	56,892	57,520	57,546	57,551	56,977	56,929
Recycled Demand, Direct	6,556	10,100	11,300	13,400	13,700	14,000	6,556	10,100	11,300	13,400	13,700	14,000	6,556	10,100	11,300	13,400	13,700	14,000
Non-Firm, Replenishment																		
Total Demand	63,448	67,620	68,846	70,951	70,677	70,929	63,448	67,620	68,846	70,951	70,677	70,929	63,448	67,620	68,846	70,951	70,677	70,929
MWD Firm Demand	22,237	24,520	24,046	18,551	17,477	11,929	22,237	24,520	24,046	18,551	17,477	11,929	22,237	24,520	24,046	18,551	17,477	11,929
Water Supply																		
Imported, MWD firm	22,237	24,520	24,046	18,551	17,477	11,929	22,237	24,520	24,046	18,551	17,477	11,929	22,237	24,520	24,046	18,551	17,477	11,929
Imported, MWD non-firm																		
Imported, Other																		
Groundwater, Potable	34,655	33,000	33,500	34,000	34,500	35,000	34,655	33,000	33,500	34,000	34,500	35,000	34,655	33,000	33,500	34,000	34,500	35,000
Groundwater, Non-Potable																		
Surface Supply/Storage																		
Recycled, Direct	6,556	10,100	11,300	13,400	13,700	14,000	6,556	10,100	11,300	13,400	13,700	14,000	6,556	10,100	11,300	13,400	13,700	14,000
Recycled, Indirect																		
Brackish Water																		
Seawater				5,000	5,000	10,000				5,000	5,000	10,000				5,000	5,000	10,000
Other																		
Conservation																		
Total Local	41,211	43,100	44,800	52,400	53,200	59,000	41,211	43,100	44,800	52,400	53,200	59,000	41,211	43,100	44,800	52,400	53,200	59,000
Total Water Supply	63,448	67,620	68,846	70,951	70,677	70,929	63,448	67,620	68,846	70,951	70,677	70,929		67,620	68,846	70,951	70,677	70,929
Per Capita Water Use GPCPD	122.5	128.1	128.0	129.4	126.5	124.6	122.5	128.1	128.0	129.4	126.5	124.6	122.5	128.1	128.0	129.4	126.5	124.6
Per Capita less Recycled/Non-Firm	109.9	109.0	107.0	105.0	102.0	100.0	109.9	109.0	107.0	105.0	102.0	100.0	109.9	109.0	107.0	105.0	102.0	100.0

Notes
Supplies equal demands

City of Los Angeles	Normal Water Year						Single Dry Water Year						Multiple Dry Water Year- Year 3					
	2010	2015	2020	2025	2030	2035	2010	2015	2020	2025	2030	2035	2010	2015	2020	2025	2030	2035
Population Projection	4,100,260	4,172,760	4,250,861	4,326,012	4,398,408	4,467,560	4,100,260	4,172,760	4,250,861	4,326,012	4,398,408	4,467,560	4,100,260	4,172,760	4,250,861	4,326,012	4,398,408	4,467,560
Water Demands																		
Firm Demand	540,596	580,620	604,340	593,260	596,281	587,432	540,596	617,520	643,440	633,760	638,281	630,032	540,596	592,920	617,440	621,760	632,780	630,632
Recycled Demand, Direct	6,703	20,000	20,400	27,000	29,000	29,000	6,703	20,000	20,400	27,000	29,000	29,000	6,703	20,000	20,400	27,000	29,000	30,000
Non-Firm, Replenishment	-	-	-	15,000	22,500	30,000	-	-	-	15,000	22,500	30,000	-					
Total Demand	547,299	600,620	624,740	635,260	647,781	646,432	547,299	637,520	663,840	675,760	689,781	689,032	547,299	612,920	637,840	648,760	661,780	660,632
MWD Firm Demand	263,827	248,120	218,040	193,760	198,781	193,027	263,827	488,500	459,020	434,540	439,451	432,687	263,827	406,650	375,370	349,490	353,010	345,457
Water Supply																		
Imported, MWD firm	263,827	248,120	218,040	193,760	198,781	193,027	263,827	488,500	459,020	434,540	439,451	432,687	263,827	406,650	375,370	349,490	353,010	345,457
Imported, MWD non-firm																		
Imported, Transfers		40,000	40,000	40,000	40,000	40,000		40,000	40,000	40,000	40,000	40,000		40,000	40,000	40,000	40,000	40,000
Groundwater, Potable	76,982	40,500	96,300	111,500	111,500	110,405	76,982	40,500	96,300	111,500	111,500	110,405	76,982	40,500	96,300	111,500	111,500	110,405
Groundwater, Non-Potable																		
Surface Supply/Storage																		
Recycled, Direct	6,703	20,000	20,400	27,000	29,000	29,000	6,703	20,000	20,400	27,000	29,000	29,000	6,703	20,000	20,400	27,000	29,000	29,000
Recycled, Indirect				15,000	22,500	30,000				15,000	22,500	30,000				15,000	22,500	30,000
Brackish Water																		
Seawater																		
LAA	199,739	252,000	250,000	248,000	246,000	244,000	199,739	48,520	48,120	47,720	47,330	46,940	199,739	105,770	105,770	105,770	105,770	105,770
Conservation																		
Total Local	283,424	312,500	366,700	401,500	409,000	413,405	283,424	109,020	164,820	201,220	210,330	216,345	283,424	166,270	222,470	259,270	268,770	275,175
Total Water Supply	547,251	600,620	624,740	635,260	647,781	646,432	547,251	637,520	663,840	675,760	689,781	689,032	547,251	612,920	637,840	648,760	661,780	660,632
Conservation from UWMP	8,178	14,180	27,260	40,340	53,419	64,368	8,178	14,180	27,260	40,340	53,419	64,368	8,178	14,180	27,260	40,340	53,419	64,368
Per Capita Water Use GPCPD	119.2	128.5	131.2	131.1	131.5	129.2	119.2	136.4	139.4	139.5	140.0	137.7	119.2	131.1	134.0	133.9	134.3	132.0
Per Capita less Recycled/Non-Firm	117.7	124.2	126.9	122.4	121.0	117.4	117.7	132.1	135.1	130.8	129.6	125.9	117.7	126.9	129.7	128.3	128.4	126.0
Potential Supplies																		
Strmwtr Capture and Reuse	-	2,000	4,000	6,000	8,000	10,000	-	2,000	4,000	6,000	8,000	10,000	-	2,000	4,000	6,000	8,000	10,000
Strmwtr capture-Increase GW		-	2,000	4,000	8,000	15,000		-	2,000	4,000	8,000	15,000		-	2,000	4,000	8,000	15,000

Notes
Replenishment Demand is for recycled water
MWD purchases would be reduced by additional supplies

MWDOC	Normal Water Year						Single Dry Water Year						Multiple Dry Water Year- Year 3					
	2010	2015	2020	2025	2030	2035	2010	2015	2020	2025	2030	2035	2010	2015	2020	2025	2030	2035
Population Projection	2,300,021	2,370,931	2,441,838	2,512,752	2,583,659	2,654,569	2,300,021	2,370,931	2,441,838	2,512,752	2,583,659	2,654,569	2,300,021	2,370,931	2,441,838	2,512,752	2,583,659	2,654,569
Water Demands																		
Firm Demand	445,669	474,829	487,068	498,886	504,198	508,373	445,669	509,577	522,891	535,728	541,402	545,859	445,669	509,577	522,891	535,728	541,402	545,859
Recycled Demand, Direct	39,642	51,658	55,699	59,324	59,492	59,597	39,642	51,658	55,699	59,324	59,492	59,597	39,642	51,658	55,699	59,324	59,492	59,597
Non-Firm, Replenishment																		
Total Demand	485,311	526,487	542,767	558,210	563,690	567,970	485,311	561,235	578,590	595,052	600,894	605,456	485,311	561,235	578,590	595,052	600,894	605,456
MWD Firm Demand	220,132	225,697	234,454	243,853	247,545	250,519	220,132	260,445	270,277	280,695	284,749	288,005	220,132	260,445	270,277	280,695	284,749	288,005
Water Supply																		
Imported, MWD firm	220,132	225,697	234,454	243,853	247,545	250,519	220,132	260,445	270,277	280,695	284,749	288,005	220,132	260,445	270,277	280,695	284,749	288,005
Imported, MWD non-firm																		
Imported, Other																		
Groundwater, Potable	220,052	243,032	246,514	248,933	250,553	251,754	220,052	243,032	246,514	248,933	250,553	251,754	220,052	243,032	246,514	248,933	250,553	251,754
Groundwater, Non-Potable																		
Surface Supply/Storage	5,485	6,100	6,100	6,100	6,100	6,100	5,485	6,100	6,100	6,100	6,100	6,100	5,485	6,100	6,100	6,100	6,100	6,100
Recycled, Direct	39,642	51,658	55,699	59,324	59,492	59,597	39,642	51,658	55,699	59,324	59,492	59,597	39,642	51,658	55,699	59,324	59,492	59,597
Recycled, Indirect																		
Brackish Water																		
Seawater																		
Other																		
Conservation																		
Total Local	265,179	300,790	308,313	314,357	316,145	317,451	265,179	300,790	308,313	314,357	316,145	317,451	265,179	300,790	308,313	314,357	316,145	317,451
Total Water Supply	485,311	526,487	542,767	558,210	563,690	567,970	485,311	561,235	578,590	595,052	600,894	605,456		561,235	578,590	595,052	600,894	605,456
Per Capita Water Use GPCPD	188.4	198.2	198.4	198.3	194.8	191.0	188.4	211.3	211.5	211.4	207.6	203.6	188.4	211.3	211.5	211.4	207.6	203.6
Per Capita less Recycled/Non-Firm	173.0	178.8	178.1	177.2	174.2	171.0	173.0	191.9	191.2	190.3	187.1	183.6	173.0	191.9	191.2	190.3	187.1	183.6

Notes

City of Pasadena	Normal Water Year						Single Dry Water Year						Multiple Dry Water Year- Year 3					
	2010	2015	2020	2025	2030	2035	2010	2015	2020	2025	2030	2035	2010	2015	2020	2025	2030	2035
Population Projection	175,957	180,691	185,640	190,436	195,089	199,562	175,957	180,691	185,640	190,436	195,089	199,562	175,957	180,691	185,640	190,436	195,089	199,562
Water Demands																		
Firm Demand	38,460	36,310	34,460	34,460	34,460	34,460	38,460	36,310	34,460	34,460	34,460	34,460	38,460	36,310	34,460	34,460	34,460	34,460
Recycled Demand, Direct	-	1,130	2,050	2,050	2,050	2,050	-	1,130	2,050	2,050	2,050	2,050	-	1,130	2,050	2,050	2,050	2,050
Non-Firm, Replenishment																		
Total Demand	38,460	37,440	36,510	36,510	36,510	36,510	38,460	37,440	36,510	36,510	36,510	36,510	38,460	37,440	36,510	36,510	36,510	36,510
MWD Firm Demand	24,024	23,626	21,149	21,149	21,149	21,149	25,744	25,346	20,306	20,306	20,306	20,306	25,804	25,406	18,086	18,086	18,086	18,086
Water Supply																		
Imported, MWD firm	24,024	23,626	21,149	21,149	21,149	21,149	25,744	25,346	20,306	20,306	20,306	20,306	25,804	25,406	18,086	18,086	18,086	18,086
Imported, MWD non-firm																		
Imported, Other																		
Groundwater, Potable	12,056	10,304	10,304	10,304	10,304	10,304	12,056	10,304	13,304	13,304	13,304	13,304	12,056	10,304	15,304	15,304	15,304	15,304
Groundwater, Non-Potable																		
Surface Supply/Storage	2,380	2,380	2,380	2,380	2,380	2,380	660	660	660	660	660	660	600	600	600	600	600	600
Recycled, Direct	-	1,130	2,050	2,050	2,050	2,050	-	1,130	2,050	2,050	2,050	2,050	-	1,130	2,050	2,050	2,050	2,050
Recycled, Indirect																		
Brackish Water																		
Seawater																		
Other	-	-	627	627	627	627	-	-	190	190	190	190	-	-	470	470	470	470
Conservation																		
Total Local	14,436	13,814	15,361	15,361	15,361	15,361	12,716	12,094	16,204	16,204	16,204	16,204	12,656	12,034	18,424	18,424	18,424	18,424
Total Water Supply	38,460	37,440	36,510	36,510	36,510	36,510	38,460	37,440	36,510	36,510	36,510	36,510		37,440	36,510	36,510	36,510	36,510
Conservation from UWMP	-	2,500	5,000	5,980	6,500	6,870	-	2,500	5,000	5,980	6,500	6,870	-	2,500	5,000	5,980	6,500	6,870
Per Capita Water Use GPCPD	195.1	185.0	175.6	171.2	167.1	163.3	195.1	185.0	175.6	171.2	167.1	163.3	195.1	185.0	175.6	171.2	167.1	163.3
Per Capita less Recycled/Non-Firm	195.1	179.4	165.7	161.5	157.7	154.2	195.1	179.4	165.7	161.5	157.7	154.2	195.1	179.4	165.7	161.5	157.7	154.2

Notes
Other supply consists of Planned Stormwater Harvesting

SDCWA	Normal Water Year						Single Dry Water Year						Multiple Dry Water Year- Year 3					
	2010	2015	2020	2025	2030	2035	2010	2015	2020	2025	2030	2035	2010	2015	2020	2025	2030	2035
Population Projection	3,200,000	3,271,773	3,438,837	3,599,952	3,758,933	3,906,718	3,200,000	3,271,773	3,438,837	3,599,952	3,758,933	3,906,718	3,200,000	3,271,773	3,438,837	3,599,952	3,758,933	3,906,718
Water Demands																		
Firm Demand	538,512	608,625	631,361	671,392	705,341	735,687	538,512	648,860	674,730	718,130	755,652	789,018	538,512	672,581	696,598	743,574	795,859	832,797
Recycled Demand, Direct	27,931	38,660	43,728	46,603	48,278	49,998	27,931	38,660	43,728	46,603	48,278	49,998	27,931	38,660	43,728	46,603	48,278	49,998
Non-Firm, Replenishment																		
Total Demand	566,443	647,285	675,089	717,995	753,619	785,685	566,443	687,520	718,458	764,733	803,930	839,016	566,443	711,241	740,326	790,177	844,137	882,795
MWD Firm Demand	310,027	358,189	230,601	259,694	293,239	323,838	310,027	430,431	305,101	338,501	376,023	409,389	310,027	320,456	324,100	328,695	334,532	341,486
Water Supply																		
Imported, MWD firm	310,027	358,189	230,601	259,694	293,239	323,838	310,027	430,431	305,101	338,501	376,023	409,389	310,027	320,456	324,100	328,695	344,532	341,486
Imported, MWD non-firm																		
Imported, Other	182,018	180,200	270,200	280,200	280,200	280,200	182,018	180,200	270,200	280,200	280,200	280,200	182,018	180,200	210,200	280,200	280,200	280,200
Groundwater, Potable	10,513	11,710	11,100	12,100	12,840	12,840	10,513	9,977	9,977	9,977	9,977	9,977	10,513	9,977	9,977	9,977	9,977	9,977
Groundwater, Non-Potable																		
Surface Supply/Storage	27,336	48,206	47,940	47,878	47,542	47,289	27,336	17,932	17,932	17,932	17,932	17,932	27,336	44,950	43,274	46,231	36,711	46,693
Recycled, Direct	27,931	38,660	43,728	46,603	48,278	49,998	27,931	38,660	43,728	46,603	48,278	49,998	27,931	38,660	43,728	46,603	48,278	49,998
Recycled, Indirect																		
Brackish Water	10,320	10,320	15,520	15,520	15,520	15,520	10,320	10,320	15,520	15,520	15,520	15,520	10,320	10,320	15,520	15,520	15,520	15,520
Seawater			56,000	56,000	56,000	56,000			56,000	56,000	56,000	56,000			56,000	56,000	56,000	56,000
Other														30,000	30,000	6,951	40,000	30,000
Conservation																		
Total Local	76,100	108,896	174,288	178,101	180,180	181,647	76,100	76,889	143,157	146,032	147,707	149,427	76,100	133,907	198,499	181,282	206,486	208,188
Total Water Supply	568,145	647,285	675,089	717,995	753,619	785,685	568,145	687,520	718,458	764,733	803,930	839,016	568,145	634,563	732,799	790,177	831,218	829,874
Per Capita Water Use GPCPD	158.0	176.6	175.3	178.1	179.0	179.5	158.0	187.6	186.5	189.6	190.9	191.7	158.0	194.1	192.2	196.0	200.5	201.7
Per Capita less Recycled/Non-Firm	150.2	166.1	163.9	166.5	167.5	168.1	150.2	177.0	175.2	178.1	179.5	180.3	150.2	183.5	180.8	184.4	189.0	190.3

Notes

Groundwater Recovery shown as brackish water
Other Imported includes water transfers-figure from MWD
Brackish water for 2010 assumed same as 2015

City of San Fernando	Normal Water Year						Single Dry Water Year						Multiple Dry Water Year- Year 3					
	2010	2015	2020	2025	2030	2035	2010	2015	2020	2025	2030	2035	2010	2015	2020	2025	2030	2035
Population Projection	23,650	24,005	24,365	24,730	25,101	25,478	23,650	24,005	24,365	24,730	25,101	25,478	23,650	24,005	24,365	24,730	25,101	25,478
Water Demands																		
Firm Demand	3,395	3,657	3,712	3,767	3,824	3,881	3,395	3,876	3,934	3,993	4,053	4,114	3,395	3,887	3,946	4,005	4,065	4,126
Recycled Demand, Direct																		
Non-Firm, Replenishment																		
Total Demand	3,395	3,657	3,712	3,767	3,824	3,881	3,395	3,876	3,934	3,993	4,053	4,114	3,395	3,887	3,946	4,005	4,065	4,126
MWD Firm Demand	-	252	307	362	419	476	-	471	529	588	648	709	-	482	541	600	660	721
Water Supply																		
Imported, MWD firm	-	3,485	3,810	4,089	3,947	3,814	-	2,457	2,781	2,977	2,822	2,689	-	2,248	2,416	2,519	2,459	2,414
Imported, MWD non-firm																		
Imported, Other																		
Groundwater, Potable	3,395	3,405	3,405	3,405	3,405	3,405	3,395	3,405	3,405	3,405	3,405	3,405	3,395	3,405	3,405	3,405	3,405	3,405
Groundwater, Non-Potable																		
Surface Supply/Storage																		
Recycled, Direct																		
Recycled, Indirect																		
Brackish Water																		
Seawater																		
Other																		
Conservation																		
Total Local	3,395	3,405	3,405	3,405	3,405	3,405	3,395	3,405	3,405	3,405	3,405	3,405	3,395	3,405	3,405	3,405	3,405	3,405
Total Water Supply	3,395	6,890	7,215	7,494	7,352	7,219	3,395	5,862	6,186	6,382	6,227	6,094		5,653	5,821	5,924	5,864	5,819
Per Capita Water Use GPCPD	128.2	136.0	136.0	136.0	136.0	136.0	128.2	144.1	144.1	144.1	144.1	144.2	128.2	144.6	144.6	144.6	144.6	144.6
Per Capita less Recycled/Non-Firm	128.2	136.0	136.0	136.0	136.0	136.0	128.2	144.1	144.1	144.1	144.1	144.2	128.2	144.6	144.6	144.6	144.6	144.6

Notes
2010 figures are for 2009

City of San Marino	Normal Water Year						Single Dry Water Year						Multiple Dry Water Year- Year 3					
	2010	2015	2020	2025	2030	2035	2010	2015	2020	2025	2030	2035	2010	2015	2020	2025	2030	2035
Population Projection																		
Water Demands																		
Firm Demand	584	1,054	1,054	1,054	1,054	1,054	584	1,054	1,054	1,054	1,054	1,054	584	1,054	1,054	1,054	1,054	1,054
Recycled Demand, Direct																		
Non-Firm, Replenishment																		
Total Demand	584	1,054	1,054	1,054	1,054	1,054	584	1,054	1,054	1,054	1,054	1,054	584	1,054	1,054	1,054	1,054	1,054
MWD Firm Demand	584	1,054	1,054	1,054	1,054	1,054	584	1,054	1,054	1,054	1,054	1,054	584	1,054	1,054	1,054	1,054	1,054
Water Supply																		
Imported, MWD firm																		
Imported, MWD non-firm																		
Imported, Other																		
Groundwater, Potable																		
Groundwater, Non-Potable																		
Surface Supply/Storage																		
Recycled, Direct																		
Recycled, Indirect																		
Brackish Water																		
Seawater																		
Other																		
Conservation																		
Total Local	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Water Supply	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Per Capita Water Use GPCPD

Per Capita less Recycled/Non-Firm

Notes

City of Santa Ana	Normal Water Year						Single Dry Water Year						Multiple Dry Water Year- Year 3					
	2010	2015	2020	2025	2030	2035	2010	2015	2020	2025	2030	2035	2010	2015	2020	2025	2030	2035
Population Projection	358,136	363,027	367,918	372,809	377,700	382,591	358,136	363,027	367,918	372,809	377,700	382,591	358,136	363,027	367,918	372,809	377,700	382,591
Water Demands																		
Firm Demand	46,604	47,500	48,100	48,800	49,400	50,100	46,604	50,942	51,585	52,335	52,979	53,729	46,604	50,942	51,585	52,335	52,979	53,729
Recycled Demand, Direct	196	300	300	300	300	300	196	300	300	300	300	300	196	300	300	300	300	300
Non-Firm, Replenishment																		
Total Demand	46,800	47,800	48,400	49,100	49,700	50,400	46,800	51,242	51,885	52,635	53,279	54,029	46,800	51,242	51,885	52,635	53,279	54,029
MWD Firm Demand	17,710	18,050	18,278	18,544	18,772	19,038	17,710	19,172	19,416	19,701	19,946	20,231	17,710	19,172	19,416	19,701	19,946	20,231
Water Supply																		
Imported, MWD firm	17,710	18,050	18,278	18,544	18,772	19,038	17,710	19,172	19,416	19,701	19,946	20,231	17,710	19,172	19,416	19,701	19,946	20,231
Imported, MWD non-firm																		
Imported, Other																		
Groundwater, Potable	28,894	29,450	29,822	30,256	30,628	31,062	28,894	31,770	32,169	32,634	33,033	33,498	28,894	31,770	32,169	32,634	33,033	33,498
Groundwater, Non-Potable																		
Surface Supply/Storage																		
Recycled, Direct	196	300	300	300	300	300	196	300	300	300	300	300	196	300	300	300	300	300
Recycled, Indirect																		
Brackish Water																		
Seawater																		
Other																		
Conservation																		
Total Local	29,090	29,750	30,122	30,556	30,928	31,362	29,090	32,070	32,469	32,934	33,333	33,798	29,090	32,070	32,469	32,934	33,333	33,798
Total Water Supply	46,800	47,800	48,400	49,100	49,700	50,400	46,800	51,242	51,885	52,635	53,279	54,029	46,800	51,242	51,885	52,635	53,279	54,029
Per Capita Water Use GPCPD	116.7	117.5	117.4	117.6	117.5	117.6	116.7	126.0	125.9	126.0	125.9	126.1	116.7	126.0	125.9	126.0	125.9	126.1
Per Capita less Recycled/Non-Firm	116.2	116.8	116.7	116.9	116.8	116.9	116.2	125.3	125.2	125.3	125.2	125.4	116.2	125.3	125.2	125.3	125.2	125.4

Notes

City of Santa Monica	Normal Water Year						Single Dry Water Year						Multiple Dry Water Year- Year 3					
	2010	2015	2020	2025	2030	2035	2010	2015	2020	2025	2030	2035	2010	2015	2020	2025	2030	2035
Population Projection	91,000	91,243	91,487	91,716	91,926	92,124	91,000	91,243	91,487	91,716	91,926	92,124	91,000	91,243	91,487	91,716	91,926	92,124
Water Demands																		
Firm Demand	13,855	12,032	12,065	12,097	12,126	12,153	13,855	13,008	13,043	13,076	13,106	13,135	13,855	13,247	13,283	13,316	13,347	13,376
Recycled Demand, Direct	9	560	560	560	560	560	9	100	100	100	100	100	9	100	100	100	100	100
Non-Firm, Replenishment																		
Total Demand	13,864	12,592	12,625	12,657	12,686	12,713	13,864	13,108	13,143	13,176	13,206	13,235	13,864	13,347	13,383	13,416	13,447	13,476
MWD Firm Demand	10,117	4,143	-	-	-	-	10,117	4,453	-	-	-	-	10,117	4,540	-	-	-	-
Water Supply																		
Imported, MWD firm	11,505	11,515	11,515	11,515	11,515	11,515	11,505	11,515	11,515	11,515	11,515	11,515	11,505	11,515	11,515	11,515	11,515	11,515
Imported, MWD non-firm																		
Imported, Other																		
Groundwater, Potable	12,400	12,400	12,400	12,400	12,400	12,400	12,400	12,400	12,400	12,400	12,400	12,400	12,400	12,400	12,400	12,400	12,400	12,400
Groundwater, Non-Potable																		
Surface Supply/Storage																		
Recycled, Direct	9	560	560	560	560	560	9	100	100	100	100	100	9	100	100	100	100	100
Recycled, Indirect																		
Brackish Water																		
Seawater																		
Other																		
Conservation																		
Total Local	12,409	12,960	12,960	12,960	12,960	12,960	12,409	12,500	12,500	12,500	12,500	12,500	12,409	12,500	12,500	12,500	12,500	12,500
Total Water Supply	23,914	24,475	24,475	24,475	24,475	24,475	23,914	24,015	24,015	24,015	24,015	24,015	23,914	24,015	24,015	24,015	24,015	24,015
Per Capita Water Use GPCPD	136.0	123.2	123.2	123.2	123.2	123.2	136.0	128.3	128.3	128.3	128.3	128.3	136.0	130.6	130.6	130.6	130.6	130.6
Per Capita less Recycled/Non-Firm	135.9	117.7	117.7	117.7	117.8	117.8	135.9	127.3	127.3	127.3	127.3	127.3	135.9	129.6	129.6	129.6	129.6	129.6

Notes
Population projections from MWD IRP update
Recycled Demand and Supply is "Recycled Dry Weather Urban Runoff"
Supply exceeds demand-demand largly met through gw rather than MWD
GW demand exceeds supply, according to table 5.4
UWMP calls for reducing MWD to zero in most years- MWD is a backup supply

Three Valleys MWD	Normal Water Year						Single Dry Water Year						Multiple Dry Water Year- Year 3					
	2010	2015	2020	2025	2030	2035	2010	2015	2020	2025	2030	2035	2010	2015	2020	2025	2030	2035
Population Projection	573,799	600,663	629,479	658,138	685,795	712,264	573,799	600,663	629,479	658,138	685,795	712,264	573,799	600,663	629,479	658,138	685,795	712,264
Water Demands																		
Firm Demand	117,304	124,980	130,505	133,145	136,149	137,852	117,810	125,525	131,076	133,730	136,748	138,461	117,810	125,300	131,548	134,832	137,829	139,838
Recycled Demand, Direct	5,317	7,272	8,185	8,937	9,623	10,292	5,317	7,272	8,185	8,937	9,623	10,292	5,317	7,062	8,010	8,797	9,487	10,159
Non-Firm, Replenishment	5,000	5,000	6,000	6,000	6,000	6,000	5,000	5,000	6,000	6,000	6,000	6,000	5,000	5,000	5,800	6,000	6,000	6,000
Total Demand	127,621	137,252	144,690	148,082	151,772	154,144	128,127	137,797	145,261	148,667	152,371	154,753	128,127	137,362	145,358	149,629	153,316	155,997
MWD Firm Demand	64,748	72,343	77,864	80,499	83,498	85,197	65,254	72,888	78,435	81,084	84,097	85,806	65,254	72,664	78,907	82,187	85,179	87,184
Water Supply																		
Imported, MWD firm	64,748	72,343	77,864	80,499	83,498	85,197	65,254	72,888	78,435	81,084	84,097	85,806	65,254	72,664	78,907	82,187	85,179	87,184
Imported, MWD non-firm	5,000	5,000	6,000	6,000	6,000	6,000	5,000	5,000	6,000	6,000	6,000	6,000	5,000	5,000	5,800	6,000	6,000	6,000
Imported, Other																		
Groundwater, Potable	46,056	46,137	46,141	46,146	46,151	46,155	46,056	46,137	46,141	46,146	46,151	46,155	46,056	46,136	46,141	46,145	46,150	46,154
Groundwater, Non-Potable																		
Surface Supply/Storage	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500
Recycled, Direct	5,317	7,272	8,185	8,937	9,623	10,292	5,317	7,272	8,185	8,937	9,623	10,292	5,317	7,062	8,010	8,797	9,487	10,159
Recycled, Indirect																		
Brackish Water																		
Seawater																		
Other																		
Conservation																		
Total Local	57,873	59,909	60,826	61,583	62,274	62,947	57,873	59,909	60,826	61,583	62,274	62,947	57,873	59,698	60,651	61,442	62,137	62,813
Total Water Supply	127,621	137,252	144,690	148,082	151,772	154,144	128,127	137,797	145,261	148,667	152,371	154,753		137,362	145,358	149,629	153,316	155,997
Conservation from UWMP	19,199	20,381	20,908	23,165	25,306	27,326	19,199	20,381	20,908	23,165	25,306	27,326	19,199	20,381	20,908	23,165	25,306	27,326
Per Capita Water Use GPCPD	198.6	204.0	205.2	200.9	197.6	193.2	199.3	204.8	206.0	201.7	198.4	194.0	199.3	204.2	206.1	203.0	199.6	195.5
Per Capita less Recycled/Non-Firm	182.5	185.8	185.1	180.6	177.2	172.8	183.3	186.6	185.9	181.4	178.0	173.5	183.3	186.2	186.6	182.9	179.4	175.3

Notes
Population Projections from SCAG and SGV Council of Governments
Conservation is 1990 base year
Retail Ag is included in firm demand
Groundwater and Groundwater Recover are combined

City of Torrance	Normal Water Year						Single Dry Water Year						Multiple Dry Water Year- Year 3					
	2010	2015	2020	2025	2030	2035	2010	2015	2020	2025	2030	2035	2010	2015	2020	2025	2030	2035
Population Projection	113,500	114,114	114,738	115,362	115,986	116,610	113,500	114,114	114,738	115,362	115,986	116,610	113,500	114,114	114,738	115,362	115,986	116,610
Water Demands																		
Firm Demand	18,758	20,368	20,882	21,409	21,950	22,604	18,758	21,997	22,552	23,122	23,706	24,304	18,758	21,793	22,343	22,908	23,486	24,079
Recycled Demand, Direct	6,445	6,500	6,650	7,150	7,150	7,150	6,445	6,500	6,650	7,150	7,150	7,250	6,445	6,500	6,650	7,150	7,150	7,150
Non-Firm, Replenishment																		
Total Demand	25,203	26,868	27,532	28,559	29,100	29,754	25,203	28,497	29,202	30,272	30,856	31,554	25,203	28,293	28,993	30,058	30,636	31,229
MWD Firm Demand	16,471	12,328	12,842	13,369	13,910	14,464	16,471	13,957	14,512	15,082	15,666	16,264	16,471	13,753	14,303	14,868	15,446	16,039
Water Supply																		
Imported, MWD firm	16,471	20,967	20,967	20,967	20,967	20,967	16,471	15,799	18,677	20,406	19,613	18,867	16,471	13,822	15,884	16,509	16,234	16,152
Imported, MWD non-firm																		
Imported, Other																		
Groundwater, Potable	1,564	5,640	5,640	5,640	5,640	5,640	1,564	5,640	5,640	5,640	5,640	5,640	1,564	5,640	5,640	5,640	5,640	5,640
Groundwater, Non-Potable																		
Surface Supply/Storage																		
Recycled, Direct	6,445	6,500	6,650	7,150	7,150	7,150	6,445	6,500	6,650	7,150	7,150	7,250	6,445	6,500	6,650	7,150	7,150	7,150
Recycled, Indirect																		
Brackish Water	1,106	2,400	2,400	2,400	2,400	2,400	1,106	2,400	2,400	2,400	2,400	2,400	1,106	2,400	2,400	2,400	2,400	2,400
Seawater																		
Other																		
Conservation																		
Total Local	9,115	14,540	14,690	15,190	15,190	15,190	9,115	14,540	14,690	15,190	15,190	15,290	9,115	14,540	14,690	15,190	15,190	15,190
Total Water Supply	25,586	35,507	35,657	36,157	36,157	36,157	25,586	30,339	33,367	35,596	34,803	34,157	25,586	28,362	30,574	31,699	31,424	31,342
Per Capita Water Use GPCPD	198.2	210.2	214.2	221.0	224.0	227.8	198.2	222.9	227.2	234.3	237.5	241.6	198.2	221.3	225.6	232.6	235.8	239.1
Per Capita less Recycled/Non-Firm	147.5	159.3	162.5	165.7	168.9	173.1	147.5	172.1	175.5	178.9	182.5	186.1	147.5	170.5	173.8	177.3	180.8	184.3

Notes
Groundwater supply will be fully utilized to meet demand
Desalter supply will be full utilized to meet demand
Reclaimed supply will be full utilized to meet reclaimed demand
Imported supply is greater than imported demand
2010 figures from table 4.1

USG Valley MWD	Normal Water Year						Single Dry Water Year						Multiple Dry Water Year- Year 3					
	2010	2015	2020	2025	2030	2035	2010	2015	2020	2025	2030	2035	2010	2015	2020	2025	2030	2035
Population Projection	903,000	935,000	966,000	996,000	1,025,000	1,025,000	903,000	935,000	966,000	996,000	1,025,000	1,025,000	903,000	935,000	966,000	996,000	1,025,000	1,025,000
Water Demands																		
Firm Demand	157,101	162,739	146,118	148,495	150,747	150,747	157,101	162,739	146,118	148,495	150,747	150,747	157,101	162,739	146,118	148,495	150,747	150,747
Recycled Demand, Direct	6,000	7,500	10,000	12,500	15,000	15,000	6,000	7,500	10,000	12,500	15,000	15,000	6,000	7,500	10,000	12,500	15,000	15,000
Non-Firm, Replenishment		25,000	16,000	19,000	23,000	23,000												
Total Demand	163,101	195,239	172,118	179,995	188,747	188,747	163,101	170,239	156,118	160,995	165,747	165,747	163,101	170,239	156,118	160,995	165,747	165,747
MWD Firm Demand	22,633	3,000	3,000	3,000	3,000	3,000	22,633	28,000	19,000	22,000	26,000	26,000	22,633	28,000	19,000	22,000	26,000	26,000
Water Supply																		
Imported, MWD firm	5,700	3,000	3,000	3,000	3,000	3,000	32,000	31,000	45,000	43,000	41,000	41,000	32,000	31,000	45,000	43,000	41,000	41,000
Imported, MWD non-firm	21,000	25,000	16,000	19,000	23,000	23,000												
Imported, Other																		
Groundwater, Potable																		
Groundwater, Non-Potable																		
Surface Supply/Storage																		
Recycled, Direct	6,000	7,500	10,000	12,500	15,000	15,000	6,000	7,500	10,000	12,500	15,000	15,000	6,000	7,500	10,000	12,500	15,000	15,000
Recycled, Indirect																		
Brackish Water																		
Seawater																		
Other																		
Conservation																		
Total Local	6,000	7,500	10,000	12,500	15,000	15,000	6,000	7,500	10,000	12,500	15,000	15,000	6,000	7,500	10,000	12,500	15,000	15,000
Total Water Supply	32,700	35,500	29,000	34,500	41,000	41,000	38,000	38,500	55,000	55,500	56,000	56,000	38,000	38,500	55,000	55,500	56,000	56,000
Conservation from UWMP																		
Per Capita Water Use GPCPD	161.2	186.4	159.1	161.3	164.4	164.4	161.2	162.5	144.3	144.3	144.4	144.4	161.2	162.5	144.3	144.3	144.4	
Per Capita less Recycled/Non-Firm	155.3	155.4	135.0	133.1	131.3	131.3	155.3	155.4	135.0	133.1	131.3	131.3	155.3	155.4	135.0	133.1	131.3	
Potential Supplies																		
Recycled for GW Replenishment			5,000	5,000	10,000	10,000												

Notes
Plan goes through 2030 only; 2035 is assumed the same as 2030

MWD Demand in red is firm demand only
Plan show non-firm demands in dry and multiple dry years. These supplies are included as firm demands in this table.

West Basin MWD	Normal Water Year						Single Dry Water Year						Multiple Dry Water Year- Year 3					
	2010	2015	2020	2025	2030	2035	2010	2015	2020	2025	2030	2035	2010	2015	2020	2025	2030	2035
Population Projection	853,377	874,219	892,116	909,498	926,592	942,893	853,377	874,219	892,116	909,498	926,592	942,893	853,377	874,219	892,116	909,498	926,592	942,893
Water Demands																		
Firm Demand	140,805	160,647	143,297	141,886	137,098	136,261	140,805	167,728	150,384	148,917	144,077	143,207	140,805	160,078	152,162	151,342	146,437	145,369
Recycled Demand, Direct	14,182	16,368	33,882	33,882	37,382	37,382	14,182	16,368	33,882	33,882	37,382	37,382	14,182	16,368	33,882	33,882	37,382	37,382
Non-Firm, Replenishment	22,980	20,480	20,480	20,480	20,480	20,480	7,706	16,980	16,980	16,980	20,480	20,480	7,706	16,980	16,980	16,980	20,480	20,480
Total Demand	177,967	197,495	197,659	196,248	194,960	194,123	162,693	201,076	201,246	199,779	201,939	201,069	162,693	193,426	203,024	202,204	204,299	203,231
MWD Firm Demand	104,985	114,647	76,797	75,386	70,598	69,761	111,246	121,728	83,884	82,417	77,577	76,707	111,246	114,078	85,662	84,842	79,937	78,869
Water Supply																		
Imported, MWD firm	104,985	114,647	76,797	75,386	70,598	69,761	111,246	121,728	83,884	82,417	77,577	76,707	111,246	114,078	85,662	84,842	79,937	78,869
Imported, MWD non-firm	15,274	3,500	3,500	3,500														
Imported, Other																		
Groundwater, Potable	35,320	45,000	45,000	45,000	45,000	45,000	35,320	45,000	45,000	45,000	45,000	45,000	36,360	45,000	45,000	45,000	45,000	45,000
Groundwater, Non-Potable																		
Surface Supply/Storage																		
Recycled, Direct	14,182	16,368	33,882	33,882	37,382	37,382	14,182	16,368	33,882	33,882	37,382	37,382	14,182	16,368	33,882	33,882	37,382	37,382
Recycled, Indirect	7,706	16,980	16,980	16,980	20,480	20,480	7,706	16,980	16,980	16,980	20,480	20,480	7,706	16,980	16,980	16,980	20,480	20,480
Brackish Water																		
Seawater	500	1,000	21,500	21,500	21,500	21,500	500	1,000	21,500	21,500	21,500	21,500	1,000	1,000	21,500	21,500	21,500	21,500
Other																		
Conservation																		
Total Local	57,708	79,348	117,362	117,362	124,362	124,362	57,708	79,348	117,362	117,362	124,362	124,362	59,248	79,348	117,362	117,362	124,362	124,362
Total Water Supply	177,967	197,495	197,659	196,248	194,960	194,123	168,954	201,076	201,246	199,779	201,939	201,069	170,494	193,426	203,024	202,204	204,299	203,231
Conservation from UWMP	14,000	15,119	21,039	21,640	22,971	23,632	14,000	15,119	21,039	21,640	22,971	23,632	14,000	15,119	21,039	21,640	22,971	23,632
Per Capita Water Use GPCPD	186.2	201.7	197.8	192.6	187.8	183.8	170.2	205.3	201.4	196.1	194.6	190.4	170.2	197.5	203.2	198.5	196.8	192.4
Per Capita less Recycled/Non-Firm	147.3	164.1	143.4	139.3	132.1	129.0	147.3	171.3	150.5	146.2	138.8	135.6	147.3	163.5	152.3	148.6	141.1	137.6

Notes
Replenishment demands(IW and RW) are from Table 3-5, but not shown on tables 5-3 to 5-5
Desalination includes brackish and ocean water
Recycled does not include replenishment or deliveries to others

Western MWD	Normal Water Year						Single Dry Water Year						Multiple Dry Water Year- Year 3					
	2010	2015	2020	2025	2030	2035	2010	2015	2020	2025	2030	2035	2010	2015	2020	2025	2030	2035
Population Projection	85,469	98,812	112,157	126,524	142,732	161,016	85,469	98,812	112,157	126,524	142,732	161,016	85,469	98,812	112,157	126,524	142,732	161,016
Total Demand in Service Area w/ cons																		
Water Demands																		
Firm Demand	84,684	117,520	122,362	132,444	141,804	151,751	84,684	132,943	138,487	149,953	160,675	172,062	84,684	132,943	138,487	149,953	160,675	172,062
Recycled Demand, Direct	950	1,120	1,680	2,240	3,360	4,480	950	1,120	1,680	2,240	3,360	4,480	950	1,120	1,680	2,240	3,360	4,480
Non-Firm, Replenishment																		
Total Demand	85,634	118,640	124,042	134,684	145,164	156,231	85,634	134,063	140,167	152,193	164,035	176,542	85,634	134,063	140,167	152,193	164,035	176,542
MWD Firm Demand	79,064	99,970	103,812	113,894	123,254	133,201	79,064	109,633	105,177	116,643	127,365	138,752	79,064	115,633	120,177	131,643	142,365	153,752
Water Supply																		
Imported, MWD firm	131,228	160,313	174,127	184,131	195,301	208,035	131,228	160,313	174,127	184,131	195,301	208,035	131,228	160,313	174,127	184,131	195,301	208,035
Imported, MWD non-firm																		
Imported, Other																		
Groundwater, Potable	1,000	2,600	3,600	3,600	3,600	3,600	1,000	2,360	3,360	3,360	3,360	3,360	1,000	2,360	3,360	3,360	3,360	3,360
Groundwater, Non-Potable																		
Surface Supply/Storage	6,000	6,000	15,000	15,000	15,000	15,000	6,000	6,000	15,000	15,000	15,000	15,000	6,000	6,000	15,000	15,000	15,000	15,000
Recycled, Direct	950	1,120	1,680	2,240	3,360	4,480	950	1,120	1,680	2,240	3,360	4,480	950	1,120	1,680	2,240	3,360	4,480
Recycled, Indirect																		
Brackish Water	6,400	10,750	10,750	10,750	10,750	10,750	6,400	10,750	10,750	10,750	10,750	10,750	6,400	10,750	10,750	10,750	10,750	10,750
Seawater																		
Other	6,200	6,200	6,200	6,200	6,200	6,200	6,200	6,200	6,200	6,200	6,200	6,200	6,200	6,200	6,200	6,200	6,200	6,200
Conservation																		
Total Local	20,550	26,670	37,230	37,790	38,910	40,030	20,550	26,430	36,990	37,550	38,670	39,790	20,550	26,430	36,990	37,550	38,670	39,790
Total Water Supply	151,778	186,983	211,357	221,921	234,211	248,065	151,778	186,743	211,117	221,681	233,971	247,825	151,778	186,743	211,117	221,681	233,971	247,825
Conservation from UWMP		11,021	21,685	23,227	24,728	26,377		12,453	24,504	26,246	27,943	29,806		12,453	24,504	26,246	27,943	29,806
Per Capita Water Use GPCPD	894.5	1071.9	987.3	950.3	908.0	866.2	894.5	1211.2	1115.7	1073.9	1026.0	978.8	894.5	1211.2	1115.7	1073.9	1026.0	978.8
Per Capita less Recycled/Non-Firm	884.5	1061.8	974.0	934.5	886.9	841.4	884.5	1201.1	1102.3	1058.1	1005.0	954.0	884.5	1201.1	1102.3	1058.1	1005.0	954.0

Notes
Population is for retail area only. Per capita numbers cannot be calculated
Supplies exceed demands in all cases
Recycled water demand is 950 AFY, per Table 3-11
Demand provided to MWD appears to exceed actual demands
MWD Demand in 2010 from Delivery summary from MWD- Appears to be a conflict from table ES-2
Other includes purchases from Meeks, Daley and City of Riverside
Existing and Planned supplies are combined, as they appear certain
Verify to see if above includes conservation
2010 MWD Demand includes agriculture
2010 Total demand from Table 2-4

Totals	Normal Water Year						Single Dry Water Year						Multiple Dry Water Year- Year 3					
	2010	2015	2020	2025	2030	2035	2010	2015	2020	2025	2030	2035	2010	2015	2020	2025	2030	2035
Population Projection-Million		18.773	19.443	20.097	20.746	21.317		18.773	19.443	20.097	20.746	21.317		18.773	19.443	20.097	20.746	21.317
Water Demands																		
Firm Demand	3,136,860	3,434,163	3,491,040	3,587,828	3,679,933	3,758,264	3,141,873	3,580,679	3,647,345	3,750,805	3,851,210	3,934,684	3,141,873	3,575,159	3,644,053	3,766,814	3,888,150	3,980,805
Recycled Demand, Direct	194,606	263,182	317,751	351,352	368,939	377,446	194,871	265,460	320,454	354,390	372,311	380,967	194,871	269,083	323,651	357,312	374,465	384,411
Non-Firm, Replenishment	30,014	73,580	63,980	81,780	93,180	100,580	14,740	24,080	23,480	38,280	49,180	56,580	14,740	24,080	23,280	23,280	26,680	26,580
Total Demand	3,361,480	3,770,925	3,872,771	4,020,960	4,142,052	4,236,290	3,351,484	3,870,219	3,991,279	4,143,475	4,272,701	4,372,231	3,351,484	3,868,322	3,990,985	4,147,406	4,289,295	4,391,796
MWD Firm Demand	1,580,579	1,717,165	1,561,752	1,612,426	1,690,853	1,750,335	1,593,236	2,119,650	1,947,778	2,006,438	2,096,558	2,156,846	1,593,296	1,931,006	1,906,190	1,935,301	1,991,160	2,026,004
Water Supply																		
Imported, MWD firm	1,616,814	1,837,507	1,701,770	1,753,168	1,827,038	1,883,305	1,655,571	2,191,281	2,071,911	2,126,058	2,203,469	2,262,874	1,655,631	1,986,530	2,004,009	2,026,855	2,084,122	2,107,718
Imported, MWD non-firm	43,308	56,600	47,000	49,800	50,200	50,100	7,034	7,100	6,500	6,300	6,200	6,100	7,034	7,100	6,300	6,300	6,200	6,100
Imported, Other	182,018	220,200	310,200	320,200	320,200	320,200	182,018	220,200	310,200	320,200	320,200	320,200	182,018	220,200	250,200	320,200	320,200	320,200
Groundwater, Potable	939,880	982,900	1,036,471	1,064,730	1,076,011	1,089,675	939,870	1,014,373	1,070,770	1,099,444	1,110,988	1,126,548	940,910	1,003,522	1,062,650	1,092,445	1,102,957	1,118,388
Groundwater, Non-Potable	7,068	7,331	7,734	8,132	8,730	9,328	7,615	7,928	8,530	8,925	9,620	10,215	7,615	7,670	8,270	8,665	9,355	9,950
Surface Supply/Storage	73,353	97,676	106,410	106,348	106,012	105,759	71,633	46,024	55,024	55,024	55,024	55,024	71,573	86,087	93,411	96,368	86,848	96,830
Recycled, Direct	194,606	269,382	324,651	353,252	370,839	379,346	194,871	271,660	327,354	356,290	374,211	382,867	194,871	275,283	330,551	359,212	376,365	385,311
Recycled, Indirect	7,706	24,188	36,980	52,980	63,980	71,480	7,706	24,188	36,980	52,980	63,980	71,480	7,706	24,188	36,980	52,980	63,980	71,480
Brackish Water	39,150	62,202	67,935	67,943	67,951	67,960	39,150	62,218	67,968	67,993	68,019	68,046	39,150	62,109	68,001	68,045	68,091	68,140
Seawater	500	1,000	77,500	82,500	82,500	87,500	500	1,000	77,500	82,500	82,500	87,500	1,000	1,000	77,500	82,500	82,500	87,500
Other	213,147	288,368	275,556	273,870	273,655	272,360	213,147	84,888	73,239	73,153	74,548	74,863	213,147	175,876	165,042	142,438	177,451	168,226
Conservation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Local	1,475,410	1,733,047	1,933,237	2,009,755	2,049,678	2,083,408	1,474,492	1,512,279	1,717,365	1,796,309	1,838,890	1,876,543	1,475,972	1,635,734	1,842,405	1,902,653	1,967,547	2,005,825
Total Water Supply	3,317,550	3,847,354	3,992,207	4,132,923	4,247,116	4,337,013	3,319,115	3,930,860	4,105,976	4,248,867	4,368,759	4,465,717	3,320,655	3,849,564	4,102,914	4,256,008	4,378,069	4,439,843

THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Office of the General Manager

June 23, 2011

VIA EMAIL

Ms. Maureen Stapleton
General Manager
San Diego County Water Authority
4677 Overland Ave.
San Diego, CA 92123

Dear Ms. Stapleton:

Board action regarding Rate Structure Integrity provisions and termination of agreements

As you know, on June 14, 2011, The Metropolitan Water District of Southern California's (Metropolitan) Board of Directors took action with regard to contracts with San Diego County Water Authority (Water Authority) containing Rate Structure Integrity provisions. The Board adopted Option 3 set forth in Board Letter 8-7 (attached).

The adoption of Option 3 by the Board authorized the following:

1. Continuation of the regional residential and commercial direct rebates for water conserving devices to residents, businesses, and institutions within the Water Authority's service area through the *SoCal Water$mart* and *Save Water, Save a Buck* programs.
2. Termination of Agreement No. ECP 24-2007 regarding landscape grants.
3. Termination of Agreement No. 94278 regarding The San Vicente Water Recycling Project.
4. Direction to staff to cease approving or providing funding for the Water Authority's member agency administered conservation projects through regional conservation Agreements Nos. 78189 (residential) and 66654 (commercial/industrial /institutional).

The Board's August 2010 direction not to execute pending agreements with the Water Authority absent new Board direction remains in effect.

Pursuant to this Board authorization and direction, please be advised as follows:

1. Metropolitan hereby terminates Agreement No. ECP 24-2007, pursuant to Sections 2.2, 3.2, and 8.4 of the agreement, effective July 25, 2011.
2. Metropolitan hereby terminates Agreement No. 94278, effective August 8, 2011, pursuant to Sections 7 and 10 of the agreement.
3. Metropolitan will issue Addenda to Agreements Nos. 78189 and 66654 to eliminate approval or funding for Water Authority's member agency administered conservation projects, effective July 1, 2011. This change will be made and effective pursuant to Sections 1 and 2.2 of Agreement No. 78189, and Section 5 of Agreement No. 66654.

4. Pending incentive agreements that have been or may be submitted to Metropolitan will not be executed prior to further action and direction from the Metropolitan Board.

Please feel free to contact me or my staff if you have any questions regarding this matter.

Sincerely,

Jeffrey Kightlinger
General Manager

PVH:vs
o:\a\s\c\2011\PVH_Rate Structure Integrity Term Letter 061611.doc

Enclosure

cc: M. Scully
Interim General Council
The Metropolitan Water District of Southern California

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

BOARD ACTION

- **Board of Directors**
  Legal and Claims Committee

6/14/2011 Board Meeting

8-7

Subject

Review Rate Structure Integrity provisions of conservation and Local Resources Program funding agreements with San Diego County Water Authority; and consider termination of agreements

Description

Background

At its August 17, 2010 meeting, the Board of Directors authorized the General Manager to initiate the process to terminate six local resources and conservation agreements with the San Diego County Water Authority (Water Authority) that include rate structure integrity (RSI) provisions, and to defer execution of three pending agreements.

Since that time, Metropolitan and the Water Authority engaged in mediation as set forth in the dispute resolution terms of the RSI provisions. Formal mediation between Metropolitan and the Water Authority took place on March 9, 2011 for four bilateral agreements and was scheduled for June 6, 2011 for an agreement involving a third party. One agreement has since been paid in full and has terminated by its own terms. The RSI provisions state that if mediation does not result in a mutually acceptable agreement, the matter goes to the Board of Directors for final determination on whether to terminate the agreements.

Rate Structure Integrity provisions

Adopted by the Board in 2004, the RSI provisions define a process through which Metropolitan can terminate conservation or other local resources incentive agreements with a member agency that chooses to pursue legal or legislative challenges to Metropolitan's existing rate structure outside of established public board processes. The objective of this language is to protect revenue sources necessary to fund Metropolitan's water management incentive programs. Subsequent to board adoption in 2004, standardized RSI terms have been included in all local resources, seawater desalination, and conservation program incentive agreements. The full text of the RSI language, including notice and dispute resolution procedures, is included in **Attachment 1**. The agreements subject to this action are listed in **Attachment 2**.

Legal Challenge by Water Authority

In June 2010, the Water Authority initiated litigation challenging Metropolitan's water rates and charges adopted April 13, 2010. This act triggered the termination and dispute resolution provisions of the RSI provisions in several existing incentives agreements with the Water Authority.

Notice and Dispute Resolution Proceedings

As set forth in the RSI provisions and after consultation with the Board of Directors, the General Manager sent the Water Authority the required 90-day notices of possible termination for four bilateral agreements, effective August 30, 2010. On September 27, 2010, the Water Authority requested mediation. Metropolitan and the Water Authority met in mediation on March 9, 2011, before retired Justice Howard B. Wiener.

Although both sides made good-faith efforts to find a mutually acceptable solution, no agreement resulted. After the mediation, the Chairman of the Water Authority Board wrote the Chairman of Metropolitan's Board

requesting a continuation of the mediation on a board to board basis. By a letter to Chairman Hogan dated April 14, 2011, Chairman Foley declined the request and effectively concluded the mediation. Metropolitan provided a separate notice of potential termination concerning two agreements involving the Water Authority's retail agencies.

On October 19, 2010, Metropolitan issued a 90-day notice of intent to terminate two agreements with the Water Authority that included Ramona Municipal Water District (Ramona) as a party and Rincon del Diablo Municipal Water District (Rincon) as funding recipient and notified all parties of their ability to request mediation. Neither Ramona nor Rincon responded to the notice or requested mediation. The Water Authority requested mediation on November 17, 2010. In January 2011, the Rincon agreement was fully paid and expired by its own terms. The Water Authority declined Metropolitan's request to include the three-party agreement in the March 9 mediation and took no further steps to pursue it. Staff concluded that the Water Authority had waived its mediation rights.

On May 9, 2011, Metropolitan received written notice from the Water Authority that, in their view, the Water Authority had not waived mediation of the Ramona agreement. As a result of that communication, Metropolitan and the Water Authority scheduled a second mediation for June 6, 2011, also before Justice Wiener and including a representative from Ramona, specifically on the Ramona contract for the San Vicente Water Recycling Project.

Board Action

At its May 10, 2011 meeting, the Legal and Claims Committee considered termination of all remaining agreements. The Committee adopted a resolution approving termination of the open agreements with the Water Authority but maintaining programs that provide direct rebates to consumers through Metropolitan's regional incentives programs. Policy discussion among board members focused on Metropolitan's historic, long-standing support for conservation. The Committee also discussed the ramifications of the new statewide conservation target of a 20 percent reduction in per capita water use by 2020 that was included in legislation sponsored by Metropolitan. The Committee also instructed staff to defer execution of any pending agreements with the Water Authority prior to further direction from the Board. At the board meeting of May 10, 2011, the Board acted to table consideration of the termination of these contracts until its June 14, 2011 meeting, to allow for further discussion of the modified action.

Pending Agreements

The three pending agreements with the Water Authority that would be subject to the Board's direction to defer execution are described below.

On November 10, 2009, the Board authorized entering into a Seawater Desalination Program agreement with the Water Authority and its retail agencies for the Carlsbad Seawater Desalination Project. The authorized agreement includes several sub-agencies of the Water Authority as parties and includes the standard RSI provisions. On July 22, 2010, the Water Authority's board of directors authorized a draft term sheet and directed its staff to prepare a water purchase agreement with Poseidon Resources LLC for direct purchase of product water from the Carlsbad Seawater Desalination Project. If such an agreement is completed, the material terms would be different from the proposed agreement authorized by Metropolitan's Board for the project. In that case, Metropolitan staff will bring the new agreement regarding the Carlsbad Seawater Desalination Project back to the Board for consideration.

The pending Agricultural Conservation Program agreement would provide incentives for professional irrigation audits and installation of water conservation improvements. The pending agreement in the Innovative Conservation Program would fund new research on flow control valves.

Options

Staff has developed four options for board consideration:

Option #1: Under this option, the Board would approve termination of all contracts with Water Authority containing RSI language. This option is consistent with the RSI language that was adopted by the Board and implemented in these contracts.

Option #2: This option is the same as Option #1, but Metropolitan would establish an interest-bearing fund to hold payments that would have been paid under the terminated agreements, to the extent that such amounts can reasonably be calculated and the information for such calculations is provided to Metropolitan by the Water Authority. Upon completion of the pending litigation over Metropolitan's existing rate structure, the Board will determine at its sole discretion whether and on what terms to provide any portion of these funds to the Water Authority.

Option #3: Under this option, the Board would approve termination of all contracts with Water Authority containing RSI language, except for the regional commercial and residential conservation incentive agreements providing payments directly to consumers. Maintaining the conservation agreements would allow residents within the Water Authority service area to continue to receive rebates from Metropolitan's regional programs when they purchase eligible conserving devices. This option reflects the Committee's recommended action of May 10 that was later tabled at the May board meeting.

Option #4: Under this option, no agreements would be terminated. The Board would also instruct staff to execute pending incentive agreements with the Water Authority, as appropriate.

Recommendation

Staff recommends Option #1, to terminate the existing incentive agreements with the Water Authority that contain rate structure integrity language. This option is consistent with the policy set forth by the RSI language. Staff will also continue to defer the approval of any pending agreements with the Water Authority requiring inclusion of the RSI provisions, until authorized by the Board.

Policy

By Minute Item 46045, dated December 14, 2004, effective April 15, 2005, the Board authorized inclusion of rate structure integrity language in all future local resources, seawater desalination, and conservation program incentive agreements.

By Minute Item 48266, dated May 11, 2010, the Board approved the water conservation plan for FY 2010/11 that includes the Agricultural Conservation Program.

By Minute Item 44974, dated August 20, 2002, the Board authorized the Innovative Conservation Program on a biennial basis.

By Minute Item 48084, dated November 10, 2009, the Board authorized entering into a Seawater Desalination Program agreement with the San Diego County Water Authority and its retail agencies for the Carlsbad Seawater Desalination Project.

By Minute Item 48377, dated August 17, 2010, the Board expressed support for the General Manager to initiate the process to terminate six local resources and conservation agreements with the San Diego County Water Authority that include rate structure integrity provisions and to defer execution of pending conservation and LRP agreements with the Water Authority.

California Environmental Quality Act (CEQA)

CEQA determination for Options #1, #2, and #3:

During preliminary environmental review, the lead agency must first determine whether an activity proposed by a public agency is subject to CEQA before preparing and conducting an initial study and environmental checklist. Given the contractual nature of the activity presented in the board letter, the proposed action is not defined as a project under CEQA or the State CEQA Guidelines and is therefore not subject to the provisions of CEQA pursuant to Sections 15060(c)(3), 15061(b)(3), 15378(b)(2), 15378(b)(4), and 15378(b)(5) of the State CEQA Guidelines. The proposed action simply terminates existing agreements for projects whose potential effects were previously addressed in other adopted/certified CEQA documents. Accordingly, no further environmental review is required.

The CEQA determination is: Determine that the proposed action is not subject to the provisions of CEQA pursuant to Sections 15060(c)(3),15061(b)(3), 15378(b)(2), 15378(b)(4), and 15378(b)(5) of the State CEQA Guidelines.

CEQA determination for Option #4:

None required

Board Options

Option #1

Adopt the CEQA determination and approve termination of five conservation and Local Resources Program funding agreements with San Diego County Water Authority pursuant to the rate structure integrity provisions of those agreements.

Fiscal Impact: Cost savings realized from terminated incentive payments would be factored into Metropolitan's rate projections and future budgets. Financial exposure to local resources and conservation program incentives would be diminished.

Business Analysis: Staff would also review potential reallocation of budgeted FY 2010/11 and FY 2011/12 conservation funds and other incentive-related administrative actions.

Option #2

Adopt the CEQA determination and

a. Approve termination of five conservation and Local Resources Program funding agreements with San Diego County Water Authority pursuant to the rate structure integrity provisions of those agreements; and
b. Direct the General Manager to establish a separate interest-bearing fund to hold payments that would be paid under such agreements to the extent that such amounts can reasonably be calculated and the information for such calculations is provided to Metropolitan by the Water Authority. Upon completion of the pending litigation over Metropolitan's existing rate structure, the Board will determine at its sole discretion whether and on what terms to provide any portion of these funds to the Water Authority.

Fiscal Impact: None. Incentive payments factored into Metropolitan's rate projections and future budgets would remain unchanged.

Business Analysis: Staff would need to make judgments on estimated payments and amount to place into separate account.

Option #3

Adopt the CEQA determination and

a. In order to continue providing Metropolitan's regional residential and commercial direct rebates to citizens within the Water Authority's service area, do not approve termination of the two regional commercial and residential conservation incentives agreements. Instead, direct staff to cease approving or providing funding for Water Authority's member agency administered conservation projects through the regional agreements.
b. Approve termination of the remaining three conservation and Local Resources Program funding agreements with San Diego County Water Authority pursuant to the rate structure integrity provisions of those agreements.

Fiscal Impact: Cost savings realized from terminated incentive payments would be factored into Metropolitan's rate projections and future budgets. Financial exposure to local resources and conservation program incentives would be diminished.

Business Analysis: Staff would continue to administer the existing regional commercial and residential conservation incentives agreements for residents within the Water Authority service area. Staff would also review potential reallocation of budgeted FY 2010/11 and FY 2011/12 conservation funds and other incentive-related administrative actions.

Option #4

a. Do not approve termination of existing conservation and Local Resources Program funding agreements with San Diego County Water Authority pursuant to the rate structure integrity provisions of those agreements; and
b. Direct the General Manager to proceed as appropriate with execution of pending incentive agreements with San Diego County Water Authority.

Fiscal Impact: None. Incentive payments factored into Metropolitan's rate projections and future budgets would remain unchanged.

Business Analysis: Staff would continue to administer existing agreements.

Staff Recommendation

Option #1

Marcia L. Scully
Interim General Counsel
6/2/2011
Date

Jeffrey Kightlinger
General Manager
6/2/2011
Date

Attachment 1 – Rate Structure Integrity Provisions adopted by Metropolitan on December 14, 2004

Attachment 2 – San Diego County Water Authority Incentive Agreements

Ref# l12612455

Rate Structure Integrity Provisions
adopted by Metropolitan's Board of Directors on December 14, 2004

1. **[Recipient]** and **[Member Agency** if different than **Recipient]** agree and understand that Metropolitan's rate structure as of January 1, 2004 ("Existing Rate Structure") provides the revenue necessary to support the development of new water supplies by local agencies through incentive payments in the Local Resources Program (LRP), Conservation Credits Program (CCP), and the Seawater Desalination Program (SDP). In particular, the Water Stewardship Rate is the component of Existing Rate Structure that provides revenue for the LRP, CCP and SDP. Further, **[Recipient]** and **[Member Agency]** acknowledge that Existing Rate Structure and all components within that rate structure were developed with extensive public input and member agency participation, and that the elements of Existing Rate Structure have been properly adopted in accordance with Metropolitan's rules and regulations.

2. (a) **[Recipient]** and **[Member Agency]** agree that Metropolitan's rates set under the Existing Rate Structure may be reset throughout the term of this Agreement to account for the cost of service, and that **[Recipient]** and **[Member Agency]** will address any and all future issues, concerns and disputes relating to Existing Rate Structure, through administrative opportunities available to them pursuant to Metropolitan's public board process. As such, **[Recipient]** and **[Member Agency]** agree if they file or participate in litigation or support legislation to challenge or modify Existing Rate Structure, including changes in overall rates and charges that are consistent with the current cost-of-service methodology, Metropolitan may initiate termination of this agreement consistent with Paragraph 4 below. Metropolitan agrees that any change in Existing Rate Structure, including changes in cost-of-service philosophy or methodology would be enacted only after collaboration and discussion with its member public agencies, and Metropolitan's public board review and approval process.
(b) Notwithstanding the foregoing, **[Recipient]** and **[Member Agency]** retain the right to file and/or participate in litigation and/or to support legislation without triggering the termination of this agreement if there are material changes to Existing Rate Structure or changes in cost-of-service methodology used to set rates by future Metropolitan board action. **[Recipient]** and **[Member Agency]** also retain the right to file and/or support litigation should Metropolitan, in setting rates under Existing Rate Structure, fail to comply with public notice, open meeting, or other legal requirements associated with the process of setting water rates and related taxes, fees, and charges. **[Recipient]** and **[Member Agency]** agree that they will not file or participate in litigation, nor will they support legislation affecting Metropolitan's rate structure after any such change in rate structure or violation of the law regarding rate setting processes until, and unless, they have exhausted all administrative opportunities available to them pursuant to Metropolitan's public board process.

3. **[Recipient]** and **[Member Agency]** agree that all users of the Metropolitan conveyance and distribution system should support the LRP, CCP, and SDP, that such projects provide benefits to Metropolitan and the users of the system by making existing distribution and conveyance capacity available for additional delivery, and that under Existing Rate Structure, the Water Stewardship Rate is an element of charges properly adopted by the Metropolitan Board and properly applied to water wheeled through the Metropolitan conveyance and distribution system.

4. Should **[Recipient]** or **[Member Agency]** file or support litigation, or sponsor or support legislation, that would challenge or be adverse to Existing Rate Structure, as described in Paragraph (a) of Section 2, Metropolitan's Chief Executive Officer may file a 90-day notice of intent to terminate this Agreement with Metropolitan's Executive Secretary, with copies to all members of Metropolitan's Board of Directors, and contemporaneously provide **[Recipient]** and **[Member Agency]** with a copy of the notice. Within 30 days of receipt of such notice, **[Recipient]** and **[Member Agency]** shall have the right to request, in writing, mediation of the dispute by a neutral third party with expertise in finance and rate setting. The mediator shall be selected by agreement of the parties, or failing agreement within 60 days of such request for mediation, a mediator shall be selected by the Metropolitan Board of Directors from a list of at least four candidates, one each from **[Recipient]** and **[Member Agency]**, and two of which will be supplied by Metropolitan's Chief Executive Officer. The cost of the mediation shall be borne equally by the parties. The request for mediation shall also serve to stay the 90-day notice of intent to terminate, but for no more than 90 days beyond the filing of the notice of request for mediation, unless otherwise agreed in writing by the parties. If mediation does not result in an agreement acceptable to each party to this Agreement within the time provided herein, the notice of intent to terminate shall be reinstated. The Metropolitan Board of Directors shall act to approve or disapprove termination of this Agreement, and all of Metropolitan's obligations hereunder shall terminate if approved, on or before the ninetieth day following filing of the notice to terminate or, if mediation has been requested as described above, the ninetieth day following the request for mediation (or other date agreed in writing by the parties.)

5. Metropolitan and **[Recipient]** and **[Member Agency]** agree that should litigation or legislation brought forth or sponsored by third parties result in changes to Existing Rate Structure, this Agreement will continue in effect unless mutually agreed in writing by the parties.

6. Should Metropolitan and its member agencies agree on an alternative rate and revenue structure that obviates the need for this section on Rate Structure Integrity, this section shall be amended or deleted to conform to such action.

7. Notwithstanding the foregoing, Metropolitan shall have no power or authority under this Section to terminate this Agreement, and Metropolitan's Chief Executive Officer shall not file a 90-day notice of intent to terminate this Agreement, if a **[Member Agency]** (but not the **[Recipient]**) files or participates in any litigation or supporting legislation to challenge or modify Existing Rate Structure, but the **[Recipient]** transmits a writing to Metropolitan's Chief Executive Officer within thirty (30) days of request therefore from Metropolitan, stating that **[Recipient]** has not participated directly or indirectly in the filing or prosecution of any litigation or the drafting or advocacy of any legislation to challenge or modify Existing Rate Structure, and indicates support for Existing Rate Structure.
Note: **[Recipient]** refers to project owner.

San Diego County Water Authority Incentive Agreements

Subject to termination:

Agreement	Target Yield	Max. Payable* ($1,000)	Funded (4-30-2011) ($1,000)	Balance ($1,000)
1. Enhanced Conservation Program – Landscape water conservation training	2,362 AF	$143	$124	$19
2. Enhanced Conservation Program – Conversion project to climate appropriate landscape	5,829 AF	$1,125	$535	$590
3. Regional Commercial Program – Commercial incentives	TBD	N/A	$6,500	N/A
4. Regional Residential Program – Residential incentives	TBD	N/A	$9,000	N/A
5. Local Resources Program – Water Recycling and Groundwater Recovery incentives (Ramona)	340 AFY	$1,280	$21	N/A

Subject to deferral:

6. Carlsbad Seawater Desalination Project	56,000 AFY	$350,000 (est.)	$0	N/A
7. Agricultural Conservation Program – Agricultural incentives	N/A	N/A	$0	N/A
8. Innovative Conservation Program – Flow control valve research project	N/A	$11	$0	N/A