

Public Notices



Outreach Overview

The Los Angeles Department of Water and Power (LADWP) conducted an extensive outreach campaign to encourage community involvement during the 2015 Urban Water Management Plan (UWMP) update process. The campaign included the release of five Informational Bulletins to inform and update the public on both the UWMP process and changes since the 2010 UWMP. Following the bulletin release, LADWP held four public meetings for the public to receive information and provide feedback on the UWMP, prior to draft 2015 UWMP release in February 2016. The outreach campaign concluded with two public hearings, which provided an opportunity for additional input and comments on the plan, before it was taken to the LADWP Board of Commissioners for adoption.

The date, time, location, and attendance of each meeting is detailed below:

Public Informational Meetings				
Dates		Time	Location	Attendees
Tuesday	1/19/16	9:00 AM	The California Endowment 1000 N Alameda St. Los Angeles, CA 90012	15
Thursday	1/21/16	6:00 PM	Council District 3 Office 19040 Vanowen St. Reseda CA 91135	14
Wednesday	1/27/16	6:00 PM	Felicia Mahood Multipurpose Center 11338 Santa Monica Blvd. Los Angeles CA 90025	8
Thursday	1/28/16	6:00 PM	LADWP Headquarters 111 N. Hope St. Los Angeles CA 90012	30
Public Hearing				
Thursday	3/3/16	6:00 PM	LADWP Headquarters 111 N. Hope St. Los Angeles CA 90012	6
Wednesday	3/9/16	6:00 PM	Sepulveda Garden Center 16633 Magnolia Blvd. Encino CA 91406	11

In response to presentation requests, LADWP attended two neighborhood council meetings to present information on the 2015 UWMP. The date, time, and location of each meeting is detailed below:

Presentation Requests					
Group	Dates		Time	Location	Attendees
Los Angeles Neighborhood Council Coalition	Saturday	2/6/16	10:00AM	West Los Angeles Civic Center 1645 Corinth Ave. Los Angeles, CA 90025	50
Central San Pedro Neighborhood Council	Tuesday	2/9/16	6:30PM	Port of Los Angeles High School 250 W. 5th Street San Pedro, CA 90731	100

60-Day Notification

Over 60-days prior to the March 2016 public hearings, the LADWP notified the County of Los Angeles, the City of Culver City, and the City of West Hollywood regarding the 2015 UWMP update. In the communication, LADWP outlined the date/time/location for the January public informational meetings, the draft 2015 UWMP release, and the March public hearings. A copy of each 60-day notice is included in the following pages.

Email Notification

Leading up to the public informational meetings in January, LADWP released Six Informational Bulletins to inform and update the public on both the UWMP process and changes since the 2010 UWMP. The Bulletins also served as an invitation for the public to attend the informational meetings in January 2016. The sixth Bulletin served to notify the public of the draft 2015 UWMP release and the two public hearings in March, 2016. The Bulletins were emailed to nearly 2,600 recipients and posted in the LADWP Newsroom webpage.

A listing of each informational bulletin is provided below:

Public Informational Bulletin Release	
Dates	
Friday	11/20/2015
Friday	12/11/2015
Wednesday	12/16/2015
Wednesday	1/6/2016
Thursday	1/14/2016
Friday	2/12/2016

A copy of each Informational Bulletin is included in the following pages.

Media Publications

In accordance with CWC Section 10642, LADWP published a notice to inform the public of the March 2016 Public Hearings. More information on the publications is listed below:

Media Outlet	Date
Los Angeles Daily News	2/17/2016
La Opinion (Spanish)	2/17/2016
Los Angeles Daily News	2/24/2016
La Opinion (Spanish)	2/24/2016

A copy of each public notice is included in the following pages.

Website Posting

The LADWP created a webpage at www.ladwp.com/uwmp to provide information on the UWMP Act and LA's UWMP development. The webpage included links to download the 2010 UWMP and the draft 2015 UWMP. Information to attend the public meetings was also available on the site. The latest version of the webpage is included in the following pages.

60-Day Notice

ERIC GARCETTI
Mayor

Commission
MEL LEVINE, *President*
WILLIAM W. FUNDERBURK JR., *Vice President*
JILL BANKS BARAD
MICHAEL F. FLEMING
CHRISTINA E. NOONAN
BARBARA E. MOSCHOS, *Secretary*

MARCIE L. EDWARDS
General Manager

December 21, 2015

Ms. Gail Farber, Director
Los Angeles County Department of Public Works
900 South Fremont Avenue
Alhambra, California 91803

Dear Ms. Farber:

Subject: City of Los Angeles 2015 Urban Water Management Plan (UWMP)

The Los Angeles Department of Water and Power (LADWP) is sending you this notice to inform you of 2015 UWMP updates that are being considered. The 2015 UWMP is currently in the draft development phase and will contain the City of Los Angeles' long-term strategy for managing water resources and ensuring water supply reliability through the year 2040.

As part of the California Water Code, Section 10621, agencies are required to notify cities and counties within their service area regarding UWMP updates. Notification must occur at least 60 days before a Public Hearing. LADWP will release a draft 2015 UWMP in February 2016 and host two Public Hearings in March 2016 to solicit comments. Your agency is invited to attend either hearing as scheduled below:

2015 UWMP Public Hearing		
Date	Time	Location
Thursday, March 3, 2016	6:00 p.m.– 8:00 p.m.	LADWP Headquarters 111 North Hope Street Los Angeles, CA 90012
Wednesday, March 9, 2016	6:00 p.m.– 8:00 p.m.	Sepulveda Garden Center 16633 Magnolia Boulevard Encino, CA 91406

Los Angeles Aqueduct Centennial Celebrating 100 Years of Water 1913-2013

111 N. Hope Street, Los Angeles, California 90012-2607 Mailing address: Box 51111, Los Angeles, CA 90051-5700
Telephone: (213) 367-4211 www.LADWP.com

Ms. Gail Farber
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December 21, 2015

In addition, LADWP will host four meetings in January 2016 to provide more information on the UWMP planning effort. Your agency is invited to attend any of the four meetings as scheduled below:

2015 Public Informational Meeting		
Date	Time	Location
Tuesday, January 19, 2016	9:00 a.m.–11:00 a.m.	The California Endowment 1000 North Alameda Street Los Angeles, CA 90012
Thursday, January 21, 2016	6:00 p.m.– 8:00 p.m.	Council District 3 Office 19040 Vanowen Street Reseda, CA 91135
Wednesday, January 27, 2016	6:00 p.m.– 8:00 p.m.	Felicia Manhood MPC 11338 Santa Monica Blvd. Los Angeles, CA 90025
Thursday, January 28, 2016	6:00 p.m.– 8:00 p.m.	LADWP Headquarters 111 North Hope Street Los Angeles, CA 90012

Comments received during the public informational meetings and hearings will be considered for the 2015 UWMP. Organizational structure of LADWP's 2015 UWMP will be similar to the 2010 UWMP and include discussion on water demand, conservation, various water supplies, water reliability, climate change, etc. For your reference, LADWP's 2010 UWMP is available on our Web site at <http://www.ladwp.com/uwmp>.

Ms. Gail Farber
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December 21, 2015

If you have any questions or comments, please contact Mr. Simon Hsu, Supervisor of Strategic Planning and Technical Analysis, at (213) 367-2970, or e-mail him at uwmp@ladwp.com

Sincerely,

A handwritten signature in blue ink, appearing to read "David R. Pettijohn", with a long horizontal flourish extending to the right.

David R. Pettijohn
Director of Water Resources

DK:yrq
c: Mr. Simon Hsu

ERIC GARCETTI
Mayor

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CHRISTINA E. NOONAN
BARBARA E. MOSCHOS, *Secretary*

MARCIE L. EDWARDS
General Manager

December 21, 2015

Mr. Oscar Delgado, Director
Department of Public Works
City of West Hollywood
8300 Santa Monica Boulevard
West Hollywood, California 90069

Dear Mr. Delgado:

Subject: City of Los Angeles 2015 Urban Water Management Plan (UWMP)

The Los Angeles Department of Water and Power (LADWP) is sending you this notice to inform you of 2015 UWMP updates that are being considered. The 2015 UWMP is currently in the draft development phase and will contain the City of Los Angeles' long-term strategy for managing water resources and ensuring water supply reliability through the year 2040.

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Sincerely,



David R. Pettijohn
Director of Water Resources

DK:yrq
c: Mr. Simon Hsu

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BARBARA E. MOSCHOS, *Secretary*

MARCIE L. EDWARDS
General Manager

December 21, 2015

Mr. Charles D. Herberston
Director of Public Works
City of Culver City
9770 Culver Boulevard, 2nd Floor
Culver City, California 90232

Dear Mr. Herbertson:

Subject: City of Los Angeles 2015 Urban Water Management Plan (UWMP)

The Los Angeles Department of Water and Power (LADWP) is sending you this notice to inform you of 2015 UWMP updates that are being considered. The 2015 UWMP is currently in the draft development phase and will contain the City of Los Angeles' long-term strategy for managing water resources and ensuring water supply reliability through the year 2040.

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If you have any questions or comments, please contact Mr. Simon Hsu, Supervisor of Strategic Planning and Technical Analysis, at (213) 367-2970, or e-mail him at uwmp@ladwp.com

Sincerely,



David R. Pettijohn
Director of Water Resources

DK:yrp
c: Mr. Simon Hsu

Public Informational Bulletins



Invitation to 2015 Urban Water Management Plan Informational Meetings

Good afternoon,

LADWP is in the process of preparing the 2015 Urban Water Management Plan (UWMP) for the City of Los Angeles (City). The UWMP will contain the City's long-term strategy for managing water resources and ensuring water supply reliability through the year 2040.

The UWMP not only provides the framework for future reliability, but meets State requirement of the City to submit a UWMP every five years in compliance with the California Urban Water Management Planning Act.

Key elements of the UWMP include:

- Existing and planned sources of water
- Water demand forecasting, and conservation efforts to reduce water demand
- Assessment of reliability and vulnerability of water supply
- Activities to develop alternative sources of water
- Water shortage contingency analysis

LA's 2015 UWMP

The 2015 UWMP will build upon the 2010 UWMP and will be consistent with the City's goals and policy objectives for a reliable water supply, such as the Mayor's Executive Directive No. 5 and the Sustainable City pLAN. Since the 2010 UWMP, water supplies that support Los Angeles continue to be under stress due to changing climate and drought. Consequently, the 2015 UWMP will include aggressive measures to increase water use efficiency, develop additional local supplies, increase supply diversity, and reduce dependence on purchased imported supplies. Specific initiatives in the UWMP are based on recommendations from the [Recycled Water Master Planning Documents](#), the Groundwater System Improvement Study, the [Stormwater Capture Master Plan](#), and the Conservation Potential Study. These planning efforts have included significant public outreach and public comment. Beyond the UWMP, LADWP is committed to ongoing public outreach that addresses emerging water resource challenges and future water supply reliability.

Tentative UWMP Timeline

- January 2016 Four public informational meetings (Date/Time/Location TBD)
- February 2016 Release of the Draft 2015 UWMP
- March 2016 Two Public Hearings
- May 2016 Expected adoption by the LADWP Board of Commissioners
- June 2016 Submittal to California Department of Water Resources

The public meetings in January are scheduled prior to the draft UWMP release date of February 2016 to provide opportunities for the public to receive information and provide feedback. Comments received during these meetings will be considered in the UWMP. After adoption by the Board of Commissioners, the final UWMP will be submitted to the California Department of Water Resources by July 1, 2016.

We hope you can join us in one of the four (4) January meetings. More details will be available in our next informational bulletin so please stay tuned!

To learn more about the Urban Water Management Plan, we invite you to visit our webpage at www.ladwp.com/uwmp or to send email inquiries to uwmp@ladwp.com.

Thank you!

2015 Urban Water Management Plan Team

Email Informational Bulletin

LA's 2015 Urban Water Management Plan

Planning for the City's Future Water Demand

LADWP is currently in the draft development phase for the 2015 Urban Water Management Plan (UMWP) for the City of Los Angeles (City). The UWMP will contain the City's long-term strategy for managing water resources and ensuring water-supply reliability through the year 2040. This process requires that the City forecast its future water demands over the next 25 years.

Changes in Water Resources and Conservation Goals

Since the 2010 UWMP was published, Los Angeles has experienced some of the driest years on record. In response to these historic dry conditions affecting the City's imported water supplies, Governor Brown and Mayor Garcetti enacted near-term conservation goals and initiated a long-term campaign to reduce the City's per capita water use, respectively. Specifically, the Mayor's Sustainability Office has prepared the Sustainable City Plan (pLAN), calling for a 20% reduction in water use by 2017 and 25% by 2035.

Water Demand Forecasting

Forecasting demand requires updated estimates of population, analysis of historical demand trends, and predicting future success in water use efficiency by all LADWP customers in meeting conservation goals. With respect to conservation, the goals established in the Sustainable City Plan provide the basis for analysis.

The City utilizes population growth and demographic projections from the most recent Regional Transportation Plan (RTP) developed by the Southern California Association of Governments (SCAG). The RTP is updated by SCAG every four years to forecast the movement of population and economic growth within Southern California.

The 2015 UWMP will forecast water demand by using the latest available data in the RTP, sound modeling principles, and the conservation goals established by the Sustainable City Plan. This demand forecast will be used to assess future reliability and refine the City's local supply development plans.

2015 UWMP Timeline

Join us for one or more of our upcoming public meetings covering the UWMP listed below.

January Information Meeting Schedule* ([Flyer](#))

Date	Time	Location
Jan 19	9 am -11 am	California Endowment, 1000 N. Alameda St., Los Angeles CA 90012
Jan 21	6 pm - 8 pm	CD3 Office, 19040 Vanowen St., Reseda CA 91335
Jan 27	6 pm - 8 pm	Felicia Mahood MPC, 11338 Santa Monica Blvd., Los Angeles CA 90025

Jan 28	6 pm – 8 pm	LADWP Headquarters, 111 N. Hope St., Los Angeles CA 90012
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Timeline Overview

Feb 2016	Release of the Draft 2015 UWMP
Mar 2016	Two Public Hearings
May 2016	Expected adoption by the LADWP Board of Commissioners
Jun 2016	Submittal to California Department of Water Resources

**The public meetings in January are scheduled prior to the draft UWMP release in February to provide opportunities for the public to receive information and provide feedback.*

Please stay tuned for additional informational bulletins. To learn more about the Urban Water Management Plan, visit www.ladwp.com/uwmp or email uwmp@ladwp.com.



LOS ANGELES DEPARTMENT OF WATER AND POWER

111 North Hope St., Room 1520, Los Angeles, CA. 90012-5701

Phone (213) 367-1361 - After Hours (213) 367-3227

www.ladwp.com



LA's 2015 Urban Water Management Plan

Diversify with More Reliable Local Water Supplies

LADWP's 2015 Urban Water Management Plan (UWMP) will contain the City's long-term water resources management strategy to ensure water reliability through the year 2040. The UWMP will examine existing and planned sources of water supply for the City of Los Angeles.

Existing Water Resources and Challenges

The City's current water supply sources include:

- Imported water from Owens Valley and Mono Lake Basin (Los Angeles Aqueduct)
- Imported water purchased from the Metropolitan Water District (MWD), coming from the California Aqueduct and the Colorado River Aqueduct
- Local water sources including groundwater, captured stormwater, recycled water, and conservation

Over the past several years, the City's imported water supplies have been impacted by legal issues, environmental demands for water, and a multi-year drought. In addition, contamination in the San Fernando Basin has limited our ability to fully utilize our local groundwater. Despite extensive conservation and water management efforts, these challenges have caused the City to become more reliant on MWD, reaching an all-time high of 75% of the total supply in 2013-2014.

The multi-year drought prompted several statewide and local initiatives including: a Statewide Drought Declaration, a Gubernatorial Executive Order, and a Mayoral Executive Directive. The City has captured its water-supply goals in the [Sustainable City Plan \(pLAn\)](#), issued in April 2015. The pLAn outlines a multi-faceted approach to reducing water use and developing local and more sustainable water supplies.

Future Water Supply Goals and Development

As outlined in the pLAn, the City has adopted the following supply goals. These goals will be the basis for the 2015 Urban Water Management Plan's conservation and local supply development initiatives.

- Reduce per capita water use 20% by 2017, 22.5% by 2025, and 25% by 2035 (from 2014 levels)
- Reduce imported water purchases 50% by 2025 (from 2014 levels)

- Obtain 50% of LA's water supply locally, including 150,000 AFY of stormwater capture by 2035
- Clean-up San the Fernando Groundwater Basin

2015 UWMP Timeline

Join us for one or more of our upcoming UWMP public meetings. For more details on these meetings, a flyer in both English and Spanish outlining the public meetings can be viewed online by clicking [here](#).

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**The public meetings in January are scheduled prior to the UWMP release date (February 2016) to provide opportunities for the public to receive information and provide feedback.*

To learn more about the Urban Water Management Plan, visit www.ladwp.com/uwmp or email uwmp@ladwp.com.



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LA's 2015 Urban Water Management Plan

The Importance of Integrated Resources Planning

LADWP's 2015 Urban Water Management Plan (UWMP) will include the City's long-term water resources management strategy to ensure water reliability through the year 2040. These strategic goals are drawn extensively from the Integrated Resources Planning (IRP) process, which is used by many water utilities to plan for long term water reliability. Below is a description of IRP processes that inform the update of the 2015 UWMP, as well as a brief overview of the City of LA's history of participation in regional IRP processes.

Regional Planning Efforts

LADWP has been involved in integrated resources planning (IRP) since its first UWMP in 1985 which incorporated conservation, recycled water, stormwater capture, and supplies from the Metropolitan Water District of Southern California (MWD).

In 1993, LADWP built upon its IRP efforts by participating in the Southern California region's first Integrated Resources Plan initiated by MWD.

In 1999, the City initiated its first IRP, which was adopted by the City Council in 2006. LADWP also participates in the development of the Greater Los Angeles County Integrated Regional Water Management (IRWM) Plan, which was last updated in 2014. The IRWM process is led by the Los Angeles County Department of Public Works.

An Integrated Approach Yields Multiple Benefits

The benefits of an integrated watershed approach incorporates extensive public engagement and dialogue, as well as identification of opportunities that might otherwise be missed if public agencies tasked with water, wastewater and stormwater issues did not share information or coordinate efforts. For example, a flood control project can be designed to provide multiple benefits beyond ensuring public safety, such as protecting private and commercial property and creating water-supply benefits.

A specific example of a benefit achieved through IRP is local production of recycled water, achieved through collaborative efforts of LADWP and the LA Bureau of Sanitation. To build on the success of the IRP, the City is taking integration a step further by launching the One Water LA 2040 Plan. This plan continues the focus on multi-jurisdictional and multi-benefit projects with the goal of making the City more sustainable. Similar to the City's initial

IRP, the One Water LA 2040 Plan is a stakeholder driven process.

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LA's 2015 Urban Water Management Plan

Water Supply Reliability Assessment

LADWP's 2015 Urban Water Management Plan (UWMP) will contain the City's long-term water resources management strategy to ensure water reliability through the year 2040. This 5th and final bulletin provides information on LADWP's Water Supply Reliability Assessment.

Climate Variability Affects Imported Supplies

LADWP analyzes historical hydrologic records to forecast available water supplies in average, single-dry, and multiple-dry years. In recent years, the City's imported water supplies have been stressed due to multi-year droughts and other extreme weather events. These conditions threaten the reliability of the City's imported water supplies, including water purchased from the Metropolitan Water District (MWD).

Currently, the City receives well over half its water from (MWD). Although a reliable supplemental supply from MWD remains essential to water reliability, the Sustainable City pLAN calls for the City to be no more than 50% dependent on MWD by the year 2025.

Developing Local Supplies Enhances Reliability

LADWP is accelerating the development of more sustainable water supplies through the development of additional water conservation, water recycling, and stormwater capture. Central to this effort is the restoration of the San Fernando groundwater basin. This basin is a tremendous asset, capable of storing large amounts of water that can be used in dry years. These efforts will reduce the City's dependence on imported water and enhance reliability.

Planning for Catastrophic Supply Interruptions

LADWP also has contingency plans in place to respond to extreme drought and other potential catastrophic events. For example, an earthquake could interrupt the delivery of imported water, in which case both MWD and LADWP can provide up to 6 months of water from reservoirs located south of the San Andreas Fault. These contingencies and the City's Emergency Water Conservation Plan will address up to 50% shortage of water supply.

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2015 UWMP Info Meetings in West LA and Downtown LA

Live Webcast of Downtown LA Meeting

LADWP will host two informational meetings on the 2015 Urban Water Management Plan (UWMP), which contains the City's long-term water resources management strategy to ensure water reliability through the year 2040.

The next meeting will be held on Wed., Jan. 27 from 6 p.m. to 8 p.m. at the Felicia Mahood Multipurpose Center, 11338 Santa Monica Boulevard, Los Angeles 90025.

The final informational meeting, which can be attended in person or online via a live webcast, will be held on Thu., Jan. 28 from 6 p.m. to 8 p.m. at LADWP's headquarters, the John Ferraro Building, 111 N. Hope Street, Los Angeles 90012. **To attend in person or via the web, email your RSVP to uwmp@ladwp.com. Instructions for webcast logon will be provided by email in advance of the meeting.**

The two meetings are the last in a series of four informational meetings being held in January for the public to receive information and provide feedback on the 2015 UWMP prior to the release of the draft plan in February. Two public hearings are also scheduled in March as detailed in the timeline below.

2015 UWMP Timeline

Join us for one or more of our upcoming UWMP public meetings. For more details on these meetings, a flyer in both English and Spanish outlining the public meetings can be viewed online by clicking [here](#).

- January 2016 Public Informational Meetings

Jan 27	6 pm - 8 pm	Felicia Mahood MPC, 11338 Santa Monica Blvd., Los Angeles CA 90025
Jan 28	6 pm – 8 pm	LADWP Headquarters, 111 N. Hope St., Los Angeles CA 90012

- February 2016 Release of the Draft 2015 UWMP
- March 2016 Two Public Hearings
- May 2016 Expected adoption by the LADWP Board of Commissioners
- June 2016 Submittal to California Department of Water Resources

To learn more about the Urban Water Management Plan, visit www.ladwp.com/uwmp or email uwmp@ladwp.com.

###



LOS ANGELES DEPARTMENT OF WATER AND POWER
111 North Hope St., Room 1520, Los Angeles, CA. 90012-5701
Phone (213) 367-1361 - After Hours (213) 367-3227
www.ladwp.com



Draft 2015 Urban Water Management Plan Released

LADWP Accepting Public Input on Proposed 2015 UWMP

To provide stakeholders with an opportunity to review or provide input for the proposed 2015 Urban Water Management plan (UWMP), LADWP has released the draft 2015 UWMP online at www.ladwp.com/uwmp.

The updates to the 2015 UWMP will be consistent with the City’s goals and policy objectives for a reliable water supply, such as the Mayor’s Executive Directive No. 5 and the Sustainable City pLAn.

The adoption of an UWMP is required every five years to comply with the California’s Urban Water Management Planning Act (Act) codified in Sections 10610 through 10656 of the California Water Code.

On a local level, the UWMP serves as the City’s long term water resources management strategy for the next 25 years through 2040. The proposed 2015 UWMP is designed to build upon the goals and progress achieved from the 2010 UWMP.

Draft Review and Comment Period

Public comments on the draft 2015 UWMP can be emailed to UWMP@ladwp.com, expressed in the two upcoming public hearings, or mailed to LADWP JFB, 111 N. Hope Street-Room 1460, Los Angeles CA 90012, Attn: Simon Hsu. All comments must be received by March 16, 2016. The draft 2015 UWMP and appendices can be downloaded at www.ladwp.com/uwmp.

Public Hearing Dates

Mar 3*	6 pm – 8 pm	LADWP Headquarters, 111 N. Hope St., Los Angeles CA 90012
Mar 9	6 pm - 8 pm	Sepulveda Garden Center, 16633 Magnolia Blvd., Encino CA 91436

Input received from these public hearings will be considered in the preparation of the UWMP updates. The final 2015 UWMP is anticipated to be presented to the LADWP Board of Commissioners for adoption in early May 2016. LADWP plans to submit the 2015 UWMP to the California Department of Water Resources by July 1, 2016.

*The Public Hearing being held on March 3 can be viewed via a live webcast. A link will be available on the 2015 UWMP dedicated web page at www.ladwp.com/uwmp.

Contact Information

If you have any questions or concerns, please contact us by email at UWMP@ladwp.com

###

LADWP Reliability Assessment Submittal to MWD

Dugan, Peter

From: Dugan, Peter
Sent: Friday, February 12, 2016 10:06 AM
To: 'Fandialan, Edgar P'; Mike Ti (mike_ti@mwdh2o.com)
Cc: Kwan, Delon; Hsu, Chiun-Gwo (Simon); Almaraz, Jaime; Viramontes, Rafael
Subject: LA's 2015 UWMP Reliability Assessment

Edgar,

As part of LADWP's 2015 UWMP update process I am sending you a draft copy of our supply and demand assessment through FYE 2040, under single-dry, multi-dry, and average weather conditions. Please, forward this to any persons within MWD that you think should have a copy. If you have any questions feel free to contact Simon Hsu (simon.hsu@ladwp.com) or myself.

Thanks,

Peter Dugan
Water Resources
Los Angeles Department of Water & Power
Office: (213) 367-1192
peter.dugan@ladwp.com

Exhibit 11F
Service Area Reliability Assessment for Single Dry Year

Demand and Supply Projections (in acre-feet)	Single Dry Year (FY2014-15) Fiscal Year Ending on June 30				
	2020	2025	2030	2035	2040
Total Water Demand¹	642,400	676,900	685,500	694,900	709,500
pLAn Water Demand Target	485,600	533,000	540,100	551,100	565,600
Existing / Planned Supplies					
Conservation (Additional Active ² and Passive ³ after FY14/15)	156,700	143,700	145,100	143,500	143,500
Los Angeles Aqueduct ⁴	32,200	51,900	51,400	51,000	50,600
Groundwater ⁵ (Net)	112,670	110,670	106,670	114,670	114,070
Recycled Water					
- Irrigation and Industrial Use	19,800	29,000	39,000	42,200	45,400
- Groundwater Replenishment	0	30,000	30,000	30,000	30,000
Stormwater Capture					
- Stormwater Reuse (Harvesting)	100	200	300	300	400
- Stormwater Recharge (Increased Pumping)	<u>2,000</u>	<u>4,000</u>	<u>8,000</u>	<u>15,000</u>	<u>15,000</u>
Subtotal	323,470	369,470	380,470	396,670	398,970
MWD Water Purchases					
With Existing/Planned Supplies	318,930	307,430	305,030	298,230	310,530
Total Supplies	642,400	676,900	685,500	694,900	709,500
Potential Supplies					
Water Transfers ⁶	<u>40,000</u>	<u>40,000</u>	<u>40,000</u>	<u>40,000</u>	<u>40,000</u>
Subtotal	40,000	40,000	40,000	40,000	40,000
MWD Water Purchases					
With Existing/Planned/Potential Supplies	278,930	267,430	265,030	258,230	270,530
Total Supplies	642,400	676,900	685,500	694,900	709,500

¹ Total Demand with existing passive conservation

² Cumulative hardware savings since late 1980s reached 118,034 AFY by 2014-15.

³ Additional non-hardware conservation required to meet water use reduction goals set in the Sustainable City pLAn.

⁴ LADWP anticipates conserving 20,000 AFY of water usage for dust mitigation on Owens Lake after the Master Project is implemented in FY 2023-24. Los Angeles Aqueduct supply is estimated to decrease 0.1652% per year due to climate change impact.

⁵ Net GW excludes Stormwater Recharge and Groundwater Replenishment supplies that contribute to increased pumping. The LADWP Groundwater Remediation project in the San Fernando Basin is expected in operation in 2021-22. Storage credit of 5,000 AFY will be used to maximize pumping in 2019-20 and thereafter. Sylmar Basin production will increase to 4,170 AFY from 2015-16 to 2038-39 to avoid the expiration of stored water credits, then go back to its entitlement of 3,570 AFY in 2039-40.

⁶ Potential water transfer occurs in dry years with stored water acquired in average and wet years.

Exhibit 11G
Service Area Reliability Assessment for Multi-Dry Years (2011-2015)

Demand and Supply Projections (in acre-feet)	Multiple Dry Years (FY2012-13 to FY2014-15) Fiscal Year Ending on June 30				
	2020	2025	2030	2035	2040
Total Water Demand¹	642,400	676,900	685,500	694,900	709,500
pLAn Water Demand Target	485,600	533,000	540,100	551,100	565,600
Existing / Planned Supplies					
Conservation (Additional Active ² and Passive ³ after FY14/15)	156,700	143,700	145,100	143,500	143,500
Los Angeles Aqueduct ⁴	33,500	53,200	52,800	52,400	51,900
Groundwater ⁵ (Net)	112,670	110,670	106,670	114,670	114,070
Recycled Water					
- Irrigation and Industrial Use	19,800	29,000	39,000	42,200	45,400
- Groundwater Replenishment	0	30,000	30,000	30,000	30,000
Stormwater Capture					
- Stormwater Reuse (Harvesting)	100	200	300	300	400
- Stormwater Recharge (Increased Pumping)	<u>2,000</u>	<u>4,000</u>	<u>8,000</u>	<u>15,000</u>	<u>15,000</u>
Subtotal	324,770	370,770	381,870	398,070	400,270
MWD Water Purchases					
With Existing/Planned Supplies	317,630	306,130	303,630	296,830	309,230
Total Supplies	642,400	676,900	685,500	694,900	709,500
Potential Supplies					
Water Transfers ⁶	<u>40,000</u>	<u>40,000</u>	<u>40,000</u>	<u>40,000</u>	<u>40,000</u>
Subtotal	40,000	40,000	40,000	40,000	40,000
MWD Water Purchases					
With Existing/Planned/Potential Supplies	277,630	266,130	263,630	256,830	269,230
Total Supplies	642,400	676,900	685,500	694,900	709,500

¹ Total Demand with existing passive conservation

² Cumulative hardware savings since late 1980s reached 118, 034 AFY by 2014-15.

³ Additional non-hardware conservation required to meet water use reduction goals set in the Sustainable City pLAn.

⁴ LADWP anticipates conserving 20,000 AFY of water usage for dust mitigation on Owens Lake after the Master Project is implemented in FY 2023-24. Los Angeles Aqueduct supply is estimated to decrease 0.1652% per year due to climate change impact.

⁵ Net GW excludes Stormwater Recharge and Groundwater Replenishment supplies that contribute to increased pumping. The LADWP Groundwater Remediation project in the San Fernando Basin is expected in operation in 2021-22. Storage credit of 5,000 AFY will be used to maximize pumping in 2019-20 and thereafter. Sylmar Basin production will increase to 4,170 AFY from 2015-16 to 2038-39 to avoid the expiration of stored water credits, then go back to its entitlement of 3,570 AFY in 2039-40.

⁶ Potential water transfer occurs in dry years with stored water acquired in average and wet years.

Exhibit 11H
Service Area Reliability Assessment for Average Weather Year

Demand and Supply Projections (in acre-feet)	Average Weather Conditions (FY 1961/62 to 2010/11) Fiscal Year Ending on June 30				
	2020	2025	2030	2035	2040
Total Water Demand¹	611,800	644,700	652,900	661,800	675,700
pLAn Water Demand Target	485,600	533,000	540,100	551,100	565,600
Existing / Planned Supplies					
Conservation (Additional Active ² and Passive ³ after FY14/15)	125,800	110,900	111,600	109,100	108,100
Los Angeles Aqueduct ⁴	275,700	293,400	291,000	288,600	286,200
Groundwater ⁵ (Net)	112,670	110,670	106,670	114,670	114,070
Recycled Water					
- Irrigation and Industrial Use	19,800	29,000	39,000	42,200	45,400
- Groundwater Replenishment	0	30,000	30,000	30,000	30,000
Stormwater Capture					
- Stormwater Reuse (Harvesting)	400	800	1,200	1,600	2,000
- Stormwater Recharge (Increased Pumping)	<u>2,000</u>	<u>4,000</u>	<u>8,000</u>	<u>15,000</u>	<u>15,000</u>
Subtotal	536,370	578,770	587,470	601,170	600,770
MWD Water Purchases					
With Existing/Planned Supplies	75,430	65,930	65,430	60,630	74,930
Total Supplies	611,800	644,700	652,900	661,800	675,700
Potential Supplies					
Water Transfers ⁶	<u>40,000</u>	<u>40,000</u>	<u>40,000</u>	<u>40,000</u>	<u>40,000</u>
Subtotal	40,000	40,000	40,000	40,000	40,000
MWD Water Purchases					
With Existing/Planned/Potential Supplies	35,430	25,930	25,430	20,630	34,930
Total Supplies	611,800	644,700	652,900	661,800	675,700

¹ Total Demand with existing passive conservation

² Cumulative hardware savings since late 1980s reached 118,034 AFY by 2014-15.

³ Additional non-hardware conservation required to meet water use reduction goals set in the Sustainable City pLAn.

⁴ LADWP anticipates conserving 20,000 AFY of water usage for dust mitigation on Owens Lake after the Master Project is implemented in FY 2023-24. Los Angeles Aqueduct supply is estimated to decrease 0.1652% per year due to climate change impact.

⁵ Net GW excludes Stormwater Recharge and Groundwater Replenishment supplies that contribute to increased pumping. The LADWP Groundwater Remediation project in the San Fernando Basin is expected in operation in 2021-22. Storage credit of 5,000 AFY will be used to maximize pumping in 2019-20 and thereafter. Sylmar Basin production will increase to 4,170 AFY from 2015-16 to 2038-39 to avoid the expiration of stored water credits, then go back to its entitlement of 3,570 AFY in 2039-40.

⁶ Potential water transfer occurs in dry years with stored water acquired in average and wet years.

Public Informational Meeting Flyer

2015 URBAN WATER MANAGEMENT PLAN PUBLIC INFORMATIONAL MEETINGS

You are invited to attend one of four public meetings to learn about and provide feedback on the City's Urban Water Management Plan (UWMP).



TUESDAY, JANUARY 19, 2016

Metro Area
The California Endowment
9:00 a.m. - 11:00 a.m.
1000 N. Alameda Street
Los Angeles, CA 90012

THURSDAY, JANUARY 21, 2016

Valley Area
Council District 3 Office
6:00 p.m. - 8:00 p.m.
19040 Vanowen Street
Reseda, CA 91135

WEDNESDAY, JANUARY 27, 2016

West Los Angeles
Felicia Mahood Multipurpose Center
6:00 p.m. - 8:00 p.m.
11338 Santa Monica Boulevard
Los Angeles, CA 90025

THURSDAY, JANUARY 28, 2016

Metro Area
LADWP Headquarters
6:00 p.m. - 8:00 p.m.
111 N. Hope Street
Los Angeles, CA 90012

About the 2015 UWMP process:

The organizational structure of the 2015 UWMP will be similar to the 2010 UWMP. You may review the 2010 UWMP at www.ladwp.com/2010uwmp. The draft 2015 UWMP will be available for public comment in February 2016, prior to two public hearings being held in March 2016. The final 2015 UWMP will be presented for adoption by the LADWP Board of Commissioners in May 2016. The final UWMP will be submitted to the California Department of Water Resources in June 2016.


About the UWMP:

LADWP is in the process of preparing the 2015 UWMP for the City of Los Angeles. The 2015 UWMP will contain the City's long-term strategy for managing water resources and ensuring water supply reliability through the year 2040. The UWMP provides the framework for future reliability and also meets the State requirement for the City to submit a UWMP every five years in compliance with the California Urban Water Management Planning Act.

To RSVP for any of the above meetings, please email your name and selected meeting to uwmp@ladwp.com

As a covered entity under Title II of the Americans with Disabilities Act, the City of Los Angeles does not discriminate on the basis of disability and upon request, will provide reasonable accommodation to ensure equal access to its programs, services and activities. To ensure availability, such requests should be made at least 72 hours in advance by calling (213) 367-3803, TDD: 1 (800) 432-7397.

Print Ads

Los Angeles  Department of Water & Power

2015 Urban Water Management Plan Notice of Public Hearing

The Los Angeles Department of Water and Power (LADWP) will hold two public hearings on the Draft 2015 Urban Water Management Plan (UWMP). Public comments received at these meetings will be taken into consideration in the preparation of the final 2015 UWMP.

March 3, 2016

6:00 p.m.

LADWP Headquarters

111 N. Hope Street, Los Angeles, CA 90012

Webcast also available. RSVP to uwmp@ladwp.com.

March 9, 2016

6:00 p.m.

Sepulveda Garden Center


16633 Magnolia Blvd., Encino, CA 91406

Please visit www.ladwp.com/UWMP to review the 2015 Draft Urban Water Management Plan.



As a covered entity under Title II of the Americans with Disabilities Act, the City of Los Angeles does not discriminate on the basis of disability and upon request, will provide reasonable accommodation to ensure equal access to its programs, services and activities. To ensure availability, such requests should be made at least 72 hours in advance by calling (213) 367-3803, TDD: 1 (800) 432-7397.



Los Angeles  Department of Water & Power

2015 Urban Water Management Plan Notice of Public Hearing

The Los Angeles Department of Water and Power (LADWP) will hold two public hearings on the Draft 2015 Urban Water Management Plan (UWMP). Public comments received at these meetings will be taken into consideration in the preparation of the final 2015 UWMP.

March 3, 2016

6:00 p.m.

LADWP Headquarters

111 N. Hope Street, Los Angeles, CA 90012

Webcast also available. RSVP to uwmp@ladwp.com.

March 9, 2016

6:00 p.m.

Sepulveda Garden Center

16633 Magnolia Blvd., Encino, CA 91406

Please visit www.ladwp.com/UWMP to review the 2015 Draft Urban Water Management Plan.




As a covered entity under Title II of the Americans with Disabilities Act, the City of Los Angeles does not discriminate on the basis of disability and upon request, will provide reasonable accommodation to ensure equal access to its programs, services and activities. To ensure availability, such requests should be made at least 72 hours in advance by calling (213) 367-3803, TDD: 1 (800) 432-7397.



#LosÁngeles
#WestCovina



Encuentran tres mujeres sin vida en Hawaiian Gardens
Tres mujeres de origen asiático y con edades de entre 60 y 70 años fueron encontradas en una casa sobre la calle 223. Las autoridades encontraron un auto encendido y un fuerte olor a químicos.

Los Angeles  Department of Water & Power

Plan de Administración de Aguas Urbanas (UWMP) 2015 Aviso de Audiencia Pública

El Departamento de Agua y Energía de la Ciudad de Los Ángeles (LADWP) le invita a dos audiencias públicas sobre el Plan Borrador de Administración de Aguas Urbanas 2015 (UWMP, por sus siglas en inglés). Comentarios del público recibidos durante estas reuniones serán consideradas en la preparación del UWMP 2015 Final.

3 de marzo de 2016
6:00 p.m.

Oficinas de LADWP
111 N. Hope Street
Los Angeles, CA 90012

*Retransmisión por internet disponible.
Regístrese por correo electrónico a
uwmp@ladwp.com*

9 de marzo de 2016
6:00 p.m.

**Centro de Jardinería Sepúlveda
(Sepulveda Garden Center)**
16633 Magnolia Blvd.
Encino, CA 91406


Favor de visitar www.ladwp.com/uwmp para ver el UWMP 2015 Borrador.

Como entidad cubierta bajo el Título II de la Ley de Estadounidenses con Discapacidades, la Ciudad de Los Angeles no discrimina por motivos de discapacidad y bajo previa solicitud, proporcionará ajustes razonables para asegurar la igualdad en el acceso a sus programas, servicios y actividades. Para asegurar la disponibilidad, estas solicitudes deben hacerse, por lo menos, con 72 horas de anticipación llamando al (213) 367-3803, TDD: 1 (800) 432-7397.

010-10110189



Discriminación con la minoría
Pese a los avances de algunos países, menciona la ONG, la discriminación y la violencia contra la comunidad LGBT sigue en pie.

Los Angeles  Department of Water & Power

Plan de Administración de Aguas Urbanas (UWMP) 2015 Aviso de Audiencia Pública

El Departamento de Agua y Energía de la Ciudad de Los Ángeles (LADWP) le invita a dos audiencias públicas sobre el Plan Borrador de Administración de Aguas Urbanas 2015 (UWMP, por sus siglas en inglés). Comentarios del público recibidos durante estas reuniones serán consideradas en la preparación del UWMP 2015 Final.

3 de marzo de 2016

6:00 p.m.

Oficinas de LADWP

111 N. Hope Street
Los Angeles, CA 90012

Retransmisión por internet disponible.
Regístrese por correo electrónico a
uwmp@ladwp.com

Favor de visitar www.ladwp.com/uwmp para ver el UWMP 2015 Borrador.

9 de marzo de 2016

6:00 p.m.

**Centro de Jardinería Sepúlveda
(Sepulveda Garden Center)**

16633 Magnolia Blvd.
Encino, CA 91406

Como entidad cubierta bajo el Título II de la Ley de Estadounidenses con Discapacidades, la Ciudad de Los Angeles no discrimina por motivos de discapacidad y bajo previa solicitud, proporcionará ajustes razonables para asegurar la igualdad en el acceso a sus programas, servicios y actividades. Para asegurar la disponibilidad, estas solicitudes deben hacerse, por lo menos, con 72 horas de anticipación llamando al (213) 367-3803, TDD: 1 (800) 432-7397.

010-10110190

LADWP UWMP Webpage



Water

Past & Present

Facts & Figures

Sources of Supply

- Local Water Supplies
- Water Conservation
- Recycled Water
- Stormwater Capture
- Groundwater
- Los Angeles Aqueduct
- Metropolitan Water District of Southern California
- Water Resource Planning
- 2015 Urban Water Management Plan**
- Los Angeles Aqueduct

Water Quality

L.A.'s Drinking Water Quality Report

Projects

Groundwater Remediation

Recycled Water

Water Conservation

Rates

2015 Urban Water Management Plan

The Urban Water Management Planning Act

LADWP is in the process of preparing the 2015 Urban Water Management Plan (UMWP) for the City of Los Angeles. The UMWP will contain the City's long-term water resources management strategy for the next 25 years through 2040. The City is required to adopt an UWMP every five years to comply with the California's Urban Water Management Planning Act (Act) codified in Sections 10610 through 10656 of the California Water Code.

The Act became effective on January 1, 1984 and requires that every urban water supplier that provides municipal and industrial water to more than 3,000 customers (or supplies more than 3,000 acre-feet per year) prepare and adopt a UWMP every five years in accordance with prescribed requirements in order to be eligible for state grant funding and/or financial assistance. The key reporting requirements in the UWMP include:

- Existing and planned sources of water
- Water demand forecasting
- Conservation efforts to reduce water demand
- Activities to develop alternative sources of water
- Assessment of reliability and vulnerability of water supply
- Water shortage contingency analysis
- Voluntary reporting on climate change impacts and energy intensity

L.A.'s 2015 UWMP

The 2015 UWMP will build upon the goals and progress achieved from the 2010 UWMP and will continue to serve as the City's master plan for reliable water supply and resources management. Updates to the UWMP will be consistent with the City's goals and policy objectives for reliable water supply, such as the Mayor's Executive Directive No. 5 and the Sustainable City pLAn. The development of additional local supplies to reduce the City's future dependence on purchased imported supplies will be based on recommendations from prior program level planning initiatives. These include the Recycled Water Master Documents, Groundwater System Improvement Study, Stormwater Capture Master Plan, and Conservation Potential Study (on-going). These documents will be used to develop an integrated water resources management plan. The 2010 UWMP can be downloaded by clicking the link below.

[2010 Urban Water Management Plan](#)

Draft Review Period and Timeline

Five email informational bulletins were distributed from November 2015 to January 2016 in conjunction with four publicized outreach meetings held in January.

The draft 2015 UWMP was completed and posted for public comment on February 12. Comments can be emailed to uwmp@ladwp.com, expressed in the two upcoming public hearings, or mailed to Room 1460 LADWP JFB, 111 N. Hope Street, Los Angeles 90012, Attn: Simon Hsu. The deadline to provide comments is March 16, 2016. The draft can be downloaded by clicking on the links below.

[Draft 2015 UWMP](#)

[Draft 2015 UWMP Appendices](#)

Public Hearings:

- Thursday, March 3 from 6:00 p.m. to 8:00 p.m. at LADWP Headquarters John Ferraro Building, 111 N. Hope Street, Los Angeles 90012.
- Wednesday, March 9 from 6:00 p.m. to 8:00 p.m. at Sepulveda Garden Center, 16633 Magnolia Blvd., Encino CA 91406.

Input received from these public hearings will be considered in the preparation of the UWMP. The final 2015 UWMP is anticipated to be presented to the LADWP Board of Commissioners for adoption in May 2016. The final submittal deadline of the UWMP to the California Department of Water Resources is July 1, 2016.

Contact Information

If you have any questions or concerns, please contact us by email at UWMP@ladwp.com.



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2015 URBAN WATER MANAGEMENT PLAN PUBLIC INFORMATIONAL MEETINGS

You are invited to attend one of four public meetings to learn about and provide feedback on the City's Urban Water Management Plan (UWMP).



Upcoming LADWP Public Meeting - UWMP

There will be four informational meetings LADWP will be hosting this month, along with two public hearings in March for the 2015 Urban Water Management Plan (UWMP).

The UWMP details the City of LA's long term strategy for managing water resources and ensuring water supply reliability through the year 2040 per the mandate of the State of California Urban Water Management Planning Act.

For stakeholders in areas where we are not holding meetings, the meeting of Jan. 28 at LADWP Headquarters will be webcast so constituents can view the presentation and provide feedback.

Please see the [attached PDF](#) (available in English and Spanish) for more details.

By [Jasmine Elbarbary](#) | January 14th, 2016 | [Blog, City Departments](#) | Comments Off on Upcoming LADWP Public Meeting-UWMP

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DEPARTMENT OF NEIGHBORHOOD EMPOWERMENT

200 North Spring Street, Suite 2005
Los Angeles, California 90012
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E-mail Stephen.Box@lacity.org

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Representing the communities of Westchester, Playa del Rey and Playa Vista

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MEETINGS

NCWP Meetings

Budget and Finance Committee Meeting

03/1/2016, 5:30 pm

NCWP Meeting

03/1/2016, 6:30 pm

NCWP Meeting

04/5/2016, 6:30 pm



Username

LOGIN

LADWP Urban Water Management Plan

LADWP's 2015 Urban Water Management Plan (UWMP) will include the City's long-term water resources management strategy to ensure water reliability through the year 2040. These strategic goals are drawn extensively from the Integrated Resources Planning (IRP) process, which is used by many water utilities to plan for long term water reliability. Below is a description of IRP processes that inform the update of the 2015 UWMP, as well as a brief overview of the City of LA's history of participation in regional IRP processes.



Regional Planning Efforts

LADWP has been involved in integrated resources planning (IRP) since its first UWMP in 1985 which incorporated conservation, recycled water, stormwater capture, and supplies from the Metropolitan Water District of Southern California (MWD).

In 1993, LADWP built upon its IRP efforts by participating in the Southern California region's first Integrated Resources Plan initiated by MWD.

In 1999, the City initiated its first IRP, which was adopted by the City Council in 2006. LADWP also participates in the development of the Greater Los Angeles County Integrated Regional Water Management (IRWM) Plan, which was last updated in 2014. The IRWM process is led by the Los Angeles County Department of Public Works.

An Integrated Approach Yields Multiple Benefits

The benefits of an integrated watershed approach incorporates extensive public engagement and dialogue, as well as identification of opportunities that might otherwise be missed if public agencies tasked with water, wastewater and stormwater issues did not share information or coordinate efforts. For example, a flood control project can be designed to provide multiple benefits beyond ensuring public safety, such as protecting private and commercial property and creating water-supply benefits.

A specific example of a benefit achieved through IRP is local production of recycled water, achieved through collaborative efforts of LADWP and the LA Bureau of Sanitation. To build on the success of the IRP, the City is taking integration a step further by launching the One Water LA 2040 Plan. This plan continues the focus on multi-jurisdictional and multi-benefit projects with the goal of making the City more sustainable. Similar to the City's initial IRP, the One Water LA 2040 Plan is a stakeholder driven process.

2015 UWMP Timeline

Join us for one or more of our upcoming UWMP public meetings. For more details on these meetings, a flyer in both English and Spanish outlining the public meetings can be viewed online by clicking [here](#).

- January 2016 Public Informational Meetings*

Jan 19	9 am -11 am	California Endowment, 1000 N. Alameda St., Los Angeles CA 90012
Jan 21	6 pm - 8 pm	CD3 Office, 19040 Vanowen St., Reseda CA 91335
Jan 27	6 pm - 8 pm	Felicia Mahood MPC, 11338 Santa Monica Blvd., Los Angeles CA 90025
Jan 28	6 pm – 8 pm	LADWP Headquarters, 111 N. Hope St., Los Angeles CA 90012
- February 2016 Release of the Draft 2015 UWMP
- March 2016 Two Public Hearings
- May 2016 Expected adoption by the LADWP Board of Commissioners
- June 2016 Submittal to California Department of Water Resources

*The public meetings in January are scheduled prior to the UWMP release date (February 2016) to provide opportunities for the public to

receive information and provide feedback.

To learn more about the Urban Water Management Plan, visit www.ladwp.com/uwmp or email uwmp@ladwp.com.



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Van Nuys Neighborhood Council

The Van Nuys Neighborhood Council meets on the second Wednesday of the month at 7pm. The General Meeting is held at 6262 Van Nuys Blvd.

Upcoming LADWP Public Meeting-UWMP

Upcoming LADWP Public Meeting-UWMP

There will be four informational meetings LADWP will be hosting this month, along with two public hearings in March for the 2015 Urban Water Management Plan (UWMP).

The UWMP details the City of LA's long term strategy for managing water resources and ensuring water supply reliability through the year 2040 per the mandate of the State of California Urban Water Management Planning Act.

For stakeholders in areas where we are not holding meetings, the meeting of Jan. 28 at LADWP Headquarters will be webcast so constituents can view the presentation and provide feedback.

Please see the [attached PDF](#) (available in English and Spanish) for more details.

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This entry was posted in City information, Los Angeles Department of Water and Power (LADWP), Public service announcement on January 16, 2016 [<http://vnnc.org/2016/01/upcoming-ladwp-public-meeting-uwmp/>] by vnncadmin.

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UPCOMING EVENTS

MAR 1
Tue
(http://www.venicenc.org/calendar-action-oneday/exact_date-3-1-2016/)

8:00 am Budget & Finance Committee Meeting
(http://www.venicenc.org/event/budget-finance-committee-meeting/?instance_id=37562)

1:00 pm Board of Neighborhood Commission... @ Varies monthly; see text below
(http://www.venicenc.org/event/bonc-meeting-2/?instance_id=37437)

6:00 pm Ocean Front Walk Committee Meeting @ Canal Club
(http://www.venicenc.org/event/ocean-front-walk-committee-meeting-15/?instance_id=37632)

RECENT NEWSLETTERS

- January 21, 2016
- January 14, 2016
- January 7, 2016
- December 31, 2015
- December 24, 2015

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Official Correspondence should be emailed to secretary@venicenc.org

http://www.venicenc.org/calendar-action-oneday/exact_date-3-9-2016/


MAR 21
Mon
(http://www.venicenc.org/calendar-action-oneday/exact_date-3-21-2016/)


1:00 pm Board of Neighborhood Commission... @ City Hall, 10th Floor Conference Center Room 1060
(http://www.venicenc.org/event/bonc-meeting/?instance_id=37514)

LADWP PRESENTS LONG-TERM WATER RESOURCES

W January 28, 2016 @ 6:00 pm – 8:00 pm

HE LADWP Headquarters
111 N Hope St
Los Angeles, CA 90012
USA

C  Email
<mailto:uwmp@ladwp.com>

O  Event website
(http://www.ladwp.com/ladwp/faces/wcnav_externalld/a-w-sos-uwmp)

[Back to Calendar \(http://www.venicenc.org/calendar-2/\)](http://www.venicenc.org/calendar-2/)

[Add to Calendar](#)

LOS ANGELES-The Los Angeles Department of Water and Power (LADWP) is hosting four public outreach meetings this January to publicly present Los Angeles' preliminary long-term strategy for managing water resources and ensuring water-supply reliability through the year 2040, and is seeking input and comments from the public.

The final meeting is tonight. All LADWP customers and stakeholders are invited to participate and provide feedback at this meeting:

Thursday, January 28, 2016, 6:00 p.m. – 8:00 p.m.
LADWP Headquarters, 111 N. Hope Street, Los Angeles, CA 90012
This meeting is also available via webcast. To access the webcast, RSVP to uwmp@ladwp.com.
Instructions for webcast logon will be provided by email in advance of the meeting.

LADWP is updating its 2015 Urban Water Management Plan, and when completed, will offer a detailed discussion on the status of Los Angeles' imported water sources, and provide an update of future water supply and demand for the City based on the latest population and economic growth data. The plan is released every five years and contains updates to the long term management and development of water resource. The UWMP is a State requirement for compliance with the California Urban Water Management Planning Act.

To meet future water demand, the 2015 plan forecasts implementation of a diverse resource mix that includes increasing and further developing local water supplies in the areas of stormwater capture, conservation and recycled water. Addressing the contamination in the City's groundwater basin will also play critical role in the future. All of these components will help reduce the region's

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Board of Neighborhood Commissioners Meeting tomorrow at 6 PM at Alpine Recreation Center

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VNC Budget and Finance Committee Meeting tomorrow morning at 8 AM at Aroth Residence

Agenda H
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VNC Mass, Scale, and Character Committee Meeting tonight at 7:30 PM at Vera Davis Center

Agenda
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demands for imported water purchases.

“We invite customers and residents to take part in the process of the 2015 UWMP as it is a critical component of the city’s future,” said Marty Adams, LADWP Senior Assistant General Manager, Water System. “LA has experienced some of the driest years on record since the last version of the plan was released in 2010. Engage with us as we carefully plan for the future needs of our customers particularly in light of historic drought conditions.”

In response to the drought, Los Angeles Mayor Eric Garcetti issued near and long term responses through his Executive Directive No. 5 and Sustainable City pLAn In the near term, the Directive calls for reduction of per capita water use by 20 percent by 2017. In the long term, the pLAn calls for 25 percent reduction in per capita water use by 2035, a 50 percent reduction in purchased imported water by 2025, and a 50 percent source local water goal by year 2035. The UWMP goals are based on the goals set by the Mayor’s pLAn.

For more information, click [here](#).

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DON'T MISS Groundwater Management Act draft released

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LADWP to hold hearings on Urban Water Management Plan

By California Water News Daily on February 28, 2016

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The Los Angeles Department of Water and Power (LADWP) will be holding two public hearings to receive resident input on the 2015 Urban Water Management Plan (UWMP), the city's long-term water resources management strategy for the next 25 years.

The primary function of the UWMP is to create new, sustainable water supplies, instead of relying on expensive, imported water supplies.

Hearing information:

March 3
6pm-8pm
LADWP Headquarters
111 N. Hope St.
Los Angeles, CA 90012

March 9
6pm-8pm
Sepulveda Garden Center
16633 Magnolia Blvd.
Los Angeles, CA 90012

All comments must be received by March 16 to be considered.

drought featured



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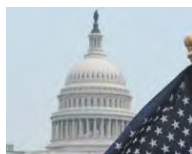
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Los Angeles Department of Water and Power

Summary of 2015 Urban Water Management Plan Public Informational Meeting Comments and Suggestions with LADWP Responses

Meeting 1: January 19, 2016, The California Endowment, 1000 N. Alameda St.

Meeting 2: January 21, 2016, Council District 3 Office, 19040 Vanowen St.

Meeting 3: January 27, 2016, Felicia Mahood Multipurpose Center, 11338 Santa Monica Blvd.

Meeting 4: January 28, 2016, LADWP Headquarters, 111 N. Hope St.

Conservation:

1. **Comment:** Which conservation program do you anticipate to be the most productive?

Response: LADWP is currently performing a study to determine the conservation potential within each customer category and recommend specific cost effective programs to be implemented. The study includes telephone and online surveys with onsite verification and audits. With this data, we will create a Water Conservation Potential Model to find out the saturation of appliances and estimate future customer adoption rates. The preliminary results from the surveys and audits indicate that both landscape and clothes washers are showing a good amount of opportunity while the single family toilets are fairly saturated. The final results and recommendations of the study will help LADWP determine a cost-effective conservation strategy to meet aggressive long-term goals. Please refer to section 3.3 for further detail.

2. **Comment:** How does the conservation ordinance relate to public facilities, i.e. parks and golf courses?

Response: The requirements of the ordinance apply to all customers regardless if they are public or private entities. Only recycled water customers are exempt from the outdoor watering restrictions in the ordinance. Please see exhibit 3E and Appendix I for further detail.

3. **Comment:** Is there a way that with part of the money you provide for turf removal, customers can be educated on proper watering practices for trees?

Response: Current outdoor watering restrictions apply to automatic sprinklers only. Customers can still hand water plants and trees with a self-closing shut-off nozzle on the hose as needed. We partner with non-profit groups to help water trees at Rec & Park facilities and provide grants to communities with a focus on outdoor landscaping. We have increased one-on-one workshops in addition to classroom training to educate homeowners about California Friendly landscape and are looking to expand our education program even more. For newly planted trees, we recommend planting sustainable trees that are used to our climate and will need less water. Please refer to section 3.2.4 for further detail.

4. **Comment:** What is the City's plan for maintaining areas that haven't been watered in 20, 30 or 50 years? I'd like to speak specifically about Silver Lake Reservoir. There are a lot of trees in that area that do not receive adequate irrigation and are dying.

Los Angeles Department of Water and Power

Summary of 2015 Urban Water Management Plan Public Informational Meeting Comments and Suggestions with LADWP Responses

Response: Like most open spaces, the trees at Silver Lake Reservoir rely only on rainfall and are not irrigated. We will forward your concern to the department's operations division for follow up.

5. **Comment:** Has the department looked at incentives to improve tree health?

Response: We provide water conservation incentives for potable water savings. We will evaluate incentivizing specific tree watering devices that save water and promote tree health.

6. **Comment:** The Fletcher Pumping Station was re-landscaped with gravel and cacti and advertised that watering is needed only once a week. It is not a California Friendly plant.

Response: We try to engage the community on the type of plants or landscaping available in that area. We have a variety of different pallets and we are trying to be efficient with watering and maintenance. Certain facilities set a goal to install maintenance independent landscape, and that may have been the case here.

7. **Comment:** How do future conservation goals compare to what we have done in the last three years?

Response: Before the current drought, we achieved about 3,000 AFY of active conservation savings in new rebates per year. In the past two years during this drought, we increased our conservation to about 6,000 AFY in new rebates per year. Since 1990 we have achieved cumulative annual hardware savings of 118,000 AFY. Please see exhibit 3B for further detail.

8. **Comment:** For the conservation potential study surveys conducted, were participants selected based on landscape type and lot size?

Response: Participants for the single family conservation potential study surveys were randomly selected to help prevent skewed data results. The survey did contain questions on landscape type and estimated size of the landscape to help estimate outdoor conservation potential. Please refer to section 3.4 for further detail.

9. **Comment:** How severe would the drought have to be to enter Phase VI of the Emergency Water Conservation Ordinance?

Response: The implementation of Phase VI would be ordered by the Mayor with the concurrence of the City Council to cope with a 50 percent or greater reduction in water supplies. There are progressive phases and other triggers that would be initiated before entering Phase VI. We will continue to monitor supply and demand and have long-term and short-term plans to avoid getting to that point. Please refer to sections 11.4.1 & 11.4.8 for further detail.

10. **Comment:** Can LADWP work with Building and Safety to require inspection on permitted upgrades? What is LADWP doing to pull other city departments along to help achieve local supply goals?

Los Angeles Department of Water and Power

Summary of 2015 Urban Water Management Plan Public Informational Meeting Comments and Suggestions with LADWP Responses

Response: LADWP has been working with Building and Safety in plumbing retrofit enforcement since 1988. In addition, Building and Safety and LADWP are part of the Mayor's Water Cabinet. We work with Building and Safety to develop new strategies that will help conserve water on renovations. LADWP is also participating in One Water LA, which includes collaboration among other city agencies. Please refer to section 3.2.1 for further detail.

11. **Comment:** Are there any policy decisions that can be made by the City Council that could match the impact of low flush toilets in the '80s and '90s?

Response: The Mayor's pLAn and ED 5 are the guiding documents that set current aggressive conservation targets. The Water Conservation Potential Study results and recommendations will be the key to identifying additional opportunities and potential direction for meeting the Mayor's targets.

12. **Comment:** How well is the 2/3 day a week watering working, and what kind of enforcement has taken place?

Response: Last year, the Water Conservation Response Unit investigated more than 16,000 complaints. Only 97 fines were actually issued. Our customers have been adhering to the restrictions and watering landscape more wisely. Please refer to section 3.2.4 for further detail.

13. **Comment:** What is the conservation percentage goal and timeframe for residential turf removal?

Response: The Potential Study results and recommendations will provide more details in the goals and timeframe. The Governor issued a goal to remove 50 million sq. ft. of turf statewide. In LA alone, we have already replaced over 43 million sq. ft. We are one of the few cities still offering turf rebates.

14. **Comment:** Use Neighborhood Councils as eyes and ears for conservation opportunities. Also, use Neighborhood Councils as "ombudsman" for people to qualify for and get rebates.

Response: Everyone is welcome to send suggested conservation opportunities or any conservation related comments to waterconservation@ladwp.com. We will look into additional opportunities of partnering with Neighborhood Councils.

Stormwater:

15. **Comment:** What is LADWP's plan to capture stormwater along the LA River?

Response: The Mayor has instructed city agencies to look at the adaptive management process for the LA River. A water focus group is being formed under the LA River Cooperation Committee to determine the needs of the river, and LADWP will be a part of this group.

16. **Comment:** What is DWP doing to ensure the protection of our watersheds? What other agencies are involved?

**Summary of 2015 Urban Water Management Plan Public Informational Meeting
Comments and Suggestions with LADWP Responses**

Response: We are involved in the Integrated Regional Watershed Management Plan, which is an integrated process focused on the protection of local watersheds. LA County Flood Control is involved along with other city agencies within the Greater Los Angeles Area. As the largest land owner in the Eastern Sierra we have minimized development there for the past 100 years. In turn it provides high quality of water to the Los Angeles Aqueduct. Please refer to section 10.2 for further detail.

17. **Comment:** Why aren't new developments required to construct large underground cisterns?

Response: The City does have a Low Impact Development Ordinance which requires developments of a specified size to capture stormwater on-site. To support these requirements, we offer rebates for rain barrels and cisterns. Please refer to section 7.5.2.2 for low impact development. For rebates information please visit www.ladwp.com.

18. **Comment:** I propose LADWP make arrangements with Neighborhood councils to identify better turf removal locations available in their respective areas.

Response: We are evaluating the watershed approach to turf removal, so that turf-rebate customers can also capture stormwater with a rain garden, and implement other low impact development practices. Please refer to section 3.2.4 for further detail.

19. **Comment:** Are there weather-based irrigation controllers that can account for the presence of rain barrels in the landscaping system?

Response: The department is not aware of such devices. Through outreach programs we educate customers to adjust their irrigation behavior after installing a rain barrel.

20. **Comment:** Has LADWP considered the use of permeable asphalts on roads as a method to capture stormwater?

Response: We see permeable pavement as an available tool, but one of the primary complaints with this technology is the buildup of sediments in the voids. In order for the asphalt to remain effective, intensive maintenance is required to remove the sediments.

21. **Comment:** What is the future distributed stormwater capture goal? Are you suggesting this is going to contribute between 68 and 114 thousand acre-feet (TAF)? How are you going to tell the public that 68 to 114 TAF is a result of rain barrels, cisterns and street-side stormwater capture?

Response: Both centralized capture and distributed capture combined will help achieve the overall stormwater capture potential of 68 - 114 TAF estimated in the Stormwater Capture Master Plan (see Exhibits 7E & 7F in 2015 UWMP). Combined centralized and distributed recharge potential is 66 - 107 TAF. Distributed direct use potential is 2 - 7 TAF. Centralized capture facilities (i.e., spreading grounds, dams, reservoirs) are engineered features located in specific locations that capture large runoff flows when available, and subsequently deliver this runoff to spreading

Los Angeles Department of Water and Power

Summary of 2015 Urban Water Management Plan Public Informational Meeting Comments and Suggestions with LADWP Responses

basins where it is infiltrated into underlying groundwater aquifers. Distributed capture projects are neighborhood level stormwater capture projects which include rain barrels, cisterns, green streets, and infiltration galleries. Please refer to section 7.3 for further detail.

22. **Comment:** Has anybody looked into recreating something like ancient cisterns found in other parts of the world, or is LA too overpopulated to have space for this type of device?

Response: The City is developing stormwater capture facilities functioning similar to the type of capture facility you are referring to. For example, we installed dry wells for infiltrating about 100 AFY of runoff into the aquifer on Branford Street in Sun Valley. Another project is on Elmer Avenue where we put infiltration galleries under the street along with parkway basins. Some parcel-base applications like rain gardens and rain barrels were also installed at adjacent properties. This has reduced flooding and recharges the underlying groundwater basin. Please refer to case study "Sun Valley EDA Public Improvement Project" in section 7.5.2 for further detail.

23. **Comment:** Section 7.6 of the 2010 UWMP suggests more distributed water capture and groundwater recharge. Design and install standard sized, small-scale percolation wells for low-lying areas in gutters. Leverage Neighborhood Councils to identify locations, raise general and local awareness. For example, "Adopt a percolation well."

Response: The Stormwater Capture Master Plan, completed in 2015, developed program type alternatives for distributed capture. They include (1) on-site infiltration, (2) on-site direct use, (3) green street programs, (4) subregional infiltration, and (5) subregional direct use. These programs are described in Section 7.5. We welcome additional suggested projects which can be submitted at stormwater@ladwp.com. We will look into opportunities of partnering with Neighborhood Councils.

24. **Comment:** Need more collaboration/enforcement with Building and Safety. Many single family homes in my neighborhood are paving their entire front yards. Not as part of turf replacement, and contrary to Building and Safety city ordinance. This prevents percolation to the aquifer and aggravates heat islands. It would be in the best interest of DWP, and B&S, and the neighborhoods to push enforcement.

Response: The City's Low Impact Development (LID) Ordinance was adopted in May 2012, which is a set of site design approaches and BMPs that are designed to address runoff and pollution at the source. The City's LID ordinance, enforced by other City departments, has significant benefits to stormwater capture because it requires that all development and redevelopment projects that create, add, or replace 500 square feet or more of impervious area to capture the three-quarter inch rain event for infiltration or reuse on-site. Single-family residences can comply in a more simple way by installing rain barrels, permeable pavement, rainwater storage tanks, or infiltration swales. LADWP's rain barrel and cistern rebates also incentivize on-site stormwater capture. LADWP will continue working with other City departments to develop programs and code requirements to highlight water conservation through LID and installation of BMPs. Please refer to section 7.5.3.2 for further detail.

Recycled Water:

**Summary of 2015 Urban Water Management Plan Public Informational Meeting
Comments and Suggestions with LADWP Responses**

25. **Comment:** Is there a more detailed plan of how you are going to achieve the recycled water goals? Also, with the more conservation we achieve won't we have less wastewater available for recycling?

Response: LADWP will achieve its recycled water goals through a combination of non-potable reuse (NPR) projects and groundwater replenishment (GWR). For the 30,000 AF of GWR, we plan to deliver recycled water treated at Donald C. Tillman WRP to Hansen Spreading Grounds and Pacoima Spreading Grounds for recharging the groundwater basin. The Draft EIR will be released in 2016 and will have more detail. For NPR, we will be pursuing new customers and environmental uses to increase recycled water use. There may also be potential for direct potable reuse if existing regulations change. Section 4.4 of the 2015 UWMP identifies a list of recycled water projects that will help achieve these goals.

Conservation affects wastewater flow to some degree since wastewater is only reduced by indoor water conservation. LADWP has begun to focus more on outdoor water conservation, which has no impact on wastewater flow.

26. **Comment:** Would it help the wastewater supply if more people transition from septic tank to sewer?

Response: Yes, it will help. There is a statewide grant forthcoming for converting septic tank to sewer.

27. **Comment:** Do you have a sense of when the Direct Potable Reuse (DPR) regulations will come out?

Response: The State has an expert panel looking into the feasibility of developing regulations for DPR. They are expected to be completed by the end of 2016. Once the studies are in place, it will take time for the regulators to evaluate that information and develop regulations.

28. **Comment:** How will GWR's treatment process be evaluated? We shouldn't need to build an advanced purification facility to achieve the goals of increasing local supply. Maybe there is a better way to treat the water to still meet public health requirements and meet our goals for water supply.

Response: We are working with LASAN to determine the most cost effective way to protect public health and increase local supplies. It could be reverse osmosis, micro-filtration, or new technological advances. There is a precedent set in the Inland Empire, where they spread recycled water that has not undergone reverse osmosis and still meet public health protection. Advanced purification may not be required for GWR, but will most likely be required for DPR. In addition, regulations allow more recharge for GWR if the water is treated to a higher level. Costs, public acceptance, and political will all need to be considered in the evaluation of GWR's treatment process. Please refer to section 4.4.2 for further detail.

29. **Comment:** Where is the public in terms of acceptance of recycled water? Maybe we need to conduct a survey to see if people accept it.

Los Angeles Department of Water and Power

Summary of 2015 Urban Water Management Plan Public Informational Meeting Comments and Suggestions with LADWP Responses

Response: The City has made significant efforts to inform the public on the safety and importance of recycled water in order to encourage its acceptance. Over the past 7 years, LADWP staff has conducted presentations at Neighborhood Council meetings throughout the City and has made efforts to contact all of them by email. LADWP has developed a robust K-12 Outreach program which has presented to over 14,000 students and teachers since 2012. This year alone the K-12 program has presented to over 5000 students and teachers at 31 schools. City staff also attended multiple community events to answer questions the public may have regarding recycled water and local water supply development. At the center of the City's effort to encourage public acceptance of recycled water is the Recycled Water Advisory Group (RWAG), which is a diverse group of stakeholders that the City meets with regularly to plan and discuss the water recycling program. In addition, RWAG members have attended tours of both City facilities and neighboring facilities to see water recycling technology in operation. Please refer to section 4.4.5 for further detail.

30. **Comment:** Do you include discussion in the 2015 UWMP about DPR? Will we invest in DPR?

Response: No, the plan includes 30,000 AF of recycled water purposed for GWR and the other 45,400 AF is for non-potable reuse. There is still uncertainty over the acceptance of DPR in California. Although we anticipate it becoming a viable water source someday, we have not included it in our current projections.

31. **Comment:** I recently became aware that we would be sending some of this recycled water to Las Virgenes. How much recycled water is actually going to be local water, as opposed to water that we will be importing from other water systems?

Response: The City is actually planning to import recycled water from Las Virgenes rather than exporting it. Currently, majority of our recycled water comes from in-city treatment plants. We are investigating additional opportunities of using wastewater sources outside the City. Please refer to section 4.4.3 for further detail.

32. **Comment:** Why don't we enforce the use of recycled water instead of potable water for hydraulic fracturing?

Response: The limiting factor on availability is location of the purple pipes.

33. **Comment:** It looks to me like you are projecting 75 TAF of recycled water. In 1990, the UWMP projected 32 TAF, 1995 UWMP projected 38 TAF, 2000 UWMP Projected 29 TAF, the 2005 UWMP projected 30 TAF, and the 2010 UWMP projected 59 TAF. At the beginning of the 2010 plan they suggested that by 2015 we would have 20 TAF. So far we only have about 8 TAF per year. Why does LADWP say that they are going to meet their recycled water goals when they have missed previous targets? Every EIR in the City uses this plan as an assurance that we will continue to provide for growth, but you are not meeting these targets.

Response: UWMP presents projected supplies reflecting the City's priorities and the availability of funding and resources at the time of update. Actual implementation may deviate from projections due to unexpected changes

Summary of 2015 Urban Water Management Plan Public Informational Meeting Comments and Suggestions with LADWP Responses

from initial assumed conditions. In 2000, groundwater recharge with recycled water was set back due to poor public acceptance. Economic recession beginning in 2008 prompted budget cutback and delayed the implementation timeline. Unforeseen events such as these cause recycled water projects to be delayed. The recent multi-year drought prompted state and local elected officials to advocate the expansion of recycled water use. It also improved public acceptance of this supply option.

LADWP's 2015 UWMP projects 75,400 AFY of recycled water use by 2040. It includes 30,000 AF of GWR by year 2024. The remaining 45,400 AF is a combination of 29,000 AF of non-potable reuse, as outlined in the Recycled Water Master Planning Documents, and 16,400 AF of non-potable reuse from conceptual planning for projects that would be completed after 2025. We believe these targets are attainable given the wider support from State, City, and the public. Please refer to section 4.4 for further detail.

Groundwater:

34. **Comment:** Is it still the case that rather than remediate the contaminated soil in the San Fernando Basin, LADWP is going to invest in treating and filtering the water upon withdrawal from the basin?

Response: Yes, our strategy is to pump groundwater, treat, and deliver the groundwater to our distribution system. Soil remediation is the responsibility of the site owner under the supervision of the regulators (i.e. EPA/LARWQCB).

35. **Comment:** The 2005 plan said you would pump 106,000 AF, but year after year groundwater production has been much less than that. Now you are saying that by 2024 you will pump 111,000 AF. The evidence does not give me a lot of hope that you will meet that. Why should I believe LADWP will meet its groundwater pumping goal?

Response: San Fernando Basin (SFB) groundwater pumping was cut back due to contamination, which was not reflected in the 2005 UWMP projections. The projected pumping of almost 110,000 AFY to restore full water rights will depend on the completion of treatment facilities. We also believe that this level of pumping is sustainable due to the increased stormwater capture projects that will be completed for increased groundwater recharge. Please refer to section 6.11 for further detail.

36. **Comment:** The ULARA Watermaster Report said that the city is so built out that during an average year only gets around 25,000 AF of recharge. You quoted in your UWMP that you would be able to pump over 100,000 AFY. There is a huge delivery problem. The difference between what Utilities say they have access to and what they can actually deliver is called paper water.

Response: According to the 2012-13 ULARA Watermaster Report, the average spreading operations by centralized facilities in SFB is about 27,000 AFY. Spreading is not the only component to sustain the proposed pumping of more than 100,000 AFY. There are other components such as the incidental distributed recharge (~35,000 AFY) and imported water used outdoor that infiltrates into groundwater basin (~42,000 AF in 2012-13). The Watermaster Report can be downloaded from <http://ularawatermaster.com/>

Los Angeles Department of Water and Power

Summary of 2015 Urban Water Management Plan Public Informational Meeting Comments and Suggestions with LADWP Responses

37. **Comment:** How far along is the San Fernando Basin remediation project, and what percentage of total supply do you expect groundwater to account for?

Response: The Environmental Impact Report will be released soon. The remediation complex should be ready by 2021, assuming the funding and rate action are in place. By FYE 2040 we expect groundwater to be 24% of our average year water supply (see Exhibit 11E).

38. **Comment:** What is the cost of the Groundwater Remediation project?

Response: The cost is in the \$600 million range; a portion of the cost will be covered in the rate action.

Los Angeles Aqueduct:

39. **Comment:** What is the basis of the assumed supply reduction of LA Aqueduct due to climate change? Are impacts such as higher frequency of bigger storms captured in your projection?

Response: LADWP conducted a climate change study to evaluate the potential impacts of climate change on the eastern Sierras Nevada and on LAA water supply. From this study we developed a long-term average runoff reduction factor that we applied to the LAA supply projections. The hydrologic cycle is also projected to become more variable, with years of higher than historical maximum runoff and other years with lower than historical minimum runoff. Although these extremes are not captured and reflected in the long-term LAA supply projection, a separate analysis was performed to evaluate how they could impact the infrastructure of the LAA and its ability to deliver water to Los Angeles. Please refer to section 12.1.2 for further detail.

40. **Comment:** Reductions in the Aqueduct have been more than just due to climate influence. Since 1987, there had been more than 50% cutback in LAA deliveries mainly because of environmental obligations. Are they considered in your projection?

Response: Aqueduct deliveries have been impacted by environmental enhancement efforts in the eastern Sierras. Our projection accounts for future impacts from these projects. Please refer to section 5.6 for further detail.

41. **Comment:** Are there unintended consequences to lack of use of the Aqueduct in dry years?

Response: We take advantage of low LAA delivery in dry years to perform required maintenance and get more maintenance done. There are no known damages that occur to the LAA system in dry years.

Costs / Funding:

42. **Comment:** How much are the local supply programs going to cost?

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Response: The current 5-year rate action has funding elements to support and develop the local water supply programs.

43. **Comment:** Is LADWP thinking about pursuing funding from Cap and Trade or Proposition 1? Also, did the new rate action account for potential grant funding?

Response: We have a group within the Water Resources Division that is dedicated to identifying, applying, and managing all grants and loans. We did not make the assumption that we would get outside funding in the rate action, unless already awarded. But the new rate structure includes a mechanism to refund monies to rate payers if the department has over collected.

Water Demand:

44. **Comment:** When comparing a single-dry year demand to average year demand, demand should go down, correct?

Response: During dry weather, demand will typically go up due to factors such as increased irrigation and cooling tower requirements. As dry conditions persist, demand will decrease by implementing mandatory conservation to respond to supply shortage.

45. **Comment:** Does GPCD include all customer classes?

Response: Yes, it includes residential (multi-family and single-family), commercial, governmental, and industrial customers.

46. **Comment:** What does LADWP do to control development, which increases demand for water?

Response: Large development projects are reviewed and approved by the City Planning Department. LADWP does not direct the development of the City nor project the growth of the City. For those projects requiring a Water Supply Assessment, we have been successful in making developers go above and beyond code requirements to conserve water. Please refer to section 11.5 for further information on water supply assessments.

Alternative Supplies:

47. **Comment:** Are transfers going to be in the next UWMP? 2010 UWMP projected that by 2015 the City would be receiving 40,000 AFY, and that is not happening.

Response: Transfer is categorized as a planned supply in 2010 UWMP and will be considered a potential supply in 2015 UWMP. Transfer requires advanced planning of acquiring and storing water in wet and normal years, then

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delivering of the stored water when needed. In light of the 2 multi-year droughts in the last decade, transfer becomes less reliable than expected. If we could build up a reserve through a few good wet years, transfer still has a great potential to provide water in times of supply shortage. Please refer to section 9.1 for further detail.

General:

48. **Comment:** Does the plan have a provision taking into account future innovations that will help us meet water demands?

Response: The UWMP is updated every 5 years to reflect current conditions and adjustments to water resources management strategies. Any innovations used by the City will be reflected in the future plans.

49. **Comment:** There doesn't seem to be any mention of infrastructure, are you handling these issues separately?

Response: Infrastructure reliability is discussed in the Water Infrastructure Plan. This plan is posted on the LADWP website and can be downloaded at <http://www.ladwp.com/docs/OPLADWPCCB421332>.

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Summary of 2015 Urban Water Management Plan Public Hearing Meeting Comments and Suggestions with LADWP Responses

Meeting 1: March 3, 2016, LADWP Headquarters, 111 N. Hope St.

Meeting 2: March 9, 2016, Sepulveda Garden Center, 16633 Magnolia Blvd.

Conservation:

1. **Comment:** What was the rationale for measuring SBx7-7 compliance using and continuing with method 3? When comparing the 4 available methods, did method 3 set the lowest target?

Response: No, method 3 does not set the lowest target. SBx7-7 is a State compliance requirement in order to stay eligible for State water grants and loans. LADWP is committed to protecting the interests of its rate payers, and therefore, selected method 3, which most fairly evaluates Los Angeles by accounting for historical conservation achievements and the demand hardening that results from increased conservation. Our Conservation Program began in 1977 and has saved over 118,000 AFY in hardware conservation. Method 3 compares to the hydrologic region target, which helps account for LADWP's historical savings achieved to date since we were an early adopter of conservation.

LADWP recognizes the need to continue aggressively pursuing additional conservation. Through our efforts to meet the Mayor's Sustainable City pLAN (pLAN) goals, LADWP's current gpcd is already lower than any target set by SBx7-7. LADWP plans to continue meeting the pLAN's aggressive water use reduction goals, which are significantly lower than the 20x2020 targets and keep the City in compliance to the California Water Code requirements. Please refer to section 3.1.2 for further detail.

2. **Comment:** In the Water Conservation Potential Study, does the category "California Friendly/No Landscape" include hardscape (i.e. pavement, concrete, impervious surfaces)?

Response: The Water Conservation Potential Study's objective is to identify the remaining conservation potential within the city. The category "California Friendly/No landscape" includes both dirt areas and paved areas to identify residential outdoor areas that do not have a water savings potential for LADWP's outdoor conservation programs. Please refer to section 3.4 for further detail.

3. **Comment:** In the Water Conservation Potential Study, did you do a study for dish washers in multi-family homes? Did you include dishwashers in the single-family home surveys?

Response: The Water Conservation Potential Study did analyze dishwashers for both the multi-family and single-family sectors, and the findings will be presented in the completed Water Conservation Potential Study. Please refer to section 3.4 for further detail.

4. **Comment:** Has the Department looked at localized government control of terminating the use of water in toilets?

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Response: Los Angeles has utilized ordinances as a tool to reduce water waste since 1988, with the adoption of its first version of a plumbing retrofit ordinance. In 1998 the ordinance was amended, requiring the installation of Ultra Low Flush (ULF) toilets and water-saving showerheads in single family and multi-family residences prior to the close of escrow. This progressive requirement is implemented with the help of local real estate professionals. Los Angeles further increased its water efficiency mandates in 2009 with adoption of the Water Efficiency Requirements Ordinance. This ordinance establishes water efficiency requirements for new developments and renovations of existing buildings by requiring installation of high efficiency plumbing fixtures in all residential and commercial buildings. Currently, the ordinance does not mandate waterless toilets due to feasibility and public health concerns. Please refer to section 3.2.1 for further detail.

5. **Comment:** Is graywater outside the purview of LADWP? Is graywater included in 2015 UWMP projections? Is there any department in the City that researches gray water systems?

Response: Graywater systems can be implemented per the Department of Building and Safety's guidelines (<http://www.ladbs.org/docs/default-source/publications/information-bulletins/plumbing-code/graywater-systems-for-residential-buildings-ib-p-pc2014-012.pdf>). LADWP has a dedicated graywater website (www.ladwp.com/graywater) to educate customers interested in a graywater system. In addition, through its Technical Assistance Program, LADWP offers a rebate of up to \$250,000 for customers who implement commercial graywater systems that reduce potable water use.

LADWP researched multiple existing graywater studies and determined that the water savings findings were inconclusive. The full research report can be found at (<https://cityclerk.lacity.org/lacityclerkconnect/index.cfm?fa=ccfi.viewrecord&cfnumber=14-1291>). Currently, LADWP does not have a residential graywater program; however, we continue to monitor the graywater research. LADWP is working on additional graywater outreach material and focusing its limited Conservation budget on cost effective programs such as the residential turf removal rebate and water-efficient clothes washer rebate.

Recycled Water:

6. **Comment:** In regards to recycled water, are you recycling sewage straight from individual residents?

Response: We are not recycling water on a parcel basis. We recycle wastewater at centralized facilities located at the City's four water reclamation plants. Please refer to section 4.2.1 for Recycled water facilities within Los Angeles.

Stormwater Capture:

7. **Comment:** What would trigger a move to the aggressive stormwater capture scenario? Does the rate increase help with funding stormwater capture?

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Summary of 2015 Urban Water Management Plan Public Hearing Meeting Comments and Suggestions with LADWP Responses

Response: In general, we are moving forward with the Conservative Scenario in the 2015 UWMP. This Scenario is fairly aggressive when compared to our past and present stormwater capture investments. Had the rate action not occurred, even the conservative scenario would've been difficult to implement. The Aggressive Scenario was developed to display the additional potential of stormwater capture above and beyond the conservative scenario, however the development of these projects are not as well defined as compared to the conservative scenario such as reliance on land acquisitions, partnerships, ordinances, incentive programs, and community engagement, among others, that are outside of LADWP control.

The projects at Sheldon and Boulevard Pits are examples of potential stormwater capture projects that fall under the Aggressive Scenario. These are large projects that have the potential to yield a substantial amount of stormwater capture. There is a current mining operation at these locations; making them prime locations for implementing a stormwater capture project after the mining rights are exhausted. The uncertainties related to these types of project are the acquisition of land, finding potential partnerships, and funding; therefore, further work will be required in order to advance the implementation of these projects, and they've been categorized in the aggressive scenario for future potential to be developed.

8. **Comment:** Would the UWMP be a good place to inform the public of what it would look like financially to implement the aggressive vs. conservative stormwater capture scenarios prior to another potential rate increase?

Response: Although the UWMP and the rate increase are guided by the same goals set by the Mayor, the UWMP is not the right forum for such discussion. Extensive public outreach has been done for the rate action which gave ample opportunity for the public to voice its opinion on such matters.

Groundwater:

9. **Comment:** How far away are we from having the San Fernando Valley aquifer 75% usable? I see it as a great shock absorber so you can put water in during wet years and take it out during dry years.

Response: We expect to have the San Fernando remediation complex operational by 2021.

10. **Comment:** Do we have the technology and infrastructure to clean up the San Fernando Basin?

Response: The technology is available. A recent milestone achievement was the completion of the Groundwater System Improvement Study (GSIS), which gives us a better characterization of the extent of the pollution, and a clear identification of the contaminants of concern. This will be the basis of designing remediation facilities. Please refer to section 6.2 for further detail.

Alternative Supplies:

11. **Comment:** What role does desalination play in your supply planning?

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Response: We performed several studies in early 2000 and completed the Scattergood Seawater Desalination Pilot Project Preliminary Evaluation Report in 2008. At that time the City chose another route believed to have less environmental impact and is more cost effective. A decision was made to exhaust all local supplies, especially recycled water, before desalination is considered. The City has no plans over the next 25 years to develop desalination facilities. Please refer to section 9.3.4 for further detail.

Water Supply Planning:

12. **Comment:** It is reasonable to assume that a recurrence of the drought conditions experienced now, would affect all major Southern California Aqueducts (LA Aqueduct, State Water Project, Colorado River Aqueduct, etc.) at the same time. Given this, why do you expect the decrease in LA Aqueduct supply during dry year can be made up by increased imports from MWD? Where is MWD's water coming from?

Response: The drought conditions in the watersheds of the 3 aqueducts don't necessarily coincide with one another. In 2015, Northern Sierra and Eastern Sierra experienced record low snowpack while Upper Colorado Basin still had about 80% of normal snowpack. In addition, MWD is also required to look at dry year hydrology impacting their sources of supplies on the CRA and SWP, similar to our analysis on LAA. MWD has developed supplies that can be called on during dry years and has played a pivotal role in developing the regional water storage in Southern California since the droughts of the early 90's. MWD has 1.5 MAF of storage rights in Lake Mead on the Colorado River and an in-basin reservoir storage capacity of 1.26 MAF that can be relied upon for regulating water supply through various hydrologic conditions. Please refer also to MWD's 2015 Urban Water Management Plan and 2015 Integrated Water Resources Plan updates.

13. **Comment:** Did you choose to include relevant climate science in your supply forecasts?

Response: LADWP completed a climate change study in 2011 to address the possible challenges posed by climate change. The study evaluated the potential impacts of climate change on the Eastern Sierra Nevada watershed and on LAA water supply and deliveries. It also investigated opportunities to improve the LAA system in order to manage the potential impacts in the 21st century (Section 12.1.2). The study results are also incorporated in the LAA supply forecast (Section 11.2.1).

14. **Comment:** Do your projections reflect the assumption that the twin tunnels will be constructed in the Bay-Delta?

Response: MWD assumes additional conservation, local supplies, and the California WaterFix will take place otherwise the member agencies will experience unacceptable level of shortage allocation frequency in the future. MWD projects 984 TAF of SWP supplies in the near term and 1.2 MAF of supplies on average starting in 2030 when the long-term Bay-Delta solution is assumed to be in place. For more details, please refer also to MWD's 2015 Urban Water Management Plan and 2015 Integrated Water Resources Plan updates.

15. **Comment:** What other local supply projects can make a significant increase in supply over the next 5 years?

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Response: LADWP's local water supply program focuses on projects based on the conserve, capture, reuse strategy and SFB remediation, The UWMP outlines near-term purple pipe projects in Section 4.4.1 (Exhibits 4Q – 4T). Hinged on the completion of groundwater remediation complex, the groundwater replenishment (expected operational in 2023/24) and stormwater capture (projects listed in Sections 7.4 & 7.5) will recharge groundwater basins. These projects will raise groundwater levels and allow us to access stored water credits we have been accumulating over the last 40 years. Additionally, conservation savings will come from the recommendations of the Conservation Potential Study (Section 3.4).

Costs / Funding:

16. **Comment:** Is the rate increase addressing the need to build infrastructure? Is there a mechanism to reduce the rates for people on social security and low-income?

Response: Yes, approximately 78% of the new water revenue from the rate action will support infrastructure for reliability and infrastructure for improvements to meet water quality regulations. LADWP offers discount rate programs to make water and electricity more affordable for qualifying families who are experiencing difficulties paying their bills. You may apply online at www.ladwp.com/lowincome or call 1-800-dialdwp (1-800-342-5397).

17. **Comment:** What is the status of getting Prop 1 funding for San Fernando aquifer clean-up? How can the public support you in getting Prop 1 funding?

Response: The Prop 1 Groundwater Grant Program is currently being developed by the State Water Resources Control Board (State Board). Final guidelines are expected to be adopted in May 2016. The application period for the first round of funding is expected to open at the end of June 2016.

In September 2015 LADWP submitted a preliminary application for \$317 million in Prop 1 grant funding for the San Fernando Basin Groundwater Remediation Project (Project). Based on preliminary estimates, the Project is expected to cost about \$635 million dollars. LADWP has been working diligently to review and comment on the Groundwater Grant Program as it is developed to ensure that the Project is well-positioned to compete for Prop 1 funding. LADWP has also been working to educate State Board members and staff on the importance of the Project and its relationship to the City's efforts to develop local water resources and reduce reliance on imported water. Interested members of the public are welcome to send letters to the State Board expressing support for the City's and the Mayor's efforts and reiterating the importance of the Project for the City, region, and state.

18. **Comment:** Has MWD given any money to LA to clean up the aquifer? How are you going to get funding for groundwater clean-up especially over the next 5 years since Prop 1 will not cover all the costs?

Response: If eligible, we will pursue MWD's Local Resources Program designated for groundwater cleanup. The rate action will provide funding for part of the remediation project. Also, there is a potential for cost recovery from the PRPs (Potentially Responsible Parties), although this is not assumed in the current rate action. We will pursue every funding opportunity for groundwater clean-up to help reduce the cost.

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19. **Comment:** I read about reports from concerned scientists that we are not going to get a lot of water from the Sierras and the Rockies due to climate change. I am more concerned about being able to capture water locally. I am worried about money going to the twin tunnels. We need to keep the money to fund local projects. Twin tunnels project is very corporate/agriculturally driven and very little for municipal use.

Response: Majority of the proposed rate increase is strictly for local water supply development and infrastructure improvement. It does not go to pay for the tunnels. If MWD incurs costs in the future due to California WaterFix and raises its rates, the costs will be passed on the LADWP customers through the Water Supply Cost Adjustment for purchased water under the new Rate Ordinance. LA is trying to reduce its dependence on MWD purchased water, which should lower its share of contribution to the WaterFix.

20. **Comment:** I am concerned that the rate increase will syphon money from local projects and be spent on the tunnels proposed in the California Water Fix. Tunnels project is based on bad science. There is bond money for a simple fix of the Delta levee. I urge LADWP talk to scientists that don't agree with MWD. Please be aggressive in investing in distributed stormwater capture, graywater, recycled water, conservation efforts, and San Fernando aquifer clean-up. We cannot rely on snowfall in the Sierras and Rockies, with threat of climate change.

Response: See previous response under comment 19.

21. **Comment:** Can you include language that stops the pass through cost of purchase water and explicitly prohibits any funds be spent on the tunnels?

Response: That is outside the scope of the Urban Water Management Plan.

22. **Comment:** I disagree that we need to look to MWD for our supplemental water. We have potential here in Los Angeles to deliver 100% of our current water need. If we adopt the aggressive finance scenario over the conservation finance scenario, then we can dedicate what would have been 9 billion dollars earmarked investment for foreign imported water for our constituents in Los Angeles and not in the Central Valley for agriculture. I want to urge LADWP to include reference in their plan to define the tunnel project and make it transparent then oppose it and to promote harvesting of our local water that is cheaper and will keep us water independent in the future.

Response: On average, MWD currently provides 57% of LA's water need. During extreme dry conditions such as in 2013-14, MWD provided 75% of LA's total supply or 442,000 AF. Reducing reliance on MWD's imported water is one of the Mayor's Sustainable City pLAn goal that is also incorporated in the 2015 UWMP. However, even with the additional conservation and planned new local supplies, the City will still need about 300,000 AF of water from MWD in dry years (see Exhibits 11F & 11G).

Water Demand:

23. **Comment:** I urge LADWP to use an independent and climate-base analysis to project future need.

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Response: Climate change impacts to LA's water demand are discussed in Section 12.1.1. There is still general uncertainty within the scientific community regarding the potential impacts of climate change within the City of Los Angeles. LADWP continues to monitor the latest developments in scientific knowledge and will continue to assess future impacts of climate change on its water demand.

WRITTEN PUBLIC COMMENTS

Following are responses to written correspondences (attached) from Joel Shapiro, Grant Hoag, David Coffin, Melanie Winter, Casey Maddren, Deborah Weinstein Bloome, and Los Angeles County Metropolitan Transportation Authority.

Responses to Written Comments

Grant Hoag, Office of Public Accountability, 2/24/16

Comment: Exhibit ES-G and Exhibit 2D are inconsistent. The indoor/outdoor water use percentages need to be updated or qualified with potential shifts since 2010.

Response: Exhibit 2D was incorrect and has been revised to match Exhibit ES-G. Additional languages have been added at the end of Section 2.1.2 to explain that Exhibit 2D represents 2004 – 2007 average year conditions and period of time where there were no outdoor watering restrictions in effect. Since the drought response strategies are primarily geared towards outdoor water use, outdoor water use percentage will typically be lower during drought years than what is shown in Exhibit 2D.

Mr. David Coffin, 3/9/16

Comment: The LADWP 2015 Draft Urban Water Management Plan, like past UWMP's, continues to mischaracterize the city's availability of water by suggesting that it has access to water that it does not have access to. The draft is a thinly disguised effort to hide the city's low water supply levels from the planning process thus making the EIRs that rely on it susceptible to legal challenge.

Response:

As indicated in Footnote 1 of Mr. Coffin's letter, his analysis focuses exclusively on the average year assessments. In fact, LADWP believes that dry year assessments are more critical to water service reliability.

The UWMP Act requires that our projections include scenarios under average, single-dry, and multiple-dry years. Focusing only on average year projection is insufficient to plan for the uncertainty of the future. For example, the 2015 UWMP projects that LAA delivery will be 275,700 AF in average year by 2020 while the delivery can be as low as 32,200 AF in single-dry years (see Exhibits 11F & 11H). Each past UWMP conducted similar analysis with a range of supplies under various hydrologic conditions

We also include plans as required by the Water Code in response to the possibility of a water supply shortage. The City's Emergency Water Conservation Plan will be implemented to cope with up to 50% of supply shortage (see Section 11.3). The City is currently under Phase 2 of the Emergency Water Conservation Plan, restriction of outdoor water to 3 days a week, due to the supply shortage caused by the statewide drought.

A common misperception is that lower deliveries than projected supplies equate to insufficient supplies. The projection of supplies reflects what is necessary to meet projected demands. If actual demands are lower than projected demands, fewer supplies will be required accordingly. Any excess water supply is then held back in surface or underground storage for future deliveries. Conversely, if the demands are higher than the projections, the stored excess water can then be used to supplement supplies.

The UWMP is a planning document that analyzes various scenarios under their respective set of assumptions to plan for the future. Please see Section 11.2.8 for further detail on LADWP's service area reliability assessment. For new developments subject to CEQA and Water Supply Assessment under Water Code Section 10910, please refer to Section 11.5.

Comment: Conservation is not a supply. Conservation should be used to lower the baseline demand. Asserting that 'Conservation' is a water supply allows the department to manipulate the UWMP's supply projections, making it appear that the city's total available supply will be 611,800 AFY in 2020 and grow as high as 675,700 AFY by the year 2040.

Response: It is correct that conservation is used to lower baseline demand. Conservation is also treated as a supply and when combined with other supplies, all go towards meeting baseline demand. Please refer to Section 11.2.3 for further detail.

Comment: The aqueduct's actual average supply between 2007 and 2012 is just 207,670 AFY. The 2015 draft overestimates and projects long term supplies of up to 293,400 AFY.

Response: The 2010 UWMP projected that LAA deliveries could range from 48,520 AF to 105,777 AF each year under multiple-dry year conditions, and 252,000 under average conditions. There were 3 dry years, 1 normal year, and 1 wet year between 2007 and 2012 (see Exhibit 5D). Since that timeframe consisted of drier conditions, the average of actual deliveries is lower than the average year projection of 252,000 AF.

The 2015 UWMP projects that LAA supply can be as low as 32,200 AF in single-dry years. The 293,400 AF is projected for average year conditions. This was determined from a long-term statistical analysis of 94 years of historical LAA hydrology. Please refer to Section 5.6 for further detail.

Comment: The groundwater projections are over estimated. There is a large discrepancy when you compare the last 15-year average groundwater supply of just 74,390 AFY (2000 and 2015) with the drafts projections of 112,670 to 114,070 AFY.

Response: The long-term decline of groundwater production is due to groundwater basin contamination. LADWP has stepped up its efforts in addressing this problem and expects to have the San Fernando Basin treatment facilities operational by the end of 2021. Along with anticipated additional stormwater recharge and GWR for replenishment, the 2015 UWMP projects that we can recover our full pumping rights and access to the more than 500,000 AF of stored water credits. Please see Section 6.2 for further detail.

Actual groundwater operations can also deviate from projections. LADWP has operated its groundwater resources conjunctively with surface water supplies by reducing pumping during wet periods when more surface water is available and increasing pumping during dry periods to compensate for reduced surface water supplies. Please see Section 6.11 for further detail.

Comment: The department's history of meeting purple pipe projections suggests that they will not come close to meeting these new projections. Over the last eight years the department's average for Irrigation and Industrial use has been just ~7,500 AFY. LADWP missed the 20,000 AFY in 2015 by ~9,800 AF.

Response: The recycled water use was 10,421 AF in FY 2014-15. In 2000, the groundwater recharge project with recycled water was delayed due to poor public acceptance. Economic recession beginning in 2008 prompted budget cutback and further delayed the recycled water program implementation timeline. Unforeseen events such as these cause recycled water projects to be delayed. The recent multi-year drought prompted state and local officials to advocate the expansion of recycled water use. It also improved public acceptance of this supply option.

Comment: LADWP has consistently underestimated the amount of water purchased from MWD because LADWP claims it has access to large amounts of water it does not have access to.

Response:

Our demand on MWD varies depending on hydrology of the LAA, the development of local supplies, and conservation efforts. More LAA delivery in wet years, increased local supplies, and additional conservation will reduce our demand on MWD. LADWP coordinates closely with MWD through their IRP and UWMP updates in order to ensure that MWD can reliably provide water to all its member agencies in future dry years. Because of MWD's large investments in water storage, they are well equipped to provide water even in extended dry periods. In some cases when extreme drought persists, like the drought we are currently in, water supply allocations will take place. Please refer to Sections 8.1.3, 8.1.4, 10.3, and 11.2.6 for further detail

Melanie Winter, 3/16/16

Comment: On Page 7-21 - Woodman Ave case study, suggest 7 edits including:

- Remedy that The River Project was missing in the project description
- Delete "through pre-treatment devices" in the 3rd sentence of the 3rd paragraph. Stormwater flows from the street directly into the swale.
- Delete "and rip-rap" in the 2nd sentence of the 4th paragraph. There is river rock in places, but not rip-rap.
- Replace "groundwater" with stormwater, and delete "shallow in depth" from the second sentence of the 5th paragraph.
- In "The Benefits" section introductory paragraph, the use of a parenthetical is awkward - as is the use of 'whom.' Consider revising.
- In addition, the total AFY recharged is not mentioned anywhere on this page.
- Bullet points should be edited. Currently, two key benefits are jammed together in each of the first two bullets, and the last two bullets are redundant.

Response: The first 6 suggested edits have been incorporated. The redundancy of the bulleted benefits has been corrected.

Comment: On Page 7-7, acknowledge that The River Project is a Stormwater Capture Master Plan (SCMP) partner/supporter.

Response: The suggested edit has been incorporated in Section 7.3.2.

Comment: On Page 7-18 & Pages 3-24 through 3-17. Discussions of On-site Infiltration and On-site Direct Use, Residential Landscape Conservation, and the Watershed Approach neglect to reflect or acknowledge The River Project's substantial accomplishments, activities, and partnerships with LADWP on these issues. The Water LA Pilot has contributed significantly to advancements on these issues and the program is recognized in the SCMP and the Basin Conservation Study as a critical component of meeting local water goals.

Response: Additional language has been incorporated in Chapter 3 under Sustainable Landscaping to describe LADWP's partnership with The River Project.

Comment: The River Project has been working on stormwater capture for over 16 years, partnering with LADWP's Watershed Management Group and various agencies and departments in the development of the Tujunga Wash Feasibility Study in 2000, the Tujunga-Pacoima Watershed Plan in 2007, partnering on the Woodman Avenue Median in 2011, and developing the Water LA Pilot and Program in 2014, among others. Acknowledgement would be appropriate.

Response: The River Project's partnership with LADWP has been incorporated in Chapter 3 under Sustainable Landscaping.

Casey Maddren, 3/16/16

Comment: Rather than using factual information and realistic estimates to create a strategy for water use, the authors of the UWMP rely on wishful thinking with little in the way of factual data to support their assumptions.

Response: LADWP's supply and demand forecasts use historical data to set baselines for future projections. Adjustments are made to account for further changes in demographics, supply availability, supply development, and climate change to name a few. These adjustments come from a variety of internal and external planning documents and research reports. Please refer to Sections 2.3 and 11.2 for further detail.

Comment: In order to lay the groundwork for any discussion of the future of our water resources, it's important to start with a discussion of the impacts of climate change on snowpacks in the Western United States.

Response: The LAA supply projection is based on actual data from 94 years of available hydrological records. Climate change impact to LAA delivery is also incorporated in the LAA supply projection. It is based on a 2011 study conducted to evaluate climate change impacts to Eastern Sierra Nevada watershed and LAA water supply. The study is summarized in Section 12.1.2. Climate change impacts to State Water Project and Colorado River supplies are discussed in Sections 12.1.3 and 12.1.4, respectively.

Comment: LADWP's 2015 UWMP relies on SWP and MWD projections that are far from certain. MWD can't count on consistent deliveries from the Colorado River.

Response: MWD's planning efforts are detailed in its 2015 IRP and 2015 UWMP. Please refer to the following documents for further detail. http://www.mwdh2o.com/PDF_About_Your_Water/2015_UWMP.pdf and http://www.mwdh2o.com/Reports/2.4.1_Integrated_Resources_Plan.pdf

Comment: Under the heading Recycled Water Planning Efforts, the document refers to recycling projects that are in the "planning, design, or construction stage." But while a number of future projects are mentioned, almost all are currently in the planning stage. There is no detailed explanation of how much increased supply we can expect from these recycling projects. There is no timetable for building the necessary infrastructure. The UWMP does not identify the sources of revenue that will finance this infrastructure. This is crucial, since rate hikes are currently being planned merely to repair and upgrade existing water infrastructure. If we haven't even been able to maintain the current system, how can we depend on vague promises about future projects?

Response: UWMP is a long-term planning document. Summaries of individual recycled water project's use and service date are provided in Exhibits 4Q through 4T. From 2016 to 2020, LADWP plans to fund \$565 million of recycled water projects through the recently passed rate action. Please refer to Section 4.4.4 for cost and funding regarding recycled water projects specifically. Summary of the 5-year local water supply costs can be found in the Water System Rate Action Report, Chapter 3, Figure 30, and at this link, <https://www.ladwp.com/ladwp/faces/ladwp/aboutus/a-financesandreports/a-fr-waterrates/a-fr-wr-rateactionreport>.

Comment: The idea that we can rely on the SWP/MWD system to furnish us with 40,000 AF every year for the next 25 years is absurdly optimistic. Even if they had the spare capacity, the cost would likely be prohibitive.

Response: In light of the recent statewide drought, LADWP's 2015 UWMP acknowledges that water transfers are a potential supply instead of a planned supply. This is shown Exhibit's 11F, 11G, and 11H.

Comment: How can anyone believe that local supplies are not influenced by variability of hydrology as asserted in the UWMP?

Response: LADWP's Local Water Supply Program consists of projects in conservation, groundwater, recycled water, and stormwater. Conservation can be achieved through prohibiting wasteful use of water and improving efficient use of water regardless of weather. Groundwater is managed through conjunctive use with surface water against the variability of hydrology (see Section 6.11 for more details). Recycled water is originated from indoor water use, which is not susceptible to variability of hydrology. Stormwater is highly dependent on hydrology. However, it is mostly captured during wet years for groundwater recharge and managed through our conjunctive use strategies for groundwater supply. Please refer to the section entitled, "Groundwater Basin Management and Sustainability" on page 6-3 for further detail.

Comment: LADWP does not have the funding lined up for SFB treatment plants.

Response: From 2016 to 2020, LADWP plans to spend a total of \$378 million on groundwater programs. Majority of the investments will go to the San Fernando Basin Groundwater Remediation Project. Please refer to the Water System Rate Action Report, Chapter 3, Figure 30, and at this link, <https://www.ladwp.com/ladwp/faces/ladwp/aboutus/a-financesandreports/a-fr-waterrates/a-fr-wr-rateactionreport>

LADWP is also pursuing the Prop 1 funding. The Prop 1 Groundwater Grant Program is currently being developed by the State Water Resources Control Board. Final guidelines are expected to be adopted in May 2016. The application period for the first round of funding is expected to open at the end of June 2016. In September 2015 LADWP submitted a preliminary application for \$317 million in Prop 1 grant funding for the San Fernando Basin Groundwater Remediation Project.

Deborah Weinstein Bloome, TreePeople, 3/16/16

Comment: Chapter 3. TreePeople would like to emphasize that updated requirements for residential landscaping rebate programs align with our, and our partner organizations', recommendations and should include: 0% artificial turf allowed, only biodegradable weed barriers allowed, and additional existing NGOs be listed as resources so that educational programming is equitably distributed city-wide.

Response: LADWP appreciates the opportunity to meet with organizations, such as TreePeople, Surfrider, and The River Project, to discuss strategies for promoting sustainable landscape transformations. We are currently in discussions with these advocacy organizations about how best to integrate additional strategies into our landscape rebate program. The conversations have been productive and we look forward to continuing the discussion.

Comment: Chapter 7. As partners with LADWP on the Stormwater Capture Master Plan (SCMP) we recommend using the aggressive scenario values presented on page ES-18 or explaining why there is a range between the two scenarios. Please also consider including language about what conditions are needed for aggressive milestones to be pursued.

Response: The 2015 UWMP stormwater capture goal reflects the Conservative Scenario. This Scenario is fairly aggressive when compared to our past and present stormwater capture investments. Had the rate action not occurred, even the conservative scenario would've been difficult to implement. The Aggressive Scenario was developed to display the potential of Stormwater Capture but the development of these numbers are reliant on land

acquisitions, partnerships, ordinances, incentive programs, and community engagement, among others. Please see Section 7.3.4 for further detail.

The projects at Sheldon and Boulevard Pits are examples of potential stormwater capture projects that fall under the Aggressive Scenario. These are large projects that have the potential to yield a substantial amount of stormwater capture. There is a current mining operation at these locations; making them prime locations for implementing a stormwater capture project after the mining rights are exhausted. The uncertainties related to this project are the acquisition of land, finding potential partnerships, and funding.

Comment: As partners in the Greater Los Angeles Water Collaborative, we note that the LA StormCatcher project is mentioned on page 7-18; however the tank size information is incorrect. The LA StormCatcher tank sizes actually range between 420 and 1,981 gallons each. We recommend the following description to add more clarity and context: "while the cistern capacities range between 420 and 1,981 gallons, there are multiple tanks per site, and each system therefore ranges between 840 and 3,962 gallons."

Response: These changes have been incorporated.

Comment: Chapter 9. How will LADWP balance investments in both large ticket centralized infrastructure and in the development of new water transfer programs against urgent needs for investments in local supplies like stormwater capture, which can be less energy intensive, more reliable, and can lessen impacts on the environment? Please explain the balance in investments to both traditional and newer, less centralized, technologies.

Response: LADWP currently categorizes water transfers as potential supplies. The primary focus under the 2015 UWMP is to develop planned local supplies. As a result, the majority of investments will occur in areas of stormwater capture, conservation, recycled water, and groundwater basin remediation. However, if economically-beneficial transfer supplies become available for storage or delivery, LADWP may also pursue these opportunities. Please see Section 9.1.1 for further detail.

Comment: Chapter 9. Given the costs and environmental impacts of desalination, we are encouraged by LADWP's prioritization of resources for enhancing local supplies, recycling, and conservation efforts. We caution LADWP's potential future exploration of desalination because it will divert investments and upgrades in local water supply technologies which can provide the water needed in LA with fewer environmental impacts and costs.

Response: LADWP does not plan to pursue ocean desalination at this time. Current long term planning under the 2015 UWMP is focused on local supply development. This focus will assist LADWP in complying with the Mayor's Local Sustainable City pLAn, which provides long term requirements for local supply development. Please see Section 9.3.4 for further detail.

Comment: Chapter 11. The water contingency plan described in section 11.4 is very detailed, however it does not indicate how tree watering will be affected. Please include details on strategies for maintaining tree health in this report.

Response: Current outdoor watering restrictions apply to automatic sprinklers only. Customers can still hand water plants and trees with a self-closing shut-off nozzle on the hose as needed. UWMP is a water resource planning document and does not include detailed information on tree health. However, we appreciate Tree People's suggestion and are considering adding information on keeping trees healthy during the drought on our website. We do emphasize the importance of maintaining tree health during a drought through various channels, such as our partnership with non-profit groups to help water trees at Rec & Park facilities, and provide grants to communities with a focus on outdoor landscaping. We have increased one-on-one workshops in addition to classroom training to educate homeowners about California Friendly landscape and are looking to expand our education program even

more. For newly planted trees, we recommend planting sustainable trees that are adapted to our climate and will need less water.

Comment: Chapter 12. We want to highlight what we consider to be highly problematic language found in this chapter around projected climate change impacts, specifically, statements such as “there is still general uncertainty within the scientific community regarding the potential impacts of climate change within the City of Los Angeles” (p. 12-1) and “predictions of changes in precipitation are even more speculative” (p. 12-2). While the science behind projecting long-term climate impacts is highly complex and inherently uncertain, highly sophisticated research conducted locally in our region has given us valuable information that provides more clarity than what we believe is implied in this document. Furthermore, as much of the water used in Los Angeles is sourced from other parts of the state, climate change impacts experienced at water source origins will greatly affect water supply reliability in Los Angeles.

Response: LADWP has included climate change study results in Los Angeles Aqueduct supply projections for the 2015 UWMP and has also included climate change study results in service area demand scenarios. Additionally, Chapter 12 of the 2015 UWMP includes references to reports by the California Department of Water Resources (DWR) and the Metropolitan District of Southern California (MWD) which include strategies for managing the potential impacts of climate change on their respective supply resources. These resources, which LADWP has relied upon, include the State Water Project (owned and operated by DWR), the Colorado River Aqueduct (owned and operated by MWD), and MWD’s regional storage resources. LADWP will keep abreast of new studies as the science advances. Please see Section 12.1 for further detail.

Los Angeles County Metropolitan Transportation Authority, 3/16/16

Comment: This Plan mentions the Groundwater System Improvement Study (completed in February 2015) and calls out “high priority” chemicals of concern. The plan imposes stricter limits than the state government on the allowable amounts of such “high priority” chemicals in drinking water but does not make recommendations of how users of these chemicals should handle or dispose of them, nor does it call out specific remediation measures. Will the final version of the UWMP address disposal or remediation measures for the stricter limits?

Response: The final version of the UWMP will not address disposal or remediation measures for these limits. LADWP is proceeding with the necessary environmental reviews, design, permitting, construction, and startup of the groundwater remediation facilities to effectively remediate the SFB. Recommendations on how users of these chemicals should handle or dispose of these chemicals is not of the purview of the LADWP, but rather the purview of the applicable State regulatory agency (i.e. Department of Toxic Substance Control, Regional Water Quality Control Board and others) depending on the particular chemical and use.

Comment: How does the LADWP track the potential stormwater harvesting capacity for implementation strategies, such as rain barrels and cisterns, which are largely privately owned? Does it make a difference if owners are not trained about the use?

Response: We have kept track of the number of rain barrels installed throughout the City through the rain barrel rebate. We assume that during an average rain year, each rain barrel fills up a certain number of times. Based on this number, we come up with an estimated total rain barrel benefit for the City. We have not conducted research on the difference between trained and untrained owners. However, typically those who install rain barrels invest some of their own money and are highly motivated to harvest rainwater to reduce their potable water use. We have recently started a cistern rebate and are also studying the benefits of cisterns through a pilot project. We have partnered with TreePeople on this pilot project which installed 6 cistern systems throughout the City. These cisterns are currently being monitored for water supply benefits for potential wide-scale implementation. Please refer to Section 7.5.1.2 for further detail.

Comment: Without a measurement instrument for these water conservation strategies, how conservative or liberal is the calculation of onsite stormwater storage?

Response: The calculation for on-site direct use projects and programs is based on a variety of assumptions. It was assumed that on-site direct use would be implemented in regions where infiltration is not beneficial, and that there is a 100% impervious area within each parcel. It was also assumed that certain implementation rates for different land uses are used – these assumptions are based off of the Water Augmentation Study and the SCMP's Technical Advisory Team. A detailed description of assumptions is in the SCMP. The estimate in the SCMP of achieving 2,000 AFY by 2035 through on-site direct use is strongly reliant on factors outside of our control, including implementation of the LID ordinance and other incentives. Please see Stormwater Capture Master Plan website at <http://www.ladwp.com/scmp> for further detail.

Comment: Page 12-5 - What are the "*business-as-usual*" emission levels? Are these the levels for the County specifically or based on global projections?

Response: The "business-as-usual" emissions levels refer to projected greenhouse gas concentration trajectories defined by the Representative Concentration Pathway 8.5 (RCP 8.5) scenario, adopted by the United Nations Intergovernmental Panel on Climate Change for its Fifth Assessment Report (AR5) in 2014. RCP 8.5 represents the worst case of all scenarios in the AR5. RCP 8.5 was downscaled to represent the greater Los Angeles area for the UCLA study. For more details, see the UCLA study titled "Mid-Century Warming in the Los Angeles Region."

Comment: Page 12-5, first paragraph last sentence – "*..the most likely warming increase was projected to be somewhat smaller.*" What is the actual definition of this "smaller" warming increase?

Response: The word "smaller" is used in reference to the degree of warming when comparing the "mitigation" scenario to the "business-as-usual" scenario. The comparison is general and is not meant to be defined quantitatively in the passage. For more details, see the UCLA study titled "Mid-Century Warming in the Los Angeles Region."

Comment: Page 12-5, second paragraph last sentence – What does 42,900 AF look like in regards to households/year or some other measurable comparison?

Response: One AF of water is enough to serve 3 households per year. 42,900 AF per year is enough to serve 128,700 households per year.

Comment: Page 12-6, first paragraph – "*It was found that there is a wide range of overall efficiency and resiliency within the existing system and that certain facilities are more readily adaptable to future changes than others.*" Are there factors that make certain systems and facilities more readily adaptable? Is it a location-based outcome?

Response: The reference is from Task 4, Final Report, Section 4.4 – Future Considerations of the LA Basin Study, <http://www.usbr.gov/lc/socal/basinestudies/LABasin.html>. The ability to adapt is based on an existing site specific characteristic.

From: Joel Shapiro
Sent: Friday, January 29, 2016 12:42 PM
To: UWMP; Joel Shapiro
Subject: Resident comment on long term H2O Plan

Hello LADWP,
I am a physician, home, business and property owner in Venice and Los Angeles. I am a 3rd generation "Los Angelian".

My simple comment is lets get off the addiction of imported water. Many civilizations have collapsed due to water issues. I hope we can be smart and avoid this....

...enough of the emotion...

I am sure you are aware we throw away into Long Beach Harbor, via the LA River, 440,000 acre-feet of water per year, while importing 660,000 acre-feet from the already overtaxed Colorado River, Sacramento Delta and the Owens Valley. Moving water around our State is also the largest single source of energy use in the California.

I am happy to see the Mayor's goal of 50% reduction of imported water by 2025, only 9 years away. This is ambitious and an excellent start.

We must use our vast intelligence to see how we can reuse all (but the needed trickle necessary for the aquatic ecosystem in Long Beach Harbor) the LA River water discharge. Perhaps a first pass is to clean it to a gray water standard and use in the lower part of the LA Basin. This would relieve the demand for water from that area. Can we also form some wetland/water reclamation projects as well?

Water is the survival issue of the future for Southern California.
I am certain, if we can go to the moon in the 1960's, we can solve this critical challenge.

Sincerely,
Joel Shapiro, M.D.
Founder Electric Lodge
Co Founder Arts Earth Partnership
Co Founder LA River Expeditions.

From: Grant Hoag
Sent: Wednesday, February 24, 2016 10:03 AM
To: Hsu, Chiun-Gwo (Simon)
Cc: Kwan, Delon; Dugan, Peter
Subject: Re: LADWP's DRAFT 2015 UWMP

Exhibit ES-G is wrong, and completely different than Exhibit 2D, which also appears incorrect. Specifically, there is no way that outdoor water use for Industry is 48% (Exhibit 2D); nor can outdoor water use for multi-family be 32% (Exhibit ES-G). While the problem is clear, the solution - not so much. I do like the methodologies used to identify the indoor/outdoor ratios.

Grant Hoag, P.E., Ratepayer Advocate
City of Los Angeles Office of Public Accountability

Follow-up telephone comments:

The indoor/outdoor water use percentages need to be updated or qualified with potential shifts since 2010.

March 9, 2016

Attn: Simon Hsu
Los Angeles Department of Water and Power
111 N. Hope St., Room 1460
Los Angeles, CA 90012

Subject: COMMENTS LADWP 2015 DRAFT URBAN WATER MANAGEMENT PLAN – HIDING THE SHORTAGE

It's important to emphasize the importance of the Urban Water Management Plan because every Environmental Impact Report uses this document to describe a project's impact on water. EIRs drawn up for every new project in the City of Los Angeles cite the future water supply data from the UWMP as evidence of sufficient future water supply for the project.

The LADWP 2015 Draft Urban Water Management Plan, like past UWMP's, continues to mischaracterize the city's availability of water by suggesting that it has access to water that it does not have access to. The draft is a thinly disguised effort to hide the city's low water supply levels from the planning process thus making the EIRs that rely on it susceptible to legal challenge.

To understand why the LADWP is doing this, we first need to remember that the Urban Water Management Plan is first and foremost a planning document.

The water supply totals found in the *Service Area Reliability Assessments* for Average, Single and Multi-Dry years found in the UWMP¹ are repeatedly cited in Environmental Impact Reports (EIR) as evidence of sufficient water supply to support the projects that are in the review process before the city planning department.

Conflicting Tasks

The LADWP has been faced with two conflicting tasks going back as far as 1985. The department's first task is to continue providing enough water to the city even while supply has fallen from an average of 680,000 Af/y to 610,000 Af/y due primarily to Court directed reductions of Aqueduct water.

To meet this task, the department has been a leader in stretching out water supplies using innovative hardware conservation strategies (low flow shower heads and toilets, water efficient washing machines, smart irrigation) and economic incentives (tier pricing), and education.

However, in conflict with this first task, the LADWP's second task is to provide *evidence of a growing water supply that is sufficient for continued growth*. The department wants to avoid at all cost, producing a document that suggests that the water supply is not scaling up with growth that city planners and elected officials want to achieve.

A close analysis of the department's historical supply data from the past twenty years, has shown conclusively that the department's actual real deliveries of water have consistently fallen far short of their projections. This leads to the conclusion that the projected supply figures

Exhibit ES-8
Service Area Reliability Assessment for Average Weather Year

Demand and Supply Projections (in acre-feet)	Average Weather Conditions (FY 1951/62 to 2010/11) Fiscal Year Ending on June 30				
	2020	2025	2030	2035	2040
Total Water Demand ¹	811,888	644,700	652,998	661,888	675,788
LA An Water Demand Target	485,680	533,080	540,180	551,180	565,680
Existing / Planned Supplies					
Conservation (Additional Active ² and Passive ³ after FY14/15)	125,800	110,900	111,600	109,100	108,100
Los Angeles Aqueduct ⁴	275,700	293,400	291,000	288,600	286,200
Groundwater ⁵ (Net)	112,670	110,670	106,670	114,670	114,070
Recycled Water					
- Irrigation and Industrial Use	19,800	29,000	29,000	42,200	45,400
- Groundwater Replenishment	0	30,000	30,000	30,000	30,000
Stormwater Capture					
- Stormwater Reuse (Harvesting)	400	800	1,200	1,600	2,000
- Stormwater Recharge (increased Pumping)	2,000	4,000	8,000	16,000	18,000
Subtotal	536,370	578,770	587,470	601,170	602,770
MWD Water Purchases With Existing/Planned Supplies	75,430	65,930	65,430	60,630	74,930
Total Supplies	611,800	644,700	652,900	661,800	675,700
Potential Supplies Water Transfers ⁶					
Subtotal	40,000	40,000	40,000	40,000	40,000
MWD Water Purchases With Existing/Planned/Potential Supplies	35,430	25,930	25,430	20,630	34,930
Total Supplies	611,888	644,700	652,998	661,888	675,788

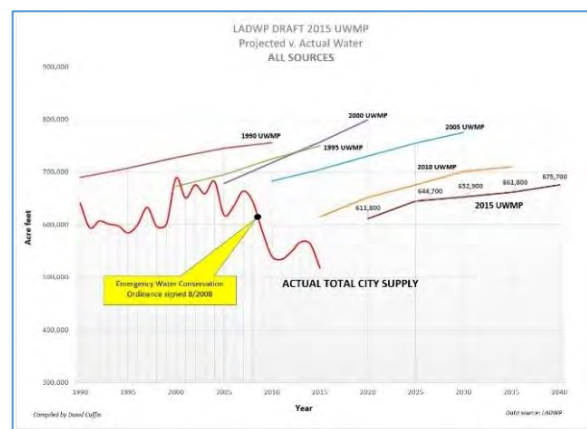


Figure 1- LADWP has consistently padded water projections with water the department could not access.

found in the current draft and past UWMP's are at best, *very poor estimates*, or at worst, that the department has been *banking on paper water to promote the appearance of sufficient supplies*.

California's Urban Water Management Plan Act along with SB 610 and SB 221, requires that utilities update the UWMP every five years to demonstrate long term water supply availability before approving new projectsⁱⁱ.

Over time this task has become tougher for the LADWP to prove as the city and the regions surrounding it grow, and various interests throughout the state assert their rights to the state's water supply. Compounding the problem, the department has never rejected Water Supply Assessments (WSA) citing insufficient water supplies for large projects that are subject to SB 610. Instead the department has always reported to planners and developers that there is sufficient water for growth despite the shortage.

In recent years, the LADWP has found that the sum total of aqueduct, groundwater, recycled water and MWD water was no longer enough to support the city's total supply requirement needed as evidence of sufficient growth. The department was also reaching the end of its credibility when it's aqueduct projections repeatedly exceeded 300,000 acre-feet per year (AF/y).

To solve this problem, the 2010 UWMP introduced new categories of supposedly new water. Some categories could result in real water such as stormwater capture and indirect potable reuse. But other categories were simply fuzzy water meant to artificially raise the total supply using paper water making it appear in EIRs that there would be long term surpluses available for growth. The 2015 Draft UWMP continues with this practice.

A Line-by-Line Analysis of the Draft UWMP's Future Water Supply Projections

The following is a review of the 2015 Draft UWMP with line by line analysis and comments of the supply projections found in the Draft's Service Area Reliability Assessments table for Average years. I'll show where the real water is and what's vulnerable to challenge.

- **Conservation**

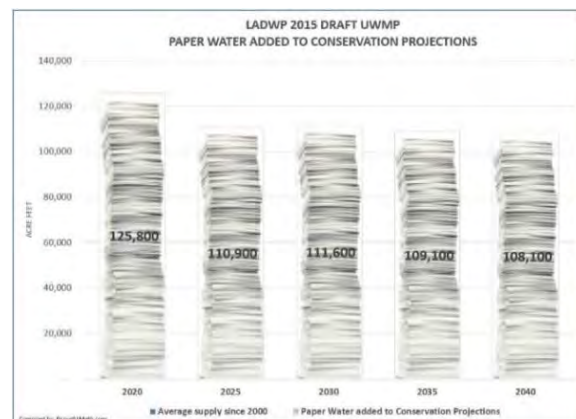
Plainly stated, *Conservation is not a supply*. Conservation should be used to lower the baseline demand. From there, the department should demonstrate how it will meet that.

Conservation (Additional Active ² and Passive ³ after FY14/15)	125,800	110,900	111,600	109,100	108,100
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Historically, the LADWP had always deducted conservation savings from the baseline demand side and from there, it calculated the required supply. However, because the falling aqueduct supply levels could no longer drive total supply above 700,000 AF/y to support an UWMP that was favorable to planning documents, the department shifted tactics in 2010 and began using Conservation as a 'supply' to artificially bump up the total supply figures.

The department's 2015 draft shows Conservation as an 'existing or planned supply' that will contribute up to 125,800 Af/y to the city's water portfolio. But simply put, this is 'paper water'. This is done to hide a portion of the total shortage the department doesn't want seen in Environmental Impact Reports that are attached to projects for review by the planning department.

There is a simple test to see if Conservation or any other category of water is real water or imaginary water. The **2009 California Water Plan Update**ⁱⁱⁱ describes 'paper water' as water that "*utilities claim they have access to, but is difficult or impossible to access for various reasons*".



Using that definition in our test, if we eliminate all of the city's real incoming sources of water such as the aqueduct, groundwater, recycled water, stormwater, and MWD water, and leave the city with only Conservation, how much water would the city have access to and available to use?

Answer: None. The 125,800 AF of 'water' in the Conservation category that the department claims it has access to is not accessible. You can't wash your hands with this water and you cannot sip it from a glass. Consequently, it's paper water and not a supply.

Asserting that 'Conservation' is a water supply allows the department to manipulate the UWMP's supply projections, making it appear that the city's total available supply will be 611,800 Af/y in 2020 and grow as high as 675,700 Af/y by the year 2040. When we remove this imaginary water from the table, the departments total projections fall to a dismal 536,370 Af/y (Figure 11) and over time it grows to just 600,770 AF/y by 2040. This is would fall more in line with the city's historical supply. (Figure 3)

I'm sure the department sees another benefit to asserting that Conservation is a supply. It doesn't have to report the actual results like it does with real water from the aqueduct, groundwater, MWD, and recycled water which are all measured as they enter the water system.

Placing Conservation on the 'supply side' of the equation creates a fuzzy math scenario of future water supply that does not belong in planning documents that rely on the UWMP. The department is basically saying, 'If the public reduces its gallons per capita daily and meets 50% of the 'projected' conservation level, then that's like having 638,235 AF/y' or 'if the public could meet 100% of the city's projected conservation level, it would be the same as reaching 675,100 AF/y'.

- **Los Angeles Aqueduct**

Los Angeles Aqueduct ⁴	275,700	293,400	291,000	288,600	286,200
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The next item of 'existing or planned supplies' in the table is the Los Angeles Aqueduct. No longer does the LADWP find William Mulholland's engineering marvel worthy of top billing anymore even though it continues to be the city's largest owned producer of water in the city's supply portfolio. Instead it appears that the department wants the public's optics to be focused on 'Conservation' in the UWMP even though that's not real water like the aqueduct.

Using paper water, the Draft 2015 UWMP hides 68,030 to 85,730 AF/y of the city's total supply shortage in the Los Angeles Aqueduct projections. It does this by seriously over projecting how much water will be available through the aqueduct system.

The aqueduct's actual average supply between 2007 and 2012^{iv} (Figure 4) is just 207,670 AF/y. The 2015 draft projects long term supplies up to 293,400 Af/y.



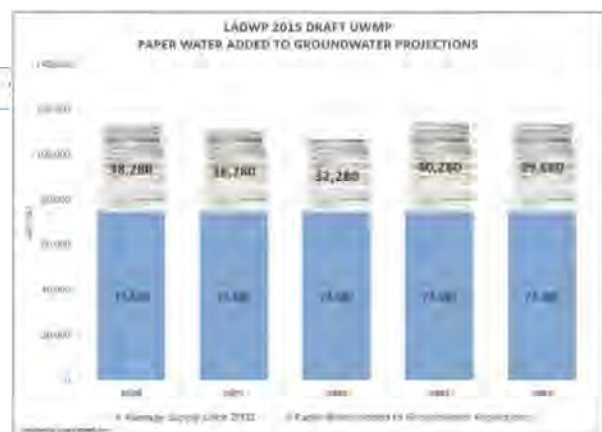
Given the aqueducts long term supply average and the permanent Court ordered environmental constraints on the aqueduct supply, there is no reason to believe that future aqueduct supplies will average higher than 227,000 Af/y. Even if the department is able to lower the amount of water needed to mitigate Owens Basin dust levels.

- **Groundwater**

Groundwater ⁵ (Net)	
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The departments next major source of domestic water supply and third on the list of 'existing or planned supplies' is Groundwater. Like every UWMP before it, the Draft 2015 UWMP continues citing far more access to groundwater than the department really has access to.

This conclusion is made by comparing the last 15-year average groundwater supply of just 74,390 AF/y (2000



and 2015) with the drafts projections of 112,670 to 114,070 AF/y. Anything more than 74,390 AF/y is paper water which is used to bump up the total supply and hide the departments shortage in planning documents. **(Figure 5)**

From a historical perspective, there is simply no evidence that the department will meet the year to year higher projections they cite in the current draft.

EIR's produced between 1995 and 2016 all cited UWMP projections claiming there would be sufficient water for their projects, in part because of the promise that future groundwater supply contributions would exceed 100,000 AF/y.

- **Recycled Water – Irrigation and Industrial**

Recycled water is next item in the 'existing or planned supplies' in the Draft 2015 UWMP. The department split the Recycle Water category between two sub categories back in 2010 and that continues today. They are 'Irrigation and Industrial Use' and 'Groundwater Replenishment'.

- Irrigation and Industrial Use	19,800	29,000	39,000	42,200	45,400
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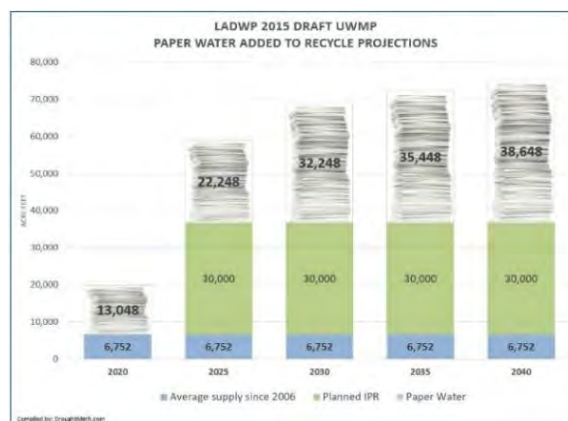
Irrigation and Industrial Use, better known as purple pipe is projected to contribute 19,800 AF/y of water into the city water system by 2020 and increase to 45,400 AF/y by 2040. However, the departments history of meeting purple pipe projections suggests that they will not come close to meeting these new projections either. Over the last eight years the department's average has been just ~7,500 AF/y. **(Figure 6)**

EIR's produced between 2010 and 2016 all cited the 2010 UWMP claiming there would be sufficient water for their projects, in part because of the 20,000 AF/y of recycled water distributed by purple pipe in the city's water system by 2015.

However, the department missed that mark badly with only ~9,800 AF of measured supply by September of 2015.

Earlier UWMP's promised that even more recycled water stating up to 29,000 AF/y would have been available by 2015.

Given that developing a more extensive purple pipe distribution system may not be cost effective over the long term, there is no reason to believe that Recycle Water-Irrigation and Industrial supply will exceed 15,000 Af/y over the next twenty-five years.



At this level, one can only conclude that the 2015 Draft UWMP uses this paper water in the Recycle Water-Irrigation and Industrial category to effectively hide up to 30,400 AF/y of the city's total supply shortage.

- **Recycled Water – Groundwater Replenishment**

- Groundwater Replenishment	0	30,000	30,000	30,000	30,000
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The item on the 'existing or planned supply' supply table is Groundwater Replenishment. This is not expected to begin contributing the city's water portfolio until 2025. Groundwater Replenishment is a treated wastewater program known as Indirect Potable Reuse which is similar to Orange County's successful IPR program.

If the department is successful at rolling out Indirect Potable Reuse, this may turn out to be a real supply. How much we actually see entering the system on a year to year basis remains to be seen.

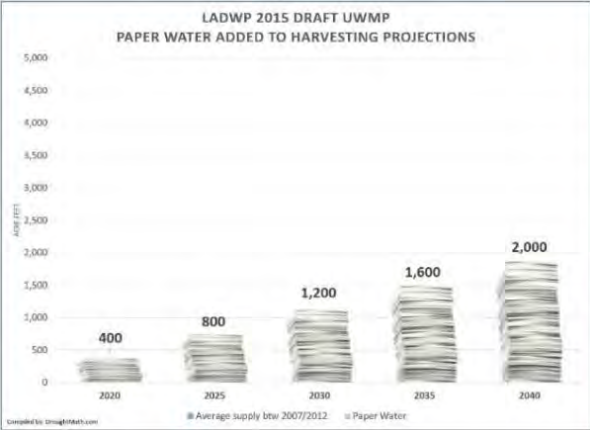
- **Stormwater Capture – Harvesting**

What was new to the 2010 UWMP but considered only a 'potential supply', Stormwater Capture has been undeservingly upgraded to a 'existing or planned supply'. Stormwater Capture is split between sub categories, Stormwater 'Reuse' and Stormwater 'Recharge'.

- Stormwater Reuse (Harvesting)	400	800	1,200	1,600	2,000
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Stormwater Reuse (Harvesting), is the sixth ‘existing or planned supply’ in the table. Harvesting, is a paper water category consisting of Rain Barrels and Cisterns. The department claims that these components will be contributing 400 AF/y to the city’s water system by 2020 and will subsequently increase to 2,000 AF/y by 2040.

Over the last six years, projects working their way through the planning process claimed that they would have sufficient water supply to support them, in part because of the 2,000 AF/y of Harvested water that would be available to the city by 2015 and 10,000 AF/y by 2035. Development projects throughout the city parroted this claim in their EIR’s but the department could never measure it nor report it. **(Figure 7)**



This category fits the definition of paper water because the department cannot access it. At best the department can only make assumptions about the quantity of water captured in rain barrels and cisterns. Such claims however are not suitable for planning documents such as environmental impact reports because they are based on guesses. The state generally recognizes supply only as water that can be measured as it enters the system.^v

Rain barrels and cisterns are back yard, privately owned containers that do not have gages mounted to them that report back to the utility. *There is no way the LADWP can tell if they are actually in use, whether they’ve collected rainwater or if they have been repurposed for other uses.*

Given that Harvesting consists entirely of paper water, one can only conclude that the Draft 2015 UWMP uses in the Stormwater Reuse category to hide 400 to 2,000 AF/y of the city’s total supply shortage.

- **Stormwater Capture – Recharge**

- Stormwater Recharge (Increased Pumping)	2,000	4,000	8,000	15,000	15,000
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Next on the list of ‘existing or planned’ supplies in the draft UWMP is Stormwater Recharge. Over the years the city has relied on ‘natural recharge’ in the San Fernando Basin for groundwater pumping, but this has severely decreased due to urbanization, led by the city’s thirst for high density development and road construction over permeable soil.

The LADWP intends to build an infrastructure in the San Fernando Basin that will capture up to 15,000 AF/y of water during intense rainwater events and allow it to infiltrate into to the ground much like natural recharge.

This may very well be another form of supply that is difficult to access given that it relies on rain events. For example, in both 2015 and 2016 it was predicted that El Nino would bring heavy rains to the Los Angeles area but that did not happen. Over the past three years, the drought has seriously reduced rainfall that would have contributed to both natural recharge and Stormwater Capture by way of recharge.

Furthermore, this new effort appears to be more about an effort to stem the further declines of groundwater shortage than to find new water. It could take decades before a payoff is seen if ever. **(Figure 13)**^{vi}

Recharge will be subject to the same meteorological events that affect groundwater pumping where the latter has never met the long term projections found in past UWMPs. There is no guarantee that Recharge efforts will result in 15,000 Af/y supply until the program is in fully implemented and the long term averages can be measured as it enters the city’s water system. How much we actually see entering the system on a year to year basis remains to be seen.

- **MWD Water Purchases with Existing/Planned Supplies**

MWD Water Purchases					
With Existing/Planned Supplies	75,430	65,930	65,430	60,630	74,930

‘MWD Water Purchases’ is an interesting category because the department has consistently ‘underestimated’ how much it will buy from the Metropolitan Water District.

This happens because as previously noted, the LADWP claims it has access to large amounts of water it doesn’t have access to. The department then has to make adjustments for the shortages by quietly purchasing additional water from the MWD.

The Draft 2015 projections are stunning given that it represents a 68% drop from the 2010 UWMP and worse, a projected 80% drop from the real purchases.

Between 2000 to 2015, the LADWP projected it would be purchasing an average of 220,881 AF/y from the MWD. But during this time the actual average supply it purchased from the MWD during that time was 47% higher at 325,570 AF/y. (**Figure 12**)

This clearly demonstrates that the LADWP projections for MWD water have been seriously understated as a result of its supply projections being so full of paper water. The department’s MWD projections are simply not reliable.

Given how much paper water is in this draft UWMP which includes the so-called ‘Conservation’, there is no evidence that the LADWP will be able to meet those projections and subsequently limit MWD purchases at this level unless city leaders intend to deliberately deepen the city’s water supply shortage by plunging the city into a Phase IV or Phase V restrictions.

- **Transfers**

Water Transfers⁶	<u>40,000</u>	<u>40,000</u>	<u>40,000</u>	<u>40,000</u>	<u>40,000</u>
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Over the last six years, EIR’s for projects working their way through the planning process claimed that they would have sufficient water supply to support them, in part because 40,000 AF/y of Transfer water would be available to the city by 2015. However, the department was not able to access this water that so we can firmly place this in the category of paper water. (**Figure 9**)



With the ‘water market’ turning increasingly bleak, the LADWP rightfully did not include Transfers as a ‘Planned Supply’ in the draft as it did in the 2010 UWMP. The department instead downgraded Transfers to a ‘Potential Supply’. However, it still remains on the table making it ‘appear’ as if it is accessible to decision makers.

The chances that the department will have access to this water is fairly remote given that there no willing sellers in the Central Valley or Northern California and it’s likely that the department would find itself bidding against the well-financed Metropolitan Water District.

- **MWD Water Purchases with Existing/Planned Supplies and Transfers**

MWD Water Purchases					
With Existing/Planned/Potential Supplies	35,430	25,930	25,430	20,630	34,930

The tenth and last item in the Draft 2015 UWMP Services Area Reliability Assessment is an alternative MWD Water Purchase should the LADWP be able to secure contracts for water in the ‘Transfer’ category. It states that if the LADWP were to be able to secure contracts for 40,000 AF/y of Transfer water, this would result in lower MWD purchases amounting to ~20,630 to 35,430 AF/y. Should Transfers occur, it’s unlikely that the MWD projections could be held this low for the same reasons described the ‘MWD Water Purchases with Existing/Planned Supplies’ section above.

Charting LADWP’s Use of Paper Water

To illustrate the LADWP’s consistent claims of having access to water it cannot access, this analysis includes the following charts that clearly show the departments projected long term normal year surpluses in past UWMPs, against the actual total supply reported by the department. In a report ‘Water for Growth’, the author noted that this practice raises the possibility that these utilities are banking on ‘paper water’.

projections of supply and demand; and, when available, these detailed series often deviated considerably from aggregate figures presented elsewhere in the plans. A majority of utilities reported considerable normal-year surpluses, both now and 20 years hence, raising the possibility that many are banking on ‘paper water’ for their margin of comfort.

Progress is clearly needed to bring UWMPs to the level where they can serve as a basis for assessing long-term supply reliability. The “show me the water” laws have raised the stakes, because a well-documented UWMP can be used to demonstrate water availability for new development. The next round of UWMPs, due in December 2005,

Paper water is water that the utility claims to have access to but cannot access it because it is used elsewhere in the state’s water system. These charts demonstrate the fact that the LADWP has for decades, routinely padded its supply projection using paper water to bump up the perception of available water in the UWMP to avoid producing a document that will otherwise show shortages instead.

Figure 2 – ‘Hanak (2010): Water for Growth’ suggests many utilities count on water used by others in state water system.

The LADWP’s UWMP projections are routinely cited by Environmental Impact Reports for projects and developments seeking permits as evidence of sufficient water supply as they work their way through the city’s planning department. The ‘actual supply’ amounts shown below demonstrate that the LADWP has been unable to meet these projections though out this entire period from 1990 through 2015.

LADWP Projections V. Actual Supply

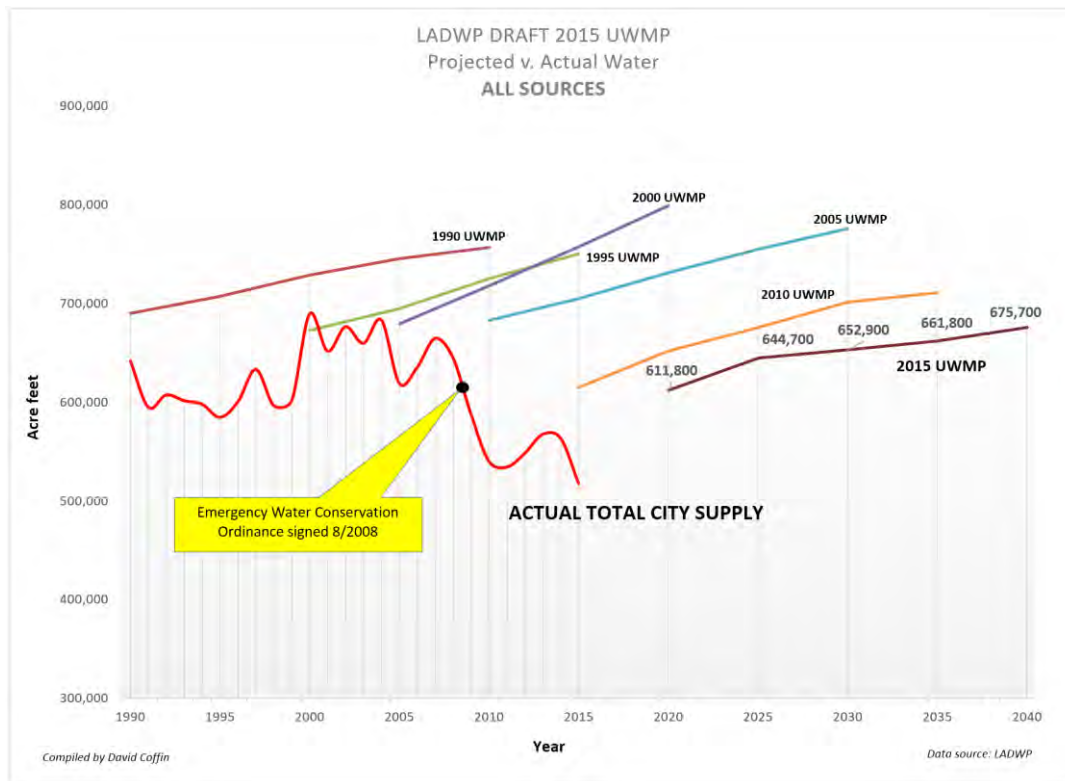


Figure 3 - Total City Water Supply - Year after year, decade after decade the LADWP has repeatedly exaggerated how much water would be available for future growth. The department was never able to access this water which resulted in an onerous Emergency Water Conservation Ordinance.

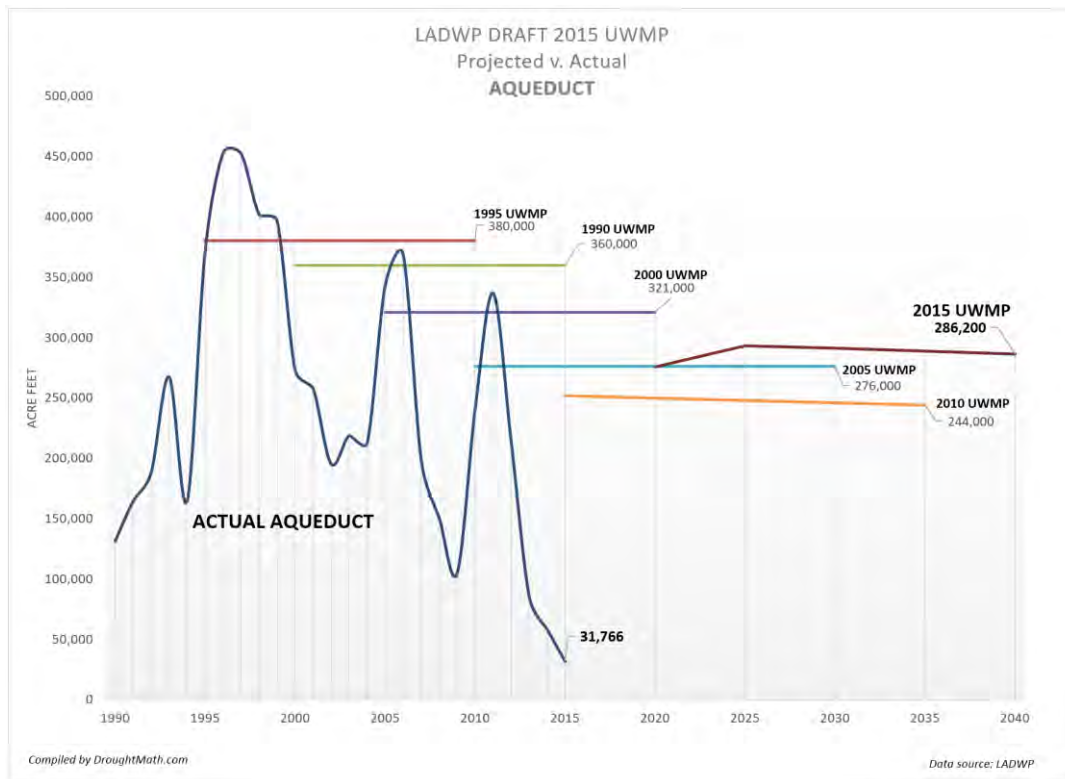


Figure 4 - Los Angeles Aqueduct - The 2015 Draft UWMP continues to cite quantities of aqueduct water that is far over the average of 207,670 acre-feet since 2007.

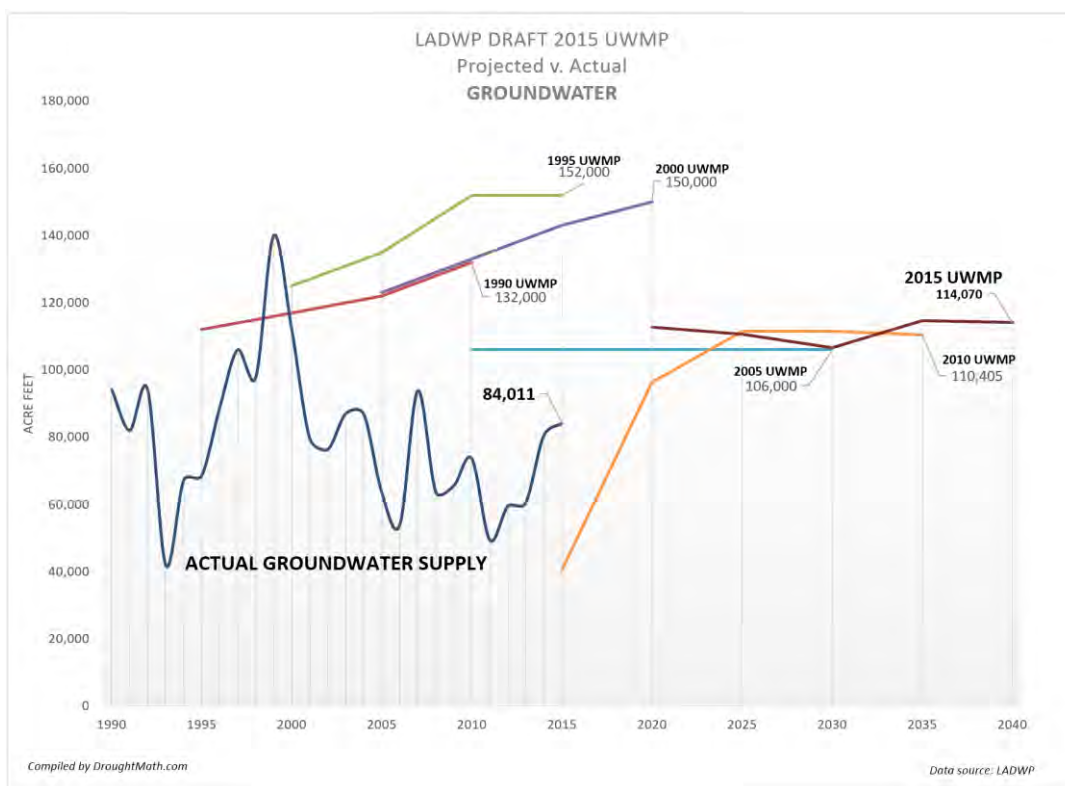


Figure 5 - Domestic Groundwater - For decades the LADWP has told planners that it will have over 100,000 acre-feet of groundwater which will be sufficient for future growth. It never came.

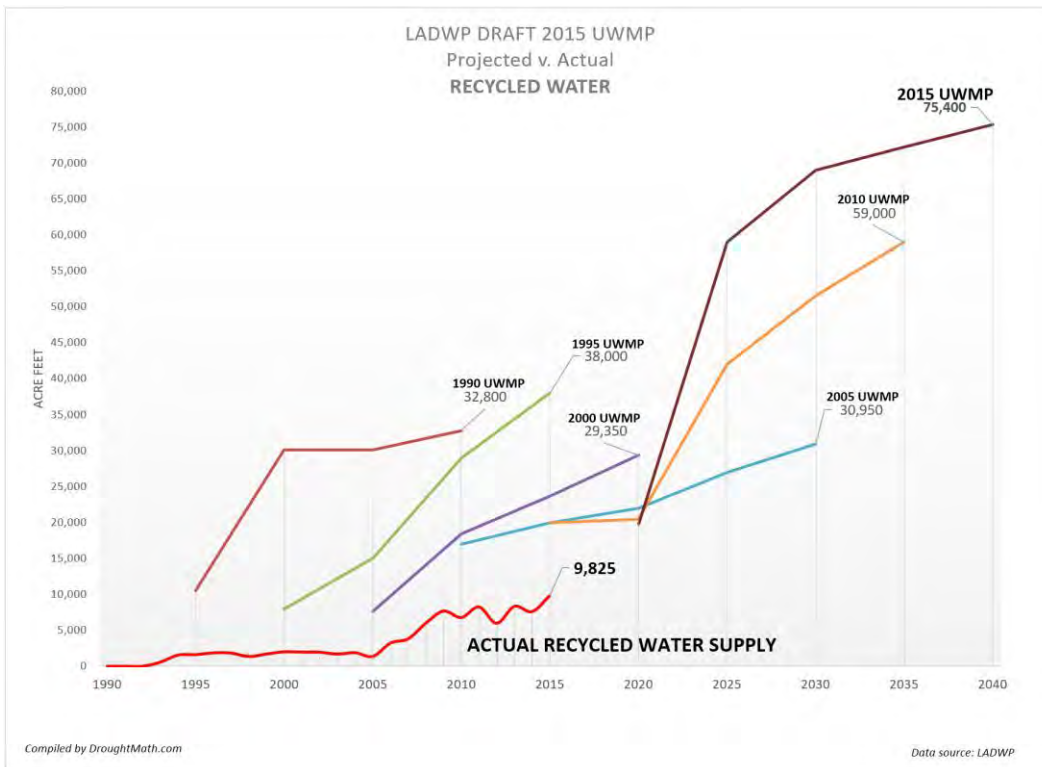


Figure 6 - Recycled Water - For decades EIR’s have cited LADWP projections telling planners that there will be an abundant supply of recycled water ranging from 30,000 to 59,000 acre-feet. The department hasn’t even met its 1990, 1995, 2000, or 2005 promises.

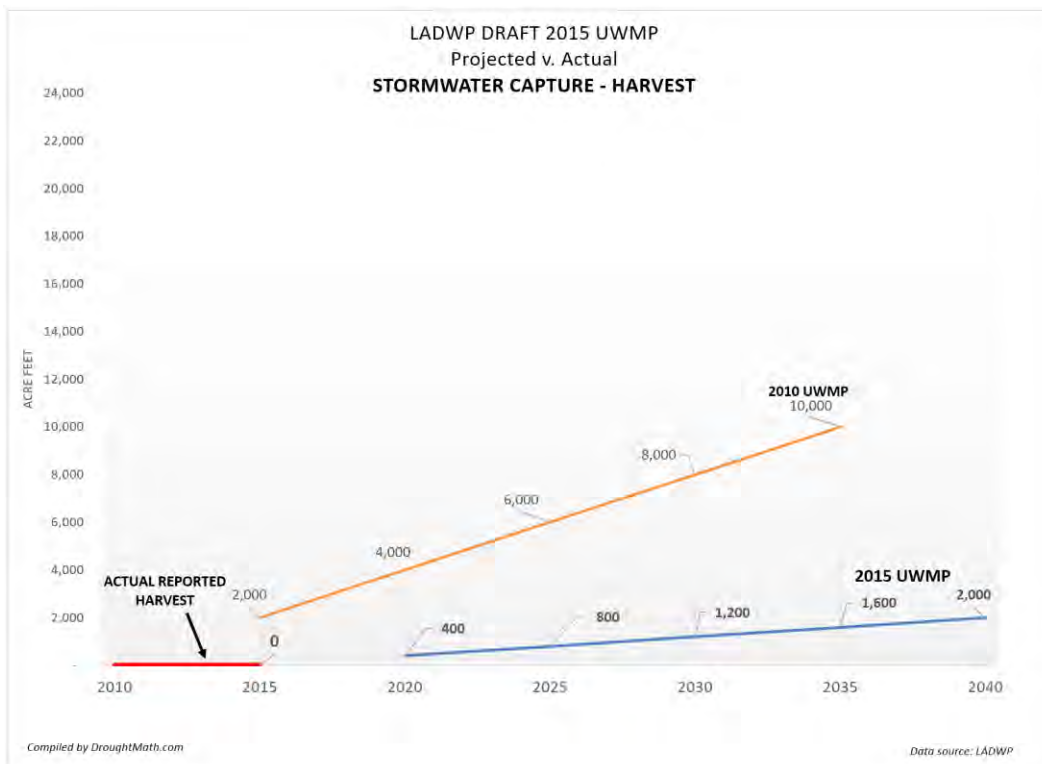


Figure 7 - Harvest (Rain Barrels & Cisterns) - In the most recent UWMP’s, the department had to invent new categories of water that can’t be considered a supply because it never enters the departments water supply and it can’t be measured.

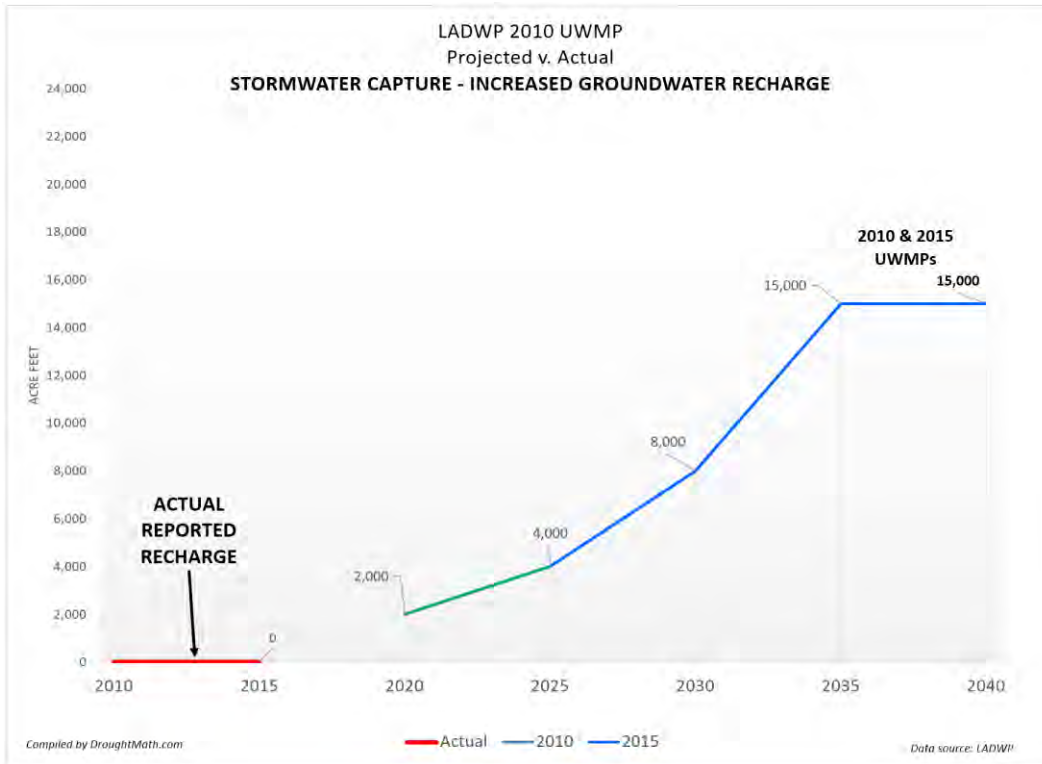


Figure 8 - Recharge (Indirect Potable Reuse) - Some of the LADWP’s new categories of water may not result in increases of water. The efforts to recharge the basin are likely being made to stem further losses of groundwater.

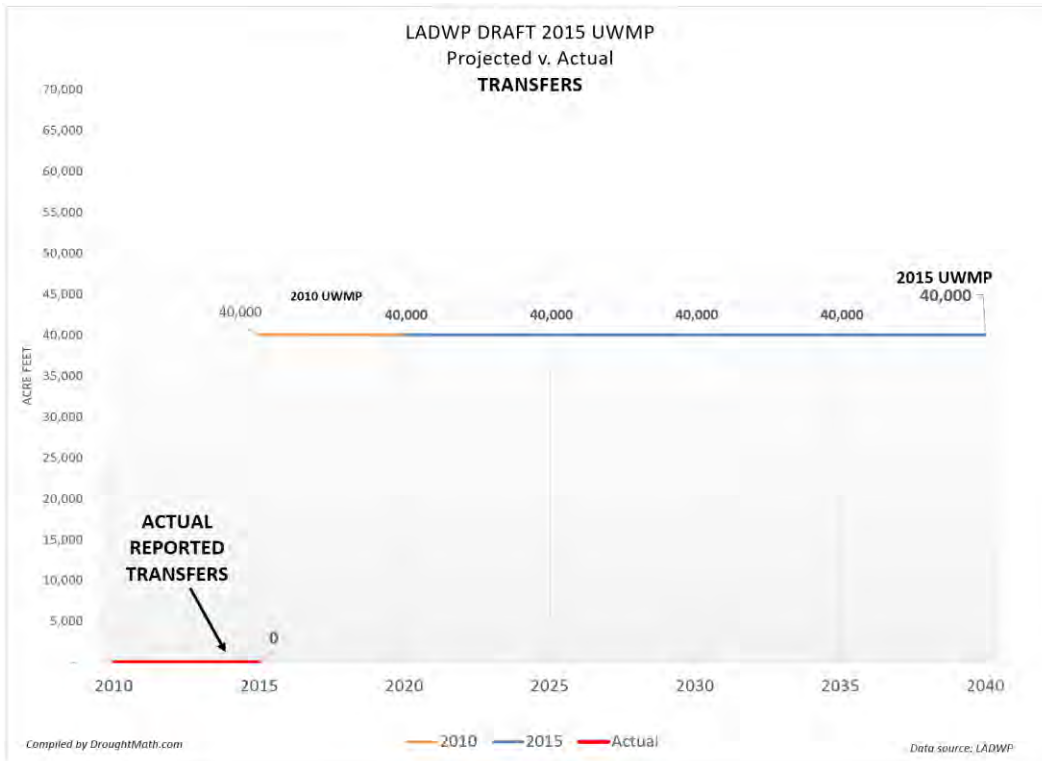


Figure 9 – Transfers - The LADWP told planners that 40,000 acre-feet of ‘Transfer’ water would be available for the supply projects they were evaluating starting in 2015. It never came.

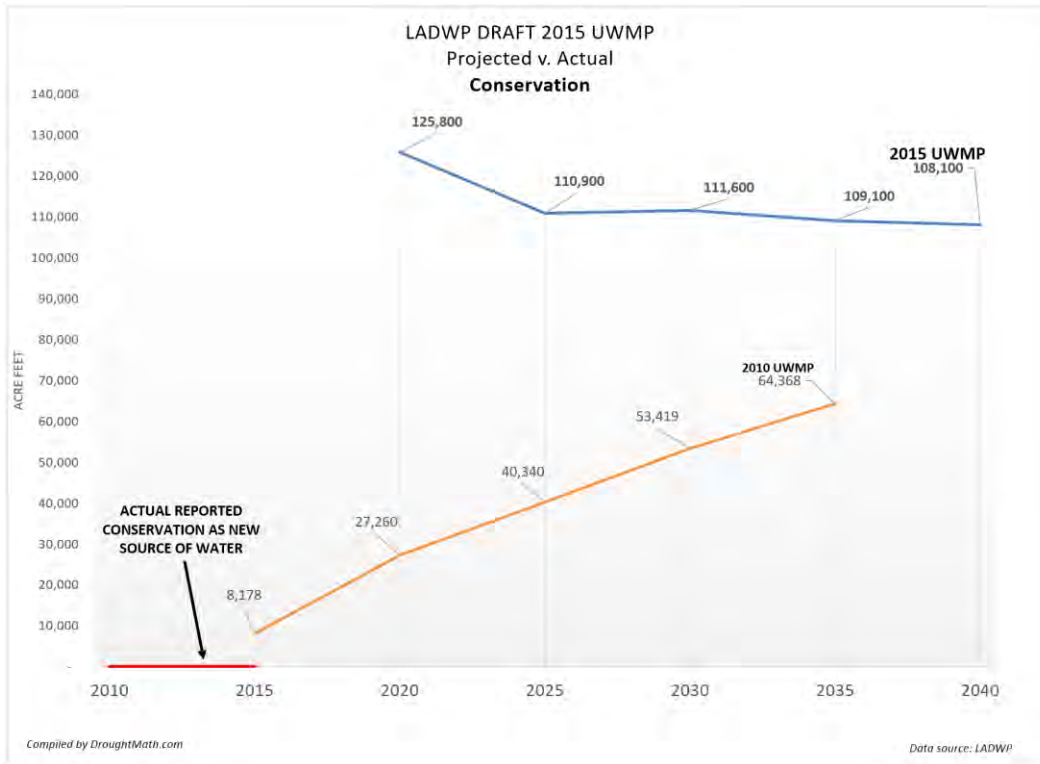


Figure 10 - Conservation – Project v. Actual Deliveries - The LADWP told planners that 8,178 acre-feet of water would be available by 2015 to the supply projects they were evaluating. It never came. The city has had to double-down on conservation just to get by.

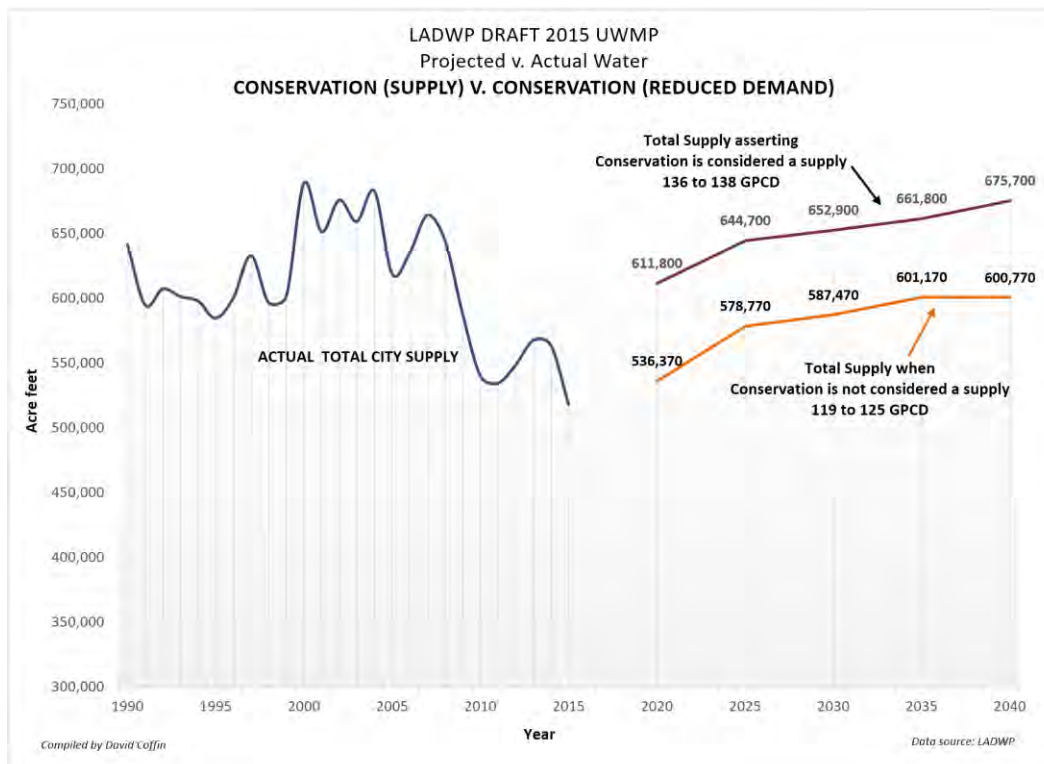


Figure 11 - Conservation – Lowered Baseline V. Paper Water - To preserve the appearance of sufficient future supplies without having to acknowledge that seriously difficult conservation efforts would be needed, the department calls conservation a supply. If the conservation targets are not met, the real result is a much smaller supply than the department is willing to admit to.

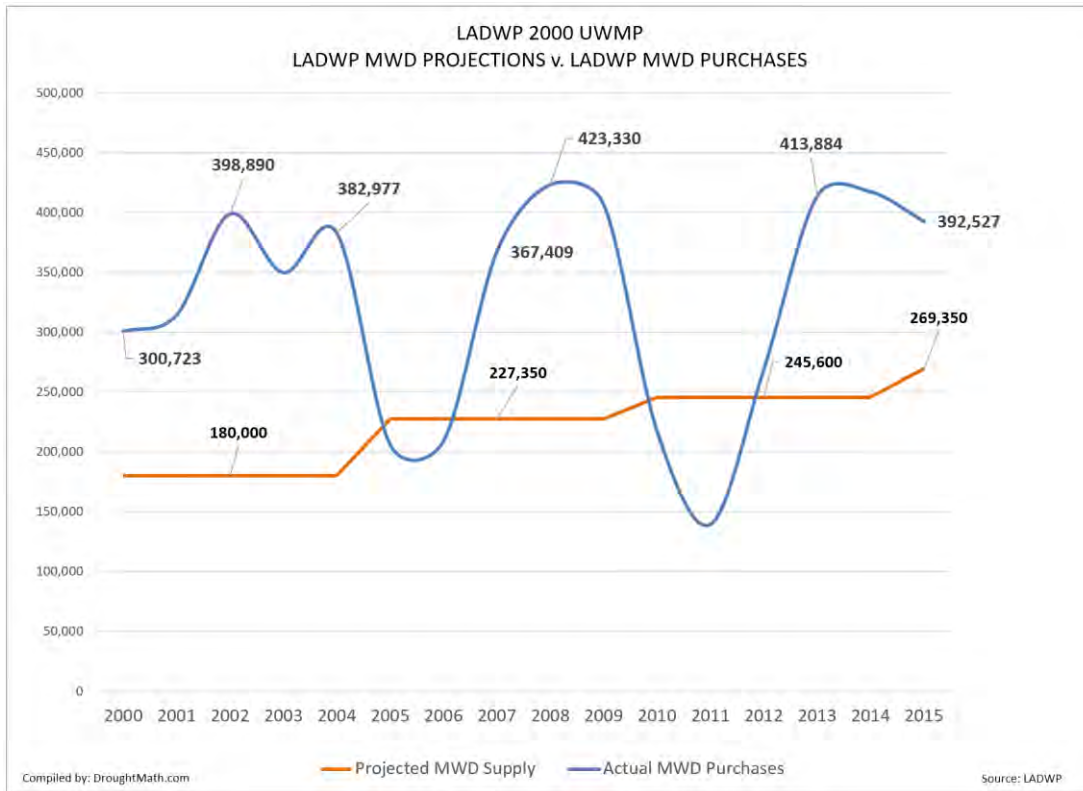


Figure 12 - Projected MWD Purchases v. Actual MWD Purchases - The LADWP consistently low-balls MWD projections. When the department fails to meet it stated goals, it has to purchase large amounts of MWD water. The 2015 UWMP takes this practice to new lows at just 60,630 acre-feet per year.

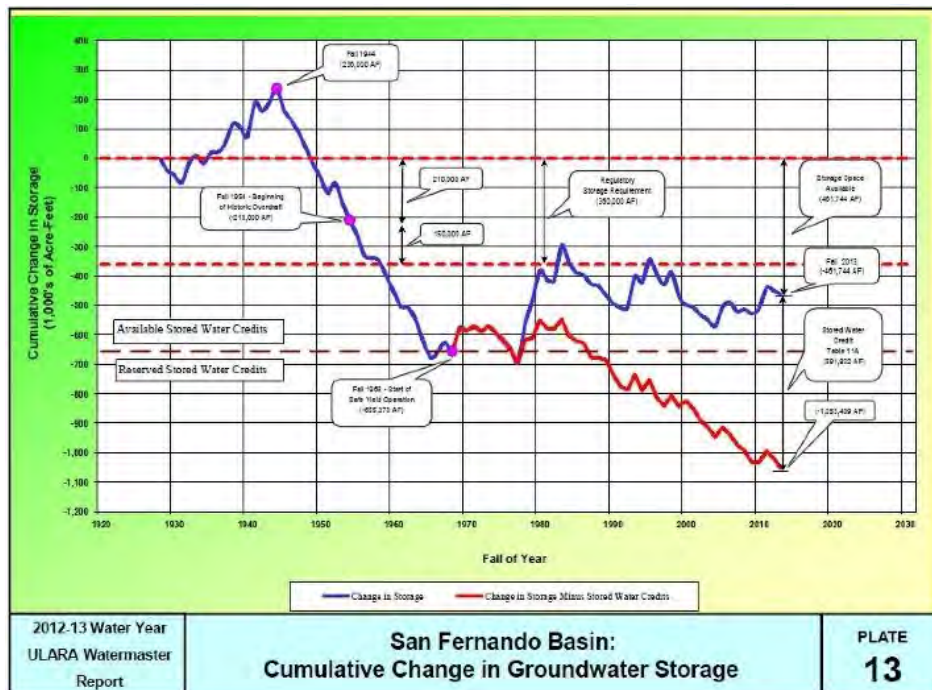


Figure 13 - Change in Groundwater Storage - The groundwater recharge category is less about attempting to find 'new water' and more about trying to stem the losses of old water in the San Fernando Basin.

Closing Comments

In closing, the 2015 Draft UWMP is totally inadequate in its current form. It mischaracterizes the city's true water supply outlook and it should be revised using meaningful, measurable, achievable water supply projections that planners, developers, and residents can be assured the department can meet.

The LADWP's continuing reliance on 'paper water' to foster the perception of a growing water supply in its UWMP's will only further exacerbate the city's water shortage as it grows, makes Environmental Impact Reviews associated with developments within the city vulnerable to legal challenges and could potentially threaten the city's viability if the practice continues.

David Coffin
Los Angeles, CA 90045
DroughtMath.com

ⁱ This analysis focuses exclusively on the Average Year assessments to keep it simple.

ⁱⁱ Show Me the Water Plan, Hanak, 2010

ⁱⁱⁱ Water for Growth, Hanak, 2009 - <http://www.waterplan.water.ca.gov/cwpu2009/index.cfm Vol 4>, Reference Guide, Pg. 75.

^{iv} The years 2013, 2014, & 2015 were excluded as they may not be necessarily 'average' years but instead outliers given the recent drought.

^v The LADWP's claims to have access Harvested Water has no suitable provision for measurement identified in 'Methodologies Urban Per Capita Water Use' <http://www.water.ca.gov/wateruseefficiency/sb7/docs/methodologies-urban-per-capita-water-use-10042010.pdf>

^{vi} 2012-13 ULARA Water Year Annual Report. Pg 2-32, 2-33, Plate 13. http://ularawatermaster.com/public_resources/WY-2012-13-ULARA-WM-Rpt-12-2014.pdf

From: Melanie Winter
Sent: Wednesday, March 16, 2016 1:18 PM
To: Hsu, Chiun-Gwo (Simon)
Cc: Castro, Art; Villegas, Rafael
Subject: UWMP Comments

Good afternoon Simon -

Thank you for the opportunity to comment on the UWMP. I provided several substantive comments on technical issue and Plan assumptions (primarily related to choice of target, climate science, and reliance on MWD assurances) at the Public Meeting on March 9. Attendees were given to understand that those comments were recorded and provided to you. If this is incorrect, I would be happy to meet and reiterate my specific concerns. My comments below are focused on specifics in Chapters 3 & 7.

Page 7-21 - Woodman Ave. Case Study

The River Project was edited out of the project description. Please remedy. The project was identified by the PCNC during the development of the Tujunga-Pacoima Watershed Plan process, which The River Project led and authored. The River Project developed the project concept, co-authored the Prop 50 grant with DWP, was instrumental in securing that grant, led the community education and engagement process, provided expertise that helped remedy project design flaws which led to its collapse in the first rainstorm, and maintained the project vegetation for the first year. Please acknowledge the critical role this partner played in the project.

Delete “through pre-treatment devices” in the 3rd sentence of the 3rd paragraph. Stormwater flows from the street directly into the swale.

Delete “and rip-rap” in the 2nd sentence of the 4th paragraph. There is river rock in places, but not rip-rap.

Replace “groundwater” with stormwater, and delete “shallow in depth” from the second sentence of the 5th paragraph.

In "The Benefits" section introductory paragraph, the use of a parenthetical is awkward - as is the use of 'whom.' Consider revising.

In addition, the total AFY recharged is not mentioned anywhere on this page.

Bullet points should be edited. Currently, two key benefits are jammed together in each of the first two bullets, and the last two bullets are redundant.

Page 7-7

The River Project would appreciate acknowledgement as a SCMP partner/supporter in the (e.g....) list.

Page 7-18 & Pages 3-24 through 3-17

Discussions of On-site Infiltration and On-site Direct Use, Residential Landscape Conservation, and the Watershed Approach neglect to reflect or acknowledge The River Project's substantial accomplishments, activities, and partnerships with LADWP on these issues. The Water LA Pilot has contributed significantly to advancements on these issues and the program is recognized in the SCMP and the Basin Conservation Study as a critical component of meeting local water goals. We would be happy to provide you with a language to describe relevant particulars for sections 7.3.1, 7.5.1.1, and 7.5.1.2 in order to assist in producing a more accurate and robust document.

Page 3-26

DWP's Watershed Management Group has partnered with organizations other than TreePeople on stormwater capture projects, and TreePeople are not the only non-profit partnering with multiple City (and County) departments and agencies. The River Project has been doing this work for over 16 years, partnering with DWP's Watershed Management Group and various agencies and departments in the development of the Tujunga Wash Feasibility Study in 2000, the Tujunga-Pacoima Watershed Plan in 2007, partnering on the Woodman Avenue Median in 2011, and developing the Water LA Pilot and Program in 2014, among others. Acknowledgement would be appropriate. We are more than happy to work with you on language.

Elmer Avenue is described as "demonstrating effective distributed stormwater BMPs on residential homes." While Elmer is a demonstration of an effective distributed Green Street, its value does not derive in any significant way from the residential BMPs. The Panorama City Water LA Pilot provides far greater benefits from residential home retrofits.

Appreciate your attention -

Melanie

--

Melanie Winter

Director, The River Project

*Working toward a living Los Angeles River,
Nourished by a healthy watershed.*

www.TheRiverProject.org

www.WaterLA.org

March 16, 2016

Commissioners,

The 2015 Urban Water Management Plan prepared by the DWP does not begin to address the reality the City of Los Angeles faces regarding its dwindling water resources. Rather than using factual information and realistic estimates to create a strategy for water use, the authors of the UWMP rely on wishful thinking with little in the way of factual data to support their assumptions.

In order to lay the groundwork for any discussion of the future of our water resources, it's important to start with a discussion of the impacts of climate change on snowpacks in the Western United States. Research by reputable institutions shows that these snowpacks have been declining for many years. In spite of the fact that heavy snows have restored snowpacks during the current season, there is no reason to expect the long-term trend toward decline to reverse itself in the foreseeable future. Here are links to studies done by the American Meteorological Society and the Earth Institute at Columbia University.

Declining Mountain Snowpack in Western North America
American Meteorological Society, January 2005
<http://journals.ametsoc.org/doi/pdf/10.1175/BAMS-86-1-39>

The Earth Institute/Columbia University
Declining Snowpacks May Cut Many Nations' Water
<http://www.earthinstitute.columbia.edu/articles/view/3265>

While our elected officials continue to characterize what we are experiencing as a cyclical drought, this research seems to indicate a different conclusion, that we are seeing a long-term reduction of our water resources due to climate change. By tacitly accepting the assumption that we are merely experiencing a cyclical drought, the 2015 UWMP does not begin to address the severity of the situation.

The plan does talk about the fact that we'll be getting much less water from the LA Aqueduct than we have in the past. In 2014/2015 we received only 53,500 AFY. Less than 14% of what we were getting thirty years ago. This is a record low. It's also important to note that last year the LA Aqueduct was closed for the first time in its history. From April through September we received no water from the LAA.

It's discussion of supplies from the SWP & MWD, the 2015 UWMP relies on the State's projections that they will be able to provide a reliable supply through 2040. This is far from certain. The decline of the snowpacks in the Sierras, coupled with ongoing conflicts regarding State water policy, make future deliveries hard to predict. And with snowpacks in the Rockies also declining, the MWD can't count on consistent deliveries from the Colorado River.

The 2015 UWMP does not provide enough context to make its assumptions about future water deliveries credible. The document should not be approved in its current state. Here are some specific comments.

1. LA Aqueduct

In its explanation of how we're going to replace the water supply from the aqueduct, the UWMP refers to recycling and stormwater capture. Both are important resources that we need to take advantage of, but at this point they produce only a small fraction of the water used by the City. We've barely started to build the infrastructure necessary to exploit recycling and stormwater capture. Under the heading Recycled Water Planning Efforts, the document refers to recycling projects that are in the "planning, design, or construction stage." But while a number of future projects are mentioned, almost all are currently in the planning stage. There is no detailed explanation of how much increased supply we can expect from these recycling projects. There is no timetable for building the necessary infrastructure. The UWMP does not identify the sources of revenue that will finance this infrastructure. This is crucial, since rate hikes are currently being planned merely to repair and upgrade existing water infrastructure. If we haven't even been able to maintain the current system, how can we depend on vague promises about future projects?

2. Water Transfers

The UWMP includes this statement regarding water transfers:

LADWP plans on acquiring water through transfers of up to 40,000 AFY to replace a portion of the Los Angeles Aqueduct (LAA) water used for environmental enhancements in the eastern Sierra Nevada. The City would purchase water when available and economically beneficial for storage or delivery to LADWP's transmission and distribution system.

It seems the DWP is relying on transfers through the SWP/MWD system, but the entire state of California is experiencing water supply shortages. If snowpacks continue to decline, as current research indicates, the crisis will continue to worsen statewide. Even if it might be possible at times to secure 40,000 AF, the UWMP is supposed to be laying out a strategy for the next 25 years. The idea that we can rely on the SWP/MWD system to furnish us with 40,000 AF every year for the next 25 years is absurdly optimistic. Even if they had the spare capacity, the cost would likely be prohibitive.

3. Groundwater

Right now the supplies we get from aquifers within city limits provide between 10% and 15% of what we use annually. But in the Executive Summary under the heading Water Supply Reliability the DWP states:

The exhibits show that the City's locally-developed supplies will increase from 14 percent to 49 percent in dry years or to 47 percent in average years.

Again, this prediction is absurdly optimistic. The exhibits that supposedly support this contention are based on wishful thinking rather than sound, fact-based planning. There is no detailed outline of the steps that will be taken, or the funding that will be required to accomplish this.

The UWMP goes on to assert that:

These local supplies are not influenced by variability in hydrology, and will become the cornerstone of LA's future water supplies.

How could anyone at the DWP expect anyone to believe such a ridiculous statement? The groundwater resources that we have in Los Angeles are susceptible to hydrological variability in the same way that water resources all over the world are susceptible to hydrological variability. DWP staff obviously knows better. Sadly, the inclusion of this statement calls into question the Department's credibility when it comes to providing the people of Los Angeles with an accurate assessment of their water resources.

There are other issues with the DWP's promises to supply nearly half of the City's demand with local water resources. Most of our groundwater comes from wells in the San Fernando Valley, and about half of those wells are closed right now because of industrial pollution. The DWP does have a plan to build two treatment plants that will purify the water from these sources, but it could be years before they break ground. At this point they don't even have the funding lined up.

The State has mandated that water agencies prepare UWMPs in order to insure that Californians can expect their resources to be managed in such a way that their needs will be met. The Draft 2015 UWMP as prepared by the DWP, for all the graphs and statistics it includes, is based on unrealistic assumptions and does not provide detailed strategies or timelines which demonstrate how the agency's goals will be achieved.

This document will play a crucial role in decision making for years to come. Because the current version does not provide an accurate, credible account of the state of our water resources, it can only undermine future planning efforts. The DWP Board of Commissioners must not approve the 2015 UWMP in its current form.

Sincerely,
Casey Maddren



Los Angeles Department of Water and Power
John Ferraro Building
111. N. Hope Street, Room 1460
Los Angeles, CA 90012
Attn: Simon Hsu

Submitted to: uwmp@ladwp.com

March 16, 2016

Re: Comments on Draft 2015 Urban Water Management Plan

Dear Mr. Hsu,

Thank you for the opportunity to submit comments on the Draft 2015 Urban Water Management Plan (UWMP). TreePeople commends LADWP on its commitment to decreasing the City's reliance on imported water by growing its local supplies and we would like to congratulate you for your efforts to create an extensive urban water management plan that takes into account climate change and multi-benefit projects. Overall, the UWMP is a step in the right direction and will help secure a water future that includes increased conservation, stormwater capture and other investments in local supplies. We encourage LADWP to continue moving along this path. Toward that end, we submit the following comments for consideration and urge you to incorporate them in the Draft UWMP before it is finalized, so that the document can represent as robust and progressive a path for the City as possible.

Chapter 3:

Cost effective conservation approaches, such as installation of water saving fixtures and customer behavior changes, are notable successes from LADWP and we look forward to further efforts to extend programs like these to institutional and commercial customers. Use of the watershed approach for water-efficient landscaping is vital to maintain watershed protection, ecosystem services, and incorporating the needs of residential landscaping. TreePeople has found that maintaining proper soil moisture is critical for successful turf retrofits, as soil moisture is the best way to regulate irrigation and avoid desertification of residential landscapes.

We, among other groups, have been working with DWP and the Mayor's Office on a "Watershed Approach" to be used for any new turf replacement rebates. We hope to see this finalized and institutionalized soon. TreePeople would like to emphasize that updated requirements for residential landscaping rebate programs align with our, and our partner organizations', recommendations and should include; 0% artificial turf allowed, only biodegradable weed barriers allowed, and additional existing NGOs be listed as resources so that educational programming is equitably distributed city-wide. For example, TreePeople offers sustainable landscaping classes, hands on workshops and can coordinate professional training on LADWP's behalf should there be interest.

Chapter 7:

We are pleased with LADWP's interest in stormwater capture and by the work of the watershed management group. We look forward to seeing more stormwater capture multi-benefit projects that improve biodiversity, augment local water supply, prevent downstream pollution, and reduce urban flooding.

As partners with LADWP on the Stormwater Capture Master Plan (SCMP) we recommend using the aggressive scenario values presented on page ES-18 or explaining why there is a range between the two scenarios. Please also consider including language about what conditions are needed for aggressive milestones to be pursued.

As partners in the Greater Los Angeles Water Collaborative, we note that the LA StormCatcher project is mentioned on page 7-18, however the tank size information is incorrect. The LA StormCatcher tank sizes actually range between 420 and 1,981 gallons each. We recommend the following description to add more clarity and context: "while the cistern capacities range between 420 and 1,981 gallons, there are multiple tanks per site, and each system therefore ranges between 840 and 3,962 gallons."

Chapter 9:

In an era of climate change which leads to many uncertainties around future water supplies, we are pleased to see LADWP pursue ongoing efforts to investigate alternative water supply options. We are also pleased to see emphasis both in this chapter and throughout the UWMP on the importance of developing more local supplies rather than continuing to rely on costly and increasingly unreliable imports.

While it historically has made sense for LADWP to develop water transfer solutions to offset Los Angeles Aqueduct supply reductions (for example, the Neenach Pumping Station), there is reason to be skeptical of investments in new hard infrastructure projects for water transfers for imported supplies. How will LADWP balance investments in both large ticket centralized infrastructure and in the development of new water transfer programs against urgent needs for investments in local supplies like stormwater capture, which can be less energy intensive, more reliable, and can lessen impacts on the environment? Please explain the balance in investments to both traditional and newer, less centralized, technologies.

Lastly, given the costs and environmental impacts of desalination, we are encouraged by LADWP's prioritization of resources for enhancing local supplies, recycling, and conservation efforts. We caution LADWP's potential future exploration of desalination because it will divert investments and upgrades in local water supply technologies which can provide the water needed in LA with fewer environmental impacts and costs.

Chapter 11:

The water contingency plan described in section 11.4 is very detailed, however it does not indicate how tree watering will be affected. As detailed in TreePeople's recent report, *Transferring Lessons from Australia's Millennium Drought to California*, Australia learned the importance of keeping mature trees alive—especially in times of drought—to protect the public

from extreme heat, as tree canopy and its associated evapotranspiration provide needed cooling.¹ Trees require water especially during dry years to maintain their overall health. The loss of mature trees due to infrequent or improper watering during times of drought must be avoided at all costs, as smaller replacement trees do not offer the same benefits as mature trees. Additionally, mature trees help manage stormwater, reduce energy costs to nearby buildings, and provide many other benefits. The loss of mature tree canopies will have profound environmental and public health implications for Angelenos, particularly those already more vulnerable to heat-related illnesses. Please include details on strategies for maintaining tree health in this report. TreePeople is available as a collaborative resource to help craft these guidelines.

Chapter 12:

We are very encouraged that LADWP is making concerted efforts to explore the many complexities surrounding the water and energy nexus. Understanding the full carbon footprint of the utility is not only necessary to meet mandates for reducing global warming, but socially and fiscally responsible given the impact of emissions on public health, the environment, and ratepayers' pocket books. The water and energy nexus provides an additional layer of justification for investments in low energy, distributed stormwater capture projects and we hope to see the utility make ambitious efforts to scale up these efforts to reduce energy consumption. Language such as "It is imperative that supply options are carefully vetted and evaluated against both adaptation and mitigation goals, as they may conflict and work against each other" (p. 12-28) reveals the type of evaluation that is critical for successful decision making in an era of climate change, and we would like to see LADWP take this thinking even further by elaborating on what types of frameworks will be used to ensure these evaluations are rigorous and effective.

We want to highlight what we consider to be highly problematic language found in this chapter around projected climate change impacts, specifically, statements such as "there is still general uncertainty within the scientific community regarding the potential impacts of climate change within the City of Los Angeles" (p. 12-1) and "predictions of changes in precipitation are even more speculative" (p. 12-2). While the science behind projecting long-term climate impacts is highly complex and inherently uncertain, highly sophisticated research conducted locally in our region has given us valuable information that provides more clarity than what we believe is implied in this document.² Furthermore, as much of the water used in Los Angeles is sourced from other parts of the state, climate change impacts experienced at water source origins will greatly affect water supply reliability in Los Angeles.

It is encouraging to see that local groundwater (in Section 12.2.4), as a low energy-intensive resource, will play an increasingly important role in LADWP's supplies. More information than what is provided on capabilities for scaling up groundwater as a water source and the associated

¹ <https://www.treepeople.org/sites/default/files/pdf/publications/TreePeople%20-%20Transferring%20Lessons.pdf>

² Some resources for reference include: "Climate Change in the Los Angeles Region: Temperature results." Alex Hall, UCLA (http://research.atmos.ucla.edu/csrl/docs/Hall-LA_temp_study_fact_sheet-Dec2013.pdf); "Using Future Climate Projections to Support Water Resources Decision Making in California." California Climate Change Center (http://www.water.ca.gov/pubs/climate/using_future_climate_projections_to_support_water_resources_decision_making_in_california/usingfutureclimateprojtosuppwater_jun09_web.pdf); "Preparing for Climate Change Impacts in Los Angeles: Strategies and Solutions for Protecting Local Communities." Union of Concerned Scientists (http://www.ucsusa.org/sites/default/files/legacy/assets/documents/global_warming/preparing-for-climate-change-impacts-in-los-angeles.pdf).

cost savings relative to other supply sources would only amplify the case for investments. Another area where more info on projected cost savings would be useful is treatment energy (in Section 12.2.6). With the release of new Los Angeles County Department of Public Health guidelines for indoor non-potable water use, there is potential for energy savings around water treatment, and we encourage LADWP to examine these opportunities closely.³

Thank you for considering these comments for incorporation into the Draft 2015 Urban Water Management Plan. If you have any questions or would like to discuss these comments, please do not hesitate to contact me at (818) 623-4887 or dbloome@treepeople.org.

Sincerely,



Deborah Weinstein Bloome
Senior Director of Policy

³ *Guidelines for Alternate Water Sources: Indoor and Outdoor Non-Potable Uses*. Los Angeles County Department of Public Health, February 2016.
http://www.smgov.net/uploadedFiles/Departments/OSE/Contact_Find_Us/Guidelines%20for%20Alternate%20Water%20Sources_2-10-16.pdf



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March 16, 2016

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Subject: Draft Urban Water Management Plan – Comments

To whom it may concern:

On behalf of the Los Angeles County Metropolitan Transportation Authority (Metro) I would like to submit the below comments and/or questions on the Los Angeles Department of Water and Power's Draft Urban Water Management Plan (UWMP).

Chapter 6 Comments/Questions:

1. This Plan mentions the Groundwater System Improvement Study (completed in February 2015) and calls out "high priority" chemicals of concern. The plan imposes stricter limits than the state government on the allowable amounts of such "high priority" chemicals in drinking water but does not make recommendations of how users of these chemicals should handle or dispose of them, nor does it call out specific remediation measures. Will the final version of the UWMP address disposal or remediation measures for the stricter limits?

Chapter 7 Comments/Questions:

2. How does the LADWP track the potential stormwater harvesting capacity for implementation strategies, such as rain barrels and cisterns, which are largely privately owned? Does it make a difference if owners are not trained about the use?
3. Without a measurement instrument for these water conservation strategies, how conservative or liberal is the calculation of onsite stormwater storage?

Chapter 12 Comments/Questions:

4. Page 12-4 - What are the "*business-as-usual*" emission levels? Are these the levels for the County specifically or based on global projections?
5. Page 12-4, first paragraph last sentence – "*..the most likely warming increase was projected to be somewhat smaller.*" What is the actual definition of this "smaller" warming increase?
6. Page 12-4, second paragraph last sentence – What does 42,900 AF look like in regards to households/year or some other measurable comparison?
7. Page 12-6, first paragraph – "*It was found that there is a wide range of overall efficiency and resiliency within the existing system and that certain facilities are*

more readily adaptable to future changes than others.” Are there factors that make certain systems and facilities more readily adaptable? Is it a location-based outcome?

Sincerely,

Alvin Kusumoto

Alvin Kusumoto
Transportation Sustainability Energy Manager
Los Angeles County Metropolitan Transportation Authority