



**LAS VIRGENES MUNICIPAL WATER DISTRICT**  
4232 Las Virgenes Road, Calabasas, CA 91302

**AGENDA**  
**REGULAR MEETING**

Members of the public wishing to address the Board of Directors are advised that a statement of Public Comment Protocols is available from the Clerk of the Board. Prior to speaking, each speaker is asked to review these protocols and **MUST** complete a speakers' card and hand it to the Clerk of the Board. Speakers will be recognized in the order cards are received.

The **Public Comments** agenda item is presented to allow the public to address the Board on matters not on the agenda. The public may present comments on any agenda item at the time the item is called upon for discussion.

Materials prepared by the District in connection with subject matter on the agenda are available for public inspection at 4232 Las Virgenes Road, Calabasas, CA 91302. Materials prepared by the District and distributed to the Board during this meeting are available for public inspection at the meeting or as soon thereafter as possible. Materials presented to the Board by the public will be maintained as part of the records of these proceedings and are available upon written request to the Clerk of the Board.

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5:00 PM

May 10, 2016

**PLEDGE OF ALLEGIANCE**

- 1 **CALL TO ORDER AND ROLL CALL**
- 2 **APPROVAL OF AGENDA**
- 3 **PUBLIC COMMENTS**

Members of the public may now address the Board of Directors **ON MATTERS NOT APPEARING ON THE AGENDA**, but within the jurisdiction of the Board. No action shall be taken on any matter not appearing on the agenda unless authorized by Subdivision (b) of Government Code Section 54954.2

4 **CONSENT CALENDAR**

A **Minutes: Special Meeting of April 18, 2016 and Regular Meeting of April 26, 2016 (Pg. 5)**

Approve

B **Directors' Per Diem: April 2016 (Pg. 20)**

Ratify

C **Financial Review: Third Quarter of Fiscal Year 2015-16 (Pg. 26)**

Receive and file the financial review for the third quarter of Fiscal Year 2015-16.

D **Independent Auditor Services: Contract Amendment for Name Change (Pg. 43)**

Authorize the General Manager to execute an amendment to the agreement for auditing services to reflect a name change from Pun & McGeady, LLP to the Pun Group, LLP.

E **Annual Supply and Delivery of Ammonium Hydroxide: Award of Bid (Pg. 45)**

Accept the bid from Airgas Specialty Products, Inc., and authorize the General Manager to approve an initial 13-month purchase order, in the amount of \$37,000, with four one-year renewal options, in the amount of \$34,106.10 per year, for the supply and delivery of ammonium hydroxide.

F **List of Demands: May 10, 2016 (Pg. 51)**

Approve

5 **ILLUSTRATIVE AND/OR VERBAL PRESENTATION AGENDA ITEMS**

A **Poster Contest Awards Ceremony**

B **Legislative and Regulatory Updates**

C **Water Supply Conditions and Drought Response (Pg. 79)**

6 **TREASURER**

7 **BOARD OF DIRECTORS**

A **General District Election on November 8, 2016: Resolution No. 2492 (Pg. 84)**

Pass, approve, and adopt proposed Resolution No. 2492, pertaining to a General District Election to be held in the District on Tuesday, November 8, 2016; and authorize the Board Secretary to submit certified copies of said resolution, completed Roster of Officeholders for Local Jurisdictions, and District Boundary and Divisions Map to the Board of Supervisors and the Registrar-Recorder/County Clerk of the County of Los Angeles.

**RESOLUTION NO. 2492**

**A RESOLUTION OF THE BOARD OF DIRECTORS OF LAS VIRGENES MUNICIPAL WATER DISTRICT REQUESTING THE BOARD OF SUPERVISORS OF THE COUNTY OF LOS ANGELES TO PERMIT THE**

**REGISTRAR-RECORDER/COUNTY CLERK TO RENDER ELECTION SERVICES FOR A GENERAL DISTRICT ELECTION TO BE HELD ON NOVEMBER 8, 2016**

(Reference is hereby made to Resolution No. 2492 in the District's Resolution Book and by this reference the same is incorporated and made a part thereof.)

**8 FACILITIES AND OPERATIONS**

- A 2015 Urban Water Management Plan: Public Hearing (Pg. 98)**  
Conduct a public hearing to accept comments on the 2015 Urban Water Management Plan.

**9 FINANCE AND ADMINISTRATION**

- A Claim from Stephen Heller on behalf of Stephen B. and Lily Ann Niefield (Pg. 193)**  
Deny the claim from Stephen Heller on behalf of Stephen B. and Lily Ann Niefield.

**10 NON-ACTION ITEMS**

- A Organization Reports**
- (1) MWD Representative Report/Agenda(s) **(Pg. 205)**
  - (2) Other
- B Director's Reports on Outside Meetings**
- C General Manager Reports**
- (1) General Business
  - (2) Follow-Up Items
- D Director's Comments**

**11 FUTURE AGENDA ITEMS**

**12 PUBLIC COMMENTS**

Members of the public may now address the Board of Directors **ON MATTERS NOT APPEARING ON THE AGENDA**, but within the jurisdiction of the Board. No action shall be taken on any matter not appearing on the agenda unless authorized by Subdivision (b) of Government Code Section 54954.2

**13 CLOSED SESSION**

- A Conference with District Counsel – Existing Litigation (Government Code Section 54956.9(a)):**

1. Las Virgenes - Triunfo Joint Powers Authority v. United States Environmental Protection Agency and Heal the Bay, Inc. v. Lisa P. Jackson (TMDL cases)
2. Las Virgenes - Triunfo Joint Powers Authority v. United States Environmental Protection Agency (FOIA case)

#### 14 **OPEN SESSION AND ADJOURNMENT**

Pursuant to Section 202 of the Americans with Disabilities Act of 1990 (42 U.S.C. Sec. 12132), and applicable federal rules and regulations, requests for a disability-related modification or accommodation, including auxiliary aids or services, in order to attend or participate in a meeting, should be made to the Executive Assistant/Clerk of the Board in advance of the meeting to ensure availability of the requested service or accommodation. Notices, agendas, and public documents related to the Board meetings can be made available in appropriate alternative format upon request.



**LAS VIRGENES MUNICIPAL WATER DISTRICT**  
4232 Las Virgenes Road, Calabasas CA 91302

**MINUTES**  
**SPECIAL MEETING**

9:00 AM

April 18, 2016

PLEDGE OF ALLEGIANCE

The Pledge of Allegiance to the Flag was led by Harold Matthews.

**1. CALL TO ORDER AND ROLL CALL**

The meeting was called to order at **9:00 a.m.**, by Board President Peterson in the Board Room at Las Virgenes Municipal Water District headquarters at 4232 Las Virgenes Road in Calabasas. Josie Guzman, Clerk of the Board, conducted the roll call.

Present: Directors Charles Caspary, Jay Lewitt, Leonard Polan, Lee Renger, and Glen Peterson

Absent: None

Staff Present: David Pedersen, General Manager  
David Lippman, Director of Facilities and Operations  
Donald Patterson, Director of Finance and Administration  
Carlos Reyes, Director of Resource Conservation and Public Outreach  
Josie Guzman, Clerk of the Board  
Doug Anders, Administrative Services Coordinator  
Brett Dingman, Water Reclamation Manager  
Mike Hamilton, Financial Analyst  
Harold Matthews, Information Systems Manager  
Larry Miller, Water Systems/Facilities Manager  
Sherri Paniagua, Human Resources Manager  
Jeff Reinhardt, Public Affairs and Communications Manager  
Mark Uribe, Finance Manager  
John Zhao, Principal Engineer

## 2. **PUBLIC COMMENTS**

None.

## 3. **STRATEGIC PLAN AND BUDGET WORKSHOP**

General Manager David Pedersen noted that District staff had been working with John Ruetten from Resource Trends, Inc., regarding strategic planning since July 2015. He stated that the strategic plan update was founded on four key principles:

1. Building off previous planning work;
2. Reviewing the structure and organization of the strategic plan and learning from similar organizations that have gone through this process recently;
3. Receiving District employees' input from all levels of the organization; and
4. Proposing a framework and content of a strategic plan to the Board, receiving the Board's feedback, and addressing key challenges and opportunities for the coming 10 years.

John Ruetten, representing Resource Trends, Inc., provided his background information and reviewed the workshop agenda.

Director of Facilities and Operations David Lippman, Director of Resource Conservation and Public Outreach Carlos Reyes, and Director of Finance and Administration Donald Patterson reviewed the progress on Fiscal Year 2015-16 Tactical Actions and Activities.

General Manager David Pedersen noted that one of the items not included in the progress report was the District's efforts during the drought. He stated that drought response has been a major undertaking and all of the departments have been very active in responding to the State Water Resource Control Board's (Water Board) 36 percent reduction standard. He noted that the District was currently at nearly a 29 percent cumulative reduction. He also noted that he would be attending a Water Board hearing in Sacramento on April 20 to provide comments and input on the emergency regulations and on more science-based regulations. He noted that the Water Board is looking at a potential long-term framework for conservation beyond 20 by 2020. Lastly, he noted that he would be participating in discussions with a newly formed ACWA Task Force.

Director Caspary expressed concern with flood protection measures for the Tapia Water Reclamation Facility (Tapia) and reintroduction of the red-legged frog in the Malibu Creek Watershed, which could adversely affect the long-term safety of Tapia when an endangered species is re-established in a tributary. General Manager David Pedersen responded that staff would look into this issue with the California State Parks, along with looking into issues with nesting birds.

Director Polan expressed support for a goal for the District to become a net energy producer and a quasi-environmental agency, and to conduct branding to reflect the District's activities.

General Manager David Pedersen reviewed the framework for the strategic plan and the strategic plan terminology provided in the agenda packet.

Mr. Ruetten noted that some utilities use the term “core values” in their foundation for the organization, and he suggested that better terminology would be “behavioral values” and “business values.” He noted that some of the District’s current goals are fundamental commitments or business values of the organization, and that typically goals and objectives have a timeframe. He also noted that some of the goals are actually on-going standards of the organization. He reviewed the handouts outlining the meaning of strategic objective, purpose of the strategic plan, the District’s current Mission Statement and strategic foundation, proposed behavioral values, and proposed business values with key standards.

Board President Peterson referred to the proposed key standard for “Exceptional Customer Service” and suggested changing it to reference “Customer Satisfaction.”

Mr. Ruetten referred back to the Strategic Foundation handout and the District’s current Mission Statement: “Dedicated to Providing Quality Water and Wastewater Services.” He noted that some utilities add “in a cost effective and environmentally sensitive manner” to their Mission Statement. He inquired whether the Board wished for the Mission Statement to remain as is or whether there was an interest in adding cost effectiveness and an environmental component.

Director Lewitt referred to the current Mission Statement and suggested using different terminology for wastewater services such as reclaimed water, recycled water or reused water. Mr. Ruetten suggested the Board could consider just using the term “water” in the Mission Statement.

Board President Peterson noted that the Board was looking toward brevity when it developed the current Mission Statement, and he stated that he believed environmental and fiscal responsibility needed to be recognized separately.

A discussion ensued regarding the statements listed under “We Value” beneath the District’s current Mission Statement. Director Caspary suggested moving up Fiscal Responsibility and Environmental Stewardship to the Mission Statement. Board President Peterson suggested adding items to the outside border, such as solar generation.

Mr. Ruetten addressed the question regarding changing the word “wastewater” in the Mission Statement, and he suggested the Mission Statement could be changed to “Dedicated to Providing Reliable Water Services in a Cost Effective and Environmentally Sensitive Manner.” He spoke regarding the difference between the District selling water versus selling reliable water service, and noted that conserving water is part of the reliability equation. He also noted that reliability was not currently in the Mission Statement. He stated that he and General Manager David Pedersen could work together to offer suggestions for a new Mission Statement for the Board’s consideration.

Mr. Ruetten referred back to the Strategic Foundation handout and noted the proposed behavioral values. He stated that the decisions made daily are based on these values, and he highlighted the sentences under responsibility, collaboration, and leadership.

Board President Peterson inquired who would be considered “we” as listed under the behavioral values. Mr. Ruetten responded that behavioral values are related to the employees of the organization. He commented that the sentence under commitment stating “We give our individual best to get the job done right” was structured a bit odd. General Manager David Pedersen suggested striking the word “individual.”

The Board recessed to a break at 10:27 a.m. and reconvened at 10:36 a.m.

Mr. Ruetten reviewed the proposed business values with key standards.

General Manager David Pedersen stated that reference would be made to these standards when bringing items to the Board in order to connect the action with the business values.

Board President Peterson inquired whether the business values should include innovation. Mr. Ruetten responded that some utilities list innovation under “Efficient Operations”.

A discussion ensued regarding “Advocate for Science-Based Regulations” and moving this from “Maximum Reuse and Resource Recovery” to “Sound Planning and Appropriate Investment”.

Mr. Ruetten referred to the Employee Interview Summary handout. General Manager David Pedersen noted that the Department Directors, Managers, and employees from multiple levels of the organization participated in the employee interviews. Mr. Ruetten reviewed each of the categories listed in the employee interview summary.

Mr. Ruetten referred to the handouts titled Draft Strategic Objectives and Discussion Prompts for Strategic Objectives.

The Board and staff divided into five groups and engaged in an exercise for the development of draft strategic objectives using the discussion prompts. The prompts focused on identifying the relevant business values and standards, key challenges, necessary actions or investments, appropriate timing and ramifications of not acting on certain draft strategic objectives.

Director Lewitt departed from the meeting at 12:00 p.m.

The following draft strategic objectives were discussed during the group exercise:

- Develop a strategy to maintain a highly-effective workforce.
- Support customers to meet water-use efficiency standards.



- Provide new or improved customer tools to enhance service delivery.
- Achieve an AAA credit rating
- Further offset District's energy usage with renewables.
- Improve the District's water supply reliability.
- Eliminate discretionary discharge to Malibu Creek.
- Develop a process to act on efficiency improvement suggestions.
- Enhance the District's asset management programs.

Upon conclusion of the exercise, a spokesperson from each group shared feedback on the draft strategic objectives. Several groups recommended modifying the description of a strategic objective. General Manager David Pedersen stated that he and Mr. Ruetten would prepare a draft strategic plan using the recommendations from the exercise, and prepare suggestions for a Mission Statement to bring back to the Board in June.

Director of Finance and Administration Donald Patterson presented a PowerPoint presentation of the Preliminary Fiscal Years 2016-18 Budget Plan, which included a financial overview, compliance with fiscal policies, budget overview, operating budget, capital budget, and next steps. He noted that the drivers and assumptions included MWD's rate adjustments, slow economic growth, incorporation of current employment contracts, no turf removal rebates, and slow drought rebound. He also noted that challenges in developing the budget included TMDL implementation/NPDES permit for Tapia, the Recycled Water Seasonal Storage Project, funding for Building No. 1 rehabilitation, AMR/AMI funding, and rebuilding potable water reserves.

Finance Manager Mark Uribe continued the PowerPoint presentation, which included the Fiscal Years 2016-17 and 2017-18 budget overview, timeline leading up to budget adoption, budget summary showing the three enterprises, preliminary budget summary, and budget overview with operating revenue and operating expenses.

Financial Analyst Mike Hamilton continued the PowerPoint presentation and reviewed the potable water, sanitation, and recycled water enterprise budgets, internal services budget, and the capital improvement projects budget. Board President Peterson noted that the budget for the Centrate Tank Equalization Project needed to be adjusted to reflect the additional appropriation required for award of the construction contract.

Director of Finance and Administration Donald Patterson provided a brief recap of the presentation, which included a proposal for a balanced operating budget, trends consistent with the rate study, and resources for capital projects from the three enterprises. He stated that the next steps would include a JPA preliminary budget presentation on May 2, LVMWD budget adoption on May 24, and JPA budget adoption on June 6.

Director Caspary inquired regarding revenue expectations with the new budget-based rates. Mr. Hamilton responded that staff used the same methodology used by Raftelis in developing the rate model and included passing-through MWD's rate increase effective January 1, 2017.

**4. ADJOURNMENT**

Seeing no further business to come before the Board, the meeting was duly adjourned at **2:16 p.m.**

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GLEN PETERSON, President  
Board of Directors  
Las Virgenes Municipal Water District

ATTEST:

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CHARLES CASPARY, Secretary  
Board of Directors  
Las Virgenes Municipal Water District

(SEAL)



**LAS VIRGENES MUNICIPAL WATER DISTRICT**  
4232 Las Virgenes Road, Calabasas CA 91302

**MINUTES**  
**REGULAR MEETING**

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5:00 PM

April 26, 2016

PLEDGE OF ALLEGIANCE

The Pledge of Allegiance to the Flag was led by Director Jay Lewitt.

**1. CALL TO ORDER AND ROLL CALL**

The meeting was called to order at **5:00 p.m.** by Director Renger in the Board Room at Las Virgenes Municipal Water District headquarters at 4232 Las Virgenes Road, Calabasas CA 91302. Joanne Bodenhamer, Deputy Clerk of the Board, conducted the roll call.

Present: Directors Charles Caspary, Jay Lewitt, Leonard Polan, and Lee Renger  
Absent: Director Glen Peterson  
Staff Present: David Pedersen, General Manager  
David Lippman, Director of Facilities and Operations  
Donald Patterson, Director of Finance and Administration  
Jeff Reinhardt, Public Affairs and Communications Manager  
Joanne Bodenhamer, Deputy Clerk of the Board  
Keith Lemieux, District Counsel

**2. APPROVAL OF AGENDA**

General Manager Pedersen stated that Item 13A could be removed from the agenda.

Director Polan moved to approve the agenda as amended. Motion seconded by Director Caspary. Motion carried by the following vote:

AYES: Caspary, Lewitt, Polan, Renger  
NOES: None  
ABSENT: Peterson

**3. PUBLIC COMMENTS**

None.

**4. CONSENT CALENDAR**

**A List of Demands: April 26, 2016 - Approve**

**B Minutes: Regular Meeting of April 12, 2016 - Approve**

**C Cash and Investment Report for March 2016**

**Receive and file the Cash and Investment Report for March 2016**

Director Caspary moved to approve the Consent Calendar as presented. Motion seconded by Director Lewitt. Motion carried by the following vote:

AYES: Caspary, Lewitt, Polan, Renger  
NOES: None  
ABSENT: Peterson

**5. ILLUSTRATIVE AND/OR VERBAL PRESENTATION AGENDA ITEMS**

**A Legislative and Regulatory Updates**

Public Affairs and Communications Manager Jeff Reinhardt provided updates regarding several legislative and regulatory items, including AB 1713 (Eggman) Sacramento-San Joaquin Peripheral Canal; AB 2583 (Frazier) Modification to the Delta Reform Act of 2009; SB 163 (Hertzberg) mandating elimination of discharges through ocean outfalls; H.R. 2993 (Matsui) Water Recycling Acceleration Act of 2015; and S. 2821 (Cardin) True LEADership Act for removal of lead from pipes. He noted that the District sent a letter of support for H.R. 4582 (Denham) Save Our Salmon Act of 2016. Director Caspary asked whether AB 1713 had passed through the Assembly. Mr. Reinhardt responded that the bill would be presented to the Appropriations Committee. He noted that the District and a number of other agencies submitted letters in opposition.

General Manager David Pedersen stated that the State Water Resources Control Board (Water Board) was considering amendments to the emergency regulations for water conservation. He reported that he attended the Water Board's hearing in Sacramento the prior week to speak in support of restoring local authority to manage supply and demand and lifting the emergency regulations. He noted that the Water Board would take action in early May and the District would have another opportunity to provide comments.

## **B Water Supply Conditions and Drought Response**

General Manager David Pedersen reported that the California Department of Water Resources increased the allocation for the State Water Project from 45% to 60%. He noted that Metropolitan Water District generally plans for an average year based on a 50% allocation. He reported that Lake Oroville and Lake Shasta were currently full with Lake Oroville at 95% of capacity. He also reported that the District achieved a 30 percent reduction in water usage for the month of March. He stated that regardless of the Water Board's decision on modifying the emergency regulations, the District would continue to promote water conservation efforts. He noted that the Water Board was also looking at a long-term water conservation policy.

## **6. TREASURER**

Director Lewitt stated that the Treasurer's report was in order.

## **7. FACILITIES AND OPERATIONS**

### **A Las Virgenes – Calleguas Interconnection Project: Memorandum of Understanding for Proposition 84 Integrated Regional Water Management Program Implementation Grant**

**Authorize the General Manager to execute a Memorandum of Understanding with the Los Angeles County Flood Control District, in a form approved by District Legal Counsel, for a Proposition 84 Integrated Regional Water Management Program Implementation Grant for the Las Virgenes – Calleguas Interconnection Project.**

General Manager David Pedersen presented the report.

Director Polan moved to approve Item 7A as presented. Motion seconded by Director Caspary.

Director of Facilities and Operations David Lippman responded to a question regarding whether the Memorandum of Understanding (MOU) references the project scope by stating that the MOU references the grant application, which includes a detailed description of the project.

General Manager David Pedersen responded to questions related to the grant, water delivery from Calleguas, and coordination with Metropolitan Water District.

Motion carried by the following vote:

AYES: Caspary, Lewitt, Polan, Renger

NOES: None

ABSENT: Peterson

**B Replacement of Construction Service Truck: Purchase Orders**

**Authorize the General Manager to issue purchase orders to Velocity Truck Centers of Oxnard/Los Angeles Truck Centers, LLC, in the amount of \$89,979.48, for a Freightliner M2 106 Cab and Chassis, and Skaug Truck Body Works of San Fernando, in the amount of \$41,724.98, for the purchase and installation of a custom-matched utility body; and declare Vehicle No. 136 as surplus equipment for salvage.**

General Manager David Pedersen presented the report.

Director Caspary moved to approve Item 7B as presented. Motion seconded by Director Renger.

Director of Facilities and Operations David Lippman responded to questions regarding the total cost for the vehicle, requirements for operators to hold Class A licenses, and salvage value of the old vehicle, which would be sent to auction.

Motion carried by the following vote:

AYES: Caspary, Lewitt, Polan, Renger

NOES: None

ABSENT: Peterson

**C Lost Hills Interchange 10-inch Recycled Water Main Relocation Project: Change Order No. 1**

**Authorize the General Manager to approve Change Order No. 1, in the amount of \$121,918.72, for the Lost Hills Interchange 10-inch Recycled Water Main Relocation Project.**

General Manager David Pedersen presented the report.

Director Lewitt moved to approve Item 7C as presented. Motion seconded by Director Caspary.

Director of Operations David Lippman responded to questions related to the original estimate prepared by the City's contract engineer and the reasons for the additional costs to the total contract amount.

Motion carried by the following vote:

AYES: Caspary, Lewitt, Polan, Renger

NOES: None

ABSENT: Peterson

## **8. RESOURCE CONSERVATION AND PUBLIC OUTREACH**

### **A Proposed Policy for Temporary Meter Service**

#### **Approve the proposed Policy for Temporary Meter Service.**

General Manager David Pedersen presented the report.

Director Caspary moved to approve Item 8A as presented. Motion seconded by Director Renger.

Don Schmitz spoke in support of the proposed policy. He noted that several residents in his neighborhood rely on private wells that have gone dry, and they have a need for a water meter in order to truck in water. He thanked the Board and staff for addressing this issue.

General Manager David Pedersen noted that staff believed the proposed policy would be very reasonable and would not lead to wasteful or inefficient usage that could compromise the ability to meet the District's water conservation targets.

Director Lewitt inquired how the proposed policy would affect Westlake Lake Management Association's use of potable water for lake refill in the future. General Manager David Pedersen responded that staff had been in communication with the Association regarding discontinuing lake supplement with potable water, which led to them to drill a well. He stated that any future request by the Association to supplement the lake with potable water would be presented to the Board for consideration.

The Board engaged in a discussion regarding the proposed policy.

Motion carried by the following vote:

AYES: Caspary, Lewitt, Polan, Renger

NOES: None

ABSENT: Peterson

## **9. INFORMATION ITEMS**

### **A Saddletree Tank Rehabilitation Project: Change Order No. 1**

General Manager David Pedersen presented the report. Director Caspary asked that staff be aware of Cal-OSHA regulations.

## **10. NON-ACTION ITEMS**

### **A Organization Reports**

- (1) MWD Representative Report - No report was given.



(2) Other

Director Caspary reported that he attended the Santa Monica Bay Restoration Commission meeting on April 21. He noted that the Water Advisory Council would be preparing an Ocean Acidification Study, and they recently completed the 2015 New Zealand Mudsail Report. He stated that the Work Plan would likely be adopted at the June meeting. He noted that Senator Ted Lieu had submitted a proposal to add beaches in Santa Monica Bay to Santa Monica Mountains National Recreation Area.

**B Director's Reports on Outside Meetings**

Director Polan reported that he, Director Lewitt, and Director Renger attended the Association of Water Agencies of Ventura County Water Symposium on April 21 where several speakers spoke regarding managing water in an era of mega-floods and mega-droughts, climate change modeling, and delivery of water.

Director Lewitt stated that he enjoyed the speech presented by Dan Walters, Political Journalist from *The Sacramento Bee*.

Director Renger noted that Brian Thomas from The PFM Group spoke regarding infrastructure and the need for a tremendous amount of investment. He also noted that David Orth spoke regarding water storage and transportation.

**C General Manager Reports**

(1) General Business

General Manager David Pedersen stated that the District had entered the creek avoidance period, which requires unique operations depending on the weather. He reported that the County gauging station had been out of service and manual readings were showing less than 2.5 cfs, meaning the District was getting close to having to perform flow augmentation. However, the gauging station was recently repaired and registered above 2.5 cfs. He also reviewed the upcoming calendar events.

(2) Follow-Up Items

None.

**D Directors' Comments**

Director Polan expressed his preference for receiving legislative and regulatory updates as a synopsis in the agenda packets. Director Caspary stated that he would prefer to receive this information via email. Public Affairs and Communications Manager Jeff Reinhardt responded that it would be difficult to provide this information in advance because the information changes frequently and he would need to know the extent of information the Board would like to receive.

**11. FUTURE AGENDA ITEMS**

None.

**12. PUBLIC COMMENTS**

None.

**13. CLOSED SESSION**

The Board recessed to closed session at **6:29 p.m.**

**A Conference with District Counsel – Existing Litigation (Government Code Section 54956.9(a)) - (This item was removed from the agenda)**

1. Las Virgenes – Triunfo Joint Powers Authority v. United States Environmental Protection Agency and Heal the Bay, Inc. v. Lisa P. Jackson (TMDL cases)
2. Las Virgenes – Triunfo Joint Powers Authority v. United States Environmental Protection Agency (FOIA cases)

**B Conference with District Counsel - Public Employee Performance Evaluation (Government Code Section 54957):**

**Title: General Manager**

**14. OPEN SESSION AND ADJOURNMENT**

The Board reconvened to Open Session at **6:44 p.m.** District Counsel Keith Lemieux stated that there was no reportable action taken during the Closed Session.

Seeing no further business to come before the Board, the meeting was duly adjourned at **6:45 p.m.**

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GLEN PETERSON, President  
Board of Directors  
Las Virgenes Municipal Water District

ATTEST:

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CHARLES CASPARY, Secretary  
Board of Directors  
Las Virgenes Municipal Water District

(SEAL)

May 2, 2016

To: Payroll

From: David W. Pedersen  
General Manager

**RE: Per Diem Request – April 2016**

Attached are the Director statements of attendance for meetings, conferences and miscellaneous functions, which are summarized in the table below. If you have any questions, please contact me. Thank you.

On February 26, 2008, the Board unanimously voted to amend the daily per diem to \$200, effective February 27, 2008. On January 26, 2010, during the annual review of compensation, the Board opted for the per diem to remain at \$200 and requested that a per diem survey be conducted along with the next employee compensation study.

<u>Director</u>	<u>No. of Meetings</u>	<u>Rate</u>	<u>Total</u>
Charles Caspary	6	\$200.00	\$1,200.00
Jay Lewitt	6	\$200.00	\$1,200.00
Glen Peterson LVMWD* – 5 MWD** – 10	15	\$200.00	\$3,000.00
Leonard Polan	8	\$200.00	\$1,600.00
Lee Renger	6	\$200.00	\$1,200.00

\*LVMWD Code Section 2-2.106(a): “not exceeding a total of ten (10) days in any calendar month”

\*\*LVMWD Code Section 2-2.106(b): MWD director “not exceeding a total of (10) days in any calendar month.”

## LAS VIRGENES MUNICIPAL WATER DISTRICT - PER DIEM REPORT

To: Clerk of the Board

Director's Name: Charles Caspary



Month of: April 2016

Division: Division 1

The following are Las Virgenes Municipal Water District Board of Directors Meetings, Committee Meetings/Conferences I have attended:

Date(s)	# of Days Claimed		Reimbursible Expenses <sup>2</sup> (Y/N)	Check One		Event Title
	Event	Travel <sup>1</sup>		Total	MWD	
4/4/2016	1		1 N		X	LV-TSD JPA BOARD MEETING
4/12/2016	1		1 N		X	LVMWD - REGULAR BOARD MEETING
4/14/2016	1		1 N		X	LV-TSD JPA SPECIAL BOARD MEETING
4/18/2016	1		1 N		X	LVMWD - BOARD MEETING - Statagic plan & budget workshop
4/21/2016	1		1 N		X	SANTA MONICA BAY RESTORATION COMMISSION - Marina Del R
4/26/2016	1		1 N		X	LVMWD - REGULAR BOARD MEETING
TOTAL			6			

Date Submitted: March 27, 2016

Director Signature: CHARLES CASPARY (via email)

**NOTES:** **1.** Travel the day before and/or after an authorized meeting or seminar outside of LA, Ventura and Orange Counties may be paid in accordance with Board Policy. **2.** Attach completed Statement of Account and Claim for Personally Incurred Expenses form.

## LAS VIRGENES MUNICIPAL WATER DISTRICT - PER DIEM REPORT



To: josie guzman Director's Name: jay lewitt  
 Month of: April Division: 5

The following are Las Virgenes Municipal Water District Board of Directors Meetings, Committee Meetings/Conferences I have attended:

Date(s)	# of Days Claimed		Reimbursible Expenses <sup>2</sup> (Y/N)	Check One		Event Title
	Event	Travel <sup>1</sup>		Total	MWD	
4.4.16	JPA		1			JPA Board Meeting
4.12.16	LVMWD		1			LVMWD Board Meeting
4.14.16	LVMWD		1			JPA Special Board Meeting
4.18.16	LVMWD		1			LVMWD Special Board Meeting
4.21.16	AWA		1			Water Symposium
4.26.16	LVMWD		1			LVMWD Board Meeting
<b>TOTAL</b>			<b>6</b>			

Date Submitted: 4.25.16  
 Director Signature: Jay Lewitt

**NOTES:** 1. Travel the day before and/or after an authorized meeting or seminar outside of LA, Ventura and Orange Counties may be paid in accordance with Board Policy. 2. Attach completed Statement of Account and Claim for Personally Incurred Expenses form.

**LAS VIRGENES MUNICIPAL WATER DISTRICT - PER DIEM REPORT**

To: Clerk of the Board

Director's Name: Glen Peterson

Month of: April, 2016

Division: 2



The following are Las Virgenes Municipal Water District Board of Directors Meetings, Committee Meetings/Conferences I have attended:

Date(s)	# of Days Claimed			Reimbursible Expenses <sup>2</sup> (Y/N)	Check One		Event Title
	Event	Travel <sup>1</sup>	Total		MWD	LVMWD	
4/4/16	1		1 n		x		JPA meeting
4/7/16	1		1 n/a	x			E and O committee prepare meeting
4/8-10/16	3		3 n/a			3	Colorado River Inspection trip
4/11/16	1		1 n	x			Committee meetings
4/12/16	1		1 n/a	x			Boards and committee meetings
4/14/16	1		1 n/a		x		Special JPA meeting
4/18/16	1		1		x		LVMWD strategic plan
4/19/16	1		1		x		Delta Islands Inspection Trip
4/20-21/16	2		2		x		California Water Policy Davis, CA
4/26-27/16	2		2 n/a	x			Board Retreat LA
4/29/16	1		1 n/a			x	ACWA State Leg Sacramento
			15				

Date Submitted: 4/28/16

Director Signature: Glen Peterson

**NOTES:** 1. Travel the day before and/or after an authorized meeting or seminar outside of LA, Ventura and Orange Counties may be paid in accordance with Board Policy. 2. Attach completed Statement of Account and Claim for Personally Incurred Expenses form.





**LAS VIRGENES MUNICIPAL WATER DISTRICT - PER DIEM REPORT**

Date(s)	# of Days Claimed		Reimbursible Expenses <sup>2</sup> (Y/N)	Check One		Event Title
	Event	Travel 1 Total		MWD	LVMWD	
4/4/2016	1	1	N		X	IPA BOARD MEETING
4/12/2016	1	1	N		X	LVMWD BOARD MEETING
4/14/2016	1	1	N		X	IPA BOARD MEETING
4/18/2016	1	1	N		X	LVMWD SPECIAL BOARD MEETING
4/21/2016	1	1	N		X	AWA SYMPOSIUM
4/26/2016	1	1	N		X	LVMWD BOARD MEETING
TOTAL		6				



The following are Las Virgenes Municipal Water District Board of Directors Meetings, Committee Meetings/Conferences I have attended:

To: Dave Pedersen  
 Director's Name: Lee Renger  
 Month of April 2016  
 Division: 3

Date Submitted: 4/30/2016

Director Signature: Lee Renger

NOTES: 1. Travel the day before and/or after an authorized meeting or seminar outside of LA, Ventura and Orange Counties may be paid in accordance with Board Policy. 2. Attach completed Statement of Expenses form.



May 10, 2016 LVMWD Regular Board Meeting

TO: Board of Directors

FROM: Finance & Administration

**Subject : Financial Review: Third Quarter of Fiscal Year 2015-16**

**SUMMARY:**

The third quarter financial review presents data as of March 31, 2016. Overall, operating revenues through the third quarter of Fiscal Year 2015-16 were 1.0% higher than budgeted, and operating expenses were 7.3% below budget.

**RECOMMENDATION(S):**

Receive and file the financial review for the third quarter of Fiscal Year 2015-16.

**FISCAL IMPACT:**

No

**ITEM BUDGETED:**

No

**FINANCIAL IMPACT:**

There is no financial impact associated with this action.

**DISCUSSION:**

The third quarter financial review presents data as of March 31, 2016. It is important to note that due to the timing of various projects and payments, the third quarter report should primarily be used to identify areas where attention needs to be focused in response to emerging trends that may affect the District's position at fiscal year-end.

Attachment A provides a table summarizing the Fiscal Year 2015-16 year-to-date financial results. The

amounts in the "FY 2014-15 YTD Actual" column represent the revenues and expenditures through the third quarter of the prior fiscal year. The "FY 2015-16 YTD Budget" column represents the budget through the third quarter of the current fiscal year. The "FY 2015-16 YTD Actual" column represents the third quarter actuals for the current fiscal year.

Following is a summary of the third quarter financial results:

	FY 2015-16 Budget	FY 2015-16 Actual	Variance from Budget	Prior Year Actual	Variance from Prior Year
Potable Water Revenues	\$21,488,879	\$22,214,993	\$726,114	\$25,371,035	(\$3,156,042)
Potable Water Expenses	\$24,573,244	\$24,014,848	(\$558,396)	\$25,536,867	(\$1,522,019)
Recycled Water Revenues	\$4,607,259	\$3,875,899	(\$731,360)	\$4,930,309	(\$1,054,410)
Recycled Water Expenses	\$3,144,563	\$2,331,743	(\$812,820)	\$1,939,147	\$392,596
Sanitation Revenues	\$12,707,881	\$13,087,115	\$379,234	\$12,456,834	\$630,281
Sanitation Expenses	\$8,684,686	\$7,700,720	(\$983,966)	\$8,166,338	(\$465,618)
Capital Project Expenses		\$3,709,736		\$6,646,309	(\$2,936,573)

Potable Water Operations:

Revenues for potable water were 3.4% higher than budget and 12.4% lower than Fiscal Year 2014-15. The large variance from the prior fiscal year was primarily due to reduced demands as a result of continued conservation efforts. Potable water expenses were 2.3% lower than budget and 6.0% lower than Fiscal Year 2014-15.

Recycled Water Operations:

Recycled water sales continued to be lower than anticipated in the budget, mainly driven by conservation measures. Revenues for recycled water were 15.9% lower than budget and 21.4% lower than Fiscal Year 2014-15. Recycled water expenses were 25.8% lower than budget and 20.2% higher than Fiscal Year 2014-15.

Sanitation Operations:

Sanitation revenues for the third quarter were 3.0% higher than budget and 5.1% higher than Fiscal Year 2014-15. Sanitation expenses were 11.3% lower than budget and 5.7% lower than Fiscal Year 2014-15.

Attachment B provides a graphical summary of the third quarter financial results.

Attachment C provides a summary of the financial results for the District's Capital Improvement Projects.

**GOALS:**

Ensure Effective Utilization of the Public's Assets and Money

Prepared by: Mark Uribe, Finance Manager

**ATTACHMENTS:**

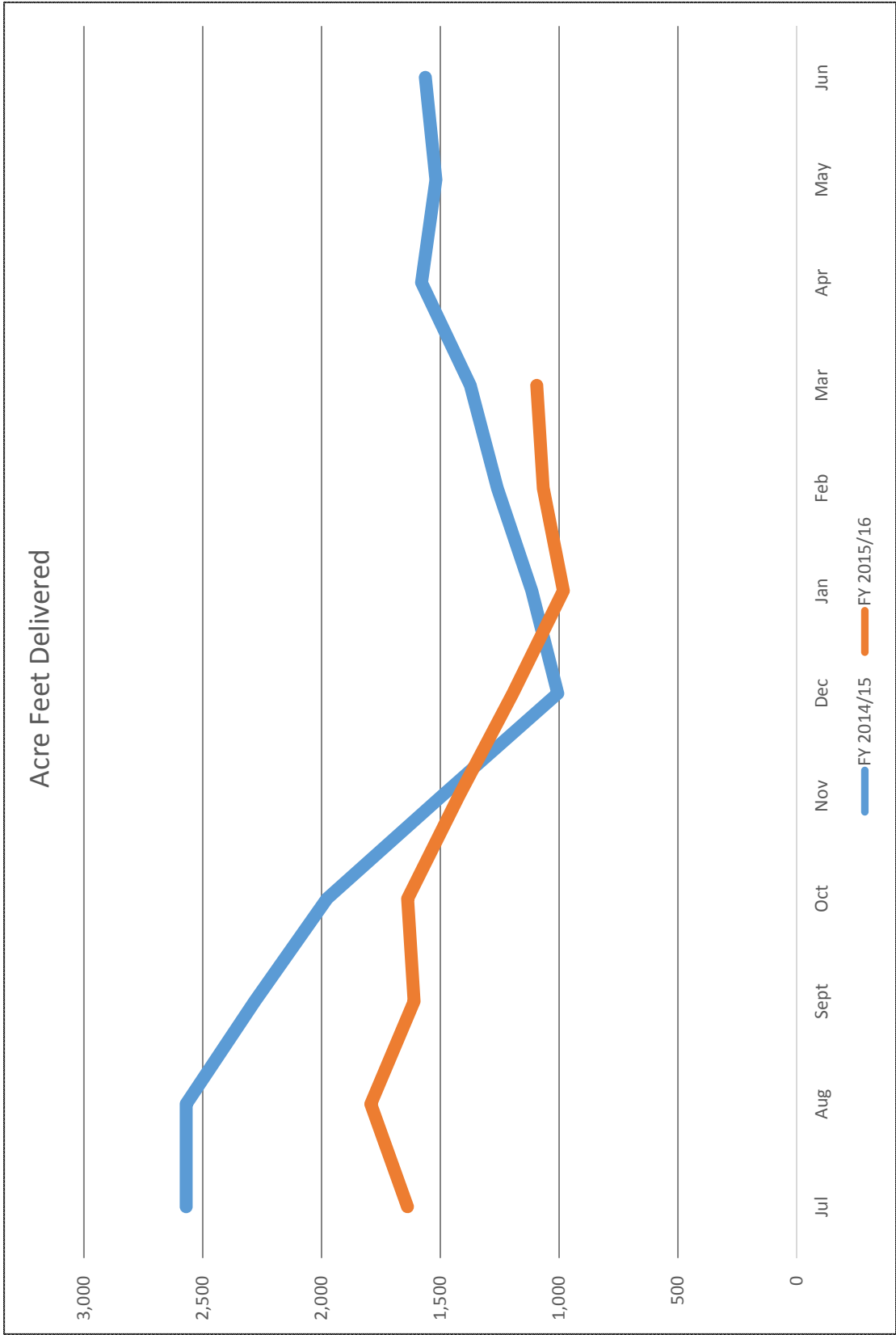
Attachment A: Summary of YTD Financial Results

Attachment B: Budget Summary Graphs

Attachment C: Financial Results for Capital Improvement Projects

**Las Virgenes Municipal Water District**  
**Quarterly Update - March 31, 2016**  
**Fiscal Year 2015/16 Year to Date**

	FY 2014/15 YTD Actual	FY 2015/16 YTD Budget	FY 2015/16 YTD Actual
<u>All Enterprises</u>			
Total Operating Revenues	\$42,758,178	\$38,804,019	\$39,178,007
Expenses:			
Source of Supply	\$13,517,657	\$12,595,578	\$12,175,852
Purchased Services	\$7,135,191	\$7,503,561	\$6,594,548
O&M Expenses	\$4,878,796	\$5,993,983	\$5,612,339
Administrative	\$5,850,670	\$6,827,670	\$6,129,101
Total Operating Expenses	<u>\$31,382,314</u>	<u>\$32,920,792</u>	<u>\$30,511,840</u>
Income available for Replacement & Debt Service	<u>\$11,375,864</u>	<u>\$5,883,227</u>	<u>\$8,666,167</u>
<u>Potable Water Operations</u>			
Total Operating Revenues	\$25,371,035	\$21,488,879	\$22,214,993
Expenses:			
Source of Supply	\$16,205,487	\$13,443,052	\$13,761,423
O&M Expenses	\$4,606,670	\$5,582,682	\$5,306,656
Administrative	\$4,724,710	\$5,547,510	\$4,946,769
Total Operating Expenses	<u>\$25,536,867</u>	<u>\$24,573,244</u>	<u>\$24,014,848</u>
Income available for Replacement & Debt Service	<u>(\$165,832)</u>	<u>(\$3,084,365)</u>	<u>(\$1,799,855)</u>
<u>Recycled Water Operations</u>			
Total Operating Revenues	\$4,930,309	\$4,607,259	\$3,875,899
Expenses:			
Source of Supply	\$1,572,208	\$2,634,227	\$1,949,900
O&M Expenses	\$85,024	\$157,221	\$96,889
Administrative	\$281,915	\$353,115	\$284,954
Total Operating Expenses	<u>\$1,939,147</u>	<u>\$3,144,563</u>	<u>\$2,331,743</u>
Income available for Replacement & Debt Service	<u>\$2,991,162</u>	<u>\$1,462,696</u>	<u>\$1,544,156</u>
<u>Sanitation Operations</u>			
Total Operating Revenues	\$12,456,834	\$12,707,881	\$13,087,115
Expenses:			
Purchased Services	\$7,135,191	\$7,503,561	\$6,594,548
O&M Expenses	\$187,102	\$254,080	\$208,794
Administrative	\$844,045	\$927,045	\$897,378
Total Operating Expenses	<u>\$8,166,338</u>	<u>\$8,684,686</u>	<u>\$7,700,720</u>
Income available for Replacement & Debt Service	\$4,290,496	\$4,023,195	\$5,386,395





# Quarterly Financial Report

FY2015/16 Year to Date as of March 31, 2016

	FY2014/15 Actual YTD	FY2015/16 Budget YTD	FY2015/16 Actual YTD
Operating Revenue	\$42,758,178	\$38,804,019	\$39,178,007
Non-operating Revenue	\$1,763,871	\$1,902,169	\$1,902,169
<b>Total Revenues</b>	<b>\$44,522,049</b>	<b>\$40,706,188</b>	<b>\$41,080,176</b>
Operating Expense	\$31,382,314	\$32,920,792	\$30,511,840
Non-operating Expense	\$757,107	\$692,210	\$692,210
<b>Total Expenses</b>	<b>\$32,139,421</b>	<b>\$33,613,002</b>	<b>\$31,204,050</b>
<b>Net Sources (Uses) of Funds</b>	<b>\$12,382,628</b>	<b>\$7,093,186</b>	<b>\$9,876,126</b>

All Enterprises – Variances to Prior Year and to Budget

Third Quarter FY 2015-16

	FY 2014/15 Actual	FY 2015/16 Budget	FY 2015/16 Actual	Variance from Budget	Variance from Prior Year
Potable Water Revenue	\$25,371,035	\$21,488,879	\$22,214,993	\$726,114	(\$3,156,042)
Potable Water Expense	\$25,536,867	\$24,573,244	\$24,014,848	(\$558,396)	(\$1,522,019)
Recycled Water Revenue	\$4,930,309	\$4,607,259	\$3,875,899	(\$731,360)	(\$1,054,410)
Recycled Water Expense	\$1,939,147	\$3,144,563	\$2,331,743	(\$812,820)	\$392,596
Sanitation Revenue	\$12,456,834	\$12,707,881	\$13,087,115	\$379,234	\$630,281
Sanitation Expense	\$8,166,338	\$8,684,686	\$7,700,720	(\$983,966)	(\$465,618)
Capital Project Expenses	\$6,646,309		\$3,709,736		(\$2,936,573)

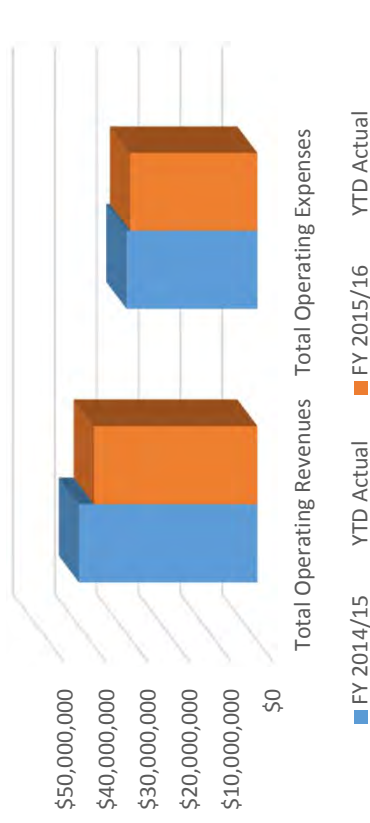
# Total Enterprise Operation Year-to-Date



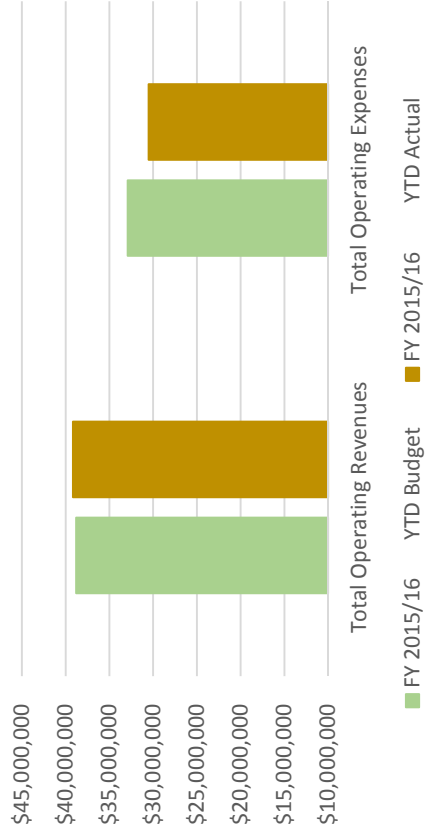
## Third Quarter FY 2015/16

	FY 2014/15 YTD Actual	FY 2015/16 YTD Budget	FY 2015/16 YTD Actual
<b>Total Operating Revenues</b>	<b>\$42,758,178</b>	<b>\$38,804,019</b>	<b>\$39,178,007</b>
Expenses:			
Source of Supply	\$13,517,657	\$12,595,578	\$12,175,852
Purchased Services	\$7,135,191	\$7,503,561	\$6,594,548
O&M Expenses	\$4,878,796	\$5,993,983	\$5,612,339
Administrative	\$5,850,670	\$6,827,670	\$6,129,101
<b>Total Operating Expenses</b>	<b>\$31,382,314</b>	<b>\$32,920,792</b>	<b>\$30,511,840</b>
Income available for Replacement & Debt Service	\$11,375,864	\$5,883,227	\$8,666,167

Operating Revenue & Expenses YTD Comparison



FY 2015/16 Budget vs. Actual





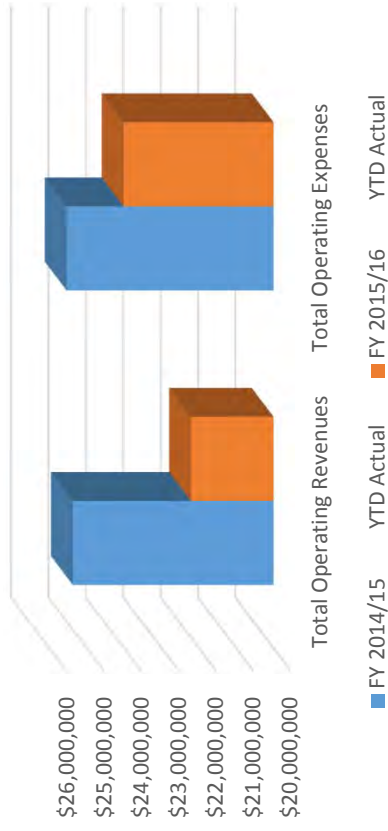
# Potable Water Year-to-Date



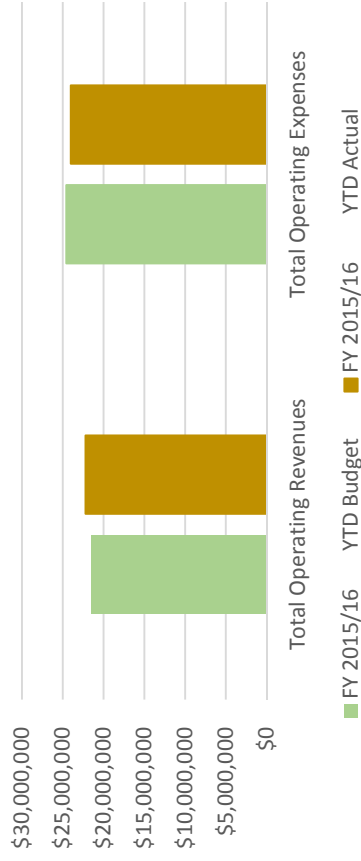
## Third Quarter FY 2015/16

	FY 2014/15 YTD Actual	FY 2015/16 YTD Budget	FY 2015/16 YTD Actual
<b>Total Operating Revenues</b>	<b>\$25,371,035</b>	<b>\$21,488,879</b>	<b>\$22,214,993</b>
Expenses:			
Source of Supply	\$16,205,487	\$13,443,052	\$13,761,423
O&M Expenses	\$4,606,670	\$5,582,682	\$5,306,656
Administrative	\$4,724,710	\$5,547,510	\$4,946,769
<b>Total Operating Expenses</b>	<b>\$25,536,867</b>	<b>\$24,573,244</b>	<b>\$24,014,848</b>
Income available for Replacement & Debt Service (1)	(\$165,832)	(\$3,084,365)	(\$1,799,855)

Potable Water  
Operating Revenue & Expenses YTD Comparison



Potable Water  
Year to Date Budget vs. Actual



(1) This number reflects timing differences of expenditures and revenues. Staff anticipates a year-end balance of (\$422,072) as reflected in the FY 2016-18 Preliminary Budget.

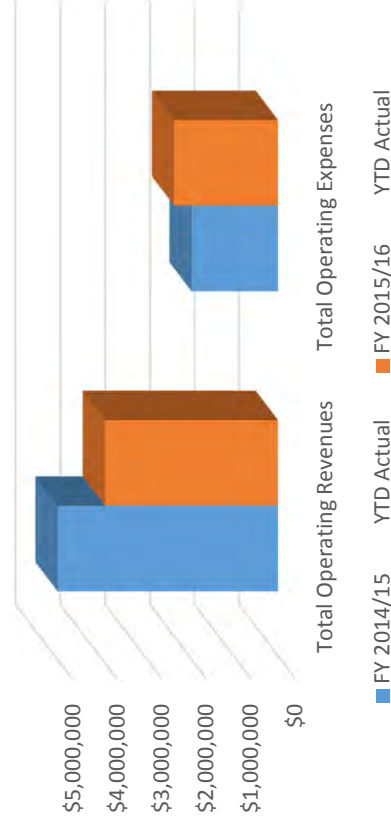
# Recycled Water Year-to-Date



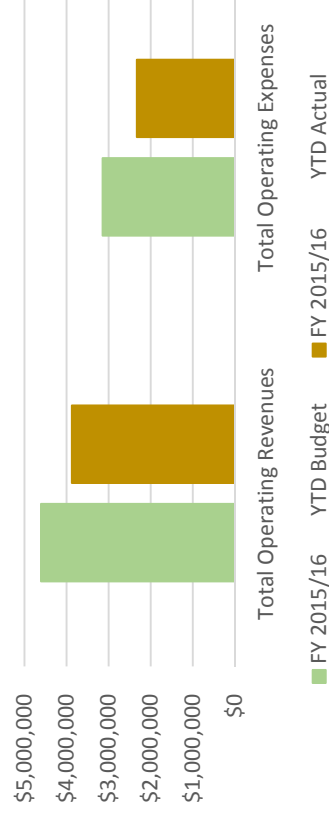
## Third Quarter FY 2015/16

	FY 2014/15 YTD Actual	FY 2015/16 YTD Budget	FY 2015/16 YTD Actual
<b>Total Operating Revenues</b>	<b>\$4,930,309</b>	<b>\$4,607,259</b>	<b>\$3,875,899</b>
Expenses:			
Source of Supply	\$1,572,208	\$2,634,227	\$1,949,900
O&M Expenses	\$85,024	\$157,221	\$96,889
Administrative	\$281,915	\$353,115	\$284,954
<b>Total Operating Expenses</b>	<b>\$1,939,147</b>	<b>\$3,144,563</b>	<b>\$2,331,743</b>
Income available for Replacement & Debt Service	\$2,991,162	\$1,462,696	\$1,544,156

Operating Revenue & Expenses YTD Comparison  
Recycled Water



Recycled Water  
Year to Date Budget vs. Actual



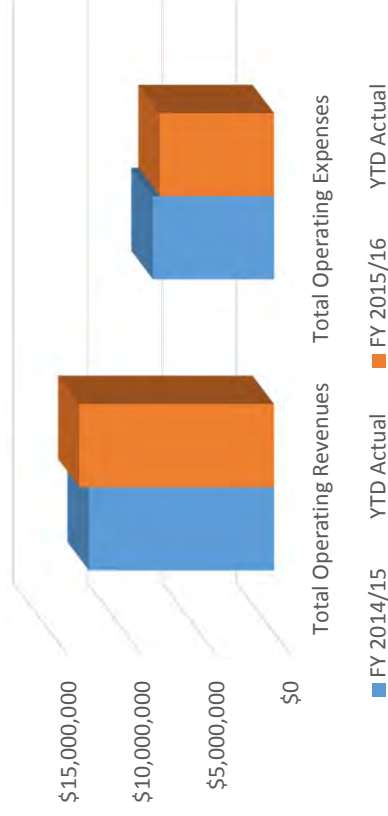
# Sanitation Year-to-Date



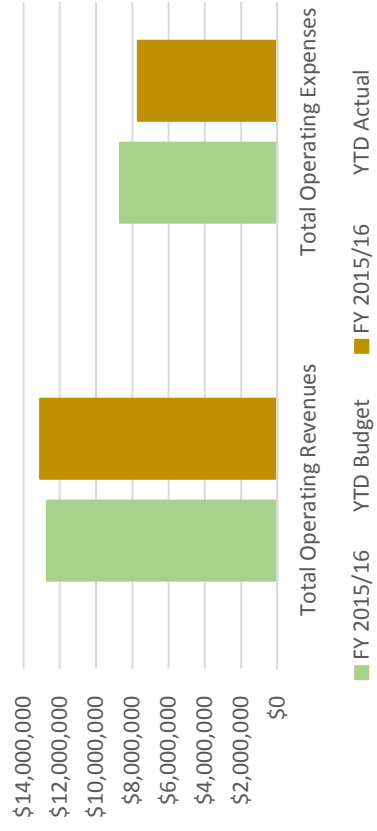
## Third Quarter FY 2015/16

	FY 2014/15 YTD Actual	FY 2015/16 YTD Budget	FY 2015/16 YTD Actual
<b>Total Operating Revenues</b>	<b>\$12,456,834</b>	<b>\$12,707,881</b>	<b>\$13,087,115</b>
Expenses:			
Purchased Services	\$7,135,191	\$7,503,561	\$6,594,548
O&M Expenses	\$187,102	\$254,080	\$208,794
Administrative	\$844,045	\$927,045	\$897,378
<b>Total Operating Expenses</b>	<b>\$8,166,338</b>	<b>\$8,684,686</b>	<b>\$7,700,720</b>
Income available for Replacement & Debt Service	\$4,290,496	\$4,023,195	\$5,386,395

Sanitation  
Operating Revenue & Expenses YTD Comparison



Sanitation  
Year to Date Budget vs. Actual



**Las Virgenes Municipal Water District  
Capital Improvement Project Status  
March 31, 2016**

<b>Job # - Description</b>	<b>Total Project Appropriations</b>	<b>Prior Year Expenditures</b>	<b>Current Year Expenditures</b>	<b>Total Project Expenditures</b>	<b>Balance Available</b>
<b>Completed Projects</b>					
<b>10476 5 MG Tank @ LV Reservoir</b> New 5 million gallon concrete reservoir (tank) near the Las Virgenes reservoir.	\$13,606,169	\$12,714,997	\$337,474	\$13,052,471	\$553,698
<b>10487 Construct 3rd Digester @Rancho</b> Construct a third anaerobic digester at the Rancho Composting Facility. Construction complete, accepted by JPA Board of Directors on January 5, 2015, Item 5B.	\$7,423,548	\$7,876,866	\$14,190	\$7,891,056	(\$467,508)
<b>10508 Tank Renovation:Calabasas Tank</b> Coating, repairs and mechanical improvements to the Calabasas water tank. Construction complete, accepted by Board of Directors on June 9, 2015.	\$2,756,038	\$2,757,483	\$6,048	\$2,763,531	(\$7,493)
<b>10522 Rsvr #2 Imprvmnt (Lining Cover</b> Cement lining of slopes of Reservoir No. 2. (recycled water). Final acceptance approved 7/14/2015.	\$1,607,010	\$1,503,277	\$187	\$1,503,464	\$103,546
<b>10538 Tapia Channel Mixing Imprvmnt</b> Replace air channel mixing components at the Tapia water reclamation facility (WRF).	\$1,210,102	\$92,939	\$1,107,056	\$1,199,995	\$10,107
<b>10543 Bldg. 7 &amp; 8 HVAC Integration</b> Upgrade and replace LVMWD campus air conditioner and chiller system. In Progress / Construction	\$297,990	\$297,106	\$14,455	\$311,561	(\$13,571)
<b>10562 Tapia Structural Repairs</b> Tapia Structural Repairs (combined with IIP No. 10582).	\$46,500	\$2,345	\$238	\$2,583	\$43,917
<b>10573 Sewer Grit Handling</b> Development of a sewer grit dewatering, removal and handling system at Tapia.	\$50,000	\$13,680	\$31,712	\$45,392	\$4,608
<b>10582 Tapia Balancg Pond Sealant Rpl</b> Replace sealant in balancing pond and fix sub grade of the return activated sludge (R.A.S.) pumps to address settling.	\$80,500	\$22,060	\$11,262	\$33,322	\$47,178
<b>10583 Fleet Maint-Oil Lub System</b> Replace failing oil lubrication system for routine maintenance of District vehicles. In Progress / Construction	\$21,500	\$0	\$10,478	\$10,478	\$11,022

<i>Job # - Description</i>	<i>Total Project Appropriations</i>	<i>Prior Year Expenditures</i>	<i>Current Year Expenditures</i>	<i>Total Project Expenditures</i>	<i>Balance Available</i>
<b>Completed Projects</b>					
10589 WIMS Software Implementation Purchase and installation of water information management solution (WIMS). In Progress / Construction	\$32,350	\$25,740	\$0	\$25,740	\$6,610
10598 Vehicle Rpl Program - FY15-16 Systematic replacement of district fleet based on age and condition of vehicles.	\$175,000	\$0	\$188,396	\$188,396	(\$13,396)
10606 Palo Comado Cyn Rd PW Main Ric Relocate potable water main to public right-of-way for Palo Comado Canyon Road to improve accessibility and facilitate future maintenance. Appropriation of \$150,000 approved by Board of Directors 8/25/2015, Item 8A	\$150,000	\$0	\$197,188	\$197,188	(\$47,188)
<b>Total Completed Projects</b>	<b>\$27,456,707</b>	<b>\$25,306,493</b>	<b>\$1,918,684</b>	<b>\$27,225,177</b>	<b>\$231,530</b>
<b>Projects to complete by June 30, 2016</b>					
10418 Rehab 18" RW Pipe (Tapia/Mlhd) Replace failing recycled water pipelines between Tapia WRF and Mulholland Highway.	\$443,231	\$324,336	\$8,542	\$332,878	\$110,353
10539 Saddletree Tank Improvements Perform recommended interior and exterior overhaul of the Saddletree water tank.	\$554,606	\$16,256	\$44,376	\$60,632	\$493,974
10541 Building 8 Computer Cntr Upgrd Upgrade District campus computer systems to provide additional protection of equipment and data.	\$199,070	\$19,070	\$15,014	\$34,084	\$164,986
10542 Vault Lid Replacement Replace potable water system vault lids to provide safer and easier access. In Progress / Construction	\$506,750	\$332,026	\$18,557	\$350,583	\$156,167
10560 Rancho:Rehab Existg CentrateLn Provide mechanical and/or chemical cleaning of minerals from the existing centrate line.	\$175,390	\$0	\$0	\$0	\$175,390
10564 Centrate Equalization Tank Construct a centrate equalization tank at the centrate treatment facility at Tapia.	\$1,250,519	\$42,197	\$125,756	\$167,953	\$1,082,566
10565 Rancho LV:Digester Cleang/Rpr Clean out and evaluate the condition of digesters that have been in service for more than 20 years.	\$287,500	\$0	\$75	\$75	\$287,425
10568 Twin Lakes Tnk Drainage Proj. Replace the existing drainage system at the Twin Lakes tank site. Design	\$346,000	\$49,834	\$28,233	\$78,067	\$267,933

**Job # - Description**

<b>Job # - Description</b>	<b>Total Project Appropriations</b>	<b>Prior Year Expenditures</b>	<b>Current Year Expenditures</b>	<b>Total Project Expenditures</b>	<b>Balance Available</b>
<b>Projects to complete by June 30, 2016</b>					
<b>10570 RLV Compost Fac: New Loader</b> Purchase of replacement loader for use at Rancho. In Progress / Construction	\$180,000	\$0	\$0	\$0	\$180,000
<b>10585 IT Capital Purchases-FY 14-15</b> Purchase of Information Technology related software and equipment.	\$145,500	\$52,935	\$20,130	\$73,065	\$72,435
<b>10594 CIS Infinity Modif-Bdg BsRt</b> Modify District's billing software to accommodate water budget based rate structure.	\$95,000	\$0	\$36,400	\$36,400	\$58,600
<b>10599 Construction Services Truck</b> Purchase new Construction Services Truck to replace aging fleet vehicle.	\$150,000	\$0	\$0	\$0	\$150,000
<b>10604 EOC-Dedicated Equip Crash Cart</b> This project is to fund and purchase technology equipment necessary to establish a dedicated EOC (emergency operations center) crash cart.	\$25,000	\$0	\$0	\$0	\$25,000
<b>10605 Performance Evaluation S/Ware</b> The District's employee performance evaluation software is at end-of-live and is no longer supported by the vendor. This project will identify a solution to support employee performance appraisals.	\$15,000	\$0	\$0	\$0	\$15,000
<b>Total Projects to complete by June 30, 2016</b>	<b>\$4,373,566</b>	<b>\$836,654</b>	<b>\$297,083</b>	<b>\$1,133,737</b>	<b>\$3,239,829</b>
<b>Multi-Year Projects</b>					
<b>10236 Raise Air Vac Valves</b> Install air-vacuum valves and piping modifications in West Hills and Hidden Hills.	\$381,621	\$44,853	\$9,088	\$53,941	\$327,680
<b>10430 Twin Lakes P/S Pipeline Proj.</b> New pipeline through Chatsworth Park to the Twin Lakes pump station. Design Complete	\$1,700,000	\$20,490	\$1,799	\$22,289	\$1,677,711
<b>10513 Tapia Gate &amp; Drive Rpl-FY12-13</b> Replaces existing gates in the tanks and channels at Tapia as well as drive mechanisms for flights and chains.	\$309,650	\$7,768	\$8,053	\$15,821	\$293,829
<b>10520 SCADA System Communicn Upgrd</b> Upgrade the JPA owned portion of the supervisory control and data acquisition system (SCADA) system to an Ethernet based radio network and provide additional data paths for system redundancy.	\$93,100	\$32,447	\$0	\$32,447	\$60,653
<b>10521 SCADA System Comm Upgrd (LV)</b> Upgrade the LVMWD owned portion of the supervisory control and data acquisition system (SCADA) system to an Ethernet based radio network and provide additional data paths for system redundancy.	\$1,387,232	\$140,557	\$0	\$140,557	\$1,246,675

<i>Job # - Description</i>	<i>Total Project Appropriations</i>	<i>Prior Year Expenditures</i>	<i>Current Year Expenditures</i>	<i>Total Project Expenditures</i>	<i>Balance Available</i>
<b>Multi-Year Projects</b>					
<b>10540 Lost Hills Overpass RW Main</b> Relocation of recycled water main due to demolition of Lost Hills overpass.	\$765,101	\$93,914	\$16,450	\$110,364	\$654,737
<b>10551 Centrate System-Pump Impellers</b> Upgrade Rancho centrate system pump impellers to handle solids in the system. In Progress / Construction	\$35,000	\$0	\$0	\$0	\$35,000
<b>10556 Interconnection With CMWD</b> Design and construct a potable water interconnection with the Calleguas Municipal Water District.	\$704,768	\$42,869	\$66,313	\$109,182	\$595,586
<b>10557 Westlake Filtrn Plant Expansn</b> Replace pumps and motors to increase capacity and reduce regulatory requirements. Design	\$5,127,017	\$274,864	\$96,029	\$370,893	\$4,756,124
<b>10558 Westlake P/S Upgrade</b> Update aging pump engines to achieve higher flow rate and provide better utilization of reservoir when it is at lower levels. Design	\$5,149,234	\$195,710	\$82,857	\$278,567	\$4,870,667
<b>10559 Manhole Rehab, F2/F3 Line</b> Rehabilitate manholes identified and prioritized in the Sewer Rehabilitation Study.	\$291,500	\$0	\$2,495	\$2,495	\$289,005
<b>10563 Tapia Suplimentl Carbon Study</b> Study to identify supplemental carbon sources needed for the biological denitrification process at Tapia.	\$85,000	\$0	\$0	\$0	\$85,000
<b>10567 Progimble Logic Contrlr Upgrd</b> Replace obsolete programmable logic controllers and upgrade other electrical equipment at Tapia.	\$216,500	\$0	\$0	\$0	\$216,500
<b>10572 Agoura Rd Widening Project</b> Valve cover, manhole lid and relocation of appurtenances following following street overlays. In Progress / Construction Reimbursed through Measure R funding	\$60,000	\$16,258	\$139,333	\$155,591	(\$95,591)
<b>10574 Rancho Facility Improvement</b> Replace and repair significant components of the JPA's Rancho Las Virgenes Composting Facility	\$384,000	\$74,496	\$61,604	\$136,100	\$247,900
<b>10576 Building No. 7 Improvement</b> Interior painting, warehouse lighting, locker room countertop, parking lot slurry seal, Building #7 (LVMWD Campus). In Progress / Construction	\$47,000	\$0	\$1,711	\$1,711	\$45,289
<b>10577 PW Pump Station Improvements</b> Repair and replace potable water system pump station components.	\$28,500	\$3,311	\$0	\$3,311	\$25,189

<i>Job # - Description</i>	<i>Total Project Appropriations</i>	<i>Prior Year Expenditures</i>	<i>Current Year Expenditures</i>	<i>Total Project Expenditures</i>	<i>Balance Available</i>
<b>Multi-Year Projects</b>					
<b>10578 Security Upgrades-LVMWD</b> Security improvements at LVMWD facilities. In Progress / Construction	\$31,000	\$0	\$22,391	\$22,391	\$8,609
<b>10579 Security Upgrades- JPA</b> Security improvements at JPA facilities. In Progress / Construction	\$32,000	\$0	\$18,244	\$18,244	\$13,756
<b>10581 PW System Equipment Upgrades</b> Replace emergency generator components and filter pump components for the potable water system. In Progress / Construction	\$38,500	\$1,984	\$4,400	\$6,384	\$32,116
<b>10587 RW Storage Study-FY 14-15</b> Study of potential recycled water storage areas. Appropriation of \$406,480 approved by JPA Board of Directors 9/1/2015, Item 6A	\$721,644	\$174,716	\$340,714	\$515,430	\$206,214
<b>10588 Woodland Hills Golf Crs-RW Ext</b> Installation of a recycled water pipeline to the City of Los Angeles. Expenses under this project will be reimbursed by the Los Angeles Department of Water and Power. Project is 100% funded by Los Angeles Department of Water and Power.	\$1,338,638	\$12,366	\$343,105	\$355,471	\$983,167
<b>10590 PW System Rehab.- FY 14-15</b> Multiple year programs to maintain reliable service within the potable water system by replacing PRV stations. Design	\$469,709	\$0	\$104,517	\$104,517	\$365,192
<b>10592 Agoura Rd. RW Main Extension</b> Construct 5,000 feet of recycled water main extension along Agoura Road. Project managed by City of Agoura Hills	\$1,272,665	\$1,192	\$40,894	\$42,086	\$1,230,579
<b>10593 CIS Infinity Software Upgrade</b> Purchase and migrate to latest version of District's billing system.	\$95,000	\$0	\$0	\$0	\$95,000
<b>10595 Tapia Primary Flow Diversion</b> Installation of permanent piping to convey primary effluent to RAS re-aeration basins.	\$44,000	\$0	\$0	\$0	\$44,000
<b>10596 Lift Stations PLC Upgrades</b> This project replaces programmable logic controllers (PLCs) at the Lift Stations with newer PLCs and provides necessary equipment upgrades (fiber optics, network switches and programming) to complete the installation.	\$47,180	\$0	\$0	\$0	\$47,180
<b>10597 Tapia E&amp;I Upgrades</b> 1. Replace obsolete and malfunctioning mechanical protective relays for generators with new solid state controls. 2. Install roots blower/motor vibration system to protect expensive motor and reduce repair cycle. 3. Roots interface upgrade. 4. Replace	\$137,250	\$0	\$0	\$0	\$137,250



<i>Job # - Description</i>	<i>Total Project Appropriations</i>	<i>Prior Year Expenditures</i>	<i>Current Year Expenditures</i>	<i>Total Project Expenditures</i>	<i>Balance Available</i>
<b>Multi-Year Projects</b>					
<b>10600 Tapia WRF Reliability Imprvmnt</b> Replace or rehabilitate facilities and equipment at the Tapia Water Reclamation Facility (WRF) based on failure, exceedence of useful life, or obsolescence.	\$100,000	\$0	\$32,367	\$32,367	\$67,633
<b>10601 Rancho Reliability Improvement</b> Replace or rehabilitate facilities and equipment at the Rancho facility based on failure, exceedence of useful life, or obsolescence.	\$100,000	\$0	\$48,954	\$48,954	\$51,046
<b>10602 Misc RW Extension</b> Funding to develop miscellaneous recycled water system extensions.	\$106,000	\$0	\$6,921	\$6,921	\$99,079
<b>10603 Bldg.1 Tenant Imprvmnt-FY15-16</b> Provide necessary improvements and upgrades to building 1 to enhance rental marketability.	\$430,000	\$0	\$40,730	\$40,730	\$389,270
<b>10607 Tapia Primary Tank No.2-5 Rehb</b> Phase 2 of Primary Clarifier Tanks rehabilitation project.	\$98,264	\$0	\$0	\$0	\$98,264
<b>Total Multi-Year Projects</b>	<b>\$21,827,073</b>	<b>\$1,137,795</b>	<b>\$1,488,969</b>	<b>\$2,626,764</b>	<b>\$19,200,309</b>
<b>Projects on Hold</b>					
<b>10446 Buffer Land at Rancho</b> This is a placeholder program for potential acquisition of additional buffer land around Rancho (no property is currently identified). Placeholder	\$250,000	\$0	\$0	\$0	\$250,000
<b>10493 Tapia: Sludge Screening</b> Install a screener for primary and secondary sludge at Tapia. Project On Hold	\$385,000	\$0	\$0	\$0	\$385,000
<b>10537 Raw Sludge WetWell Mixing Impv</b> Replace the existing raw sludge mixing pump at Tapia with a more suitable unit. Project On Hold	\$127,000	\$0	\$5,000	\$5,000	\$122,000
<b>10586 AMR Implementation- FY 14-15</b> Installation of automated meter reading/advanced metering infrastructure (AMR/AMI) for the potable water system. In Progress / Construction	\$1,275,000	\$0	\$0	\$0	\$1,275,000
<b>Total Projects on Hold</b>	<b>\$2,037,000</b>	<b>\$0</b>	<b>\$5,000</b>	<b>\$5,000</b>	<b>\$2,032,000</b>

<i>Job # - Description</i>	<i>Total Project Appropriations</i>	<i>Prior Year Expenditures</i>	<i>Current Year Expenditures</i>	<i>Total Project Expenditures</i>	<i>Balance Available</i>
<i>Totals</i>	<u>\$55,694,346</u>	<u>\$27,280,942</u>	<u>\$3,709,736</u>	<u>\$30,990,678</u>	<u>\$24,703,668</u>
<i>Less: Triunfo Sanitation District's share of JPA Projects</i>	<u>\$5,500,359</u>	<u>\$3,027,949</u>	<u>\$642,541</u>	<u>\$3,670,490</u>	<u>\$1,829,869</u>
<i>Total Las Virgenes share: All Projects</i>	<u>\$50,193,987</u>	<u>\$24,252,993</u>	<u>\$3,067,195</u>	<u>\$27,320,188</u>	<u>\$22,873,799</u>



May 10, 2016 LVMWD Regular Board Meeting

TO: Board of Directors

FROM: Finance & Administration

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**Subject : Independent Auditor Services: Contract Amendment for Name Change**

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**SUMMARY:**

The District's independent auditors recently made a change to the name of their firm and requested that the current contract for audit services be amended accordingly.

**RECOMMENDATION(S):**

Authorize the General Manager to execute an amendment to the agreement for auditing services to reflect a name change from Pun & McGeady, LLP to the Pun Group, LLP.

**FISCAL IMPACT:**

No

**ITEM BUDGETED:**

No

**FINANCIAL IMPACT:**

**DISCUSSION:**

In 2014, the District completed a Request for Proposals process for independent audit services. On June 24, 2014, the Board awarded a contract to Pun & McGeady, LLP for the Fiscal Year 2014-15 audit, including up to four one-year renewal options.

Due to recent restructuring, the firm name was changed from Pun & McGeady, LLP to the Pun Group, LLP. This item authorizes the General Manager to execute an amendment to

the agreement for audit services to reflect the name change. No other changes to the contract are proposed.

**GOALS:**

Ensure Effective Utilization of the Public's Assets and Money

Prepared by: Mark Uribe, Finance Manager



May 10, 2016 LVMWD Regular Board Meeting

TO: Board of Directors

FROM: Finance & Administration

**Subject : Annual Supply and Delivery of Ammonium Hydroxide: Award of Bid**

The Las Virgenes-Triunfo Joint Powers Authority (JPA) approved funding for this matter in the JPA Budget. The LVMWD Board, as the Administering Agent of the JPA, is authorized to approve the purchase of ammonium hydroxide.

**SUMMARY:**

On March 22, 2016, the Board approved a Request for Bids for the annual supply and delivery of ammonium hydroxide. Staff recommends that the Board accept the bid from Airgas Specialty Products, Inc., which results in an overall 30% cost-savings as compared to current pricing for the chemical.

**RECOMMENDATION(S):**

Accept the bid from Airgas Specialty Products, Inc., and authorize the General Manager to approve an initial 13-month purchase order, in the amount of \$37,000, with four one-year renewal options, in the amount of \$34,106.10 per year, for the supply and delivery of ammonium hydroxide.

**FISCAL IMPACT:**

Yes

**ITEM BUDGETED:**

Yes

**FINANCIAL IMPACT:**

The total estimated annual cost for ammonium hydroxide is \$34,106.10, which constitutes an annual cost-savings of \$14,780.40. Sufficient funds for the purchase are available in the adopted Fiscal Year 2015-16 Budget and will be proposed in future year budgets.

**DISCUSSION:**

Ammonium hydroxide (aqua ammonia) is used for the disinfection process at the Tapia Water Reclamation Facility to minimize the formation of disinfection byproducts in the final effluent and for the disinfection of filtered potable water treated at the Westlake Filtration Plant.

The initial Purchase Order is proposed for a 13-month period, intended to align future contract periods with the fiscal year. Four one-year renewal options are proposed for the annual supply and delivery of ammonium hydroxide to the Tapia and Westlake facilities.

**Bid Process:**

A Request for Bids was posted on the District's website, advertised in the *Daily News*, and sent to 20 different vendors who previously expressed an interest in chemical bids. Five bid responses were received and publicly opened. Airgas submitted the lowest bid with a unit price of \$0.1043 per pound. The Airgas bid noted several exceptions to the District's standard terms and conditions. However, during the bid review process, Airgas rescinded its exceptions and agreed to the District's standard terms and conditions.

The District's previous annual contract unit price for ammonium hydroxide was \$0.1495 per pound. The competitive bid process resulted in an overall 30% cost-savings, approximately \$14,780.40 annually. Attached for reference is a copy of the bid from Airgas.

**Bid Summary:**

<u>Bidder</u>	<u>Unit Price (pound)</u>	<u>Bid Total</u>
<b>Airgas Specialty Products, Inc.</b>	\$ 0.1043	<b>\$34,106.10</b>
Argo Chemical	\$ 0.1387	\$45,354.90
Hill Brothers Chemical Co.	\$ 0.1169	\$38,226.30
Industrial Solution Services	\$ 0.1724	\$56,374.80
Univar USA Inc.		no bid

**GOALS:**

Ensure Effective Utilization of the Public's Assets and Money

Prepared by: Gretchen Bullock, Purchasing Supervisor

**ATTACHMENTS:**

Ammonium Hydroxide Airgas Bid

April 8, 2016

Gretchen Bullock  
Las Virgenes Water District  
4232 Las Virgenes Rd  
Calabasas, CA 91302

***RE: RFB Ammonium Hydroxide Annual Supply***

Greetings,

Enclosed please find our response to your bid. We appreciate the opportunity to potentially service your requirement.

We have reviewed the Purchase Order, and our requested changes are included.

We look forward to working with you and your team. Let us know if you have any questions or concerns.

Thanks,



Cynthia Thomas  
Manager of Contracts & Pricing  
Airgas Specialty Products, Inc.  
2530 Sever Road, Suite 300  
Lawrenceville, GA 30043  
678.985.7332  
eFax:877.342.3998  
[cynthia.thomas@airgas.com](mailto:cynthia.thomas@airgas.com)

**Las Virgenes Municipal Water District  
Bid Form-Schedule  
Ammonium Hydroxide—Annual Supply**

The undersigned states and declares as follows: that the bidder has carefully read and examined the Bid Documents; Bid Notice; Instruction to Bidders; Bid Specifications including exhibits; Bid Form-Schedule; and that the bidder will comply with the bid terms and conditions. The undersigned agrees to supply and deliver materials in strict conformity with the specifications and instructions enclosed with the Invitation for Bids for the prices set forth below in this bid schedule.

It is understood that this bid shall remain open and shall not be withdrawn for a period of ninety (90) days from the date prescribed for the opening of the bid.

It is further agreed that the materials/services to be furnished under this bid shall be delivered at such time and in such quantities as called for by the Las Virgenes Municipal Water District. The District may extend the term of this contract by written notice to the supplier at the end of the contract period.

CONTRACT TERM as follows: initial contract term shall be good for 13 months from date of contract execution. Four (4) additional one (1) year renewals may be negotiated at the District's option.

Materials to be furnished under this bid shall be delivered FOB Destination Freight Pre-Paid and Allowed to Las Virgenes Municipal Water District's Tapia Water Reclamation Facility, 731 Malibu Canyon Road, Calabasas, CA 91302 or Westlake Filtration Plant, 32601 Torchwood Place, Westlake Village, CA 91361 (whichever is applicable), in the manner set forth in the Bid Scope and Specifications.

All bidders are required to submit the following information with their bid

- Completed Bid Form-Schedule
- Contact information for three customers bidder is currently supplying with Ammonium Hydroxide
- Product information/technical data sheet
- Global Harmonized System-Safety Data Sheet (GHS-SDS)

The bidder's authorized officer identified below hereby declares that the representations in this bid are true and correct and of my own personal knowledge, and that these representations are made under penalty of perjury under the laws of the State of California, and that I am duly authorized to bind this bidder to this bid.

**>>>continued on next page<<<**



Bid Item No.	Quantity	Unit of Measure UOM	Description Refer to Bid Scope & Specifications for detailed description	Unit Price	Extended Price
1.	300,000	pound	Ammonium Hydroxide	#0.1043	\$31290 <sup>00</sup>
			CA Sales Tax (9 % as of 4/13/16)		\$2816.10
<b>Total Bid</b>				<b>\$</b>	<b>34106.10</b>

Written Total Bid Amount:

Thirty-Four thousand one hundred six dollars + <sup>10</sup>/<sub>100</sub>

Notes or Exceptions:

\*See attached redlined Purchase Order \*

Addendum Acknowledgement:

Addendum #1

Signed: Cynthia Thomas

Addendum #2

Signed: \_\_\_\_\_

Bidder:

Airgas Specialty Products, Inc. 4/8/16  
Corporate Name of Bidder Date

By: Cynthia Thomas Title: Manager of Contracts  
Authorized Signature

Cynthia Thomas Cynthia.Thomas@airgas.com  
Print Name E-mail

800-295-2225  
Phone

2530 Sever Rd, Ste 300 \_\_\_\_\_  
Address Lawrenceville, GA 30043 Mobile

Purchase Order Terms and Conditions

1. **Acceptance.** By accepting this Purchase Order, Vendor agrees to comply with these terms and conditions. Vendor shall sell and deliver, and Las Virgenes Municipal Water District (the "District") shall purchase, the goods, material and/or items described above (the "Goods"). The Goods must comply with this Purchase Order and the notice inviting bids and information to bidders, (if any). The Goods shall be new (unless stated otherwise on this Purchase Order), sold and purchased at prices set forth above.
2. **Delivery.** Vendor's carrier shall deliver the Goods FOB at the location set forth above. Vendor to pay all freight costs unless otherwise noted on front of Purchase Order; FOB Destination Freight Prepaid and Allowed. Goods shall be delivered no later than the date set forth above. Time is of the essence. Any delivery of Goods prior to issuance of a Purchase Order shall be at the Vendors sole risk. The District will not be obligated to return ~~or pay for~~ any Goods delivered without a Purchase Order. It will be the Vendors responsibility to pick up any Goods delivered without a Purchase Order.
3. **Compliance with Law.** The design and manufacture of the Goods shall comply with all applicable federal, state and local laws and regulations.
4. **Governing Law.** This Agreement shall be construed in accordance with and governed by the laws of the State of California.
5. **Risk of Loss.** Vendor shall bear the risk of loss of or damage to Goods until such time as District takes actual possession of Goods by moving them from the point of delivery.
6. **Substitutions.** No substitution will be permitted without the written consent of District. If Vendor proposes any substitution, Vendor guarantees that the substitution is equal in quality, capacity, durability, ease of maintenance, and ease of installation to the Goods originally specified.
7. **Changes.** District, by written order, may delete Goods to be supplied under this Purchase Order, and the Purchase Order price will be equitably reduced and the Purchase Order shall be modified in writing accordingly. District, by written order, may order an increase in Goods to be supplied, and the Purchase Order price will be equitably increased. If unit prices are stated, the reduction or increase shall be calculated at the unit prices stated in the Purchase Order. If no unit prices are stated, Vendor shall promptly, at the request of District, quote prices, and District shall promptly accept or reject the quote.
8. **Blanket or Annual Purchase Orders.** For Blanket or Annual Purchase Orders, the quantity amounts reflect estimated needs of the District for the term of the order and actual quantity purchased may vary higher or lower.
9. **Inspection and Testing.** All Goods will be subject to final inspection and approval after delivery. Payment for the Goods will not constitute final acceptance. Vendor at its cost shall remove and replace any Goods that District designates as nonconforming or defective. District's failure to inspect does not relieve Seller of any responsibility to perform according to the terms of the Purchase Order.
10. **Indemnification.** Vendor shall indemnify, defend, protect, and hold harmless District, and its officers, employees, volunteers and agents from and against any and all liability, losses, claims, damages, expenses, demands, lawsuits, administrative proceedings, arbitrations, and costs (including, but not limited to, attorney, expert witness and consultant fees, and litigation costs) of every nature arising out of breach of this Purchase Order or negligent or wrongful act of Vendor. This indemnification provision shall not apply to claims, liability, loss or damage caused by the ~~sole~~ negligence or willful misconduct of District.
11. **Warranty.** Vendor warrants that all Goods and related services to be supplied by it under this Purchase Order are fit and sufficient for the purpose intended; that all Goods and related services will conform to the specifications, drawing samples or other descriptions specified by the District; that the Goods are new, merchantable, good quality and free from defects (whether patent or latent) in material and workmanship; that all workmanship and Goods to be provided are of the best grade and quality; and, that it has good and clear title to all Goods to be supplied by it and the same are free and clear from all liens, encumbrances and security interests. For a period of one year after delivery of the Goods, Vendor shall at its own expense replace or repair defective Goods at the request of District.
12. **Payment.** Payment will be made within 30 days after receipt of a properly prepared invoice or receipt of goods, whichever is later. ~~District may withhold 10% of the price until the Goods are installed, tested, and operating.~~ District shall pay all applicable sales and use taxes. ~~The District is not responsible for payment of any Good delivered without a valid Purchase Order in effect.~~
13. **Force Majeure.** Except for defaults of Seller's subcontractors at any tier, neither District nor Vendor shall be liable for any failure to perform due to any cause beyond their reasonable control and without their fault or negligence. Such causes include, but are not limited to, acts of God or of the public enemy, acts of the Government in either its sovereign or contractual capacity, fires, floods, epidemics, terrorism, quarantine restrictions, strikes, freight embargoes, and unusually severe weather. In the event that performance of this Purchase Order is hindered, delayed or adversely affected by causes of the type described above ("Force Majeure"), then the party whose performance is so affected shall so notify the other party's authorized representative in writing and, at District's option, this Purchase Order shall be completed with such adjustments as are reasonably required by the existence of Force Majeure or this Purchase Order may be terminated for convenience.
14. **Termination.** District may terminate this Purchase Order at any time with or without cause and such termination shall not constitute default. In the event of partial termination, Vendor is not excused from performance of the non-terminated balance of work under this Purchase Order. The District shall pay the vendor for any portion of the order that is completed prior to termination.
15. **Integration.** This Purchase Order constitutes the sole, final, complete, exclusive and integrated expression and statement of the terms of this contract among the parties concerning the subject matter addressed herein, and supersedes all prior and contemporaneous negotiations, representations and agreements, either oral or written, that may be related to the subject matter of this Purchase Order, except those other documents that are expressly referenced in this Purchase Order.
16. **Severability.** If any provision of this Agreement shall be deemed to be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby.
17. **Waiver.** The waiver at any time by any party of its rights with respect to a default or other matter arising in connection with this Purchase Order shall not be deemed a waiver with respect to any subsequent default or matter. No payment by District to Vendor shall be considered or construed to be an approval or acceptance of any defective goods or any other breach or default.
18. **Attorney's Fees.** In the event any legal action is brought to enforce or construe this Purchase Order, the prevailing party shall be entitled to an award of reasonable attorney's fees, expert witness and consulting fees, litigation costs and costs of suit.
19. **Disputes.** If a dispute arises in any way arising out of or relating to this Agreement or the breach thereof, or relating to its application or interpretation, the aggrieved party will notify the other party of the dispute in writing within twenty days after such dispute arises and the parties will meet and confer within thirty days after delivery of such notice to attempt to resolve the dispute. If the parties are unable to resolve the dispute to their mutual, the District reserves its right to seek appropriate legal remedies.
20. **Remedies.** Except as otherwise provided herein, the rights and remedies of both parties hereunder shall be in addition to their rights and remedies at law or in equity. Failure of either party to enforce any of its rights shall not constitute a waiver of such rights or of any other rights and shall not be construed as a waiver or relinquishment of any such provisions, rights or remedies.
21. **Insurance.** Any vendor performing a service on District property or a District job site is required to have insurance. The District's minimum standard insurance requirements are as follows: General Liability with \$1 million per occurrence and \$2 million aggregate, Insured Autos \$1 million, and Worker's Compensation CA State Statutory Requirements. Additional insurance may be required. If so, it will be stated on front of PO or other related contract documents. Insurance certificates and endorsements specifically naming "Las Virgenes Municipal Water District, its officers, employees, and agents" as additional insured are required before any work is performed.
22. **Rentals.** For the purpose of calculating rental periods, one day is 24 hours (from time of delivery), one week is seven calendar days and one month is 30 calendar days, unless specified otherwise on the front of Purchase Order. Items are to be considered off rent at the time a pick-up is called in to vendor.
23. **Assignment.** Vendor shall not assign, sell or otherwise transfer any obligation or interest in this Agreement without the specific written consent of the District.
24. **Modifications.** Any modifications or exceptions to these Terms and Conditions will be stated on the front of the Purchase Order.

**LAS VIRGENES MUNICIPAL WATER DISTRICT**

To: JAY LEWITT, TREASURER

Payments for Board Meeting of: May 10, 2016

Upon certification by the Treasurer the checks and wire transfers were correct and supporting documents available, it is recommended the following demands on the various funds be approved and payments authorized.

Wells Fargo Bank A/C No. 4806-994448

Checks Nos. 72837 through 72946 were issued in the total amount of \$ 529,174.06

**Payments through wire transfers as follows:**

4/25/2016	Bank of New York Mellon	Payment Sani Refunding Revenue Bond	\$ 387,750.49
4/29/2016	Metropolitan Water Dist.	Payment for water deliveries in the month of February 2016	\$ 939,076.58
		Total wires	\$ 1,326,827.07
		Total payments	\$ 1,856,001.13

(Reference is hereby to these demands on file in the District's Check Register and by this reference the same is incorporated herein and made a part hereof.)

**CHECK LISTING FOR BOARD MEETING  
05/10/16**

Company Name	Company No.	Check No. 72837 thru 72842 04/26/16	Amount	Check No. 72843 thru 72850 05/03/16	Amount	Check No. 72851 thru 72946 05/10/16	Amount	Total
Potable Water Operations	101	325.39		25,977.55		56,940.12		83,243.06
Recycled Water Operations	102	155.00				1,625.00		1,780.00
Sanitation Operations	130			63.70		2,279.91		2,343.61
Potable Water Construction	201							0.00
Water Conservation Construction	203							0.00
Potable Water Replacement	301			2,285.25		159,379.55		161,664.80
Reclaimed Water Replace	302							0.00
Internal Service	701			17,143.20		103,136.64		120,279.84
JPA Operations	751	21,374.69		6,838.18		134,051.75		162,264.62
JPA Construction	752							0.00
JPA Replacement	754	75.00				11,459.83		11,534.83
<b>Total Printed</b>		<b>21,930.08</b>		<b>52,307.88</b>		<b>468,872.80</b>		<b>543,110.76</b>

**Voided Checks/ payment stopped:**

Ck#72655	751	(13,936.70)						(13,936.70)
<b>Total Voids</b>		<b>(13,936.70)</b>		<b>0.00</b>		<b>0.00</b>		<b>(13,936.70)</b>
<b>Net Total</b>		<b>7,993.38</b>		<b>52,307.88</b>		<b>468,872.80</b>		<b>529,174.06</b>

**LAS VIRGENES MUNICIPAL WATER DISTRICT  
WIRE TRANSFER REQUEST**

**DATE NEEDED: April 25, 2016**

REQUESTED BY: Jennifer Chen

FUNDS WIRING TO: LAS VIREGENES MWD 09 BOND PMT FUND A/C

BENEFICIARY BANK NAME: BANK OF NEW YORK MELLON ABA No. 021000018

BENEFICIARY BANK A/C NO. 8500248400

FUNDS WIRING FROM: LVMWD's Checking A/C (No. 4806994448) @ Wells Fargo Bank

AMOUNT TO BE WIRED: \$387,750.49

REMARKS: Transfer Fund to A/C No. 8500248400-Las Virgenes Bond Pmt Account for interest payments of 2009 Sani Refunding Revenue Bond due on 5/1/16.

REVIEWED BY: 

APPROVED BY: 

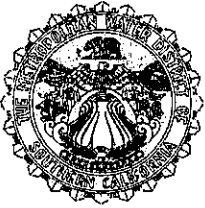
APPROVED BY: 

\*\*\*\*\*ACCOUNTING DEPARTMENT USE ONLY\*\*\*\*\*

WIRE ENTERED BY: Jennifer Chen DATE: 4-19-2016

WIRE VERIFIED/SENT BY:  DATE: 4/19/16

WIRE EFFECTIVE DATE: 4/25/16



**MWD**

**METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA**

700 North Alameda Street  
Los Angeles, CA, 90012-2944

**INVOICE**

Billed To:  
Las Virgenes Municipal Water District



Service Address  
4232 Las Virgenes Road  
Calabasas, CA 91302

February 2016	Page No. 1 of 1
Mailed: 03/10/2016	Due Date: 04/29/2016
Invoice Number: 8623	Revision: 0

**NOTICE**

The MWD Administrative Code Section 4507 and 4508 require that payment must be made in "Good Funds" by the due date or the payment will be considered delinquent and an additional charge shall be assessed.

DELIVERIES	Volume (AF)
Total Water Treated Delivered	774.8

SALES	Type	Volume (AF)	Rate (\$ /AF)	Total (\$)
Full Service	Tier 1 Supply Rate	881.8	\$156.00	\$137,560.80
	System Access Rate	881.8	\$259.00	\$228,386.20
	Water Stewardship Rate	881.8	\$41.00	\$36,153.80
	System Power Rate	881.8	\$138.00	\$121,688.40
	Treatment Surcharge	881.8	\$348.00	\$306,866.40
SUBTOTAL				\$830,656.60

OTHER CHARGES AND CREDITS	Rate (\$ /AF)	
Conservation Debit/Credit	(\$66,328.00)	
Readiness To Serve Charge( Payment Schedule: M)	\$132,874.81	
Capacity Charge( Payment Schedule: M)	\$41,874.17	
SUBTOTAL		\$108,420.98

ADDITIONAL INFORMATION	Volume (AF)	Tier 1 %	Peak Day	Flow (CFS)
Purchase Order Commitment (Jan 2015 to Dec 2024)	162,390.0			
Purchase Order Firm Delivery To Date (Jan 2015 to Dec 2024)	20,971.1			
Tier 1 Annual Limit (For Current Calendar Year)	24,359.0			
Tier 1 YTD Deliveries (For Current Calendar Year)	1,502.1	6.2		
Tier 1 Current Month Deliveries	881.8			
Capacity Charge			5/30/2014	46.1

**INVOICE TOTAL**

Volume AF  
**881.8**

Amount Now Due  
**\$939,076.58**

Note: Amount Due is based on highlighted fields

Approved for Payment  
*David W. Pedersen*  
David W. Pedersen, P.E. 03/21/16

Approved for Payment  
*David R. Lipman*  
David R. Lipman 3/17/16

**PAID**  
*Wired 4/29/16*  
SC

Batch Number - 244205

Bank Account - 00146807 Cash-General

Payment Number	Payment Date	Address Number	Name	Payment Stub Message	Ty	Document Number	Key Item	Key Co	Amount	Invoice Number
72837	04/26/16	2611	LA DWP	RECTIFIER	PV	145560	001	00101	36.42	503850/041516
				3/16~4/14/16						
				RECTIFIER	PV	145562	001	00101	40.97	017698/041416
				3/15~4/13/16						
				Payment Amount					77.39	
72838	04/26/16	7949	LOS ANGELES COUNTY - PUBLIC HEALTH	ANLN	PV	145563	001	00101	248.00	AR0243824/15-16
				FEE-BCKFLW						
				PREV DEVICES						
				ANLN	PV	145563	002	00101	155.00	AR0243824/15-16
				FEE-BCKFLW						
				PREV DEVICES						
				Payment Amount					403.00	
72839	04/26/16	3514	LOS ANGELES COUNTY, REGISTRAR-REC ORDER	NOD FEE-TAPIA SLIDE GATE	PV	145561	001	00754	75.00	10513/NOD
				Payment Amount					75.00	
72840	04/26/16	2932	SEALS WEST PACKING CO.	REBLD REW PMP#3 SEAL	PV	145564	001	00701	560.00	4368
				Payment Amount					560.00	
72841	04/26/16	19083	SOLARCITY - AU SOLAR 1 (GS1)	RW P/S	PV	145578	001	00751	19,532.69	9133440-00-02
				3/1~3/31/16						6
				Payment Amount					19,532.69	
72842	04/26/16	2969	STATE WATER RESOURCES CONTROL BOARD	ANLN PRMT FEE	PV	145579	001	00751	1,282.00	SW-0114288
				4/16~3/17						
				Payment Amount					1,282.00	
				Total Amount of Payments Written					21,930.08	
				Total Number of Payments Written					6	

Batch Number - 244262

Bank Account - 00146607 Cash-General

Payment Number	Payment Date	Address Number	Name	Payment Stub Message	Ty	Document Number	Key Item Co	Amount	Invoice Number
72843	05/03/16	2869	AT&T	SRV 4/14--5/13/16	PV	145695	001 00701	101.60	4639/041416
				SRV 4/14--5/13/16	PV	145696	001 00751	101.60	4860/041416
				SRV 4/20--5/19/16	PV	145711	001 00101	101.60	2150/042016
				SRV 4/22--5/21/16	PV	145712	001 00701	516.64	0119/042216
				Payment Amount				821.44	
72844	05/03/16	2425	BANK OF AMERICA	VISA CHG-F&A-MAR'16	PV	145573	001 00701	299.89	3071/040716
				VISA CHG-F&A-MAR'16	PV	145574	001 00701	940.85	1129/040716
				VISA CHG-MAINT-MAR'16	PV	145575	001 00751	106.50	1302/040716
				VISA CHG-MAINT-MAR'16	PV	145575	002 00751	75.00	1302/040716
				VISA CHG-MAINT-MAR'16	PV	145575	003 00751	127.53	1302/040716
				VISA CHG-MAINT-MAR'16	PV	145575	004 00751	300.96	1302/040716
				VISA CHG-MAINT-MAR'16	PV	145575	005 00751	125.40	1302/040716
				VISA CHG-MAINT-MAR'16	PV	145575	006 00751	73.91	1302/040716
				VISA CHG-MAINT-MAR'16	PV	145575	007 00751	184.54	1302/040716
				VISA CHG-MAINT-MAR'16	PV	145575	008 00751	29.35	1302/040716
				VISA CHG-MAINT-MAR'16	PV	145575	009 00751	138.00	1302/040716



Batch Number - 244262  
Bank Account - 00146807 Cash-General

Payment Number	Date	Address Number	Name	Payment Stub Message	Ty	Document Number	Key Item Co	Amount	Invoice Number
				VISA	PV	145575	010 00751	175.35	1302/040716
				CHG-MAINT-MAR '16					
				VISA	PV	145576	001 00701	54.00	2504/040716
				CHG-ENGR-MAR' 16					
				VISA	PV	145577	001 00701	48.05	7366/040716
				CHG-OPS-MAR' 6					
				VISA	PV	145577	002 00701	635.39	7366/040716
				CHG-OPS-MAR' 6					
				VISA	PV	145577	003 00701	1,854.04	7366/040716
				CHG-OPS-MAR' 6					
				VISA	PV	145577	004 00701	225.00	7366/040716
				CHG-OPS-MAR' 6					
				VISA	PV	145577	005 00701	31.27	7366/040716
				CHG-OPS-MAR' 6					
				VISA	PV	145577	006 00701	290.62	7366/040716
				CHG-OPS-MAR' 6					
				VISA	PV	145577	007 00701	255.93	7366/040716
				CHG-OPS-MAR' 6					
				VISA	PV	145577	008 00701	107.75	7366/040716
				CHG-OPS-MAR' 6					
				VISA	PV	145577	009 00701	58.84	7366/040716
				CHG-OPS-MAR' 6					
				VISA	PV	145577	010 00701	476.11	7366/040716
				CHG-OPS-MAR' 6					
				VISA	PV	145577	011 00701	2,060.09	7366/040716
				CHG-OPS-MAR' 6					
				VISA	PV	145577	012 00701	363.86	7366/040716
				CHG-OPS-MAR' 6					

Payment Number	Date	Address Number	Name	Payment Stub Message	Ty	Document Number	Key itm Co	Amount	Invoice Number
6				VISA CHG-OPS-MAR'1	PV	145577	013 00701	40.00	7366/040716
6				VISA CHG-OPS-MAR'1	PV	145577	014 00701	113.48	7366/040716
6				VISA CHG-OPS-MAR'1	PV	145577	015 00701	492.31	7366/040716
6				VISA CHG-TAPIA-MAR '16	PV	145580	001 00701	50.21	2698/040716
6				VISA CHG-TAPIA-MAR '16	PV	145580	002 00701	64.14	2698/040716
6				VISA CHG-TAPIA-MAR '16	PV	145580	003 00701	439.66	2698/040716
6				VISA CHG-TAPIA-MAR '16	PV	145580	004 00701	172.23	2698/040716
6				VISA CHG-TAPIA-MAR '16	PV	145580	005 00701	49.00	2698/040716
6				VISA CHG-TAPIA-MAR '16	PV	145580	006 00701	583.00	2698/040716
6				VISA CHG-TAPIA-MAR '16	PV	145580	007 00701	74.86	2698/040716
6				VISA CHG-R CNSRV-MAR'16	PV	145610	001 00701	1,009.18	1722/040716
6				VISA CHG-WSTLK-MAR '16	PV	145611	001 00101	123.51	7431/040716
6				VISA CHG-WTR DIST	PV	145612	001 00701	56.92	8102/040716
6				N2-MAR'16 VISA CHG-WTR DIST	PV	145612	002 00701	379.62	8102/040716

Batch Number - 244262  
Bank Account - 00146807 Cash-General

Payment Number	Date	Address Number	Name	Payment Stub Message	Ty	Document . . .	Key Item Co	Amount	Invoice Number
				N2-MAR'16					
				VISA CHG-WTR	PV	145612	003 00701	236.10	8102/040716
				DIST					
				N2-MAR'16					
				VISA CHG-WTR	PV	145612	004 00701	95.68	8102/040716
				DIST					
				N2-MAR'16					
				VISA CHG-WTR	PV	145612	005 00701	431.00	8102/040716
				DIST					
				N2-MAR'16					
				VISA CHG-WTR	PV	145612	006 00701	228.57	8102/040716
				DIST					
				N2-MAR'16					
				VISA CHG-WTR	PV	145612	007 00701	161.04	8102/040716
				DIST					
				N2-MAR'16					
				VISA CHG-OPS	PV	145613	001 00701	107.91-	1498/040716
				ADMIN-MAR'16					
				VISA CHG-OPS	PV	145613	002 00701	8.63	1498/040716
				ADMIN-MAR'16					
				VISA CHG-OPS	PV	145613	003 00701	114.45	1498/040716
				ADMIN-MAR'16					
				VISA CHG-OPS	PV	145613	004 00701	103.86	1498/040716
				ADMIN-MAR'16					
				VISA CHG-OPS	PV	145613	005 00701	124.66	1498/040716
				ADMIN-MAR'16					
				VISA CHG-OPS	PV	145613	006 00701	60.00	1498/040716
				ADMIN-MAR'16					
				VISA CHG-OPS	PV	145613	007 00701	107.91	1498/040716
				ADMIN-MAR'16					
				VISA CHG-OPS	PV	145613	008 00701	68.37	1498/040716
				ADMIN-MAR'16					
				VISA CHG-OPS	PV	145613	009 00701	43.07	1498/040716
				ADMIN-MAR'16					
				VISA CHG-OPS	PV	145613	010 00701	133.25	1498/040716
				ADMIN-MAR'16					
				VISA CHG-OPS	PV	145613	011 00701	62.11	1498/040716
				ADMIN-MAR'16					
				VISA CHG-OPS	PV	145613	012 00701	642.03	1498/040716
				ADMIN-MAR'16					
				VISA CHG-OPS	PV	145613	013 00701	38.14	1498/040716
				ADMIN-MAR'16					

Batch Number - 244262  
Bank Account - 00146807 Cash-General

Payment Number	Date	Address Number	Name	Payment Stub Message	Ty	Document Number	Key Item	Co	Amount	Invoice Number
				ADMIN-MAR'16						
				VISA CHG-R	PV	145614	001	00701	34.64	3954/040716
				CNSRV						
				N1-MAR'16						
				VISA CHG-R	PV	145614	002	00701	35.00	3954/040716
				CNSRV						
				N1-MAR'16						
				VISA CHG-R	PV	145614	003	00701	5.36	3954/040716
				CNSRV						
				N1-MAR'16						
				VISA CHG-R	PV	145614	004	00701	156.96	3954/040716
				CNSRV						
				N1-MAR'16						
				VISA CHG-R	PV	145614	005	00701	188.92	3954/040716
				CNSRV						
				N1-MAR'16						
				VISA CHG-R	PV	145614	006	00701	245.38	3954/040716
				CNSRV						
				N1-MAR'16						
				VISA CHG-R	PV	145614	007	00701	35.00	3954/040716
				CNSRV						
				N1-MAR'16						
				VISA CHG-R	PV	145614	008	00701	35.00	3954/040716
				CNSRV						
				N1-MAR'16						
				VISA CHG-R	PV	145614	009	00701	35.00	3954/040716
				CNSRV						
				N1-MAR'16						
				VISA CHG-R	PV	145614	010	00701	35.00	3954/040716
				CNSRV						
				N1-MAR'16						
				VISA CHG-R	PV	145614	011	00701	35.00	3954/040716
				CNSRV						
				N1-MAR'16						
				VISA CHG-R	PV	145614	012	00701	35.00	3954/040716
				CNSRV						
				N1-MAR'16						
				VISA CHG-R	PV	145614	013	00701	119.99	3954/040716
				CNSRV						
				N1-MAR'16						
				VISA CHG-R	PV	145614	014	00701	185.50	3954/040716
				CNSRV						

Batch Number - 244262  
Bank Account - 00146807 Cash-General

Payment Number	Date	Address Number	Name	Payment Stub Message	Ty	Document . . . Number	Key lim Co	Amount	Invoice Number
				CNSRV					
			N1-MAR'16						
			VISA CHG-R		PV	145614	015 00701	115.00	3954/040716
			CNSRV						
			N1-MAR'16						
			VISA CHG-R		PV	145614	016 00701	28.95	3954/040716
			CNSRV						
			N1-MAR'16						
			VISA CHG-R		PV	145614	017 00701	241.40	3954/040716
			CNSRV						
			N1-MAR'16						
			VISA		PV	145665	001 00701	347.25	8518/040716
			CHG-PETERSON- MAR'16						
			VISA		PV	145666	001 00701	435.70	4013/040716
			CHG-FIGUEROA- MAR'16						
			VISA		PV	145667	001 00701	437.47	2372/040716
			CHG-LIPPMAN-M AR'16						
			VISA		PV	145668	001 00701	595.28	4176/040716
			CHG-PANIAGUA- MAR'16						
			VISA		PV	145669	001 00701	325.00	0271/040716
			CHG-PATTERSON -MAR'16						
			VISA		PV	145670	001 00701	88.02	1162/040716
			CHG-PEDERSEN- MAR'16						
			VISA		PV	145671	001 00701	945.00	7961/040716
			CHG-POLAN-MAR '16						
			VISA		PV	145699	001 00701	188.36	3044/040716
			CHG-REYES-MAR '16						
			VISA CHG-WTR DIST		PV	145700	001 00701	120.40	3713/040716
			N1-MAR'16						
			VISA CHG-WTR DIST		PV	145700	002 00701	120.40	3713/040716
			N1-MAR'16						

Batch Number - 244262  
Bank Account - 00146807 Cash-General

Payment Number	Payment Date	Address Number	Name	Payment Stub Message	Document Ty	Document Number	Key Item	Key Co	Amount	Invoice Number
				VISA CHG-WTR	PV	145700	003	00701	383.71	3713/040716
				DIST						
				N1-MAR'16						
				VISA CHG-WTR	PV	145700	004	00701	120.40	3713/040716
				DIST						
				N1-MAR'16						
				VISA CHG-WTR	PV	145700	005	00701	95.68	3713/040716
				DIST						
				N1-MAR'16						
				VISA	PV	145725	001	00751	1,359.06	3187/040716
				CHG-RLV-MAR'16						
				6						
				Payment Amount					22,466.14	
72845	05/03/16	19270	COMMUNICATION S RELAY, LLC	5/16 SITE	PV	145697	001	00701	900.00	56022
				RNTL						
				Payment Amount					900.00	
72846	05/03/16	4566	CONSOLIDATED ELECTRICAL DISTRIBUTORS	200 CONDUIT 3/4	PV	145691	001	00701	207.15	9009-731944
				Payment Amount					207.15	
72847	05/03/16	6770	G.I. INDUSTRIES	3/29-4/15/16	PV	145726	001	00701	1,322.70	2766974-0283-8
				SHOP DISP						
				3/29-4/15/16						
				TAPIA RAGS						
				DISP						
				Payment Amount					1,594.05	
72848	05/03/16	2611	LA DWP	RECTIFIER	PV	145692	001	00101	41.13	557160/042516
				3/25-4/22/16						
				RECTIFIER						
				3/25-4/25/16						
				TWIN LKS P/S						
				3/15-4/13/16						
				GERMAIN TEMP						
				MTR						
				3/17-4/14/16						
				Payment Amount					21,962.83	
72849	05/03/16	3352	LAS VIRGENES	JED SMITH P/S	PV	145505	001	00101	32.25	0254/041316

Batch Number - 244262  
Bank Account - 00146807 Cash-General

Payment Number	Payment Date	Address Number	Name	Payment Stub Message	Document Ty	Document Number	Key Item	Key Co	Amount	Invoice Number
			MUNICIPAL WATER DISTRICT	3/7-4/16/16						
			RLV FARM	PV	145506	001	00751		90.89	2080/041316
			3/9-4/7/16 TAPIA	PV	145507	001	00751		219.08	1760/041316
			3/9-4/7/16 RLV	PV	145508	001	00751		438.28	2090/041316
			3/9-4/7/16 BLDG#1	PV	145509	001	00101		223.69	2620/041316
			3/9-4/7/16 BLDG#8	PV	145510	001	00701		231.68	2647/041316
			3/9-4/7/16 BLDG#8 FIRE PRT	PV	145511	001	00701		7.50	2650/041316
			3/9-4/7/16 BLDG#7 FIRE PRT	PV	145512	001	00701		7.50	2654/041316
			3/9-4/7/16 BLDG#7	PV	145513	001	00701		486.10	2656/041316
			3/9-4/7/16 BLDG#2	PV	145514	001	00701		270.35	2658/041316
			3/9-4/7/16 LS#2	PV	145515	001	00130		34.23	0570/041316
			3/8-4/7/16 LS#1	PV	145516	001	00130		29.47	1775/041316
			3/8-4/7/16 Payment Amount					2,071.02		
72850	05/03/16	3514	LOS ANGELES COUNTY, REGISTRAR-REC ORDER	NOD-WDLND HILLS REW EXTSN	PV	145572	001	00301	2,285.25	10588/NOD
			Payment Amount					2,285.25		
			Total Amount of Payments Written					52,307.88		
			Total Number of Payments Written					8		

Batch Number - 244537  
Bank Account - 00146807 Cash-General

Payment Number	Payment Date	Address Number	Name	Payment Stub Message	Document Ty	Document Number	Key Item	Key Co	Amount	Invoice Number
72851	05/10/16	18965	ePOWER NETWORK, INC.	3KVA RCK MNTD UPS	PV	145547	001	00701	2,620.65	24972
72852	05/10/16	18445	AAA BACKFLOW DEVICE TESTING, INC.	Payment Amount DEC'15 BCKFLW TESTS	PV	145518	001	00701	175.00	B15-123115
				DEC'15 BCKFLW TESTS	PV	145518	002	00701	150.00	B15-123115
				JAN'16 BCKFLW TESTS	PV	145519	001	00701	1,325.00	B15-013116
				JAN'16 BCKFLW TESTS	PV	145519	002	00701	1,475.00	B15-013116
72853	05/10/16	19269	ACC BUSINESS	Payment Amount SCADA MPLS LINES	PV	145640	001	00130	480.82	161050826
				3/11-4/10/16 SCADA MPLS LINES	PV	145640	002	00130	515.94	161050826
				3/11-4/10/16 SCADA MPLS LINES	PV	145640	003	00130	480.67	161050826
				3/11-4/10/16 SCADA MPLS LINES	PV	145640	004	00130	515.95	161050826
				3/11-4/10/16 SCADA MPLS LINES	PV	145640	005	00130	480.83	161050826
72854	05/10/16	19070	ADDISON FOREST PRODUCTS, LLC	Payment Amount 80 YDS WOOD SHVGS@\$11	PV	145641	001	00701	987.56	161038744
				Payment Amount APR'16 FLW MNTRG	PV	145729	001	00701	880.00	1265
				APR'16 FLW MNTRG	PV	145729	002	00701	673.15	22085.22-04-16
				APR'16 FLW MNTRG	PV	145729	002	00701	2,019.45	22085.22-04-16



Batch Number - 244537  
Bank Account - 00146807 Cash-General

Payment Number	Payment Date	Address Number	Name	Payment Stub Message	Ty	Document Number	Key Item Co	Amount	Invoice Number
72856	05/10/16	3077	AIRGAS USA, LLC	Payment Amount RAIN JCKTS&OVERALL S	PV	145520	001 00701	139.96	9050293056
				4/16 CYLNR	PV	145521	001 00701	799.27	9935442206
				RENT	PV	145534	001 00701	96.97	9049683578
				BOOTS-B.BRIL	PV	145661	001 00701	42.40	9050439294
				12 DIAL SOAPS					
			AIRGAS USA, LLC P. O. BOX 7423 PASADENA CA 91109-7423					2,692.60	
72857	05/10/16	2355	ALFA LAVAL INC.	Payment Amount FRAME&LINR-CN T#1&2 FREIGHT	PV	145734	001 00701	18,011.33	276022244
					PV	145734	003 00701	333.09	276022244
			ALFA LAVAL INC. 3210 ALFA LAVAL INC. P. O. BOX 123227 DALLAS TX 75312-3227					1,078.60	
72858	05/10/16	18647	AMTECH ELEVATOR SERVICES	Payment Amount 5/1-7/31/16 ELEV MAINT	PV	145717	001 00701	851.97	DVA09741516
								18,344.42	
72859	05/10/16	2526	APPLIED INDUSTRIAL TECHNOLOGIES	Payment Amount 5 SLV OUTPUT 3-438	PV	145731	001 00701	1,640.97	7007681606
								851.97	
			APPLIED INDUSTRIAL TECHNOLOGIES 3180 APPLIED INDUSTRIAL TECHNOLOGIES P. O. BOX 100538 PASADENA CA 91189-0538					1,640.97	
72860	05/10/16	2397	AQUATIC BIOASSAY & CONSULTING	Payment Amount 3/16 CHRNC NPDES BIOASSYS	PV	145522	001 00701	1,150.00	LVS0416.0328
								1,150.00	
72861	05/10/16	5625	ASSOC. OF WATER AGENCIES OF VENTURA CO	Payment Amount CCWJUC LNCHN 3/23 LM&EM	PV	145673	001 00701	70.00	06-9878
								70.00	
								70.00	

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Payment Number	Payment Date	Address Number	Name	Payment Stub Message	Document Ty	Document Number	Key Ifm	Key Co	Amount	Invoice Number
72862	05/10/16	7865	B&B PALLET CO.	55 YDS WOOD CHIPS	PV	145523	001	00701	638.00	114920
				55 YDS WOOD CHIPS	PV	145524	001	00701	638.00	114921
				55 YDS WOOD CHIPS	PV	145525	001	00701	638.00	114922
				55 YDS WOOD CHIPS	PV	145526	001	00701	638.00	114924
				55 YDS WOOD CHIPS	PV	145604	001	00701	638.00	114923
				55 YDS WOOD CHIPS	PV	145605	001	00701	638.00	114925
				55 YDS WOOD CHIPS	PV	145735	001	00701	638.00	114926
				55 YDS WOOD CHIPS	PV	145736	001	00701	638.00	114930
				55 YDS WOOD CHIPS	PV	145737	001	00701	638.00	114899
				55 YDS WOOD CHIPS	PV	145738	001	00701	638.00	114900
				55 YDS WOOD CHIPS	PV	145739	001	00701	638.00	114901
				55 YDS WOOD CHIPS	PV	145740	001	00701	638.00	114902
				55 YDS WOOD CHIPS	PV	145741	001	00701	638.00	114903
				Payment Amount					8,294.00	
72863	05/10/16	2443	BENNER & CARPENTER	P/E 4/13/16 AREA 6 ANNEXATN	PV	145678	001	00101	2,285.00	12060
				Payment Amount					2,285.00	
72864	05/10/16	18080	BOOT BARN INC.	PRTCTV FTWR-S.BUCHAN AN	PV	145536	001	00701	161.99	IVC0077817
				Payment Amount					161.99	
72865	05/10/16	20354	PATRICIA O'REILLY CARPENTER	TURF RMVL REBATE	PV	145631	001	00101	3,050.00	1020332
				Payment Amount					3,050.00	
72866	05/10/16	2554	COASTLINE EQUIPMENT	LOADR 4 YR/5000 HR	PV	145594	001	00701	3,025.00	292067-1
				Payment Amount					3,025.00	

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Payment Number	Payment Date	Address Number	Name	Payment Stub Message	TY	Document Number	Key Item	Co	Amount	Invoice Number
72867	05/10/16	2557	COMBAT FIRE PROTECTION	WARRANTY Payment Amount	PV	145544	001	00701	3,025.00 561.00	36462
				ANNUAL FIRE EXT INSPCT						
				ANNUAL FIRE EXT INSPCT	PV	145544	002	00701	907.75	36462
				ANNUAL FIRE EXT INSPCT	PV	145544	005	00701	1,426.50	36462
				ANNUAL FIRE EXT INSPCT	PV	145544	015	00701	621.30	36462
				ANNUAL FIRE EXT INSPCT	PV	145544	018	00701	523.20	36462
72868	05/10/16	2565	CONEJO AWARDS	Payment Amount	PV	145632	001	00101	4,039.75 115.03	88257
				PSTR CNT NAME PLT&PERP						
				PLATES						
				K.NORMAN NAME TAG	PV	145633	001	00701	13.44	88180
72869	05/10/16	4586	CONSOLIDATED ELECTRICAL DISTRIBUTORS	Payment Amount	PV	145548	001	00701	128.47 2,125.50	9009-732087
				SCADA SYS SUPPORT						
72870	05/10/16	2547	COUNTY SANITATION DISTRICTS OF LA COUNTY	Payment Amount	PV	145517	001	00701	2,125.50 511.06	48892/033116
				MAR'16 RAGS/GRIT HAULING						
72871	05/10/16	16364	D&H WATER SYSTEMS INC.	Payment Amount	PV	145598	001	00701	511.06 6,528.54	I 2016-0272
				W&T ANALYZER PARTS						
				W&T ANALYZER PARTS	PV	145598	016	00701	35.00	I 2016-0272
72872	05/10/16	18688	DATAFORM PRINT COMMUNICATION S	Payment Amount	PV	145530	001	00751	6,563.54 415.39	11950
				COMPRSD SPONGES WSLOGAN						
72873	05/10/16	20352	PAMELA.A. DAVIS	Payment Amount	PV	145587	001	00101	415.39 1,728.00	341478
				TURF RMVL REBATE						
				Payment Amount					1,728.00	

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Payment Number	Payment Date	Address Number	Name	Payment Stub Message	Document Ty	Document Number	Key Item	Key Co	Amount	Invoice Number
72874	05/10/16	11330	DIAL SECURITY	WLK GATE WIRING/SVC	PV	145608	001	00101	750.00	273255
72875	05/10/16	7420	DICALITE MINERALS CORP.	Payment Amount 44 BAGS DICALITE	PV	145730	001	00701	9,711.90	436893
				44 BAGS DICALITE	PV	145730	002	00701	120.20	436893
			All Payee	9884 DICALITE MINERALS CORP. 1 BALA AVENUE, SUITE 310 BALA CYNWYD PA 19004						
72876	05/10/16	8612	DURHAM SCHOOL SERVICES	Payment Amount 3/16 BUSES-3 SCHLS OUTDR ED	PV	145531	001	00701	1,503.52	91297149
72877	05/10/16	3515	DWYER INSTRUMENTS, INC.	Payment Amount NATL GAS PRSSR SWITCH	PV	145721	001	00101	258.17	04139274
72878	05/10/16	18111	ELECSYS INTERNATIONAL CORPORATION	Payment Amount MAY'16 RADIX MAINT	PV	145549	001	00701	261.00	148246
72879	05/10/16	14591	EMISSION COMPLIANT CONTROLS CORP.	Payment Amount RAW WTR 1 ENGN SVC	PV	145593	001	00701	1,690.00	PSO3499
			All Payee	15750 EMISSION COMPLIANT CONTROLS CORP. P. O. BOX 16727 IRVINE CA 92623-6727						
72880	05/10/16	18441	EMPLOYEE RELATIONS NETWORK	Payment Amount BACKGRND CHECK-AKAJGA NIC	PV	145535	001	00701	200.60	74550
72881	05/10/16	15256	ENVIRONMENTAL OUTSOURCE, INC	Payment Amount LIFT OPERATR TRNG@4/20/16	PV	145628	001	00701	995.00	9387

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72882	05/10/16	2638	ENVIRONMENTAL RESOURCE ASSOC	Payment Amount PERF EVAL STNDS	PV	145622	001	00701	5,156.79	788893
									995.00	
				FREIGHT	PV	145622	002	00701	101.42	788893
				Payment Amount					5,258.21	
72883	05/10/16	19146	LOURDES FIGUEROA	DRNK/SNACK-SO N&DTR DAY 4/28	PV	145626	001	00701	208.23	13763
				Payment Amount					208.23	
72884	05/10/16	2660	FISHER SCIENTIFIC	3 TIMERS & 1 PIPET	PV	145662	001	00701	314.60	1840636
				Payment Amount					314.60	
			Alt Payee	FISHER SCIENTIFIC FILE #50129 LOS ANGELES CA 90074-0129						
72885	05/10/16	20351	DAVID FRITZ	TURF RMVL REBATE	PV	145586	001	00101	1,414.00	341378
				Payment Amount					1,414.00	
72886	05/10/16	2691	GIERLICH-MITC HELL, INC.	TRQ LMTR&SPKT	PV	145162	001	00701	11,314.85	GC 14608
				Payment Amount					144.98	
				FREIGHT	PV	145162	003	00701	144.98	GC 14608
			Alt Payee	GIERLICH-MITCHELL, INC. 10533 PROGRESS WAY, SUITE A CYPRESS CA 90630						
				Payment Amount					11,459.83	
72887	05/10/16	18175	GOLD COAST ENVIRONMENTAL	8" KROHNE MAG MTR FLW 8" KROHNE MAG MTR FLW	PV	145733	001	00701	4,830.24	11394
				Payment Amount					250.00	
				TURF RMVL REBATE	PV	145708	001	00101	1,036.00	2180460
				Payment Amount					1,036.00	
72888	05/10/16	20358	JUSTIN GOLD	KEY CNTL CABINET CALIPERS&INDI CATORS 3 ROLLS-RECYCLE	PV	145532	001	00701	95.79	9069543032
				Payment Amount					556.80	
				TURF RMVL REBATE	PV	145533	001	00701	556.80	9067839457
				Payment Amount					250.19	
				TURF RMVL REBATE	PV	145538	001	00751	250.19	9075998212

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Payment Number	Payment Date	Address Number	Name	Payment Stub Message	Ty	Document Number	Key Item Co	Amount	Invoice Number
			Alt Payee 5453 GRAINGER, INC. DEPT 805178142 PALATINE IL 60038-0001	D RUBBER MISC TUBING&FITTING GS 2 CLOCKS BLDG&STRUT CREDIT FOR RETRND STRUT	PV	145545	001 00701	287.86	9069243211
72890	05/10/16	15664	GRIFFITH AIR TOOL INC.	30 LB CLAY DIGGER	PV	145660	001 00701	848.84	42761
72891	05/10/16	16846	G3 LA, LLC	LNDSCP CLASSES@4/13& 4/20	PV	145629	001 00101	3,000.00	345
72892	05/10/16	2705	HACH COMPANY	GRD CLMNS, FRT&STA BLCAL FREIGHT	PV	145637	001 00701	1,143.95	9880971
			Alt Payee 6442 HACH COMPANY 2207 COLLECTIONS CENTER DR CHICAGO IL 60693		PV	145637	006 00701	66.40	9880971
72893	05/10/16	15755	HD SUPPLY WATERWORKS, LTD.	AIR BLWR PIPING&FITTINGS	PV	145603	001 00751	1,089.79	F291896
			Alt Payee 15948 HD SUPPLY WATERWORKS, LTD P. O. BOX 6039 CYPRESS CA 90630		PV	145603	001 00751	1,089.79	F291896
72894	05/10/16	18646	HDR ENGINEERING, INC.	2/21-3/26/16 WLK FLT PLNT EXP 2/21-3/26/16 WLK P/S UPRGD	PV	145555	001 00701	8,563.40	269749-B
			Alt Payee 15948 HD SUPPLY WATERWORKS, LTD P. O. BOX 6039 CYPRESS CA 90630		PV	145555	001 00701	8,563.40	269749-B
					PV	145556	001 00701	5,708.94	269749-B
								14,272.34	

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Payment Number	Payment Date	Address Number	Name	Payment Stub Message	Ty	Document Number	Key Item	Key Co	Amount	Invoice Number
72895	05/10/16	20356	REGINA HELLER	TURF RMVL REBATE	PV	145642	001	00101	2,016.00	2170576
				Payment Amount					2,016.00	
72896	05/10/16	2591	JOHN CRANE, INC.	2 MECH SEAL REBLD KITS FREIGHT	PV	145595	001	00701	1,769.20	3214279
				Payment Amount					1,769.20	
				Payment Amount					7.99	
				Payment Amount					9,104.77	80598
72897	05/10/16	4850	JWC ENVIRONMENTAL	MUFFN MNSTR GRNDR	PV	145732	001	00701	9,104.77	80598
				Payment Amount					9,104.77	
72898	05/10/16	20228	KIEWIT INFRASTRUCTUR E WEST CO.	PMT#1-WLK PLNT EXPSN	PV	145606	001	00701	60,850.00	10557/#1
				Payment Amount					60,850.00	
				5% RETENTION-PMT #1	PD	145607	001	00301	3,042.50-	10557/RTN#1
				Payment Amount					57,807.50	
72899	05/10/16	3038	LARRY WALKER & ASSOC	P/E 3/31/16 NPDES PRMT RNWL	PV	145638	001	00701	47,141.41	00532.01-5
				Payment Amount					47,141.41	
72900	05/10/16	15749	LAWRENCE ROLL-UP DOORS, INC.	WAREHOUSE ROLL-UP DOOR	PV	145596	001	00701	3,108.67	1658705
				Payment Amount					3,108.67	
72901	05/10/16	20359	SAM LEE	TURF RMVL REBATE	PV	145707	001	00101	2,720.00	2201295
				Payment Amount					2,720.00	
72902	05/10/16	2789	LIEBERT CASSIDY WHITMORE	DFEH COMPLAINT P/E 3/31/16 PROF SRV-P/E 3/31 GEN	PV	145591	001	00701	1,715.00	1418970
				Payment Amount					1,715.00	
				Payment Amount					130.00	1418969
				Payment Amount					1,845.00	
72903	05/10/16	2590	LOS ANGELES DAILY NEWS	MAR'16 LEGAL ADS	PV	145600	001	00701	5,476.40	0000265633
				Payment Amount					5,476.40	

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Payment Number	Payment Date	Address Number	Name	Payment Stub Message	TY	Document Number	Key Item	Key Co	Amount	Invoice Number
72904	05/10/16	5594	MCCARTY & SONS TOWING	TOW&RPR VEH#163	PV	145875	001	00701	2,227.87	1391
				Payment Amount					2,227.87	
72905	05/10/16	2814	MCMMASTER-CARR SUPPLY CO	SANITARY CLEAR TUBING FLEX HOSE&CAMLCK FITGS	PV	145529	001	00101	484.84	54800116
				Payment Amount					484.84	
				Payment Amount					534.89	55216090
				Payment Amount					217.32	835053037001
				Payment Amount					29.42	835053038001
				Payment Amount					152.71	835188041001
				Payment Amount					85.01	835052899001
				Payment Amount					466.35	834266879001
				Payment Amount					217.99	834267252001
				Payment Amount					27.57	834267253001
				Payment Amount					1,827.85	2154130
				Payment Amount					2,698.81	
				Payment Amount					87,594.43	10539/#1
				Payment Amount					4,379.72	10539/RTN#1



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Payment Number	Payment Date	Address Number	Name	Payment Stub Message	Document Ty	Document Number	Key Item	Key Co	Amount	Invoice Number	
72908	05/10/16	19164	DONALD PATTERSON	4/25/16 Payment Amount REIMB	PV	145658	001	00701	83,214.71 746.15	041516	
72910	05/10/16	8418	PERMACOLOR, INC.	EXP-CMTA CONF Payment Amount GRATE&TUBE FOR COATING	PV	145543	001	00701	400.00	2766923	
72911	05/10/16	20002	PETTY CASH - SUSAN BROWN	Payment Amount PETTY CASH 1/12-4/15/16 PETTY CASH 1/12-4/15/16 PETTY CASH 1/12-4/15/16 PETTY CASH 1/12-4/15/16 PETTY CASH 1/12-4/15/16 PETTY CASH 1/12-4/15/16 PETTY CASH 1/12-4/15/16 PETTY CASH 1/12-4/15/16 PETTY CASH 1/12-4/15/16 PETTY CASH 1/12-4/15/16 PETTY CASH 1/12-4/15/16 PETTY CASH 1/12-4/15/16 PETTY CASH 1/12-4/15/16 PETTY CASH 1/12-4/15/16 PETTY CASH 1/12-4/15/16	PV	145685	001	00701	400.00	15.00	041516
					PV	145685	002	00701	14.20	041516	
					PV	145685	003	00701	10.66	041516	
					PV	145685	004	00701	10.65	041516	
					PV	145685	005	00701	23.75	041516	
					PV	145685	006	00701	17.49	041516	
					PV	145685	007	00701	5.44	041516	
					PV	145685	008	00701	15.00	041516	
					PV	145685	009	00701	14.00	041516	
					PV	145685	010	00701	14.00	041516	
					PV	145685	011	00701	23.22	041516	
					PV	145685	012	00701	37.69	041516	
					PV	145685	013	00701	48.58	041516	
72913	05/10/16	19133	PINNACLE PETROLEUM, INC.	Payment Amount 8,691 GAL 87 OCTN GAS	PV	145627	001	00701	249.68 20,547.29	128569	
72913	05/10/16	18821	LEONARD POLAN	Payment Amount MILEAGE-ACWA WTRWISE	PV	145656	001	00701	20,547.29 26.46	031716	

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Payment Number	Payment Date	Address Number	Name	Payment Stub Message	Ty	Document Number	Key itm	Key Co	Amount	Invoice Number
	3/17/16				PV	145657	001	00701	908.53	040616
				CASA POLICY FORUM						
	4/5--4/6/16			Payment Amount				934.99		
72914	05/10/16	15994	POSTAGE ONE	PSTG ADV-MTR	PV	145677	001	00701	2,000.00	127
				DIST						
				BILLS/PUBL						
				Payment Amount				2,000.00		
72915	05/10/16	2585	PURETEC	APR'16 14"	PV	145709	001	00701	218.00	1476346
				TNK RNTL						
				Payment Amount				218.00		
72916	05/10/16	19855	RESOURCE TRENDS, INC.	STRTG PLNG	PV	145722	001	00701	3,250.00	526
				PROCESS						
				Payment Amount				3,250.00		
72917	05/10/16	18632	ERIC N. ROHLFING	2/19--4/15/16	PV	145554	001	00701	4,085.00	15-178-CD-04
				CMPTR RM DSN						
				Payment Amount				4,085.00		
72918	05/10/16	20357	MICHAEL J. ROSEN	SIGN	PV	145676	001	00101	240.00	042116
				LNGUG-GRDN						
				CLS 4/13&20						
				Payment Amount				240.00		
72919	05/10/16	17174	ROTH STAFFING COMPANIES, LP	4/11--4/15/16	PV	145609	001	00701	799.20	13269133
				E.M.AGUILAR						
				4/18--4/22/16	PV	145718	001	00701	779.22	13272098
				E.M.AGUILAR						
				Payment Amount				1,578.42		
72920	05/10/16	19115	SILVER STAR MOTOR CAR COMPANY	ALL WEATHER MATS	PV	145588	001	00701	80.63	57053
				Payment Amount				80.63		
72921	05/10/16	19169	SUM INDUSTRIAL RADIO	RNTL RADIO	PV	145635	001	00751	75.00	38016
				4/15--4/30/16						
				Payment Amount				80.63		
				WARNER TNK						
				WIFI SRV						
				Payment Amount				1,222.50		
				WARNER TNK						
				WIFI SRV						
				Payment Amount				1,560.40		
72922	05/10/16	2949	SNAP ON TOOLS	THERMOMETER	PV	145590	001	00701	29.16	04201620780
				Payment Amount				29.16		

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72923	05/10/16	8599	STANDARD AUTOMATION	ARISTA MICROBOX-SCAD A	PV	145616	001	00701	1,586.60	62360
Alt Payee 8600 STANDARD AUTOMATION & CONTROL LP P. O. BOX 849717 DALLAS TX 75284-9717										
72924	05/10/16	8212	STANSBERRY'S WELDING	AGITATR RPRS@RLV	PV	145651	001	00701	505.00	2142
				AGITATR RPRS@RLV	PV	145652	001	00751	1,930.00	2142
				L/S ALUM PMP COUPLG GRD	PV	145653	001	00130	610.00	2145
72925	05/10/16	2969	STATE WATER RESOURCES CONTROL BOARD	WTR SYS#1910225 JUL-DEC'15	PV	145625	001	00101	15,803.37	LW-1005929
				Payment Amount					3,045.00	
72926	05/10/16	14479	STEPHENS VIDEO PRODUCTIONS	APR'16 JPA BRD&SPCL.MTGS	PV	145654	001	00751	1,090.00	4-26-16
				Payment Amount					15,803.37	
72927	05/10/16	17066	SUPPORT PRODUCT SERVICES, INC.	ANNL BOILER TSTG	PV	145621	001	00701	3,102.23	6988
				Payment Amount					2,725.00	
72928	05/10/16	4595	THE COPY DEPARTMENT	2015 URBAN WTR MGMT PLAN	PV	145537	001	00701	813.79	1486565
				Payment Amount					3,102.23	
72929	05/10/16	15427	THE GATEKEEPER	WLK BARRIER ARM SVC	PV	145599	001	00701	115.44	95363
				Payment Amount					813.79	
72930	05/10/16	18651	TOYOTA-LIFT OF LOS ANGELES	VEH#305 PROPEN FUEL LEAK	PV	145723	001	00701	112.19	WO-344455
				Payment Amount					115.44	
72931	05/10/16	3011	UNITED	(12) DD-32	PV	145664	001	00701	576.39	83198
				Payment Amount					112.19	

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SPECIALTIES										
72932	05/10/16	2780	VALLEY NEWS GROUP	CLEANER Payment Amount	PV	145630	001	00101	576.39	
				ADS-RAIN					550.00	4-7
				BRL&PST						
				CONTST 4/7						
				3 ADS@4/21/16	PV	145639	001	00101	580.00	4-21
				3 ADS@4/21/16	PV	145639	002	00101	280.00	4-21
				Payment Amount				1,410.00		
72933	05/10/16	18604	VENTURA PEST CONTROL	APR'16 PEST	PV	145557	001	00701	110.00	514722
				CNTL						
				APR'16 PEST	PV	145557	003	00701	380.00	514722
				CNTL						
				APR'16 PEST	PV	145557	008	00701	195.00	514722
				CNTL						
				Payment Amount				685.00		
72934	05/10/16	16132	V3	PSTG-MAILG	PV	145679	001	00701	29,000.00	33572
				BILLS&NOTCS						
				Payment Amount				29,000.00		
72935	05/10/16	2436	VINCE BARNES AUTOMOTIVE	VEH#895	PV	145581	001	00701	114.98	021475
				OIL/FILTERS						
				VEH#899	PV	145582	001	00701	118.47	021472
				OIL/FILTERS						
				VEH#914 LIGHT	PV	145583	001	00701	625.00	021460
				BRAIR						
				COMPRSR						
				VEH#905	PV	145584	001	00701	93.29	021457
				OIL/FILTERS						
				VEH#908	PV	145585	001	00701	104.83	021458
				OIL/FILTERS						
				Payment Amount				1,056.57		
72936	05/10/16	3034	VORTEX INDUSTRIES	DOOR	PV	145663	001	00701	490.00	01-1018711-1
				RPR@TAPIA						
				HEADWRKS						
				Payment Amount				490.00		
72937	05/10/16	3035	VWR SCIENTIFIC	TEST TUBES&PH	PV	145617	001	00701	1,154.33	8044625303
				STRG SOLN						
				FREIGHT	PV	145617	003	00701	81.99	8044625303
				FLUORIDE	PV	145618	001	00701	158.05	8044619871
				STNDRD						
				FREIGHT	PV	145618	002	00701	14.35	8044619871
				LAURYL	PV	145619	001	00701	537.75	8044655066

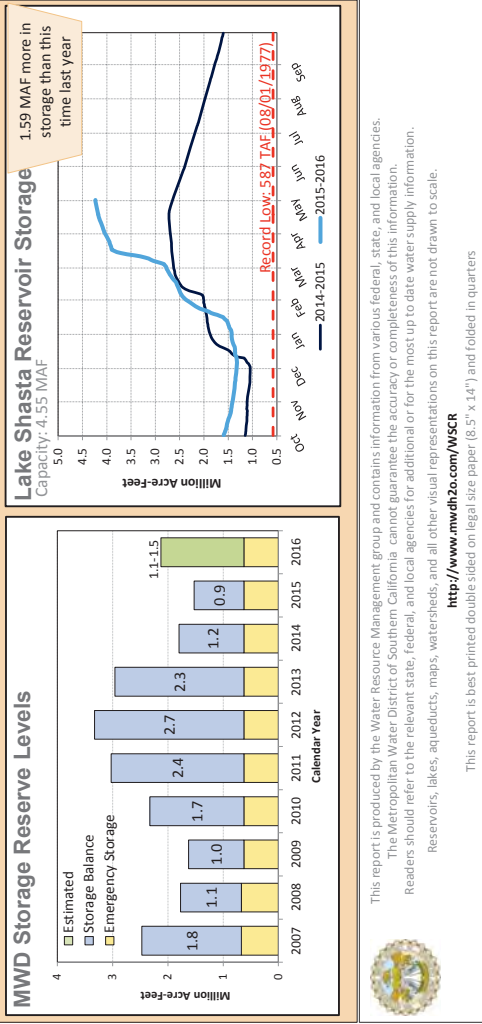
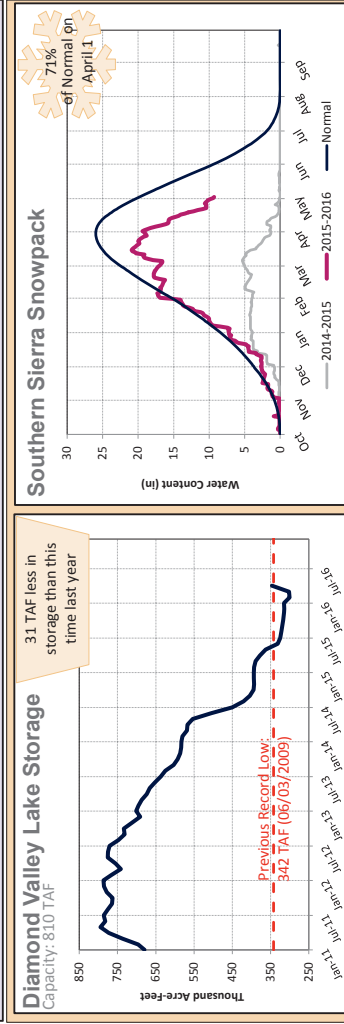
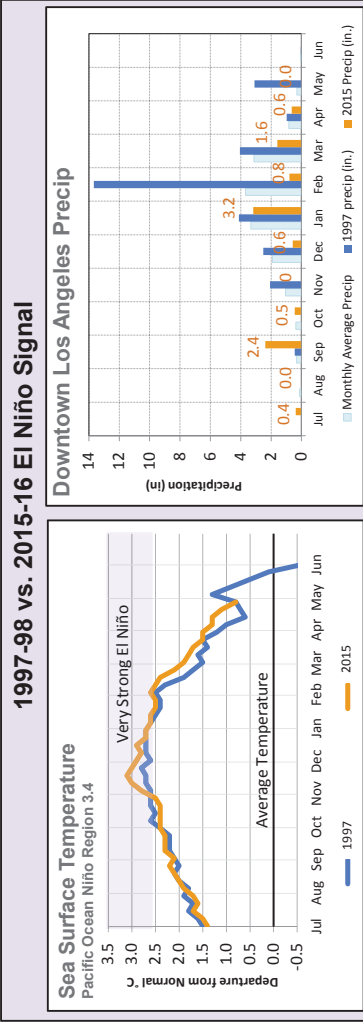
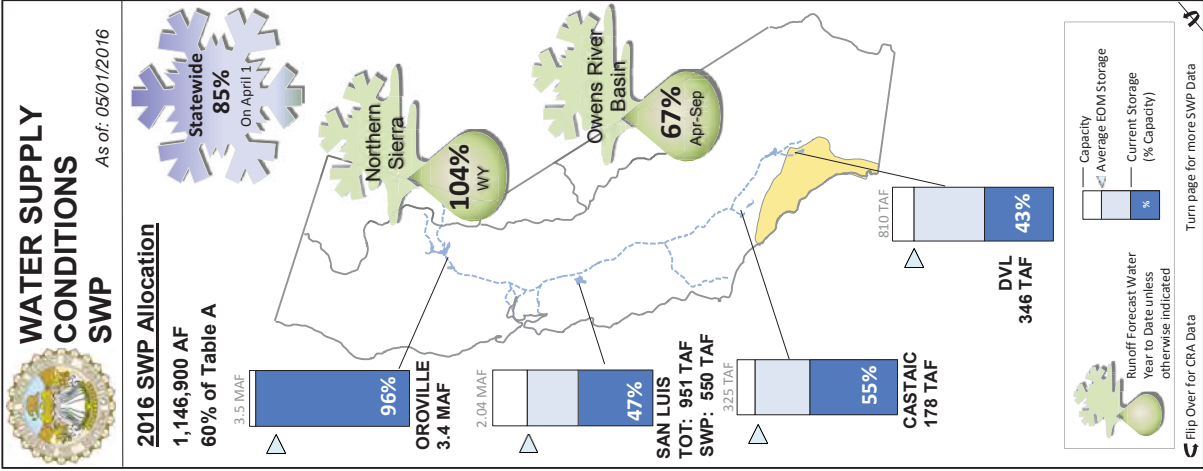
Batch Number - 244537  
Bank Account - 00146807 Cash-General

Payment Number	Payment Date	Address Number	Name	Payment Sub Message	Document Ty	Document Number	Key Item	Key Co	Amount	Invoice Number
				TRYPTOSE						
				BROTH						
				FREIGHT	PV	145619	002	00701	11.21	8044655066
		3216	VWR INTERNATIONAL, INC P. O. BOX 640169 PITTSBURGH PA 15264-0169							
				Payment Amount					1,957.68	
72938	05/10/16	19685	W. LITTEN INC.	SRV	PV	145553	001	00701	5,385.50	11076
				4/10-4/16/16@						
				RLV						
				SRV	PV	145681	001	00701	5,045.85	11078
				4/17-4/23/16@						
				RLV						
				Payment Amount					10,431.35	
72939	05/10/16	18914	WECK LABORATORIES, INC.	LAB SRV@TAPIA	PV	145550	001	00701	20.00	W6D1036-LV
				INFLNT						
				LAB	PV	145551	001	00701	25.00	W6D1034-LV
				SRV@DIONIZED						
				WTR						
				LAB SRV@TAPIA	PV	145552	001	00701	7.00	W6D1035-LV
				GRNDWTR						
				LAB SRV@WSTLK	PV	145701	001	00701	159.00	W6D1438-LV
				Payment Amount					211.00	
72940	05/10/16	3047	WESCO DISTRIBUTION, INC.	SCREWS	PV	145539	001	00701	33.36	541826
				FREIGHT IN	PV	145539	002	00701	18.63	541826
				COOLING FAN	PV	145540	001	00701	1,501.19	544830
				OMNI CABLE	PV	145541	001	00701	210.74	543911
				OMNI CABLE	PV	145542	001	00701	210.74	543910
				SCREWS	PV	145706	001	00701	33.36	547189
				Payment Amount					2,008.02	
				RPL	PV	145643	001	00701	10.20	573953
				BELT@EF#3-BLD						
				G#8						
				RPL	PV	145644	001	00701	10.56	573954
				Payment Amount						
				RPL	PV	145643	001	00701	10.20	573953
				BELT@EF#3-BLD						
				G#8						
				RPL	PV	145644	001	00701	10.56	573954

Batch Number - 244537

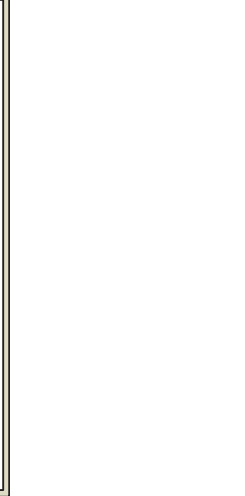
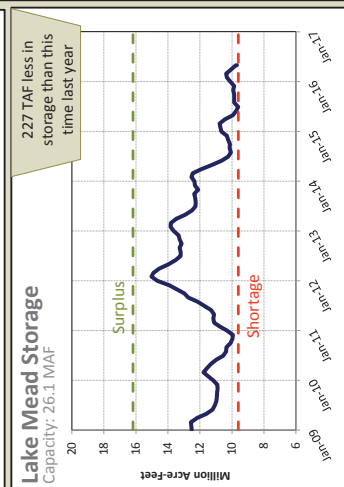
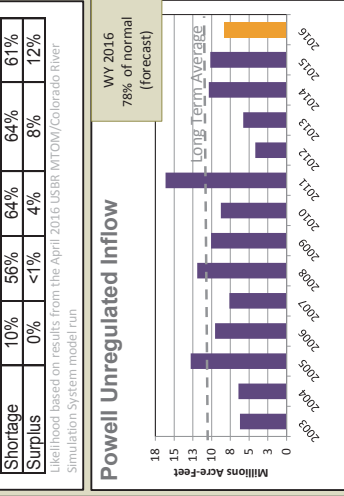
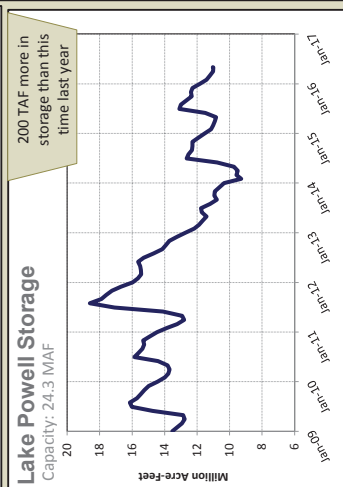
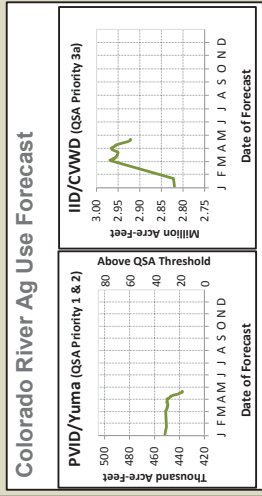
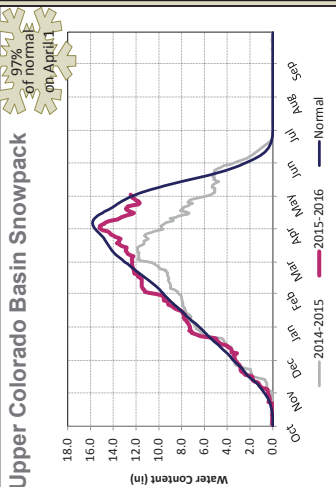
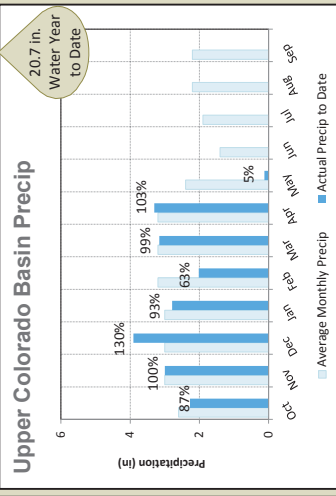
Bank Account - 00146807 Cash-General

Payment Number	Payment Date	Address Number	Name	Payment Stub Message	Ty	Document	Key	Key	Amount	Invoice Number
					Number		Item	Co		
				BELT@A/C#1-TA						
				PIA						
				A/C	PV	145645	001	00701	395.00	S74001
				PM@BLDG#7&8						
				A/C PM@TAPIA	PV	145646	001	00701	135.00	S73603
				A/C PM@RLV	PV	145647	001	00701	385.00	S73578
				A/C PM@BLDG#8	PV	145648	001	00701	650.00	S73546
				A/C	PV	145649	001	00701	50.00	S73620
				PM@CORNELL						
				P/S						
				CONDNSR FAN	PV	145650	001	00701	460.00	S73861
				MTR SRV						
				Payment Amount					2,095.76	
72942	05/10/16	8514	WEST COAST IRRIGATION	PIPE FITTG	PV	145559	001	00751	125.40	8434
				RPR&GASKTS						
				Payment Amount					125.40	
72943	05/10/16	18640	WEST COAST POWER SOLUTIONS	BLDG#8 RM	PV	145634	001	00701	282.00	S5411
				TEMP TSTG						
				Payment Amount					282.00	
72944	05/10/16	18128	WOLTERS KLUWER LAW & BUSINESS	PAYROLL MGR	PV	145674	001	00701	545.00	0321754X
				LTR 6/16--5/17						
				Payment Amount					545.00	
72945	05/10/16	8510	WORK BOOT WAREHOUSE	PRCTCTV	PV	145527	001	00701	225.00	2-22952
				FTWR-M.KAMINS						
				KI						
				PRCTCTV	PV	145528	001	00701	196.19	2-22696
				FTWR-B.HEITKA						
				MP						
				Payment Amount					421.19	
72946	05/10/16	3068	YSI	RS-232 INTRFC	PV	145659	001	00701	83.93	641771
				CABLE						
				FREIGHT	PV	145659	002	00701	8.94	641771
				Payment Amount					92.87	
				Total Amount of Payments Written					468,872.80	
				Total Number of Payments Written					96	



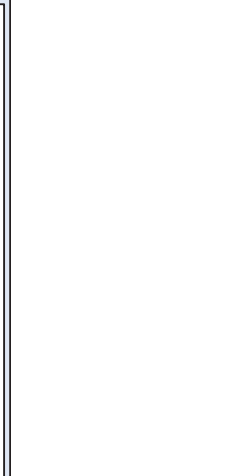
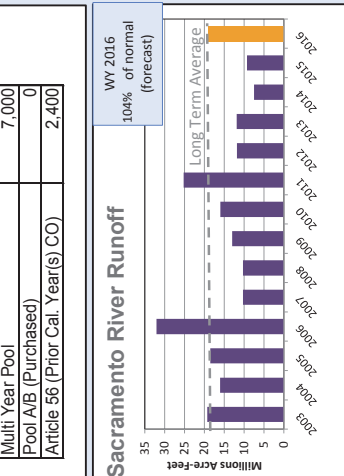
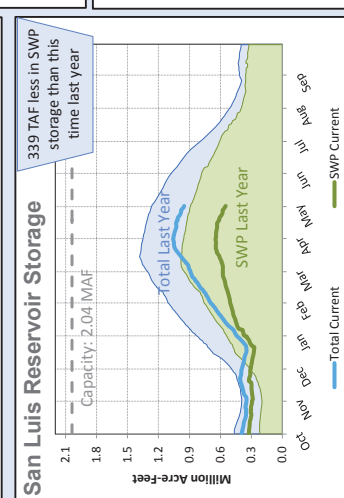
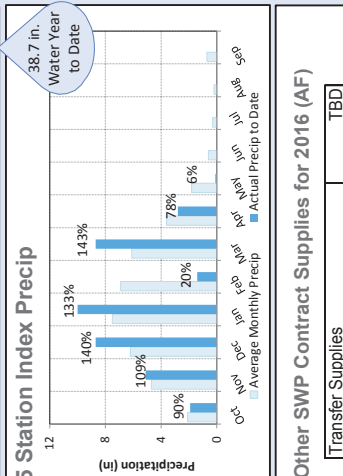
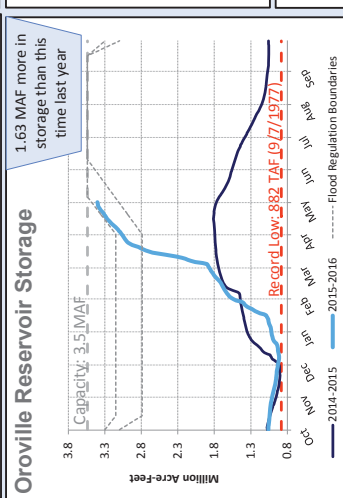
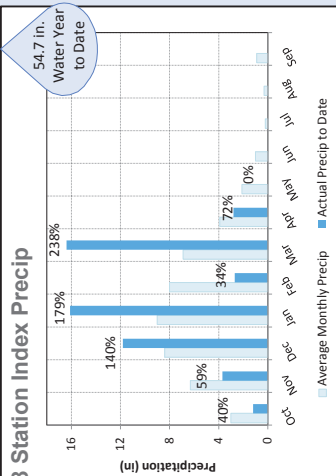
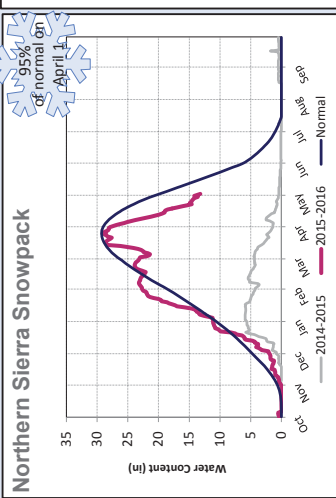
# Colorado River Resources

As of: 05/01/2016



# State Water Project Resources

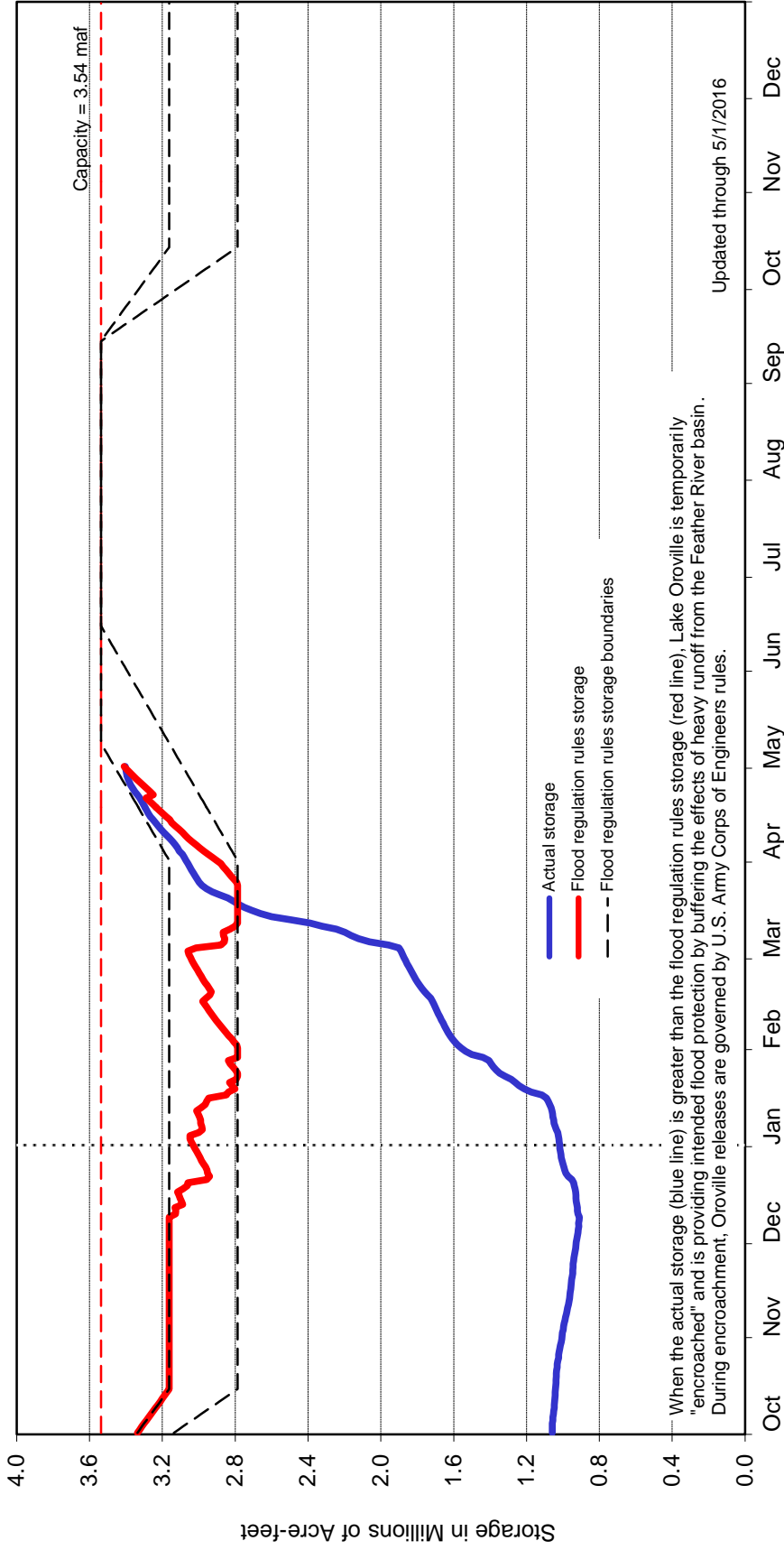
As of: 05/01/2016





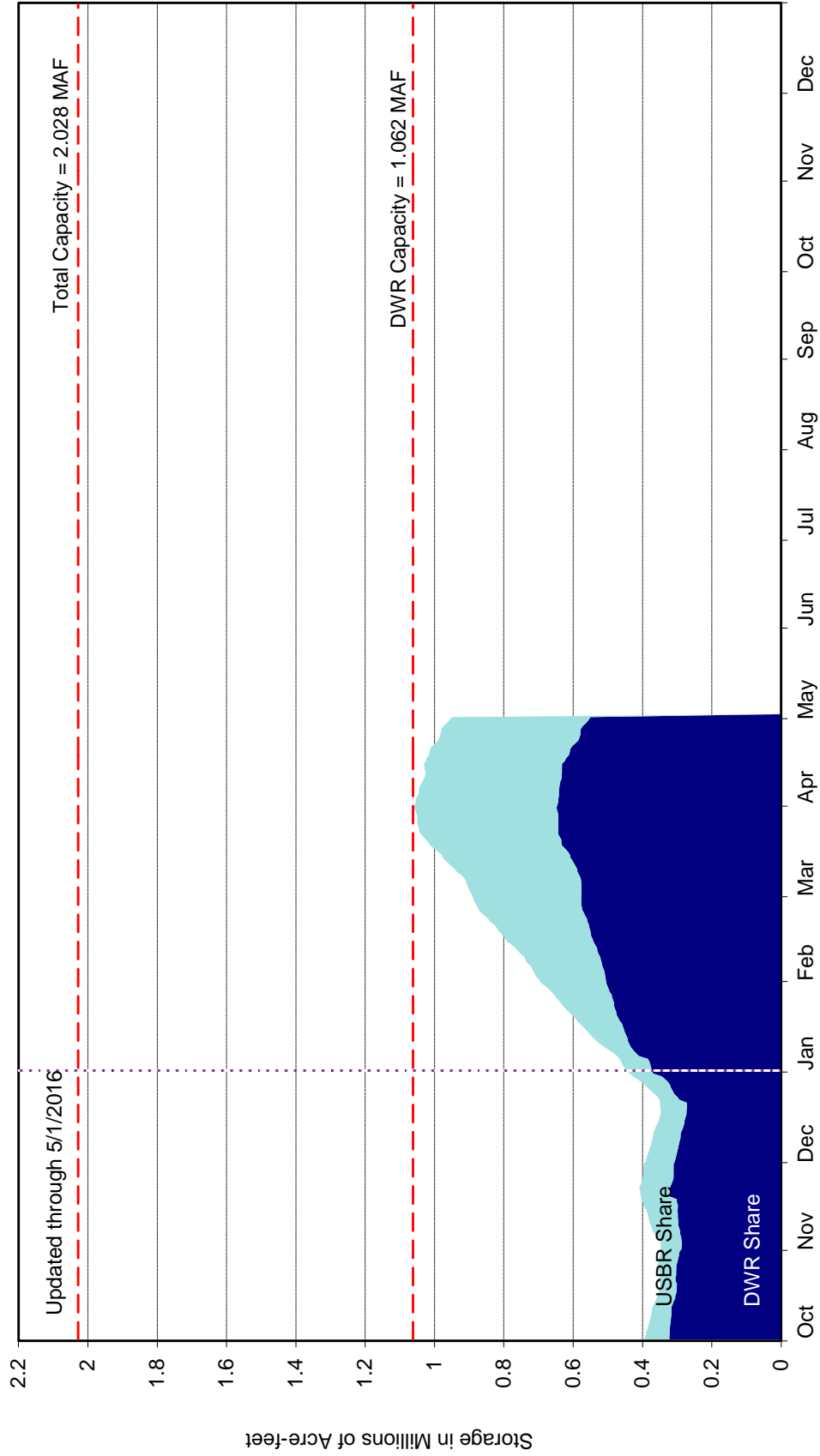
## Lake Oroville Storage

October 1, 2015 to December 31, 2016



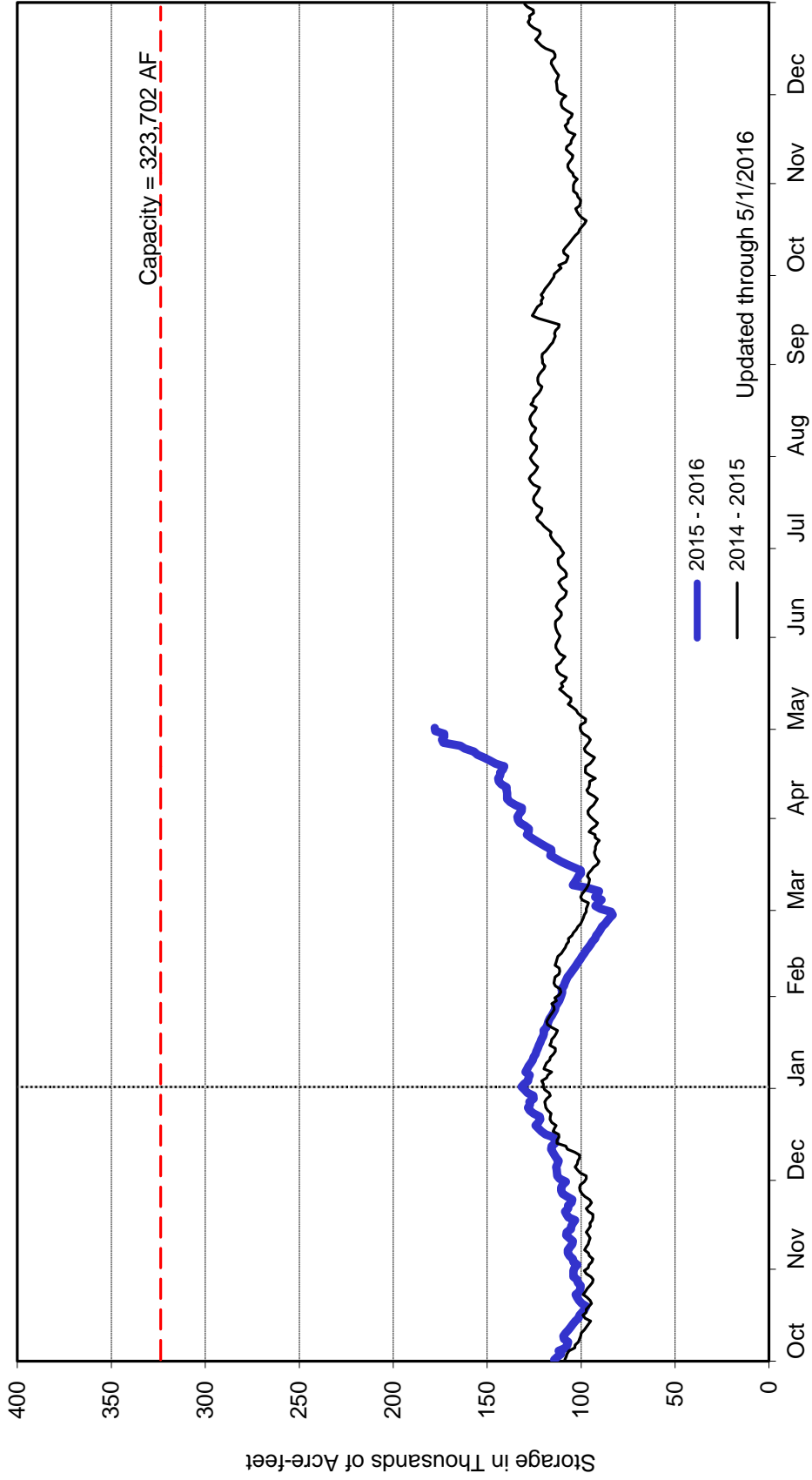
# San Luis Reservoir Storage Shares

Combination Water/Calendar Year 2016



# Castaic Lake Storage

Combination Water/Calendar Year





May 10, 2016 LVMWD Regular Board Meeting

TO: Board of Directors

FROM: General Manager

**Subject : General District Election on November 8, 2016: Resolution No. 2492**

**SUMMARY:**

The District received notification from the Los Angeles County Registrar-Recorder/County Clerk, Election Coordination Unit, regarding rendering election services for the November 8, 2016 General District Election. The District is required to return a certified copy of a resolution requesting election services, a completed questionnaire consisting of the Roster of Officeholders for Local Jurisdictions, and a map reflecting the District boundaries and divisions. The deadline for returning these documents is June 10, 2016.

**RECOMMENDATION(S):**

Pass, approve, and adopt proposed Resolution No. 2492, pertaining to a General District Election to be held in the District on Tuesday, November 8, 2016; and authorize the Board Secretary to submit certified copies of said resolution, completed Roster of Officeholders for Local Jurisdictions, and District Boundary and Divisions Map to the Board of Supervisors and the Registrar-Recorder/County Clerk of the County of Los Angeles.

**RESOLUTION NO. 2492**

**A RESOLUTION OF THE BOARD OF DIRECTORS OF LAS VIRGENES MUNICIPAL WATER DISTRICT REQUESTING THE BOARD OF SUPERVISORS OF THE COUNTY OF LOS ANGELES TO PERMIT THE REGISTRAR-RECORDER/COUNTY CLERK TO RENDER ELECTION SERVICES FOR A GENERAL DISTRICT ELECTION TO BE HELD ON NOVEMBER 8, 2016**

(Reference is hereby made to Resolution No. 2492 in the District's Resolution Book and by this reference the same is incorporated and made a part thereof.)

**FISCAL IMPACT:**

Yes

**ITEM BUDGETED:**

Yes

**FINANCIAL IMPACT:**

The estimated cost for the election services is \$43,000.

Prepared by: Josie Guzman, CMC, Executive Assistant/Clerk of the Board

**ATTACHMENTS:**

Proposed Resolution No. 2492

Election Notification Letter

Letter on Estimated Election Costs for 2016

Boundary Map

**RESOLUTION NO. 2492**

**A RESOLUTION OF THE BOARD OF DIRECTORS OF LAS VIRGENES MUNICIPAL WATER DISTRICT REQUESTING THE BOARD OF SUPERVISORS OF THE COUNTY OF LOS ANGELES TO PERMIT THE REGISTRAR-RECORDER/COUNTY CLERK TO RENDER ELECTION SERVICES FOR AN ELECTION OF SAID DISTRICT TO BE HELD ON NOVEMBER 8, 2016**

**WHEREAS**, the California Elections Code permits special districts electing governing board members to call an election;

**WHEREAS**, an election in the Las Virgenes Municipal Water District is to be held on Tuesday, November 8, 2016, for the purpose of electing two members of the Board of Directors of said District; and

**WHEREAS**, the Board of Directors believes that it is desirable that said election be conducted with the General District Elections to be held on the same date and that within said Las Virgenes Municipal Water District the precincts, polling places and election officers of the election be the same, and that the Registrar-Recorder/County Clerk of the County of Los Angeles canvass the returns of the election and that said Las Virgenes Municipal Water District election, be held in all respects as if there were only one election.

**NOW, THEREFORE, THE BOARD OF DIRECTORS OF LAS VIRGENES MUNICIPAL WATER DISTRICT HEREBY RESOLVED, DETERMINES, AND ORDERS AS FOLLOWS:**

1. That an election is hereby called by the Board of Directors of the Las Virgenes Municipal Water District to be held on November 8, 2016 for the purpose of electing two members to the Board of Directors.
2. That pursuant to the requirements of Section 10403 of the Elections Code, the Board of Supervisors of the County of Los Angeles is hereby requested to consent and agree to conduct the Las Virgenes Municipal Water District election with the Tuesday, November 8, 2016, Consolidated Elections for the purpose of electing members to the Board of Directors of said district.
3. Said Registrar-Recorder/County Clerk is hereby authorized to canvass the returns of the Las Virgenes Municipal Water District election.
4. Said Board of Supervisors is hereby requested to issue instructions to the Registrar-Recorder/County Clerk to take any and all steps necessary for the holding of said election.

5. Las Virgenes Municipal Water District shall pay in full its pro rata share of the expenses for the conduct of the election.

6. Las Virgenes Municipal Water District shall require each candidate to pay in advance his or her pro rata share of the printing, handling, and mailing costs of his/her candidate statement as a condition to having it included in the voter's sample ballot pamphlet.

7. The word limit for candidate's statements shall be 200 words.

5. That the Board Secretary is directed to file a certified copy of this resolution with the Board of Supervisors and the Registrar-Recorder/County Clerk of the County of Los Angeles.

**PASSED, APPROVED AND ADOPTED** this 10<sup>th</sup> day of May, 2016.

\_\_\_\_\_  
Glen D. Peterson, President

ATTEST:

\_\_\_\_\_  
Charles Caspary, Secretary

APPROVED AS TO FORM:

\_\_\_\_\_  
District Counsel

(SEAL)



Los Angeles County Registrar-Recorder/County Clerk

Dean C. Logan  
Registrar-Recorder/County Clerk



March 4, 2016

Dave Pederson, General Manager  
Las Virgenes Municipal Water District  
4232 Las Virgenes Road  
Calabasas, California 91302

Dear Mr. Pederson:

An election is scheduled to be held in your district on November 8, 2016. To assist this office in conducting your election, we are requesting your cooperation in completing the enclosed questionnaire. Please complete each blank field with an answer. If the question is not applicable, then indicate "NA". Your responses are critical to the conduct of the election and services rendered effectively. We have highlighted a few important deadlines, payment information, and documents required by specific areas within our department as follows:

Election Coordination Unit

Please designate on the questionnaire any adjudicated newspaper(s) you recommend be used for publication purposes. We also request a map reflecting district boundaries and divisions, if appropriate, and notification of any new vacancies or appointments, as they occur. Please return the questionnaire with your district map no later than June 10, 2016.

Campaign Finance

The Political Reform Act requires each officeholder who receives a monthly salary and/or compensation from the district of two hundred dollars (\$200) or more to file semi-annual campaign statements. These statements are required to be filed by January 31 and July 31 of each year.

Election Planning Section

Elections Code Section 13307 permits a local agency to require payment in advance of each candidate's pro rata share of the printing, handling and mailing costs of the candidate statement as a condition to having it included in the Official Sample Ballot booklet mailed to voters. If your district determines payment is required in advance, our office will estimate the cost and will collect the fee at the time the candidate's statement is filed. Should your district elect not to have candidates pay in advance, cost of the statement will be considered an election expense and will be charged to the district pursuant to Elections Code Sections 10002 and 10520.

Enclosed for your information is a list of election functions to be performed by your district and by this office. Please mail the completed questionnaires to: Election Coordination Unit, 12400 Imperial Highway Room 2013A Norwalk, California 90650 or email to [Ecu@rrcc.lacounty.gov](mailto:Ecu@rrcc.lacounty.gov). If you have any questions or require further information, please contact the Election Planning Section (562) 462-2317, Election Coordination Unit at (562) 462-2912, or Campaign Finance Section at (562) 462-2339.

Sincerely,

Valerie Pagcanlungan, Administrative Assistant I  
Election Coordination Unit

Enclosures



ROSTER OF OFFICEHOLDERS FOR LOCAL JURISDICTIONS

Please print or type requested information and complete in its entirety.

DISTRICT NAME: Las Virgenes Municipal Water District		
District Secretary/Manager: _____		
Mailing Address: _____		
City and Zip: _____		
Telephone No.	(    ) _____	Fax No. (    ) _____
Attorney For District: _____		
Mailing Address: _____		
City and Zip: _____		
Telephone No.	(    ) _____	
Prepared by: _____	(    ) _____	_____
Name and Title	Telephone No.	Date

PLEASE RETURN COMPLETED QUESTIONNAIRE NO LATER THAN JUNE 10 TO:

Registrar-Recorder/County Clerk  
 12400 Imperial Highway  
 Norwalk, California 90650

Attention: Election Coordination Unit  
 2<sup>nd</sup> Floor Room 2013A  
 Fax No: (562) 406-2149 or Email: [ecu@rrcc.lacounty.gov](mailto:ecu@rrcc.lacounty.gov)

<b>POLITICAL REFORM ACT:</b>	
<p>Officeholders who receive a salary and/or compensation from the district (excluding contributions to insurance plans and other fringe benefits) averaging \$200 or more per month, are required to file semi-annual campaign statements. This applies whether or not they had any campaign activity. To assist this office in notifying your officeholders of their filing obligations, please indicate below if the monthly threshold is met.</p> <p style="text-align: center;">Threshold is:    <input type="checkbox"/> Less than \$200    <u>or</u>    <input type="checkbox"/> \$200 or more</p> <p>Please provide the name and election date for any officeholder who, to your knowledge was/is a candidate for any election held between January 1 and June 30.</p>	
_____	_____
Name	Election Date
_____	_____
Name	Election Date

**CANDIDATE STATEMENTS:**

The governing body of the district has adopted the following policy regarding candidate statements for district elections:

(Check One)

- Maximum word limitation is 200.
- Maximum word limitation is 400.

(Check One)

- Payment of the estimated cost must be made by the candidate at time of filing.
- District will bill candidate after the election.
- District will bear the cost for all statements.

Other \_\_\_\_\_

A copy of the resolution/board minutes is:  Attached  Forthcoming

**ELECTION PROCESS:**

Please indicate how directors are nominated or elected.

NOMINATED:

- By Division (1,2,3,4,5)
- At Large

ELECTED:

- By Division (1,2,3,4,5)
- At Large

**PUBLICATION PURPOSES:**

This office is responsible for publishing certain legal election notices. To assist in properly serving the district, this office will select the Newspaper Publication based on the best cost effective and relative circulation for the district. If the district MUST have a specific Newspaper Publication, please state below:

\_\_\_\_\_  
\_\_\_\_\_

**DISTRICT MAP:**

- Map enclosed: YES  NO
- Any changes in boundaries since last election? YES  NO
- Do you anticipate any changes in district or division boundaries before next election? YES  NO

**OFFICEHOLDERS:**

Please complete a separate section for each officer whether or not office is scheduled for election. NOTE: Officers up for election should be listed first.

<p style="text-align: center;">NAME</p> <hr/> <p style="text-align: center;">Last                      First                      MI</p>	<p style="text-align: center;">DATE</p> <hr/> <p style="text-align: center;">Appointed Provisionally</p> <hr/> <p style="text-align: center;">Appointed in Lieu</p> <hr/> <p style="text-align: center;">Elected</p>	<p style="text-align: center;">DATE TERM <u>EXPIRES</u></p> <hr/> <p style="text-align: center;">Month/ Day/ Year</p> <p><input type="checkbox"/> Unexpired Term</p>	<p style="text-align: center;">DIVISION NO. (if any)</p> <hr/>
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Mailing Address \_\_\_\_\_  
City and Zip \_\_\_\_\_  
Telephone (     ) \_\_\_\_\_  
(Name of previous officeholder if current officeholder was recently appointed)

<p style="text-align: center;">NAME</p> <hr/> <p style="text-align: center;">Last                      First                      MI</p>	<p style="text-align: center;">DATE</p> <hr/> <p style="text-align: center;">Appointed Provisionally</p> <hr/> <p style="text-align: center;">Appointed in Lieu</p> <hr/> <p style="text-align: center;">Elected</p>	<p style="text-align: center;">DATE TERM <u>EXPIRES</u></p> <hr/> <p style="text-align: center;">Month/ Day/ Year</p> <p><input type="checkbox"/> Unexpired Term</p>	<p style="text-align: center;">DIVISION NO. (if any)</p> <hr/>
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Mailing Address \_\_\_\_\_  
City and Zip \_\_\_\_\_  
Telephone (     ) \_\_\_\_\_  
(Name of previous officeholder if current officeholder was recently appointed)

<p style="text-align: center;">NAME</p> <hr/> <p style="text-align: center;">Last                      First                      MI</p>	<p style="text-align: center;">DATE</p> <hr/> <p style="text-align: center;">Appointed Provisionally</p> <hr/> <p style="text-align: center;">Appointed in Lieu</p> <hr/> <p style="text-align: center;">Elected</p>	<p style="text-align: center;">DATE TERM <u>EXPIRES</u></p> <hr/> <p style="text-align: center;">Month/Day/Year</p> <p><input type="checkbox"/> Unexpired Term</p>	<p style="text-align: center;">DIVISION NO. (if any)</p> <hr/>
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Mailing Address \_\_\_\_\_  
City and Zip \_\_\_\_\_  
Telephone (     ) \_\_\_\_\_  
(Name of previous officeholder if current officeholder was recently appointed)

<p style="text-align: center;">NAME</p> <hr/> <p style="text-align: center;">Last                      First                      MI</p>	<p style="text-align: center;">DATE</p> <hr/> <p style="text-align: center;">Appointed Provisionally</p> <hr/> <p style="text-align: center;">Appointed in Lieu</p> <hr/> <p style="text-align: center;">Elected</p>	<p style="text-align: center;">DATE TERM <u>EXPIRES</u></p> <hr/> <p style="text-align: center;">Month/Day/Year</p> <p><input type="checkbox"/> Unexpired Term</p>	<p style="text-align: center;">DIVISION NO. (if any)</p> <hr/>
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Mailing Address \_\_\_\_\_  
City and Zip \_\_\_\_\_  
Telephone (     ) \_\_\_\_\_  
(Name of previous officeholder if current officeholder was recently appointed)

**OFFICEHOLDERS:**

Please complete a separate section for each officer whether or not office is scheduled for election. NOTE: Officers up for election should be listed first.

<p style="text-align: center;">NAME</p> <p>_____</p> <p style="text-align: center;">Last                      First                      MI</p>	<p style="text-align: center;">DATE</p> <p>_____</p> <p style="text-align: center;">Appointed Provisionally</p> <p>_____</p> <p style="text-align: center;">Appointed in Lieu</p> <p>_____</p> <p style="text-align: center;">Elected</p>	<p style="text-align: center;">DATE TERM <b>EXPIRES</b></p> <p>_____</p> <p style="text-align: center;">Month/Day/Year</p> <p><input type="checkbox"/> Unexpired Term</p>	<p style="text-align: center;">DIVISION NO. (if any)</p> <p>_____</p>
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Mailing Address \_\_\_\_\_  
 City and Zip \_\_\_\_\_  
 Telephone (    ) \_\_\_\_\_  
 (Name of previous officeholder if current officeholder was recently appointed)

<p style="text-align: center;">NAME</p> <p>_____</p> <p style="text-align: center;">Last                      First                      MI</p>	<p style="text-align: center;">DATE</p> <p>_____</p> <p style="text-align: center;">Appointed Provisionally</p> <p>_____</p> <p style="text-align: center;">Appointed in Lieu</p> <p>_____</p> <p style="text-align: center;">Elected</p>	<p style="text-align: center;">DATE TERM <b>EXPIRES</b></p> <p>_____</p> <p style="text-align: center;">Month/Day/Year</p> <p><input type="checkbox"/> Unexpired Term</p>	<p style="text-align: center;">DIVISION NO. (if any)</p> <p>_____</p>
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Mailing Address \_\_\_\_\_  
 City and Zip \_\_\_\_\_  
 Telephone (    ) \_\_\_\_\_  
 (Name of previous officeholder if current officeholder was recently appointed)

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Mailing Address \_\_\_\_\_  
 City and Zip \_\_\_\_\_  
 Telephone (    ) \_\_\_\_\_  
 (Name of previous officeholder if current officeholder was recently appointed)

**BOARD OF DIRECTORS ELECTION**  
GENERAL ELECTION - NOVEMBER 8, 2016

**FUNCTIONS TO BE PERFORMED  
BY DISTRICT AND RR/CC**

**DISTRICT'S RESPONSIBILITIES**

1. No later than **June 10 (E-151)**, deliver a notice to the Registrar-Recorder/County Clerk (RR/CC) which contains elective offices to be filled, and whether district or candidate is to pay for candidate statement. (CEC 10509)

**NOTE:** Legal date to provide data to this office is **July 6 (E-125)** but because of election requirements, such as preparing and disseminating an election manual and publication of the notice of election this office recommends the date of **June 7**.

2. No later than **June 10 (E-151)**, determine if district or candidate is to pay for candidate statement, whether word limit should be 200 or increased to 400, and whether candidate is to pay a deposit or be billed by the district after the election. Change in decision cannot be made after **July 12 (E-119)**. (CEC 13307)
3. No later than **July 6 (E-125)** deliver a map to this office showing the boundaries of the district, and the boundaries of divisions, if applicable. (CEC 10522) In lieu of delivering a map you may advise this office that no boundary changes have been made since the last scheduled election. (CEC 10522)
4. Post the Notice of Election (provided by this office) at the district's headquarters.
5. Receive Canvass Certificate and Statement of Votes Cast approximately 27 days after the election. (CEC 10551)

CEC – California Elections Code

## **REGISTRAR-RECORDER/COUNTY CLERK'S RESPONSIBILITIES**

1. Prepare Candidate Handbook and Resource Guide which contains pertinent election events.
2. Publish all legal notices.
3. Issue and file all candidate nomination documents (including Campaign Reporting Statements).
4. Ensure copies of all ballot material, including candidates' names, ballot occupations and candidate statements, are available for public examination for recommended period designated in calendar of events.
5. Consolidate established precincts to form voting and declared Vote By Mail precincts.
6. Designate polling places and recruit pollworkers.
7. Print official ballots.
8. Print and mail Official Sample Ballot booklets.
9. Issue and receive Vote By Mail ballots.
10. Furnish precinct supplies to pollworkers.
11. Train pollworkers.
12. Staff check-in centers and central tally center.
13. Conduct election tally and release semi-official election results.
14. Canvass election returns.
15. Certify official election results to district.
16. Issue Certificates of Election to successful candidates.

E X A M P L E

RESOLUTION NO. \_\_\_\_\_

A RESOLUTION OF THE BOARD OF DIRECTORS OF \_\_\_\_\_ REQUESTING THE BOARD OF SUPERVISORS OF THE COUNTY OF LOS ANGELES TO PERMIT THE REGISTRAR-RECORDER/COUNTY CLERK TO RENDER ELECTION SERVICES FOR AN ELECTION OF SAID \_\_\_\_\_ TO BE HELD ON NOVEMBER 8, 2016.

WHEREAS, the California Elections Code permits special districts electing governing board members to call an election;

WHEREAS, an election in the \_\_\_\_\_ is to be held on Tuesday, November 8, 2016, for the purpose of electing \_\_\_\_\_ members of the Board of directors of said \_\_\_\_\_; and

WHEREAS, the Board of Directors believes that it is desirable that said election be conducted with the General District Elections to be held on the same date and that within said \_\_\_\_\_ the precincts, polling places and election officers of the election be the same, and that the Registrar-Recorder/County Clerk of the County of Los Angeles canvass the returns of the election and that said \_\_\_\_\_ election, be held in all respects as if there were only one election.

NOW, THEREFORE, THE BOARD OF DIRECTORS OF \_\_\_\_\_ HEREBY RESOLVES, DETERMINES, AND ORDERS AS FOLLOWS:

1. That an election is hereby called by the Board of Directors of the \_\_\_\_\_ to be held on November 4, 2014 for the purpose of electing \_\_\_\_\_ members to the Board of Directors.
2. That pursuant to the requirements of Section 10403 of the Elections Code, the Board of Supervisors of the County of Los Angeles is hereby requested to consent and agree to conduct the \_\_\_\_\_ election with the Tuesday, November 8, 2016, Consolidated Elections for the purpose of electing members to the Board of Directors of said district.
3. Said Registrar-Recorder/County Clerk is hereby authorized to canvass the returns of the \_\_\_\_\_ election.
4. Said Board of Supervisors is hereby requested to issue instructions to the Registrar-Recorder/County Clerk to take any and all steps necessary for the holding of said election.
5. \_\_\_\_\_ shall pay in full its pro rata share of the expenses for the conduct of the election.
6. \_\_\_\_\_ (shall/shall not) require each candidate to pay in advance his or her pro rata share of the printing, handling, and mailing costs of his/her candidate statement as a condition to having it included in the voter's sample ballot pamphlet.
7. The word limit for candidate's statements shall be \_\_\_\_\_ words.
8. That the Executive Director is hereby directed to file a certified copy of this resolution with the Board of Supervisors and the Registrar-Recorder/County Clerk of the County of Los Angeles.

PASSED, APPROVED, AND ADOPTED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, \_\_\_\_\_

ATTEST:

OFFICIAL \_\_\_\_\_

OFFICIAL \_\_\_\_\_

DATED \_\_\_\_\_



Dean C. Logan  
Registrar-Recorder/County Clerk

February 22, 2016

Josie Guzman, CMC, Executive Assistant/Clerk of the Board  
Las Virgenes Municipal Water District  
4232 Las Virgenes Road  
Calabasas, CA 91302

**ESTIMATED COST FOR THE NOVEMBER 8, 2016 GENERAL ELECTION**

Dear Ms. Guzman:

As requested, the estimated cost for the Las Virgenes Municipal Water District to participate in the November 8, 2016 General Election with two offices is \$43,000.

The estimated cost is based on the following estimated statistics: 18,282 registered voters, 6,903 permanent vote-by-mail voters, 14 precincts, and up to 5 other jurisdictions sharing the prorated costs with your District. **Changes in any of these factors and overall election statistics, as well as unanticipated increases in labor rates and cost of materials, will have a significant impact on the final costs.**

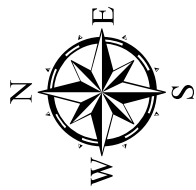
If you have any questions regarding this estimate, please contact Bernice Liang of my staff at (562) 462-2690.

Sincerely,

DEAN C. LOGAN  
Registrar-Recorder/County Clerk

ANN SMITH, Manager  
Fiscal Operations



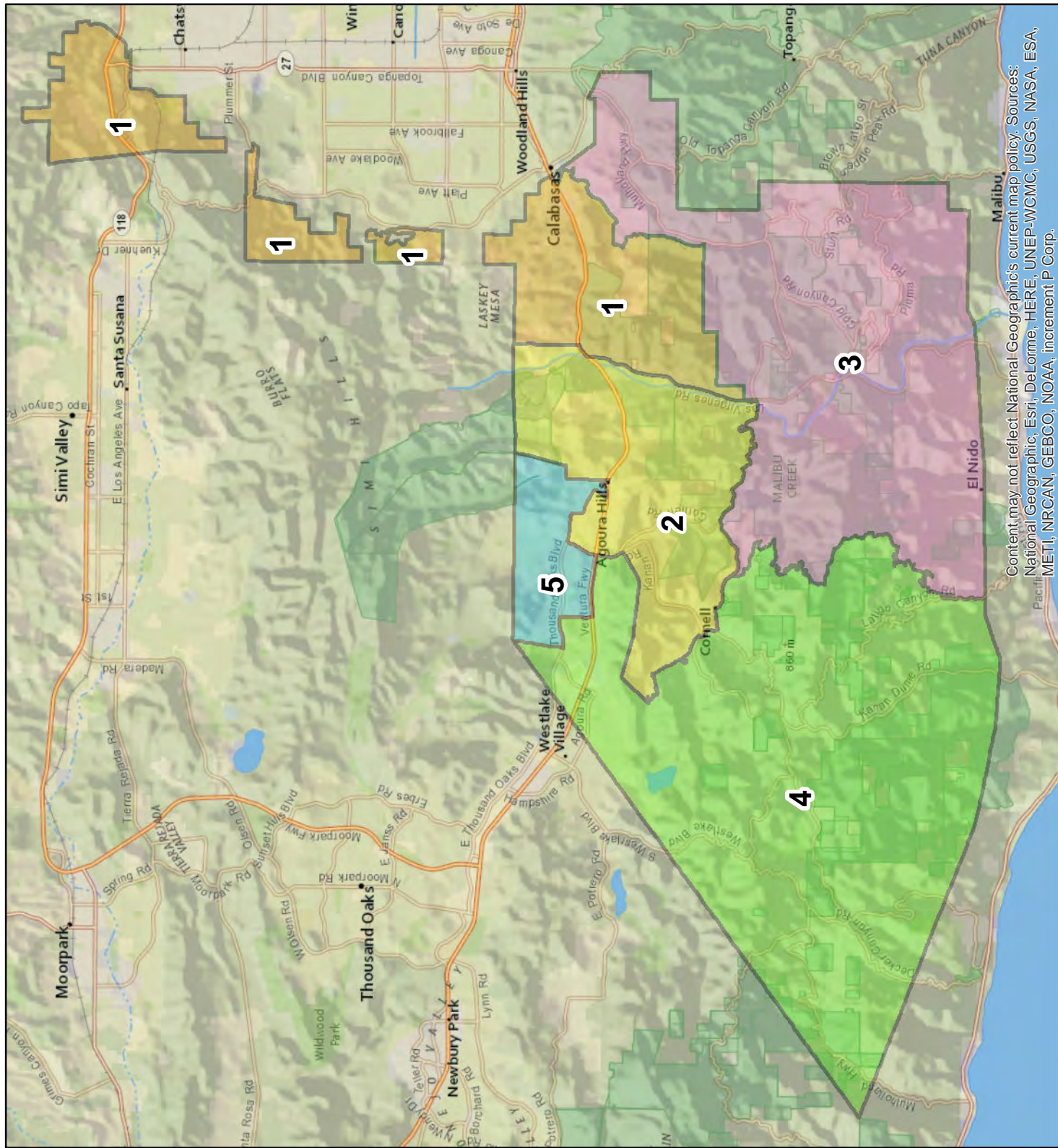


**Official  
Directors' Division  
Boundary Map**

**Las Virgenes MWD  
January 2015**

**Legend**

- | Division     | Color       |
|--------------|-------------|
| 1 - Caspary  | Orange      |
| 2 - Peterson | Yellow      |
| 3 - Renger   | Pink        |
| 4 - Polan    | Light Green |
| 5 - Lewitt   | Light Blue  |



Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, DeLorme, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp.

Division boundaries based on population distribution. Each division is approximately equal in population.



May 10, 2016 LVMWD Regular Board Meeting

TO: Board of Directors

FROM: Facilities & Operations

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**Subject : 2015 Urban Water Management Plan: Public Hearing**

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**SUMMARY:**

On January 10, 2016, the Board accepted a proposal from Kennedy/Jenks Consultants to prepare the District's 2015 Urban Water Management Plan (UWMP). The scope of work consisted of updating the 2010 UWMP and addressing new guidelines covering the required content of UWMPs, including analyses of the embedded energy in the District's water service and the impacts of climate change on water supplies. A summary presentation on the findings of the 2015 UWMP will be given at the Board meeting.

Attached is a copy of the 2015 UWMP without the appendices. A full version, including the appendices, is available on the District's website at <http://www.lvmwd.com/about-us/management/facilities-and-operations/technical-services-planning-engineering/master-plans-and-engineering-documents>. Also, a hard-copy of the full version will be available at the Board meeting.

**RECOMMENDATION(S):**

Conduct a public hearing to accept comments on the 2015 Urban Water Management Plan.

**FISCAL IMPACT:**

No

**ITEM BUDGETED:**

Yes

**FINANCIAL IMPACT:**

There is no financial impact associated with this action.

## **DISCUSSION:**

An UWMP is a planning document used to ensure that water supplies and demands are balanced over a 20-year period, considering normal, single-dry and multiple-dry water years. The URWMP provides general guidance on water supply management issues and serves as the basis for evaluating the availability of water supplies for large development projects. It is not a specific action plan and should not be viewed as an exact blueprint for supply and demand management.

The 2015 UWMP provides updated information on population growth and projections for future water supplies and demands. The projections are similar to but lower than the projections contained in the 2010 UWMP and 2014 Potable Water Master Plan Update, primarily because of delayed growth due to economic conditions and lower-than-expected demands stemming from the State-mandated water use reductions.

Based on the 2015 UWMP, the District's actual 2015 consumption was 242 gallons per capita per day (GPCD), which is less than both the 2015 interim target of 280 GPCD and 2020 target of 249 GPCD. However, the District's GPCD is expected to increase modestly through 2020 as the State-mandated water use reductions are lifted and economic conditions continue to improve

A projection of 257 GPCD in year 2020 was estimated based on the assumption that water use would gradually increase to the average level over the past five years. Although this projection is 8 GPCD over the District's 20x2020 target of 249 GPCD, staff is confident that the implementation of budget-based rates will close the gap by 2020.

The District's 2015 UWMP provides a water supply and demand analysis for 25 years (five years more than required), through 2040, considering normal, single-dry and multiple-dry water years. Based on the 2015 UWMP from Metropolitan Water District of Southern California, the District has adequate water supplies to meet projected demands under all these three scenarios.

On March 1, 2016, a notice of preparation for the 2015 UWMP was sent to Metropolitan Water District of Southern California, Triunfo Sanitation District, Calleguas Municipal Water District, the County of Los Angeles and the cities within the District's service area. Also, a copy of the Public Draft 2015 UWMP was sent to these agencies with information on the time and place of the public hearing, addressing the minimum 60-day notice requirement. Further, a notice of the public hearing was published in *The Acom* on April 7 and 14, 2016.

No comments on the 2015 UWMP have been received to-date. However, staff will provide the Board with any comments received hereafter. Board adoption of the 2015 UWMP is tentatively scheduled for May 24, 2016.

## **GOALS:**

Provide Safe and Quality Water with Reliable Services

Prepared by: John Zhao, P. E., Principal Engineer

**ATTACHMENTS:** Public Draft 2015 UWMP



PUBLIC DRAFT

# 2015 Urban Water Management Plan for Las Virgenes Municipal Water District

*Revised April 25, 2016*

Prepared by  
**Kennedy/Jenks Consultants**

## **Kennedy/Jenks Consultants**

2775 North Ventura Road, Suite 100  
Oxnard, California 93036  
805-973-5700  
FAX: 805-973-1440

### **2015 Urban Water Management Plan Public Draft**

25 April 2016

Prepared for

#### **Las Virgenes Municipal Water District**

4232 Las Virgenes Road  
Calabasas, CA 91302

K/J Project No. 1644210\*00

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## Acronym List

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°F	Fahrenheit
Act	Urban Water Management Planning Act
AF	Acre Feet
AFY	Acre Feet per Year
ARDWP	Annual Reports to the Drinking Water Program
AWWA	American Water Works Association
cfs	Cubic Feet per Second
CMWD	Calleguas Municipal Water District
CUWCC	California Urban Water Conservation Council
CWC	California Water Code
DDW	Division of Drinking Water
DMM	Demand Management Measure
DWR	California Department of Water Resources
ET <sub>o</sub>	Evapotranspiration
GIS	Geographic Information System
GPCD	Gallons Per Capita Per Day
gpm	Gallons per Minute
HGL	Hydraulic Grade Line
IRP	Integrated Water Resources Plan
JPA	Joint Powers Authority
LADWP	Los Angeles Department of Water and Power
LRP	Local Resource Program
mg/l	Milligrams per Liter
mgd	Million Gallons per Day
MWDSC	Metropolitan Water District of Southern California
ppm	Parts per Million
RHNA	Regional Housing Needs Assessment
RWQCB	Regional Water Quality Control Board
SBX7-7	Senate Bill 7 of Special Extended Session 7
SDP	Seawater Desalination Program
SWP	State Water Project

## **Table of Contents (cont'd)**

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SWRCB	State Water Resources Control Board
TDS	Total Dissolved Solids
TSD	Triunfo Sanitation District
TWRF	Tapia Water Reclamation Facility
UWMP	Urban Water Management Plan
VCWWD	Ventura County Waterworks District
WSCP	Water Shortage Contingency Plan

## **Section 1: Introduction**

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### **1.1 Overview**

This document presents the 2015 Urban Water Management Plan (UWMP) for the Las Virgenes Municipal Water District (LVMWD). This chapter describes the general purpose of the Plan and discusses Plan adoption and implementation.

The State of California mandates that all “urban” water suppliers within the state prepare a UWMP. Detailed information on what must be included in these plans as well as who must complete them can be found in California Water Code (CWC) sections 10610 through 10657. According to the Urban Water Management Planning Act (Act) of 1983, an urban water supplier is defined as a supplier, either public or private, that provides water for municipal purposes either directly or indirectly to more than 3,000 customers or supplies more than 3,000 acre-feet (AF) annually.

### **1.2 Purpose**

An UWMP is a planning tool that generally guides the actions of water management agencies. It provides managers and the public with a broad perspective on a number of water supply issues. It is not a substitute for project-specific planning documents, nor was it intended to be when mandated by the State Legislature. For example, the Legislature mandated that a plan include a Section which “describes the opportunities for exchanges or water transfers on a short-term or long-term basis.” (California Urban Water Management Planning Act, Article 2, Section 10630(d).) The identification of such opportunities, and the inclusion of those opportunities in a general water service reliability analysis, neither commits a water management agency to pursue a particular water exchange/transfer opportunity, nor precludes a water management agency from exploring exchange/transfer opportunities not identified in the plan. When specific projects are chosen to be implemented, detailed project plans are developed, environmental analysis, if required, is prepared, and financial and operational plans are detailed.

“A plan is intended to function as a planning tool to guide broad-perspective decision making by the management of water suppliers.” (*Sonoma County Water Coalition v. Sonoma County Water Agency* (2010) 189 Cal. App. 4th 33, 39.) It should not be viewed as an exact blueprint for supply and demand management. Water management in California is not a matter of certainty and planning projections may change in response to a number of factors. “[L]ong-term water planning involves expectations and not certainties. Our Supreme Court has recognized the uncertainties inherent in long-term land use and water planning and observed that the generalized information required in the early stages of the planning process are replaced by firm assurances of water supplies at later stages.” (Id., at 41.) From this perspective, it is appropriate to look at the UWMP as a general planning framework, not a specific action plan. It is an effort to generally answer a series of planning questions including:

- What are the potential sources of supply and what is the reasonable probable yield from them?

- What is the probable demand, given a reasonable set of assumptions about growth and implementation of good water management practices?
- How well do supply and demand figures match up, assuming that the various probable supplies will be pursued by the implementing agency?

Using these “framework” questions and resulting answers, the implementing agency will pursue feasible and cost-effective options and opportunities to meet demands.

The Act requires preparation of a plan that:

- Accomplishes water supply planning over a 20-year period in five year increments. (LVMWD is going beyond the requirements of the Act by developing a plan which spans twenty-five years.)
- Identifies and quantifies adequate water supplies, including recycled water, for existing and future demands, in normal, single-dry and multiple-dry years.
- Implements conservation and efficient use of urban water supplies.

Additionally, Senate Bill 7 of Special Extended Session 7 (SBX7-7) was signed into law in November 2009, which calls for progress towards a 20 percent reduction in per capita water use statewide by 2020. As a result, the legislation mandated each urban retail water supplier to develop and report a water use target in the retailer’s 2010 UWMP. The legislation further requires that retailers report an interim 2015 water use target, their baseline daily per capita use and 2020 compliance daily per capita use, along with the basis for determining those estimates. Beginning in 2016, retail water suppliers are required to comply with the water conservation requirements in SBX7-7 in order to be eligible for State water grants or loans. Water suppliers have the ability to revisit the SBX7-7 baseline and targets that were determined in the 2010 UWMPs and update them in the 2015 Plan. In addition, if the 2010 census was not utilized for the SBX7-7 calculations in the 2010 UWMP, census data must be used to update the 2015 Plan.

Significant new requirements for quantified demand reductions have been added by the enactment of SBX7-7, which amended the Act. In addition, a number of changes to the Water Code have been enacted since 2010 which affect implementation of the 2015 Plan updates. These changes apply to:

- Demand Management Measures CWC Section 10631(f)(1) and (2) Assembly Bill 2067, 2014
- Submittal Date CWC Section 10621 (d) Assembly Bill 2067, 2014
- Electronic Submittal CWC Section 10644 (a)(2) Senate Bill 1420, 2014
- Standardized Forms CWC Section 10644(1)(2) Senate Bill 1420, 2014
- Water Loss CWC Section 10631 (e)(1)(J) and (e)(3)(A) and (B) Senate Bill 1420, 2014

- Estimating Future Water Savings CWC Section 10631 (e)(4) Senate Bill 1420, 2014
- Voluntary Reporting of Energy Intensity CWC Section 10631.2 (a) and (b) Senate Bill 1036, 2014
- Defining Water Features CWC Section 10632 (b) Assembly Bill 2409, 2014

A checklist to ensure compliance of this Plan with the Act requirements is provided in Appendix A.

It is the stated goal of LVMWD to deliver a reliable and high quality water supply to its customers, even during dry periods. Based on conservative water supply and demand assumptions over the next twenty five years in combination with conservation of non-essential demand during normal water years, the UWMP successfully achieves this goal.

### **1.3 Basis for Preparing the Plan**

In accordance with the CWC, urban water suppliers with 3,000 or more service connections, or supplying 3,000 or more acre-feet (AF) of water per year, are required to prepare a UWMP every five years. The 2015 UWMP shall be updated and submitted to the California Department of Water Resources (DWR) by July 1, 2016. LVMWD has prepared this UWMP as it directly provides water for municipal purposes to over 3,000 customers and supplies more than 3,000 AF of water annually.

LVMWD prepared and adopted UWMPs for the years 2005 and 2010. This UWMP serves as an update to the 2010 UWMP and was prepared as an individual UWMP, covering only the LVMWD service area (more details on the LVMWD service area are provided in Chapter 2).

### **1.4 Overview of Document**

This plan is organized as follows:

- 1) Introduction
- 2) Service Area
- 3) Water Use
- 4) Water Supply
- 5) Recycled Water
- 6) Water Quality
- 7) Reliability Planning
- 8) Demand Management Measures
- 9) Water Shortage Contingency Plan
- 10) References
- 11) Appendices



### **1.4.1 Methodology and Key Assumptions**

A water supplier may report on a fiscal year or calendar year basis, but must clearly state in its UWMP the type of year that is used for reporting. The type of year should remain consistent throughout the Plan. DWR prefers that agencies report on a calendar year basis in order to ensure UWMP data is consistent with data submitted in other reports to the State. This UWMP provides data consistent with a calendar year, in acre-feet per year (AFY).

Public water systems (PWS) are systems that provide drinking water for human consumption and these systems are regulated by the State Water Resources Control Board (SWRCB), Division of Drinking Water. The SWRCB, Division of Drinking Water, requires reporting on the PWS. Reporters file electronic Annual Reports to the Drinking Water Program (ARDWP) to the SWRCB, which include annual reports of water usage and other information. The information provided in the UWMP should be consistent with the data reported in the ARDWP.

### **1.4.2 Standardized Tables**

Revisions to the CWC directed DWR to develop standardized tables for the reporting and submittal of UWMP data. Water agencies are required to submit UWMP data electronically to DWR using the standardized tables. The standardized tables were prepared for this Plan and are included as Appendix B.

## **1.5 Coordination During Plan Preparation and Adoption**

### **1.5.1 Agency Coordination**

The UWMP Act requires that the water agency identify its coordination with appropriate nearby agencies. LVMWD's 2015 UWMP is intended to address those aspects of the UWMP Act which are under the control of the District, specifically water supply and water use. LVMWD is the sole water supplier and water management agency for the area. While preparing the 2015 UWMP, LVMWD coordinated its efforts with relevant agencies to ensure that the data and issues discussed in the plan are presented accurately. Among other coordination activities, LVMWD also informed the Metropolitan Water District of Southern California (MWDSC) of projected water use. Table 1-1 summarizes how the UWMP preparation was coordinated with relevant agencies in the area. All agencies listed in Table 1-1 were sent a notice of preparation, copies of which are included in Appendix C.

**TABLE 1-1  
COORDINATION AND NOTIFICATION FOR PLAN PREPARATION**

	Participated in Developing UWMP	Received Copy of Draft	Commented on Draft	Attended Public Meetings	Contacted for Assistance	Was Sent Notice of Intent to Adopt	Not Involved
Metropolitan Water District of Southern California	✓						
Calleguas Municipal Water District	✓						
City of Calabasas	✓						
City of Hidden Hills	✓						
City of Agoura Hills	✓						
City of Westlake Village	✓						
Triunfo Sanitation District	✓						
Los Angeles County	✓						

### **1.5.2 Public Outreach**

LVMWD has actively encouraged community participation in its Urban Water Management Planning efforts. A notice of public hearing was published in the local newspaper on April 14, 2016, notifying interested parties that the draft 2015 UWMP was under preparation. City and County agencies were notified on March 1, 2016, more than 60 days prior to the public hearing. Copies of the public hearing notification, which include the time and place of the public hearing, are included in Appendix C.

The Draft 2015 UWMP was presented to the LVMWD Board of Directors on May 10, 2016 in a public hearing. The hearing provided an opportunity for LVMWD's customers, residents, and employees to learn and ask questions about the current and future water supply. The Final Draft 2015 UWMP was presented to the LVMWD Board of Directors and subsequently adopted by resolution of the Board on May 24, 2016. A copy of the resolution of the intent to adopt and the adoption resolution are included in Appendix D.

Table 1-2 presents a timeline for public participation during the development of the Plan. A copy of the public outreach materials, including paid advertisements, newsletter covers, website postings and invitation letters are attached in Appendix C.

**TABLE 1-2  
PUBLIC PARTICIPATION TIMELINE**

March 1, 2016	Notice of Preparation	City and County agencies notified of 2015 UWMP preparation
April 15, 2015	Release of Public Draft UWMP	Draft UWMP made available on LVMWD website
May 10, 2016	Public Hearing, Presentation of Draft UWMP	Review contents of Draft UWMP and take comments
May 24, 2016	Board Approval	UWMP considered for approval by the Board

### **1.5.3 Plan Availability**

The adopted 2015 UWMP will be submitted to:

- The California Department of Water Resources
- The California State Library
- The County of Los Angeles Regional Planning Department
- The City of Agoura Hills
- The City of Calabasas
- The City of Hidden Hills
- The City of Westlake Village

In addition, the plan will be posted to the LVMWD website and will be made available during normal business hours at LVMWD, located at: 4232 Las Virgenes Road, Calabasas, CA 91302.

## **Section 2: Service Area**

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### **2.1 Las Virgenes Municipal Water District Service Area**

The LVMWD service area comprises a 122-square mile area (74,640 acres) in western Los Angeles County, including the Los Angeles/Ventura County boundary to the northwest and the City of Los Angeles to the east. As shown in Figure 2-1, the service area includes the incorporated cities of Agoura Hills, Calabasas, Hidden Hills, and Westlake Village as well as unincorporated portions of Los Angeles County.

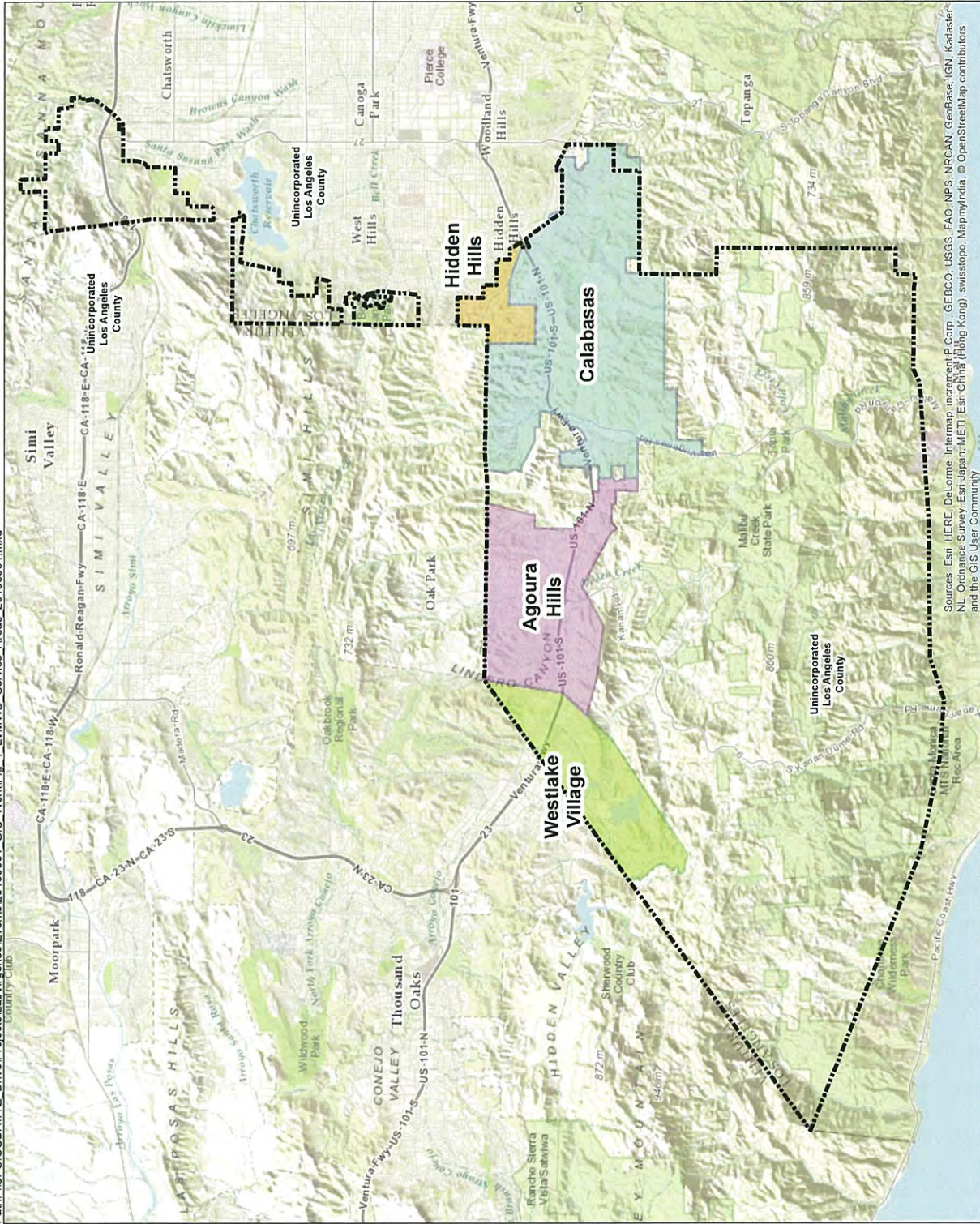
### **2.2 Land Use**

A large portion of the service area is undeveloped land characterized by the Santa Monica Mountains that range in elevation from a few feet above mean sea level (msl) to elevations exceeding 2,500 ft-msl. As shown in Figure 2-2, these open space areas comprise about 35 to 40 percent of the total service area and are mostly held in public ownership, such as state and national parks that will not require water service. There are also many undeveloped private parcels, particularly in the southern half of the service area. While these parcels are difficult to develop due to the topography of the land, they are accounted for in long-range water planning as these parcels could potentially receive water from LVMWD in the future (Kennedy/Jenks 2014a). The remaining portion is primarily made up of mixed residential and commercial land uses, while only a small portion of the service area is designated as industrial and agricultural land use types. The development pattern in recent years within the service area has been predominately commercial/office along the freeway corridor with some modest residential development and growth in smaller tracts.






There are several unique aspects of LVMWD's geography which must be considered when discussing regional water infrastructure. LVMWD's water demands are primarily residential, as opposed to commercial, industrial, institutional, or agricultural, so LVMWD's customer base consists of many small users (i.e., single family residential homes) with associated landscape irrigation. Secondly, because of LVMWD's rural location within the Santa Monica Mountains, the distribution systems are large and must accommodate geographical challenges such as rapidly changing elevations. And while LVMWD benefits from a highly integrated recycled water system, effective potable distribution has been a continual challenge.

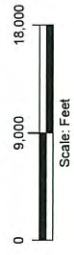
#### **2.2.1 Development Projections**

The 2014 Potable Water Master Plan contains development projections, taking into account land use and planning data, local agency Housing Element reports, and vacant housing information. That analysis was updated with most recent Housing Element reports for this UWMP. Based on the analysis, a total of 5,254 new dwelling units is anticipated by build-out. For purposes of this 2015 UWMP and in contrast to the 2014 Master Plan, build-out is projected to occur by 2040. Using applicable persons per household numbers, the related additional population from these new development projects is estimated to be 16,378. These projections are summarized in Table 2-1.



**Legend**

-  LVMWD Potable Water Service Area
-  Westlake Village
-  Agoura Hills
-  Calabasas
-  Hidden Hills



**Kennedy/Jenks Consultants**  
 Las Virgenes Municipal Water District 2015 UWMFP  
 Los Angeles, County, CA

**LVMWD Service Area**

K/J 1644210.00  
 March 2016  
 Figure 2-1

Sources: Esri, HERE DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Beijing), Swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

**TABLE 2-1  
HOUSING AND POPULATION PROJECTIONS**

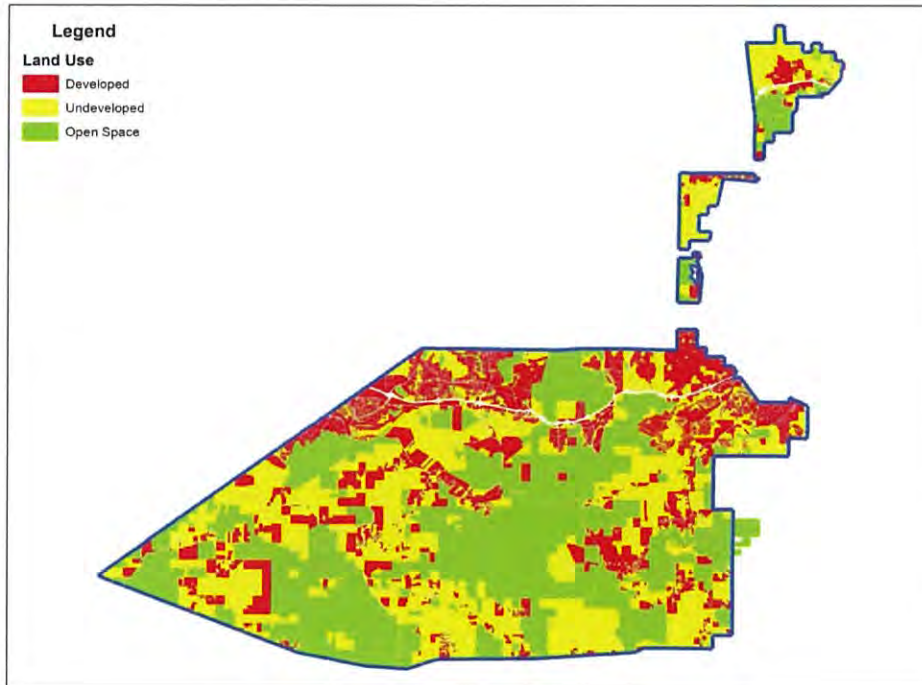
Agency/Growth Description	Projected New Dwelling Units	Applicable Persons per Household (PPH) <sup>(a)</sup>	Projected Additional Population
<b>Agoura Hills<sup>(b)</sup></b>			
Agoura Village	293	3.345	980
N Agoura Rd	73	3.345	244
<b>Calabasas<sup>(c)</sup></b>			
Paxton Calabasas	78	3.045	238
Village at Calabasas	80	3.045	244
Vacant Residential Sites	306	3.045	932
Underutilized Residential Sites	270	3.045	822
Second Units	12	3.045	37
<b>Hidden Hills<sup>(d)</sup></b>			
Vacant Land	32	3.23	103
Affordable Housing	17	3.23	55
Second Units	2	3.23	6
<b>Westlake Village<sup>(e)</sup></b>			
Westlake Village Business	401	3.01	1,207
Additional Potential Residential	8	3.01	24
<b>Additional Units<sup>(b)</sup></b>			
Additional Population from Land Use Calculations (Unincorporated LA County) <sup>(b)</sup>	2,746	3.15	8,650
Additional Population from Vacant units <sup>(b)</sup>	936	3.03	2,836
<b>Total Additional Population from New Development</b>	<b>5,254</b>	<b>n/a</b>	<b>16,378</b>
<b>Total Population at Buildout</b>			<b>85,144<sup>(f)</sup></b>

**Notes:**

Source: Adapted from Potable Water Master Plan Update 2014

- (a) PPH from 2014 Master Plan
- (b) Based on assessment from Potable Water Master Plan Update 2014; Table III-1
- (c) City of Calabasas Housing Element 2014-2021 Update, 2013; Table V-4
- (d) City of Hidden Hills 2013-2021 Housing Element, 2014
- (e) City of Westlake Village 2013-2021 Housing Element, 2014; Table 4
- (f) Total population at buildout (2040) taking into account current 2015 and additional population from new development. See also Table 2-2.

**FIGURE 2-2: DEVELOPED, UNDEVELOPED AND DEDICATED OPEN SPACE LAND IN LVMWD SERVICE AREA**



### 2.3 Population

The population for LVMWD in 2015 was required to be calculated using the DWR online population tool, which uses a Geographic Information System (GIS) interface. By adding shape files for the LVMWD service area boundaries, population is derived using U.S. Census Bureau census tract data from historical census years and combined with persons per connection data.

Based on 2015 population data and additional population from new development, which is assumed to occur by 2040, future population was calculated for all intervening years through the end of the planning period. Population projections are shown in Table 2-2. As can be seen, it is anticipated that LVMWD's service area population will grow to around 85,144 in the next 25 years.

**TABLE 2-2  
CURRENT AND PROJECTED POPULATION**

	2015	2020	2025	2030	2035	2040
Service Area Population	68,766 <sup>(a)</sup>	71,768	74,901	78,170	81,582	85,144 <sup>(b)</sup>

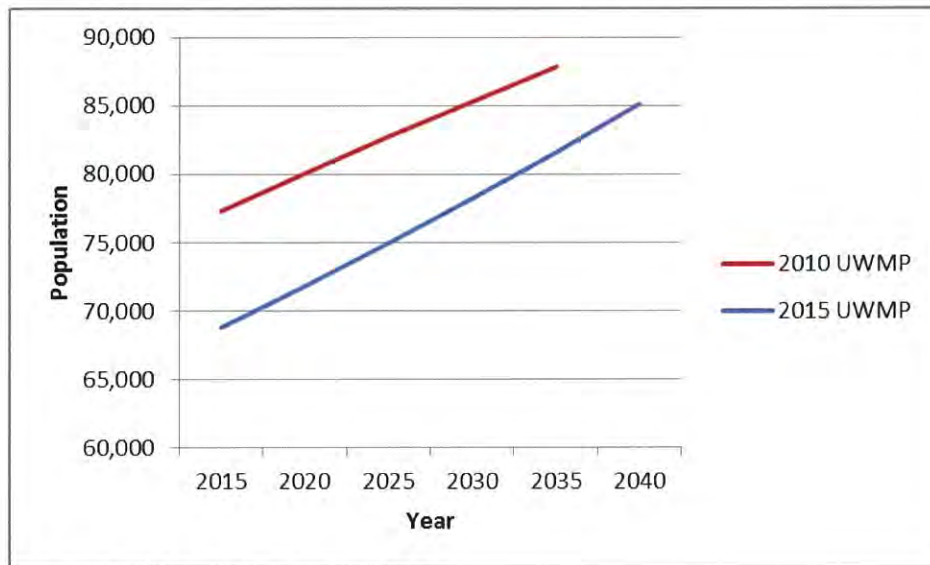
**Notes:**

(a) 2015 population value from DWR population tool.

(b) 2040 population reflects current plus additional population at build-out

Population projections in this UWMP are similar to build-out projections made in the 2014 Master Plan and the 2010 UWMP, albeit slightly lower and with a slightly steeper increasing trajectory. A comparison of population projections from the 2010 UWMP and this 2015 UWMP are shown in the figure.

**FIGURE 2-3: COMPARISON OF POPULATION PROJECTIONS**



Note: 2010 UWMP projections go through 2035.

## 2.4 Climate

The majority of LVMWD's service area climate is a semi-arid environment with mild winters, warm summers and moderate rainfall, consistent with coastal Southern California. The general region lies in the semi-permanent high-pressure zone of the eastern Pacific. As a result, the climate is mild, tempered by cool sea breezes. The usually mild climatological pattern is interrupted infrequently by periods of extremely hot weather, winter storms, or dry hot Santa Ana winds. The standard monthly average evapotranspiration (ET<sub>o</sub>) rates, rainfall, and temperature are summarized in Table 2-3.

As can be seen, LVMWD's average monthly temperature ranges from about 52 to 78 degrees Fahrenheit (°F), with an annual average temperature of 65°F. The daily extreme low and high temperatures have been measured to be 38°F and 104°F, respectively. ET<sub>o</sub> averages a total of 68.5 inches per year, while the average annual rainfall is 16.86 inches. Records for the 2007-2016 timeframe show that the monthly precipitation has been as high as 8 inches and as low as 0.0 inches. Most of the rainfall typically occurs during the period of November through April.



**TABLE 2-3  
CLIMATE CHARACTERISTICS**

Month	Standard Monthly Average ETo (inches) <sup>(a)</sup>	Monthly Average Rainfall (inches) <sup>(b)</sup>	Monthly Average Temperature(°F) <sup>(b)</sup>		
			Average	Minimum	Maximum
January	3.25	3.78	53.6	67.9	39.3
February	3.29	3.95	55.35	70	40.7
March	5.28	2.78	57.1	72.3	41.9
April	6.30	1.13	60.7	76.8	44.6
May	7.57	0.29	65.1	81.1	49.1
June	8.05	0.04	70.2	87.4	53
July	8.55	0.01	75.95	94.9	57
August	8.53	0.1	76.35	95.4	57.3
September	6.56	0.16	73.15	91.7	54.6
October	4.83	0.52	66.5	84	49
November	3.57	1.79	58.7	74.8	42.6
December	2.64	2.31	53.8	68.8	38.8
Annual	68.55	16.86	63.85	80.4	47.3

**Notes:**

(a) Source: California Irrigation Management Information System (CIMIS) Station 204 (CIMIS, 2016). Represents monthly average data from January 2007 to January 2016.

(b) Source: Western Regional Climate Center (WRCC), Woodland Hills Pierce College, California (Station 041484); Period of record: 7/1/1949-1/20/2015.

## **Section 3: Water Use**

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### **3.1 Overview**

This chapter describes historic and current water usage and the methodology used to project future demands within LVMWD's service area. Water usage is divided into sectors such as residential, commercial/institutional, landscape, and other. To undertake this evaluation, existing land use data and anticipated new development information were compiled. This information was then compared to historical trends of water usage. In addition, weather and water conservation effects on historical water usage were factored into the evaluation.

The discussion on water demands in this chapter is related to potable demands, unless otherwise stated. The potable water distribution system draws solely from potable water sources. A detailed discussion on demands for recycled water is provided in Section 5.

### **3.2 Historical and Current Water Use**

#### **3.2.1 Water Deliveries**

All authorized connections within the LVMWD service area are metered and meters are installed for all new accounts. The water use categories are characterized as follows:

- **Single-Family Residential** – A single-family dwelling unit, generally a single lot containing a single home.
- **Multi-Family Residential** – Multiple dwelling units contained within one building or a complex of several buildings.
- **Commercial/Institutional/Industrial** – This is a single water use category that captures water customers conducting business (i.e. providing a product or service), customers dedicated to public service, and manufacturers or processors of materials. Most of the City's water use in this sector reflects water use for retail businesses.
- **Irrigation** – Water connections supplying water solely for landscape irrigation, including landscapes in a residential, commercial, or institutional setting.
- **Other** – Water for fire protection and temporary uses, such as line flushing and construction. A portion of these uses are metered, whereby a portion may fall under unmetered, unbilled consumption depending on system operations and tracking methods.

Approximately 84 percent of LVMWD's potable water demand in 2015 came from the residential sector, of which approximately 77 percent was attributed to single-family and 7 percent attributed to multi-family residential customers. The remainder of demands came from commercial, irrigation uses and a smaller portion from other uses. Historical (2010) and current (2015) water deliveries by customer class are shown in

Table 3-1. As of 2015, LVMWD served approximately 19,900 connections.

**TABLE 3-1  
ACTUAL WATER DELIVERIES – 2010 AND 2015**

Water Use Sector	Level of Treatment	Volume of Deliveries <sup>(a)</sup> (AF)	
		2010	2015
Single-family	Drinking Water	13,911	13,221
Multi-family	Drinking Water	1,291	1,309
Commercial	Drinking Water	2,182	2,006
Landscape	Drinking Water	559	545
Other <sup>(b)</sup>	Drinking Water	503	207
<b>Total Potable Water Demand</b>		<b>18,446</b>	<b>17,288</b>

**Notes:**

(a) Source: LVMWD staff – potable water sales data

(b) "Other" Includes metered fire protection and temporary uses

Between the years 2010 and 2015, water use showed a slight increasing trend through 2013 and began to decrease after 2014 to below 2010 values in 2015. Declines are largely attributable to increased water conservation efforts in response to drought conditions and statewide water use reduction targets.

On May 5, 2015 the State Water Resources Control Board (State Water Board) adopted an Emergency Regulation for urban water conservation to address, in part, the mandatory 25 percent statewide reduction mandated by the Governor by Executive Order of April 1, 2015. As part of this Emergency Regulation, LVMWD was directed by the State Water Board to reduce water usage by 36 percent compared to 2013 water usage. In response to this water use reduction requirement, LVMWD enacted numerous water conservation measures, including irrigation restrictions, general potable water conservation requirements and stricter enforcement actions.

### **3.2.2 Historic Sales**

LVMWD has not historically sold any water to other water agencies, nor does it anticipate any future sales to other agencies.

### **3.2.3 Historical Other Water Uses**

Besides metered deliveries to customers, LVMWD has additional demands on its water supplies. Surplus potable water supplies from MWDSC are delivered to the Las Virgenes Reservoir, LVMWD's potable reservoir, for seasonal and emergency system storage. The reservoir provides seasonal balancing between supplies and demands. Further, when demand on the recycled water system is greater than available recycled water supplies, potable water purchased from MWDSC is used to supplement the recycled water system. This usually occurs in the April to October period.

A portion of water consumption within the LVMWD service area is made up of unbilled unmetered water use, such as for emergency fire suppression or water line flushing. As these unmetered volumes tend to be difficult to quantify, a default value of 1.25 percent of authorized metered consumption, as used in the AWWA water audit software, was used to estimate related volumes in 2010 and 2015.

LVMWD, like all water agencies, also has some system losses, which is the difference between the amount of water supplied and the amount of authorized consumption. As required by DWR, LVMWD performed a system water audit as part of this UWMP (see output provided in Appendix E). The reporting period was the 2015 calendar year, which showed that system losses for that timeframe made up approximately 1 percent of water supplied within LVMWD's potable water distribution system. Approximately 30 percent of system losses is from real losses (actual leaks) and the remaining 70 percent from apparent losses, such as meter reading errors. A summary of the 2015 audit report is provided in Table 3-2.

**TABLE 3-2  
12 MONTH WATER LOSS AUDIT REPORT SUMMARY**

Reporting Period Start Date	Volume of Water Loss <sup>(a)</sup> (AF)
January 2015	189

Note:

(a) Sum of real and apparent losses.

All "other" LVMWD water uses, besides metered deliveries are summarized in Table 3-3.

**TABLE 3-3  
HISTORIC "OTHER" WATER USES (AF)**

Use Type	2010	2015
Other <sup>(a)</sup>	2,171	2,108
System Losses <sup>(b)</sup>	208	189
<b>Total<sup>(c)</sup></b>	<b>2,379</b>	<b>2,297</b>

Notes:

(a) Includes deliveries to the LVMWD potable reservoir, potable supplies used to augment the recycled water system, and authorized, but unbilled and unmetered uses.

(b) 2010 losses estimated based on 2015 audit report.

(c) Any water accounted for in Table 3-1 is not included in this table.

### **3.2.4 Total Historical Water Use**

Table 3-4 below summarized information on all historic potable water uses for the years 2010 and 2015, from the previous tables.

**TABLE 3-4  
HISTORIC TOTAL POTABLE WATER USE (AF)**

Use Type	2010	2015
Total Water Deliveries (from Table 3-1)	18,446	17,288
Other water uses and losses (from Table 3-3)	2,379	2,297
<b>Total</b>	<b>20,825</b>	<b>19,585</b>

Total water demands including potable and recycled water demands are shown in Table 3-5.

**TABLE 3-5  
HISTORIC TOTAL WATER USE (AF)**

Use Type	2010	2015
Total Potable Water Use <sup>(a)</sup>	20,825	19,585
Total Recycled Water Use <sup>(b)</sup>	4,354	4,240
<b>Total</b>	<b>25,179</b>	<b>23,825</b>

Notes:

(a) From Table 3-4

(b) See Section 5 for details.

### **3.3 Existing and Targeted Per Capita Water Use**

The Water Conservation Bill of 2009 (SBX7-7) is one of four policy bills enacted as part of the November 2009 Comprehensive Water Package (Special Session Policy Bills and Bond Summary). The Water Conservation Bill of 2009 provides the regulatory framework to support the statewide reduction in urban per capita water use described in the *20 by 2020 Water Conservation Plan*. Consistent with SBX7-7, each water supplier must determine and report its existing baseline water consumption and establish water use targets in gallons per capita per day (GPCD), and compare actual water use against the target; reporting began with the 2010 UWMP. The primary calculations required by SBX7-7 are summarized in Table 3-6.

**TABLE 3-6  
SBX7-7 CALCULATION**

	<b>2010 UWMP</b>	<b>2015 UWMP</b>	<b>2020 UWMP</b>
Base Daily Water Use calculation (average GPCD used in past years)	First calculated and reported in 2010 plan: [318 GPCD (5-year); 307 GPCD (10-year)]	May be revised in 2015 Plan, must be revised if 2010 Census data not used in original calculation. (Described in this Section)	NA
Interim Water Use Target (target GPCD in 2015)	First calculated and reported in 2010 plan: [277 GPCD]	May be revised in 2015 Plan, must be revised if 2010 Census data not used in original calculation. (Described in this Section)	NA
Compliance Water Use Target (target GPCD in 2020)	First calculated and reported in 2010 plan: [246 GPCD]	May be revised in 2015 Plan, must be revised if 2010 Census data not used in original calculation. (Described in this Section)	NA
Actual 2015 Water Use (in GPCD)	NA	In 2015 Plan must compare actual 2015 GPCD against 2015 target. (Described in this Section)	NA
Actual 2020 Water Use (in GPCD)	NA	NA	In 2020 Plan must compare actual 2020 GPCD against 2020 target

In the 2015 UWMP water agencies must demonstrate compliance with the target established for 2015 and demonstrate that the agency is on track to achieve its 2020 target. Compliance is done through review of the SBX7-7 Verification Tables submitted with the 2015 Plan (included in Appendix B).

LVMWD first reported its Base Daily Water Use in its 2010 UWMP. However, at the time the 2010 UWMP was prepared full Census data was not available. LVMWD was therefore required to redo the Base Daily Water Use calculation in this UWMP.

The Base Daily Water Use calculation is based on gross water use by an agency in each year and can be based on a ten-year average ending no earlier than 2004 and no later than 2010 or a 15-year average if ten percent of 2008 demand was met by recycled water. Base Daily Water Use must account for all water sent to retail customers, excluding:

- Recycled water
- Water sent to another water agency
- Water that went into storage

It is at an agency's discretion whether or not to exclude agricultural water use from the Base Daily Water Use calculation. If agricultural water use is excluded from the Base Daily Water Use calculation it must also be excluded from the calculation of actual water use in later urban water management plans. LVMWD did not supply water to agriculture during the period 1995 to 2010 and so agricultural water does not factor into LVMWD's SBX7-7 calculations.

An urban retail water supplier must set a 2020 water use target (herein called the Compliance Water Use Target) and a 2015 interim target (herein called the Interim Water Use Target). There are four methods for calculating the Compliance Water Use Target:

1. Eighty percent of the urban water supplier's baseline per capita daily water use
2. Per capita daily water use estimated using the sum of the following:
  - a. For indoor residential water use, 55 gallons per capita daily water use as a provisional standard. Upon completion of DWR's 2016 report to the Legislature reviewing progress toward achieving the statewide 20 percent reduction target, this standard may be adjusted by the Legislature by statute.
  - b. For landscape irrigated through dedicated or residential meters or connections, water use efficiency equivalent to the standards of the Model Water Efficient Landscape Ordinance set forth in section 490 et seq. of Title 23 of the California Code of Regulations, as in effect the later of the year of the landscape's installation or 1992.
  - c. For CII uses, a ten percent reduction in water use from the baseline CII water use by 2020.
3. Ninety-five percent of the applicable state hydrologic region target as stated in the state's April 30, 2009, draft 20 by 2020 Water Conservation Plan. LVMWD falls within the South Coast Hydrologic Region (95 percent of the region target is 142).
4. Reduce the 10 or 15-year Base Daily Per Capita Water Use a specific amount for different water sectors:
  - a. Indoor residential water use to be reduced by 15 GPCD or an amount determined by use of DWR's "BMP Calculator".
  - b. A 20 percent savings on all unmetered uses.
  - c. A 10 percent savings on baseline CII use.
  - d. A 21.6 percent savings on current landscape and water loss uses.

The Interim Water Use Target is set as a halfway point between the Base Daily Water Use GPCD and the 2020 Compliance Water Use Target GPCD.

Finally, the selected Compliance Water Use Target must be compared against what DWR calls the "Maximum Allowable GPCD". The Maximum Allowable GPCD is based on 95 percent of a 5-year average base gross water use ending no earlier than 2007 and no later than 2010. The Maximum Allowable GPCD use is used to determine whether a supplier's 2015 and 2020 per capita water use targets meet the minimum water use reduction of the SBX7-7 legislation. If an agency's Compliance Water Use Target is higher than the Maximum Allowable GPCD, the agency must instead use the Maximum Allowable GPCD as their target.

### 3.3.1 Base Daily Per Capita Water Use

Figure 2-1 illustrates the LVMWD service area population projection used to estimate the Base Daily Per Capita water use. Table 3-7 and Table 3-8 summarize the Base Daily Water Use calculation for LVMWD. As is shown in these tables, LVMWD is eligible to use a 10 to 15-year base period. Years 1999 to 2008 have been selected for calculation of a 10-year base period while years 2004 to 2008 have been selected for calculation of the 5-year base period

**TABLE 3-7  
BASELINE PERIOD RANGES**

Baseline	Parameter	Value	Units
10 to 15 year baseline period	2008 total water deliveries	30,479	AFY
	2008 total volume of delivered recycled water	5,325	AFY
	2008 recycled water as a percent of total deliveries	17	Percent
	Number of years in baseline period <sup>(a)</sup>	10	Years
	Year beginning baseline period range	1999	-
	Year ending baseline period range <sup>(b)</sup>	2008	-
5 year baseline period	Number of years in baseline period	5	Years
	Year beginning baseline period range	2004	-
	Year ending baseline period range <sup>(c)</sup>	2008	-

**Notes:**

- (a) If the 2008 recycled water percent is less than 10 percent, then the first baseline period is a contiguous 10-year period. If the amount of recycled water delivered in 2007 is 10 percent or greater, the first baseline period is a contiguous 10 to 15 year period.
- (b) The ending year must be between December 31, 2004 and December 31, 2010.
- (c) The ending year must be between December 31, 2007 and December 31, 2010

In order to calculate Base Daily Per Capita water use for past years, it was necessary to develop population estimates for past years. The population for LVMWD was calculated for 1990, 2000, 2010 and 2015 using the DWR online population tool. This was accomplished using a GIS interface. By adding shape files for the entity service area boundaries or public water system boundary in 1990, 2000, and 2010, population is derived using U.S. Census Bureau census tract data from census years. Then, along with District production and service connections, the DWR population tool derives a persons-per-connection number, which is used to determine population in the intervening years between 1990 and 2010.

As shown in the top portion of Table 3-8, LVMWD 11-year Baseline GPCD is estimated to be 311. As shown in the second tier of Table 3-8 LVMWD's 5-year Baseline GPCD is 322.



**TABLE 3-8  
GALLONS PER CAPITA PER DAY**

Year		Service Area Population	Gross Water Use (gallons)	Daily Per Capita Water Use
10 to 15 Year Baseline GPCD				
1	1999	64,771	7,183,720,560	304
2	2000	65,641	7,175,248,423	299
3	2001	65,888	6,817,789,407	283
4	2002	66,135	7,705,082,843	319
5	2003	66,384	7,216,631,554	298
6	2004	66,633	7,752,005,448	319
7	2005	66,883	7,381,838,227	302
8	2006	67,135	7,603,417,198	310
9	2007	67,387	8,474,092,211	345
10	2008	67,640	8,196,466,795	332
10 to 15 Year Average Baseline GPCD				<b>311</b>
5 Year Baseline GPCD				
Year		Service Area Population	Gross Water Use (gallons)	Daily Per Capita Water Use
1	2004	66,633	7,752,005,448	319
2	2005	66,883	7,381,838,227	302
3	2006	67,135	7,603,417,198	310
4	2007	67,387	8,474,092,211	345
5	2008	67,640	8,196,466,795	332
5 Year Average Baseline GPCD				<b>322</b>
2015 Compliance Year GPCD				
	2015	68,766	5,633,319,470	<b>224</b>

The re-calculation of historical service area population for this UWMP, using the DWR population tool and 2010 Census data, resulted in slightly lower historical population values and consequently a slightly higher 10-year average baseline. The 10-year average baseline was 307 GPCD in the 2010 UWMP, compared to 311 GPCD shown in Table 3-8.

### 3.3.2 Compliance Water Use Targets

In addition to calculating base gross water use, the “20 by 2020” legislation requires that a retail water supplier identify its demand reduction targets.

Option 1. 80% of baseline gpcd water use (i.e., a 20% reduction).

Option 2. The sum of the following performance standards: indoor residential use (provisional standard set at 55 gpcd); plus landscape use, including dedicated and residential meters or connections equivalent to the State Model Landscape Ordinance (80% ETo existing landscapes, 70% of ETo for future landscapes); plus 10% reduction in baseline commercial, industrial institutional use by 2020.

- Option 3. 95% of the applicable state hydrologic region target as set in the DWR “20x2020 Water Conservation Plan” (February, 2010) (20x2020 Plan).
- Option 4. The provisional target method for determining water use targets developed by DWR pursuant to SBX7-7, which is not applicable here

The methodologies for calculating demand reduction targets were described above. LVMWD is choosing to meet SBX7-7 targets as an individual agency rather than as part of a regional alliance. LVMWD has selected Method 1, achieving 80% of baseline GPCD water use (i.e., a 20% reduction). The 11 year baseline GPCD for LVMWD is 311, which after a 20% reduction is 249 (311\*0.80=249). The Interim Water Use Target is 280 GPCD. These calculations are summarized in Table 3-9.

The LVMWD 2015 GPCD was calculated by using the DWR population tool. Once population was derived from 1990 to 2010, 2015 could be extrapolated by using the data points from 1990 to 2010. With 2015 production and connection data, an entity can then calculate their 2015 consumption to determine if they met their 2015 interim target. As shown in Table 3-8, LVMWD had a 2015 GPCD of 224, which means the District has met the 2015 Interim Target.

**TABLE 3-9  
COMPONENTS OF TARGET DAILY PER CAPITA WATER USE**

Period	Value		Unit	
10 to 15-year period selected for baseline GPCD	<i>First Year</i>	1999	<i>Last Year</i>	2008
5-year period selected for maximum allowable GPCD	<i>First Year</i>	2004	<i>Last Year</i>	2008
Highest 11-year Average	311		GPCD	
Highest 5-year Average	322		GPCD	
Compliance Water Use Target	249		GPCD	
Maximum Allowable Water Use Target (5% Reduction 5yr)	306		GPCD	
<b>2020 Target</b>	<b>249</b>		GPCD	
<b>2015 Interim Target</b>	<b>280</b>		GPCD	
<b>Methodology Used</b>	<b>Option #1</b>			

### 3.4 Projected Water Use

Starting around 2008, water demands dropped off in response to the implementation of various factors including water conservation efforts and the economic downturn. The 2014 Water Master Plan projected that water demands would eventually recover to pre-2008 levels and then continue to climb. This projected climb was attributed in part to anticipated economic recovery and associated declines in unemployment rates, which were found to be closely correlated to water demands in the area (Kennedy/Jenks 2014a).

However, drought conditions and statewide conservation regulations have also impacted water demands in the recent years. For example, LVMWD was directed to reduce usage by 36 percent in order to meet statewide water use reduction goals; which LVMWD has responded to with additional conservation measures and related penalties. Additional details on these mandatory measures are presented in Chapters 7 and 8. As a result of these conditions, water demands have remained low, compared to 2008 and pre-2008 levels.

LVMWD water demand projections were based on historic water demand trends, an assumption of some easing of water use prohibitions and anticipated population growth from new development. Since these demands are based on historic demands, they naturally account for ongoing water savings resulting from LVMWD's long-standing water conservation regulations, such as water waste ordinances. Future water savings due to codes, standards, ordinances, or transportation and land use plans are not considered in these water use projections nor have other conservation activities been estimated. Continued implementation of aggressive water conservation actions, including for purposes of meeting GPCD targets, could be expected to reduce demands going forward.

From 2014 to the end of 2015, there was a strong reduction in LVMWD demands, largely resulting from drought-related statewide conservation mandates and ensuing conservation actions implemented by LVMWD. It is assumed water use will increase again by 2020 to around average yearly total water use over the past five-year period, which is approximately 21,600 AFY (see also Table 4-2). This translates into an approximately 10 percent increase over 2015 water use. This increase is based on the assumption that drought restrictions resulted in water demand reductions that were greater than usual and which will diminish slightly once water conditions normalize again.

### **3.4.1 Projected Water Use from New Development**

In addition to the anticipated easing of drought restrictions, additional demands are projected to occur from potential future developments. As noted in Section 2, analyses of potential new developments estimated 5,254 new dwelling units by buildout, resulting in additional population of 16,378 by 2040. The associated population growth rate, approximately 1 percent annually, was used to calculate projected demands from the additional population through the end of the planning period. Additional projected demands from future developments are presented in Table 3-10.

### **3.4.2 Total Projected Water Use**

Total projected demands, taking into account the anticipated easing of drought restrictions and estimated additional demands from new development, are shown in Table 3-10.

**TABLE 3-10  
TOTAL PROJECTED DEMANDS FOR POTABLE WATER (AFY)**

<b>Use Type</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>	<b>2035</b>	<b>2040</b>
Projected Baseline Demands <sup>(a)</sup>	21,600	21,600	21,600	21,600	21,600
Additional Demands from Future Development	943	1,927	2,954	4,026	5,144
<b>Total</b>	<b>22,543</b>	<b>23,527</b>	<b>24,554</b>	<b>25,626</b>	<b>26,744</b>

Notes:

(a) Assumes 10% rebound due to easing of drought restrictions. Based on average of water use over the past five-year period.

It is worth noting here that the demand projections assessed in this UWMP are significantly lower than those developed in the Potable Water Master Plan Update 2014. Demand projections in the Master Plan were based higher population estimates already starting in 2010 and accounted for both, an economic recovery factor of 25 percent and a drought rebound factor of 16 percent (Kennedy/Jenks 2014b). As noted under Section 3.4, Master Plan analyses assumed water demand recovery to pre-2008 levels, however overall demands have remained noticeably lower than pre-2008 levels, in part due to mandatory water use reductions.

In contrast, demand projections in this UWMP account for an approximately 10 percent rebound in demands by 2020, based on average historic water use, as described above.

### **3.4.3 Projected Demands by Water Use Type**

The breakdown of total water use projections, is discussed in this section. Projected customer demands by water use sector are shown in Table 3-11, along with 2015 demands (from Table 3-1). The ratios of water use by sector were assumed to remain the same as the average ratios recorded since 2010.

**TABLE 3-11  
PROJECTED DEMANDS BY WATER USE SECTOR (AFY)**

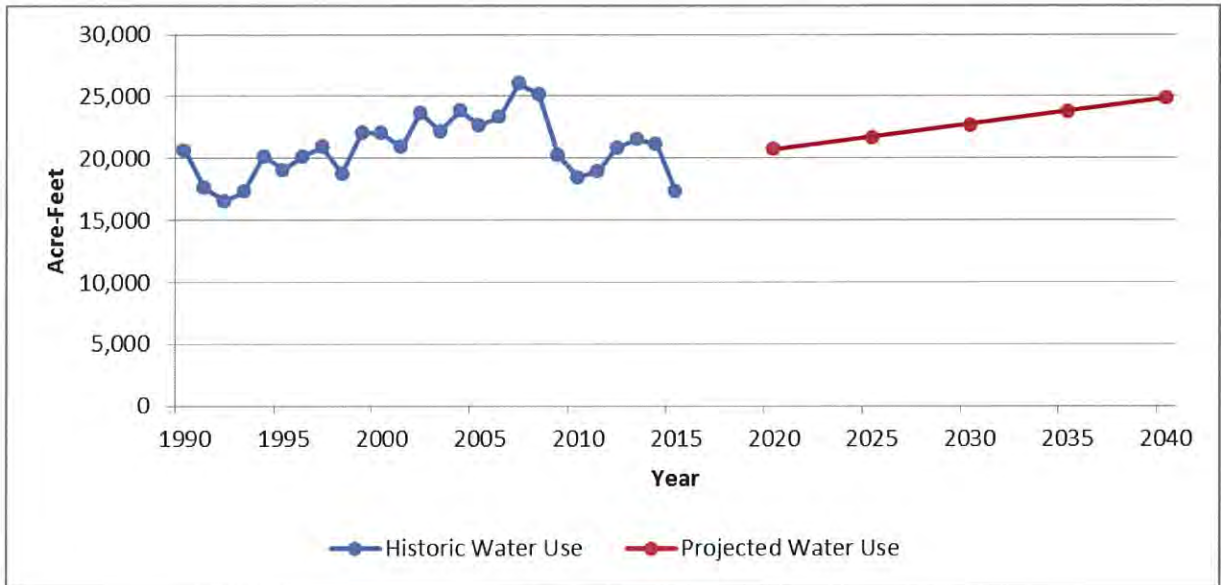
<b>Water Use Sector</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>	<b>2035</b>	<b>2040</b>
Single-family	13,221	15,907	16,656	17,438	18,254	19,106
Multi-family	1,309	1,429	1,496	1,566	1,639	1,716
Commercial	2,006	2,338	2,448	2,563	2,683	2,808
Landscape	545	672	704	737	771	807
Other <sup>(a)</sup>	207	342	358	374	392	410
<b>Total</b>	<b>17,288</b>	<b>20,687</b>	<b>21,662</b>	<b>22,678</b>	<b>23,739</b>	<b>24,847</b>

Note:

(a) Other includes metered fire protection and temporary uses.

The projected customer demands (from Table 3-12) along with historical demands are shown in Figure 3-1.

**FIGURE 3-1: HISTORIC AND PROJECTED CUSTOMER DEMANDS**



Of the total demands, various portions will be attributed to other uses as described for historical and current water use. Other uses anticipated in the future, will include use of surplus supplies for the Las Virgenes Reservoir, potable water to supplement the recycled water system, other authorized uses such as unmetered, unbilled consumption, and system losses. LVMWD does not anticipate any future sales to other agencies. These uses, beyond those metered deliveries in Table 3-11 are shown in Table 3-12.

**TABLE 3-12  
FUTURE SALES AND "OTHER" WATER USES (AFY)**

Water Use	2020	2025	2030	2035	2040
Sales to Other Agencies	0	0	0	0	0
Other <sup>(a)</sup>	1,630	1,630	1,630	1,630	1,630
System Losses <sup>(b)</sup>	225	235	246	256	267
<b>Total<sup>(c)</sup></b>	<b>1,855</b>	<b>1,865</b>	<b>1,876</b>	<b>1,886</b>	<b>1,897</b>

**Notes:**

- (a) Includes deliveries to the LVMWD potable reservoir, potable supplies used to augment the recycled water system, and unbilled, unmetered supplies, such as temporary uses.
- (b) Calculated as 1% of deliveries, based on 2015 audit. Losses account for real and apparent losses.
- (c) Any water accounted for in Table 3-12 is not included in this table.

Table 3-13 summarizes all projected potable water uses for the years 2020 to 2040, as described in the previous tables.

**TABLE 3-13  
TOTAL PROJECTED POTABLE WATER USE (AF)**

Water Use	2020	2025	2030	2035	2040
Total Water Deliveries (from Table 3-12)	20,687	21,662	22,678	23,739	24,847
Additional water uses (from Table 3-13)	1,855	1,865	1,876	1,886	1,897
<b>Total</b>	<b>22,543</b>	<b>23,527</b>	<b>24,554</b>	<b>25,626</b>	<b>26,744</b>

Table 3-14 summarizes all projected water uses for the years 2020 to 2040, including potable and recycled water.

**TABLE 3-14  
TOTAL PROJECTED WATER USE (AF)**

Water Use	2020	2025	2030	2035	2040
Total Potable Water Use <sup>(a)</sup>	22,543	23,527	24,554	25,626	26,744
Total Recycled Water Use <sup>(b)</sup>	4,255	4,269	4,284	4,299	4,314
<b>Total</b>	<b>26,798</b>	<b>27,796</b>	<b>28,838</b>	<b>29,925</b>	<b>31,058</b>

**Notes:**

(a) From Table 3-13

(b) See Section 5 for details.

### **3.4.4 Water Use Projections for Lower Income Households**

Senate Bill 1087 requires that water use projections of a UWMP include the projected water use for single-family and multi-family residential housing for lower income households, as defined in Section 50079.5 of the Health and Safety Code, and as identified in the housing element of any city, county, or city and county in the service area of the supplier.

Regional Housing Needs Assessment (RHNA) data developed by SCAG for the 2014-2021 timeframe were used to estimate water use projections for lower income households for the LVMWD service area. These assessments are developed for all Southern California jurisdictions covered by SCAG, including the four cities located within the LVMWD service area.

The average allocations for very low income and low income households across the LVMWD service area Cities, were the following:

- Very Low Income Households 27%<sup>1</sup>
- Low Income Households 17%<sup>1</sup>

No further classification by water use category was available. Therefore, these percentages were applied to the total projected residential water demands to estimate future lower income

<sup>1</sup> Southern California Association of Governments 5<sup>th</sup> Cycle Regional Housing Needs Assessment Final Allocation Plan, 2012.

household water use, as shown in Table 3-15. These demands are accounted for in, and are not in addition to, total potable water demands described in Section 3.4.4.

**TABLE 3-15  
PROJECTIONS OF FUTURE LOW-INCOME HOUSEHOLD WATER USE (AF)**

Water Use	2020	2025	2030	2035	2040
Estimated Very Low Income Household Water Use <sup>(a)</sup>	4,694	4,915	5,145	5,386	5,637
Estimated Low Income Household Water Use <sup>(b)</sup>	2,891	3,027	3,169	3,317	3,472
<b>Total Lower Income Household Water Use</b>	<b>7,584</b>	<b>7,942</b>	<b>8,314</b>	<b>8,703</b>	<b>9,109</b>

Source: Southern California Association of Governments 5<sup>th</sup> Cycle Regional Housing Needs Assessment  
<http://www.scaq.ca.gov/Documents/5thCyclePFinalRHNAplan.pdf>

Notes:

- (a) Assumes 27% (rounded from 27.1%) Very Low Income Households
- (b) Assumes 17% (rounded from 16.7%) Low Income Households

In addition, LVMWD will not deny or condition approval of water services, or reduce the amount of services applied for by a proposed development that includes housing units affordable to lower income households unless one of the following occurs:

- LVMWD specifically finds that it does not have sufficient water supply;
- LVMWD is subject to a compliance order issued by the State Water Resources Control Board Division of Drinking Water that prohibits new water connections; or
- The applicant has failed to agree to reasonable terms and conditions relating to the provision of services.

### **3.4.5 GPCD Comparison with Projections**

An overview of GPCD projections made in the 2010 and GPCD calculations made in this 2015 UWMPs is provided in the following table. As can be seen in the table, GPCD calculations made in the 2010 are very similar to those calculated for this UWMP, although demand and population projections were higher in the 2010 UWMP.

**TABLE 3-16  
GPCD COMPARISON WITH PROJECTIONS**

Water Use	GPCD
<b>2010 UWMP Projections/Calculations</b>	
2015 Interim Target <sup>(a)</sup>	277
2020 Target <sup>(a)</sup>	246
<b>2015 UWMP Projections/Calculations</b>	
2015 Interim Target <sup>(b)</sup>	280
2020 Target <sup>(b)</sup>	249
<b>Actual 2015 GPCD<sup>(c)</sup></b>	<b>242</b>
<b>Projected 2020 GPCD<sup>(d)</sup></b>	<b>257</b>

Notes:

- (a) LVMWD 2010 UWMP, Table 5.2
- (b) Table 3-9
- (c) Table 3-8 and 3-9
- (d) Based on 2020 projected population of 71,768 and projected demands from Table 3-12 of 20,687 AFY

### **3.4.6 Plan to Meet 2020 GPCD Target**

Based on population and water demand projections assessed in this UWMP, and as shown in Table 3-16, the projected 2020 GPCD would exceed the 2020 target by 8 GPCD. As discussed under Section 3.4, the projected 2020 GPCD assumes a 10 percent rebound in demands by 2020. In order to achieve the 2020 target GPCD of 249 at the projected 2020 population, 2020 water demands (pertaining to actual deliveries) would have to be reduced by 643 AFY, for a total of 20,017 AFY compared to the projected 20,687 AFY. This reduction in water demands is highly feasible with the recently adopted budget-based rate structure and continued implementation of water conservation measures, as described in Section 8 – Demand Management Measures.

A budget-based rate structure was adopted by LVMWD at the end of 2015 and went into effect on January 1, 2016. Water budgets provide a strong price signal to drive an efficiency ethic among customers and will enable LVMWD to effectively conserve water and reduce per capita consumption. In addition, LVMWD's current conservation activities, such as public outreach, water conservation rebate programs, and programs such as the "Stop the Waste" campaign will continue to increase awareness about water conservation and promote practices to bring down per capita water use. More details on LVMWD's demand management measures are provided in Section 8.

### **3.5 Other Factors Affecting Water Usage**

In addition to the factors described above, future water use may be affected by other factors, such as climate or demand reducing behaviors. Historically, when the weather is hot and dry, water usage generally increases. The amount of increase varies according to the number of consecutive years of hot, dry weather and the conservation activities imposed. During cool, wet years, water usage generally decreases, reflecting less water usage for exterior landscaping.



Under current drought conditions, conservation efforts within the LVMWD service area have been increasingly implemented, resulting in noticeable water demand reductions. As described above, short-term drought responses are anticipated to ease once drought conditions end. However, passive water conservation will continue to contribute to demand reduction goals and ongoing water resource management efforts will continue to focus on maintaining high levels of water use efficiency. Additional details on ongoing and future water conservation actions are provided in Section 8, Demand Management Measures.

## Section 4: Water Supply

### 4.1 Overview

This section describes the water resources available to LVMWD for the 25-year period covered by this Plan. Both currently available and planned supplies are summarized in Table 4-1 and discussed in more detail below.

Located in the Santa Monica Mountains, LVMWD has very limited natural water resources and currently relies on four sources: imported potable water from MWDSC and VCWWD, recycled water from the Tapia Water Reclamation Facility (TWRf), groundwater from the Thousand Oaks Area Basin (which is only used to supplement the TWRf effluent), and surface runoff into the Las Virgenes Reservoir.

LVMWD has developed these water resources to provide increased water reliability and efficient water use to help meet the water demand of the LVMWD service area into the future.

**TABLE 4-1  
SUMMARY OF CURRENT AND PLANNED WATER SUPPLIES (AFY)**

Water Supply Source	2015	2020	2025	2030	2035	2040
<b>Existing Supplies</b>						
Imported <sup>(a)</sup>						
MWDSC	19,467	22,412	23,396	24,423	25,495	26,613
Box Canyon (VCWWD 8) <sup>(b)</sup>	16	19	19	19	19	19
Woolsey (VCWWD 17) <sup>(b)</sup>	101	112	112	112	112	112
Local Groundwater <sup>(c)</sup>	0	0	0	0	0	0
Recycled Water <sup>(d)</sup>	4,240	4,255	4,269	4,284	4,299	4,314
<b>Total Existing Supplies</b>	<b>23,825</b>	<b>26,798</b>	<b>27,796</b>	<b>28,838</b>	<b>29,925</b>	<b>31,058</b>
<b>Planned Supplies</b>						
Future supplies <sup>(e)</sup>	0	0	0	0	0	0
<b>Total Supplies</b>	<b>23,825</b>	<b>26,798</b>	<b>27,796</b>	<b>28,838</b>	<b>29,925</b>	<b>31,058</b>

**Notes:**

(a) See Section 4.3.

(b) Projections based on historical average supplies. See Section 4.3.2.

(c) Groundwater is set to 0 to avoid double counting. All pumped groundwater is used to supplement the recycled water system and is therefore accounted for in recycled water supplies. See Section 4.4.

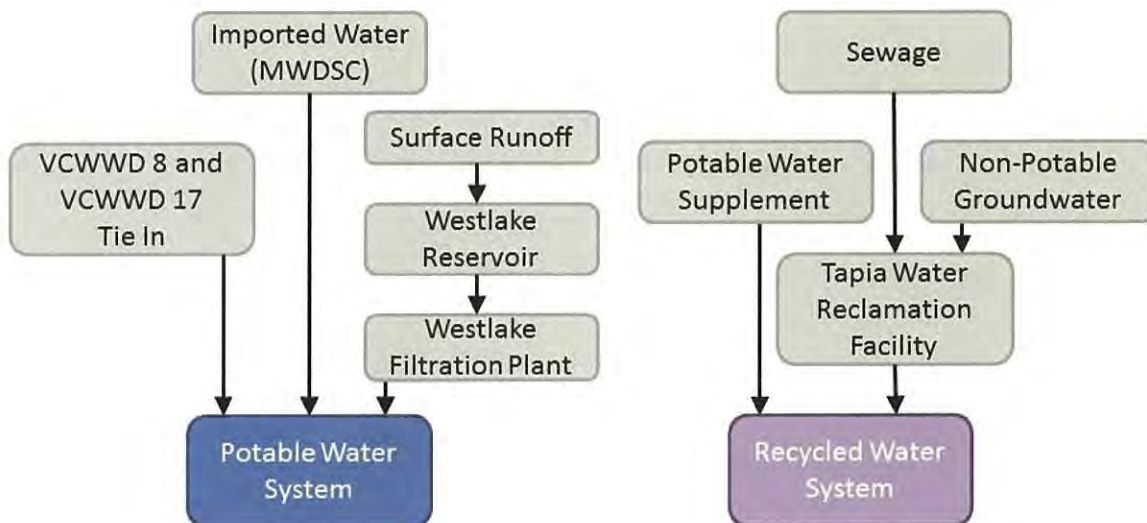
(d) Recycled water supplies are set equal to the lesser of recycled water supplies or demands. See Section 5 for discussion on recycled water supplies and demands.

(e) There are currently no planned/future supplies. See Section 4.7.

## 4.2 LVMWD Water Distribution System

LVMWD operates two water distribution systems, the potable water distribution system and the recycled water distribution system. Both systems are schematically presented in Figure 4-1.

FIGURE 4-1: LVMWD WATER DISTRIBUTION SYSTEM



LVMWD's potable water distribution system includes 25 storage tanks, 24 pump stations, and nearly 400 miles of pipelines. LVMWD maintains 22 main pressure zones due to the mountainous topography of its service area. For billing purposes, the pressure zones are categorized into five pumping zone levels based on hydraulic grade line (HGL).

LVMWD's recycled water distribution system consists of 62 miles of pipelines, 3 storage tanks, 3 open reservoirs, and 4 pump stations. More details on LVMWD's recycled water system, including related supplies and demands is presented in Section 5 of this UWMP.

### 4.2.1 Embedded Energy

While not required by the CWC, urban water suppliers are encouraged to provide estimates of energy use related to water operations, also known as embedded energy. As part of this 2015 UWMP, an assessment of energy intensity for the potable water management operations within LVMWD's control was conducted using the Total Utility Approach as described in Appendix O of the UWMP Guidebook. This assessment only evaluates energy use once water enters LVMWD's system and does not include energy used by LVMWD's wholesale agency, MWDC. For this assessment, water entering the District's distribution system was compared to energy consumed over the one year timeframe of fiscal year 2013/2014. Energy consumption was calculated based on electricity and gas expenditures during the timeframe as reported in the LVMWD budget report and related per unit costs for each energy source. Results of the

assessment showed an energy intensity of 481 kWh/AF for the FY 2013/2014 period, as shown in Table 4-2. The completed Voluntary Energy Intensity Table of UWMP Guidelines Appendix O is provided with this UWMP in Appendix F.

**TABLE 4-2  
EMBEDDED ENERGY FOR FY 2013/2014 WATER OPERATIONS**

Unit	Sum of All Water Management Processes
Volume of Water Entering Process (AF)	23,759 <sup>(a)</sup>
Energy Consumed (kWh)	11,428,043 <sup>(b)</sup>
<b>Energy Intensity (kWh/AF)</b>	<b>481</b>

Notes:

- (a) Total volume of water purchased during FY 2013/2014, according to Las Virgenes Municipal Water District Adopted Budget – Fiscal Year 2015-16.
- (b) Based on total “Energy” and “Gas” expenses for FY 2013/2014 (according to Las Virgenes Municipal Water District Adopted Budget – Fiscal Year 2015-16) and assuming electricity rates of \$0.14/kWh and gas rates of \$0.35/therm.

### 4.3 Imported Water Supplies

#### 4.3.1 State Water Project Supplies

LVMWD’s potable water is provided almost entirely through wholesale purchases from MWDSC. MWDSC imports water from northern California through the SWP and the Colorado River to meet the needs of 26 member agencies across six Southern California counties. LVMWD is one of MWDSC’s member agencies. Currently, the configuration of MWDSC’s distribution system allows LVMWD to receive solely SWP water originating from northern California through the Sacramento-San Joaquin Bay-Delta. The SWP water is treated at Jensen Filtration Plant in Granada Hills prior to delivery to LVMWD.

LVMWD’s historical and current SWP deliveries from MWDSC are shown in Table 4-3.

**TABLE 4-3  
HISTORICAL IMPORTED WATER SUPPLIES FROM MWDSC (AFY)**

Water Source	2011	2012	2013	2014	2015	Average
SWP (MWDSC)	20,065	20,695	23,595	23,987	19,467	21,562

Source: LVMWD Water Purchase Records

LVMWD receives the imported supplies on its eastern side and then distributes it to its customers through its potable water distribution system. LVMWD maintains three connections to the MWDSC system. LVMWD’s total instantaneous imported water supply capacity is 33,000 gallons per minute (gpm), or 73 cubic feet per second (cfs), as shown in Table 4-4.

**TABLE 4-4  
CAPACITY OF IMPORTED WATER CONNECTIONS**

<b>Connection Name</b>	<b>MWD Pipeline Designation</b>	<b>Current Capacity (gpm / cfs)</b>
LV1	West Valley Feeder No. 1	11,000 gpm (24 cfs)
LV2	Calabasas Feeder	20,000 gpm (45 cfs)
LV3	West Valley Feeder No. 2	2,000 gpm (4 cfs)
<b>Total</b>		<b>33,000 gpm (73 cfs)</b>

Note:

(1) Source: 2007 Integrated Systems Master Plan (Boyle 2007)

During planned and unplanned MWDSC outages, LVMWD also utilizes an interconnection to the Los Angeles Department of Water and Power (LADWP), which was enabled through an agreement with MWDSC and LADWP. LADWP provides supply at two distinct connections, one at Kittridge Street and one at Germain Street. Imported supplies from MWDSC presented in this UWMP include water supplied through the three connections to the MWDSC system and the LADWP connections.

#### 4.3.1.1 Reliability of MWDSC Supplies

MWDSC has invested significantly in the development of a diverse resource mix to ensure continued reliability of its supplies. In addition, MWDSC has undertaken numerous planning initiatives, including a recent update to the Integrated Water Resources Plan (IRP), the Water Surplus and Drought Management Plan, the Water Supply Allocation Plan, and the Long-Term Conservation Plan. Additional details on these reports are found in Section 9. These efforts enable MWDSC to meet water supply needs of its member agencies under various water year types.

Based on the 2015 draft MWDSC UWMP, MWDSC anticipates having supplies sufficient to reliably meet water demands through 2040 during average, single dry-, and multiple dry-years. In fact, MWDSC projects surplus supplies under all water year types. It is therefore assumed that MWDSC can meet the full water demands of LVMWD. Hence, for purposes of projecting available imported MWDSC supplies for this 2015, these supplies have been set equal to total LVMWD demands less other imported water supplies and are shown in Table 4-5.

**TABLE 4-5  
PROJECTED IMPORTED WATER SUPPLIES FROM MWDSC (AFY)**

<b>Water Source</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>	<b>2035</b>	<b>2040</b>
SWP (MWDSC) <sup>(a)</sup>	22,412	23,396	24,423	25,495	26,613

Note:

(a) Projections are equivalent to total LVMWD water demand projections less "other imported water supplies."

#### 4.3.2 Other Imported Water Supplies

In addition to the imported water connections with MWDSC, LVMWD also receives a small amount of treated imported water from the City of Simi Valley/Ventura County Waterworks

District 8 and Ventura County Waterworks District 17. On average these supplies account for less than one percent of LVMWD’s potable water deliveries. Interconnections with these agencies provide potable water to two small areas in the hills west of the San Fernando Valley, Woolsey Canyon and Box Canyon. These areas are geographically isolated, and currently not connected to the rest of the LVMWD distribution system. However, LVMWD may connect these customers to the main potable water distribution system in the future (Psomas 2005). A summary of historical purchases from these sources are shown in Table 4-6.

**TABLE 4-6  
HISTORICAL OTHER IMPORTED WATER SUPPLIES (AFY)**

<b>Water Source</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>Average</b>
VCWWD 8 (Woolsey)	100	115	120	125	101	112
VCWWD 17 (Box Canyon)	17	19	21	22	16	19

Source: LVMWD Water Purchases Records

As these supplies are originally imported via MWDSC, these supplies are considered to be reliable based on the MWDSC reliability discussion above.

### **4.3.3 Potable Water Reservoir**

LVMWD owns and operates the Las Virgenes Reservoir, located just south of Westlake Village. This potable water reservoir has a total capacity of 9,600 AF and provides storage to balance differences between seasonal supply and demands. This reservoir is filled with imported water and is withdrawn and replenished as needed. In low demand season LVMWD puts water into the reservoir, while in high demand season LVMWD draws upon the reservoir to meet the increased demands.

In addition to serving as a seasonal storage facility, the reservoir also provides emergency storage capacity that can be used during imported water outages. Although LVMWD also has a connection to the LADWP system used during scheduled MWDSC outages, following a major earthquake, the Las Virgenes Reservoir would be the only source of supply that LVMWD could count on.

Water withdrawn from the reservoir is treated at the Westlake Filtration Plant. The plant is rated for 15 million gallons per day (mgd) and typically operates during periods of peak demand in the summer. The total volume of the reservoir typically fluctuates by several hundred to more than 1,000 AF each year. Since its creation, the reservoir has remained at a volume of approximately 7,300 AF, but occasionally drops below 4,000 AF during dry months, and reaches over 9,000 AF when recharge water is purchased from MWDSC.

While the reservoir's watershed area does not supply a significant source of water in most years, it is estimated that sufficient runoff is typically produced to offset evaporative losses. Based on an assumed watershed area of 550 acres, the watershed is estimated to receive about 770 AF annually, whereby average evaporation losses are estimated at about 700 AFY.

Due to the uncertainties of runoff volumes and minimal contribution to overall water supplies, this runoff is not accounted for in LVMWD supplies.

#### **4.3.3.1 Potable Water Interconnection**

Currently, LVMWD and Calleguas Municipal Water District (CMWD) are currently in the process of developing a joint interconnection between their potable water systems. The interconnection would enable delivery of potable water from one agency to the other if imported water supply was interrupted, and would enable LVMWD to receive water from CMWD to support winter refill of Las Virgenes Reservoir. This project is anticipated to enable the exchange of approximately 870 AFY and will enable LVMWD to fill the Las Virgenes Reservoir by an additional 1,300 AFY. This additional water would serve as an alternative to purchasing water from MWDSC during summer months.

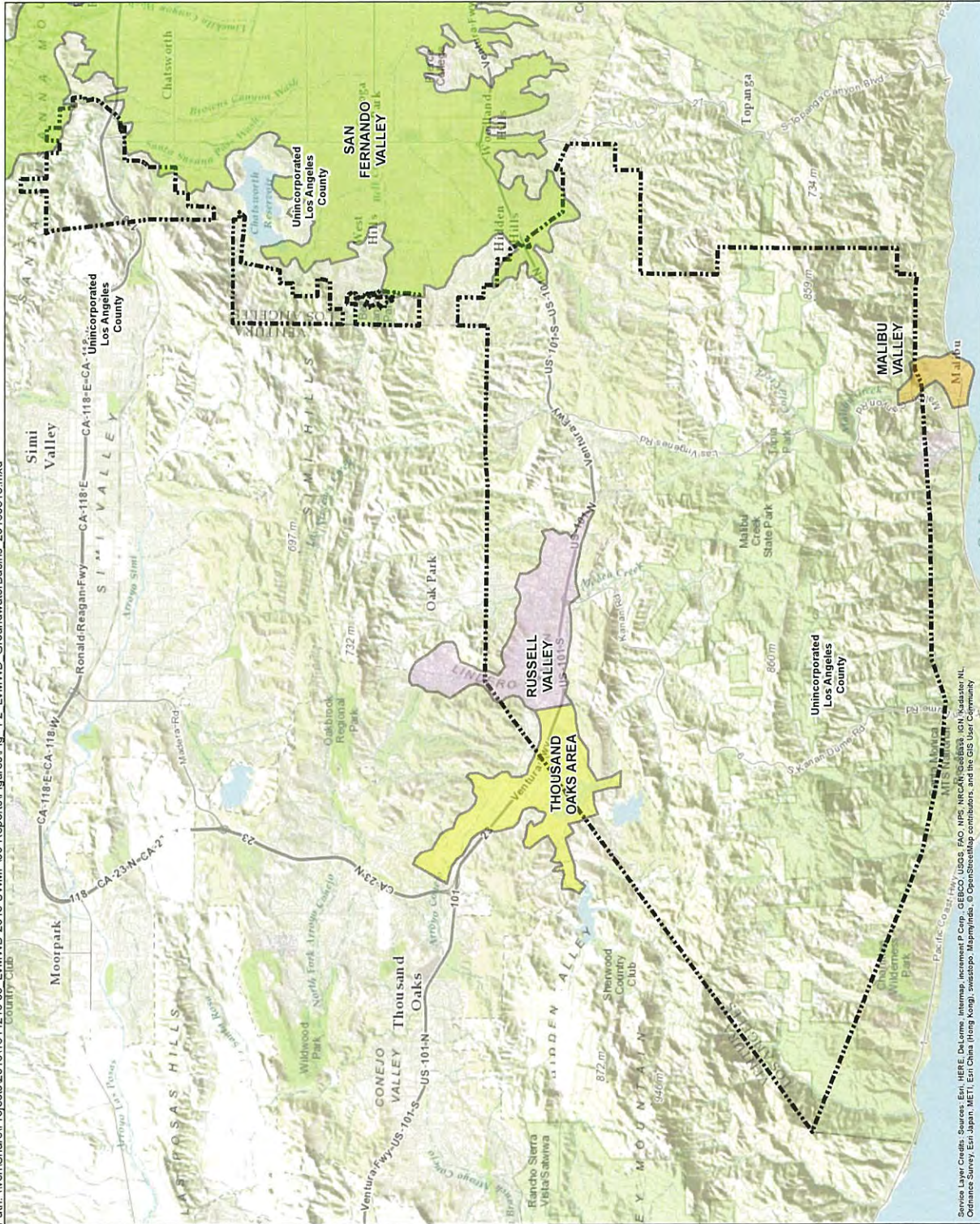
Overall, this interconnection will increase reliability of the potable water system of both agencies.

## **4.4 Groundwater**

Groundwater underlying the LVMWD service area provides a local source of water supplies. However, due to its poor quality, this source is solely used to augment supplies of the recycled water system. As all pumped groundwater is used to supplement the recycled water system, these supplies are not explicitly listed in total LVMWD supply tables, but rather accounted for under "recycled water".

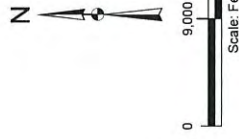
Currently, LVMWD operates two groundwater wells in the Thousand Oaks Area Groundwater Basin; Westlake Well 1 and Westlake Well 2, which are located along Lindero Canyon Road, South of Highway 101. The combined capacity of these two wells is approximately 1.15 mgd, or 800 gpm. Due to high levels of iron and manganese, groundwater pumped from these wells needs to be treated first. To avoid the need of a separate treatment facility, the pumped groundwater is discharged into the sewer collection system when additional recycled water is needed. After mixing and conveyance, this water is treated at the TWRF, at which point it is used to supplement the recycled water system.

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**Legend**

- Groundwater Basins**
- Malibu Valley
  - Russell Valley
  - San Fernando Valley
  - Thousand Oaks Area
  - LVMWD Potable Water Service Area



**Kennedy/Jenks Consultants**  
 Las Virgenes Municipal Water District 2015 UVWMP  
 Los Angeles, County, CA

**Groundwater Basins**

KJ/J 1644210.00  
 March 2016  
 Figure 4-2



#### **4.4.1 Groundwater Basin Description**

The Thousand Oaks Area Groundwater Basin (Basin), shown on Figure 4-2, is a relatively small alluvial basin bounded by semi-permeable rocks of the Santa Monica Mountains. Triunfo Creek drains the valley into Malibu Creek. The Basin underlies a surface area of about 3,100 acres or five square miles.

Groundwater in the Basin is primarily found in Quaternary age alluvium, with some water found in sandstone beds and fractures. Recharge to the Basin occurs by percolation of rainfall and stream flow from Conejo Creek. The Basin is estimated to have a total storage capacity of 130,000 AF (DWR 2004).

According to California's Groundwater Bulletin 118, groundwater quality is magnesium-calcium-sodium sulfate in nature. Total dissolved solids (TDS) content usually ranges from 800 to 1,200 milligrams per liter (mg/l). TDS content averages about 1,400 mg/L, but can be as high as 2,300 mg/l in some areas. In addition to high TDS levels in the Basin, water quality is also impaired by high alkalinity and hardness (DWR 2004).

#### **4.4.2 Historical Groundwater Levels**

In the past and into the mid 1970's groundwater was being pumped by private and public users in larger quantities than currently. Once LVMWD improved the water supply systems in the service area and neighboring systems came on line, imported water began to dominate local supply. These actions caused groundwater pumping to decline and groundwater levels to rise.

#### **4.4.3 Groundwater Management**

The Thousand Oaks Area Basin is not adjudicated and DWR has not identified the Basin to be in an overdraft condition (DWR 2004). Therefore, there are no defined legal pumping rights for LVMWD. LVMWD has not adopted a groundwater management plan, and no regional groundwater management plan currently exists for the Basin. The Thousand Oaks Area Groundwater Basin has been rated a "very low" priority basin by DWR and as such is not subject to the Sustainable Groundwater Management Act.

#### **4.4.4 Groundwater Pumping**

As groundwater supplies are only used to supplement LVMWD's recycled water system during peak demand season, annual groundwater pumping varies significantly. The amount of groundwater pumped from the Basin through the Westlake Wells over the last five years is presented in Table 4-7.

**TABLE 4-7  
HISTORICAL GROUNDWATER PUMPING FROM THE THOUSAND OAKS AREA BASIN  
(AFY)**

<b>Water Source</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>Average</b>
Thousand Oaks Area Basin	190	182	267	298	258	239

Source: Pumping data from LVMWD

Given the existing conditions of the Basin, very low priority of the basin and overall low levels of pumping by LVMWD, groundwater supplies are anticipated to be reliably available throughout the planning period of this UWMP.

Projections of groundwater to be pumped from the Basin are presented in Table 4-8. These projections are based on the assumption that groundwater will be required to supplement wastewater flows for production of recycled water for two months out of each year and in consideration of average historical pumping shown above.

**TABLE 4-8  
PROJECTED GROUNDWATER PUMPING FROM THE THOUSAND OAKS AREA BASIN  
(AFY)**

<b>Water Source</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>	<b>2035</b>	<b>2040</b>
Thousand Oaks Area Basin <sup>(a)</sup>	239	239	239	239	239

Note:

(a) Projections are based on average historical pumping from table 4-5. Actual usage by year is anticipated to fluctuate based on actual needs during periods of peak recycled water demands.

As noted previously, to avoid double counting of supply capacities, groundwater supplies are stated as zero in total supply tables, as they are captured in total recycled water supply.

#### **4.5 Recycled Water**

Recycled water is discussed in Section 5.

#### **4.6 Desalinated Water Opportunities**

The California UWMP Act requires a discussion of potential opportunities for use of desalinated water (Water Code Section 10631[h]). LVMWD has evaluated opportunities for using desalinated water in future supply options. However, at this time, none of the opportunities is practical or economically feasible for LVMWD and LVMWD has no current plans to pursue them. Therefore, desalinated supplies are not included in the supply summaries in this Plan. Desalination options considered by LVMWD are described below.

#### **4.6.1 Opportunities for Brackish Water and/or Groundwater Desalination**

As discussed under Section 4.4, water from the groundwater basin underlying the LVMWD service area is currently delivered to the TWRP for treatment and subsequent use in the recycled water system. These groundwater supplies are characterized by elevated TDS concentrations, reaching as high as 2,800 mg/l in some areas in addition to high iron and manganese concentrations. A conversion of this groundwater use for potable supplies is not considered a feasible option at the moment. No other opportunities for desalination of local brackish groundwater currently exist.

#### **4.6.2 Opportunities for Seawater Desalination**

It is not considered practical nor economically feasible to implement a seawater desalination program at this time. While located near the Pacific Ocean, in comparison to many other water purveyors, the topography of LVMWD's service area would not be conducive to pumping desalinated water from the ocean.

LVMWD could provide financial assistance to other retailers and/or team with MWDSC to provide financial assistance in the construction of other retail water purveyor's seawater desalination facilities in exchange for SWP supplies. Should the need arise, LVMWD may consider this option.

#### **4.6.3 MWDSC's Desalination Program**

Although, LVMWD has not identified any specific opportunities for desalination of seawater or impaired groundwater at this time, other desalination projects developed by MWDSC within the region will indirectly benefit LVMWD. MWDSC serves as a regional facilitator for seawater desalination and provides assistance and incentives to promote the development of local seawater desalination projects.

MWDSC's Seawater Desalination Program (SDP) was created in 2001 as an incentive program to encourage the development of seawater desalination by local agencies. In 2014, seawater desalination projects were merged into the Local Resource Program (LRP) to promote local resources development in the region. Like the LRP, the SDP offers sliding-scale incentives to member and local agencies that proceed up to \$250/acre-foot of produced supplies. The incentive is designed to accelerate the development of expensive local supply projects by member agencies by lowering their cost. Current SDP projects have the potential to produce between 91,000 to 142,000 AFY once completed (MWDSC 2016).

### **4.7 Transfers and Exchanges**

There are currently no transfers or exchanges planned at this time.

## 4.8 Planned Water Supply Projects and Programs

### 4.8.1 Projects Planned by LVMWD

LVMWD updated its Integrated Water System Master Plan in 2014. Analysis of the potable water system resulted in recommended improvements to enhance system operations and reliability. Recommendations included piping, storage and pumping improvements, as shown in Table 4-9.

**TABLE 4-9  
POTABLE WATER SYSTEM RECOMMENDED CAPITAL IMPROVEMENTS**

<b>Improvements</b>	<b>Description</b>
<b>Improvements for Existing Demand Conditions</b>	
Pipeline	A total of 19,611 linear feet in various pressure zones.
Storage	Jed Smith pressure zone, storage needed: 0.8 MG.
Pumping	Standby pumping needs in two pressure zones.
<b>Improvements for Future Demand Conditions</b>	
Pipeline	A total of 28,975 linear feet in various pressure zones.
Storage	A total of 5.5 MG in various pressure zones.
Pumping	Standby pumping needs in various pressure zones.

Source: Potable Water Master Plan Update 2014

With the implementation of these projects, LVMWD will improve its potable water infrastructure to meet the existing and projected demands. These projects are important to continue to provide reliable potable water services, however, these projects will not change the availability of existing supplies or result in new supplies. As a result, no planned supplies are shown in supply projection tables.

In efforts to enhance overall water supplies, LVMWD continues to look for opportunities to expand its recycled water system. Opportunities to do so were assessed in the Recycled Water Master Plan Update of 2014. The majority of potential growth in recycled water demand stems from extensions to the existing recycled water system and conversion of existing potable water demand to recycled use.

Additional potential options to expand the recycled water system outside of the LVMWD service area are described in the Recycled Water Master Plan Update (2014). Details on existing and projected recycled water use and supplies are discussed in in Section 5.

#### 4.8.2 Projects Planned by MWDSC

Since LVMWD purchases most of its water from MWDSC, projects implemented by MWDSC to secure their water supplies have a direct impact on LVMWD.

As described in its 2015 UWMP, MWDSC plans to meet its supply reliability goal through:

- Surface water storage programs related to the SWP and Colorado River
- Colorado River Water Management Programs
- SWP Management Programs
- Central Valley/SWP Storage and Transfer Programs
- Water Conservation
- Development of Local Supplies
- Water Recycling Projects
- Seawater Desalination Programs
- Groundwater banking programs in Southern California Region

The projected supply capability of MWDSC's programs that are under development, under average year conditions, is summarized in Table 4-10. Details on the implementation approach and the achievements to-date for each of these programs are discussed in detail in Chapter 3 of the MWDSC 2015 UWMP.

**TABLE 4-10  
MWDSC'S PLANNED ADDITIONAL SUPPLY PROGRAMS (AFY)**

<b>Programs Under Development</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>	<b>2035</b>	<b>2040</b>
In-Region Supplies and Programs	43,000	80,000	118,000	160,000	200,000
California Aqueduct	20,000	20,000	225,000	225,000	225,000
Colorado River Aqueduct	5,000	25,000	25,000	25,000	25,000
<b>Total Capability of Proposed Programs</b>	<b>63,000</b>	<b>100,00</b>	<b>343,000</b>	<b>385,000</b>	<b>425,000</b>

Source: MWDSC 2015 UWMP, Table 2-6

As shown in Table 4-10, the planned programs are estimated to provide up to 425,000 AFY in additional supplies by 2040.

#### 4.9 Projected Water Supplies in Average, Single Dry and Multiple Dry Years

The following tables provide an overview of supplies anticipated to be available to LVMWD in average/normal, single-dry and multiple-dry years over the planning period of this UWMP.

**TABLE 4-11  
WATER SUPPLY ESTIMATES – AVERAGE/NORMAL YEAR (AFY)**

Water Supply Source	2015	2020	2025	2030	2035	2040
<b>Existing Supplies</b>						
Imported <sup>(a)</sup>						
MWDSC	19,467	22,412	23,396	24,423	25,495	26,613
Box Canyon (VCWWD 8)	16	19	19	19	19	19
Woolsey (VCWWD 17)	101	112	112	112	112	112
Local Groundwater <sup>(b)</sup>	0	0	0	0	0	0
Recycled Water	4,240	4,255	4,269	4,284	4,299	4,314
<b>Total Existing Supplies</b>	<b>23,825</b>	<b>26,798</b>	<b>27,796</b>	<b>28,838</b>	<b>29,925</b>	<b>31,058</b>

**Notes:**

(a) See Section 4.3.

(b) Groundwater is set to 0 to avoid double counting. Groundwater is used within the recycled water system and is accounted for in recycled water supply.

Single dry year estimates were calculated based on the largest percent increase in water use between two years over the last 5 years, which was approximately 10 percent. Accordingly, supplies and demands are assumed to increase by 10 percent over the average water year. The timeframe chosen was considered appropriate for purposes of assessing dry year water resource conditions due to severe drought conditions during the recent 5-year period.

**TABLE 4-12  
WATER SUPPLY ESTIMATES – SINGLE-DRY YEAR (AFY)**

Water Supply Source	2015	2020	2025	2030	2035	2040
<b>Existing Supplies</b>						
Imported <sup>(a)</sup>						
MWDSC	19,467	24,653	25,736	26,865	28,044	29,275
Box Canyon (VCWWD 8)	16	21	21	21	21	21

<b>Water Supply Source</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>	<b>2035</b>	<b>2040</b>
Woolsey (VCWWD 17)	101	123	123	123	123	123
Local Groundwater <sup>(b)</sup>	0	0	0	0	0	0
Recycled Water	4,240	4,255	4,269	4,284	4,299	4,314
<b>Total Existing Supplies</b>	<b>23,825</b>	<b>29,052</b>	<b>30,149</b>	<b>31,294</b>	<b>32,487</b>	<b>33,733</b>

Notes:

(a) See Section 4.3.

(b) Groundwater is set to 0 to avoid double counting. Groundwater is used within the recycled water system and is accounted for in recycled water supply.

Multiple dry year estimates were calculated based on the largest percent increase between multiple years over the last 5 years, which occurred between 2011 and 2013 and amounted to approximately 14 percent. Accordingly, supplies and demands are assumed to increase by 14 percent over the average water year. The timeframe chosen was considered appropriate for purposes of assessing dry year water resource conditions due to severe drought conditions during the recent 5-year period. Table 4-13 presents water supply estimates for multiple dry year conditions, representing the 3<sup>rd</sup> year of the sequence.

**TABLE 4-13  
WATER SUPPLY ESTIMATES – MULTIPLE DRY YEAR (AFY)**

<b>Water Supply Source</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>	<b>2035</b>	<b>2040</b>
<b><i>Existing Supplies</i></b>						
Imported <sup>(a)</sup>						
MWDSC	19,467	25,550	26,671	27,842	29,064	30,339
Box Canyon (VCWWD 8)	16	22	22	22	22	22
Woolsey (VCWWD 17)	101	128	128	128	128	128
Local Groundwater <sup>(b)</sup>	0	0	0	0	0	0
Recycled Water	4,240	4,255	4,269	4,284	4,299	4,314
<b>Total Existing Supplies</b>	<b>23,825</b>	<b>29,954</b>	<b>31,090</b>	<b>32,276</b>	<b>33,512</b>	<b>34,803</b>

Notes:

(a) See Section 4.3.

(b) Groundwater is set to 0 to avoid double counting. Groundwater is used within the recycled water system and is accounted for in recycled water supply.

## **Section 5: Recycled Water**

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### **5.1 Overview**

This section of the Plan describes the existing and future recycled water opportunities available to the District service area. The description includes descriptions of recycled water supply and demand for 2015 and projections out to 2040 in five year increments, as well as LVMWD's proposed actions to encourage recycled water use.

### **5.2 Recycled Water Coordination and Recycled Water System**

Since TWRF began producing recycled water in 1972, LVMWD has aggressively pursued the development of a recycled water market. By requiring all non-residential landscaping located along the District's recycled water distribution main lines to be designed or converted to utilize recycled water for landscape irrigation, LVMWD now serves 638 of the approximately 900 dedicated irrigation accounts within their service area with recycled water. Further, for well over a decade, all water reaching the TWRF during the summer has been beneficially reused.

Recycled master planning efforts began in the 1980s, when ambitious concepts for a regional system were first developed. Master Plans for the existing recycled water system were prepared in 1985, 1988, 1999, 2007, and most recently updated in 2014.

The existing recycled water system is jointly owned and operated by LVMWD, Triunfo Sanitation District (TSD) and CMWD. This system currently serves customers ranging from Calabasas in the east to Thousand Oaks in the west. The system begins at the TWRF, which is owned by the Joint Powers Authority (JPA) of LVMWD and TSD, where up to 10 mgd of wastewater is treated to a high level, allowing it to be distributed for non-potable uses such as landscape irrigation and various commercial uses. The JPA also owns and operates a complex distribution system, consisting of pipelines, pump stations, tanks and reservoirs, and associated appurtenances to deliver the recycled water to areas of Los Angeles and Ventura Counties (Kennedy/Jenks Consultants/HDR 2014).

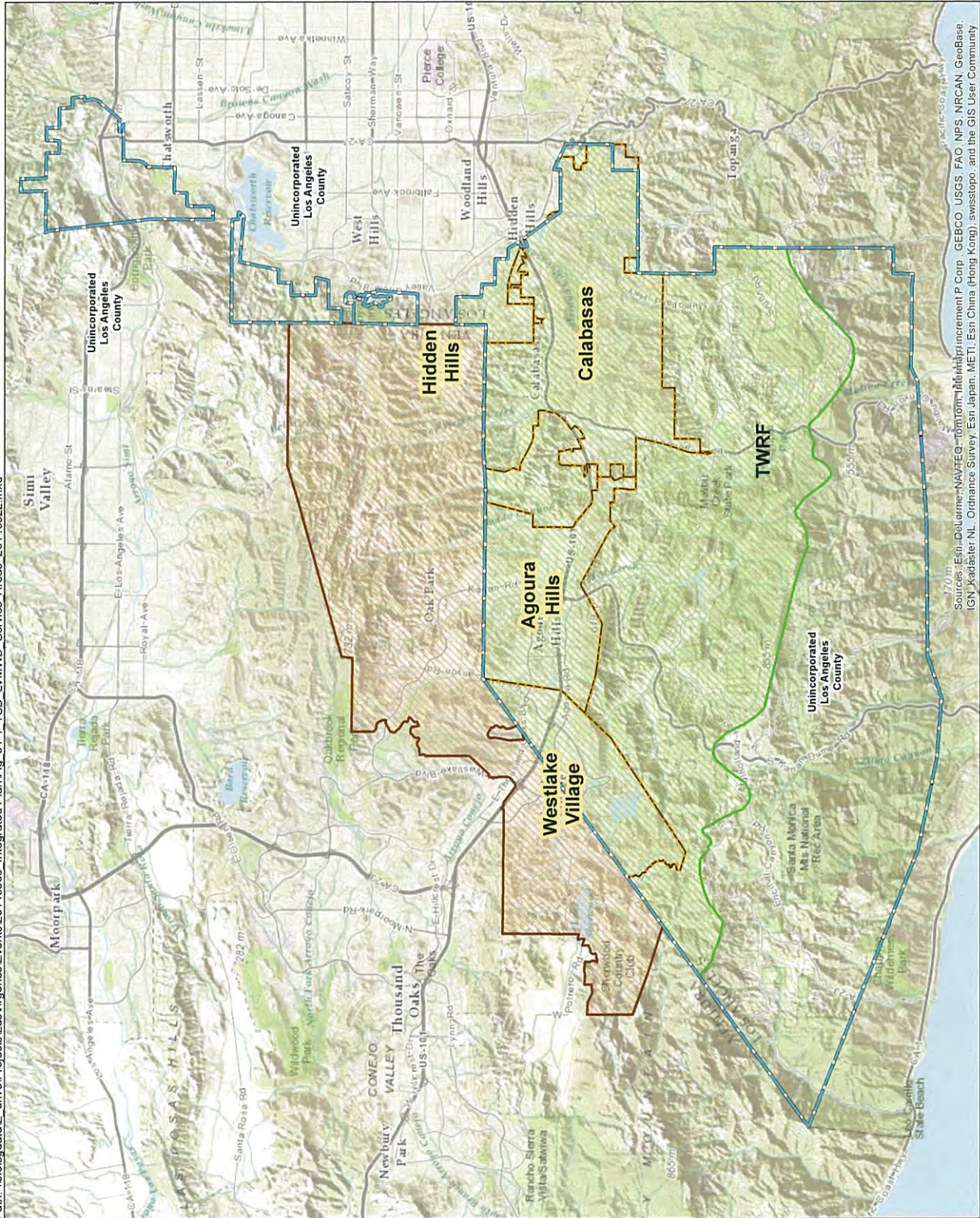
### **5.3 Wastewater Collection, Treatment, and Disposal**

#### **5.3.1 Tapia Water Reclamation Facility**

TWRF was initially constructed in 1965 with an initial capacity of 0.5 mgd. The plant is located on Malibu Canyon Road at the southern edge of LVMWD's wastewater service area, as shown on Figure 5-1, and provides primary, secondary, and tertiary treatment for wastewater contributed by both LVMWD and TSD from their respective service areas.

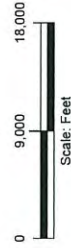


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**Legend**

- Tapia Water Reclamation Facility
- LVMWD Potable Water Service Area
- LVMWD Sewer Service Area
- Triunfo Sanitation District
- City Limits



Scale: Feet

**Kennedy/Jenks Consultants Las**  
 Las Virgenes Municipal Water District 2015 UWMWP  
 Los Angeles, County, CA

**LVMWD/TSD Service Areas**

K/J 1644210.00  
 March 2016

Figure 5-1

Sources: Esri, DeLorme/NAVTEQ, TomTom, Intermap/Inc, GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri, Japan, METI, Esri China (Hong Kong), swisstopo, and the GIS User Community

The current design treatment capacity of TWRP is 16 mgd, however due to permit limitations on nutrients, its current treatment capacity is approximately 12 mgd. The average daily flows to TWRP are fairly constant, but do show some seasonal variation. During storm events the daily flows into the TWRP can double due to inflow and infiltration into the sewer mains. In 2015, the plant processed nearly 8 mgd. A decrease in flows is attributed to increased water conservation efforts and the economic slow-down.

Table 5-1 presents an overview of influent and effluent flows at TWRP in 2015.

**TABLE 5-1  
2015 WASTEWATER FLOWS AT TWRP (AF)**

TWRP Flows (AF)	2015
Influent	8,550 <sup>(a)</sup>
Effluent	7,727

Source: TWRP Month End Reports provided by LVMWD

Note:

(a) Value includes supplemental groundwater in 2015 and retreat water.  
Actual sewage flows were 6,854.

Table 5-2 documents wastewater collection in 2015, as required by UWMP Guidelines. Methods of disposal are discussed in the subsequent subsection. Table 5-3 documents wastewater treatment and discharge in 2015.

Influent flows to TWRP are made up of TSD wastewater flows, LVMWD wastewater flows, and supplemental water primarily from LVMWD wells. In 2015, the ratio of LVMWD wastewater to TSD wastewater was approximately 60 to 40. Influent flows were supplemented in 2015 by 258 AFY of groundwater. A depiction of inputs to the recycled water system is provided in Section 4, Figure 4-1.

### **5.3.2 Effluent Disposal**

The supply of recycled water is relatively constant because the generation of wastewater is essentially the same throughout the year. In contrast, recycled water demands typically vary on a seasonal basis. Summer peaks, for example, can be several times higher than typical spring and fall demands. Currently, recycled water demand exceeds supply during summer months and is lower than available supply during winter months, requiring a portion to be disposed of.

Excess treated water effluent from TWRP is discharged to two local waterways. The primary disposal method is discharge into Malibu Creek during the months of November to April. Excess effluent, beyond what can be discharged to Malibu Creek, is discharged to the Los Angeles River, via the Arroyo Calabasas, which requires pumping over the Calabasas grade.

**TABLE 5-2  
WASTEWATER COLLECTED WITHIN SERVICE AREA 2015 (AFY)**

Name of Wastewater Collection Agency	Wastewater Volume Metered or Estimated?	Volume of Wastewater Collected from UWMP Service Area in 2015	Name of Agency Receiving Collected Wastewater	Treatment Plant Name	Is WWTP Located Within UWMP Area?	Is WWTP Operation Contracted to a Third Party?
JPA (LVMWD, TSD)	Metered	4,116	JPA (LVMWD, TSD)	Tapia Water Reclamation Facility	Yes	No

**TABLE 5-3  
WASTEWATER TREATMENT AND DISCHARGE WITHIN SERVICE AREA IN 2015**

Wastewater Treatment Plant Name	Discharge Location Name or Identifier	Discharge Location Description	Method of Disposal	Does This Plant Treat Wastewater Generated Outside the Service Area?	2015 Volumes (AFY)				
					Treatment Level	Wastewater Treated	Discharged Treated Wastewater <sup>(a)</sup>	Recycled Within Service Area	Recycled Outside of Service Area
TWRF	Malibu Creek	Monte Nido Area	River/creek disposal	Yes	Tertiary	8,550	1,798	4,240	1,635
TWRF	Los Angeles River	Arroyo Calabasas Creek	River/creek disposal	Yes	Tertiary	0 <sup>(b)</sup>	54	0 <sup>(b)</sup>	0 <sup>(b)</sup>
<b>Total</b>						<b>8,550</b>	<b>1,852</b>	<b>4,240</b>	<b>1,635</b>

Notes:

(a) "Discharged Treated Wastewater" volume is the amount of effluent disposed of via creek disposal.

(b) Volumes of wastewater treated and recycled are captured in the first row, and set to 0 in the second row in order to avoid double-counting.

Discharges from the TWRP are regulated under an NPDES permit (Order No. R4-2005-0074) issued by the Los Angeles Regional Water Quality Control Board. Under the existing permit, LVMWD is generally prohibited from discharging to Malibu Creek from April 15 to November 15. However, when the creek flow drops below 2.5 cfs during this period, LVMWD is required to release recycled water from Tapia to provide water pools (habitat) for the endangered steelhead trout.

### 5.3.3 Recycled Water Supplement

During periods of peak demands, TWRP treated effluent is not be sufficient to meet recycled water demands. In such cases, LVMWD supplements its recycled water with two sources: storage within the system and supplemental water from Westlake groundwater wells and potable water. As a result of the poor groundwater quality, groundwater supplies are conveyed to the TWRP via the sewer system. The groundwater thereby enters the recycled water system with other water treated at TWRP. The amount of groundwater from the Westlake Wells is on average about 240 AFY (see Table 4-5).

Even with groundwater supplies to supplement recycled water, historical demands have significantly exceeded recycled water availability in the summer months. As a result, potable water supplement is needed to meet recycled water needs for those months. The amount of supplemental imported water has averaged approximately 590 AFY since 2010. Supplementing with potable water is possible at three locations in the recycled water system, listed as follows:

- Cordillera Tank (1,200 gpm capacity)
- Reservoir 2 (about 2,100 gpm capacity)
- Morrison Tank (about 1,300 gpm capacity)

Supplemental water sources and respective volumes in 2015 are shown in Table 5-4.

**TABLE 5-4  
SUPPLEMENTAL WATER ADDED IN 2015**

Source of Supplemental Water	Volume (AF)
Groundwater	257
Potable Water	454
<b>Total</b>	<b>711</b>

These supplemental sources are important to the optimization of recycled water use in the LVMWD service area, as they allow recycled water system demands to be met during peak periods thereby encouraging continued demands by recycled water users during non-peak periods.

### 5.3.4 Wastewater Flow Projections

The 2014 Sanitation Master Plan Update projected the wastewater flow to reach approximately 12 MGD in year 2035. The projection was based on an average annual wastewater flow of 8 MGD in 2013 and an Economic Factor of 13 percent, Drought Recovery Factor of 9 percent and an Infiltration and Inflow Factor of 4 percent (Kennedy/Jenks Consultants 2014c). Due to persistent drought condition that reduced inflows, low groundwater tables that all but eliminated infiltration, a not fully recovered economy and a mandatory water conservation order from the State to reduce water usage by 36% within the LVMWD service area, the most recent wastewater flow has been reduced from the 8 MGD in 2013 to 6 MGD in 2015. Although the Economic Factor, Drought Recovery Fact and Infiltration and Inflow Factor identified in the 2014 Sanitation Master Plan still hold true when future conditions improve, the timing to apply these factors should be extended. For the purpose of projecting wastewater flow to the 2040 built-out year for this report, we are estimating the wastewater flow growth projection slope identified in the ES-1 on page Executive Summary-II of the 2014 Sanitation Master Plan Updated has been further flattened and with a lower starting point due to reduction of wastewater flow from 8 MGD in 2013 to 6 MGD in 2015. Therefore the 12 MGD projection would likely be reached in 2040 than in the year 2035 as identified in the 2014 Sanitation Master Plan Update. Projections in five-year increments are shown in Table 5-5.

**TABLE 5-5  
PROJECTED WASTEWATER FLOWS (AFY)**

User Type	2015	2020	2025	2030	2035	2040
Wastewater Flows (Influent to TWRF) <sup>(a)</sup>	7,140	8,181	9,374	10,741	12,308	14,103
<b>Total</b>	<b>7,140</b>	<b>8,181</b>	<b>9,374</b>	<b>10,741</b>	<b>12,308</b>	<b>14,103</b>

Note:

(a) Wastewater flows from LVMWD and TSD combined. Does not include groundwater supplement.

Groundwater and potable water supplies will continue to be supplemented on an as-needed basis and can be expected to be used in volumes similar to historical averages (described in Section 5.3.3).

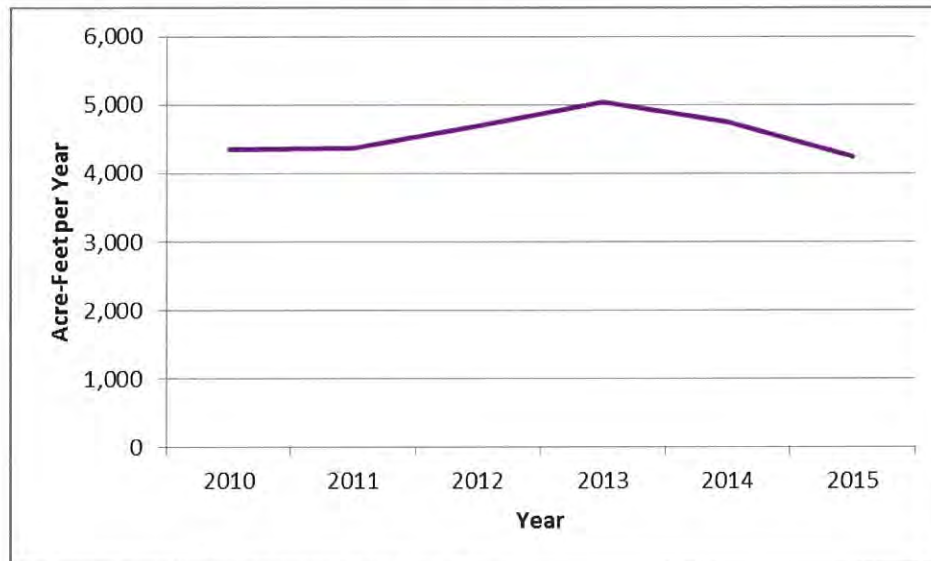
### 5.4 Recycled Water Beneficial Uses

LVMWD currently (2015) supplies about 20 percent of its total customer demands with recycled water. In summer and fall, all wastewater produced at TWRF is effectively recycled. While the Regional Water Quality Control Board (RWQCB) has permitted TWRF tertiary treated water for spray landscape irrigation, agriculture, and industrial uses, recycled water uses by LVMWD's customers are almost exclusively for landscape and golf course irrigation within LVMWD's service area.

Historical recycled water deliveries to LVMWD customers since 2010 are displayed in Figure 5-2. Recycled water demands peaked in 2013, then dropped to below 2010 levels by 2015. Unusually dry and warm conditions during winter months resulted in increased recycled water

use during normal periods of low demand. However, observed declines in demands can in part be attributed to extensive promotion of water conservation in the LVMWD service area.

**FIGURE 5-2:  
HISTORICAL LVMWD RECYCLED WATER DELIVERIES**



Data source: LVMWD Reclaimed Water Demands

LVMWD recycled water use in 2015 by user type is shown in Table 5-6.

**TABLE 5-6  
2015 RECYCLED WATER USE (AFY)**

User Type	2015
Landscape Irrigation	3,756
Golf Course Irrigation	483
Other <sup>(a)</sup>	1
<b>Total</b>	<b>4,240</b>

Note:

(a) Dual Plumbed Commercial

## 5.5 Potential Recycled Water Demands

Recycled water planning efforts have been successful in connecting virtually all schools, parks, and golf courses to the existing recycled water system. LVMWD's opportunities for expansion of the recycled water system are limited by the wastewater flow projections for its service area. However, opportunities for developing additional recycled water use are also limited. The LVMWD service area is nearly built out. The smaller sized developments that are expected to be built in the next few decades are anticipated to lack major recycled water customers, such as schools and parks. In order for demands to keep up with any potential increases in supply,

therefore, LVMWD will need to make a concerted effort to maximize the use of recycled water whenever new developments occur or large customers sign up for service. The conversion of estate-sized residential customers to recycled water user may also be needed, though it should be noted that this will need to be closely coordinated with DDW.

The 2014 Recycled Water Master Plan assessed potential future demands, with a focus on potential infill and recycled water distribution extensions. The majority of potential growth in recycled water use will come from extensions to the recycled water system to serve primarily existing customers and conversion of a portion of potable water uses to recycled water use.

### 5.5.1 Recycled Water Demands Projections

Up to 4,314 AFY in total recycled water demands are estimated to be possible in the LVMWD service area by 2040 based on existing demands and realization of potential projects that would serve the LVMWD service area (HDR 2014). It is anticipated by LVMWD, and assumed for purposes of recycled water use projections, that all new recycled water demands will be for landscape irrigation. Projected recycled water use for the LVMWD service area is shown in Table 5-7.

**TABLE 5-7  
PROJECTED RECYCLED WATER USE (AFY)**

User Type	2020	2025	2030	2035	2040
Landscape Irrigation	3,771	3,785	3,800	3,815	3,830
Golf Course Irrigation	483	483	483	483	483
Other <sup>(a)</sup>	1	1	1	1	1
<b>Total</b>	<b>4,255</b>	<b>4,269</b>	<b>4,284</b>	<b>4,299</b>	<b>4,314</b>

Note:

(a) Dual Plumbed Commercial

### 5.6 Comparison of Projected and Actual Use

Table 5-8 presents actual 2015 recycled water use, and provides a comparison of the projections from the 2010 UWMP. As shown in the table, LVMWD supplied slightly less recycled water than projected for 2015 in the 2010 UWMP. Reduced demands are in part attributed to overall LVMWD water conservation actions, as described above.

**TABLE 5-8  
RECYCLED WATER USES - PROJECTION COMPARED WITH ACTUAL USE (AFY)**

User Type	2010 Projection for 2015 <sup>(a)</sup>	2015 Use
Landscape Irrigation	4,410	3,756
Golf Course Irrigation	467	483
Other <sup>(b)</sup>	1	1
<b>Total</b>	<b>4,878</b>	<b>4,240</b>

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Notes:

- (a) Total recycled water use projection from 2010 UWMP, Table 4.4. Breakdown based on average of actual 2010 and 2015 use.
- (b) Dual Plumbed Commercial

## **5.7 Actions to Encourage and Optimize Recycled Water Use**

The 2014 Recycled Water Master Plan evaluated infrastructure improvements needed to reach new customers and address capital facility replacement needs. These improvements would contribute to optimizing recycled water use. As noted above, opportunities for developing substantial new recycled water demands are fairly limited. The majority of potential new growth in recycled water use would occur through main extensions that would primarily serve existing customers and enable conversion of some potable water demands to recycled water use.

Optimizing recycled water use also depends on maximizing use during periods where recycled water supply exceeds demands. This is primarily important in months when excess treated water cannot be discharged to Malibu Creek due to permit restrictions. During these so-called shoulder months, one method implemented to increase use has been to encourage recycled water customers to use water above their normal requirements at no added cost.

The District and its JPA partner, TSD are currently undertaking an effort for seasonal storage of recycled water, which entails long-range plans to beneficially use all of the JPA's recycled water and to effectively discontinue discharges to Malibu Creek. In July of 2015, a Plan of Action was approved for the effort by the JPA Board of Directors.

As a drought response measure, the JPA has been making recycled water available at no cost to residential customers. After attending a brief training, customers may fill up their own sealable containers at the Rancho Las Virgenes Composting Facility. Up to 300 gallons of recycled water may be picked up on a single visit.

Expanding the use of recycled water for demands that do not peak seasonally, such as dual-plumbing systems and recirculation systems would allow more year-round usage of recycled water. LVMWD's customer base, lacking significant industrial or commercial office customers, preclude extensive use of recycled water for these types of demands.

Direct or indirect potable reuse of recycled water may be considered by LVMWD to further optimize recycled water use in the future as the process becomes more common in California.



## **Section 6: Water Quality**

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### **6.1 Overview**

Water quality is an important factor in determining overall supply reliability. If adequate drinking water quality cannot be maintained, then the supply may no longer be available for use. Water quality is not a static feature of water, and the potential impacts and variables must be recognized. Water quality is dynamic in nature and can vary over the course of a year.

Water quality regulations can also change as the result of the discovery of new contaminants, changes in the understanding of the health effects of contaminants, and the introduction of new treatment technologies. All retail water purveyors are subject to drinking water standards set by the U.S. Environmental Protection Agency (EPA) and DDW.

LVMWD's regular water quality monitoring and understanding of current and potential regulations allows LVMWD to respond readily to any water quality issues that may impact supply reliability.

This section provides a general description of the water quality of LVMWD's water supplies. A discussion of potential water quality impacts on the reliability of these supplies is also provided.

### **6.2 Imported State Water Project Water**

LVMWD meets the majority of its potable water demands with imported water from MWDSC. This imported water is transported from northern California via the SWP and supplied to MWDSC, a SWP contractor. The water is then supplied to LVMWD its three turnout connections to the MWDSC system or interconnections, as described in Section 3. A small portion, typically less than one percent, is purchased from Ventura County Waterworks Districts 8 and 17. These supplies also originate primarily from the SWP.

The source of SWP water is rain and snow from the Sierra Nevada, Cascade, and Coastal mountain ranges. This water travels to the Sacramento-San Joaquin Delta, which is a network of natural and artificial channels and reclaimed islands at the confluence of the Sacramento and San Joaquin rivers. The Delta forms the eastern portion of the San Francisco estuary, receiving runoff from more than 40 percent of the state's land area. It is a low-lying region interlaced with hundreds of miles of waterways. From the Delta, the water is pumped into a series of canals and reservoirs, which provides water to urban and agricultural users throughout the San Francisco Bay Area and Central and Southern California.

During periods of intense rainfall or snowmelt, new constituents may be mobilized and enter the water while other constituents are diluted or eliminated. However, imported SWP water is generally of high quality with low levels of TDS, sulfate, hardness, iron and manganese, and consistently meets all federal and state water quality standards as reported in the annual Water Quality Report (LVMWD 2014). According to the 2014 report, TDS levels in the water served in the LVMWD service area ranged from 300 to 440 parts per million (ppm), which is well below the California secondary standard of 1,000 ppm. Nitrate concentrations are also generally low and were measured at up to 0.6 ppm in LVMWD's water supplies according to the 2014 report.

In contrast, the California drinking water standard for nitrate is 45 ppm. Prior to delivery to LVMWD, the imported water is treated at MWDSC's Jensen Treatment Facility in Granada Hills to ensure that all water quality standards are met.

The water quality reports of the Ventura County Waterworks Districts providing water to LVMWD also show that delivered water quality is high and well below the State drinking water standards (VCWWD 8 and 17, 2015).

### **6.3 Local Surface Water Quality**

A portion of LVMWD's potable water is stored in the Westlake Reservoir, which is replenished with surplus imported water supplies. The reservoir also receives runoff from the watershed. Water withdrawn from the reservoir is treated at the Westlake Filtration Plant. Filtration at the plant is accomplished through 10 filtration units containing diatomaceous earth filtration media. The filtered water is then disinfected with chloramines. Reservoir supplies have historically been of very high quality. LVMWD does not currently experience and does not foresee issues with supplies from this reservoir.

### **6.4 Groundwater**

Local groundwater is relatively high in sodium bicarbonate or calcium bicarbonate, iron, manganese and possibly calcium-magnesium sulfate. The TDS content typically ranges from 800 to 1,200 mg/l, although can reach concentrations as high as 2,800 mg/l in some areas. The elevated TDS concentrations make the water too poor in quality to be used as a potable source without substantial treatment. High iron and manganese concentrations also cause sidewalk stains when put directly into irrigation systems. To circumvent this issue, the groundwater is used only to augment the recycled water system.

### **6.5 Recycled Water**

While recycled water is not a source of LVMWD's potable water supplies, its reliability and hence its quality, is important for continuing to offset non-potable water demands. Recycled water comprises nearly 20 percent of LVMWD's total water use on an annual basis. The recycled water is stored in an open reservoir, which can often times result in increased levels of particulate matter, which could potentially impact its usability. However, LVMWD has had success with using non-clogging sprinklers and valve controllers where problems with particulate matter have been experienced. No other water quality issues related to recycled water have been identified to pose problems in the LVMWD service area.

### **6.6 Water Quality Impacts on Reliability**

The quality of water dictates the types and extent of management strategies a retail water purveyor will implement, including, but not limited to, the selection of raw water sources, treatment alternatives, blending options, and modifications to existing treatment facilities. Maintaining the quality of water supplies helps maintain continued reliability of each source by ensuring that deliveries are not interrupted due to water quality concerns. If water supplies become degraded they may require additional treatment to ensure that drinking water standards

are met. However, high levels of degradation may eventually require the water source to be taken off-line and could potentially decrease overall water supply reliability.

Further, utilizing high quality sources of water facilitates management activities, increases water supply alternatives and water supply reliability, and decreases the cost of treatment within the service area. Based on current conditions and knowledge, water quality is not anticipated to affect LVMWD's water reliability. LVMWD receives and expects to continue to receive high quality imported SWP water. However, as water quality issues are constantly evolving, LVMWD will take appropriate steps to continue providing safe, high quality water supplies, to the extent feasible. It is well recognized water quality treatment can have significant costs should the need for treatment arise.

## **Section 7: Water Reliability**

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### **7.1 Overview**

The UWMP Act requires urban water suppliers to assess water supply reliability that compares total projected water use with the expected water supply over the next twenty years in five year increments. The Act also requires an assessment for a single-dry year and multiple-dry years. Water use projections are described in Chapter 3 and water supply is described in Chapter 4. This chapter summarizes LVMWD's water supply relative to demands over the 25-year planning period, through 2040.

### **7.2 Normal, Single-Dry, and Multiple-Dry Year Reliability**

Water supply and demands comparison is presented in this section for three water year scenarios: normal (average), single dry, and multiple dry water years. These scenarios are defined as follows:

- Normal Year: The normal year is a year in the historical sequence that most closely represents median runoff levels and patterns.
- Single Dry Year: This is defined as the year with the minimum useable supply.
- Multiple Dry Years: This scenario represents the lowest average water supply available for a consecutive multiple year period (three years or more).

#### **7.2.1 Normal/Average Water Year**

Assumptions about supplies and demands are provided in Chapters 3 and 4. Table 7-1 demonstrates that LVMWD anticipates adequate supplies for years 2020 to 2040 under Normal conditions.

#### **7.2.2 Single-Dry Year**

LVMWD's water supplies and demands over the 25-year planning period were analyzed in the event that a single-dry year occurs, similar to the drought that occurred in the recent five years. Table 7-2 summarizes the existing and planned supplies available to meet demands during a single-dry year. Demand during dry years was assumed to increase by 10 percent over the average water year, based the highest increase between two years over the last five-year period.

#### **7.2.3 Multiple-Dry Year**

The water supplies and demands for the LVMWD service area over the 25-year planning period were also analyzed in the event that a three-year multiple-dry year event occurs. Water systems are typically more vulnerable to these dry conditions of longer duration because they deplete water storage reserves in local and state reservoirs and in groundwater basins.

Table 7-3 summarizes the existing and planned supplies available to meet demands during multiple-dry years. Demand during multiple-dry year conditions was assumed to increase by 14 percent over average water conditions, by the third year of dry conditions. This percent increase is based on the highest three-year period increase over the last five-year period.

#### 7.2.4 Summary of Comparisons

As shown in the tables below, LVMWD anticipates having adequate supplies to meet demands during average, single-dry, and multiple-dry years throughout the 25-year planning period.

**TABLE 7-1  
COMPARISON OF SUPPLIES AND DEMANDS – AVERAGE/NORMAL YEAR (AF)**

Water Supply Source	2015	2020	2025	2030	2035	2040
<b>Existing Supplies<sup>(a)</sup></b>						
Imported						
MWDSC	19,467	22,412	23,396	24,423	25,495	26,613
Box Canyon (VCWWD 8)	16	19	19	19	19	19
Woolsey (VCWWD 17)	101	112	112	112	112	112
Local Groundwater	0	0	0	0	0	0
Recycled Water	4,240	4,255	4,269	4,284	4,299	4,314
<b>Total Supplies</b>	<b>23,825</b>	<b>26,798</b>	<b>27,796</b>	<b>28,838</b>	<b>29,925</b>	<b>31,058</b>
<b>Estimated Demands</b>						
Potable Water Demands <sup>(b)</sup>	19,585	<b>22,543</b>	<b>23,527</b>	<b>24,554</b>	<b>25,626</b>	<b>26,744</b>
Recycled Water Demands <sup>(c)</sup>	4,240	4,255	4,269	4,284	4,299	4,314
<b>Total Demands</b>	<b>23,825</b>	<b>26,798</b>	<b>27,796</b>	<b>28,838</b>	<b>29,925</b>	<b>31,058</b>
<b>Difference (Supply - Demand)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

**Notes:**

(a) See Section 4

(b) From Tables 3-4 and 3-13

(c) From Table 5-2

**TABLE 7-2  
COMPARISON OF SUPPLIES AND DEMANDS – SINGLE DRY YEAR (AF)**

<b>Water Supply Source</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>	<b>2035</b>	<b>2040</b>
<b><i>Existing Supplies</i></b>						
Imported						
MWDSC	19,467	24,653	25,736	26,865	28,044	29,275
Box Canyon (VCWWD 8)	16	21	21	21	21	21
Woolsey (VCWWD 17)	101	123	123	123	123	123
Local Groundwater	0	0	0	0	0	0
Recycled Water	4,240	4,255	4,269	4,284	4,299	4,314
<b>Total Supplies</b>	<b>23,825</b>	<b>29,052</b>	<b>30,149</b>	<b>31,294</b>	<b>32,487</b>	<b>33,733</b>
<b><i>Estimated Demands</i></b>						
Potable Water Demands	<b>19,585</b>	<b>24,797</b>	<b>25,880</b>	<b>27,009</b>	<b>28,188</b>	<b>29,419</b>
Recycled Water Demands	4,240	4,255	4,269	4,284	4,299	4,314
<b>Total Demands</b>	<b>23,825</b>	<b>29,052</b>	<b>30,149</b>	<b>31,294</b>	<b>32,487</b>	<b>33,733</b>
<b><i>Difference (Supply - Demand)</i></b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

**TABLE 7-3  
COMPARISON OF SUPPLIES AND DEMANDS – MULTIPLE DRY YEAR (AF)**

<b>Water Supply Source</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>	<b>2035</b>	<b>2040</b>
<b><i>Existing Supplies</i></b>						
Imported						
MWDSC	19,467	25,550	26,671	27,842	29,064	30,339
Box Canyon (VCWWD 8)	16	22	22	22	22	22
Woolsey (VCWWD 17)	101	128	128	128	128	128
Local Groundwater	0	0	0	0	0	0
Recycled Water	4,240	4,255	4,269	4,284	4,299	4,314
<b>Total Supplies</b>	<b>23,825</b>	<b>29,954</b>	<b>31,090</b>	<b>32,276</b>	<b>33,512</b>	<b>34,803</b>
<b><i>Estimated Demands</i></b>						
Potable Water Demands	<b>19,585</b>	<b>25,699</b>	<b>26,821</b>	<b>27,991</b>	<b>29,213</b>	<b>30,489</b>
Recycled Water Demands	4,240	4,255	4,269	4,284	4,299	4,314
<b>Total Demands</b>	<b>23,825</b>	<b>29,954</b>	<b>31,090</b>	<b>32,276</b>	<b>33,512</b>	<b>34,803</b>
<b><i>Difference (Supply - Demand)</i></b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

### **7.3 Climate Change**

Understanding the potential impacts of climate change is essential for optimizing water resources planning and preparing appropriate responses. A climate change vulnerability assessment was performed for the 2014 Greater Los Angeles County (GLAC) Integrated Regional Water Management Plan (IRWMP), which includes the LVMWD service area. Impacts to the region described in the GLAC IRWMP include average temperature increases by at least 3.5 degrees Fahrenheit by mid-century; a decrease in precipitation by 2 to 5 inches with the greatest reductions occurring in higher elevations; demand increases; and changes in the reliability of imported water supplies.

A summary of the highest priority vulnerability issues identified for the GLAC Region with a description of the applicability to the LVMWD service area is provided in Table 7-4 and discussed in the following.

Similar to the GLAC Region and other areas across the State, the LVMWD service area is vulnerable to numerous climate change impacts, including increased water demands, changes in the reliability of water supplies and potential water quality impacts with potential implications on treatment costs.

Water demand and water supply are the two primary factors that guide water resource planning. Demands in the LVMWD service area are expected to increase as a result of potential new developments. While water conservation efforts in the LVMWD service area have shown effectiveness to reduce demands, water use savings are expected to level off in the future as demands harden and water conservation fatigue sets in. Hence, it will be especially critical for LVMWD to ensure and improve water supply reliability to meet projected demands.

Due to the high dependence on imported supplies, LVMWD's vulnerability of water supplies to climate change impacts is highly dependent on MWDSC's supply reliability. MWDSC has undertaken significant efforts in water resource planning and in developing and promoting development of a diverse mix of water resources. These efforts have helped and continue to help improve overall water supply reliability in the face of climate change.

Diversifying the water supply portfolio is an important strategy for improving local supply reliability and increase climate change resiliency. LVMWD has been expanding local water resources primarily with its extensive recycled water system. While future LVMWD projects primarily consist of water infrastructure improvements that are not anticipated to produce new or additional supplies, LVMWD will continue to consider and pursue opportunities for enhanced water supply reliability and climate change resiliency as they become available.

The foregoing discussion also reflects vulnerabilities assessed for the LVMWD service area based on the Climate Change Vulnerability Assessment of the Climate Change Handbook for Regional Water Planning (USEPA and DWR, 2011). This assessment was completed for the LVMWD service area in relation to water demand, water supply and water quality vulnerabilities, as shown below in Table 7-5.

**TABLE 7-4  
SUMMARY OF GLAC REGION AND LVMWD CLIMATE CHANGE VULNERABILITIES**

<b>Vulnerability Issue</b>	<b>General Impact on GLAC Region</b>	<b>Applicability to LVMWD</b>
Decreased ability to meet water conservation goals.	Demand hardening and increased costs can be anticipated to reduce water use efficiency options and additional savings.	In response to drought conditions and water use reduction targets, LVMWD has implemented water conservation measures that have produced measurable savings. As of January 1, 2016, water budgets are being implemented to encourage greater water use reductions. While these ongoing actions will produce initial water use reductions, there will be few, if any "low-hanging fruit" for obtaining significant additional savings in the future.
Reduced resiliency to drought.	The Region is highly vulnerable to persistent drought and climate change effects will increase the need for drought resiliency.	Similar to the Region as a whole, the need for drought resiliency will increase in the LVMWD service area, which includes expanding and diversifying water resources available to LVMWD.
Municipal water demand would increase.	Water demands are anticipated to increase from new developments in combination with hotter temperatures.	Water demand projections show an increase in potable water demands alone of over 7,000 AFY through 2040.
Decrease in imported water supply (from impacts to Bay-Delta system).	Climate change impacts including sea level rise, temperature changes and higher storm surges could impact the reliability of imported Delta supplies.	LVMWD depends highly on imported Delta supplies, via MWDSC. However, reliability assessments performed by MWDSC anticipate sufficient supplies through the planning period as a result of various local and imported water projects and planning strategies.
Decrease in coastal groundwater supply.	Reduced reliability of alternative supplies, including imported water could increase pressures on groundwater supplies.	Groundwater in the LVMWD service area is currently only used to supplement the recycled water system and overdraft conditions have not been identified. Changes in the reliability of alternative supplies, such as imported water, are not anticipated to have significant impacts on groundwater resources in the service area.
Increase in wildfire risk and erosion and sedimentation which may impact water quality, flood control, and habitat.	Increases in erosion from increased wildfires and flashier storm events would result in increased sediment loads entering local streams or other water bodies.	Wildfire risks are generally high in undeveloped open space areas, which make up approximately a third of the LVMWD service area. Water supplies stored in LVMWD potable and recycled water reservoirs could be vulnerable to increased wildfires and related erosion and sedimentation. Water quality impacts could have particular implications on treatment requirements and costs at the Westlake Filtration Plant, which treats potable water supplies from the Las Virgenes Reservoir.



Vulnerability Issue	General Impact on GLAC Region	Applicability to LVMWD
Damage to coastal infrastructure/ recreation/ tourism due to sea level rise and storm surge	Coastal infrastructure is vulnerable to sea level rise in combination to increased flooding.	LVMWD is not located directly along the coast, therefore related impacts are not considered high vulnerability issues to LVMWD.

**TABLE 7-5  
CLIMATE CHANGE VULNERABILITY INDICATOR QUESTIONS**

<b>Vulnerability Question<sup>(a)</sup></b>	<b>Potential Vulnerability Issue<sup>(a)</sup></b>	<b>Response/Justification</b>
<b>Water Demand</b>		
Are there major industries that require cooling/ process water in your planning region?	As average temperatures increase, cooling water needs may also increase.	There are no major industries in the LVMWD service area.
Does water use vary by more than 50% seasonally in parts of your region?	Seasonal water use, which is primarily outdoor water use, is expected to increase as average temperatures increase and droughts become more frequent.	Potable water use does not vary by more than 50% seasonally. Recycled water demands do show significant seasonal variations, which is one of the reasons for which supplemental water is used in the recycled water system. The supplemental supplies, from groundwater and potable imported water, help maintain consistent demand from recycled water customers, while meeting peak demands and minimizing discharge of unused recycled water supplies.
Are crops grown in your region climate-sensitive? Would shifts in daily heat patterns, such as how long heat lingers before night-time cooling, be prohibitive for some crops?	Fruit and nut crops are climate-sensitive and may require additional water as the climate warms.	Agricultural water demands in the LVMWD service area are limited and impacts on crop water needs are not anticipated to have significant effect on overall water demands.
Do groundwater supplies in your region lack resiliency after drought events?	Droughts are expected to become more frequent and more severe in the future. Areas with a more hardened demand may be particularly vulnerable to droughts and may become more dependent on groundwater pumping.	Groundwater in the LVMWD service area is currently only used to supplement the recycled water system, with production averaging 239 AFY since 2011. The groundwater basin from which groundwater is pumped, the Russell Valley Basin, has not been identified to be in overdraft. Due to overall low reliability on the groundwater basin, low levels of pumping and very low CASGEM priority conditions, groundwater supplies are not considered to lack resiliency after drought events.

Vulnerability Question <sup>(a)</sup>	Potential Vulnerability Issue <sup>(a)</sup>	Response/Justification
Are water use curtailment measures effective in your region?	Droughts are expected to become more frequent and more severe in the future. Areas with a more hardened demand may be particularly vulnerable to droughts.	<p>Water use conservation measures implemented to achieve a 20% reduction by 2020 and particularly in response to drought targets in 2015, have proven to be largely effective in reducing water use across the LVMWD service area. As of March, 2016, water use was reduced by over 28 percent compared to 2013 baseline levels through expanded implementation of conservation efforts. District customers have been found to be very responsive to calls for water use reductions, including with efforts to change their landscapes, use of water saving appliances, and altering water use practices.</p> <p>Additional water conservation measures and possible curtailments will need to be implemented in order to meet drought targets and 2020 per capita water use targets. However it is important to note that with the implementation of additional water conservation measures, saturation of water-saving devices and fixtures, as well as onset of water conservation fatigue felt by customers, it can be expected that marginal water savings will decrease and savings will eventually level off. At that point, the vulnerability to drought may increase.</p>
Are some instream flow requirements in your region either currently insufficient to support aquatic life, or occasionally unmet?	Changes in snowmelt patterns in the future may make it difficult to balance water demands. Vulnerabilities for ecosystems and municipal/agricultural water needs may be exacerbated by instream flow requirements.	<p>Snowmelt is not a source of flow for local streams. However maintaining instream flow requirements exist in the service area. Minimum instream flows are recommended for Malibu Creek, which receives excess recycled water flows from the Tapia WRF. At the same time, discharges are prohibited between April 15 to November 15. Due to the consistency of wastewater flows in contrast with the seasonal variability of recycled water demands, discharges of excess treated water can be anticipated to be available to meet minimum flows as needed. With drier conditions potentially resulting from climate changes, additional discharges may be required in the future.</p>

Vulnerability Question <sup>(a)</sup>	Potential Vulnerability Issue <sup>(a)</sup>	Response/Justification
<b>Water Supply</b>		
Does a portion of the water supply in your region come from snowmelt?	Snowmelt is expected to decrease as the climate warms. Water systems supplied by snowmelt are therefore potentially vulnerable to climate change.	Imported SWP supplies originate in large part from snowmelt in northern California. Those supplies are the primary source of supplies in the LVMWD service area and may be impacted by changes in precipitation and temperature regimes.
Does part of your region rely on water diverted from the Delta, imported from the Colorado River, or imported from other climate-sensitive systems outside your region?	Some imported or transferred water supplies are sources from climate-sensitive watersheds, such as water imported from the Delta and the Colorado River.	LVMWD relies on imported water originating from the Delta. LVMWD does not receive Colorado River water.
Does part of your region rely on coastal aquifers? Has salt intrusion been a problem in the past?	Coastal aquifers are susceptible to salt intrusion as sea levels rise, and many have already observed salt intrusion due to over-extraction, such as the West Coast Basin in southern California.	LVMWD does not rely on coastal aquifers.
Would your region have difficulty in storing carryover supply surpluses from year to year?	Droughts are expected to become more severe in the future. Systems that can store more water may be more resilient to droughts.	Currently, LVMWD stores surplus imported water supplies in its Westlake Reservoir, which has a capacity of approximately 9,600 AF. Water stored in this reservoir adds some resiliency to LVMWD water supplies. However, LVMWD would also continue to rely on the resiliency of the MWDCS system to meet all its demands.
Has your region faced a drought in the past during which it failed to meet local water demands?	Droughts are expected to become more severe in the future. Systems that have already come close to their supply thresholds may be especially vulnerable to droughts in the future.	The region, and State as a whole, has recently experienced a historic drought, which required significant water use cutbacks. LVMWD customers did not experience shortages in their supplies. Water shortage contingency plan elements have been implemented to reduce demands and will continue to be implemented as needed in order to meet demands.
Does your region have invasive species management issues at your facilities, along conveyance structures, or in habitat areas?	As invasive species are expected to become more prevalent with climate change, existing invasive species issues may indicate an ecological vulnerability to climate change.	Quagga mussels are a threat to the Westlake Reservoir and if introduced at the reservoir they could impact the operation of the reservoir.

Vulnerability Question <sup>(a)</sup>	Potential Vulnerability Issue <sup>(a)</sup>	Response/Justification
<b>Water Quality</b>		
Are increased wildfires a threat in your region? If so, does your region include reservoirs with fire-susceptible vegetation nearby which could pose a water quality concern from increased erosion?	Some areas are expected to become more vulnerable to wildfires over time.	Wildfire risks are generally high in undeveloped open space areas, which make up approximately a third of the LVMWD service area. Water supplies stored in LVMWD potable and recycled water reservoirs could be vulnerable to increased wildfires and related erosion and sedimentation. Water quality impacts could have particular implications on treatment requirements and costs at the Westlake Filtration Plant, which treats potable water supplies from the Westlake Reservoir.
Does part of your region rely on surface water bodies with current or recurrent water quality issues related to eutrophication, such as low dissolved oxygen or algal blooms? Are there other water quality constituents potentially exacerbated by climate change?	Warming temperatures will result in lower dissolved oxygen levels in water bodies, which are exacerbated by algal blooms and in turn enhance eutrophication. Changes in streamflows may alter pollutant concentrations in water bodies.	The LVMWD service area does not rely on local surface water as a supply source. Imported SWP water is generally of high quality, however higher temperatures could impact the quality of those supplies.
Are seasonal low flows decreasing for some waterbodies in your region? If so, are the reduced low flows limiting the waterbodies' assimilative capacity?	In the future, low flow conditions are expected to be more extreme and last longer. This may result in higher pollutant concentrations where loadings increase or remain constant.	Most streams in the area region are naturally ephemeral or intermittent. With increasing temperatures instream flows could decrease, which has the potential to compromise assimilative capacities. Treated water discharges to Malibu Creek will continue to be maintained or limited, as required by existing permits.
Are there beneficial uses designated for some water bodies in your region that cannot always be met due to water quality issues?	In the future, low flows are expected to decrease and to last longer. This may result in higher pollutant concentrations where loadings increase or remain constant.	Existing beneficial uses of Malibu Creek, a representative stream of the LVMWD service area, include the following: <ul style="list-style-type: none"> <li>- Warm Freshwater Habitat</li> <li>- Cold Freshwater Habitat</li> <li>- Wild Habitat</li> <li>- Rare, Threatened, or Endangered Species</li> <li>- Migration of Aquatic Organisms</li> <li>- Spawning, Reproduction, and/or Early Development</li> <li>- Wetland Habitat</li> </ul>

Vulnerability Question <sup>(a)</sup>	Potential Vulnerability Issue <sup>(a)</sup>	Response/Justification
Does part of your region currently observe water quality shifts during rain events that impact treatment facility operation?	While it is unclear how average precipitation will change with temperature, it is generally agreed that storm severity will probably increase. More intense, severe storms may lead to increased erosion, which will increase turbidity in surface waters. Areas that already observe water quality responses to rainstorm intensity may be especially vulnerable.	These beneficial uses would likely be affected by lower flows in the future. The LVMWD service area depends on imported SWP water which is treated at the Jensen Filtration Plant prior to delivery to LVMWD. As a result, water entering the LVMWD distribution system has a consistent high quality. Impacts to water quality in the Westlake reservoir are a potential vulnerability which could result in additional treatment requirements and/or higher treatment costs.

Note:

(a) Vulnerability questions and potential vulnerability issues are taken from the Climate Change Vulnerability Assessment of the Climate Change Handbook for Regional Water Planning (USEPA and DWR, 2011)

## **Section 8: Demand Management Measures**

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### **8.1 Overview**

The purpose of the Demand Management Measures (DMM) section of this UWMP is to describe the DMMs that LVMWD (a) has implemented over the past five years (since 2010) to meet its urban water use reduction targets and (b) plans to implement to meet its urban water use reduction targets. For the purposes of this UWMP the DMMs are categorized as “Foundational” and “Other”. Foundational DMMs, listed below, are those DMMs that the UWMP Act and Water Code specifically mention:

- a. Water waste prevention ordinances
- b. Metering
- c. Conservation pricing
- d. Public education and outreach
- e. Programs to assess and manage distribution system real loss
- f. Water conservation program coordination and staffing support

Activities outside of the Foundational DMMs that encourage less water use within LVMWD fall in the “Other DMM” category.

LVMWD is committed to implementing water conservation and recycling programs to maximize sustainability in meeting future water needs for its customers. LVMWD is a signatory to the Memorandum of Understanding regarding Urban Water Conservation in California dated September 1991 (and amended thereafter). As a member of the CUWCC and signatory of its MOU, LVMWD realizes the importance of the DMMs to ensure a reliable future water supply. Water conservation reports for the recent reporting period are recorded in the CUWCC database.

Narrative descriptions of LVMWD’s DMMs are provided below and include conservation measures already in place and those that are being considered to improve the efficiency of water use within LVMWD.

#### **8.1.1 Foundational DMMs**

##### **8.1.1.1 Water Waste Prohibition**

Section 3-4.202 of Article 2 of the Las Virgenes Municipal Water District Code, addresses penalties for wasteful water use. These penalties were adopted on August 11, 2015 and became effective on January 1, 2016. As described in that section, District customers are not allowed to wastefully or negligently use water, including knowingly allow leaks. Water waste penalties are summarized in Table 8-1.

Water use exceeding twice a customer's water budget is considered a waste of water and a violation subject to escalating administrative penalties, as described in Section 3-4.202 and summarized in the table below. Water budgets are described under 8.1.1.3.

**TABLE 8-1  
WATER WASTE PENALTIES**

<b>Penalties or Charges</b>	<b>Violation Level</b>
The customer shall receive a written warning from LVMWD, with amount of exceedance and notice that further exceedances will result in monetary penalties.	First Violation
A penalty of \$2.50 per billing unit or portion thereof will be imposed, for water use exceeding twice the customer's water budget.	Second Violation
A penalty of \$5.00 per billing unit or portion thereof will be imposed, for water use exceeding twice the customer's water budget.	Third and Subsequent Violation

In addition, mandatory conservation measures and irrigation practices, as required under Section 3-4.404, are listed in Table 9-3.

In August 2015, LVMWD also adopted Resolution No. 2481, which updated the Water Shortage Contingency Plan and is described in more detail in Section 9 – Water Shortage Contingency Plan.

**8.1.1.2 Metering**

Currently, all connections within LVMWD's service area are metered and customers are billed according to the amount of water used. LVMWD will continue to install meters on all new connections, however additional water conservation savings are not foreseeable from this measure.

Installation of Automatic Meter Reading/Automated Metering Infrastructure (AMR/AMI) is planned for the future. The AMR/AMI system will assist customers in monitoring their water use, facilitate compliance with water budgets and enhance leak detection.

**8.1.1.3 Conservation Pricing**

In an effort to encourage water use reduction, LVMWD implemented a budget-based water billing structure with Resolution No. 2475, adopted on October 26, 2015. Each customer is provided with a personalized water budget, which is designed to meet their specific indoor and outdoor water needs.

For residential customers, budgets are based on the number of people in the household, irrigated area, evapotranspiration rate, with some adjustments. Irrigation customer budgets are based on irrigated areas and evapotranspiration rates. For commercial customers, individual budgets are based on each customer's historical usage. Customers are then charged based on their efficiency relative to their budget (by tier). A summary of the tiers, tier descriptions and related 2016 rates for residential, irrigation and commercial customer classes is provided in the Table 8-2.



**TABLE 8-2  
QUANTITY RATES AND TIER LEVEL**

<b>Tier Name</b>	<b>Tier Name/Description (Residential and Irrigation)<sup>(b)</sup></b>	<b>Tier Description (Commercial)</b>	<b>Customer Rates (\$/HCF)<sup>(a)</sup></b>
Tier 1	Efficient Indoor (Indoor Water Budget)	33% of Budget	\$2.36
Tier 2	Efficient Outdoor (Outdoor Water Budget)	67% of Budget	\$3.18
Tier 3	Inefficient (101-150% of Budget)	101-150% of Budget	\$3.96
Tier 4	Excessive (Over 150% of Budget)	Over 150% of Budget	\$4.98

Notes:

(a) 2016 rates; rates are per hundred cubic feet (hcf)

(b) Irrigation only has three tiers. Irrigation Tiers 1, 2 and 3 correspond to Residential Tiers 2, 3, and 4.

In addition to the budget-based commodity charges, District water rates also include a "Readiness to Serve Charge", which is a fixed rate depending on the meter size, and per unit elevation charges to offset pumping costs. Elevation charges differ by zone, with customers at higher elevations paying higher costs per unit of water.

**8.1.1.4 Public Education and Outreach**

Public Information Program

LVMWD maintains an intensive outreach commitment to customers regarding water conservation benefits and practices. LVMWD engages in numerous public information programs, including ongoing public tours of district facilities preceded by a presentation on conservation, specialized tours provided to leadership from local cities, state and local elected officials and local environmental groups and their volunteers. LVMWD has a Speaker's Bureau that provides expert speakers to service clubs, homeowner associations, chambers of commerce and other organizations on a variety of topics, including water conservation, water efficient plant selections, environmental issues and more.

LVMWD utilizes multiple media outlets to encourage water conservation and educate its customers, including social media, its website, cable tv, "auto dial" telephone messages, news releases, newsletters, paid ads in local newspapers, and portions of the Water Quality Report dedicated to conservation messages. In the period 2013-2015, LVMWD's General Manager was featured on several television newscasts, a radio program and multiple cable television productions speaking on the topic of water conservation.

The LVMWD website provides a substantial amount of water conservation resources and information. The website includes detailed tips and guidance on conserving water, both indoors and outdoors, including videos on how to check for leaks, irrigate properly, and save water. In addition, the website is used to advertise initiatives to further reduce potable water use. For example, free recycled water is available to customers of LVMWD or Triunfo Sanitation District for irrigation purposes and is advertised on the LVMWD website. Participants can fill up their approved containers every Saturday after attending one training session. The LVMWD website also advertises that any resident of LVMWD or Triunfo Sanitation District can obtain free

compost from the Rancho Las Virgenes Community Composting Facility every Saturday. The soil amendment improves soil conditions and results in reduced watering needs. Additional content includes rebates, water-wise plants, daily watering index, sign-ups for water-wise gardening classes and facility tours and conservation advisories.

LVMWD also publishes a bi-monthly newsletter, "The Current Flow", which provides LVMWD customers with updates on conservation, rebates, environmental stewardship, easy to use water-saving ideas, landscaping tips and more. The newsletter is mailed to customers and is also available on the LVMWD website and in hard copy at LVMWD. Water conservation information is also included in the LVMWD annual water quality report. Social media outlets, including twitter and Facebook, are also used for public outreach.

At community events occurring throughout the District's service area, LVMWD promotes awareness of water conservation issues through an informational outreach booth, often accompanied by its mascot "Little Drop." Among the many of the events where LVMWD has encouraged water conservation are the following:

- Agoura Hills Conservation Summit and Expo, August 17, 2015
- Agoura Hills Concerts in the Park, July 5, 2015
- Agoura Hills Public Safety Day, 2013 and 2015
- Bay Laurel Carnival 2014
- Calabasas Pumpkin Festival, 2013, 2014 and 2015
- Calabasas Earth Day Celebrations 2013, 2014 and 2015
- Agoura Hills Reyes Adobe Days, 2013, 2014 and 2015
- Westlake Village Rotary Street Fair, 2013, 2014 and 2015
- Sumac Elementary's Fall Festival, 2014

Further efforts include the donation of water-topic books and other resources to local libraries, and presentations scheduled at local city council meetings, all of which are carried on public access television. LVMWD also conducts point of purchase advertising in conjunction with its rebate programs.

#### School Education Programs

In addition to reaching out to the general public, LVMWD implements a school education program that includes providing educational materials and instructional assistance.

LVMWD's primary outreach is conducted with Las Virgenes Unified School District, which has some 11,300 students enrolled in grades K-12. Additional outreach is made to private schools and home-schooled students. School programs include:

- \$107,000 direct financial support for the LVUSD 4-5 Science Team

- Facility tours for all fourth grade students and high school science classes (includes bus transportation)
- Educational water conservation performances by “The Story Pirates”
- Annual water conservation student art contest that generates several thousand submissions
- Support for two high school teams participating in the Metropolitan Water District’s Solar Cup Challenge (2013, 2014, 2015)
- Mentoring outreach to local high schools
- Website section devoted to water conservation targeted to students

#### **8.1.1.5 Program to Assess and Manage Distribution System Real Loss**

A Water Activity Report, previously called Water Loss Report, was produced for the 2015 calendar year, based on the water system balance methodology established by the American Water Works Association (AWWA) Manual 36. The results showed that LVMWD’s unaccounted for water losses (real and apparent losses) are minimal, at approximately one percent for the audited period.

LVMWD regularly utilizes visual inspection of distribution routes and aerial surveys of 8 miles of pipeline traversing rugged terrain to detect leaks.

#### **8.1.1.6 Water Conservation Program Coordination and Staffing Support**

The Water Conservation and Reuse Supervisor is responsible for coordinating LVMWD’s water conservation program and providing residents with useful water conservation information. This position is held by Scott W. Harris.

### **8.1.2 Other DMMs**

#### **8.1.2.1 Water Survey Program**

LVMWD offers water audits to residential customers. Audits include reviewing water usage history with the customer, identifying leaks inside and outside the home, and recommending improvements. Between 2010 and 2015, 576 water use efficiency surveys were conducted at single-family residential properties.

LVMWD also provides water efficiency surveys to large landscape customers. Between 2010 and 2015, LVMWD conducted large landscape efficiency surveys for over 107 acres, including locations such as schools, country clubs, and homeowners associations.

#### **8.1.2.2 Stop the Waste**

In an effort to identify water waste and increase water use efficiency, LVMWD established the “Stop the Waste” program in February 2014. With this program, anyone can report incidents such

as water leaks, broken sprinkler heads or irrigation violations to LVMWD by phone or email. Photos of the leaks or other water waste incidents can be included in the report sent to LVMWD. LVMWD will then contact the property owner to correct the problem. Information can be found on the LVMWD website: <http://www.lvmwd.com/your-water/drought/stop-the-waste>.

LVMWD also engages the community in reducing water waste by providing door tags that community members can use to alert neighbors of observed water waste.

### **8.1.2.3 Rebate Programs**

LVMWD has been offering and promoting water conservation rebates in coordination with MWDCS as part of the SoCal WaterSmart rebates program, including the following:

- High Efficiency Toilet (HET)
- High Efficiency Clothes Washer (HECW)
- Weather-Based Irrigation Controller (WBIC)
- Rotating Sprinkler Heads
- Rain Barrel
- Soil Moisture Sensor System
- Premium High-Efficiency Toilets
- Ultra Low and Zero Water Urinals
- Plumbing Flow Control Valves
- Larch Rotary nozzles
- In-stem Flow Regulators
- Soil Moisture Sensor Systems
- Connectionless Food Steamers
- Air-cooled Ice machines
- Cooling Tower Conductivity Controllers
- Cooling Tower pH Controllers
- Dry Vacuum Pumps
- Laminar Flow Restrictors

Between 2012 and 2015, LVMWD also implemented the “Mow no Mow” turf removal rebate. Under the program LVMWD residential customers received \$2 per square foot of turf removed, up to a total of \$6,000. The program converted 1.4 million square feet of landscaping to California-friendly gardens and hardscaping.

Table 8-3 The following table provide a summary of conservation rebates provided between 2010 and 2015.

**TABLE 8-3  
CONSERVATION REBATES BETWEEN 2010 AND 2015**

<b>Rebate Type</b>	<b>Number of Rebates Provided</b>
<b>Residential Conservation Rebates</b>	
HECW	1,554
HET	845
Rain Barrels	91
Rotating Nozzles	3,208
Soil Moisture Sensor	1
WBIC	3,71
WBIC Large Landscape	107
<b>CII Conservation Rebates</b>	
In-stem Flow Restrictor	1,360
HET	1
HET Premium	28
Rotating Nozzle	2,020
Zero Water Urinals	10
WBIC	135

Source: LVMWD Conservation Intervention Data (2010-2015) provided by LVMWD staff

### **8.1.3 Planned Actions to Meet Water Use Targets**

Going forward, LVMWD will continue implementation of the Foundational DMMS described in above. However, the extent and details of implementation may be modified. It is important to note that severe drought conditions, statewide reduction mandates and wholesale agency use restrictions have led LVMWD to considerably intensify their water conservation program efforts, including significantly increased public outreach and education. As a result, economic factors including feasibility and cost-effectiveness will be taken into account to evaluate future implementation and possible modifications to LVMWD’s water conservation program. Overall, these programs will assist LVMWD in achieving its SBX7-7 2020 target as described in this UWMP.

## **Section 9: Water Shortage Contingency Plan**

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### **9.1 Overview**

Water supplies may be interrupted or reduced significantly in a number of ways, such as a drought which limits supplies, an earthquake which damages water delivery or storage facilities, a regional power outage, or a chemical spill that affects water quality. This section of the UWMP describes how LVMWD plans to respond to such emergencies so that water demands can be appropriately reduced and emergency water needs are met promptly and equitably.

LVMWD updated its Water Shortage Contingency Plan (WSCP) in August 2015. The implementation of budget-based water rates on January 1, 2016 triggered the most recent update of the WSCP. As the State recognizes, water budgets can achieve results equivalent to outdoor irrigation restrictions. In lieu of watering restrictions, the LVMWD Board of Directors may institute a drought factor to limit outdoor water use and/or reduce the indoor water allowance.

### **9.2 Stages of Action**

The 2016 WSCP establishes four stages of escalating response to a water shortage caused by droughts and/or emergencies. Each stage may be triggered by a declaration from federal or state authorities, MWDSC, or LVMWD to address events that result in a water shortage. The stages and applicable water supply conditions are summarized in Table 4-1.

**TABLE 9-1  
STAGES OF LVMWD WATER SHORTAGE CONTINGENCY PLAN**

<b>Stage</b>	<b>Percent Supply Reduction</b>	<b>Triggers</b>
1 Water Shortage Alert	0 to 10%	<ul style="list-style-type: none"><li>• Federal, state or local disaster declaration that may impact water supplies</li><li>• State or MWDSC declaration due to drought or system maintenance</li><li>• LVMWD Board of Directors determination</li><li>• Unplanned LVMWD water system maintenance</li></ul>
2 Water Shortage Warning	10 to 20%	<ul style="list-style-type: none"><li>• Federal, state or local disaster declaration that may impact water supplies</li><li>• State or MWDSC declaration due to drought or system maintenance</li><li>• LVMWD Board of Directors determination</li><li>• Unplanned LVMWD water system maintenance requiring more time to repair</li></ul>

Stage	Percent Supply Reduction	Triggers
3 Water Shortage Emergency	20 to 50%	<ul style="list-style-type: none"> <li>• Federal, state or local disaster declaration that may impact water supplies</li> <li>• State or MWDSC determination due to drought or significant system failure <ul style="list-style-type: none"> <li>- State outdoor irrigation restriction; and/or</li> <li>- MWDSC Water Supply Allocation Plan (5-50% of baseline allocation)</li> </ul> </li> <li>• LVMWD Board of Directors determination</li> <li>• Unplanned LVMWD water system failure or emergency (Westlake Filtration Plant, Dam and/or Backbone System)</li> </ul>
4 Critical Water Shortage Emergency	50% or higher	<ul style="list-style-type: none"> <li>• Federal, state or local disaster declaration that may impact water supplies</li> <li>• Sacramento to Delta/SWP failure</li> <li>• State or MWDSC determination due to drought or significant system failure</li> <li>• LVMWD Board of Directors determination</li> <li>• Natural or human-caused catastrophe disrupting delivery of water to, or within the service area</li> <li>• Severe LVMWD water system failure (Westlake Filtration Plant, Dam and Backbone System)</li> </ul>

### 9.2.1 Procedures for Water Shortage Level Determination

The LVMWD General Manager will recommend activation of one or more elements of the WSCP whenever water supplies of the District have a reasonable prospect for being inadequate to meet the needs of customers. The recommendation shall be presented to the board in the form of a written report, which includes the reasons for the recommendation. The board shall consider the report at a duly noticed public hearing. In case of emergencies, a special meeting may be called by a majority of the Board on less than twenty-four hour notice and without an agenda to deal with the disruption of service.

If an emergency arises which would ordinarily be brought to the attention of the Board but insufficient time exists, the General Manager has administrative authority to take action as he deems appropriate and reasonable.

LVMWD uses various public notification forms like media outlets, direct mail, automated voice recording, website, social media, group presentations and public meetings. The form and extent of notification depends on the severity and duration of the emergency condition.

### **9.3 Prohibitions on End Uses and Consumption Reduction Methods**

LVMWD permanently implements general water conservation measures and irrigation practices aimed at increasing everyday water use efficiency. Those measures are outlined in 3-4.404 of the LVMWD Code and are presented in Table 9-2.

**TABLE 9-2  
PERMANENT WATER CONSERVATION MEASURES**

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#### **General Water Conservation Measures**

- Potable water shall not be used to clean or sweep hard surfaces, such as sidewalks, walkways, driveways, or parking areas and only as necessary to protect public health and safety.
- Hotels, motels and other places for commercial transient occupancy shall offer guests who stay more than one night the opportunity to retain towels and linens during their stay.
- Car washing is permitted only with the use of a nozzle having an automatic shut-off.
- Fountains and other decorative water features shall recirculate water.
- Drinking water shall be served only upon request in eating or drinking establishments, including but not limited to restaurants, hotels, cafes, cafeterias, bars, or other public places where food or drink are served and/or purchased.

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#### **Irrigation Practices**

- Irrigation shall occur after 5:00 p.m. and before 10:00 a.m. No irrigation is permitted during and within 48 hours after measurable rainfall.
  - Irrigation shall not run off to streets, gutters or adjacent properties.
  - The District shall assist in the promotion of water efficient irrigation practices by monitoring compliance with landscaping plans approved by cities and the county under the Water Conservation in Landscaping Act. The District shall notify the city or county with jurisdiction by law if it is determined that a landscaping plan has been breached.
  - Limit the number of watering days, if and as determined by the Board, except that watering is permitted at any time with a hand-held hose equipped with an automatic shut-off, a faucet filled bucket of five gallons or less, or a drip irrigation system.
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According to each water shortage stage enacted, the LVMWD WSCP outlines actions required by customers and by LVMWD. These actions are presented in Table 9-3.



**TABLE 9-3  
CUSTOMER AND DISTRICT WATER SHORTAGE ACTIONS**

<b>Stage</b>	<b>District Actions</b>	<b>Customer Actions</b>
Stage 1	<ul style="list-style-type: none"> <li>• Initiate public information campaign</li> <li>• Increase awareness of conservation measures</li> <li>• Commence enforcement of conservation measures</li> </ul>	<ul style="list-style-type: none"> <li>• Voluntary water conservation</li> <li>• Adhere to conservation measures</li> <li>• Consider conversion to more efficient irrigation methods</li> <li>• Consider turf removal and conversion to California-friendly landscaping</li> <li>• Patronize local carwashes that recycle their water</li> </ul>
	<ul style="list-style-type: none"> <li>• Promote methods to reduce water use</li> <li>• Conduct focused outreach to large water users</li> <li>• Coordinate public outreach with the cities and County</li> </ul>	
Stage 2	<ul style="list-style-type: none"> <li>• Expand public information campaign</li> <li>• Step up enforcement of conservation measures</li> <li>• Continue previous actions</li> </ul>	<ul style="list-style-type: none"> <li>• Re-double voluntary conservation</li> <li>• Continue previous actions</li> </ul>
	<ul style="list-style-type: none"> <li>• Intensify public information campaign</li> <li>• Expand enforcement of conservation measures</li> <li>• Implement State and MWDSC required reduction using a drought factor for water budgets</li> </ul>	
Stage 3	<ul style="list-style-type: none"> <li>• Send direct notices to all customers</li> <li>• Provide regular media, city council and County briefings</li> <li>• Activate emergency connections with mutual aid agencies</li> <li>• Continue previous actions</li> </ul>	<ul style="list-style-type: none"> <li>• Continue previous actions</li> <li>• Ensure appropriate programming of irrigation controller</li> </ul>
	<ul style="list-style-type: none"> <li>• Implement crisis communication plan</li> <li>• Activate Emergency Operations Center</li> <li>• Implement State and MWDSC required reduction using a drought factor for outdoor water budgets and reduction in indoor water budget if necessary</li> <li>• Coordinate actions with regulatory agencies</li> </ul>	
Stage 4	<ul style="list-style-type: none"> <li>• Coordinate actions with public safety agencies to address enforcement and fire protection issues</li> <li>• Install flow restrictors on meters as necessary</li> <li>• Terminate potable water supplement to the recycled water system</li> <li>• Recall all temporary meters and activate water fill stations</li> <li>• Continue previous actions</li> </ul>	<ul style="list-style-type: none"> <li>• Continue previous actions</li> <li>• Terminate outdoor water use for irrigation, pools and fountains</li> <li>• Water may only be used outdoors for public health and safety purposes</li> <li>• Be on alert for Boil Water Orders if they become necessary</li> </ul>
	<ul style="list-style-type: none"> <li>• Implement State and MWDSC required reduction using a drought factor for outdoor water budgets and reduction in indoor water budget if necessary</li> <li>• Coordinate actions with regulatory agencies</li> <li>• Coordinate actions with public safety agencies to address enforcement and fire protection issues</li> <li>• Install flow restrictors on meters as necessary</li> <li>• Terminate potable water supplement to the recycled water system</li> <li>• Recall all temporary meters and activate water fill stations</li> <li>• Continue previous actions</li> </ul>	

Multiple communication channels will be used by LVMWD staff to communicate water shortage conditions and necessary actions to the LVMWD Board of Directors, customers, residential homeowners associations, business chambers, inter-governmental bodies,

essential facilities (schools, hospitals, fire), and other stakeholders. Among the communication methods to be used are the following:

- Public water conservation forums hosted at LVMWD headquarters and off- site locations.
- Attendance and agenda presentation at local city council meetings.
- Attendance and agenda presentations at home-owners association and business chamber meetings.
- Direct mailings and bill inserts to customers and account holders.
- Press releases.
- LVMWD publications, e.g., the *Current Flow*.
- Updated posting of issues and information on LVMWD website.
- Advertisements in local publications and cable channels.
- Cards, table tents, door hangers and other leave-behind reminders.

#### **9.4 Penalties, Charges, Other Enforcement of Prohibitions**

Section 3-4.406 of the LVMWD Code outlines enforcement actions for violations of water conservation measures. These actions are summarized in Table 8-1. LVMWD customers are encouraged to report water conservation violations through use of the LVMWD hotline.

**TABLE 9-4  
ENFORCEMENT ACTIONS**

<b>Violation Level</b>	<b>Penalties or Charges</b>
First Violation	The customer shall be notified in writing. The notice shall include a warning that further violations could result in stricter penalties.
Second Violation	A second violation within a twelve-month period is punishable by a fine of up to \$100.
Third Violation	A third violation within a twelve-month period is punishable by a fine of up to \$200.
Fourth Violation	A fourth violation within a twelve-month period is punishable by a fine of up to \$500.
Fifth Violation	A fifth violation within a twelve-month period may result in the installation of flow restrictors or termination of service.

## **9.5 Determining Water Shortage Reductions**

The water shortage condition may be determined at the local, regional or state level. An issue with LVMWD's transmission main or treatment system may require water use reduction in a particular area or community. The Metropolitan Water District, as wholesaler at the regional level, may require a reduction in to their member agencies to manage their allocation from the state. Lastly, as in the current drought condition, the State may impose a reduction mandate to each water purveyor to achieve a statewide goal.

LVMWD's water system currently has water meters on all connections. These meters record the amount of water consumed at each location. LVMWD will use these meters in concert with the budgeted water allocations for each customer to monitor actual reductions in water use district-wide.

## **9.6 Revenue and Expenditure Impacts**

Currently, only about 21 percent of LVMWD's fixed costs are covered by fixed revenues. In contrast, water sales make up the largest portion of the total operating revenue. As a result, water conservation efforts can significantly impact revenues. Current drought conditions have presented a reminder of the large fluctuations in water sales volumes that can occur within the LVMWD service area and statewide, and emphasize the importance of measures to improve revenue stability.

According to the LVMWD Fiscal Year 2015-16 Adopted Budget, reductions in potable water use due to statewide mandates are anticipated to result in an operating shortfall for the Potable Water Enterprise. While operating expenses are reduced with lower sales, fixed costs cannot be fully recovered for potable water with significant reductions in sales, thereby resulting in a net operating loss. This shortfall will be made up by drawing from LVMWD's Rate Stabilization Fund that was established for this purpose (LVMWD 2015).

In the case of future water use reductions resulting from the implementation of the LVMWD WSCP, LVMWD would likely experience similar impacts to operating revenue and would draw as necessary and as possible from the Rate Stabilization Fund. In addition, one of the objectives of the budget-based rate structure implemented on January 1, 2016 is to improve revenue stability for LVMWD. Therefore, while revenue would inevitably fluctuate with water use reductions, LVMWD has established appropriate means to manage these impacts.

## **9.7 Resolution or Ordinance**

LVMWD adopted the WSCP with Resolution No. 2481 on January 12, 2016. This Resolution amended Section 3-4.407 of the LVMWD Code and repealed Resolution No. 2478. A copy of the WSCP is included in Appendix G.

## **9.8 Catastrophic Supply Interruption**

### **9.8.1 MWDSC Catastrophic Supply Strategies**

A catastrophic event, such as an earthquake damaging the aqueducts that transport imported water supplies could result in an unplanned interruption in MWDSC supplies, which LVMWD depends on. In recognition of the possibility of such unplanned events, MWDSC has invested in emergency storage facilities located within and outside of the region to facilitate continued supplies. In the event of a SWP outage, water stored in surface reservoirs and groundwater basins under MWDSC's emergency storage program would be made available to meet demands by MWDSC member agencies, which includes LVMWD. Under circumstances of a 6-month disruption of imported supplies, storage supplies could serve 75 percent of firm retail demands. (MWDSC 2016).

In the case of extreme water shortages within the MWDSC service area, MWDSC will implement the WSAP. The WSAP provides methodologies for allocating supply to each of MWDSC's retail and wholesale customers on an equitable needs-basis, and establishes surcharges for excess water use. The WSAP was originally adopted by the MWDSC Board in 2008 and was revised in 2014.

These efforts increase the reliability of supplies on a region-wide basis, including the LVMWD service area, even under unexpected circumstances, such as catastrophic supply interruption.

### **9.8.2 LVMWD Catastrophic Supply Strategies**

Stage 4 actions of the LVMWD WSCP would be triggered, among other conditions, by a natural or human-caused catastrophe disrupting delivery of water to, or within the service area. Disruptions could include failures of the LVMWD water system, such as at the Westlake Filtration Plant, dam and/or backbone system, as well as at State or MWDSC facilities. All LVMWD and customer actions described above for Stage 4 would be implemented, as necessary to address catastrophic water supply interruption.

The Westlake Reservoir provides emergency storage capacity that can be used during imported water outages. In addition, the planned potable water interconnection with CMWD, described in Section 4, would provide additional system reliability, enabling LVMWD to receive potable water from CMWD as available under conditions of supply interruptions.

A large part of the potable water distribution system relies on local sub-systems that include individual pump stations and storage tanks. The storage tanks include a minimum of 5 hours of maximum day demand emergency storage. LVMWD owns three mobile generators that can be utilized at the sub-system pump stations. The main pumping stations of LV-2, Cornell and Westlake Pump Station include emergency power facilities providing the means to operate them during electrical power outages.

## 9.9 Minimum Supply Next Three Years

The minimum water supply available during the next three years would occur during a three-year multiple-dry year event between the years 2016 and 2018. Since 2015 was the driest year on record, it is assumed the minimum supply for 2016, 2017, and 2018 will be a repeat of what happened in 2015. Table 9-5 presents the minimum supply assumed to be available over the next three years.

**TABLE 9-5  
WATER SUPPLY ESTIMATES – NEXT THREE YEARS (AFY)**

<b>Water Supply Source</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
Imported			
MWDSC	19,467	19,467	19,467
Box Canyon (VCWWD 8)	16	16	16
Woolsey (VCWWD 17)	101	101	101
Local Groundwater	0	0	0
Recycled Water	4,240	4,240	4,240
<b>Total Supplies<sup>(a)</sup></b>	<b>23,825</b>	<b>23,825</b>	<b>23,825</b>

Note:

(a) See Section 4 for details on water supply sources. Note, as described in Section 4, LVMWD has no new planned supplies.

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<http://pwportal.ventura.org/WSD/Residents/Water%20Services/Water%20Quality/docs/Ventura%20County%20Waterworks%20District%20No.17%20-%20Bell%20Canyon.pdf>

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Photo courtesy of [Water.org](#)







May 10, 2016 LVMWD Regular Board Meeting

TO: Board of Directors

FROM: Finance & Administration

**Subject : Claim from Stephen Heller on behalf of Stephen B. and Lily Ann Niefield**

**SUMMARY:**

On April 14, 2016, Stephen B. Niefield allegedly sustained injuries after stepping through a vault cover located near 23577 Calabasas Road. Stephen Heller of Heller LaChapelle, APC, submitted a claim for unspecified damages and a demand to safeguard evidence on behalf of Mr. Niefield and his wife, Lily Ann Niefield. Staff investigated the incident and determined the vault is not a District-owned facility. As a result, staff recommends that the claim be denied.

**RECOMMENDATION(S):**

Deny the claim from Stephen Heller on behalf of Stephen B. and Lily Ann Niefield.

**FISCAL IMPACT:**

No

**ITEM BUDGETED:**

No

**DISCUSSION:**

On April 20, 2016, the District received the attached claim and a demand to safeguard evidence from Stephen Heller, legal counsel for Stephen B. and Lily Ann Niefield. The claimants seek unspecified compensation for injuries that occurred on April 14, 2016. Mr. Niefield allegedly stepped through a vault cover and fell to the ground when walking on the north sidewalk of Calabasas Road, across the street from 23586 Calabasas Road. Mr. Niefield allegedly fractured his right upper extremity and sustained soft tissue injuries to his neck, back and knees. Additionally, Ms. Niefield claims a loss of consortium.

Staff investigated the incident and determined that the vault and cover are not owned, operated or maintained by the District. The vault cover is located within the service area of Los Angeles Department of Water and Power and stamped with "WATER BUREAU," a marking not used by the District.

**GOALS:**

Ensure Effective Utilization of the Public's Assets and Money

Prepared by: Mary Capps, Secretary

**ATTACHMENTS:**

Claim from Stephen Heller

Photos from District's Investigation

HELLER LACHAPELLE  
— A PROFESSIONAL CORPORATION —

**SERIOUS INJURY LITIGATION**

24025 PARK SORRENTO, SUITE 240  
CALABASAS, CALIFORNIA 91302-4008  
TEL 818.591.6388 • FAX 818.591.6399  
WWW.SERIOUSINJURY.ORG

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SHAYNE HELLER LACHAPELLE  
SHAYNE@HLLAWYERS.NET

OF COUNSEL  
ROBERT POURVALI  
ROBERT@HLLAWYERS.NET

**By Email to [jguzman@lvmwd.com](mailto:jguzman@lvmwd.com)**

**By Messenger**

**Certified Mail #7013 2630 0001 5311 2101  
Return Receipt Requested**

April 19, 2016

Ms. Josie Guzman  
Executive Assistant Clerk/Clerk of the Board  
Las Virgenes Municipal Water District  
4232 Las Virgenes Road  
Calabasas, CA 91302

Re: Our Client: Stephen B. Niefield  
Date of Loss: April 14, 2016  
Location: Sidewalk, across street from  
23586 Calabasas Road

***NOTICE OF CLAIM FOR INJURIES***

***DEMAND TO SAFEGUARD EVIDENCE***

Dear Ms. Guzman:

Thank you for returning my call this morning advising that claims against Las Virgenes Municipal Water District (“District”) were to be sent to your attention.

Please be advised that our firm represents Stephen B. Niefield for injuries sustained on April 14, 2016, at approximately 10:00 p.m., while walking on the north sidewalk of Calabasas Road, across the street from 23586 Calabasas Road, Calabasas, California. Enclosed are Google Maps images (dates unknown) depicting the location where he was injured and the subject vault (discussed below).

Ms. Josie Guzman  
Executive Assistant Clerk/Clerk of the Board  
Las Virgenes Municipal Water District  
April 19, 2016

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Mr. Niefield was injured when he stepped on or through a defective vault cover and fell to the ground. The vault contained a water line which we are advised was, *inter alia*, owned, operated, inspected and maintained by the District. We are further advised that the vault cover was designed and manufactured by Amorcast Products Company.

Parts of the vault cover were found inside the vault and a photo (taken April 18, 2016) depicting five separate pieces thereof is also enclosed.

Additionally, the light in a street lamp, located approximately 15 feet away from the subject vault, was not illuminated at the time of the incident.

**Demand to Safeguard Evidence.** We hereby demand that The District safeguard and protect the vault, the five separate pieces of the vault cover, the circular steel access plate, the gasket, the debris (including leaves) contained inside the vault, *et cetera*, all of which are important items of evidence in any civil action which may be filed against the District and others. We further demand that the District and its agents, representatives and attorneys refrain from intentionally destroying, mutilating, or significantly altering any of this evidence for the purpose of defeating our clients' potential recovery in their civil action against the District and others. The District, its attorneys, agents, representatives, successors and assigns, must preserve and maintain any and all the aforesaid evidence. The destruction, alteration, or loss of any of the items listed in this letter will constitute destruction of evidence under the law.

Additional information set forth in the District's *Claim Against Las Virgenes Municipal Water District* not addressed above is set forth below.

**Address to which replies/notices should be sent.** Stephen Heller, Heller LaChapelle, APC, 24025 Park Sorrento, Suite 240, Calabasas, CA 91302. Our telephone number is 818-591-6388 and the fax number is 818-591-6399. My email address is [heller@hllawyers.net](mailto:heller@hllawyers.net).

**Claimed injuries.** To the extent known at this time, we are advised that Mr. Niefield sustained a fracture to his right upper extremity and soft-tissue injuries to his neck, back, and knees. He is currently treating for these injuries. Lily Ann Niefield claims a loss of consortium.

**Names of District employees causing the injury, damage or loss.** Unknown.

Ms. Josie Guzman  
Executive Assistant Clerk/Clerk of the Board  
Las Virgenes Municipal Water District  
April 19, 2016

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**Acts and omissions by District employees causing the injuries and damages claimed.**

Our investigation is in its preliminary stages, but we believe the District's employees negligently and carelessly failed, *inter alia*, to inspect, repair and maintain the subject vault and vault cover. The District also negligently failed to warn pedestrians, including Mr. Niefield, of the dangerous condition.

**Amount of Damages claimed.** Undetermined at this time.

Please forward a copy of this letter to the District's liability carrier and direct all inquiries concerning this matter to the undersigned.

Thanks for your cooperation.

Yours truly,



Stephen Heller

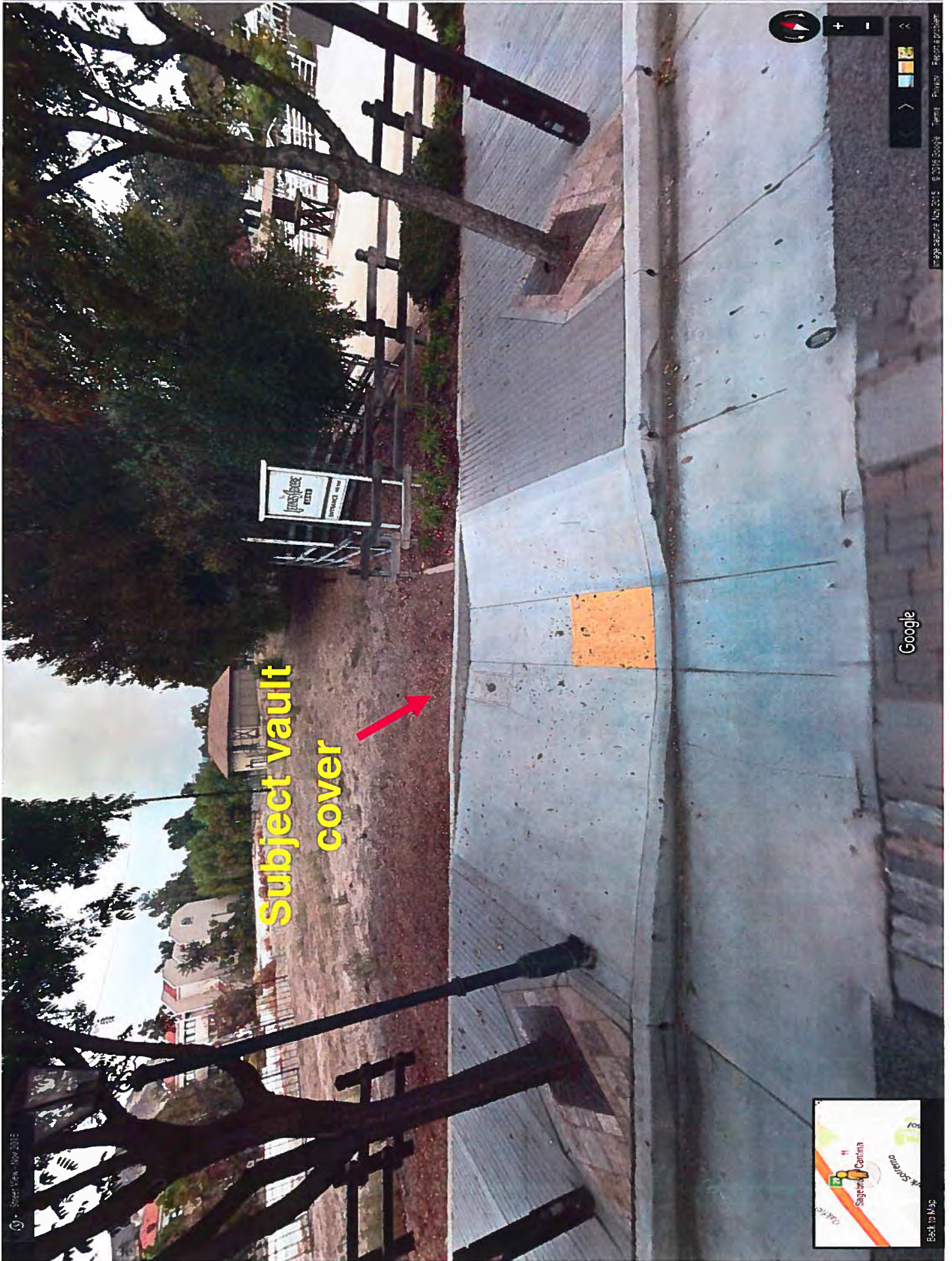
SH/sj  
Enclosures

cc: Mr. and Mrs. Stephen B. Niefield

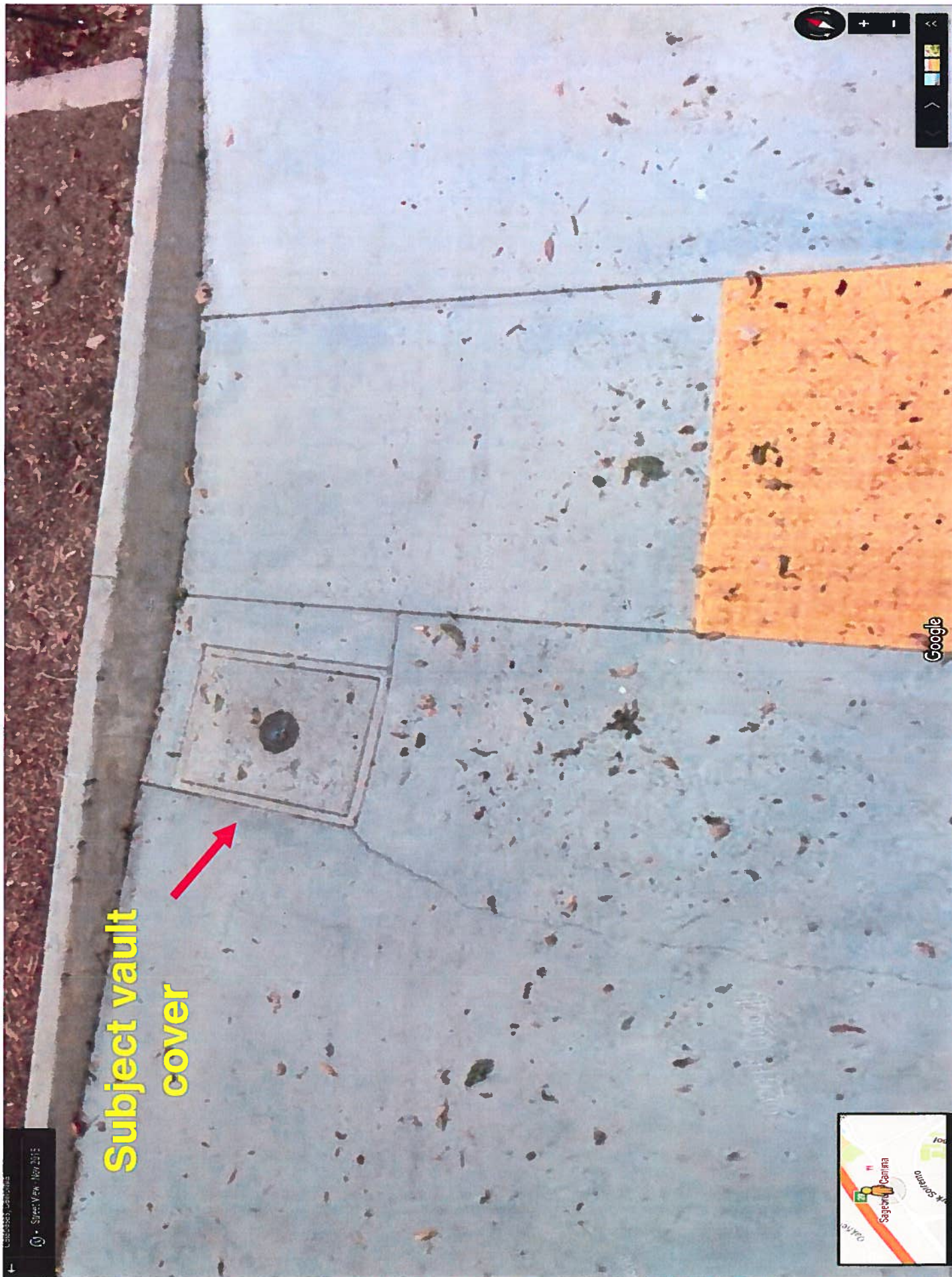




Subject vault  
cover location







**Subject vault  
cover**





LVMWD Investigation Photos





THE METROPOLITAN WATER DISTRICT  
OF SOUTHERN CALIFORNIA

# MWD MEETING AGENDA

**Board Meeting**  
Meeting with Board of Directors

**May 10, 2016**

**12:00 p.m. -- Board Room**

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**MWD Headquarters Building**

**700 N. Alameda Street**

**Los Angeles, CA 90012**

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**1. Call to Order**

- (a) Invocation: Manju Nair, Assistant Engineer II, Engineering Services Group
- (b) Pledge of Allegiance: Director Russell Lefevre

**2. Roll Call**

**3. Determination of a Quorum**

**4. Opportunity for members of the public to address the Board on matters within the Board's jurisdiction. (As required by Gov. Code § 54954.3(a))**

**5. OTHER MATTERS**

- A. Approval of the Minutes of the Meeting for April 12, 2016. (A copy has been mailed to each Director) Any additions, corrections, or omissions
- B. Report on Directors' events attended at Metropolitan expense for month of April
- C. Approve committee assignments
- D. Chairman's Monthly Activity Report
- E. Approve 30-day leave of absence for Director Larry Dick, commencing May 5, 2016

**6. DEPARTMENT HEADS' REPORTS**

- A. General Manager's summary of Metropolitan's activities for the month of April
- B. General Counsel's summary of Legal Department activities for the month of April
- C. General Auditor's summary of activities for the month of April
- D. Ethics Officer's summary of activities for the month of April

**7. CONSENT CALENDAR ITEMS — ACTION**

- 7-1 Appropriate \$800,000; and authorize design of chemical system upgrades at the F. E. Weymouth Water Treatment Plant (Approp. 15477). (E&O)

- 7-2 Appropriate \$400,000; and award \$268,000 contract to First Responder Fire Protection Corp. to install a fire protection system in the La Verne Shops (Approp. 15395). (E&O)

7-2 Board Letter and Attachments

- 7-3 Appropriate \$600,000; and authorize design of drainage and erosion control improvements at Garvey Reservoir (Approp. 15480). (E&O)

7-3 Board Letter and Attachments

- 7-4 Authorize granting a permanent easement to the city of San Jacinto on Metropolitan-owned property located in Riverside County. (RP&AM)

7-4 Board Letter and Attachment

- 7-5 Redesignation of the Special Real Property and Asset Management Committee as a Board Standing Committee. (L&C)

7-5 Board Letter and Attachments

**8. OTHER BOARD ITEMS — ACTION**

- 8-1 Adopt resolution to continue Metropolitan's Water Standby Charge for fiscal year 2016/17. (F&I)

8-1 Board Letter and Attachment

- 8-2 Appropriate \$6.7 million; and authorize: (1) preconstruction activities for seismic upgrades and preliminary design of building improvements for Metropolitan's Headquarters Building; and (2) increase of \$3.5 million to an agreement with ABSG Consulting, Inc., for a new not-to-exceed total of \$5.3 million (Approp. 15473). (E&O)

8-2 Board Letter and Attachments

- 8-3 Appropriate \$2.1 million; award \$708,000 contract to Pacific Winds Building, Inc. for electrical upgrades at the East Dam area of Diamond Valley Lake; and authorize: (1) \$520,000 agreement with Southern California Edison (SCE); and (2) granting of permanent easements to SCE; and (3) construction of a sanitation facility at the East Marina (Approps. 15334 and 15480). (E&O)

8-3 Board Letter and Attachments

- 8-4 Authorize continuing participation in pilot program to fund water use efficiency measures for the Colorado River and approve payment of up to \$1 million. (WP&S)

8-4 Board Letter

- 8-5 Declare a "Condition 2 -- Water Supply Alert" effective immediately; do not implement a Water Supply Allocation Plan for 2016/17 and thereby rescind the current "Condition 3 - Water Supply Allocation". (WP&S) (To be mailed separately)

- 8-6 Adopt the 2015 Urban Water Management Plan and resolution for submittal to the State of California. (WP&S) (To be mailed separately)

- 8-7 Approve Metropolitan Water District of Southern California's Salary Schedule pursuant to CalPERS regulations. (OP&T)

8-7 Board Letter and Attachment

**9. BOARD INFORMATION ITEMS**

- 9-1 Renewal status of Metropolitan's Property and Casualty Insurance Program. (F&I)

9-1 Board Letter and Attachment

- 9-2 Upcoming Department Head Performance Evaluation Process and Schedule

- 9-3 Update on purchase of property from Delta Wetlands Properties in Contra Costa, San Joaquin, and Solano Counties. (RP&AM)

- 9-4 Report on existing and potential litigation challenging the purchase of property from Delta Wetlands Properties in Contra Costa, San Joaquin, and Solano Counties, including County of San Joaquin v. Metropolitan Water District of Southern California, et al., San Joaquin County Superior Court Case No. STK-CV-UWM-2016-3597; North Coast Rivers Alliance v. Metropolitan Water District of Southern California, et al., Contra Costa County Superior Court Case No. MSN16-0629; and Pacific Coast Federation of Fishermen's Associations v. Metropolitan Water District of Southern California, et al., Solano County Superior Court Case No. FCS046934. (L&C)

[Conference with legal counsel-existing and anticipated litigation; to be heard in closed session pursuant to Gov. Code Sections 54956.9(d)(1) & (d)(2)]

**10. FOLLOW-UP ITEMS**

**11. FUTURE AGENDA ITEMS**

**12. ADJOURNMENT**

NOTE: At the discretion of the committee, all items appearing on this agenda, whether or not expressly listed for action, may be deliberated and may be subject to action by the committee.

This committee reviews items and makes a recommendation for final action to the full Board of Directors. Final action will be taken by the Board of Directors. Agendas for the meeting of the Board of Directors may be obtained from the Board Executive Secretary. This committee will not take any final action that is binding on the Board, even when a quorum of the Board is present.

Writings relating to open session agenda items distributed to Directors less than 72 hours prior to a regular meeting are available for public inspection at Metropolitan's Headquarters Building and on Metropolitan's Web site <http://www.mwdh2o.com>.

Requests for a disability related modification or accommodation, including auxiliary aids or services, in order to attend or participate in a meeting should be made to the Board Executive Secretary in advance of the meeting to ensure availability of the requested service or accommodation.