DESERT WATER AGENCY JULY 19, 2016



BOARD OF DIRECTORS REGULAR MEETING AGENDA

REGULAR MEETING 8:00 A.M. OPERATIONS CENTER - 1200 SOUTH GENE AUTRY TRAIL - PALM SPRINGS - CALIFORNIA

About Desert Water Agency:

Desert Water Agency operates independently of any other local government. Its autonomous elected board members are directly accountable to the people they serve. The Agency is one of the desert's two State Water Contractors and provides water and resource management, including recycling, for a 325-square-mile area of Western Riverside County, encompassing parts of Cathedral City, Desert Hot Springs, outlying Riverside County and Palm Springs.

1. PLEDGE OF ALLEGIANCE

2.	APPROVAL OF MINUTES – A. June 28, 2016	CIOFFI
3.	GENERAL MANAGER'S REPORT	KRAUSE
4.		cioffi Cioffi

5. PUBLIC INPUT:

Members of the public may comment on any item not listed on the agenda, but within the jurisdiction of the Agency. In addition, members of the public may speak on any item listed on the agenda as that item comes up for consideration. Speakers are requested to keep their comments to no more than three (3) minutes. As provided in the Brown Act, the Board is prohibited from acting on items not listed on the agenda.

6.	SEC	CRETARY-TREASURER'S REPORT - JUNE 2016	BLOOMER					
7.		MS FOR ACTION <u>PUBLIC HEARING ITEM (A)</u> Public Hearing for the Purpose of Accepting and Responding to Public Comments on Public Health Goals Report	JOHNSON					
	В.	Request Adoption of Resolution No. 1141 Granting Retirement Status to Debbie Randall	KRAUSE					
	C.	Water Use Violation - Civil Penalty Hearings	KRAUSE					
8.	A. N	BLIC INFORMATION Media Information PI Activities	METZGER					
9.	9. ITEMS FOR DISCUSSION KRAUSE A. June Water Production Comparison KRAUSE B. Perris Dam Seepage Recovery Project KRAUSE C. Whitewater Power Plant – Renewable Market Adjusting Tariff (Re-MAT) Update JOHNSON							
10.	DIR	ECTORS COMMENTS AND REQUESTS						
11.	CLO	OSED SESSION						
	Α.	CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION Pursuant to Government Code Section 54956.9 (d) (1) Name of Case: Agua Caliente Band of Cahuilla Indians vs. Coachella Valley Water District, et al						
	В.	CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION Pursuant to Government Code Section 54956.9 (d) (1) Name of Case: Agua Caliente Band of Cahuilla Indians vs. County of Riverside, et al						
	C.	CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION Pursuant to Government Code Section 54956.9 (d) (1) Name of Case: Desert Water Agency vs. U.S. Department of Interior						

- D. CONFERENCE WITH LEGAL COUNSEL EXISTING LITIGATION Pursuant to Government Code Section 54956.9 (d) (1) Name of Case: Mission Springs Water District vs. Desert Water Agency
- E. CONFERENCE WITH REAL PROPERTY NEGOTIATORS Pursuant to Government Code Section 54956.8 Property: 1.17 acre lot North of the Northeast corner of Sunrise Way and Mesquite Avenue, APN No. 502-560-038 Agency Negotiators: Mark S. Krause, General Manager and Steve L. Johnson, Asst. General Manager Negotiating Parties: Chris Thomsen, New Mesquite HOA Under Negotiation: Price and terms of possible acquisition

12. RECONVENE INTO OPEN SESSION – REPORT FROM CLOSED SESSION

13. ADJOURN

Upon request, this agenda will be made available in appropriate alternative formats to persons with disabilities, as required by Section 202 of the Americans with Disabilities Act of 1990. Any person with a disability who requires a modification or accommodation in order to participate in a meeting is asked to contact Desert Water Agency's Executive Secretary, at (760) 323-4971, at least 48 working hours prior to the meeting to enable the Agency to make reasonable arrangements. Copies of records provided to Board members which relate to any agenda item to be discussed in open session may be obtained from the Agency at the address indicated on the agenda.

MINUTES OF THE SPECIAL MEETING OF THE DESERT WATER AGENCY BOARD OF DIRECTORS

June 28, 2016

DWA Board:	Attendance							
DWA Staff:	Mark S. Krause, General Manager Martin S. Krieger, Finance Director Sylvia Baca, Asst. Secretary of the Board Ashley Metzger, Outreach/Conserv. Manager Irene Gaudinez, Human Resources Manager))))						
Consultant:	Michael T. Riddell, Best Best & Krieger Victoria E. Morrell, Krieger & Stewart))						
17513. President Cioffi opened the meeting at 8:00 a.m. and asked Pledge of Allegiance everyone to join Vice President Stuart in the Pledge of Allegiance.								
17514. Presi Regular Board mee	dent Cioffi called for approval of the June 7, ting minutes.	2016	Approval of 06/07/16 Regular Board Mtg. Minutes					
	tor Oygar moved for approval. After a second minutes were approved as written.	nd by						
	dent Cioffi called upon General Manager Krau on Agency operations.	ise to	General Manager's Report					
Mr. Krause stated on June 6 at approximately 12:00 p.m., Assistant Construction Superintendent Kuhlman responded to a hit hydrant at 68760 Summit Dr., in Cathedral City. An employee of Segundos Auto Repair backed a motorhome into the hydrant. A damage report and police report was filed. The water loss was from a small leak which ran for about 45 minutes. The hydrant was repaired and is back in service.								

On June 6 at approximately 8:30 a.m., staff responded to a Stolen Meter - 447 stolen meter at 447 Juanita Dr. The thieves cut the front of the angle stop Juanita Dr.

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		8682
stop, meter	side meter coupling to take the meter. Staff replaced the angle and backside meter coupling. There was no meter loss, the as off. A police report was filed.	General Manager's Report (Cont.)
Staff was abl service. The	On June 16 at approximately 8:30 a.m., staff responded to a ant on the east side of Perez Rd., north of E. Palm Canyon Dr. le to replace the bolts and gasket and put the hydrant back into water ran for approximately ten minutes through a 6-inch . A police report was filed.	Fire Hydrant Damage – Perez Rd./E. Palm Cyn.
-	Concluding his report, Mr. Krause stated with today's special re are no items for consideration for the July 5 meeting. The onsider cancelling that meeting.	Future Board Meeting Schedule
meeting. Stat	There was consensus by the Board to cancel the July 5 ff will send out the notice of cancellation.	July 5 Board Meeting Cancelled
	In response to Director Ewing, Finance Director Krieger s meeting with NBS within the next few weeks; a study session ed after it is held.	NBS Rate Study
	Vice President Stuart noted the minutes for the June 15, 2016 mittee were provided in the Board's packet; further discussion under Item 7-C.	Committee Reports Finance 06/15/16
17517.	President Cioffi opened the meeting for public input.	Public Input
Board, Presid	There being no one from the public wishing to address the dent Cioffi closed the public comment period.	
17518. provide an ov	President Cioffi called upon Secretary-Treasurer Bloomer to verview of financial activities for the month of May 2016.	Secretary-Treasurer's Report-May 2016 Operating Fund
Reclamation Receipts (SC Accounts Pay date Total Re are 7% under	Secretary-Treasurer Bloomer reported that the Operating ed \$1,653,708 in Water Sales Revenue, and \$112,706 in Sales Revenue. \$6,737 was included in Miscellaneous CE Solar Field II Energy Rebate). \$1,669,877 was paid out in yable. Year-to-date Water Sales are 12% over budget, Year-to- evenues are 12% over budget, and Year-to-date Total Expenses r budget. There were 22,308 active services as of May 31, 2016 22,248 as of April 30, 2016 and 21,793 as of May 31, 2013.	
received in	Reporting on the General Fund, Secretary-Treasurer Bloomer 8,941 was received in Property Tax Revenue. \$31,590 was Groundwater Replenishment Assessments. \$235,971 was State Water Project Refunds. \$706,577 was paid out in State	General Fund

Water Project Charges and \$25,754 paid to CVWD for Whitewater Basin

Management.

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Regarding the Wastewater Fund, \$13,783 was received in Sewer Capacity Charges (\$9,327.20 Elks Lodge, \$4,454.84 in Sewer Contract payments). There were a total of 72 contracts with 29 delinquent (40%). \$62,392 was paid out in Accounts Payable.

was received in Secretary-Treasurer's Report (Cont.)

Wastewater Fund

Items for Action: Public Hearing 2015 Urban Water Mgmt. Plan

17519. President Cioffi called upon General Manager Krause to present staff's request for adoption of the 2015 Urban Water Management Plan.

Mr. Krause introduced Victoria Morrell, from Krieger & Stewart who helped in the plan preparation. Ms. Morrell is present to answer any questions the Board may have. Mr. Krause explained that the Urban Water Management Plan (UWMP) is prepared by urban water suppliers every five years to support long-term resource planning and to ensure adequate water supplies for future demands. The report is due to the Department of Water Resources (DWR) in July 2016.

Continuing his report, Mr. Krause indicated that K&S developed the plan in coordination with DWA staff. He noted the key differences between the 2010 and 2015 reports. He stated in order to adopt the 2015 UWMP, a noticed public hearing is required. A copy of the notice of public meeting and public hearing was sent to stakeholders on June 3. The notice of public hearing was published in The Public Record on June 16 and June 23. There were no written comments received from the public. Staff recommends adoption of the 2015 Urban Water Management Plan.

President Cioffi declared the public hearing open at 8:35 a.m.	Open Public Hearing

There being no one from the public wishing to address the Board and no written comments regarding this item, President Cioffi closed Close Public Hearing the public hearing at 8:36 a.m.

Director Ewing made a motion to approve and adopt the 2015 Urban Water Management Plan. After a second by Vice President Stuart, the motion carried unanimously.

17520. President Cioffi called upon General Manager Krause to present staff's request for authorization to amend the 2015-16 United States Request Amendment to 2015-16 USGS Program Costs

Mr. Krause stated on June 2, 2016, representatives from DWA, CVWD, RCFC and USGS met to discuss the program for the period November 1, 2016 thru October 31, 2017. At the meeting, CVWD proposed the addition of a new gaging station located within Murray Canyon stream. CVWD has water rights for the stream source and SB88 requires a person who diverts 10 acre-feet of water per year or more under a permit or license to install and maintain a device or employ a method capable of measuring the rate of direct diversion, collection to storage and withdrawal or release

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from storage and to report to the state board, at least annually. A new gaging station will satisfy this new requirement and will allow for a more accurate measurement of the water inflow to the valley basin.

Concluding his report, Mr. Krause said the proposed total costs for the new station installation, including telemetry equipment and data collection is \$25,730 to be split evenly between DWA and CVWD. RCFC may also contribute, but has not yet committed. If RCFC agrees to share costs, then the total amount for DWA will be \$8,577. Staff requests Board authorization to participate in the cost sharing for installation of the new Murray Canyon gaging station, amending the 2015-16 cooperative water resources program cost from \$68,400 to \$81,265.

Director Oygar made a motion to amend the 2015-2016 USGS Survey Cooperative Water Resources Program costs. After a second by Director Ewing, the motion passed unanimously.

17521. President Cioffi asked Finance Director Krieger to present the Operating, General and Wastewater Budgets for 2016/2017.

Mr. Krieger noted that the Finance Committee has reviewed the budgets and amendments to the Operating fund for Turf Buyback rebates, Reserves and General fund were made. He stated once the Prop. 218 process is complete later this year, staff will then request Board approval to augment the budget.

Director Ewing made a motion to adopt the 2016/2017 Operating, General and Wastewater budgets. Vice President Stuart seconded the motion, which carried unanimously.

17522. President Cioffi asked Finance Director Krieger to present staff's request for adoption of Resolution No. 1140 Establishing Tax Rate Establishing Tax Rate for Fiscal Year 2015-2016.

Mr. Krieger stated the proposed resolution will fix the tax rate of \$0.10 per \$100 of assessed valuation, as adopted in the 2016-2017 General Fund budget, which is the same rate as 2015-2016. The resolution directs the County Board of Supervisors to levy such tax rate for the 2016-2017 Fiscal Year on all taxable property within the Agency boundaries. Staff recommends adoption of Resolution No. 1140 Establishing Tax Rate for 2016-2017.

Director Oygar moved to adopt Resolution No. 1140. President Cioffi seconded the motion, which passed unanimously.

Action Items: (Cont.) Request Amendment to 2015-16 USGS Program Costs

Adoption of Fiscal Year 2016/2017 Operating, General and Wastewater Budgets

Resolution No. 1140

RESOLUTION NO. 1140 A RESOLUTION OF THE BOARD OF DIRECTORS OF THE DESERT WATER AGENCY **DETERMINING, CERTIFYING, AND DIRECTING**

Director Ewing, Secretary-Treasurer Bloomer, Vice 17523. President Stuart, and President Cioffi noted their attendance at the AWWA conference held in Chicago.

2016-2017 LEVIES PURSUANT TO SECTION 27 **OF THE AGENCY ACT AS AMENDED**

17524. President Cioffi asked Agency Counsel Riddell to provide a report on the June 16, 2016 meeting of the Board of Directors of the State Water Contractors, Inc.

Mr. Riddell noted in his absence. Ms. Deborah Kollars from BBK's Sacramento office attended the meeting and her notes are provided in the report. He then reported on the following items: 1) Board Action Items, 2) Water Supply Report, 3) Energy Report, 4) Water Supply Objectives Update, 5) General Manager's Report, 6) Legislation, and 7) Legal Counsel's Report.

17525. At 9:30 a.m., President Cioffi convened into Closed Session for the purpose of Conference with Legal Counsel, (A) Existing Litigation, pursuant to Government Code Section 54956.9 (d) (1), Mission Springs Water District vs. Desert Water Agency.

At 9:41 a.m., President Cioffi reconvened the meeting into 17526. open session and announced there was no reportable action.

17527. In the absence of any further business, President Cioffi adjourned the meeting at 9:42 a.m.

James Cioffi, President

ATTEST:

Kristin Bloomer, Secretary-Treasurer

Action Items: (Cont.) **Resolution No. 1140** Adopted

Items for Discussion: Directors Reports on AWWA Conference

State Water Contractors Meeting - 06/16/16

Closed Session: A. Existing Litigation -MSWD vs. DWA

Reconvene – No **Reportable Action**

Adjournment

GENERAL MANAGER'S REPORT JULY 19, 2016

On July 13 at approximately 8:30 a.m. staff responded to a stolen fire hydrant at the North West corner of Sepulveda Rd. and Los Felices. As staff was driving in the neighborhood, they found another stolen fire hydrant on the South West corner of Zanjero Rd. and Yorba Rd. There was no water loss due to the thieves turning the valves off. A police report was made.



General Manager's Meetings and Activities

Meetings:

6/27/16Meeting with MSWD7/14/16Executive7/14/16Conservation & Public Affairs

Activities:

Palm Springs and Cathedral City Population Projections and Seasonal Populations Perris Reservoir Seepage Water Supply Recovery Sites Reservoir Water Supply Opportunity E-Billing **Outreach Talking Points** USGS cooperative agreement **IRWMP Round 3 Invoices** IRWMP Turf Buy Back In Kind Contributions by Customer SWP Delta Charges State Drinking Water Program Fees Well 6 and Well 32 Water Quality Remediation issues Whitewater Ranch Water Service Agreement Rate Study **Replenishment Assessment Charge** Snow Creek Hydro SCE contract extension Whitewater Hydro SCE contract extension SWP/DWA tax rates ACBCI PRA Whitewater Mutual Water Company State and Federal Contractors Water Authority and Delta Specific Project Committee Property Acquisition - New Mesquite HOA **MSWD** Lawsuit Snow Creek Security

Minutes Executive Committee Meeting July 14, 2016

Directors Present:Jim Cioffi, Joe StuartStaff Present:Mark Krause, Martin Krieger, Steve Johnson

- 1. Discussion Items
 - A. <u>Review Agenda for July 19, 2016 Regular Board Meeting</u> The proposed agenda for the July 19, 2016 regular board meeting was reviewed.
 - B. <u>Expense Reports</u> The May and June expense reports were reviewed.
- 3. Adjourn

Minutes Conservation & Public Affairs Committee Meeting

July 14, 2016

Directors Present:	Jim Cioffi, Craig Ewing
Staff Present:	Mark Krause, Ashley Metzger

- 1. Discussion Items
 - A. <u>Turf Buy Back Documents/Workshop</u> The Committee reviewed documents and gave feedback about language and workshop logistics.
 - B. <u>New Conservation Coupon Program</u> The Committee inquired about the reverse osmosis pool treatment coupon program and discussed the merits of offering a coupon to customers for water saving technologies/practices.
 - C. <u>Rate Outreach Schedule</u> The Committee discussed the timing and sequence of various outreach elements, as well as the forum options for a public hearing, if needed.

2. Other

- A. E-billing roll out and announcements were discussed.
- B. Palm Springs High School public service announcement concepts were reviewed.
- C. Sponsorship options, water trailer and in-kind contributions were discussed.
- D. An update on Drinking Water Program fees was provided.
- E. Upcoming outreach needs were evaluated.
- 3. Adjourn

DESERT WATER AGENCY STATEMENT OF CASH RECEIPTS AND EXPENDITURES

OPERATING ACCOUNT

JUNE 2016

BALANCE	JUNE 1, 2016	(\$668,96	5.97)	RESERVE FUNDS \$12,103,111.86
WATER SAL	.ES	\$1,812,078.45		
RECLAMAT		162,213.25		
WASTEWAT	ER RECEIPTS	70,904.45		
POWER SA	LES	1,745.39		
METERS, SE	ERVICES, ETC.	105,107.52		
REIMBURSE	EMENT – GENERAL FUND	165,308.83		
REIMBURSE	EMENT – WASTEWATER FUND	21,895.89		
ACCOUNTS	RECEIVABLE - OTHER	22,294.16		
CUSTOMER	DEPOSITS - SURETY	9,158.56		
CUSTOMER	DEPOSITS - CONST.	23,040.00		
LEASE REV	ENUE	3,368.43		
INTEREST F	RECEIVED ON INV. FDS.	3,125.00		
FRONT FOC	DTAGE FEES	0.00		
BOND SERV	/ICE & RESERVE FUND INT	0.00		
MISCELLAN	EOUS	23,552.22		
тот	TAL RECEIPTS	\$2,423,79	2.15	
PAYMENTS				
PAYROLL C	HECKS	\$497,440.97		
PAYROLL T/	AXES	160,926.75		
ELECTRONI	C TRANSFERS	125,734.89		
CHECKS UN	IDER \$10,000.00	348,376.95		
CHECKS OV	/ER \$10,000.00 SCH. #1	1,208,504.66		
CANCELLEE	CHECKS AND FEES	11,003.23		
τοτ	TAL PAYMENTS	<u>\$2,351,98</u>	37.45	
NET INCOME		\$	71,804.70	
BOND SERVICE	EACCOUNT			
MONTHLY W	VATER SALES	\$0.00		
EXCESS RE	TURNED BY B/A	\$0.00		
BON	ND SERVICE FUND		\$0.00	
INVESTED RES		¢000.000.00		
		\$900,000.00		
	ESTED – SCH. #3	1,285,200.00		
NÉT	TRANSFER		(\$385,200.00)	\$385,200.00
	INE 20, 2016		(\$082 361 27)	\$12 488 311 86

BALANCE JUNE 30, 2016

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SCHEDULE #1-CHECKS OVER \$10,000

AMOUNT	\$37,069.92	\$20.375.72	S17.446.00	SAE AAR ON	614 162 ED	00'10'10'10'10'10'10'10'10'10'10'10'10'1	00.000/FIX	\$17.052.95	\$15 M37 98	517 AAA DO		04.120(515	\$79,889.90	\$152,350.62	\$93,823.92	\$47,737.26	\$14,603.82	S13.089.00	S31 845 46	S14.379.41	S10.289.29	207 B20 35	\$157 110 M		さん つうさ のフーク	\$203,073.87	\$23,834.61	\$14,373.16	
DESCRIPTION	WATER SERVICE SUPPLIES	PAVING	TURF BUY BACK PROGRAM	TURF BUY BACK PROGRAM	TURF BUY BACK PROGRAM	TURF BUY BACK PROGRAM	TURF BUY BACK PROGRAM	TURF BUY BACK PROGRAM	TURF BUY BACK PROGRAM	TURF BUY BACK PROGRAM	LARGE WATER SYSTEM FEES FOR PERIOD OF 07/01/15 - 12/31/15	WASTEWATED PEVENILE BILLING EAD MAY AND A	PEALTU DENTAL & VISION INVENDED AND VIDE AND VID	TEALIT, JENIAL & VISION INSURANCE PREMIUMS - JULY 2016	WALEK SERVICE SUPPLIES	LEGAL FEES	SWITCH GEAR @ WELL # 43 (W/O # 03-552-W-43)	WATER SAMPLES	LANDSCAPE MAINTENANCE	SMART CONTROLLER INSTALLATIONS	WATER SERVICE SUPPLIES	WATER SERVICE SUPPLIES	CONTRACT PAYMENT - RESERVOIR MAINTENANCE	ENGINEERING			WATER SERVICE SUPPLIES	PAVING	
# NAME	BADGER METER INC	Z&L PAVING, INC	SUNDANCE II HOA	CANYON SANDS HOA	VILLAGE RACQUET CLUB HOA	ESTADOS SOUTH HOMEOWNERS	PALM SPRINGS BIARRITZ CONDOS	UNITED METHODIST CHURCH PS	ROMAN CATHOLIC BISHOP SAN BERNARDINO	SUNRISE ALEJO HOA	STATE WATER RES CONTROL BOARD	DESERT WATER AGENCY - WASTEWATER	ACWA-IPIA	BADCEP ALETED INC		DESI BESI & AKIEGEK ILP	BRITHINEE ELECTRIC INC	CLINICAL LAB OF SAN BERNARDINO	DOWN TO EARTH LANDSCAPING	ECOWISE LANDCARE	HD SUPPLY WATERWORKS LTD	INLAND WATER WORKS SUPPLY CO	J COLON COATINGS INC	KRIEGER & STEWART INC	SOUTHERN CALIFORNIA FDISON CO			ZEL PAVING, INC	
CHECK #	111786	111859	111870	111871	111872	111873	111874	111876	111879	111880	111894	111900	111912	111024	000111	074111	111733	111943	111953	111954	111973	111979	111981	111985	112013	ATOCLT		112028	

** TOTAL

DESERT WATER AGENCY OPERATING FUND - LISTING OF INVESTMENTS JUNE 30, 2016

PURCH DATE	NAME	DESCRIPTION	MATURITY DATE	COST	PAR VALUE	N	JARKET VALUE	YIELD TO MATURITY	CALLABLE STATUS
06-30-83	State of California	Local Agency Investment Fund	Open	\$ 9,733,611.86	\$ 9,733,611.86	\$	9,733,611.86	0.580%	-
		Certificates of Deposit							
09-28-15	Union Bank	Capital Bank CD	09-28-17	\$ 250,000.00	\$ 250,000.00	\$	251,150.00	1.050%	Bullet
01-15-16	Union Bank	Union Bank CD	01-13-17	\$ 500,000.00	\$ 500,000.00	\$	500,050.00	0.830%	Bullet
		Total Certificat	·	\$ 750,000.00	\$ 750,000.00	\$	751,200.00		
04-30-12	Union Bank	General Electric	04-27-17	\$ 1,004,700.00	\$ 1,000,000.00	\$	1,009,980.00	2.300%	Bullet
		Total Comr	nerical Paper	\$ 1,004,700.00	\$ 1,000,000.00	\$	1,009,980.00		
		Government Agency							
11-25-15	Union Bank	FHLMC (Caliable 8-25-16)	11- 25-19	\$ 1,000,000.00	\$ 1,000,000.00	\$	1,000,610.00	1.500%	Qrtrly
		Total Govern	ment Agency	\$ 1,000,000.00	\$ 1,000,000.00	\$	1,000,610.00		

Weighted Mean YTM 0.811%

TOTAL INVESTED @ 06/30/16 \$ 12,488,311.86 \$ 12,483,611.86 \$ 12,495,401.86 BALANCE @ 06/30/15 <u>\$ 15,055,930,48</u> INCREASE (DECREASE) (\$2,567,618.62)

DESERT WATER AGENCY STATEMENT OF CASH RECEIPTS AND EXPENDITURES

GENERAL ACCOUNT

JUNE 2016

INVESTED

BALANCE	JUNE 1, 2016	\$316,	645.40	RESERVE FUNDS \$107,955,975.37				
* TAXES -	RIVERSIDE COUNTY	223,453.05						
	ST EARNED - INV. FUNDS	95,972.32						
GROUN	DWATER REPLEN. ASSESSMENT	0.00						
REIMBU	RSEMENT - OPERATING FUND	0.00						
REIMBU	RSEMENT - CVWD MGMT AGRMT	352,708.00						
STATE \	WATER PROJECT REFUNDS	41,312.00						
REIMB -	CVWD - WHITEWATER HYDRO	29,115.79						
POWER	SALES - WHITEWATER	13,357.17						
MISCEL	LANEOUS -	25,078.00						
	TOTAL RECEIPTS	\$780,	996.33					
PAYMENTS	3							
CHECKS	S UNDER \$10,000.00	19,771.51						
CHECKS	S OVER \$10,000.00 - SCH. #1	2,428,011.15						
CANCEL	LED CHECKS AND FEES	(5,000.00)						
	TOTAL PAYMENTS	<u>\$2,442,</u>	782.66					
	1E	(\$1,661,786.33)						
INVESTED	RESERVE FUNDS							
FUNDS	MATURED	13,892,625.00						
FUNDS	INVESTED – SCH. #2	13,105,000.00						
	NET TRANSFER		\$787,625.00	(\$787,625.00)				
BALANCE	JUNE 30, 2016	_	(\$557,515.93)	\$107,168,350.37				
* INCLUS	VE TO DATE		TAXES	INTEREST				
RECEIP	TS IN FISCAL YEAR		\$22,619,806.04					
RECEIP	TS IN CALENDAR YEAR		\$16,746,677.42	\$477,909.58				

AMOUNT	\$1,497,773.00 \$76,096.00 \$171,939.15 \$682,203.00
DESERT WATER AGENCY GENERAL ACCOUNT SCHEDULE #1-CHECKS OVER \$10,000 DESCRIPTION	STATE WATER PROJECT ENTITLEMENT - MARCH 2016 WHITEWATER BASIN MANAGEMENT P/R & EXP REIMBURSEMENT FOR MAY 2016 STATE WATER PROJECT - JUNE 2016
* NAME	STATE OF C.A. DEPT. OF WATER RESOURCES COACHELLA VALLEY WATER DISTRICT DESERT WATER AGENCY-OPERATING STATE OF C.A. DEPT. OF WATER RESOURCES
CHECK #	8758 8764 8767 8768

** TOTAL

\$2,428,011.15

DESERT WATER AGENCY GENERAL FUND - LISTING OF INVESTMENTS JUNE 30, 2016

PURCHASE DATE	NAME	DESCRIPTION	MATURITY		COST		PAR VALUE		MARKET VALUE	YIELD TO MATURITY	CALLABLE
		Local Agency Investment Fund	<u>ן</u>	<u> </u>	<u> </u>					· · · · · ·	· ·
		Cover Agency investment 1 and	J.								
06-30-83	State of California	LAIF	Open	\$	48,946,763.70	\$	48,946,763.70	\$	48,946,763.70	0.580%	100
			,								
		Certificates of Deposit	ļ								
01-25-13	Union Bank	General Electric Capital Bank CD	01-25-18	\$	1,000,000.00	\$	1,000,000.00	÷	1.002.850.00	1.100%	Decline
12-04-14	Ladenburg Thaimann	AEX Centurion Bank CD	12-05-16	\$	245.000.00	\$	245.000.00		245,348.39	1.050%	Bullet Bullet
09-28-15	Union Bank	Capital Bank CD	09-28-17	\$	250,000.00	\$	250,000.00	\$	251,150.00	1.050%	Builet
10-07-15	Ladenburg Thaimann	Goldman Sachs CD	04-07-18	\$	245,000.00	\$	245,000.00	\$	246,012.09	1.350%	Bullet
10-29-15	Ladenburg Thalmann	Ally Bank CD	10-30-17	\$	245,000.00	\$	245,000.00	\$	245,382.93	1.150%	Bullet
11-04-15	Ladenburg Thalmann	Capital One NA CD	11-06-17	\$	245,000.00	\$	245,000.00	\$	245,226.13	1.100%	Bullet
11-04-15	Ladenburg Thaimann	Discover CD	11-06-17	\$	245,000.00	\$	245,000.00	\$	245,388.32	1.150%	Bullet
01-15-16	Union Bank	Union Bank CD	01-13-17	\$	1,000,000.00	\$	1,000,000.00	\$	1,000,100.00	0.830%	Bullet
		Tatal Castification of	Desert		2 475 000 00		1 497 opp op		- 404 457 06		
		Total Certificates of	Deposit	\$	3,475,000.00	Ş	3,475,000.00	Ş	3,481,457.86		
		Commercial Paper									
			-								
12-16-13	Stifel	General Electric	05-15-18	\$	587,600.00	\$	500,000.00	\$	545,410.00	6.300%	Bullet
04-27-15	Ladenburg Thalmann	Apple inc.	05-03-18	\$	997,920.00	\$	1,000,000.00	\$	1,002,102.00	1.000%	Bullet
02-01-16	Union Bank	US Bank Note (Callable 12-29-17)	01-29-18	\$	1,000,950.00	\$	1,000,000.00	\$	1,006,900.00	1.450%	1 Time
		Total Comm	ercial Paper	Ş	2,586,470.00	Ş	2,500,000.00	\$	2,554,412.00		
		Government Agency									
09-19-12	Stifel (D.A.D)	FNMA	09-19-17	\$	1,000,000.00	\$	1,000,000.00	\$	1,001,580.00	0.950%	1 Time
10-03-12	Stifel (D.A.D)	FNMA	10-03-16	\$	1,000,000.00		1,000,000.00	\$	1,000,660.00	0.650%	1 Time
10-10-12	Ladenburg Thalmann	FFCB (Callable Continuous)	10-10-17	\$	1,000,000.00	\$	1,000,000.00	\$	1,000,030.00	0.900%	Continuous
10-11-12	Stifel (D.A.D)	FFCB (Callable Continuous)	07-11-17	\$	1,000,000.00	\$	1,000,000.00	\$	999,260.00	0.820%	Continuous
10-17-12	Ladenburg Thalmann	FHLB (Callable Continuous)	04-17-17	\$	1,000,000.00	\$	1,000,000.00	\$	1,000,040.00	0.800%	Continuous
12-05-12	Ladenburg Thalmann	FFCB (Callable Continuous)	06-05-17	\$	999,250.00	\$	1,000,000.00	\$	1,000,080.00	0.770%	Continuous
12-20-12	Ladenburg Thalmann	FFCB (Callable Continuous)	03-20-17	\$	998,700.00	\$	1,000,000.00	\$	1,000,030.00	0.670%	Continuous
12-28-12	Stifel (D.A.D)	FHLB (Callable Continuous)	12-28-17	\$	1,000,000.00	\$	1,000,000.00	\$	1,000,010.00	0.840%	Continuous
02-05-13	Ladenburg Thalmann	FHLB (Callable Continuous)	02-05-18	\$	666,666.67	\$	666,666.67	\$	666,666.66	1.000%	Continuous
03-12-13	Stifel (D.A.D)	FFCB (Callable Continuous)	03-12-18	\$	1,000,000.00	\$	1,000,000.00	\$	1,000,030.00	1.030%	Continuous
03-27-13	Ladenburg Thaimann	FNMA (Callable 9-27-16)		\$	1,000,000.00	-	1,000,000.00		1,000,200.00	1.050%	Qrtrly
06-13-13	Ladenburg Thalmann	FHLB (Callable 9-13-16)	06-13-18		1,000,000.00		1,000,000.00		1,000,800.00	1.100%	Qrtrly
07-29-14	Stifel (D.A.D)	FNMA (Cailable 7-29-16)	10-29-18	•	1,000,000.00		1,000,000.00		1,001,180.00	1.500%	1 Time
09-29-14	Union Bank	FHLMC	09-29-16		1,500,000.00	-	1,500,000.00		1,500,915.00	0.650%	1 Time
06-23-15	Ladenburg Thaimann	FHLMC		\$	1,000,000.00		1,000,000.00		1,002,918.00	0.900%	1 Time
09-30-15	Union Bank	FFCB (Callable Continuous)	09-30-19	•	1,000,000.00		1,000,000.00		1,000,050.00	1.530%	Continuous
10-02-15 10-29-15	Stifel Stifel	FHLB (Cellable 10-2-17)	10-02-19		1,000,000.00		1,000,000.00		1,007,120.00	1.450%	Continuous
10-29-15		FHLB (Callable 7-29-16) FHLMC (Callable 8-23-16)	10-29-18 05-23-18		1,000,000.00 996,000.00		1,000,000.00		1,000,040.00	1.120%	Continuous
11-25-15	Union Bank	FHLMC (Callable 8-25-16)	11-25-19		1,000,000.00		1,000,000.00 1,000,000.00	> \$	1,000,616.00	1.000%	Qrtrly
	Stifel	FNMA (Callable 11-25-16)	11-25-19		1,000,000.00		1,000,000.00	÷.	1,000,610.00 1,002,240.00	1.500% 1.500%	Qrtrly Ortrly
		······· (*	A,VVV,UUV.UU	*	2,000,000.00	*	1,002,240.00	1.00070	Qrtrly

DESERT WATER AGENCY GENERAL FUND - LISTING OF INVESTMENTS JUNE 30, 2016

DATE		DESCRIPTION	MATURITY DATE		COST		PAR VALUE	M	MARKET VALUE	YIELD TO MATURITY	CALLABLE STATUS
		Government Agency									
01-27-16	Stifei	FHLB (Callable 7-27-16)	07-27-18	\$	1,000,000.00	\$	1,000,000.00	\$	1,000,460.00	1.300%	1 Time
) 1-29- 16	Ladenburg Thaimann	FHLB (Caliable 7-29-16)	07-29-19	\$	1,000,000.00	\$	1,000,000.00	\$	1,000,350.00	1.650%	Qrtrly
)1-29-16	Ladenburg Thalmann	FHLB (Callable 7-29-16)	04-29-20	\$	1,000,000.00	\$	1,000,000.00	\$	1,000,450.00	1.750%	Qrtrly
2-26-16	Ladenburg Thaimann	FNMA (Callable 8-26-16)	02-26-19	\$	1,000,000.00	\$	1,000,000.00	\$	1,000,300.00	1.250%	Qrtrly
2-26-16	Ladenburg Thalmann	FNMA STEP (Caliable 8-26-16)	02-26-19	\$	1,000,000.00	\$	1,000,000.00	\$	1,000,540.00	1.000%	Qrtrly
2-26-16	Stifel	FNMA STEP (Callable 8-26-16)	02-26-19	\$	1,500,000.00	\$	1,500,000.00	\$	1,500,525.00	0.600%	1 Time
3-09-16	Ladenburg Thalmann	FFCB (Callable Continuous)	09-09-19	\$	1,000,000.00	\$	1,000,000.00	\$	1,000,020.00	1.390%	Continuous
3-23-16	Ladenburg Thalmann	FNMA (Callable 9-23-16)	03-23-20	\$	1,000,000.00	\$	1,000,000.00	\$	1,000,830.00	1.500%	Qrtrly
3-30-16	Stifel	FNMA STEP (Callable 9-30-16)	03-30-21	\$	1,000,000.00	\$	1,000,000.00	\$	1,000,540.00	1.350%	Qrtrly
3-30-16	Stifel	FHLMC STEP (Callable 9-30-16)	03-30-21	\$	1,000,000.00	\$	1,000,000.00	\$	1,000,230.00	1.250%	Qrtrly
4-14-16	Ladenburg Thalmann	FHLMC STEP (Callable 10-14-16)	04-14-21	\$	1,000,000.00	\$	1,000,000.00	\$	1,001,836.00	1.500%	Qrtrly
4-26-16	Ladenburg Thalmann	FHLB (Callable 7-26-16)	10-26-20	\$	999,500.00	\$	1,000,000.00	\$	1,000,130.00	1.550%	Continuous
4-28-16	Ladenburg Thalmann	FHLMC (Callable 10-28-16)	01-28-21	\$	1,000,000.00	\$	1,000,000.00	\$	1,001,188.00	1.700%	Qrtrly
4-28-16	Union Bank	FHLMC (Callable 10-28-16)	01-28-20	\$	1,000,000.00	\$	1,000,000.00	\$	1,000,900.00	1.400%	Qrtrly
5-18-16	Union Bank	FHLMC (Callable 8-18-16)	11-18-19	\$	1,000,000.00	\$	1,000,000.00	\$	1,000,630.00	1.500%	Qrtrly
5-23-16	Stife!	FHLMC STEP (Callable 8-23-16)	05-23-19	\$	1,000,000.00	\$	1,000,000.00	\$	1,000,330.00	0.800%	Qrtrly
5-23-16	Ladenburg Thalmann	FHLMC (Calilable 8-23-16)	11-16-18	\$	1,000,000.00	\$	1,000,000.00	\$	1,000,630.00	1.200%	Qrtrly
5-23-16	Stife	FNMA (Callable 11-23-16)	08-23-19	\$	1,000,000.00	\$	1,000,000.00	\$	1,000,730.00	1.250%	Qrtrly
5-25-16	Stifel	FNMA STEP (Callable 11-25-16)	05-25-21	\$	1,000,000.00	s	1,000,000.00	s	1,000,490.00	1.000%	Qrtrly
5-26-16	Ladenburg Thaimann	FHLMC (Callable 8-26-16)	05-26-20	\$	1,000,000.00	\$		\$	1,001,117.00	1.625%	Qrtrly
5-26-16	Union Bank	FNMA (Callable 5-26-17)	11-26-19	\$	1,000,000.00	Ś	1,000,000.00	\$	1,002,760.00	1.300%	1 Time
5-31-16	Ladenburg Thaimann	FHLMC (Callable 11-29-16)	08-29-18	\$	1,000,000.00	s		\$	1,001,241.00	1.020%	Qrtrly
6-01-16	Stifel	FFCB (Callable 9-1-16)	03-01-19	Ś	1,000,000.00	s		s	1,000,450.00	1.250%	Continuous
6-13-16	Ladenburg Thalmann	FNMA (Callable 12-13-16)		\$	1,000,000.00	ŝ		\$	1,002,510.00	1.400%	Qrtrly
6-16-16	Stifel	FFCB (Callable 9-16-16)		\$	• •	ŝ		s	1,000,290.00	1.400%	Continuous
6-21-16	Stifel	FHLMC STEP (Callable 12-21-16)		5		ŝ		s	1,002,240.00	1.400%	Qrtrly
6-28-16	Stifei	FHLMC STEP (Callable 12-28-16)		Ś		\$		\$	1,500,780.00	0.750%	Qrtrly
5- 28-16 I	Ladenburg Thalmann	FNMA (Callable 12-28-16)		Ś	1.000.000.00	-		Ś	1.000.900.00	1.200%	Qrtriy
	Stifel	FHLMC STEP (Callable 9-30-16)		Ś		ŝ		ŝ	1,000,430.00	1.000%	Qrtrly
5-30-16 l	Union Bank	FHLMC (Callable9-30-16)	03-30-20		1,000,000.00		1,000,000.00	•	~,000,+30.00	1.500%	quury

Total Government Agency \$ 52,160,116.67 \$ 52,166,666.67 \$ 52,209,372.66

Weighted Mean YTM 0.922%

TOTAL INVESTED @ 06/30/16	\$ 107,168,350.37	\$ 107,088,430.37	\$ 107,192,006.22
BALANCE @ 06/30/15	\$ 100,021,864.49		
INCREASE OR (DECREASE)	\$ 7,146,485.88		

DESERT WATER AGENCY STATEMENT OF CASH RECEIPTS AND EXPENDITURES

WASTEWATER ACCOUNT

JUNE 2016

BALANCE JUNE 1, 2016	\$1,3	314.09	INVESTED RESERVE FUNDS \$1,058,031.01
ACCOUNTS RECEIVABLE - OTHER	\$0.00		
CUSTOMER DEPOSITS - CONSTRUCTION	0.00		
INTEREST EARNED - INVESTED FUNDS	38.01		
WASTEWATER REVENUE	79,889.90		
SEWER CAPACITY CHARGES	3,680.40		
MISCELLANEOUS	0.00		
TOTAL RECEIPTS	\$83,6	608.31	
PAYMENTS			
CHECKS UNDER \$10,000.00	\$15,412.24		
CHECKS OVER \$10,000.00 - SCH. #1	99,431.72		
CANCELLED CHECKS AND FEES	0.00		
TOTAL PAYMENTS	<u>\$114,8</u>	843.96	
NET INCOME	5	(\$31,235.65)	
INVESTED RESERVE FUNDS			
FUNDS MATURED	\$0.00		
FUNDS INVESTED – SCH. #2	31,000.00		
NET TRANSFER		\$31,000.00	(\$31,000.00)
BALANCE JUNE 30, 2016	-	\$1,078.44	\$1,027,031.01

AMOUNT	\$21,895.89 \$47,584.53 \$29,951.30
DESCRIPTION	OPERATING FUND REIMURSEMENT FOR APRIL 2016 WASTEWATER REVENUE BILLING FOR MAY 2016 CAPITAL IMPROVEMENT LOAN - REPAYMENT # 16
NAME	DESERT WATER AGENCY - OPERATING COACHELLA VALLEY WATER DISTRICT DESERT WATER AGENCY - GENERAL
CHECK #	2442 2444 2445

** TOTAL

\$99,431.72

DESERT WATER AGENCY WASTEWATER FUND - LISTING OF INVESTMENTS JUNE 30, 2016

PURCH DATE	NAME	DESCRIPTION	MATURITY DATE		COST	PAR VALUE	MARKET VALUE	YIELD TO MATURITY
		Local Agency Invstment Fund]					
06-30-83	State of California	LAIF	Open	\$	1,027,031.01	\$ 1,027,031.01	\$ 1,027,031.01	0.580%
		TOTAL INVESTED @ 06/30/16		\$		\$ 1,027,031.01	\$ 1,027,031.01	
		BALANCE @ 06/30/15 INCREASE OR (DECREASE)	-	\$ \$	862,257.70 164,773.31			

DESERT WATER AGENCY OPERATING FUND WATER CONSUMPTION

QUARTER ENDING JUNE 2016

		THIS QUAF	RTER			
				FISCA	L YEAR TO DATE	
	LAST YEAR	THIS YEAR	% UP (DOWN)	LAST YEAR	THIS YEAR	% UP (DOWN)
WATER REVENUE	\$5,799,619	\$5,424,404	(7)	\$24,646,563	\$21,531,768	(13)
TOTAL CONSUMPTION (100 CU FT)	3,087,732	2,841,269	(8)	13,443,311	11,282,798	(16)
AVERAGE CONSUMPTION PER CONSUMER (100 CU FT)	1 4 0	127	(9)	610	508	(17)
CONSOMER (100 COTT)	140	*		010	с .	()
NUMBER OF CONNECTIONS	16	63		22,126	22,304	1
* = ADDED THIS QUARTER						

C = TOTAL ACTIVE JUNE 2016

STAFF REPORT TO DESERT WATER AGENCY BOARD OF DIRECTORS

JULY 19, 2016

RE: REPORT ON PUBLIC HEALTH GOALS – PUBLIC HEARING

Per the California Health and Safety Code - Section 116470(b), staff has prepared DWA's 2015 Public Health Goal Report (due July 2016). The Report compares the Agency's system water quality with Public Health Goals (PHGs) and Maximum Contaminant Level Goals (MCLGs), and is prepared every three years.

PHG levels have been established by the California Environmental Protection Agency's Office of Environmental Health Hazard Assessment (OEHHA); the MCLGs have been established by the United States Environmental Protection Agency (USEPA), and are the federal equivalent to PHGs. PHGs and MCLGs are not enforceable standards and no action is required to meet them.

The Agency's water system complies with all of the health-based drinking water standards and maximum contaminant levels (MCLs) required by the Division of Drinking Water and the USEPA. Throughout the three-year reporting period (2013-2015), there were only five constituents found at levels that exceeded the PHG or MCGL.

Constituent	PHG/MCGL	MCL	DWA max level	Removal	Capital Costs / Yearly O&M (Per Site)
Coliform bacteria	zero	5%	2.2%	Chlorination	\$97K / \$20k
Chromium-6	0.02 ppb	10 ppb	3.8 ppb	Reverse Osmosis	\$2M / \$32k
Radium-228	0.019 pCi/L	5 pCi/L (radium combined)	0.49 pCi/L	Reverse Osmosis	\$2M / \$32k
PCE	0.06 ppb	5 ppb	0.5 ppb		RWQCB managed
Uranium	0.43 pCi/L	20 pCi/L	20 pCi/L	Reverse Osmosis	\$2M / \$32K

<u>Report recommendations</u>: DWA meets all federal and state drinking water standards set to protect public health. The further reduction of the constituents is not justified. The effectiveness of additional techniques and the projected health benefits are not clear or quantifiable. As DWA is a not-for-profit public agency, all of its treatment costs are borne by its customers. No action is proposed at this time.

In accordance with requirements of Health and Safety Code (California Safe Drinking Water Act of 1996, SB 1307), a public hearing must be held.

The purpose of this public hearing is to allow the Board to accept and respond to public comments on the Report.

The Public Hearing notice was provided via:

- Home page of DWA website
- Bulletin board in DWA lobby
- Cathedral City City Hall, Palm Springs City Hall, and Desert Hot Springs City Hall bulletin boards
- Notice in The Public Record on July 5 and 12

As of 5:00 p.m., July 14, no written or verbal comments were received from the public.

Other than conducting the hearing, no action is required with respect to the Report. Staff will notify the Division of Drinking Water to make them aware that the hearing took place.

DESERT WATER AGENCY REPORT ON SYSTEM WATER QUALITY RELATIVE TO PUBLIC HEALTH GOALS January 2013 to December 2015

BACKGROUND

Provisions of the California Health & Safety Code (see Reference #1) specify that public water systems with greater than 10,000 service connections must prepare a special report by July 1, 2016 if their water quality measurements have exceeded any Public Health Goals (PHGs). PHGs are non-enforceable goals established by the Cal-EPA's Office of Environmental Health Hazard Assessment (OEHHA). The law also requires that where OEHHA has not adopted a PHG for a constituent, the water suppliers are to use the MCLGs (Maximum Contaminant Level Goal) adopted by the U.S. Environmental Protection Agency (USEPA). Only constituents which have a California primary drinking water standard and for which either a PHG or MCLG has been set are to be addressed. (Reference 2 is a list of all regulated constituents with the MCLs and PHGs.)

The purpose of this Report is to provide consumer access to information regarding the levels of various constituents, even if they are below enforceable mandatory maximum contaminant levels (MCLs), and an estimate of cost to either reduce the constituent level or eliminate any trace of it from drinking water, regardless of how minimal the risk might be.

If a constituent was detected in the Agency's water supply between 2013 to 2015 at a level exceeding an applicable PHG or MCLG, this Report provides the information required by the law. Included is the numerical public health risk (if applicable) associated with the MCL and the PHG or MCLG, the category or type of risk to health that could be associated with each constituent, the best treatment technology available that could be used to eliminate or reduce the constituent level, and an estimate of the cost to install that treatment if it is appropriate and feasible.

WHAT ARE PHGs/MCLs/MCLGs?

Public health goals (PHGs) are based solely on public health risk assessments and are generally lower than the enforceable maximum contaminant levels (MCLs) of the primary drinking water standards. MCLs, which are established at very conservative levels, provide protection to consumers against all but very low to negligible risk and are the regulatory definition of what is considered "safe."

PHGs for non-carcinogenic chemicals in drinking water are set at a concentration "at which no known or anticipated adverse health effects will occur, with an adequate margin of safety." For carcinogens, PHGs are set at a concentration that "does not pose a significant risk of cancer." This is usually a one-in-a-million excess cancer risk

 $(1x10^{-6})$ for a lifetime of exposure. MCLGs, like PHGs, are strictly health-based and include a margin of safety. One difference, however, is that the MCLGs for carcinogens are set at zero because the USEPA assumes there is no absolutely safe level of exposure to them.

None of the practical risk-management factors that are considered in establishing MCLs are considered in establishing PHGs/MCLGs. MCLs include analytical detection capability, availability of treatment technology, benefits and costs.

PHGs/MCLGs are not enforceable and are not required to be met by any public water system. In addition to cost and technological feasibility, PHGs/MCLGs may provide a basis for revising MCLs.

HEALTH RISK CATEGORIES

Health Risk Assessments are categorized for various PHG/MCLGs. Health risks are based on long-term exposure to low levels of contaminants as would occur with drinking water, rather than high doses from a single or short-term exposure. These are the first or most sensitive adverse effects that occur when chemical exposure reaches a sufficient level and duration to produce toxicity. Basing health goals to protect against these risks also protects against risks that would occur from short-term exposure.

Numerical Public Health Risks have been assigned to carcinogenic health risk categories, whereas the cancer risk is stated in terms of excess cancer cases per million (or fewer) population. No numerical Public Health Risk has been calculated for chemicals considered non-carcinogenic.

Various Health Risk categories and specific health outcome are as follows:

Acute toxicity – adverse health effects that develop after a short-term exposure to a chemical. Exposure may last only minutes or occur over a few days.

Carcinogenic – capable of producing cancer.

Chronic Toxicity – adverse effects that usually develop gradually from low levels of chemical exposure where exposure may occur from months to years.

Developmental toxicity – adverse effects on the developing organism that may result from exposure prior to conception (either parent), during prenatal development, or postnatally to the time of sexual maturation. Adverse developmental effects may be detected at any point in the life span of the organism. The majority manifestations include: (1) death of the developing organism, (2) structural abnormality (birth defects), (3) altered growth, and (4) functional deficiency.

Neurotoxic – capable of destroying or adversely affecting the nervous system, or interfering with nerve signal transmission. Effects may be reversible (for example, effects on chemicals that carry nerve signals across gaps between nerve cells) or irreversible (destruction of nerve cells).

Reproductive effects – the occurrence of adverse effects on the reproductive system of females or males that may result from exposure to environmental agents. The toxicity may cause changes to the female or male reproductive organs, the regulating endocrine system, or pregnancy outcomes. Examples of such toxicity may include adverse effects on onset of puberty, egg production and transport, menstrual cycle normality, sexual behavior such as sexual urge, and lowered fertility, sperm production, length of pregnancy, and milk production.

WATER QUALITY DATA CONSIDERED

All water quality data collected within our system between January 2013 through December 2015, has been considered for the purpose of determining compliance with the primary drinking water standards. Data from 2015 is summarized in our 2015 Annual Water Quality Report which has already been distributed to our customers (Reference #3).

BEST AVAILABLE TREATMENT TECHNOLOGY & COST ESTIMATES

Both the USEPA and State Water Resources Control Board (SWRCB) adopt what are known as BATs or Best Available Technologies, which are the best known methods of reducing contaminant levels to the MCL. Costs of these BATs are difficult to predict. Estimating the costs to reduce a constituent to zero is difficult, if not impossible. Some approved analytical methods may not be able to verify that levels have indeed been reduced beyond the method detection limit. However, since many PHGs and all MCLGs are set much lower than the MCL, it is not always possible nor feasible to determine what treatment is needed to further reduce a constituent downward to or near the PHG or MCLG. In some cases, installing treatment to try and further reduce very low levels of one constituent may have adverse effects on other aspects of water quality.

CONSTITUENTS DETECTED THAT EXCEED A PHG OR MCLG

The following constituents were detected in one or more of our drinking water sources at levels above the PHG, or if no PHG, above the MCLG.

Coliform Bacteria

During the calendar year 2015, the Agency collected an average of 98 samples each month for Coliform analysis. Occasionally, a sample was found to be positive for

coliform bacteria, but follow-up action and sample re-checks were negative. The maximum coliform bacteria count within the 3 year reporting period was 2.20%, detected in May 2015.

The MCL for coliform is 5% positive samples of all samples per month, and the MCLG is zero. The reason for the coliform drinking water standard is to minimize the possibility of the water containing pathogens, which are organisms that cause waterborne disease. Because coliform is only a surrogate indicator of the potential presence of pathogens, it is not possible to state a specific numerical health risk. While USEPA normally sets MCLGs "at a level where no known or anticipated adverse effects on persons would occur," they indicate that they cannot do so with coliforms.

Coliform bacteria are an indicator organism that are ubiquitous in nature and are not generally considered harmful. They are used because of the ease in monitoring and analysis. If a positive sample is found, it indicates a potential problem that needs to be investigated and follow up sampling is required. It is not at all unusual for a system to have an occasional positive sample. It is difficult, if not impossible, to assure that a system will never get a positive sample.

Desert Water Agency currently utilizes chlorine for disinfection. Chlorine residuals are continually maintained within those portions of the distribution system served by surface water, while chlorine residuals for the remaining portions of the distribution system are maintained on an as required basis only.

Chlorine disinfection is only one method that this Agency utilizes to insure the water served is microbiologically safe. Other equally important measures that this Agency has implemented include an effective cross-connection control program, preventative maintenance, main flushing, proper placement and construction of wells, facility upgrades, effective monitoring and surveillance programs and maintaining positive pressures within the distribution system.

With the exception of maintaining continual chlorine residuals throughout the entire distribution system, the Agency has taken the steps prescribed by State Water Resources Control Board (SWRCB) as the best available technology for coliform bacteria.

BATs have been adopted by the USEPA and SWRCB (formerly the California Dept. of Public Health) and are described in Section 64447, Title 22, California Code of Regulations (Reference #4), as the best-known methods of reducing coliform levels to the MCL. Although the BAT for coliform PHG/MCLG has been defined as a treatment techniques, there is no indication that the PHG/MCLG can ever be achieved. The BAT for the reduction of coliform could be implementation of disinfection residuals throughout the distribution system. To provide for this capability, additional groundwater disinfection facilities would need to be installed.

The initial construction cost for these facilities is estimated at \$3,381,620.00 with additional overhead and maintenance costs of \$724,064.00 per year. This would result in an approximate increased cost per service connection/customer of \$180.16.

<u>Chromium VI</u>

Chromium is a naturally occurring metallic element. It is tasteless and odorless and is most often found in the environment as a result of erosion of rocks, plants, soil, and volcanic dust. The two most common forms of naturally occurring chromium are:

Trivalent chromium (chromium-3) Hexavalent chromium (chromium-6)

Chromium-3 is essentially a dietary element found in many fruits and vegetables, meat, grain and yeast. Dietary supplements often contain chromium 3.

Chromium-6 is used to process leather, for chrome plating, manufacturing stainless steel, used as a wood preservative and in dyes and pigments. Other than occurring naturally, it can find its way into groundwater through industrial waste leaks, specifically leaks in storage facilities or disposal sites.

The primary drinking water standard (MCL) for chromium-6, as set by the SWRCB is 10 ug/L (micrograms per liter). On July 1, 2014, California added chromium-6 to the list of regulated contaminants and set the PHG at 0.02 ug/L. Per Title 22 regulations, Desert Water Agency collected initial samples for compliance regulations in 2013. In 2014 the EPA required DWA to monitor chromium-6 in selected wells for a one-year period. All wells tested during 2013 and 2014 show between 0.06 – 3.8 ug/L chromium-6, well below MCL standards.

Chromium-6 is an occupational carcinogen most often inhaled, therefore associated with lung cancer, and nasal and sinus cancer. It's also been shown to be a reproductive cancer in both men and women. The cancer risk at the PHG has been established as 1×10^{-6} , which means there could be one excess cancer case per million people. Most cancer studies have been associated with inhalation of chromium-6, but there is strong data to suggest ingestion can also have severe side effects.

The (BAT) for removing hexavalent chromium as it applies to Desert Water Agency would be reverse osmosis and will be discussed in greater detail in the Contaminant Removal section of this report.

Radium-228

Radium is a naturally occurring radioactive element found in most rocks and soil. Groundwater can contain radium leached from the bedrock surrounding the aquifers used for drinking water. There are several forms or products of decay called isotopes. Radium-228 is an isotope of radium and emits beta particle activity. It has a decay rate, or half-life of just less than 6 years.

Radium in drinking water can present a cancer risk over a long period of consumption. When ingested, radium behaves similarly to calcium and can collect in the bones and teeth. Long term exposure can increase the risk of bone cancer and leukemia. Exposure through bathing is less of a concern because the skin can minimize the penetration of beta radiation.

The primary drinking water standard (MCL) for combined radium-226 + radium-228 is 5 pCi/L. The PHG for radium-228 is 0.019 pCi/L. Several of DWAs wells and three surface water sites were tested for radium-228 in 2013. Data ranged between non detect to the high of 0.49 pCi/L. All the data fell below the detection limit for reporting of 1 pCi/L, so was not transmitted to the state for their database. The numerical cancer risk ranking for radium-228 is 1 X 10^{-6} , which means there could be one excess cancer case per million people.

The BAT for removing radium-228, as it applies to Desert Water Agency, would be reverse osmosis and will be discussed in greater detail in the Contaminant Removal section of this report.

Tetrachloroethylene (PCE)

Tetrachloroethylene is a manufactured substance that is not found in nature. At room temperature, it is a nonflammable liquid that easily evaporates into the air. It has a distinctive sharp-sweet odor that most people can detect at 1 part PCE per million parts of air. It's primary use is for dry cleaning. It is also used as a metal degreaser in the automotive industry and may be found in spot removers and paint strippers. Though a chemically stable solvent, it is volatile and can enter the body through inhalation and skin contact. It has been detected in drinking water supplies from contaminated groundwater. The OEHHA has established the PHG for PCE at 0.06 ug/L. The MCL for drinking water is 5 ug/L.

Effects of exposure to PCE include neurological effects like dizziness, headache, sleepiness, unconsciousness, mood or behavioral changes and impaired motor skills. Exposure can cause kidney and liver dysfunction and irritation to the eyes and upper respiratory tract. It is a carcinogen associated with liver, kidney and bladder cancer. The cancer risk is 1×10^{-6} which means there could be one excess cancer case per

million people. Because of the cancer and toxicity risks, PCE was banned in 2007 for all new dry cleaning machines. Older PCE using machines were to be shut down as of 2010 and use of PCE will be completely discontinued in California by 2023. As a result of this action, PCE detection in the air has been reduced.

Desert Water Agency pumps water directly from the unconfined Whitewater River Subbasin Aquifer. This aquifer generally flows underground in a south easterly direction. In 1987, levels of PCE that exceeded the MCL were detected at Well 6. The source of the contamination was a drycleaner approximately 800 feet away. The well has since been taken out of service, pending abatement that began in 1996.

In 2013, PCE was detected at Well 32, which is east and slightly south of Well 6. The amount of PCE that was detected was 0.5 ug/L which is ten times less than the MCL, but right at the detection limit for reporting. Subsequent quarterly monitoring for one year did not detect the presence of PCE and the well continues to be in use.

The California Regional Water Quality Control Board (RWQCB) is the lead agency involved with the remediation at Well 6. The financial burden for the cleanup using BAT, including collecting soil samples and an abatement plan, is the responsibility of the drycleaner. Should future sampling at Well 32 show an excess of PCE, and if abatement is necessary, the expense will be covered by the same BAT overseen by the RWQCB.

<u>Uranium</u>

Uranium is a silvery white metallic radioactive element that is present, to some degree, in almost everything in our environment. It occurs naturally in granites and other mineral deposits and it generally finds its way into water by leaching from these natural deposits. As established by OEHHA, the PHG for uranium is 0.43 pCi/L (pico Curies per liter of water). The MCL or drinking water standard for uranium is 20 pCi/L. Laboratory analysis on our groundwater and surface water sources have indicated uranium levels ranging from 2.5 pCi/L to 20 pCi/L. Uranium has a health risk category of Carcinogen and it usually effects the kidneys. Health risk categories are based on experimental animal testing data evaluated by the USEPA. Cancer risk is stated numerically as 1 X 10⁻⁶, which means there could be one excess cancer case per million people.

Between 2013 and the end of 2015, 27 well sites and 1 surface water site were monitored for Uranium. Two other surface water sites did not require Uranium testing. All 28 sites sampled exceeded the PHG for uranium yet all levels of uranium detected were below or at the MCL at all times. Well 16 reported a result of 20 pCi/L in December 2014 requiring quarterly monitoring for 12 months. The quarterly sampling was completed in December 2015 with an average Uranium of 17 pCi/L, meeting drinking water standards.

Contaminant Removal

There are many steps that can be taken to achieve compliance with state and federal regulations. Desert Water Agency continues to remain in compliance and deliver safe drinking water to our customers. To protect the water system and continue to deliver safe drinking water, it may be necessary to reduce or remove the contaminant.

Desert Water Agency has explored the best available technology (BAT) to remove hexavalent chromium, radium-228 and uranium. Each of these contaminants can be removed or reduced by using the same technology; reverse osmosis (RO). RO is an accepted method for removal of many contaminants and once installed at a well site, it has the ability to remove several components, including those that pose no risk at all.

To remove uranium, radium-228 and chromium-6 from one site, the estimated initial construction cost is approximately \$2,016,000, with an estimated additional overhead and maintenance cost of \$31,508. Uranium is the most frequent occurring contaminant and if the Agency had to remove uranium throughout the system, the costs would be estimated at \$70,650,000 for initial construction and \$1,071,510 for additional overhead and maintenance costs. If surface water samples have high turbidity, they must first be filtered for reverse osmosis to be effective and the above figures do not reflect this additional expense. To meet these expenses, the Agency would have to increase the cost per service connection/customer more than \$3,230.

RECOMMENDATION FOR FURTHER ACTION

The Desert Water Agency meets all Federal and State Drinking Water Standards set to protect public health.

To further reduce the levels of constituents identified in this Report that are already significantly below the health-based Maximum Contaminant Levels, additional costly treatment processes would be required. As the effectiveness of additional treatment processes is uncertain, and the health protection benefits of any reduction are not clear, and may not be quantifiable, additional treatment processes are not justified. Therefore, no action is proposed.

References Attached:

- #1 Excerpt from California Health & Safety Code: Section 116470(b)
- #2 Table of Regulated Contaminants with MCL, PHG, or MCLGs, updated September 23, 2015
- *#3 DWA 2015 Consumer Confidence Report*
- #4 Excerpt from Health risk Information for Public Health goal Exceedance Reports; February 2016

Reference #1

NOTE: This publication is meant to be an aid to the staff of the CDHS Drinking Water Program and cannot be relied upon by the regulated community as the State of California's representation of the law. The published codes are the only official representation of the law. Refer to the published codes whenever specific citations are required.

Health and Safety Code §116470

(a) As a condition of its operating permit, every public water system shall annually prepare a consumer confidence report and mail or deliver a copy of that report to each customer, other than an occupant, as defined in Section 799.28 of the Civil Code, of a recreational vehicle park. A public water system in a recreational vehicle park with occupants as defined in Section 799.28 of the Civil Code shall prominently display on a bulletin board at the entrance to or in the office of the park, and make available upon request, a copy of the report. The report shall include all of the following information:

(1) The source of the water purveyed by the public water system.

(2) A brief and plainly worded definition of the terms "maximum contaminant level," "primary drinking water standard," and "public health goal."

(3) If any regulated contaminant is detected in public drinking water supplied by the system during the past year, the report shall include all of the following information:

(A) The level of the contaminant found in the drinking water, and the corresponding public health goal and primary drinking water standard for that contaminant.

(B) Any violations of the primary drinking water standard that have occurred as a result of the presence of the contaminant in the drinking water and a brief and plainly worded statement of health concerns that resulted in the regulation of that contaminant.

(C) The public water system's address and phone number to enable customers to obtain further information concerning contaminants and potential health effects.

(4) Information on the levels of unregulated contaminants, if any, for which monitoring is required pursuant to state or federal law or regulation.

(5) Disclosure of any variances or exemptions from primary drinking water standards granted to the system and the basis therefor.

(b) On or before July 1, 1998, and every three years thereafter, public water systems serving more than 10,000 service connections that detect one or more contaminants in drinking water that exceed the applicable public health goal, shall prepare a brief written report in plain language that does all of the following:

(1) Identifies each contaminant detected in drinking water that exceeds the applicable public health goal.

(2) Discloses the numerical public health risk, determined by the office, associated with the maximum contaminant level for each contaminant identified in paragraph (1) and the numerical public health risk determined by the office associated with the public health goal for that contaminant.

(3) Identifies the category of risk to public health, including, but not limited to, carcinogenic, mutagenic, teratogenic, and acute toxicity, associated with exposure to the contaminant in drinking water, and includes a brief plainly worded description of these terms.

(4) Describes the best available technology, if any is then available on a commercial basis, to remove the contaminant or reduce the concentration of the contaminant. The public water system may, solely at its own discretion, briefly describe actions that have been taken on its own, or by other entities, to prevent the introduction of the contaminant into drinking water supplies.

Reference #1

1

NOTE: This publication is meant to be an aid to the staff of the CDHS Drinking Water Program and cannot be relied upon by the regulated community as the State of California's representation of the law. The published codes are the only official representation of the law. Refer to the published codes whenever specific citations are required.

(5) Estimates the aggregate cost and the cost per customer of utilizing the technology described in paragraph (4), if any, to reduce the concentration of that contaminant in drinking water to a level at or below the public health goal.

(6) Briefly describes what action, if any, the local water purveyor intends to take to reduce the concentration of the contaminant in public drinking water supplies and the basis for that decision.

(c)Public water systems required to prepare a report pursuant to subdivision (b) shall hold a public hearing for the purpose of accepting and responding to public comment on the report. Public water systems may hold the public hearing as part of any regularly scheduled meeting.

(d)The department shall not require a public water system to take any action to reduce or eliminate any exceedance of a public health goal.

(e)Enforcement of this section does not require the department to amend a public water system's operating permit.

(f) Pending adoption of a public health goal by the Office of Environmental Health Hazard Assessment pursuant to subdivision (c) of Section 116365, and in lieu thereof, public water systems shall use the national maximum contaminant level goal adopted by the United States Environmental Protection Agency for the corresponding contaminant for purposes of complying with the notice and hearing requirements of this section.

(g)This section is intended to provide an alternative form for the federally required consumer confidence report as authorized by 42 U.S.C. Section 300g-3(c).

MCLs, DLRs, and PHGs for Regulated Drinking Water Contaminants

(Units are in milligrams per liter (mg/L), unless otherwise noted.)

Last Update: September 23, 2015

This table includes:

California's maximum contaminant levels (MCLs)

Detection limits for purposes of reporting (DLRs)

Public health goals (PHGs) from the Office of Environmental Health Hazard Assessment (OEHHA)

Also, PHGs for NDMA and 1,2,3-Trichloropropane (which are not yet regulated) are included at the bottom of this table.

	MCL	DLR	PHG	Date of PHG
Chemicals with MCLs in 22 Co	CR §64431 -	-Inorganic	Chemicals	
Aluminum	1 1	0.05	0.6	2001
Antimony	0.006	0.006	0.02	1997
Antimony			0.0007	2009 draft
Arsenic	0.010	0.002	0.000004	2004
Asbestos (MFL = million fibers per liter; for fibers >10 microns long)	7 MFL	0.2 MFL	7 MFL	2003
Barium	1	0.1	2	2003
Beryllium	0.004	0.001	0.001	2003
Cadmium	0.005	0.001	0.00004	2006
Chromium, Total - OEHHA withdrew the 0.0025-mg/L PHG	0.05	0.01	withdrawn Nov. 2001	1999
Chromium, Hexavalent	0.010	0.001	0.00002	2011
Cyanide	0.15	0.1	0.15	1997
Fluoride	2	0.1	1	1997
Mercury (inorganic)	0.002	0.001	0.0012	1999 (rev2005)*
Nickel	0.1	0.01	0.012	2001
Nitrate (as nitrogen, N)	10 as N	0.4	45 as NO3 (=10 as N)	1997
Nitrite (as N)	1 as N	0.4	1 as N	1997
Nitrate + Nitrite (as N)	10 as N	<u></u>	10 as N	1997
Perchlorate	0.006	0.004	0.001	2015
Selenium	0.05	0.005	0.03	2010
Thallium	0.002	0.001	0.0001	1999 (rev2004)
Copper and Lead	i, 22 CCR §6	64672.3	-	
Values referred to as MCLs for lead and co called "Action Levels" und				they are
Copper	1.3	0.05	0.3	2008
Lead	0.015	0.005	0.0002	2009

Reference #2

[units are picocuries per liter (pCi/L), u	inless otherwis	se stated; r	n/a = not app	licable]
Gross alpha particle activity - OEHHA		1	Т	1
concluded in 2003 that a PHG was not	15	3	none	n/a
practical				-
Gross beta particle activity - OEHHA	1000			
concluded in 2003 that a PHG was not	4 mrem/yr	4	none	n/a
practical Radium-226			0.05	0000
Radium-228		1	0.05	2006
Radium-226 + Radium-228	5	1	0.019	2006
Strontium-90	8	2	0.35	2006
Tritium	20,000	1,000	400	2008
Uranium	20,000	1,000	0.43	2000
Chemicals with MCLs in 22 (and the second second	2001
(a) Volatile Organ	nic Chemicals	s (VOCs)		
Benzene	0.001	0.0005	0.00015	2001
Carbon tetrachloride	0.0005	0.0005	0.0001	2000
1.2 Dichlerebenzene	0.0	0.0005		1997
1,2-Dichlorobenzene	0.6	0.0005	0.6	(rev2009)
1,4-Dichlorobenzene (p-DCB)	0.005	0.0005	0.006	1997
1,1-Dichloroethane (1,1-DCA)	0.005	0.0005	0.003	2003
1,2-Dichloroethane (1,2-DCA)	0.0005	0.0005	0.0004	1999 (rev2005)
1,1-Dichloroethylene (1,1-DCE)	0.006	0.0005	0.01	1999
cis-1,2-Dichloroethylene	0.006	0.0005	0.1	2006
trans-1,2-Dichloroethylene	0.01	0.0005	0.06	2006
Dichloromethane (Methylene chloride)	0.005	0.0005	0.004	2000
1,2-Dichloropropane	0.005	0.0005	0.0005	1999
1,3-Dichloropropene	0.0005	0.0005	0.0002	1999 (rev2006)
Ethylbenzene	0.3	0.0005	0.3	1997
Methyl tertiary butyl ether (MTBE)	0.013	0.003	0.013	1999
Vonochlorobenzene	0.07	0.0005	0.07	2014
Styrene	0.1	0.0005	0.0005	2010
1,1,2,2-Tetrachloroethane	0.001	0.0005	0.0001	2003
Tetrachloroethylene (PCE)	0.005	0.0005	0.00006	2001
Foluene	0.15	0.0005	0.15	1999
1,2,4-Trichlorobenzene	0.005	0.0005	0.005	1999
,1,1-Trichloroethane (1,1,1-TCA)	0.2	0.0005	1	2006
1,1,2-Trichloroethane (1,1,2-TCA)	0.005	0.0005	0.0003	2006
Trichloroethylene (TCE)	0.005	0.0005	0.0017	2009
Trichlorofluoromethane (Freon 11)	0.15	0.005	1.3	2014
,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 13)	1.2	0.01	4	1997 (rev2011)
/inyl chloride	0.0005	0.0005	0.00005	2000

Xylenes	1.75	0.0005	1.8	1997
(b) Non-Volatile Synthe	etic Organic C	hemicals (SOCs)	
Alachlor	0.002	0.001	0.004	1997
Atrazine	0.001	0.0005	0.00015	1999
Bentazon	0.018	0.002	0.2	1999 (rev2009
Benzo(a)pyrene	0.0002	0.0001	0.000007	2010
Carbofuran	0.018	0.005	0.0017	2000
Carbofuran			0.0007	2015 draf
Chlordane	0.0001	0.0001	0.00003	1997 (rev2006)
Dalapon	0.2	0.01	0.79	1997 (rev2009)
1,2-Dibromo-3-chloropropane (DBCP)	0.0002	0.00001	0.0000017	1999
2,4-Dichlorophenoxyacetic acid (2,4-D)	0.07	0.01	0.02	2009
Di(2-ethylhexyl)adipate	0.4	0.005	0.2	2003
Di(2-ethylhexyl)phthalate (DEHP)	0.004	0.003	0.012	1997
Dinoseb	0.007	0.002	0.012	1997 (rev2010)
Diquat	0.02	0.004	0.015	2000
Diquat		1.04	0.006	2015 draf
Endrin	0.002	0.0001	0.0018	1999 (rev2008)
Endrin			0.0003	2015 draff
Endothal	0.1	0.045	0.094	2014
Ethylene dibromide (EDB)	0.00005	0.00002	0.00001	2003
Glyphosate	0.7	0.025	0.9	2007
Heptachlor	0.00001	0.00001	0.000008	1999
Heptachlor epoxide	0.00001	0.00001	0.000006	1999
Hexachlorobenzene	0.001	0.0005	0.00003	2003
Hexachlorocyclopentadiene	0.05	0.001	0.002	2014
indane	0.0002	0.0002	0.000032	1999 (rev2005)
Methoxychlor	0.03	0.01	0.00009	2010
Molinate	0.02	0.002	0.001	2008
Dxamyl	0.05	0.02	0.026	2009
Pentachlorophenol	0.001	0.0002	0.0003	2009
Picloram	0.5	0.001	0.5	1997
Picloram	1		0.166	2015 draft
Polychlorinated biphenyls (PCBs)	0.0005	0.0005	0.00009	2007
Simazine	0.004	0.001	0.004	2001
2,4,5-TP (Silvex)	0.05	0.001	0.003	2014
2,3,7,8-TCDD (dioxin)	3x10 ⁻⁸	5x10 ⁻⁹	5x10 ⁻¹¹	2010
hiobencarb	0.07	0.001	0.07	2000
hiobencarb			0.042	2015 draft
oxaphene	0.003	0.001	0.00003	2003
Chemicals with MCLs in 22 CCF	R §64533—Di	sinfection l	Byproducts	
otal Trihalomethanes	0.080	1	0.0008	2010 draft

Reference #2

Bromodichloromethane		0.0010	10 00 10 00 00	
Bromoform	1111-4	0.0010		1000
Chloroform		0.0010		
Dibromochloromethane		0.0010		
Haloacetic Acids (five) (HAA5)	0.060	1		
Monochloroacetic Acid	· · · ·	0.0020		
Dichloroacetic Adic		0.0010		
Trichloroacetic Acid		0.0010		
Monobromoacetic Acid		0.0010		
Dibromoacetic Acid		0.0010		
Bromate	0.010	0.0050**	0.0001	2009
Chlorite	1.0	0.020	0.05	2009
Chemicals with PHGs established currently regulated			nts.	
N-Nitrosodimethylamine (NDMA)			0.000003	2006
1,2,3-Trichloropropane			0.0000007	2009
*OEHHA's review of this chemical during in the PHG.	the year indicate	ed (rev20XX)	resulted in no	o change
**The DLR for Bromate is 0.0010 mg/L fo Revision 2.0, 321.8, or 326.0.	r analysis perfor	med using E	PA Method 3	17.0



Facing New Challenges Together

Over the past year, my first serving you as General Manager, we've seen some incredible changes, both in our community and the water industry. The much-anticipated El Niño generated excitement and higher water levels in some Northern California reservoirs, but did not end our historic drought. The costs to provide water throughout the state are increasing dramatically, as strict new environmental requirements and water quality standards create the need for new infrastructure and treatment. The importance of water to our lifestyle and economy has never been clearer.

Tackling these challenges together with you, our customers, is more important than ever. You have answered the call, achieving unprecedented levels of conservation, and making meaningful changes to the way you use precious water resources. Driving around Palm Springs and Cathedral City, I've noticed more and more desert landscaping. I am proud that this is due in part to our turf buy back grant program. We hope that this program and others like it have a snowball effect. Offering information and rebates to help save water is one important way we will continue to serve customers.

While conservation is always a focus, it is only part of what we do here at Desert Water. Our most important job is to serve you high-quality water that you can depend on every time you turn on the tap. Our team is on call around the clock, seven days a week to ensure the safety and reliability of your supply.

We are tasked with maintaining a system that has little room for error. While our agency and our customers have made investments in the right infrastructure for our region, many of our pipelines are older than the average Palm Springs resident. Fixing and replacing older pipelines and operating in a highly regulated state, all at a time when we are selling less water, creates financial challenges, but it is essential to the long-term viability of Desert Water. While we operate and maintain this system, it belongs to you, our customer. Continuing to invest in it will help ensure that we leave the next generation with the same opportunity to thrive.

Serving as stewards of your local supply is also essential to protecting this opportunity. Desert Water Agency has been blessed to overlie an aquifer filled with healthy water that requires only a touch of chlorine before delivery. Our aquifer has not seen declines in the face of the severe drought, thanks to groundwater replenishment efforts that protect the health of our groundwater basin and help secure your future supply. Imported water plays a key role in our system now, and will for years to come.

As we head into the future, we will work to balance the needs of our community and protect our most precious resource. We encourage you to engage with us at our bimonthly public meetings, on social media, by phone or even at our offices.

Hearing what matters to our community helps us serve you better. It is our privilege to provide you this service.

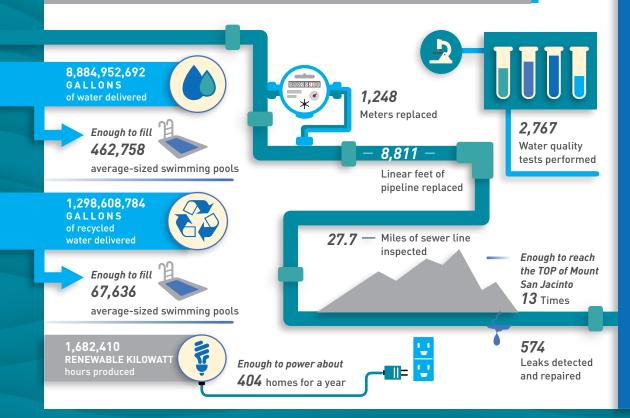


Mark J. Krause

Mark S. Krause General Manager and Chief Engineer

June 2016

Desert Water Agency Year at a Glance



Your Water Quality

Construction Desert Water Agency is committed to serving healthy, safe drinking water and to keeping you informed about the quality of the water that is delivered to your tap. Our dedicated staff samples water daily to ensure that it meets all standards. As drought conditions in California continue to affect water supply, it is important for us to support our customers and work together to protect this precious local resource.

 \sim By explaining the sources of our water and defining the constituents in the water, this report is our way of providing clear, transparent information to our customers. To make going through our report easier for customers, we've included informational videos; we hope that you enjoy them. The board and staff of DWA take their responsibility to provide high-quality water very seriously and we're proud to report that our water meets and beats the strictest standards in the nation. If you have any questions when reviewing this report, please contact Beth Amheiser, laboratory director, at (760) 323-4971 ext. 169.



Desert Water Agency

Established in 1961, Desert Water Agency (DWA) is a public nonprofit agency and State Water Contractor serving residents and visitors in a 325-square-mile area that includes parts of Cathedral City, Palm Springs, and Desert Hot Springs, as well as some unincorporated areas of Riverside County. The Agency's responsibility is to provide a safe, reliable water supply to its service area while protecting its interests in the State Water Project. DWA's ratepayers are represented by a five-member elected board, which makes policy decisions on their behalf.



Water Sources

Water is a precious and limited resource; only about .007 percent of the water found on Earth is readily accessible to treat for drinking.

Desert Water Agency's groundwater comes from the Whitewater River Sub basin of the Coachella Valley Groundwater Basin, a natural reservoir storing water beneath the valley floor. Mountain streams also bring water by way of Chino Creek, Falls Creek and Snow Creek. Surface water sources are operated under criteria for avoiding filtration.

Natural groundwater replenishment is supplemented with Colorado River water, which is imported through the Colorado River Aqueduct and percolated into the groundwater basin via recharge ponds near Windy Point and in Mission Creek.



Water Quality Monitoring

Unless otherwise noted, data presented in this report was obtained between January 1, 2015, and December 31, 2015. Water quality monitoring was performed in accordance with regulations established by the State Water Resources Control Board Division of Drinking Water and the U.S. Environmental Protection Agency.

In some cases, the State Water Resources Control Board allows DWA to test for certain contaminants less than once a year, because the Agency's system is not susceptible to these contaminants, or because the levels recorded are expected to vary little from year to year.

Water Source Information

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.





Source Water Assessment

 \sim A Source Water Assessment Plan (SWAP), last updated in October 2007, is available at our office. This plan is an assessment of the delineated area around our listed sources through which contaminants, if present, could migrate and reach our source water. It also includes an inventory of potential sources of contamination within the delineated area and a determination of the water supply's susceptibility to contamination by the identified potential sources.

✓ These sources are considered vulnerable to activities normally associated with residential, commercial and industrial development. However, all water provided by Desert Water Agency meets all U.S. EPA and SWRCB guidelines. To review the SWAP, please contact our office during regular business hours.

Questions? For more information about this report, or for any questions relating to your drinking water, please call Beth Amheiser, laboratory director, at (760) 323-4971 ext. 169.

Chromium-6: What you need to know

Desert Water Agency is continually monitoring our water system, performing thousands of tests per year to make sure the drinking water we deliver to customers meets or exceeds all public health standards.

One of the things we test for is chromium-6, also known as hexavalent chromium, a mineral that occurs naturally in the Coachella Valley's groundwater. In 2014, California became the first and only state in the nation to set a drinking water standard for chromium-6.

DWA is fortunate because its water supplies are below the state standard of 10 parts per billion. Any chromium-6 that is present in untreated water is diluted when Colorado River imports are blended with groundwater in our portion of the Coachella Valley Groundwater Basin. Because the success of our groundwater recharge program means our water already complies with this new state regulation, DWA is one of the only water providers in the region that will not have to perform additional treatment or build costly new facilities.



The state continues to monitor possible long-term health risks of chromium-6. However, there is no immediate health threat, even in areas with levels of the mineral above the state's maximum contaminant level. DWA will continue to prioritize water quality, to ensure that families and businesses in the communities we serve have access to a safe and reliable water supply.

Did you know? ~~~

Desert Water Agency tests its water for constituents in concentrations as small as one part per billion, meaning one part of a substance in one billion molecules of water.

That's equivalent to:

- One drop of water in an Olympic swimming pool
- One penny in \$10 million
- One second in 32 years
- One foot on a trip to the moon!

Since the 1980s, DWA has committed to sustainability. Today, those practices include:

- Supplying recycled water to all the public golf courses we serve, saving millions of gallons of potable water each year.
- Powering 100% of daytime operations at the DWA headquarters and recycled water plant with solar power.
- Generating almost two million kilowatts of power through hydroelectric and solar sources to offset energy costs.

These commitments are beneficial to the ratepayer as well as the environment, protecting resources while helping to keep rates as low as possible.

Investing to Prevent Leaks

Desert Water has some pipelines that have been in place since the Great Depression, and the overwhelming majority of pipelines were installed before the Berlin Wall came down. Times have changed – and our system needs to as well. Many of the older pipelines are smaller in diameter than is ideal, and they are made of materials that aren't as durable as what is installed today.

Our team has determined that the older, unlined steel pipes are responsible for more than 90 percent of leaks in our system. This is a staggering figure, particularly given that unlined steel pipes make up only 20 percent of our system. In 2015 alone, about 10.9 million gallons were lost to system leaks. Our Board of Directors and staff have committed to a proactive replacement program that will target the unlined steel pipelines, reducing leak frequency, water loss, and the staffing costs that result from emergency repairs.

Emergency replacements can cost five times more than planned work. Replacing more than a mile of pipeline every year is going to cost about \$4 million annually, but these pipelines will need to be replaced regardless of planning. By taking this proactive approach to system maintenance, DWA will save customers money over the long term. As a not-for-profit government agency, DWA can only charge what it costs to provide service. A rate study is now underway to determine current costs and evaluate whether rate changes are necessary. The pipeline replacement program is just one factor that is being weighed as the Board of Directors evaluates potential water rate changes. You will receive a notification by mail and have an opportunity to provide input before any changes are made to the rates.



Common Questions on Water Quality

Why does tap water sometimes smell funny? ~~

When your water tastes or smells funny, the problem may or may not be in the water. Odors might actually be coming from your sink drain, where bacteria grow on hair, soap, food, and other things that get trapped. Odorous gases get stirred up when water pours into the drain. Odor can also come from bacteria growing on devices such as water heaters.

Why does tap water have a faint chlorine smell?

A small amount of chlorine is added to meet drinking water regulations. It is a disinfectant that is used to provide continuous protection against possible microbial contamination. Regulations limit the amount of chlorine added to tap water so that the water is safe to drink. A slight smell or taste of chlorine is normal.

 $\mathsf{T}|\mathsf{P}$ An easy way to reduce the chlorine smell is to let water sit in a glass for a few minutes. Then, put the water in a covered container and chill in the refrigerator. Cold water tastes and smells better than water at room temperature.

Visit dwa.org/2015wqr to see a video interview.

Why does my water have a rotten egg or sulfur smell?

This smell can occur under some conditions when sulfate is present in the water supply. Improperly maintained water heaters or lack of water circulation within a residence during warmer months are circumstances that may contribute to this odor.

FACT If the odor is only present in hot water, then the odor may be a result of sulfur-reducing bacteria growing in the water heater tank.

Why does my water look cloudy? -

Occasionally, tiny air bubbles in tap water cause a cloudy appearance. Air dissolves into water when pressurized, which occurs in the groundwater basin and in the water pipes that deliver water to your tap. These bubbles dissipate after a few moments in a glass.

Do I need a softener?

No. Desert Water Agency tap water meets all drinking water standards and does not need to be conditioned or filtered. DWA does not prohibit the use of water softeners, but Agency ordinance does prohibit the discharge of excess salt down the drain. Discharged salt can harm the groundwater and may require additional treatment, which would increase the future costs of providing sewer and water services.



In 2015: A Big Year For Conservation at DWA

Despite forecasts for a wet winter, California is still facing drought conditions. As a whole, the state fell just short of Governor Brown's 25-percent conservation target. Desert Water Agency customers saved 26.5 precent compared to 2013. Due to climate conditions and the continued need to save, the State Water Board extended the restrictions through January 2017. Desert Water Agency expects to have its new conservation standard by the end of June 2016.

Desert Water Agency plans to work with customers to achieve the state's conservation mandate. Our team is already recycling every drop of wastewater we receive, replenishing the aquifer with available imports, and offering rebates to support our customers.

TIPS FOR BIG SAVINGS



- ➔ Install a SMART IRRIGATION CONTROLLER to cut water use by 15%.
- → WATER AT NIGHT and turn off sprinklers when it rains.



- → CHECK FOR LEAKS: fixing them
- can save water and money.
- → Go online to view our MANDATORY RESTRICTIONS.

For additional conservation tips and programs, visit www.dwa.org

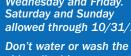


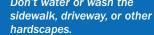
THE FOLLOWING MANDATORY RESTRICTIONS ARE STILL IN EFFECT AS OF JUNE 7, 2016.



Water only before 7 a.m. and after 7 p.m. on Monday, Wednesday and Friday. Saturday and Sunday allowed through 10/31/16.







Don't water during or 48 hours after rain.



Restaurants can only serve water upon request.



Hotels must give guests the option to skip daily laundry.

For the most current information, please visit www.dwa.org/restrictions

Regulatory Information

Contaminants that may be present in source water include:

- *Microbial contaminants*, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- *Inorganic contaminants*, such as salts and metals, that can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- **Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals, that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
- **Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production and mining activities.



 \sim In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) and the State Water Resources Control Board (SWRCB) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. USEPA regulations also establish limits for contaminants in bottled water that provide protection for public health.

 \sim Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects is available through the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers.

USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).



If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Desert Water Agency is responsible for providing high-quality drinking water but cannot control the variety of materials used in your property's plumbing. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.



Sampling Results

During the past year we have taken more than 2,000 water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants. **The tables below show only those contaminants that were detected in the water.** The State allows us to monitor for certain substances less often than once per year because the concentrations of these substances do not change frequently. Some of our data, although representative, are more than one year old. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

	Unit of	MCL	PHG	Grou	ındwater Sc	ource	Surf	ace Water S	ource	Dis	tribution Sy	/stem	Viola	tion	Likely source of
Substance	Measure	[MRDL]	(MCLG) [MRDLG]	Year Sampled	Amount Detected*	Range (Low-High)	Year Sampled	Amount Detected*	Range (Low-High)	Year Sampled	Amount Detected*	Range (Low-High)	Yes	No	contamination
Barium	mg/L	1	2	2013	0.08	ND - 0.16	NA	NA	NA	NA	NA	NA		*	Erosion of natural desposits
Chlorine	mg/L	[4.0 as Cl ₂]	[4 as Cl ₂]	NA	NA	NA	NA	NA	NA	2015	0.41 ¹	ND-1.98		★	Drinking water disinfectant added for treatment
Fluoride	mg/L	2.0	1	2013- 2015	0.44	0.13- 0.83	2015	ND	ND	NA	NA	NA		*	Erosion of natural desposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Gross Alpha Particle Activity	pCi/L	15	(0)	2010- 2015	10	3.0-17	2013	ND	ND	NA	NA	NA		\star	Erosion of natural desposits
Haloacetic Acids [HAA5]	µg/L	60	NONE	NA	NA	NA	NA	NA	NA	2015	18.8 ¹	ND-20.9		\star	By-product of drinking water disinfection
Hexavalent Chromium	µg/L	10	0.02	2014	1.06	0.062- 3.8	NA	NA	NA	NA	NA	NA		*	Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities; erosion of natural deposits.
Iron	µg/L	300	NONE	2013	40	ND-540	2015	45	ND-180	NA	NA	NA		*	Leaching from natural deposits; industrial waste

mg/L	45	45	2015	5.0	ND-17	2015	ND	ND	NA	NA	NA		★	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
pCi/L	5 ³	0.019	2009- 2013	.03	ND-1.55	NA	NA	NA	NA	NA	NA		★	Erosion of natural deposits.
%	more than 5% of monthly samples are positive	(0)	NA	NA	NA	NA	NA	NA	2015	0.34	NA		★	Naturally present in the environment
µg/L	80	NONE	2014	3.5	NA	NA	NA	NA	2015	21.6 ¹	ND-29		\star	By-product of drinking water disinfection
NTU	5	NONE	2013	0.4	ND-3.7	2015	0.46	0.21-1.08	2015	0.07	ND-0.15		★	Soil runoff
pCi/L	20	0.43	2008- 2015	12	2.5-20	2013	9.4	NA	NA	NA	NA		\star	Erosion of natural deposits.
mg/L	250	NONE	2013	34	5.5-84	2015	1.9	1.2-2.3	NA	NA	NA		\star	Runoff/leaching from natural deposits; seawater influence
Units	15	NONE	2013	ND	NA	2015	ND	ND	2015	0.09	ND-1.2		\star	Naturally occuring organic materials
mg/L	0.5	NONE	2013	0.01	ND-0.21	2014	ND	NA	NA	NA	NA		*	Municipal and industrial waste discharge
TON	3	NONE	2013	1	NA	2015	1	NA	2015	1	NA		★	Naturally occuring organic materials
μS/cm	1600	NONE	2013	560	240-940	2015	180	110-280	NA	NA	NA		★	Substances that form ions when in water; seawater influence
mg/L	500	NONE	2013	92	20-210	2015	4	1.3-8.4	NA	NA	NA		\star	Runoff/leaching from natural deposits; industrial wastes
mg/L	1000	NONE	2013	360	140-610	2015	100	74-140	NA	NA	NA		\star	Runoff/leaching from natural deposits
AI	Non- aggressive	NONE	2009	12.5	12-5	2009	10.84	10.65- 11.19	NA	NA	NA		★	Influenced by hydrogen, carbon, oxygen, and temperature
mg/L	NONE	NONE	2013	130	98-170	2015	88	55-130	NA	NA	NA		*	Function of carbonate, hydroxide, and bicarbonate; naturally occuring
	pCi/L pCi/L % μg/L pCi/L pCi/L mg/L mg/L μS/cm mg/L mg/L mg/L AI	BBPCi/L53PCi/L53%more than smothly samples are positiveµg/L80µg/L20µg/L20µg/L20µg/L20µg/L0.5µg/L0.5µg/L1600µg/L500µg/L1000µg/L1000	3A.R.pCi/L5 ³ 0.019pCi/L5 ³ 0.019%more than 5% of smples are positive(0)%Souther(0)µg/L80NONEµTU5NONEpCi/L200.43µg/L200.43µg/L20NONEµg/L0.5NONEµg/L0.5NONEµg/L1600NONEµg/L500NONEµg/L1000NONEµg/L1000NONE	B B CircleCircleCircleCirclepCi/L5 ³ 0.0192009- 2013% $\frac{5^{96}}{8^{96}}$ (0)NA% $\frac{5^{96}}{8^{96}}$ (0)NAµg/L80NONE2014µg/L50NONE2013pCi/L200.432008-µg/L150NONE2013µg/L0.51NONE2013µg/L0.5NONE2013µg/L1600NONE2013µs/cm1600NONE2013µg/L500NONE2013µg/L1000NONE2013µg/L1000NONE2013µg/L1000NONE2013µg/L1000NONE2013µg/L1000NONE2013µg/L1000NONE2013µg/L1000NONE2013µg/L1000NONE2013µg/L1000NONE2013µg/L1000NONE2013µg/L1000NONE2013µg/L1000NONE2013µg/L1000NONE2009µg/L1000NONE2009µg/L1000NONE2009	B B CircleCircleCircleCirclepCi/L5 ³ 0.0192009; 2013.03% $\frac{5\% of}{8000hly}$ samples are positive(0)NANA% $\frac{5\% of}{800hly}$ samples are positive(0)NANAµg/L80NONE20143.5NTU5NONE20130.4pCi/L200.432008; 201312mg/L250NONE201334Units15NONE201334ing/L0.5NONE201310µS/cm1600NONE201311µS/cm1600NONE201392ing/L500NONE201392µg/L1000NONE2013360AIagnesityNONE200912.5	g GL CL CL 	GAAAAAApGi/L5 ³ 0.0192009 2013.03ND-1.55NAMmonthy smpels are positive(0)NANANANAMg/L80NONE20143.5NANAPGi/L50NONE20130.4ND-3.72015PGi/L200.432015122.5-202013PGi/L200.432015122.5-202013PGi/L2500NONE2013345.5-842015PGi/L15NONE20131ADNA2015PGi/L0.5NONE20131ADNA2015PGi/L15NONE20131ADNA2015PGi/L1600NONE20131ANA2015PGi/L1600NONE20131ANA2015PGi/L1600NONE20131A1A-6402015PGi/L1000NONE2013360140-6102015PGi/LNONE2013360140-6402015PGi/LNONE20132029212.52098PGi/L1000NONE2013360140-6102015PGi/LNONE20092013360140-6102015PGi/LNONE2009201336012.52098PGi/LNONE2013360140-61	aaaaaaapCi/L5³0.019200930.03ND-1.55NANAMs10020130.03ND-1.55NANAMs100NANANANANAM/L800NONE20143.5NANANANTU5NONE20130.4ND-3.720150.46PG/L200.432015122.5-2020139.4PG/L250NONE2013345.5-8420151.9PM/L15NONE2013345.5-8420151.9PM/L15NONE2013301NA20151.9PM/L15NONE2013301NA20151.9PM/L15NONE2013301NA20151.9PM/L1600NONE2013101NA20151.9PM/L1600NONE2013360201020151.9PM/L1600NONE2013360201020151.9PM/L1000NONE2013360201020151.9PM/L1000NONE2013360201020151.0PM/L1000NONE20133601.020151.0PM/L1000NONE20133601.02.01.0 <td< td=""><td>AAAAAAAPCi/L530.0192009-3 20130.03ND-1.55NANANAM$\frac{100}{9001100000000000000000000000000000$</td><td>A. I.A. I.</td><td>A A A A A A A A A A A A pC/L 5^3 0.019 2009 .03 ND-1.55 NA 2015 1.01 <</td><td>A. A. A</td><td>A A A</td><td>1 1 1</td></td<>	AAAAAAAPCi/L530.0192009-3 20130.03ND-1.55NANANAM $\frac{100}{9001100000000000000000000000000000$	A. I.A. I.	A A A A A A A A A A A A pC/L 5^3 0.019 2009 .03 ND-1.55 NA 2015 1.01 <	A. A	A A	1 1

Secondary Substances

es	Bicarbonate	mg/L	NONE	NONE	2013	160	120-210	2015	110	67-160	NA	NA	NA		*	Naturally occurring
Substances	Calcium	mg/L	NONE	NONE	2013	64	19-100	2015	22	12-37	NA	NA	NA		*	Contributes to water hardness; naturally occurring
er S	Hardness	mg/L	NONE	NONE	2013	210	77-320	2015	64	30-110	NA	NA	NA		\star	Naturally occurring
Other .	Magnesium	mg/L	NONE	NONE	2013	11	1.9-20	2015	3.4	ND-3.6	NA	NA	NA		*	Contributes to water hardness; naturally occuring
	Potassium	mg/L	NONE	NONE	2013	4	2.3-8.0	2015	3.5	1.7-5.3	NA	NA	NA		*	Leaching from water softeners, fertilizers and natural deposits
	рН	NA	NONE	NONE	2013	7.7	7.3-8.1	2015	7.6	7.2-8.0	2015	8.0	7.5-8.3		\star	Naturally occuring
	Sodium	mg/L	NONE	NONE	2013	30	20-78	2015	11	8.7-13	NA	NA	NA		\star	Naturally occuring
	Unit of Notification								ce Distribution System Violat				tion	Likely Source of		
Unregulated Substances	Substance	Unit of Measure	Le		Year Sampled	Amount Detected*	Range (Low-High)	Year Sampled	Amount Detected*	Range (Low-High)	Year Sampled	Amount Detected*	Range (Low-High)	Yes	No	Contamination
gula tan	Boron	μg/L	10	00	2013	2.9	ND-100	2015	ND	ND	NA	NA	NA		\star	Naturally occuring
garn garn	Chlorate	µg/L	NO	NE	2013	64	22-380	NA	NA	NA	NA	NA	NA		\star	Erosion of natural deposits
U S	Molybdenum	μg/L	NO	NE	2013	4.7	3.4-13	NA	NA	NA	NA	NA	NA		\star	Naturally occuring
	Strontium	μg/L	NO	NE	2013	250	70-450	NA	NA	NA	NA	NA	NA		\star	Naturally occuring
	Vanadium	µg/L	5	0	2013	5.4	2.0-16	2015	0.9	ND-3.7	NA	NA	NA		\star	Erosion of natural deposits
			Tap wate	er samples	were colle	ected for le	ad and co	pper analy	ses from s	ample sites	throughou	t the comm	nunity.			
		Unit of				Dist	ribution Sys	stem		Viola	tion					
	Substance	Measure	AL	PHG	Year Sampled		Detected ercetile)		oove AL/ l Sites		No		Likely	Source	of Co	ntamination
Сорр	er	mg/L	1.3	0.3	2015	0.	32	0/	'30		*					plumbing systems; discharges rosion of natural deposits
Lead		μg/L	15	0.2	2015	N	D	0/	'30		★					plumbing systems; discharges rosion of natural deposits

• Amount detected based on average of samples |¹ Highest LRAA for 2015 |² Turbidity is regulated as a TT for the surface sources (as a condition for filtration avoidance) and is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality. High turbidity can binder the effectiveness of disinfectants

cloudiness of the water. We monitor it because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants. ³ The MCL of 5 pCi/L is for combined radium (ra-226 + ra-228) |⁴ This is the highest % of positive samples collected in any one monnth during the year.

GLOSSARY

The highest level of a contaminant that is a contaminant in a known quantity of water. allowed in drinking water. Primary MCLs 1 µg/L equals 1 part per billion (see parts are set as close to the (PHGs or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water, below, which there is no NA: Not applicable. known or expected risk to health. MCLG's are set by the U.S. Environmental Protection Agency.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants. MRDLGs are set by the U.S. Environmental Protection Agency.

Microsiemens Per Centimeter (µS/cm): A measurement of the electrolytes in the water, which determines the ability of the water to requirements and recommendations apply. conduct electrical current.

Maximum Contaminant Level (MCL): Micrograms Per Liter (µg/L): A measure of per billion).

> Milligrams Per Liter (mg/L): A measure of a contaminant in a known quantity of water. 1 mg/L equals 1 part per million (see parts per million).

Nanograms per Liter (ng/L): A measurement of a contaminant in a known quantity of water. lng/L equals 1 part per trillion. (see parts per trillion).

ND: Not detected or below the detection limit for reporting.

Nephelometric Turbidity Units (NTU): A measure of cloudiness due to undissolved solids in the water. We measure turbidity because it is a good indication of the effectiveness of our filtration system and/or water quality.

Notification Level (NL): Health-based advisory levels established by the State for chemicals in drinking water that lack maximum caontaminant levels (MCLs). When chemicals are found at concentrations greater than their notification levels, certain

Parts Per Billion (PPB): One part per billion Locational Running Annual Average corresponds to one minute in 2,000 years or one penny in \$10,000,000. (Ten million results for samples taken during the previous dollars)

Parts Per Million (PPM): One part per Treatment Technique (TT): A required million corresponds to one minute in process intended to reduce the level of a two years or one penny in \$10,000. (Ten contaminant in drinking water. thousand dollars).

pH: An expression of the intensity of the Monitoring Rule basic or acid condition of a liquid. The pH may range from 0 to 14, where 0 is most acid, 14 most basic and 7 neutral.

PicoCuries per Liter (pCi/L): A measure of conditions. the radioactivity in the water.

Primary Drinking Water Standard (PDWS): MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements and water treatment requirements.

Public Health Goal (PHG): The level of a contaminant in drinking water, below, which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

Regulatory Action Level (AL): The concentration of a contaminant, which if exceeded, triggers treatment or other requirements, such as public notification, that a water system must follow.

(LRAA): The average of sample analytical four calendar quarters.

UCMR: Unregulated Contaminant

Variances and Exemptions: SWRCB permission to exceed an MCL or not comply with a treatment technique under certain

< Means "less than": For example <0.2 means the lowest detectable levels is 0.2 and that the contaminant was less than 0.2 and therefore not detected.

> Means "greater than": For example >0.1 means any sample tested having a value greater than 0.1.





Board of Directors

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Contact Us :

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Board Meetings are held the first and third Tuesdays of each month at 8 a.m. at the Desert Water Agency's Operations Center -Board Room, 1200 Gene Autry Trail South, Palm Springs, California.

 $\bigcirc \bigcirc \bigcirc \bigcirc$

Este informe contiene información muy importante sobre su agua de beber. Tradúzcalo ó hable con alguien que lo entienda bien.

Reference #4

Health Risk Information for Public Health Goal Exceedance Reports

Prepared by

Office of Environmental Health Hazard Assessment California Environmental Protection Agency

February 2016

Under the Calderon-Sher Safe Drinking Water Act of 1996 (the Act), water utilities are required to prepare a report every three years for contaminants that exceed public health goals (PHGs) (Health and Safety Code Section 116470 (b)(2)). The numerical health risk for a contaminant is to be presented with the category of health risk, along with a plainly worded description of these terms. The cancer health risk is to be calculated at the PHG and at the California maximum contaminant level (MCL). This report is prepared by the Office of Environmental Health Hazard Assessment (OEHHA) to assist the water utilities in meeting their requirements.

PHGs are concentrations of contaminants in drinking water that pose no significant health risk if consumed for a lifetime. PHGs are developed and published by OEHHA (Health and Safety Code Section 116365) using current risk assessment principles, practices and methods.

Numerical health risks. Table 1 presents health risk categories and cancer risk values for chemical contaminants in drinking water that have PHGs.

The Act requires that OEHHA publish PHGs based on health risk assessments using the most current scientific methods. As defined in statute, PHGs for non-carcinogenic chemicals in drinking water are set at a concentration "at which no known or anticipated adverse health effects will occur, with an adequate margin of safety." For carcinogens, PHGs are set at a concentration that "does not pose any significant risk to health." PHGs provide one basis for revising MCLs, along with cost and technological feasibility. OEHHA has been publishing PHGs since 1997 and the entire list published to date is shown in Table 1.

Table 2 presents health risk information for contaminants that do not have PHGs but have state or federal regulatory standards. The Act requires that, for chemical contaminants with California MCLs that do not yet have PHGs, water utilities use the federal maximum contaminant level goal (MCLG) for the purpose of complying with the requirement of public notification. MCLGs, like PHGs, are strictly health based and include a margin of safety. One difference, however, is that the MCLGs for carcinogens are set at zero because the US Environmental Protection Agency (US EPA) assumes there is no absolutely safe level of exposure to such chemicals. PHGs, on the other hand, are set at a level considered to pose no *significant* risk of cancer; this is usually a no more than one-in-one-million excess cancer risk (1×10^{-6}) level for a lifetime of exposure. In Table 2, the cancer risks shown are based on the US EPA's evaluations.

For more information on health risks: The adverse health effects for each chemical with a PHG are summarized in a PHG technical support document. These documents are available on the OEHHA Web site (<u>http://www.oehha.ca.gov</u>). Also, technical fact sheets on most of the chemicals having federal MCLs can be found at <u>http://www.epa.gov/your-drinking-water/table-regulated-drinking-water-contaminants</u>.

Table 1: Health Risk Categories and Cancer Risk Values for Chemicals
with California Public Health Goals (PHGs)

Chemical	Health Risk Category ¹	California PHG (mg/L) ²	Cancer Risk ³ at the PHG	California MCL ⁴ (mg/L)	Cancer Risk at the California MCL
<u>Alachlor</u>	carcinogenicity (causes cancer)	0.004	NA⁵	0.002	NA
<u>Aluminum</u>	neurotoxicity and immunotoxicity (harms the nervous and immune systems)	0.6	NA	1	NA
<u>Antimony</u>	digestive system toxicity (causes vomiting)	0.02	NA	0.006	NA
<u>Arsenic</u>	carcinogenicity (causes cancer)	0.000004 (4×10 ⁻⁶)	1×10 ⁻⁶ (one per million)	0.01	2.5×10 ⁻³ (2.5 per thousand)
<u>Asbestos</u>	carcinogenicity (causes cancer)	7 MFL ⁶ (fibers >10 microns in length)	1×10 ⁻⁶	7 MFL (fibers >10 microns in length)	1×10 ⁻⁶ (one per million)
<u>Atrazine</u>	carcinogenicity (causes cancer)	0.00015	1×10 ⁻⁶	0.001	7×10 ^{−6} (seven per million)

¹ Based on the OEHHA PHG technical support document unless otherwise specified. The categories are the hazard traits defined by OEHHA for California's Toxics Information Clearinghouse (online at: $\frac{\text{http://oehha.ca.gov/multimedia/green/pdf/GC_Regtext011912.pdf}}{2 \text{ mg/L} = \text{milligrams per liter of water or parts per million (ppm)}$

³ Cancer Risk = Upper estimate of excess cancer risk from lifetime exposure. Actual cancer risk may be lower or zero. 1×10^{-6} means one excess cancer case per million people exposed.

⁴ MCL = maximum contaminant level.

 5 NA = not applicable. Risk cannot be calculated. The PHG is set at a level that is believed to be without any significant public health risk to individuals exposed to the chemical over a lifetime.

⁶ MFL = million fibers per liter of water.

Table 1: Health Risk Categories and Cancer Risk Values for Chemicals
with California Public Health Goals (PHGs)

Chemical	Health Risk Category ¹	California PHG (mg/L) ²	Cancer Risk ³ at the PHG	California MCL⁴ (mg/L)	Cancer Risk at the California MCL
<u>Barium</u>	cardiovascular toxicity (causes high blood pressure)	2	NA	1	NA
<u>Bentazon</u>	hepatotoxicity and digestive system toxicity (harms the liver, intestine, and causes body weight effects ⁷)	0.2	NA	0.018	NA
<u>Benzene</u>	carcinogenicity (causes leukemia)	0.00015	1×10 ⁻⁶	0.001	7×10 ⁻⁶ (seven per million)
<u>Benzo[a]pyrene</u>	carcinogenicity (causes cancer)	0.000007 (7×10 ⁻⁶)	1×10 ⁻⁶	0.0002	3×10 ⁻⁵ (three per hundred thousand)
<u>Beryllium</u>	digestive system toxicity (harms the stomach or intestine)	0.001	NA	0.004	NA
<u>Bromate</u>	carcinogenicity (causes cancer)	0.0001	1×10 ⁻⁶	0.01	1×10 ⁻⁴ (one per ten thousand)
<u>Cadmium</u>	nephrotoxicity (harms the kidney)	0.00004	NA	0.005	NA
<u>Carbofuran</u>	reproductive toxicity (harms the testis)	0.0017	NA	0.018	NA

⁷ Body weight effects are an indicator of general toxicity in animal studies.

Table 1: Health Risk Categories and Cancer Risk Values for Chemicals
with California Public Health Goals (PHGs)

Chemical	Health Risk Category ¹	California PHG (mg/L) ²	Cancer Risk ³ at the PHG	California MCL ⁴ (mg/L)	Cancer Risk at the California MCL
<u>Carbon</u> <u>tetrachloride</u>	carcinogenicity (causes cancer)	0.0001	1×10 ⁻⁶	0.0005	5×10 ⁻⁶ (five per million)
<u>Chlordane</u>	carcinogenicity (causes cancer)	0.00003	1×10 ⁻⁶	0.0001	3×10 ⁻⁶ (three per million)
<u>Chlorite</u>	hematotoxicity (causes anemia) neurotoxicity (causes neurobehavioral effects)	0.05	NA	1	NA
<u>Chromium,</u> <u>hexavalent</u>	carcinogenicity (causes cancer)	0.00002	1×10 ⁻⁶	0.01	5×10 ⁻⁴ (five per ten thousand)
<u>Copper</u>	digestive system toxicity (causes nausea, vomiting, diarrhea)	0.3	NA	1.3 (AL ⁸)	NA
<u>Cyanide</u>	neurotoxicity (damages nerves) endocrine toxicity (affects the thyroid)	0.15	NA	0.15	NA
<u>Dalapon</u>	nephrotoxicity (harms the kidney)	0.79	NA	0.2	NA

⁸ AL = action level. The action levels for copper and lead refer to a concentration measured at the tap. Much of the copper and lead in drinking water is derived from household plumbing (The Lead and Copper Rule, Title 22, California Code of Regulations [CCR] section 64672.3).

Office of Environmental Health Hazard Assessment Water Toxicology Section February 2016

Table 1: Health Risk Categories and Cancer Risk Values for Chemicals
with California Public Health Goals (PHGs)

Chemical	Health Risk Category ¹	California PHG (mg/L) ²	Cancer Risk ³ at the PHG	California MCL ⁴ (mg/L)	Cancer Risk at the California MCL
<u>1,2-Dibromo-3-</u> <u>chloropropane</u> (DBCP)	carcinogenicity (causes cancer)	0.0000017 (1.7x10 ⁻⁶)	1×10 ⁻⁶	0.0002	1×10 ⁻⁴ (one per ten thousand)
<u>1,2-Dichloro-</u> <u>benzene (o-</u> <u>DCB)</u>	hepatotoxicity (harms the liver)	0.6	NA	0.6	NA
<u>1,4-Dichloro-</u> <u>benzene (p-</u> <u>DCB)</u>	carcinogenicity (causes cancer)	0.006	1×10 ⁻⁶	0.005	8×10 ⁻⁷ (eight per ten million)
<u>1,1-Dichloro-</u> <u>ethane (1,1-</u> <u>DCA)</u>	carcinogenicity (causes cancer)	0.003	1×10 ⁻⁶	0.005	2×10 ⁻⁶ (two per million)
<u>1,2-Dichloro-</u> <u>ethane (1,2-</u> <u>DCA)</u>	carcinogenicity (causes cancer)	0.0004	1×10 ⁻⁶	0.0005	1×10 ⁻⁶ (one per million)
<u>1,1-Dichloro-</u> <u>ethylene</u> (<u>1,1-DCE)</u>	hepatotoxicity (harms the liver)	0.01	NA	0.006	NA
<u>1,2-Dichloro-</u> ethylene, cis	nephrotoxicity (harms the kidney)	0.1	NA	0.006	NA
<u>1,2-Dichloro-</u> ethylene, trans	hepatotoxicity (harms the liver)	0.06	NA	0.01	NA
<u>Dichloromethane</u> (methylene chloride)	carcinogenicity (causes cancer)	0.004	1×10 ⁻⁶	0.005	1×10 ⁻⁶ (one per million)
2,4-Dichloro- phenoxyacetic acid (2,4-D)	hepatotoxicity and nephrotoxicity (harms the liver and kidney)	0.02	NA	0.07	NA

Table 1: Health Risk Categories and Cancer Risk Values for Chemicals
with California Public Health Goals (PHGs)

Chemical	Health Risk Category ¹	California PHG (mg/L) ²	Cancer Risk ³ at the PHG	California MCL ⁴ (mg/L)	Cancer Risk at the California MCL
<u>1,2-Dichloro-</u> propane (propylene dichloride)	carcinogenicity (causes cancer)	0.0005	1×10 ⁻⁶	0.005	1×10 ⁻⁵ (one per hundred thousand)
<u>1,3-Dichloro-</u> propene (Telone II®)	carcinogenicity (causes cancer)	0.0002	1×10 ⁻⁶	0.0005	2×10 ⁻⁶ (two per million)
<u>Di(2-ethylhexyl)</u> adipate (DEHA)	developmental toxicity (disrupts development)	0.2	NA	0.4	NA
<u>Diethylhexyl-</u> phthalate (DEHP)	carcinogenicity (causes cancer)	0.012	1×10 ⁻⁶	0.004	3×10 ⁻⁷ (three per ten million)
<u>Dinoseb</u>	reproductive toxicity (harms the uterus and testis)	0.014	NA	0.007	NA
<u>Dioxin (2,3,7,8-</u> <u>TCDD)</u>	carcinogenicity (causes cancer)	5×10 ⁻¹¹	1×10 ⁻⁶	3×10⁻ ⁸	6×10 ⁻⁴ (six per ten thousand)
<u>Diquat</u>	ocular toxicity (harms the eye) developmental toxicity (causes malformation)	0.015	NA	0.02	NA
<u>Endothall</u>	digestive system toxicity (harms the stomach or intestine)	0.094	NA	0.1	NA
<u>Endrin</u>	hepatotoxicity (harms the liver) neurotoxicity (causes convulsions)	0.0018	NA	0.002	NA

Table 1: Health Risk Categories and Cancer Risk Values for Chemicals
with California Public Health Goals (PHGs)

Chemical	Health Risk Category ¹	California PHG (mg/L) ²	Cancer Risk ³ at the PHG	California MCL ⁴ (mg/L)	Cancer Risk at the California MCL
<u>Ethylbenzene</u> (phenylethane)	hepatotoxicity (harms the liver)	0.3	NA	0.3	NA
<u>Ethylene</u> <u>dibromide</u>	carcinogenicity (causes cancer)	0.00001	1×10 ⁻⁶	0.00005	5×10 ⁻⁶ (five per million)
<u>Fluoride</u>	musculoskeletal toxicity (causes tooth mottling)	1	NA	2	NA
<u>Glyphosate</u>	nephrotoxicity (harms the kidney)	0.9	NA	0.7	NA
<u>Heptachlor</u>	carcinogenicity (causes cancer)	0.000008 (8×10 ⁻⁶)	1×10 ⁻⁶	0.00001	1×10 ⁻⁶ (one per million)
<u>Heptachlor</u> <u>epoxide</u>	carcinogenicity (causes cancer)	0.000006 (6×10⁻ ⁶)	1×10 ⁻⁶	0.00001	2×10 ⁻⁶ (two per million)
<u>Hexachloroben-</u> <u>zene</u>	carcinogenicity (causes cancer)	0.00003	1×10 ⁻⁶	0.001	3×10 ⁻⁵ (three per hundred thousand)
<u>Hexachloro-</u> cyclopentadiene (HCCPD)	digestive system toxicity (causes stomach lesions)	0.002	NA	0.05	NA
<u>Lead</u>	developmental neurotoxicity (causes neurobehavioral effects in children) cardiovascular toxicity (causes high blood pressure) carcinogenicity (causes cancer)	0.0002	<1×10 ⁻⁶ (PHG is not based on this effect)	0.015 (AL [®])	2×10 ⁻⁶ (two per million)

Table 1: Health Risk Categories and Cancer Risk Values for Chemicals
with California Public Health Goals (PHGs)

Chemical	Health Risk Category ¹	California PHG (mg/L) ²	Cancer Risk ³ at the PHG	California MCL ⁴ (mg/L)	Cancer Risk at the California MCL
<u>Lindane</u> <u>(γ-BHC)</u>	carcinogenicity (causes cancer)	0.000032	1×10 ⁻⁶	0.0002	6×10 ⁻⁶ (six per million)
<u>Mercury</u> <u>(inorganic)</u>	nephrotoxicity (harms the kidney)	0.0012	NA	0.002	NA
<u>Methoxychlor</u>	endocrine toxicity (causes hormone effects)	0.00009	NA	0.03	NA
<u>Methyl tertiary-</u> <u>butyl ether</u> (MTBE)	carcinogenicity (causes cancer)	0.013	1×10 ⁻⁶	0.013	1×10 ⁻⁶ (one per million)
<u>Molinate</u>	carcinogenicity (causes cancer)	0.001	1×10 ⁻⁶	0.02	2×10 ⁻⁵ (two per hundred thousand)
<u>Monochloro-</u> <u>benzene</u> (chlorobenzene)	nephrotoxicity (harms the kidney)	0.07	NA	0.07	NA
<u>Nickel</u>	developmental toxicity (causes increased neonatal deaths)	0.012	NA	0.1	NA
<u>Nitrate</u>	hematotoxicity (causes methemoglobinemia)	45 as nitrate	NA	10 as nitrogen (=45 as nitrate)	NA
<u>Nitrite</u>	hematotoxicity (causes methemoglobinemia)	1 as nitrogen	NA	1 as nitrogen	NA

Reference #4

Table 1: Health Risk Categories and Cancer Risk Values for Chemicals
with California Public Health Goals (PHGs)

Chemical	Health Risk Category ¹	California PHG (mg/L) ²	Cancer Risk ³ at the PHG	California MCL⁴ (mg/L)	Cancer Risk at the California MCL
<u>Nitrate and</u> <u>Nitrite</u>	hematotoxicity (causes methemoglobinemia)	10 as nitrogen	NA	10 as nitrogen	NA
<u>N-nitroso-</u> <u>dimethyl-amine</u> (NDMA)	carcinogenicity (causes cancer)	0.000003 (3×10 ⁻⁶)	1×10⁻ ⁶	none	NA
<u>Oxamyl</u>	general toxicity (causes body weight effects)	0.026	NA	0.05	NA
Pentachloro- phenol (PCP)	carcinogenicity (causes cancer)	0.0003	1×10 ⁻⁶	0.001	3×10 ⁻⁶ (three per million)
Perchlorate	endocrine toxicity (affects the thyroid) developmental toxicity (causes neurodevelop- mental deficits)	0.001	NA	0.006	NA
Picloram	hepatotoxicity (harms the liver)	0.5	NA	0.5	NA
Polychlorinated biphenyls (PCBs)	carcinogenicity (causes cancer)	0.00009	1×10 ⁻⁶	0.0005	6×10 ⁻⁶ (six per million)
<u>Radium-226</u>	carcinogenicity (causes cancer)	0.05 pCi/L	1×10 ⁻⁶	5 pCi/L (combined Ra ²²⁶⁺²²⁸)	1×10 ⁻⁴ (one per ten thousand)
Radium-228	carcinogenicity (causes cancer)	0.019 pCi/L	1×10 ⁻⁶	5 pCi/L (combined Ra ²²⁶⁺²²⁸)	3×10 ⁻⁴ (three per ten thousand)

Table 1: Health Risk Categories and Cancer Risk Values for Chemicals
with California Public Health Goals (PHGs)

Chemical	Health Risk Category ¹	California PHG (mg/L) ²	Cancer Risk ³ at the PHG	California MCL ⁴ (mg/L)	Cancer Risk at the California MCL
<u>Selenium</u>	integumentary toxicity (causes hair loss and nail damage)	0.03	NA	0.05	NA
<u>Silvex (2,4,5-TP)</u>	hepatotoxicity (harms the liver)	0.003	NA	0.05	NA
<u>Simazine</u>	general toxicity (causes body weight effects)	0.004	NA	0.004	NA
<u>Strontium-90</u>	carcinogenicity (causes cancer)	0.35 pCi/L	1×10 ⁻⁶	8 pCi/L	2×10 ⁻⁵ (two per hundred thousand)
<u>Styrene</u> (vinylbenzene)	carcinogenicity (causes cancer)	0.0005	1×10 ⁻⁶	0.1	2×10 ⁻⁴ (two per ten thousand)
<u>1,1,2,2-</u> <u>Tetrachloro-</u> <u>ethane</u>	carcinogenicity (causes cancer)	0.0001	1×10 ⁻⁶	0.001	1×10 ⁻⁵ (one per hundred thousand)
<u>Tetrachloro-</u> <u>ethylene</u> (perchloro- ethylene, or <u>PCE)</u>	carcinogenicity (causes cancer)	0.00006	1×10 ⁻⁶	0.005	8×10 ⁻⁵ (eight per hundred thousand)
<u>Thallium</u>	integumentary toxicity (causes hair loss)	0.0001	NA	0.002	NA
<u>Thiobencarb</u>	general toxicity (causes body weight effects) hematotoxicity (affects red blood cells)	0.07	NA	0.07	NA

Table 1: Health Risk Categories and Cancer Risk Values for Chemicals
with California Public Health Goals (PHGs)

Chemical	Health Risk Category ¹	California PHG (mg/L) ²	Cancer Risk ³ at the PHG	California MCL ⁴ (mg/L)	Cancer Risk at the California MCL
<u>Toluene</u> (methylbenzene)	hepatotoxicity (harms the liver) endocrine toxicity (harms the thymus)	0.15	NA	0.15	NA
<u>Toxaphene</u>	carcinogenicity (causes cancer)	0.00003	1×10 ⁻⁶	0.003	1×10 ⁻⁴ (one per ten thousand)
<u>1,2,4-Trichloro-</u> benzene	endocrine toxicity (harms adrenal glands)	0.005	NA	0.005	NA
<u>1,1,1-Trichloro-</u> <u>ethane</u>	neurotoxicity (harms the nervous system), reproductive toxicity (causes fewer offspring) hepatotoxicity (harms the liver) hematotoxicity (causes blood effects)	1	NA	0.2	NA
<u>1,1,2-Trichloro-</u> ethane	carcinogenicity (causes cancer)	0.0003	1x10 ⁻⁶	0.005	2×10 ⁻⁵ (two per hundred thousand)
<u>Trichloro-</u> ethylene (TCE)	carcinogenicity (causes cancer)	0.0017	1×10 ⁻⁶	0.005	3×10 ⁻⁶ (three per million)
<u>Trichlorofluoro-</u> <u>methane</u> (Freon 11)	accelerated mortality (increase in early death)	1.3	NA	0.15	NA

Table 1: Health Risk Categories and Cancer Risk Values for Chemicals
with California Public Health Goals (PHGs)

Chemical	Health Risk Category ¹	California PHG (mg/L) ²	Cancer Risk ³ at the PHG	California MCL ⁴ (mg/L)	Cancer Risk at the California MCL
<u>1,2,3-Trichloro-</u> propane (1,2,3-TCP)	carcinogenicity (causes cancer)	0.0000007 (7×10 ⁻⁷)	1x10 ⁻⁶	none	NA
<u>1,1,2-Trichloro-</u> <u>1,2,2-trifluoro-</u> <u>ethane</u> <u>(Freon 113)</u>	hepatotoxicity (harms the liver)	4	NA	1.2	NA
<u>Tritium</u>	carcinogenicity (causes cancer)	400 pCi/L	1x10 ⁻⁶	20,000 pCi/L	5x10 ⁻⁵ (five per hundred thousand)
<u>Uranium</u>	carcinogenicity (causes cancer)	0.43 pCi/L	1×10 ⁻⁶	20 pCi/L	5×10 ⁻⁵ (five per hundred thousand)
Vinyl chloride	carcinogenicity (causes cancer)	0.00005	1×10 ⁻⁶	0.0005	1×10 ⁻⁵ (one per hundred thousand)
<u>Xylene</u>	neurotoxicity (affects the senses, mood, and motor control)	1.8 (single isomer or sum of isomers)	NA	1.75 (single isomer or sum of isomers)	NA

Table 2: Health Risk Categories and Cancer Risk Values for Chemicals
without California Public Health Goals

Chemical	Health Risk Category ¹	U.S. EPA MCLG ² (mg/L)	Cancer Risk ³ @ MCLG	California MCL ⁴ (mg/L)	Cancer Risk @ California MCL
Disinfection bypro	ducts (DBPS)				
Chloramines	acute toxicity (causes irritation) digestive system toxicity (harms the stomach) hematotoxicity (causes anemia)	4 ^{5,6}	NA ⁷	none	NA
Chlorine	acute toxicity (causes irritation) digestive system toxicity (harms the stomach)	4 ^{5,6}	NA	none	NA
Chlorine dioxide	hematotoxicity (causes anemia) neurotoxicity (harms the nervous system)	0.8 ^{5,6}	NA	none	NA
Disinfection byproducts: haloacetic acids (HAA5)					
Chloroacetic acid	general toxicity (causes body and organ weight changes ⁸)	0.07	NA	none	NA

- ⁶ The federal Maximum Residual Disinfectant Level (MRDL), or highest level of disinfectant
- allowed in drinking water, is the same value for this chemical. 7 NA = not available.

⁸ Body weight effects are an indicator of general toxicity in animal studies.

¹ Health risk category based on the U.S. EPA MCLG document or California MCL document unless otherwise specified.

² MCLG = maximum contaminant level goal established by U.S. EPA.

³ Cancer Risk = Upper estimate of excess cancer risk from lifetime exposure. Actual cancer risk may be lower or zero. 1×10^{-6} means one excess cancer case per million people exposed. ⁴ California MCL = maximum contaminant level established by California. ⁵ Maximum Residual Disinfectant Level Goal, or MRDLG.

Table 2: Health Risk Categories and Cancer Risk Values for Chemicals without California Public Health Goals

Chemical	Health Risk Category ¹	U.S. EPA MCLG ² (mg/L)	Cancer Risk ³ @ MCLG	California MCL ⁴ (mg/L)	Cancer Risk @ California MCL
Dichloroacetic acid	carcinogenicity (causes cancer)	0	0	none	NA
Trichloroacetic acid	hepatotoxicity (harms the liver)	0.02	0	none	NA
Bromoacetic acid	NA	none	NA	none	NA
Dibromoacetic acid	NA	none	NA	none	NA
Total haloacetic acids	carcinogenicity (causes cancer)	none	NA	0.06	NA
Disinfection bypro	ducts: trihalomethanes (THMs)			
Bromodichloro- methane (BDCM)	carcinogenicity (causes cancer)	0	0	none	NA
Bromoform	carcinogenicity (causes cancer)	0	0	none	NA
Chloroform	hepatotoxicity and nephrotoxicity (harms the liver and kidney)	0.07	NA	none	NA
Dibromo- chloromethane (DBCM)	hepatotoxicity, nephrotoxicity, and neurotoxicity (harms the liver, kidney, and nervous system)	0.06	NA	none	NA
Total trihalomethanes (sum of BDCM, bromoform, chloroform and DBCM)	carcinogenicity (causes cancer), hepatotoxicity, nephrotoxicity, and neurotoxicity (harms the liver, kidney, and nervous system)	none	NA	0.08	NA

Table 2: Heal	th Risk Categories and Cancer Risk Values for Chemicals
	without California Public Health Goals

Chemical	Health Risk Category ¹	U.S. EPA MCLG ² (mg/L)	Cancer Risk ³ @ MCLG	California MCL ⁴ (mg/L)	Cancer Risk @ California MCL
Radionuclides					
Gross alpha particles ⁹	carcinogenicity (causes cancer)	0 (²¹⁰ Po included)	0	15 pCi/L ¹⁰ (includes ²²⁶ Ra but not radon and uranium)	up to 1x10 ⁻³ (for ²¹⁰ Po, the most potent alpha emitter
Beta particles and photon emitters ⁹	carcinogenicity (causes cancer)	0 (²¹⁰ Pb included)	0	50 pCi/L (judged equiv. to 4 mrem/yr)	up to 2x10 ⁻³ (for ²¹⁰ Pb, the most potent beta- emitter)

⁹ MCLs for gross alpha and beta particles are screening standards for a group of radionuclides. Corresponding PHGs were not developed for gross alpha and beta particles. See the OEHHA memoranda discussing the cancer risks at these MCLs at http://oehha.studio-weeren.com/media/downloads/water/chemicals/phg/grossalphahealth.pdf. ¹⁰ pCi/L = picocuries per liter of water.

Office of Environmental Health Hazard Assessment Water Toxicology Section February 2016

STAFF REPORT TO DESERT WATER AGENCY BOARD OF DIRECTORS

JULY 19, 2016

RE: REQUEST ADOPTION OF RESOLUTION NO. 1141, GRANTING RETIREMENT STATUS TO DEBBIE RANDALL WITH APPRECIATION

Attached is a copy of Resolution No. 1141 officially granting retirement status to Senior Engineering Technician, Debbie Randall.

Ms. Randall will be presented a copy of Resolution No. 1141 acknowledging her 24 years of dedicated service and loyalty to Desert Water Agency.

RESOLUTION NO. 1141

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE DESERT WATER AGENCY GRANTING RETIREMENT STATUS TO DEBBIE RANDALL

WHEREAS, Debbie Randall began her service with Desert Water Agency on June 22, 1992 as a Service Planner I in the Engineering Department and was quickly promoted to Service Planner II in 1994, Service Planner III in 1999, Senior Service Planner in 2001 and on January 1, 2008 was promoted to Senior Engineering Technician; and is concluding her career in that capacity; and

WHEREAS, over her career with Desert Water Agency, Debbie has assisted developers with numerous projects, to include Escena, Arrive Hotel, Ace Hotel remodel, Desert Fashion Plaza, Desert Palisade Tract, Mountain Gate Tract, Smoke Tree Commons, Downtown Cathedral City, and Cathedral Canyon Plaza; and

WHEREAS, Debbie has helped manage the Agency's Cross-Connection Program, Water Loss/Leak Tracking Program, and the annual Health Department Statistical Report; and

WHEREAS, in 2011, Debbie authored the cross connection procedures for each recycled water user and created a Recycle Water User Guide to assist recycled water users; and

WHEREAS, Debbie has always been a conscientious, dependable and punctual employee who is a team player who always offers to help wherever and whenever needed; and

WHEREAS, Debbie has shared her knowledge and experience by cross-training and mentoring other Engineering Technicians in the Engineering Department for their advancement; and

WHEREAS, Debbie has consistently provided excellent customer service to the community and served her fellow employees with a courteous and friendly personality; and

WHEREAS, the Desert Water Agency is deeply appreciative of this employee's loyalty, honesty, integrity, competency and conscientious service in her duties, and her willingness to assist others whenever necessary for the completion of a project or special assignment; and

WHEREAS, Debbie has served as an outstanding role model with respect to her work ethics and has consistently performed her duties meticulously and with commitment to the highest standards required in conjunction with fulfilling her responsibilities, and has done so with the Agency's best interest in mind;

NOW, THEREFORE, BE IT RESOLVED by the Desert Water Agency Board of Directors that

DEBBIE RANDALL

is, with infinite thanks and appreciation for her 24 years of service to the Desert Water Agency, and our community, hereby granted the status of retirement. It is the wish of the Board that Debbie spends countless years enjoying a happy and healthy retirement, for she has earned it.

ADOPTED this 19th day of July, 2016, with retirement effective July 15, 2016.

James Cioffi, President Board of Directors

ATTEST:

Kristin Bloomer, Secretary-Treasurer Board of Directors

STAFF REPORT TO DESERT WATER AGENCY BOARD OF DIRECTORS

JULY 19, 2016

RE: WATER USE VIOLATION – CIVIL PENALTY HEARINGS

Starting after the March 1st board meeting, staff began issuing water use violations under the new ordinance; to date, more than 250 violations have been issued. Recipients of the violations have 7 days to request a hearing in writing. Staff has received three such requests for a hearing on the violations since the last hearing on June 7. Two violations have hearings scheduled for today's board meeting, one requested to be heard at the August 2 Board meeting due to a scheduling conflict.

The following is a summary of the procedure for the hearings.

Staff has provided the Board with the correspondence for each of the violations including photographic evidence. Photographs will also be projected during the hearing to provide the board and customer a common point of reference for discussion.

Staff will introduce each violation with a summary of the event. After the introduction the customer will be invited by the Board to speak concerning the violation. If the recipient of the violation is not present or does not wish to speak, staff will read the violation summary and submit the written petition into the record for board action.

Each petition will be discussed and voted on separately.

As a point of reference, Staff has notified Agency customers concerning water conservation regulations in several different ways:

Recent Notifications

- 1. Published the ordinance in The Public Record
- 2. Published the ordinance in the Agency Website
- 3. Social media outlets
- 4. KMIR, KESQ, KPCC, the Joey English Show
- 5. Desert Sun Valley Voice
- 6. Palm Desert Patch
- 7. Email to Palm Springs and Cathedral City Chambers
- 8. Emails to HOA in our contact list
- 9. Emails to high volume users

Comprehensive Notifications – Since June 2015

- 1. Direct mail to all customers
- 2. Bill Inserts
- 3. Bill on envelope messaging
- 4. Billboards
- 5. Online advertising (KESQ)
- 6. Television advertising (Time Warner)
- 7. Social media
- 8. Several public presentations on TV
- 9. Print and radio Interviews
- 10. DWA and CVWD websites

1. Beverly Elmore, 220 N Farrell Drive

- a. On Monday, May 9 at 7:36 a.m. a Desert Water Agency representative observed water use violations at said address and reported them.
 - i. Irrigating between the restricted hours of 7 a.m. and 7 p.m.
- b. Fine amount \$50
 - i. Single-family home
 - ii. First violation
- c. Reason for petition
 - i. Valve issue





May 9, 2016

Beverly Elmore % Monique Carrier 220 N Farrell Dr Palm Springs, CA 92262

RE: FINE ON ACCOUNT# 220 N Farrell Dr

Dear Valued Customer:

Due to a water use violation observed and documented by a Desert Water Agency representative on Monday, May 9, 2016 at 7:36 am, you are being served with a complaint to impose a civil (monetary) penalty.

You have 7 days to request, in writing, a hearing on this violation. If you do request a hearing, you will need to come to the Agency and present information that refutes the alleged violation. If you do not request a hearing within 7 days of this complaint, the civil penalty of \$50.00 will be added onto your water bill.

You were cited for:

- Outdoor residential irrigation shall be restricted to Mondays, Wednesdays and Fridays, before 7:00 a.m. and after 7:00 p.m.
- Runoff such that water flows onto adjacent property, non-irrigated areas, private and public walkways, roadways, parking lots, or structures is prohibited.

This is a violation of Desert Water Agency's Ordinance No. 65. For a first violation within any 12month period, the civil penalty shall be \$100 for a multi-family residential, commercial or institutional establishment or \$50 for a single-family residential customer.

For a second violation within any 12-month period, the civil penalty shall be \$200 for a multi-family residential, commercial or institutional establishment or \$100 for a single-family residential customer.

For a third and each subsequent violation within any 12-month period, the civil penalty shall be \$500 for a multi-family residential, commercial or institutional establishment or \$250 for a single-family residential customer.

Failure to pay the civil penalty on your water bill may result in termination of water service. In addition, the Agency staff shall be authorized to discontinue water service for any violation of the Ordinance.

If you have any additional questions, please contact us.

Thank you,

Ashley Metzger Outreach & Conservation Manager Desert Water Agency *On behalf of General Manager Mark Krause*

No whom it may concern Re: Desert Water Agency On the 9th of May cl was looking out my window and I noticed the spinkles running . I went outside to turn them off which I did at the times and they remained running all of the 5 stations. I asked my husband what cloud do to - tein them off and he said if you unplug the main line to time it may shat the computer down and term it off _____ And it worked. clcalled my gardner and he returned my call late Monday. d told him what happened and he said he would come out as soon as possible which was Wednedy and he bound a bod walve and repaired it and reset the system. It was \$ 25.00 I asked that you would remore the fine of 75.00 because it was a molfunction and not myself

watering at the wrong Time - and as tipe would have it your Mon apparentle took as picture Monday morning after 7:00 of my sprinkter running wild. Please Forgive us truly yours every Elmore Bevery

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KEEP THIS SLIP FOR REFERENCE

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2. Gordon McKiel, 2725 N. Biskra Rd

- a. On Friday, June 24 at 3:14 p.m. a Desert Water Agency representative observed water use violations at said address and reported them.
 - i. Irrigating between the restricted hours of 7 a.m. and 7 p.m.
 - ii. Runoff from irrigation onto hardscape
- b. Fine amount \$100
 - i. Single-family home
 - ii. Second violation
- c. Reason for petition
 - i. Power outage reset timer



DESERT WATER

Date: 00/24/2016 Time: 3:14 A.M. (P.M)

Address: 2725 N BISKRA RD

RE: COMPLAINT FOR CIVIL (MONETARY) PENALTY

Dear Valued Customer:

Due to a water use violation observed and documented by a Desert Water Agency representative today, you are being served with this complaint to impose a civil (monetary) penalty.

You have 7 days to request, in writing, a hearing on this violation. If you do request a hearing, you will need to come to the Agency and present information that refutes the alleged violation. If you do not request a hearing within 7 days of this complaint, the civil penalty will be added onto your water bill.

You have been cited for:

- Unreasonable use of water (unnecessary runoff onto adjacent property and non-irrigation areas, private and public walkways, roadways, parking lots and parking structures.)
- Cutdoor irrigation during restricted days or times (Watering is only permitted Mondays, Wednesdays, and Fridays before 7:00 a.m. and after 7:00 p.m.)
- \Box Other

This is in violation of Desert Water Agency's Ordinance No. 65.

For a first violation within any 12-month period, the civil penalty shall be \$100 for a multi-family residential, commercial or institutional establishment or \$50 for a single-family residential customer.

For a second violation within any 12-month period, the civil penalty shall be \$200 for a multi-family residential, commercial or institutional establishment or \$100 for a single-family residential customer.

For a third and each subsequent violation within any 12-month period, the civil penalty shall be \$500 for a multi-family residential, commercial or institutional establishment or \$250 for a single-family residential customer.

Failure to pay the civil penalty on your water bill may result in termination of water service. In addition, the Agency staff shall be authorized to discontinue water service for any violation of the Ordinance.

If you have any additional questions, please contact us.

Thank you,

, Desert Water Agency

On behalf of Mark Krause, General Manager

Desert Water Agency – 1200 South Gene Autry Trail, Palm Springs, CA 92264 P.O. Box 1710, Palm Springs, CA 92263-1710 | Phone: 760-323-4971 | Fax: 760-325-6505 | Website: www.dwa.org July 1, 2016 Gordon McKiel 2725 N. Biskra Rd. Palm Springs, CA. 92262 760-673-8170

To Whom it may concern:

On June 24th 2016 I received a complaint for civil penalty. All of Palm Springs electricity was out just a day or 2 prior and set every setting off schedule. This is an unfair penalty and request that it is thrown out . The watering timer has been adjusted and it working correctly now.

Thank you,

Gordon F. McKiel

Gordon McKiel

DESERT WATER AGENCY MEDIA INFORMATION JUNE 2016

DATE	PACKET PAGE	MEDIA SOURCE	ARTICLE
06/01/16	1	PRESS ENTERPRISE	Riverside To Drop Water Lawsuit
06/04/16	2	PRESS ENTERPRISE	Environment: State Probe Looks At Nestle's Mountain Water Rights
06/06/16	3-4	PRESS ENTERPRISE	Water Restrictions Ease, But Agencies Urge Efficient Use
06/07/16	5	THE PUBLIC RECORD	CVWD And State Water Board Announce New Conservation Program
06/07/16	6-7	THE DESERT SUN	Lawmakers Try To Slow 'Water Rush' On Aquifers
06/07/16	8-9	PRESS ENTERPRISE	Drought Could Get Worse This Winter
06/07/16	10-11	PRESS ENTERPRISE	Save Or Else, Water Users Told
06/11/16	12-13	PRESS ENTERPRISE	Nestle Facing Scrutiny
06/11/16	14	PRESS ENTERPRISE	New Water Rates Approved In Temecula
06/12/16	15-19	THE DESERT SUN	Customers Balk At Plan To Raise Water Rates
06/14/16	20	THE DESERT SUN	Coachella Valley Agency Votes To Raise Water Rates
06/14/16	21	PRESS ENTERPRISE	Bottled Water Case's Judge Sends Attorneys Back To Well
06/15/16	22	PRESS ENTERPRISE	Digital Mapping Tools Save Money, Water
06/16/16	23-25	THE DESERT SUN	Colorado River Aqueduct Marks 75 Years Of Water Delivery
06/20/16	26-27	THE DESERT SUN	Bill Targets Secrecy In California Water Data
06/20/16	28-29	THE DESERT SUN	Palm Springs Area Racks Up Whopping Water Savings In May

DWA MEDIA LISTING JUNE 2016

DATE	PACKET PAGE	MEDIA SOURCE	ARTICLE
06/21/16	30	KESQ / CBS	Indio Water Authority Expands Outdoor Watering to 7-days Per Week
06/21/16	31	THE PUBLIC RECORD	CVWD Board Approves New Domestic Water Rates
06/23/16	32-35	THE DESERT SUN	California's Drought Isn't Over. Why Are So Many Water Agencies Ending Mandatory Conservation?
06/24/16	36	PRESS ENTERPRISE	Hundreds of Norco Residents Paid Part Of City's Water Bills For Years
06/25/16	37-38	PRESS ENTERPRISE	Redlands To Sprinkle Its Drought Fine Around
06/25/16	39-40	LA TIMES	Water Agencies Move To Lift Mandatory Restrictions
06/28/16	41	THE PUBLIC RECORD	CVWD Joins Innovation, New Partnership For Clean Water
06/29/16	42-43	THE DESERT SUN	\$250 Million Plan To Treat Drinking Water Approved
06/30/16	44-45	PRESS ENTERPRISE	Riverside Loosens Belt On Water Use

Riverside to drop water lawsuit

By SUZANNE HURT

STAFF WRITER

Shortly before a scheduled court hearing, the Riverside City Council agreed in closed session Tuesday to direct the city attorney to drop a lawsuit over state-mandated emergency water conservation orders during the drought.

The city wants to dismiss its suit against the State Water Resources Control Board after board officials on May 18 set aside mandated water-savings targets throughout the state and agreed to allow suppliers like Riverside Public Utilities to set their own conservation goals, according to a statement released by utilities General Manager Girish Balachandran late Tuesday afternoon.

A hearing date had been set for June 20.

The city sued the state June 4, 2015, after the state water board ordered it to cut monthly water use by 28 percent over its 2013 usage. Riverside, apparently the only supplier to sue over the issue, sought a 4 percent savings mandate because the water sold to customers comes entirely from groundwater, Deputy General Manager Kevin Milligan said.

Riverside uses no Northern California water "imported" through the State Water Project.

State officials disagreed, saying Riverside's water use or savings affect the state's groundwater system.

THE PRESS-ENTERPRISE Prom

ENVIRONMENT: State probe looks at Nestle's mountain water rights

By JIM STEINBERG / STAFF WRITER

Published: June 4, 2016

The State Water Resources Control Board has launched an investigation into Nestle's water rights in the San Bernardino National Forest, adding a new layer of scrutiny to the public outcry into the water bottler's operations during a drought.

Last year, Nestle withdrew 36 million gallons from remote Strawberry Canyon, on U.S. Forest Service land north of San Bernardino, paying \$524 – under a permit that expired 28 years ago. Forest Service officials say permits remain in effect until they are renewed or denied.

"We have launched an investigation into the basis of their water rights" in Strawberry Canyon and requested documents supporting those rights, said Tim Moran, spokesman for the state water board.

Moran said he could not say when the investigation began, but he did say that Nestle has complied and those documents are being evaluated.

Jane Lazgin, director of media and public relations for Nestle Waters North America, said she did not know a formal investigation was underway.

"We are not aware that the SWRCB has opened a formal investigation," Lazgin said in a statement. "From time to time, the board asks questions, and we are happy to provide the board with the requested information to the extent it is in our possession."

The state inquiry follows the launch earlier this year of the San Bernardino National Forest's first environmental study of Nestle's operations in Strawberry Creek. The review could take from six months to two years.

A meeting with Nestle officials in Sacramento is planned for June 16 to go over documents, Moran said. It's not unusual for this type of inquiry, he added. There will also be a meeting with San Bernardino National Forest officials.

Steve Loe, a Yucaipa resident and a wildlife biologist in the San Bernardino National Forest for more than 30 years, sees a new urgency to stop Nestle's water withdrawals while the scientific studies continue.

Water flows from Strawberry and the nearby East Twin Creek area are declining rapidly given the heat and the relatively sparse rainfall this winter, Loe said via email.

"There is no doubt these extremely low flows will greatly reduce areas of surface water and habitat capable of supporting endangered and sensitive species as well as riparian vegetation," he wrote.

Nestle has said it carefully monitors rainfall and spring flows and makes adjustments as conditions change.

In 2014, the company reported collecting about 28 million gallons. It reported approximately 36 million gallons in 2015, which had higher rainfall than the previous year, according to Lazgin.

And the legal process continues June 13 for the lawsuit filed late last year against the Forest Service. The lawsuit, filed by the Center for Biological Diversity, Courage Campaign Institute and Story of Stuff Project, claims the Forest Service allowed Nestle's pipelines, pumps and other structures on federal land for too long after the permit expired.

Two of the plaintiffs, Courage Campaign Institute and Story of Stuff Project, along with Corporate Accountability International, are holding a digital town hall at 5 p.m. Thursday to discuss strategies for stopping Nestle's bottling operations in the San Bernardino Mountains and elsewhere, according to Courage Campaign spokesman Tim Molina.

Water restrictions ease, but agencies urge efficient use

By SUZANNE HURT

STAFF WRITER

Stringent local water conservation rules that led some homeowners to rip out their lawns or fume over higher water bills are being thrown out in parts of the Inland region and elsewhere in California after the state dropped emergency drought restrictions.

Some Inland suppliers – including Riverside Public Utilities, Rancho California Water District, and Eastern and Western municipal water districts – are eliminating outdoor watering restrictions and higher rates following the State Water Resources Control Board's May 18 decision to set aside orders for 25 percent statewide water savings and allow agencies to develop their own goals.

"Our customers have done a tremendous job of adjusting their water use," said Tim Barr, Western Municipal's director of water resources. "If our customers remain efficient for the next six months, we believe mandatory conservation is no longer necessary." Other suppliers, such as East Valley Water District in Highland and the cities of Corona and Redlands, are easing restrictions or postponing possible changes until they can seek guidance on conservation standards from state water officials.

A conference call with urban water suppliers is scheduled today.

Adjusting water-use restrictions as conditions change is appropriate, yet eliminating them when Southern California remains in drought, and when Riverside County's most populated western region is still in extreme drought, doesn't seem prudent, said Natural Resources Defense Council Senior Policy Analyst Ed Osann.

"That certainly seems short-sighted," he said. "We're not out of the drought."

Osann said he's not surprised to see some suppliers across California eagerly discarding water restrictions.

"It does seem as though some are trying to generate a surge in revenue rather than more carefully balancing the continued availability of sufficient supplies through a multiyear drought," he said.

Suppliers such as Western and Eastern municipal water districts, Elsinore Valley Municipal Water District and Corona already set budgeted amounts of indoor and outdoor water for customers based on occupancy and lot size, with tiered pricing to discourage inefficient or excessive use.

"Eliminating the special restrictions that were put into place beneath the state mandate does not mean they're not encouraging efficient water use," said Ellen Hanak, director of the Public Policy Institute of California Water Policy Center.

RESTRICTIONS EASED

With a vote tonight postponed to later this month, the Riverside Public Utilities board is expected to lift restrictions, such as outdoor watering on limited days, after declaring its groundwater supply normal and sufficient for three more years of drought, said city spokesman Phil Pitchford.

The Riverside utility plans to submit its own "zero percent" water conservation standard to the State Water Resources Control Board. The City Council on May 31 decided to drop a lawsuit pushing the board to change Riverside's 28 percent water savings mandate to 4 percent.

The utilities board plans to pass an ordinance with guidance for "voluntary" restrictions including no outdoor watering from 10 a.m. to 6 p.m. and time limits for landscape sprinklers or sprayers.

On June 1, the boards of Eastern and Western municipal water districts agreed customers who'd been told to cut outdoor use by 30 percent could again use 100 percent of their normal outdoor allotments, or "budgets," without paying higher prices.

Western won't charge extra unless customers exceed 125 percent of their budget.

On Thursday, Elsinore Valley Municipal Water District will consider rolling back drought surcharges and loosening some restrictions, such as reducing penalties for exceeding allotments.

Rancho California Water District is set to vote Thursday on new residential rates that include a suspension of drought surcharges added to bills last year.

"California's water picture improved somewhat over the winter, but in no way was there enough precipitation to end the drought," said Bonnie Woodrome, spokeswoman for Elsinore Valley Municipal Water District, which is considering eliminating drought surcharges.

Homeowners in Temecula and a sliver of southern Murrieta let their lawns die in response to Rancho California's surcharges, which shrank water budgets and imposed higher rates for those who exceeded their allotted targets.

In Corona, the 50 percent reduction in customers' outdoor water budgets needed to meet the city's state-mandated 28 percent savings target will be cut back to 10 percent, taking effect on June bills, Corona Department of Water & Power General Manager Jonathan Daly said.

"The customers, our residents in town, have been doing their share to conserve," he said.

Redlands and East Valley Water District in Highland are among the suppliers postponing any changes until after taking part in the conference call today.

During the meeting, state water officials will discuss how suppliers should submit their new conservation standards and supporting documentation, said Redlands spokesman Carl Baker and East Valley spokeswoman Kelly Malloy.

East Valley is working with its wholesaler, the San Bernardino Valley Municipal Water District, which determines the water supply level and is likely to leave at least some restrictions in place, Malloy said.

"We'll be looking at what we think the best long-term solution is for encouraging water efficiency in our community," she said.

Most of the water-use reductions that took place during the state's emergency conservation mandates are unlikely to be permanent, said UC Davis civil and environmental engineering professor Frank Loge, director of the university's Center for Water-Energy Efficiency.

While savings will continue for people who installed low-flow toilets and shower heads or replaced lawns with xeriscapes, some people will revert to old behaviors once mandated conservation targets are removed, he said.

Water retailers should have the ability to develop their own conservation programs, Loge said.

"But in practice, we'll have to see how effective those programs are," he said.

Because Lake Mead, a reservoir fed by the Colorado River that supplies some of the area's water, is at a historic low, Osann said Southern California suppliers must maintain active conservation programs to help consumers continue to reduce discretionary water use outdoors and save more for cooking, drinking and bathing.

Water suppliers must submit new conservation standards to the state by June 22.

State water officials will report back on submissions about July 15, water board spokesman Andrew DiLuccia said.

Staff writer Aaron Claverie

contributed to this report.

TUESDAY, JUNE 7, 2016 VOLUME 38 - EDITION #45 PALM SPRINGS, CALIFORNIA \$1.50 - PER SINGLE ISSUE

SERVING ALL OF THE DESERT CITIES AND UNINCORPORATED AREAS OF RIVERSIDE COUNTY IN THE COACHELLA VALLEY

CVWD AND STATE WATER BOARD ANNOUNCE

Coachella Valley Water District (CVWD) and the State Water Resources Control Board (State Water Board) have announced collaboration of a new conservation program aimed at helping professional landscapers in the Coachella Valley be more efficient water users.

The new online program will focus on teaching professional landscapers the best practices for achieving water efficiency when creating outdoor environments. This certification course will be required for any new or existing professionals seeking a landscaping business lucense in any city or county in the Coachella Valley.

"The (State Water Board's) focus has always been on finding innovative and sustaining solutions to meet the goals of water conservation – not issuing fines," said Cris Carrigan, director of the State Water Board's Office of Enforcement.

The State Water Board fined CVWD in fall of 2015 for being unable to meet its water conservation standard. The two agencies collaborated on a way to enhance local conservation in lieu of paying the fine. With the successful completion of this program within one year at an estimated cost of \$83,400, the \$61,000 fine will be suspended. CVWD has committed to investing in the program for five years.

"What we have here is another program that will bring real, tangible benefits of water conservation and resiliency, as opposed to just a monetary penalty," Carrigan said.

CVWD is creating the program's online curriculum in partnership with College of the Desert and Coachella Valley Association of Governments, which will oversee the implementation of the certification criteria into landscaping business licenses.

"CVWD appreciates the State Water Board's support of this project and willingness to allow us to spend the funds in a way that benefits the Coachella Valley," said CVWD General Managei Jim Barrett. "We expect this certification program will become a valuable resource for professional landscapers to help their clients become more water wise"

The new program is expected to be available to the public this summer. More details will be available soon at www.cvwd.org



Lawmakers try to slow 'water rush' on aquifers

lan James, June 7, 2016

Two years ago, California adopted historic legislation to move toward managing the state's aquifers, many of which are declining rapidly due to overpumping.

But local agencies are being given a long grace period to meet the requirements of the Sustainable Groundwater Management Act – in many cases until 2022 to adopt plans for sustainable water use, and an additional 20 years to bring their aquifers into balance.

Despite the law, thousands of new wells have been drilled across California and groundwater levels have continued dropping in many areas.

A bill approved by the state Senate on Thursday would clamp down by prohibiting the drilling of most new wells in places where aquifers are in "critical overdraft," and by requiring cities and counties in other areas to start requiring permits to put checks on the proliferation of wells.

"There seems to be a real gold rush – or a water rush – to dig as many wells as possible before the deadline of 2022, at which point there will be a groundwater association in place to regulate or control that," said Sen. Lois Wolk, D-Davis, who introduced the bill. Without the legislation, she predicted that more and more wells will be dug in order to avoid restrictions during the next several years.

The 2014 groundwater law applies to 127 groundwater basins that state officials have deemed high- or medium-priority. In all of those areas, Wolk's legislation calls for cities and counties to start requiring permits for well-drilling by January 2018. Applicants would need to show that more pumping wouldn't have detrimental effects.

The bill, SB 1317, would ban most new wells in 21 basins that state officials have classified as "critically overdrafted." Those basins, which range from Merced to Kern County to the Borrego Valley, have been given until 2020 to adopt their 20-year plans for achieving sustainable management – defined as managing groundwater in ways that avoid problems such as chronic declines or saltwater intrusion.

"It applies to brand new wells, new straws that are being placed into the groundwater in aquifers that we know are in critical condition. Why would you do that? Why would anybody want to do that?" Wolk said in a telephone interview. "Areas that we know have critical water supply issues really do have to be sure and verify that it's safe to put more straws in the ground."

The ban would not apply to the drilling of wells for drinking water. Counties that have adopted ordinances to manage aquifers would also be exempt.

Members of the Senate voted 21-17 to approve the bill, and it's headed next to the Assembly.

The legislation has been opposed by a variety of organizations, such as the Agricultural Council of California, the Association of California Water Agencies and the California Building Industry Association.

But Wolk said even the bill's opponents have acknowledged that unlimited well-drilling is a problem.

"I'm waiting for their suggestions," she said. "The status quo is not acceptable."

When new wells are dug in areas where water tables are already in decline, she said, that puts the water supplies of other well owners at risk. "It's a zero-sum game. Somebody else is going to lose – the neighboring farmer, the neighboring rancher, the neighboring urban area."

The five-year drought has multiplied the stresses on aquifers across California, pushing groundwater levels to record lows in many parts of the state.

In the San Joaquin Valley, farms have been pumping heavily to make up for the lack of surface water, and thousands of people in rural communities have been left with dry wells, forcing them to install water tanks and rely on deliveries from tanker trucks.

In the Coachella Valley, state regulators have listed three aquifer sub-basins – Indio, Mission Creek and San Gorgonio Pass – as being "medium" priority. A fourth groundwater sub-basin, Desert Hot Springs, is classified by the state as being a relatively lower priority.

Several local agencies – including the Coachella Valley Water District, the Desert Water Agency, the Indio Water Authority and Coachella Water Authority – have filed notices with the state to begin the process of becoming the designated groundwater agencies for the areas where they provide water.

The drought has also prompted greater awareness about the longstanding lack of access to clean drinking water in many poor rural communities.

One new bill passed by the Senate, SB 1318, is intended to remedy the problem by requiring Local Agency Formation Commissions to recommend plans for bringing water or sewage systems to disadvantaged communities. The bill, also introduced by Wolk, would add to legislation approved last year that gave the state new authority to require the consolidation of water systems when communities have unsafe drinking water.

The latest measure is aimed at pressing agencies to develop plans to serve unincorporated communities such as the trailer parks that dot the farmland of the eastern Coachella Valley.

In parts of Thermal, for instance, the tap water is tainted with hazardous contaminants such as naturally occurring arsenic. For years, many people have been buying bottled water.

The bill would require local agencies to review the adequacy of water and wastewater systems and collect information about communities that need help.

"It would create a roadmap for finally getting water and wastewater services to hundreds of communities in California," said Phoebe Seaton, co-director of Leadership Counsel for Justice and Accountability, an organization backing the measure.

Wolk said it's an embarrassment that California, despite its wealth, has so many people still living without clean, safe drinking water.

"There are a lot of different reasons, but the fact is many of these communities are poor and underserved and disadvantaged, and it's time to put an end to that," Wolk said. "We have to come up with a plan to take care of them, and there is some state money available for that now."

A separate measure approved by the Assembly this week would use 10 percent of fines collected by the California Environmental Protection Agency to pay for environmental projects in disadvantaged communities. The bill, AB 2781, was introduced by Assemblymember Eduardo Garcia, D-Coachella.

"I know first-hand that many of our communities continue to be disproportionately burdened by pollution," Garcia said in a statement. He said creating a fund for disadvantaged communities would help direct money to projects in areas with the greatest needs.

Drought could get worse this winter

El Niño's dry cousin, La Niña, could arrive alongside further cuts to Southern California's water sources.

By AARON ORLOWSKI

STAFF WRITER

Last month, state water officials eased conservation mandates in response to slightly above-average winter rain and snow in much of California, leading many to speculate that the state's long-running drought has tapered off.

If only.

"That's very naive," said Richard Minnich, a UC Riverside earth sciences professor. "We didn't get that much rain here."

The EI Niño winter that forecasters said would drench the state with rain and snow veered north instead, striking mostly the Pacific Northwest. The amount of rain and snow that hit Northern California was a tick above average and looked impressive mostly because it contrasted sharply with the extreme drought of the previous four years.

As for Inland Southern California, the region was wetter than in previous years. But that's not saying much.

In many locales, cumulative rainfail for the 2015-16 season – which concludes this month – fell short of average. And those places that did reach the long-term average were boosted by unusually heavy downpours last summer. Winter was exceptionally dry just about everywhere.

Now global weather cycles are shifting. El Niño's counterpart, La Niña – a seasonal period marked by lower Pacific temperatures that shrivel rainfall in California – is expected to arrive in early fall and could prolong the dry times.

"I would be concerned about the drought continuing," said Dave Pierce, who does El Niño and La Niña forecasts at the Climate Research Division of the Scripps Institution of Oceanography in La Jolla.

Minnich is concerned, too.

"We are five years into subnormal rain," he said. "And we are going into a La Niña. Regardless of the magnitude, the odds are 3 in 4 that we will go into a sixth year."

The really scary part, Minnich said, is that La Niñas tend to usher in a few years of dry weather, not just one.

BAD TIMING

Another dry winter could hit at a time when the sources that provide Southern California with imported water - the Colorado River and the Sacramento-San Joaquin Delta region - face existential threats.

The Colorado River is overallocated, meaning there are more demands on the river's water than there is water. Levels at the river's biggest reservoir, Lake Mead, hit a record low last month, after dropping in 14 of the past 17 years.

While Nevada and Arizona face cutbacks on river water before California, that might change. Negotiations are underway to distribute cuts more evenly among the three states early on to avoid more severe restrictions later.

Meanwhile, in Northern California's delta region, environmental protections are increasing. This could mean healthier populations of fish and better water quality – and less water pumped south to thirsty Southern California cities.

'RIDICULOUSLY

RESILIENT'

During the drought, a persistent high-pressure ridge off the coast of the Pacific Northwest has bent the track of storms away from Southern California.

Forecasters predicted that El Niño-related, record-breaking warm water temperatures in the central Pacific would collapse that ridge. Instead, it reformed intermittently during the winter and blocked the sort of parade of storms that hit Southern California during past El Niño winters. Only the strongest storms were able to break through.

The rainy season was "a pretty modest response" to the unusually warm ocean, said Pierce, the Scripps forecaster.

Now, conditions in the Pacific are cooling and shifting again. Forecasters at the Climate Prediction Center say the odds of a La Niña hitting this winter are about 75 percent.

That means more dry times and a potential revival of the high-pressure system that weather experts call the "Ridiculously" Resilient Ridge."

A La Niña year in Southern California is typically 25 percent drier than an average year, and La Niña has a similar effect on the Colorado River basin.

Scientists are unsure why the local high-pressure ridge is so stubborn.

FIRE STARTER

A La Niña, even as it builds up for winter, figures to bring an extra threat - fire.

Four years of dry times have left the region with a buildup of dead, highly combustible shrubs and trees. As a result, forest managers say the summer could be a particularly difficult fire season.

"Even if the El Niño had brought us normal rain, or even twice as much rain as we normally get, it's still a cumulative effect; the dead stuff is still dead," said Gordon Martin, fire management officer at the Coronabased Trabuco Ranger District of the Cleveland National Forest.

"To get out of four years of drought, it takes four years of above-normal rainfall," Martin said.

FALLING GROUND

Beside the fire threat above ground, drought affects the water below it.

For years, farmers and others in the Central Valley have pumped groundwater to supplement the rain and river water. But between 2014 and 2015, they pumped an unprecedented 11.5 million acre-feet of water out of the earth, causing the ground surface in some parts of the valley to collapse by as much as a foot per year.

"Groundwater has been overpumped for decades, and the recent acceleration of pumping has only made things worse," said Tom Farr, a research scientist at NASA's Jet Propulsion Laboratory in Pasadena.

In Southern California, groundwater basins are closely managed and regularly refilled after they've been drawn down. Farr said there isn't much risk of ground surface collapsing here.

Staff writer David Downey

contributed to this report.

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Save or else, water users told

State officials promise more restrictions if suppliers ease up too much.

By SUZANNE HURT

STAFF WRITER

State officials lauded Californians' continued water savings Monday while issuing a stem warning: Statemandated restrictions will be imposed again on suppliers

that fail to take extended conservation needs seriously.

Californians' water scrimping kept climbing in April, with 43.7 billion gallons of water saved and perperson daily water use slashed by 27 gallons compared with April 2013.

Many Inland water consumers pitched in, accord- ing to compliance figures released Monday by the State Water Resources Control Board in Sacramento.

Statewide savings rose to 26.1 percent for the month. Per person daily consumption dropped from 104 gallons in April 2013 to 77 gallons two months ago.

Yet sustained conservation remains critical as summer arrives in the state's fifth year of drought, and water suppliers' efforts to develop and meet their own conservation goals will be closely watched, board Chairwoman Felicia Marcus said in a call with reporters Monday afternoon.

"The drought is not over. The need for conservation is not over. And the emergency regulations are not over. They are modified," said Max Gomberg, a climate and conservation manager for the water board.

State officials in May agreed to end emergency drought restrictions requiring suppliers to save 25 percent statewide, through individualized water conservation targets of up to 36 percent set by the board.

Under an emergency conservation regulation that took effect June 1, water suppliers must now develop their own conservation goals, based on their assessments of what their three-year water supplies and demands will be if the drought continues. The regulation is in effect until February.

Some suppliers had been pushing for relief from the state's emergency water conservation requirements but assured state water officials they'd keep encouraging customers to save water.

With suppliers in Inland Southern California and throughout the state already lifting or easing restrictions on their water customers, Marcus said, state officials expect water agencies to take conservation requirements seriously or face new state-mandated savings orders.

"If this approach doesn't work, we are prepared to call folks on it," she said.

Customers of at least 20 Inland suppliers saved significant amounts of water in April by meeting or exceeding their savings targets – with Banning, Hemet, Lake Hemet and mountain communities surpassing their goals by at least 10 percentage points.

Yet 14 Inland suppliers fell short in April, notably Hesperia Water District and Redlands, which got only halfway to their targets of 28 percent and 33 percent, respectively.

Reservoir levels need to be replenished and maintained as most of the state remains in a drought.

The best place for Californians to curb water use is in landscaping, which guzzles more than half the water consumed in some areas and 80 percent in others, Marcus said.

"We need people to keep it up over the hot summer months," she said.

Water wholesalers must report their three-year water supply projections by June 15. Water retailers, some of whom get their water from wholesalers, must turn in their supply projections, assuming three more dry years, and calculations used to form new self-determined water conservation goals by June 22.

Suppliers that expect to have a 10 percent water deficit after three years must set a 10 percent savings goal, Gomberg said.

Those savings targets take effect this month. State water officials, who continue requiring monthly conservation reports, will be able to see by the end of July whether suppliers are meeting their new standards, Gomberg added.

April water conservation The State Water Resources Control Board on June 6 released figures showing how much water savings Inland suppliers had In April, compared to the same month in 2013:

	State target	April
Apple Valley Ranckes Weber Company	24%	37.8%
Baxeing	28%	39.3%
Beaumont-Cherry Valley Water District	32%	34.4%
Big Bear Community Services District	13%	33.7%
Big Bear Lake Bept of Water and Power	13%	30.9%
Chino	2:%	22.2%
Chine Hills	28%	28.3%
Colton	18%	18.7%
Corona	28%	21.9%
Crestline Village Water District	8%	20.4%
Curamonya Valley Water Statrict	30%	28.3%
East Valley Water District	22%	NA
Eastern Municipal Water District	20%	23.6%
Etsinere Valley Municipal Water District	27%	30%
tity of Homat	1496	26.9%
Hesperia Water Sistrict	28%	14.6%
Jurapa Community Services District	23%	16.9%
Lake Arrowhead Community Services District	13%	29.9%
Lake Henset Municipal Water District	26%	39.196
Lome Linda	30%	22.9%
Nerco	36%	35.2%
Ontario	20%	20.1%
Perris	24%	20.4%
Ranche California Water District	32%	26%
Rodlands	33%	1596
Rialto	26%	25.7%
City of Riverside	25%	24.8%
Riverside Highland Water Company	33%	35.8%
Rubbies: Community Services Histrict	20%	22.2%
City of Sea Bernardine	25%	24.8%
San Cabriel Valley Fentana Water Compony	26%	24.3%
San Jacinte	30%	34.8%
City of Upland	34%	25.7%
Western Municipal Water District of Riverside	28%	32.9%
Yuculus Valley Water District	34%	34.1%

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Nestle facing scrutiny

A hearing will assess a permit for taking water from S.B. mountains.

By JIM STEINBERG

STAFF WRITER

Environmentalists and other organizations are turning up the heat under international food and beverage provider Nestle as a legal challenge to the company's water operations in the San Bernardino National Forest heads toward a long-awaited federal court hearing Monday.

The hearing to address Nestle's permit for water operations at Strawberry Creek watershed is scheduled before Judge Jesus G. Bernal at 9 a.m. in U.S. District Court in Riverside.

During a digital town hall Thursday evening, one of the plaintiffs in the case against the United States Forest Service called for informational picketing at as many Sprouts Farmers Market locations as a possible on July 9 to seek removal of the Arrowhead spring water brand from store shelves.

Based in Phoenix, Sprouts operates more than 200 stores across the country.

"We selected Sprouts because they emphasize the sustainability issue," Tim Molina, spokesman for the Courage Campaign, said in an interview Friday.

Molina said a few weeks ago, his organization and Sprouts executives met about Nestle and asked them to pull their product from Sprout's shelves.

"There was no sense of urgency" at Sprouts, Molina said. "So we want to put pressure on management."

"Shoppers at Sprouts are choosing products that support their healthy lifestyle," said Jane Lazgin, a Nestle Waters North America Inc. spokeswoman.

"Americans are drinking more water – bottled and tap – than any other type of beverage. And drinking more water is being encouraged by health professionals across the U.S.," she said.

"In order to provide our bottled water products to people, we must be good stewards of water sources and the surrounding environment," Lazgin said. "Functioning continuously from Strawberry Canyon for more than a century points to our effective and sustainable management. And, that's done with the shoppers at Sprouts and other outlets always in mind," she said.

"Nestlé Waters has assured us that the allegations being made are false," said Diego Romero, a Sprouts spokesman in Phoenix. "Specific questions about their bottling and sourcing practices should be directed to them. We will continue to monitor the situation and, as always, will listen to our customers' feedback."

Christopher Hogan, spokesman for the International Bottled Water Association, said discouraging people from drinking water "is not in the public interest" and will increase the likelihood that they may opt for "an unhealthy sugarsweetened packaged drink instead."

The Courage Campaign, the Center for Biological Diversity and the Story of Stuff Project filed a lawsuit in October claiming that the Forest Service allowed Nestle's pipelines, pumps and other structures on federal land for too long after the special use permit expired 28 years ago.

Forest Service officials say verbally – and in court filings – that when those permits expire, they remain in effect until renewed or denied.

In November, the three plaintiffs filed a motion for a summary judgment asking for the federal court to quickly rule on the case, so that Nestle does not continue to bottle millions of gallons of water during a drought from one remote canyon in the San Bernardino National Forest.

On April 20, Bernal asked the plaintiffs and the Forest Service, the defendant, to file briefs address ing whether the plaintiffs are entitled to injunctive relief.

The hearing Monday is anticipated to deal largely with the plaintiffs' request for a decision without a trial and whether injunctive relief would be an appropriate remedy, officials close to the case said.

Earlier this month, the State Water Resources Control Board confirmed it had launched an investigation into Nestle's water rights in the San Bernardino National Forest, adding a new layer of scrutiny to Nestle's operations – one proceeding independently of the coming courtroom showdown.

Activists from the Story of Stuff Project, the California-based Courage Campaign Institute and the Center for Biological Diversity announced plans in a news release for a rally Monday morning outside the federal court building in Riverside as Bernal considers the challenge to Nestle's operation.

"I hope and pray that justice is done," Steve Loe, a Yucaipa resident who spent more than 30 years as wildlife biologist in the San Bernardino National Forest, said Friday by telephone.

Loe said he spent the last two years of his career – 2006 and 2007 – working on a Forest Service program to get about 800 cabins in the San Bernardino Mountains to stop taking water from streams, an action requiring many to spend from \$6,000 to \$8,000 to put in water tanks.

Loe said that historic year-round water flow from Strawberry Creek is unusual in the entire San Bernardino Mountain range and for that reason, many animals, insects and plants, including endangered species, are impacted.

But that flow is being threatened, given Nestle's continued withdrawals – 36 million gallons last year – plus the heat and sparse rainfall this winter.

"There is no doubt that these extremely low flows will greatly reduce areas of surface water and habitat capable of supporting endangered and sensitive species as well as riparian vegetation," Loe wrote in an email earlier this month.

Whose water is it?

A court hearing is scheduled Monday before Judge Jesus G. Bernal in U.S. District Court in Riverside to discuss the future of Nestlé's deal to bottle water from the San Bernardino Mountains.

121

The years Arrowhead bottled water brand has been fueled by spring water from the San Bernardino Mountains and other springs around the state.

1,200

Number of employees associated with Nestle's Arrowhead brand in California.

5

Nestle water bottling plants: Cabazon, Ontario, Los Angeles, Livermore and Sacramento.

36 million

Gallons of water from Strawberry Creek that Nestlé reported collecting in 2015, up from 28 million gallons in 2014.

524

The dollar amount Nestlé pays each year for water in the San Bernardino Mountains.

Timeline

1978: United States Forest Service issued permit to Nestlé to draw water at Strawberry Creek watershed.

1988: Nestle's permit expires, but the company continued to draw water.

April 2015: Online community group, Courage Campaign, collected more than 135,000 signatures to demand Nestlé discontinue operations in California under Arrowhead and Pure Life brands.

October 2015: Group of environmentalists filed a complaint in federal court, alleging federal government did not push Nestlé to update its permit.

January: Forest Service began a comprehensive environmental review of Nestle's continuing operations in the San Bernardino Mountains.

May: Nestlé submits a 79-page document to the Forest Service expressing its disapproval of the process to renew its permit in Strawberry Canyon.

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BRIEFLY

NEW WATER RATES APPROVED IN TEMECULA

Temecula-area homeowners will be getting a little budgetary wiggle room next month.

The Rancho California Water District approved a new water rate structure Thursday morning that should make it easier for people to water their lawns or fill up their pools.

The structure, which the district calls Stage 3C of its "water shortage contingency plan," includes a suspension of the drought surcharges that were imposed last year following Gov. Jerry Brown's statewide water use reduction mandate.

Residents in De Luz, Temecula, Wine Country and a sliver of Murrieta should see the changes in their July bills.

The vote by the board was 5-2. The dissenting members of the board, Ben Drake and Stephen Corona, advocated for a move to Stage 3B, which would have given ratepayers an additional cushion before hitting the highest rates.

- Aaron Claverie



CUSTOMERS BALK AT PLAN TO RAISE WATER RATES

lan James, June 12, 2016

A plan to raise water rates in communities from Cathedral City to La Quinta is being questioned and scrutinized by customers who say they're about to be hit with an excessive financial burden.

The rate increases, which are up for a vote Tuesday, would lead to significantly higher bills for residential customers, businesses and homeowners associations that buy water from the Coachella Valley Water District.

The district's board members say the rate increases are needed to raise \$250 million for new water treatment plants to remove the potentially hazardous heavy metal chromium-6, as required under a new state standard. The district is also trying to make up for a projected decline in revenue due to conservation.

Many opponents of the plan are pressing CVWD to reduce the rate increases or at least ease into them. Some customers have called for the agency to find ways to spend less on water treatment or come up with different financing approaches.

According to notices mailed to homeowners, the average monthly bill for a single-family home could climb by about \$6, or 23 percent, starting in July. The increases will vary, though, depending on the customer and on how much water is used. Some homeowners associations could see rates jump by more than 50 percent.

The board will be voting on a single year of rate increases for now. But CVWD's mailer details potential increases for the next five years. If those changes are adopted as proposed in future years, many customers would see their bills double by 2020 – and the rates of some HOAs could rise more than 150 percent.

"It's ridiculous," said Keith Comrie, whose homeowners association in Rancho Mirage has calculated its annual water bill could go from \$60,000 to about \$140,000 by 2020 under the proposal. "You're going to see people in associations see their water bill go up \$100 a month. That's huge for somebody living on Social Security."

The district's board members say they intend to limit the rate hikes to the lowest level that would still allow them to qualify for a low-interest state loan to pay for chromium-6 treatment.

Some critics, however, argue CVWD's elected leaders ought to be managing money very differently.

Debating rates and finances

One of those who has raised detailed objections is Randy Roberts, a retired businessman who lives in Palm Desert. He contends the water treatment plan is ill-conceived and CVWD's board has long mismanaged funds.

Roberts accused the district of improperly using revenues from domestic customers to make up for insufficient revenues in the East Valley, where large farms benefit from particularly cheap water rates. Roberts argued the district has been undercharging those big agricultural water users and should have increased their rates years ago to adequately cover costs.

"We're shouldering all of it," he said. "They're making us pay for these guys."

Roberts pointed to a list of concerns in the district's records. In 2013, for instance, documents show CVWD's board chose to use \$60.3 million from the Domestic Water Fund to provide a 15-year loan to the East Whitewater Replenishment Fund, which relies on revenues from fees charged to well owners. The loan has been used to pay for construction of the Thomas E. Levy Groundwater Replenishment Facility in La Quinta, and the funds are being gradually paid back.

"This money is owed to us immediately," Roberts said. He said he thinks if those and other funds were paid back to the domestic customers' fund and properly allocated, "there would be little need for additional rate increases."

Roberts said his message for the district's board is: "Give us back our money and come with a realistic proposal."

John Powell, Jr., president of the CVWD board, denied those accusations and defended the district's ratesetting process and financial management, including the 2013 loan.

"With the repayment of that loan, with interest, the domestic fund is whole," Powell said. "And we take that into account when we set rates."

Powell also took issue with Roberts' contention that the district has been undercharging water users in the East Valley, and he pointed out that the rates are based on cost studies. Consultants hired by the district have carried out those "cost-of-service" studies for different categories of customers, and have recommended rates.

The district collects "replenishment assessment charges" from well owners across the valley to cover costs associated with importing water to replenish the aquifer.

Those rates vary in different parts of the valley. In the West Whitewater area, which stretches from north of Palm Springs to Bermuda Dunes, well owners as of July 1 will pay the recently increased rate of \$128.80 per acre-foot. In the adjacent Mission Creek sub-basin near Desert Hot Springs, the rate is \$123.20 per acre-foot.

In the East Whitewater area – which stretches from Bermuda Dunes to the Salton Sea – groundwater pumpers pay \$66 per acre-foot.

"The rates are based on the cost of service in each area," Powell said. Water that flows from the Colorado River to the East Valley via the Coachella branch of the All-American Canal costs much less, he pointed out, than water the district obtains in the West Valley by trading its State Water Project allocation for an equivalent amount from the Colorado River Aqueduct.

"The west rate's higher because the cost of water's higher – by 10 times," Powell said.

At one point last year, the district considered making the replenishment rates the same in all of those areas. A presentation from a CVWD study session on March 17, 2015, recommended increasing the East Whitewater rates to \$116 per acre-foot starting in 2017, matching the other two areas. The presentation said the East Whitewater Replenishment Fund "has never fully recovered its costs due to its rate structure."

But the board rejected that proposal and instead decided to stick with the lower rate of \$66 per acre-foot for East Valley well owners following a study by Hawksley Consulting, which concluded that those rates "reflect the cost of providing the associated service."

Roberts also objects to the district's use of a portion of property tax revenues for the East Whitewater Replenishment Fund, and argues that money should be used for purchasing water supplies from the State Water Project, not for groundwater replenishment in the East Valley.

Increasing revenues from the district's State Water Project tax have accounted for a large share of the cash flow into the fund. In the 2013 budget year, the CVWD board approved an increase in the State Water Project tax from 8 cents to 10 cents per \$100 of assessed property value. The district has also decided to allocate more of the tax – two cents instead of the previous one cent – to the fund.

A rate study report prepared for CVWD by Hawksley Consulting projected the tax to generate more than \$100 million for the fund between 2016 and 2020.

A 2012 legal opinion by the board's attorney backed the practice of using the State Water Project tax revenues for groundwater replenishment in the East Valley. In March 2015, though, as the board was considering consolidating the rates, a CVWD presentation said a legal opinion from the district's new attorneys concluded that the "SWP tax can only be used to pay SWP invoices."

Roberts said that indicates the tax revenues should be used for expenses directly related to buying water from the State Water Project, and not for projects that involve the use of Colorado River water in the East Valley.

Asked about the 2015 legal opinion, Powell said "that's privileged and it's not in the public domain." He said he couldn't comment further about it, but he insisted that using the tax revenues for the East Valley costs of replenishing the aquifer is legal and fair.

"The legal opinion that we have on the State Water Project tax is solid, and we went forward on that basis," Powell said. "The purpose of those funds is to replenish the aquifer, and that's what we're doing."

The debate over water rates hasn't been limited to rates for well owners and domestic water service. Roberts has also criticized recent changes to the rate structure for water from the Colorado River that is delivered by canal. He called it "disturbing" that Powell, who is president and CEO of Peter Rabbit Farms, has cast votes in support of low rates that benefit his business.

But Powell pointed out that it's perfectly normal for board members of water agencies to be subject to the rates they approve – whether domestic rates or agricultural rates. And he insisted the entire rate-setting process has been carried out properly, guided by extensive studies of the costs for different categories of customers.

Questions about reserves, chromium-6

Some of the customers who are speaking out against the rate increases have questioned why CVWD needs to charge more when it holds substantial reserves.

As of December, a financial report showed the district had more than \$484 million in total cash and investments, of which about \$423 million was listed as "total unrestricted funds." Last year's budget projected reserves of \$386.7 million at the end of the fiscal year.

The district's reserves are split up into separate funds for purposes ranging from domestic water service to stormwater and sanitation. The district also has a policy that outlines its goals in maintaining sufficient reserves to prepare for risks such as unanticipated shortfalls in revenue.

The reserves for the Domestic Water Fund now total about \$80 million, which Powell said is in line with the district's guidelines. That's good, he said, because the district needs cash to begin construction of chromium-6 treatment plants while it pursues a low-interest loan from the Drinking Water State Revolving Fund.

"We anticipate that we're going to use before the end of this year about half of that reserve, about \$40 million," Powell said. "If we didn't have that reserve, we would not be able to do this. So having the reserve has actually saved us quite a bit of money in terms of not having to go into the bond market and pay much higher costs to finance this project."

The district is pursuing a state loan that at present offers an interest rate of 1.6 percent, Powell said. "We don't have excess reserves in domestic. We have the right amount of reserves," Powell said. "We are going to use those funds."

CVWD's managers say treating water to remove chromium-6, also known as hexavalent chromium, will be their costliest infrastructure project ever.

California regulators adopted a new drinking water standard for the carcinogen in 2014, and water districts have been given until 2020 to comply with the limit of 10 parts per billion. CVWD officials have questioned the science behind the new state limit but say they're obligated to meet the state's requirements.

In large portions of the aquifer beneath the Coachella Valley, the groundwater has levels of chromium-6 that exceed the new state limit. While water agencies say the heavy metal occurs naturally in the area's water supply, chromium-6 can also be released into the environment as pollution from sources ranging from cooling towers to industrial plants.

The water district, the largest of six water suppliers in the area, plans to install ion-exchange treatment units at about 30 of its 92 wells across the Coachella Valley.

The rate increases will affect the bills of nearly 93,000 single-family homeowners, as well as more than 3,400 multi-family accounts, more than 4,800 landscape irrigation meters and more than 4,500 commercial customers.

CVWD laid out its plans, including changes to the rate structure, in the mailer it sent to customers ahead of Tuesday's public hearing.

The district's figures show that under one scenario, customers living in a multifamily condominium and with a level of water use deemed "efficient," could face an increase of 21 percent starting in July.

Homeowners associations that buy water for outdoor irrigation would see some of the biggest increases. HOAs often have a few dozen water meters for grassy areas, and the large proposed increases in the fixed rates for each meter would add up.

Representatives of HOAs have been writing to the district to protest the plan. Cal Lockett, executive director of the Coachella Valley chapter of the Community Associations Institute, said in a letter to CVWD that his non-profit organization opposes the major increases proposed for monthly fixed charges.

"We represent more than fifty percent of your customers," Lockett wrote. "These rates are problematic for all associations and may put some associations at substantial financial risk."

Associations will be forced to pass along the increases to homeowners through higher monthly dues. And HOAs will need up to a year to put in place higher assessments, Lockett said. "Forcing associations to pay these increases without providing a reasonable amount of time to properly raise assessments is setting them up to fail financially."

'Lowest possible increase'

At a CVWD meeting on Wednesday, several people told the board they think the proposed rates are excessive, particularly the big jump in the monthly fixed rates for homeowners associations.

Chrystina Wallen said her 50-home community, Casa Rosada in Indian Wells, has projected a 78-percent increase in its water costs by next June under the proposed rate increases.

"That is very difficult when you've already done your budget," she said. "It will affect us severely as a small development."

She said the district ought to challenge the state on the chromium-6 regulations. She also asked what CVWD has done with the money it has collected in penalty fees from customers who have failed to reach conservation targets during the drought.

CVWD eliminated those drought penalty fees after state regulators lifted mandatory conservation targets for local agencies in May. Those fees helped the agency's finances as it lost \$12.3 million in revenues between July 2015 and April 2016 due to conservation.

As people continue with their water-saving habits, the district will no longer have penalties to offset those losses in revenue. General Manager Jim Barrett has said that's another factor contributing to the need for higher rates.

After listening to several people oppose the plan at Wednesday's meeting, Powell said he'd support a smaller increase in fixed rates as long as it generates enough money to cover debt payments, a key condition for the state loan.

"I'm interested in the lowest possible increase to the rate that doesn't disqualify us from accessing the state revolving fund loan, which is a very low-cost loan," Powell said. "I'm suggesting that we take it down as much as we can."

It's not clear how much smaller the rate increases might turn out to be when the board votes on Tuesday. Ian James writes about water and the environment for The Desert Sun.

Water rates increases

Here are scenarios for potential rate increases based on a notice the Coachella Valley Water District mailed to customers. The actual rates vary depending on the customer and the amount of water used. The CVWD board could decide to adopt smaller rate increases.

Single-family home - 3/4" water connection, 20 ccf, efficient rates

Now: \$28.30 per month

With increase: \$34.74 per month

Multifamily - 3/4" connection, 105 ccf, efficient rates

Now: \$122.40 per month

With increase: \$148.25 per month

Landscape irrigation – 1 1/2" meter size, 193 ccf, efficient rates

Now: \$227.66 per month

With increase: \$348.16 per month

Commercial - 3/4" connection, 52 ccf, efficient rates

Now: \$65.24 per month

With increase: \$76.74 per month

Public hearing on water rates

The public hearing on the proposed rate changes will be held at 9 a.m. on Tuesday, June 14, at the CVWD administration building, at 75515 Hovley Lane in Palm Desert.

The water district will accept formal written protests until Tuesday. Written protests may be mailed to: Coachella Valley Water District, Attention: Clerk of the Board, P.O. Box 1058, Coachella, CA 92236 or may be hand-delivered to: Coachella Valley Water District, Attention: Clerk of the Board, 51501 Tyler Street, Coachella, CA 92236; or 75515 Hovley Lane, Palm Desert, CA 92211; or at the public hearing on June 14. Protests must include name, signature, street address, parcel number and/or account number.



Coachella Valley agency votes to raise water rates

lan James, The Desert Sun, June 14, 2016

The board of the Coachella Valley Water District voted Tuesday to raise rates after hearing from dozens of customers who protested the increase as excessive.

The board chose to increase per-gallon rates starting in July for residential customers, businesses and homeowners associations that buy water from the district. Monthly fixed rates will also increase on water bills starting in October.

Board members said they need to charge more to invest \$250 million in water treatment to remove the potentially hazardous heavy metal chromium-6, as required under a new state standard. CVWD, the largest water supplier in the Coachella Valley, is also trying to make up for a projected decline in revenue due to conservation.

Customers lined up to speak out against the plan Tuesday. Some called the higher rates "astronomical" and "unconscionable." Some said their homeowner association dues will soar as a result of the higher water bills.

"I'm on a fixed income also and I live in an HOA, too," board member Ed Pack said. "But it has to be increased. That I do know."

The increases approved were somewhat smaller than the levels initially proposed in a mailer sent to customers. Board members chose one of four options.

Several people accused the district of violating Proposition 218, the 1996 ballot measure that requires districts to charge the actual cost of providing service to customers.

"Gentlemen, you are perpetrating a fraud on everybody in this room," Peter Wirchanske of Rancho Mirage told board members during the meeting. "You may end up in court."

The board room in Palm Desert was filled to capacity, and people stood along the back wall. Dozens of people stood to register their complaints. CVWD also received more than 2,000 written protests.

BOTTLED WATER CASE'S JUDGE SENDS ATTORNEYS BACK TO WELL

More data needed in assessment of Nestlé's water rights.

By JIM STEINBERG

STAFF WRITER

RIVERSIDE > A federal judge Monday said he needed more information before he can determine if the government has erred in allowing Nestlé to continuously withdraw millions of gallons of water annually from Strawberry Creek – 28 years after the company's permit expired.

Judge Jesus G. Bernal asked both U.S. Forest Service attorney Andrew Smith and Matt Kenna, representing the environmentalist plaintiffs, to provide briefs examining whether certain U.S. Forest Service regulations fall under the Federal Administrative Procedures Act, which prescribes how the federal government goes about its business.

In an interview, Kenna said he was sur- prised by the request because neither side raised the procedures act in their briefs to the judge.

Monday's hearing was in response to a lawsuit filed in October 2015 by the Center for Biological Diversity, the Story of Stuff Project and The Courage Campaign, claiming that the Forest Service allowed Nestlé Waters North America to maintain pipelines, pumps and other structures in the San Bernardino National Forest for 28 years after its permit expired. The company bottles the water under the Arrowhead brand.

"I know the courtroom can be a challenging and sometimes disappointing place," Michael O'Heaney, executive director of the Story of Stuff Project, said after the hearing. "I would have loved to have heard (the judge) say from the bench that the permit is invalid and Nestlé should stop taking water."

Smith, a senior trial attorney with the U.S. Attorney's Natural Resources Section in Albuquerque, N.M., declined comment.

"This will continue to unwind. ... Our lawyer and Forest Service attorneys will submit some briefs, and we will go from there," O'Heaney said.

Bernal said Monday he hasn't decided whether he'll require another hearing.

O'Heaney called Monday's hearing just one piece of a multipronged strategy in challenging Nestlé.

The state Water Resources Control Board is conducting a separate investigation into Nestlé's rights to withdraw water from Strawberry Canyon, and the Forest Service is reviewing the environmental impacts of Nestlé's permit. There will be ample opportunity for public comment about the latter, he said.

The activist group also plans to picket the Arrowhead brand at Sprouts Farmers Market outlets around the county July 9, he said.

"I think the judge asked good questions and clearly had the government's attorney off-balance," O'Heaney said.

While Nestlé is not a party to the lawsuit, the company continues to follow developments in the case, said Jane Lazgin, a spokeswoman for Nestlé Waters North America.

Nestlé will provide any information the court requests as it continues to study the situation, she said in a statement.

"I am happy that the judge doesn't seem to like the fact that nothing has been done for 28 years," said Steve Loe, who attended the hearing and has spent more than 30 years as a wildlife biologist in the San Bernardino National Forest.

"I hate to see the case depending on a couple of words in some regulation when the real issue is continuing to remove massive amounts of water from public land in the most severe drought in recorded history using a permit that has never been updated as required to protect the environment," Loe said in an email.

Nan Mooring, a Riverside resident who attended Monday's hearing, said she has let plants die during the drought and is outraged that Nestlé continues to extract millions of gallons of water annually from the San Bernardino National Forest.

In 2015, Nestlé tapped 36 million gallons of water from Strawberry Creek, paying \$524 for the permit, which National Forest officials say is in force even though it expired in 1988.

Digital mapping tools save money, water

New data help a water district monitor infrastructure, track customers' habits.

By SANDRA EMERSON

STAFF WRITER

HIGHLAND > Since trading in paper maps for digital ones, the East Valley Water District has been able to monitor its infrastructure and customer water use more efficiently.

The Highland-based water district uses Esri's geographic information systems technology to identify and fix leaks more quickly, track water consumption and conservation, and monitor other happenings in the field in real time.

"We're not making decisions based on emotion or gut feeling. The decisions we make have a foundation behind them – empirical data that justifies the decisions we make," said Robert Peng, the district's information technology manager.

The water district uses GIS for asset management, such as maintenance of water mains and infrastructure; ArcGIS for water usage; and various operations dashboards showing field activities.

In 2008, Esri developed a GIS Road Map and pilot project to help the water district implement GIS. The water district entered into a Small Utility Enterprise License Agreement with Esri, providing unlimited access to Arc-GIS software along with assistance from Esri employees, said Suzanne Timani, senior account executive with Esri.

About 90 percent of water agencies in the state are using Esri's technology, Timani said.

Esri works with small, medium and large agencies to identify their needs and challenges and how they can "make them more efficient, save them time and money and of course, water," Timani said. "Especially these days in California with the drought, the Esri location platform is a key solution for that."

The technology has proved useful since Gov. Jerry Brown's executive order mandated that water agencies across the state cut back on water use. The software allows them to identify their highest water users, who they can then reach out to.

"If we can get to those customers first, we would expedite reaching our conservation goal much faster because we are targeting the most inefficient customers," Peng said. "It's really a mutually benefiting relationship. We're going to help them conserve water and save money on their water bills."

The technology also helps the district determine infrastructure repairs. The district can use the data to identify the infrastructure most in need of replacement, which is more cost effective.

"We have miles of mains, and if we recognize we're pouring all these resources into a single main, we can analyze that and say it may be more cost effective for us to do a replacement rather than to continue maintenance on a single asset that continues to fail," Peng said.

The water district is also using Esri's technology to identify the age of its nearly 23,000 water meters. The goal is to install advanced meters, which would allow the district's customer service representatives to read meters from the office.

The partnership with Esri has made the water district a model for other water agencies looking to integrate GIS technology. In April, representatives from the Dubai Water Authority visited the water district to learn about its use of GIS, such as its programs for landscape analysis, utility billing and quality control measures.

The water district's work has also been presented to Esri users.

The system did not take long to implement in the district, Peng said.

"These are what we call templates, so Esri does a really good job of building these templates so they're almost ready to go out of the box," Peng said. "We just need to tell the dashboard where to grab the data and what data to grab."

***** The Desert Sun

Colorado River Aqueduct marks 75 years of water delivery

Denise Goolsby, The Desert June 16, 2016

The lifeblood of greater Los Angeles runs through the Coachella Valley, coursing through a series of tunnels bored into the rugged foothills of the San Jacinto Mountains.

The 242-mile Colorado River Aqueduct — constructed from 1933 to 1941 by the Metropolitan Water District of Southern California — stretches from Parker Dam at the Arizona border to Lake Mathews in western Riverside County. Since June 1941, it's provided water to millions of residents of Los Angeles and the surrounding counties.

This week marks the 75th anniversary of the first water delivery of Colorado River water to the Los Angeles area — Pasadena received the first flow — and as a bonus, the 13 cities that originally formed the district received free water for two months.

The eight-plus-year construction project was launched at a critical time in the nation's history, when jobs were scarce and people were still reeling from the fallout of the stock market crash of 1929.

Also known as the Metropolitan Aqueduct, "it was one the biggest public works projects in the country during the Depression," local historian Pat Laflin said.

The construction of this aqueduct was a Herculean undertaking and engineering marvel that came about out of necessity: to quench the thirst of a growing Southern California population.

The Los Angeles Basin was already receiving water from the Owens River, but just 10 years after the 233-mile Los Angeles Aqueduct (Owens Valley aqueduct) was completed in 1913, it became apparent the Sierra Nevada watershed was not adequate to fill the aqueduct in a dry cycle, Laflin said.

The men of the Los Angeles Department of Water and Power looked to the east for a new source of water to support the throngs of settlers flooding into Los Angeles.Building the Colorado River Aqueduct

They decided the Colorado River was their only hope to sustain the growth of the area as Los Angeles had become a city of major manufacturing importance and an essential port.

In 1928, a group led by William Mulholland — the driving force behind the Los Angeles Aqueduct — organized the Metropolitan Water District of Southern California.

The district, formally created by the state Legislature, would be responsible for the planning, building and funding of the Colorado River Aqueduct.

In 1931, voters living in the district approved a \$220 million bond issue to build the aqueduct, which would require 29 tunnels covering 92 miles to be blasted through the solid core of mountains, including the San Jacintos. That bond issue would cost about \$3.5 billion today.

There would be four dams and five pumping plants built to lift the water 1,600 feet along its journey to the terminal reservoir near Riverside and Corona.

The project — officially underway in January 1933 — employed more than 30,000 people over an eight-year period and was a boon to the local communities, especially Indio.

The Jan. 13, 1933, issue of The Date Palm newspaper reported that "aqueduct camps (were) being established daily in the hills near Indio."

By April 1933, the paper reported that six permanent aqueduct camps of men were at Wide Canyon, 1000 Palms Canyon, Pushawalla Canyon, Berdoo Canyon, Fargo Canyon and Yellow Spot.

Berdoo Camp, the one The Date Palm mentioned most, can be reached by a side road that leads into San Bernardino Canyon from Dillon Road.

One of the largest buildings at Berdoo was a 27-bed hospital. Other camps only had emergency first aid stations.

The hospital was staffed by a surgeon/medical officer, an assistant surgeon and 14 registered male nurses. The air-conditioned hospital was equipped with a modern operating room, X-ray plant, diet kitchen and general offices. Each employee was charged five cents per working day for medical care. The men made \$4 to \$5 a day on average.

At least 25 men died while working on the Coachella Valley section of the aqueduct due to falls, crushings and heat.

As work ended at each of the camp sites and crews moved on to the west, the camps were dismantled. Some buildings were moved intact. Many were dismantled for salvage.

Thermal date farmer Ben Laflin ran a salvage business during the time the aqueduct was being built.

"This was the Depression and farming wasn't very profitable," son Ben Laflin Jr. told The Desert Sun in 2014. The elder Laflin contracted to buy a lot of the timber, lumber and railroad ties being disposed of as the tunnel work was finished.

"There would be big piles of this disposed material up at the entrances into the different sections of the tunnel," Laflin said. "I remember stacking an awful lot of lumber as a kid. My dad and I would go up in the truck and either truck it down to the ranch or take it directly to people who had ordered timber and ties. We took the materials to buyers everywhere from Los Angeles to Kingman, Arizona, and points east."

Coachella Valley benefits

The Coachella Valley receives some of that Colorado River Aqueduct water.

The Desert Water Agency and the Coachella Valley Water District have entitlements to State Water Project water supplies from Northern California, but lack any physical connection to the state aqueduct.

In order for DWA and CVWD to obtain State Water Project water entitlement, Metropolitan Water District swaps an equal quantity of its Colorado River water for the agencies' state water. The water is released from the aqueduct near the Whitewater River recharge area, providing water to the aquifer in the upper Coachella Valley groundwater basin.

A topographical map showing the route of the aqueduct is on permanent loan from the Metropolitan Water District at the General Patton Memorial Museum in Chiriaco Summit.

The map, built in the late 1920s and '30s, is in five sections, each weighing a ton.

"All five sections were flown back to Washington, D.C., in 1938, put back together, to illustrate to Congress how an aqueduct system could deliver fresh water from a pumping station at Parker Dam up through this pass, which has an elevation rise of 1,700 feet," museum general manager Mike Pierson said while pointing out the course of the aqueduct on the map.

"And from the summit here (Chiriaco Summit), starts going back downhill through the Coachella Valley, through the Hemet valley and into Los Angeles. All the area in pink — from North Los Angeles to San Diego — thrived ... because of this aqueduct being built."

The aqueduct began delivering water just six months before the Japanese bombed Pearl Harbor on Dec. 7, 1941. Gen. Patton established the Desert Training Center the following year, just months after the start of World War II.

"Being a California boy, he knew that the Metropolitan Water District had already completed the aqueduct," Pierson said.

"He knew the aqueduct was right here off of the two two-lane roads that intersected four miles west of here the old two-lane highway from Indio to Blythe and the still current two-lane road from Mecca, called Cottonwood. He pitched his first pup tent literally within 200 yards of the aqueduct, told his soldiers to tap into that water and that's how his camps grew."

Colorado River Aqueduct Timeline

Dec. 29, 1928 - First meeting held of the board of directors of the Metropolitan Water District.

Oct. 29, 1929 - Stock market crash; Great Depression begins.

1931 – Metropolitan's Board of Directors approves the Parker route (Jan. 16); Southern California voters approve a \$220 million measure to build the Colorado River Aqueduct, with 82 percent voting yes (Sept. 29). That would be about \$3.5 billion today.

Jan. 25, 1933 – Construction begins on the Colorado River Aqueduct as the first crew of workers arrives in the foothills of Coachella Valley.

Nov. 10, 1934 – Eight months after "Arizona Navy" attempts to block construction of Parker Dam, Arizona's governor attempts to put the construction site under martial law. Congress clears way for dam construction the following year.

July 22, 1935 – Colorado River Aqueduct pioneer William Mulholland dies. Several days later, workers pay silent tribute to Mulholland along the aqueduct.

1936-37 – Construction begins on Gene pumping plant; first Colorado River Aqueduct pumping plant completed at Iron Mountain.

1938 – Completion of Cajalco Reservoir, Metropolitan's first storage reservoir and terminus for the Colorado River Aqueduct.

1939 – First Colorado River water delivered into the Colorado River Aqueduct (Jan. 7); the 13-mile San Jacinto Tunnel is completed, capping six years of floods and labor woes (Nov. 29).

1940 – In the year it receives its first Colorado River water, Cajalco Reservoir is renamed Lake Mathews in honor of W.B. Mathews, Metropolitan's first general counsel.

1941 – The first water flows into the softening and filtration plant at La Verne, which will soon be renamed for Metropolitan chief engineer F.E. Weymouth, who passed away withing a few weeks after deliveries begin.

June 17, 1941 – Metropolitan water arrives in Pasadena marking the first delivery of Colorado River water to Southern California cities.

Dec. 7, 1941 – Japanese attack on Pearl Harbor. Metropolitan responds by adding surveillance of the Colorado River Aqueduct.

Source: Metropolitan Water District of Southern California.



Bill targets secrecy in California water data

lan James, The Desert, June 20, 2016

Farms and golf courses rank among the biggest water users in the Coachella Valley, but detailed information about how much water each of those businesses use is kept secret by the area's largest water agency.

That would change under a bill now before the California Legislature. The bill would clarify previous legislation by specifying that while residential customers' data may be kept confidential, the public is entitled to information about how much water and energy is used by businesses and institutions.

"People have a right to know who's using what, and especially with a commodity like water," said Assembly member Mark Stone, a Democrat who represents the Monterey Bay area.

The bill, AB 1520, was introduced last year in the Assembly Judiciary Committee, which Stone chairs, and was approved last week by the Senate Judiciary Committee. It will go next before the Senate Appropriations Committee.

One of the organizations backing the bill is the First Amendment Coalition, which in 2014 sued the Coachella Valley Water District and the Desert Water Agency after they stopped releasing detailed information about groundwater pumping by large customers such as farms, golf courses, housing developments and resorts.

DWA later settled the case and resumed disclosing pumping data for businesses and organizations. CVWD, however, won the case in Riverside County Superior Court, with the judge backing its argument that the district didn't need to disclose the data.

"Secrecy should never be the norm when it comes to government unless there's some special justification for secrecy," said Peter Scheer, executive director of the San Rafael-based First Amendment Coalition. "This bill would return California to a status quo of public access and transparency."

Scheer said it's crucial for the public to have access to detailed information to spot patterns in water use over time, and to assess whether government agencies are managing water supplies effectively.

"It's very, very hard for the public to know whether agencies are doing what they need to do without access to this data," Scheer said.

Managers of the Coachella Valley Water District have said they believe all of their customers are entitled to privacy, whether they are individuals or businesses. Heather Engel, CVWD's director of communication and conservation, said the district hasn't taken a position on the legislation.

Until 2013, the water district included data in annual reports on the amounts of groundwater pumped annually by more than 160 entities, ranging from farms and golf courses to resorts with acres of grass and artificial lakes.

CVWD stopped releasing that information in 2014 after The Desert Sun published the names of some of the area's biggest water users. CVWD also has denied requests for the data.

The bill is cosponsored by the California Newspaper Publishers Association and backed by other organizations such as the Natural Resources Defense Council and Leadership Counsel for Justice and Accountability.

The legislation faces strong opposition from a long list of business and agricultural groups, as well as the Association of California Water Agencies, the California Manufacturers and Technology Association, and the California Municipal Utilities Association.

Paul Wenger, president of the California Farm Bureau Federation, objected to the legislation for various reasons. For one thing, he said, the amounts of water used in agriculture vary greatly from year to year depending on the weather and the crops selected.

"What are you going to do with the information? At the beginning it seems somewhat innocuous. And then later on you find out that somebody's taking that information, misinterpreting it or reinterpreting it and it creates a lot of problems. So that's why we're opposed to it," said Wenger, who farms crops including almonds, walnuts, pumpkins and corn in Modesto.

"When they pull this kind of information together, it's usually the precursor to restricting you to a set amount of water usage," Wenger said. "They're going to say, 'Well, historically you've used X-amount of water. That's what you're going to be entitled to going forward.' That doesn't work for agriculture."

Farms in the Central Valley have been pumping groundwater heavily during California's five-year drought to make up for the lack of surface water. In many areas, water tables have fallen to record lows.

California adopted historic legislation in 2014 to move toward managing the state's aquifers, many of which are declining due to excessive pumping. Another bill before the Legislature this year would clamp down further by prohibiting the drilling of most new wells in places where aquifers are in critical overdraft.

Information on diversions of surface water is collected and released by the state. But water districts continue to keep confidential information about water use by many business customers.

AB 1520 would change that by specifying that the public is entitled "to know the usage rates of industrial, institutional, and commercial water and energy users." The bill says the privacy interests of those water users aren't sufficient to justify granting an exemption to the public records law.

"People have a right to know who the big users are, and why and where water is going, and where electricity is going," Stone said. "We are all ratepayers. We all suffer the drought and shortages, so it's in the public interest."

Scheer pointed out that California's public records law already protects corporate trade secrets.

"If it's not a trade secret, then it doesn't deserve protection," Scheer said. "There's no reason to give them additional exemptions."

Jim Ewert, general counsel for the California Newspaper Publishers Association, said if water agencies are able to keep such data confidential, that makes it difficult for journalists to assess their performance.

"The agency may be turning the other cheek or a blind eye to a particular water user and doesn't want that information to be publicly known," Ewert said. "Without that information, you can't publicly hold the agency's feet to the fire."



Palm Springs area racks up whopping water savings in May

lan James, The Desert Sun10:54 a.m. PDT June 20, 2016

May turned out to be a banner month for water conservation in the Palm Springs area, with customers of the Desert Water Agency cutting back by 39 percent and surpassing a state-mandated goal.

During the past year, from June 2015 through May, DWA has reported a cumulative reduction of 26.6 percent in water use as compared to the same months in 2013, which state officials have chosen as a baseline year.

Those cutbacks over the past 12 months have fallen short of the state's conservation target for the agency, which was initially 36 percent and was later adjusted to 32 percent.

Last month's stellar performance, though, indicates that people have made lasting changes to their habits and have continued to dial back water use even as the state has begun to loosen restrictions.

"During the recession, everyone learned to be a little bit more budget-savvy, and I think the same is true with water," said Ashley Metzger, DWA's outreach and conservation manager.

She said relatively mild weather in May probably helped boost conservation by limiting the quantities of water needed to keep yards green. A bigger factor, she said, is that with higher water use during the warm months of the year, it's easier for customers to save by cutting back "more of that discretionary water use."

Changes in landscaping have also helped during the past year, as more people have removed lawns and replaced them with desert landscaping.

Other water agencies in the Coachella Valley also reported substantial water-savings during May, most of them meeting or exceeding conservation targets set by the State Water Resources Control Board.

- Customers of Mission Springs Water District in Desert Hot Springs reduced water use by 24 percent last month, matching their 24-percent conservation goal.
- Indio Water Authority reported a reduction of 31 percent in May, surpassing a target of 27 percent.
- Coachella Water Authority reduced water use by 23.1 percent, beating its 20-percent target.
- Customers of Myoma Dunes Mutual Water Company, who have ranked among California's higher percapita water users, cut back by 37.6 percent, surpassing the goal of 32 percent.
- Of the valley's six water suppliers, only the Coachella Valley Water District, the area's largest, missed its target in May. It reported using 28.8 percent less as compared to the same month in 2013, while its target was 32 percent.

With California in a fifth year of drought, managers of water districts have called for people to keep up their conservation efforts during the summer.

The U.S. Drought Monitor website shows that nearly 84 percent of California is classified as being in drought conditions, with about 43 percent of the state in the two worst categories of extreme or exceptional drought.

Even so, the state's water situation this summer is better than last summer. More snow and rain during the winter and spring pushed up reservoirs' levels. In response, state water regulators decided last month to lift mandatory conservation targets for water districts and instead allow agencies to come up with their own goals.

Starting this month, 411 urban water suppliers across California will be able to "self-certify" their available water supplies and the levels of conservation they deem necessary.

Water agencies have until Wednesday to turn in their "self-certification" numbers to back their new conservation standards. The revised rules will lead to a substantial loosening of water-saving goals in the Coachella Valley and other parts of the state.

Managers of many water agencies had pressed for the state water board to relax or eliminate the mandatory targets.

While the strict targets are now disappearing, Gov. Jerry Brown and top state officials have called for Californians to keep making conservation a way of life. The updated regulations will be in effect through the end of January, and officials say they are keeping open the possibility of returning to tougher measures next year if needed.

During the past year, between June 2015 and last month, customers of the Coachella Valley Water District reduced their water use by 25.5 percent below 2013 levels.

CVWD has been charging extra penalty fees when customers fail to meet conservation goals. The district decided to eliminate those fees starting in June in response to the new state regulations. This month, the district's board also voted to raise rates, in part to make up for lost revenues due to conservation.

As the drought rules change, "we still need to be mindful of our water, and we can't go back completely to the way things were," said Heather Engel, the district's director of communication and conservation.

Some water restrictions remain in place. For instance, CVWD's customers still aren't allowed to hose down driveways or sidewalks, wash cars without a shut-off nozzle, water within 48 hours after rain, or cause runoff by over-watering lawns, among other things.

The board of the Desert Water Agency voted earlier this month to allow outdoor watering on five days a week instead of three, adding Saturdays and Sundays to the previous Monday-Wednesday-Friday schedule. The agency allows watering before 7 a.m. and after 7 p.m. on those days.

DWA has also set a goal of continuing to conserve 10 percent to 13 percent below 2013 levels.

Metzger said the agency calculated that goal for "long-term sustainability" based on the area's water use and the amounts of imported water it has been receiving to replenish the aquifer. She said that goal is separate from the conservation standard DWA will be submitting to the state this week.

"It was important to our board to make sure that we continue towards long-term sustainability," Metzger said. "We think that our customers will continue to save, and we want to encourage that behavior."

Groundwater levels have declined in large portions of the Coachella Valley over the past several decades, even as the inflows of imported water from the Colorado River have helped partially offset those declines. In recent years, the water table has risen near groundwater recharge ponds in Palm Springs and La Quinta, while the biggest declines in the aquifer have occurred away from those ponds in the middle of the valley.

Metzger said the DWA's goal of continuing to save 10 percent to 13 percent is aimed at achieving a water balance in the long term. The latest numbers, she said, show that people in the area have been embracing a conservation ethic.



Indio Water Authority expands outdoor watering to 7-days per week You can water before 6AM & after 6PM seven days week

Patrick Edgell, Digital Content Director - KESQ & CBS Local 2, patrick.edgell@kesq.com, June 21, 2016

INDIO, Calif. -

Another Coachella Valley water utility is easing outdoor water conservation restrictions based on local and state water supply conditions. Officials at the Indio Water Authority announced Tuesday morning that they will be expanding outdoor watering hours to before 6 a.m., and after 6 p.m., seven days a week now.

On June 7, the Desert Water Agency decided to allow its customers extra watering days this summer, and in May, the Coachella Valley Water District announced it would be lifting drought penalties for its customers.

The previous schedule allowed for outdoor watering during those hours on Tuesday, Thursday, Saturday and Sunday only. According to the I.W.A.'s release, the drought penalty surcharge will remain in effect to further encourage water conservation, but will only apply to residents who exceed their water budget.

"Our residents have made great strides in a collective effort to conserve water," said IWA General Manger Brian Macy. "Although conditions have begun to improve after five consecutive years of drought, we must continue to be diligent in our goal of long-term responsible water usage."

Mandatory water use restrictions include:

- Outdoor watering is allowed every day before 6 a.m. and after 6 p.m.
- Washing of hardscapes (sidewalks, driveways, pavement, etc.) is prohibited
- Water run-off onto hardscapes is prohibited
- Using a hose without a shut-off nozzle to wash vehicles is prohibited
- Irrigating up to 48 hours after measurable rainfall is prohibited
- Restaurants may only serve drinking water upon request

Indio Water Authority continues to offer free indoor water conservation kits, outdoor irrigation audits and several rebates including:

- Washing machines
- Low-flow toilets
- Turf removal
- Irrigation equipment
- Smart controllers

You can call (760) 391-4129 to report water waste in Indio.

PUBLIC AFFAIRS WEEKLY	VOL PALN 81.6	A key component of the water budget is the weather. It allows the water budget to increase during horter months and decrease during cooler months CVWD will now change from actual weather to historical, thereby allowing for vaster budgets to be calculated in adjusted based on the length of the billing cycle. The fixed rule norteases, effective Oct. I with prior board review, provide for gratter free trates is service and providing a monthly target for customers. Budgets will also contume to be Te fixed rule norteases, effective Oct. I with prior board review, provide for gratter ground be established for different types of customers in order to reflect the true cost of and the began promote financial stability. Fixed rates will very based on the size of the meter single family homes, multifamily residences, commercial customers, and dedicated hard. Another change to the overall rate structure is the consolidation of five geographic rate and through the first the norteases are the variable at a structure stability. The difficuent class is a variable at www.cywd.org/ratechanges. More information note that the rest and the variable at www.cywd.org/ratechanges. More information the control of the order of the new rates for each customer class is available at www.cywd.org/ratechanges. More information the control frame of the rates for each customer in their July bills. The distruct provides domestic and redimande, water water protector, groundwalling to the control of three states for each customer in their July bills. The distruct provides domestic and transformation gradies for a state approximately 108,000 residential and the order to redicated them and business customeres across 1,000 square males. Induces and rounder to protector, groundwalling to the order of the rate and redimation services, regional storm water protector, groundwalling to the order of the redicated state to the order of the structure and water conservation the redicated state to the order of the structure states for each customer states for	31
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* The Desert Sun

California's drought isn't over. Why are so many water agencies ending mandatory conservation?

Sammy Roth, The Desert Sun1:38 p.m. PDT June 23, 2016

Coachella Valley residents have slashed their water use nearly 25 percent over the past year in response to California's historic drought. Now they face a new conservation mandate: zero percent.

No, the drought isn't over: The entire state is abnormally dry and 43 percent of it suffers from"extreme" or "exceptional" drought, according to the U.S. Drought Monitor. But with California's reservoirs and snowpack in better shape than last year after a moderately wet winter, Gov. Jerry Brown ordered the state water board to relax the strict conservation targets it imposed last June.

The water board had previously required parts of the Coachella Valley to cut back by as much as 36 percent, compared to 2013 levels. But last month, the board told urban water suppliers to calculate their own targets, based on local water conditions. All six Coachella Valley water suppliers sent their calculations to the state this week, and they reached the same conclusion: The valley's underground aquifer has more than enough water to withstand several more years of drought, so no mandatory conservation is necessary.

That also means golf courses — which have been responsible for a quarter of the Coachella Valley's groundwater pumping in recent years — are no longer legally obligated to use less groundwater.

"This isn't OK," said Peter Gleick, president of the Pacific Institute, a water think tank in Oakland. "I just think all of this is the wrong message to be sending."

Still, local agencies are urging homes and businesses to keep saving water.

Partly, that's because of the ongoing drought and the fact that Southern California received much less rain and snow than Northern California did this winter. More broadly, it's because the Coachella Valley has long used more water than is sustainable. The valley's groundwater aquifer has plenty of water for now, but it's in overdraft, meaning we're taking more water out of it than is flowing back in.

"It's not an easy thing to explain to people," said Heather Engel, a spokesperson for the Coachella Valley Water District, referring to the new zero percent conservation targets. "It's very important for people to understand that we can't go back to the way things were. Hopefully people have learned lessons. Hopefully they've learned that they can live with less water."

The Coachella Valley Water District, the region's largest water supplier, has a long-term goal of reducing consumption 20 percent below pre-drought levels by 2020. The Desert Water Agency will ask its customers in Palm Springs and parts of Cathedral City for voluntary cutbacks of 10 to 13 percent, compared to 2013 levels — down from the agency's previous state-mandated target of 32 percent.

"We didn't feel it was appropriate to throttle down from 32 to zero," Desert Water Agency spokesperson Ashley Metzger said. Still, the agency submitted an official target of zero percent to the state.

The zero percent targets also apply to water users that pump groundwater from their own private wells, including many golf courses, cemeteries and university campuses. Those water users were previously required to reduce outdoor watering to two days per week, or to cut consumption by 25 percent. Now the state water board has ordered them either to limit watering to two days per week or to achieve reductions "commensurate with those required of the nearest urban water supplier."

In the Coachella Valley, that means a zero percent target for golf courses. The valley is home to 121 courses, although some of them supplement their groundwater with recycled water or Colorado River water, neither of which has been subject to the state's conservation mandate.

Craig Kessler, director of governmental affairs for the Southern California Golf Association, said the valley's golf industry will keep working toward its own goal, announced in 2014, of cutting water use 10 percent below 2010 levels by 2020. About 24 or 25 local courses have either replaced turf with artificial grass over the past two years or are actively planning to do so, Kessler said.

"That zero percent — for the golf industry, that is not going to work," he said. "The challenge will fall to those of us who are leaders of the golf industry to explain that that's really not the requirement."

Even if golf courses were faced with a non-zero conservation target, it's unlikely anyone would enforce it. When the State Water Resources Control Board announced cutback requirements for golf courses and other private pumpers last year, board officials acknowledged they wouldn't require those water users to prove they were following the rules. With more than 400 water agencies to keep track of, state officials said, they didn't have the capacity to police individual water users.

The result was a total lack of enforcement and transparency. It's unclear how many Coachella Valley golf courses, if any, actually managed to cut back by 25 percent.

"Some have, and some have struggled," Kessler said. "One of the ironies is probably the more well-heeled or exclusive the golf course, the better they were able to deal with the mandate" because those courses' wealthy customers tend to avoid the desert over the summer, when water consumption is highest and course managers have the greatest opportunity to cut back.

Max Gomberg, the state water board's climate and conservation manager, said the agency will maintain its "honor system" approach to private groundwater pumpers.

"With these independent producers, we have not required them to report," he said. "The only way they could be on the hook is if someone makes a complaint that they're not following the regulations, and we investigate and determine that that's true."

State officials said they've conducted just one such investigation since the conservation mandate took effect last year, after getting a complaint about a cemetery in the San Diego area that had its own groundwater well. The cemetery informed the state water board it had reduced watering to two days per week, said Matthew Buffleben, the board's chief enforcement officer.

Gleick, from the Pacific Institute, slammed the state board for letting local agencies set their own targets. He noted that this winter's near-average Sierra Nevada snowpack, which traditionally has provided about one-third of California's water supply, is melting faster than usual. The Colorado River Basin, which supplies some of the Coachella Valley's water, is in its 16th year of drought.

In 2014 and early 2015, Gleick added, urban areas largely ignored Gov. Brown's call for a voluntary 20 percent cutback. Californians only started to take conservation seriously when Brown mandated statewide savings of 25 percent, with the threat of fines for water agencies that didn't meet their targets, Gleick said.

"Voluntary targets alone are rarely enough. But when the voluntary target is zero, it's pretty hard to imagine that we're going to make much progress," he said.

Gleick also criticized local agencies, including those in the Coachella Valley, for not setting more ambitious targets.

"There's no district in California that is doing enough to save water," he said. "The resources in the Coachella Valley are not adequate, and the potential to save more water is significant."

Local water agencies counter that they didn't have much choice in calculating their new conservation targets since they were following a specific formula prescribed by the state water board, designed to ensure they have enough water to weather three more dry years. In the Coachella Valley, agencies calculated they have more than enough groundwater and Colorado River water to make it through three more years of drought, even if water consumption returns to what it was before the conservation mandate — hence the zero percent targets.

Coachella Valley officials also object to the idea that their new targets are "voluntary." Local water agencies are still required to send monthly consumption reports to the state board, which could fine them if water use exceeds 2013 levels, thereby violating the zero percent reduction targets.

But it's unclear how much of a deterrent that threat will be. Over the past year, the water board fined just four agencies for failing to meet their state-imposed targets, even though 57 agencies fell short by 5 percentage points or more, per the most recent statewide data. And of the four suppliers that were penalized, only one — the city of Beverly Hills — has actually paid its \$61,000 fine. The Coachella Valley Water District and the city of Indio, which were also fined \$61,000, reached settlements with the state board that allowed them to spend the money locally to support conservation.

The city of Redlands is still negotiating with state officials over its \$61,000 fine, nearly eight months after the water board announced that fine.

Asked whether the threat of fines is meaningful when state officials have penalized almost no one, Gomberg responded that "the ability for the board to issue fines is still there." He said the board has exercised "restraint" and has worked with smaller water agencies that haven't met their targets, but which wouldn't be able to afford big fines, to help them improve their conservation programs.

Urban water suppliers were required to submit their new targets to the state board by Wednesday. The board doesn't need to approve those targets, which take effect retroactive to June 1, but it will review the local agencies' calculations to make sure they're accurate.

In an interview earlier this week, before the targets were due, Gomberg said he expected more than half of the state's 400-plus urban water agencies to calculate zero percent as their goal. In addition to the six zero submissions from the Coachella Valley, the Metropolitan Water District of Southern California and the San Diego County Water Authority — two of the state's largest water wholesalers — said they too had enough water to make it through three more years of drought, and therefore would set zero percent targets.

In the Coachella Valley, water agencies have already eased their conservation rules in response to the state board's decision last month to let local officials set their own targets. The Desert Water Agency now allows outdoor watering on Saturdays and Sundays, adding to the previous Monday-Wednesday-Friday schedule.

The cities of Coachella and Indio, as well as the Myoma Dunes Mutual Water Company, now allow or will soon allow outdoor watering every day, after having restricted it to a few days per week. All of those agencies still limit watering to nighttime or early-morning hours.

The Coachella Valley Water District eliminated its drought penalty fees, but it also tightened residential water budgets by about 25 percent when it raised rates earlier this month. That change, which takes effect July 1, will reduce the amount of water homes can use each month before they end up in the more expensive payment tiers, giving them additional incentive to conserve.

"With the new budgets, if you have 100 percent grass, you've not going to be able to meet your budget," said Engel, the district spokesperson. "You're going to need half grass, half (desert) landscaping."

Mission Springs Water District, which serves Desert Hot Springs, is still limiting outdoor watering to Saturdays, Sundays, Tuesdays and Thursdays over the summer, before 6 a.m. or after 6 p.m. The district is also still levying a drought surcharge on all customers, as suggested by the state water board after the agency failed to meet its conservation target for several months last year.

Mission Springs ultimately fell short of its state-mandated target, although per-person water use in Desert Hot Springs is already much lower than it is in wealthier parts of the valley, spokesperson John Soulliere noted.

"Much of our water use reduction is the consequence of economic conditions in our service area and we don't foresee a lot of 'bounce' back into higher usage in the future," Soulliere said in an email. "Our demand began plummeting in about 2009 and has gone down every year."

Statewide rules limiting water waste are also still in effect. The state water board has permanently prohibited hosing down driveways and sidewalks, running fountains that don't recirculate water, washing cars without a shut-off nozzle, watering turf on street medians and causing runoff by over-watering lawns.

Sammy Roth writes about energy and the environment for The Desert Sun. He can be reached at sammy.roth@desertsun.com, (760) 778-4622 and @Sammy_Roth.

Hundreds of Norco residents paid part of city's water bills for years

By PATRICK O'NEILL

STAFF WRITER

Hundreds of Norco residents unwittingly have paid part of the city's power bill for nearly a decade, resulting in more than \$440,000 of errant charges.

The error was unearthed during the annual budgeting process, and the city already has taken steps to avoid similar errors in the future, Norco City Manager Andy Okoro said.

"This didn't happen because of incompetence. It happened because of an oversight," Okoro said, adding that no city officials were reprimanded.

Since 2007, city officials have been billing 537 residents for a meter that registers water pumped from a reservoir at Norco's eastern edge, in an area known as Landscape Management District 4.

The district includes Hidden Valley Golf Club and homes lining Vandermolen, Crestview and Valley drives.

Residents in each of Norco's five landscape maintenance districts have agreements with the city to finance trail upkeep and irrigation services. In fiscal 2017, each District 4 resident could pay up to \$995 in fees.

Though dozens of electric meters nearby correctly were billed to District 4 residents, the unit in question kept tabs on water used for city services and should have been paid by the Norco Water Department.

As a result, each affected homeowner paid \$862 worth of city bills, an internal audit found. Okoro said the meter had been lumped in with others since a developer installed it.

Now it's up to the City Council to decide how to refund the residents' money.

At a meeting Tuesday at Norco City Hall, some homeowners called for a full refund check to be issued immediately.

"That's an option we're going to propose," Community Services Director Brian Petree said. "Some people said, 'I might be moving next year. I want a check now.' " Issuing checks could present some problems as residents would have to provide the city with their taxpayer ID numbers to stay in compliance with IRS guidelines, Okoro said.

Another option would be to use the payments to replace District 4 wood trail fencing with a white vinyl variety.

The city has proposed refunding half of the \$440,000 owed by reducing taxes on each of the 537 affected parcels until the money is repaid. Another idea would refund the entire amount over the next six years.

Lance Gregory, a District 4 resident who recently ran for City Council, said he hopes the repayment plan is "what the majority of the residents in LMD 4 want, not what the city wants."

All recommendations will be presented to the City Council during its July 20 meeting.

In the meantime, the city since has labeled and inventoried every power meter, cross-referencing them with accounting department records to make sure each is billed properly, Petree said. Each time a new meter is installed, officials from the water and financing departments must sign off on it.

"Was it an error in accounting? Was it the Water Department's responsibility? Our boss said we all hold responsibility," Petree said. "We've inventoried every meter that exists, and there are now protocols to protect against this.

"Lesson learned."

Redlands to sprinkle its drought fine around

A deal allows the city to apply its \$61,000 penalty to conservation retrofit and education efforts.

By SANDRA EMERSON

STAFF WRITER

The fine imposed on Redlands for failing to meet its water conservation target has turned into something beneficial for residents.

Rather than pay the \$61,000 fine to the state, Redlands will funnel that money into two new water conservation programs. One program will provide irrigation retrofit rebates to small citrus groves, and the other will create a water conservation education program for children.

"I'm happy we were able to keep all those dollars in town," said Chris Diggs, director of the city's Municipal Utilities and Engineering Department.

In October, the State Water Resources Control Board fined the city \$61,000 because water customers were not conserving enough to meet the city's state-mandated 36 percent conservation target. The state also fined Beverly Hills, Indio and the Coachella Valley Water District.

After months of negotiations, the city and state reached an agreement to allow Redlands to use the money toward water conservation. The agreement was approved Tuesday by the City Council.

"There was quite a bit of negotiating back and forth as to what they thought was appropriate and what we thought would work," Diggs said.

The rebates for small groves – those with up to 20 trees – will help property owners replace irrigation with more efficient watering systems, such as drip and smart irrigation timers.

The educational program will teach children how to identify and address water waste.

"Kids are very likely to influence their parents into changing their irrigation habits or their water-use habits," said Cecilia Griego, water resources specialist with the city.

The kid-friendly program will be centered on two alligator characters, one focused on irrigation and the other focused on water waste.

"The two of them play off each other," Griego said.

City staff members already visit classrooms when invited, but the city does not have an established program geared to children. The new program will be shared at schools and during Redlands Market Night, where children will get to check out a water waste "crime scene" and participate in activities.

"When we got this idea, it was a bunch of us girls in the office who came up with it and decided to run with it," Griego said.

Also with regard to water conservation, the elimination of the state-issued consumption targets will give the city some relief, city officials say.

According to the state's latest conservation regulations, water agencies were required to calculate their own targets based on two things: projected demand based on 2013 and 2014, and the assumption that rainfall in 2017-19 will match that in 2013-15, Diggs said.

When Redlands made its calculation, it was clear there would be enough supply to meet demand, giving the city a conservation target of zero, Diggs said. But that does not tell the full story.

"That's just the ability to get it and pump it and meet the customer needs," Diggs said. "What that doesn't tell you is what's going on in the groundwater basin."

The Bunker Hill Basin stretches from Rialto to the mountains. To keep the basin capacity at a healthy level, Redlands and other water agencies that withdraw from the basin have settled on a 15 percent conservation target.

Redlands' water users have been conserving about 22 percent over the past year.

The water agencies also will benefit from an increased allocation from the State Water Project.

"I think we're doing what we can to blend meeting what the customers were looking for, which is a little bit more water for irrigation, yet still making sure we're conserving, we're not wasting water and we're trying to help replenish the basin," Diggs said.

Just because the conservation target is lower, however, that does not mean an end to watering restrictions, he said. Diggs' department will ask the City Council in July to amend the restrictions allowing outdoor irrigation three days per week, up from two days per week.

The department also is planning for \$150,000 in rebates, but with a \$500 cap per customer. By establishing a cap, the city hopes to reach more customers, Diggs said.

For more information on water conservation, restrictions and programs, visit the city's website: city ofredlands.org/water/conservation.

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Los Angeles Times

Water agencies move to lift mandatory restrictions

By Matt Stevens, June 25, 2016

After a year of mandatory water conservation that shortened showers and faded lawns, millions of droughtweary Californians will no longer be required to aggressively cut back their use.

In order to comply with the state's latest emergency regulation, local water providers this week submitted documents intended to demonstrate whether their agencies have enough supply to meet customers' demands for another three severely dry years.

The State Water Resources Control Board has not publicly posted the documents. But officials at several Southern California water providers said that they have enough water to pass the board's "stress test." Those agencies subsequently determined that no mandatory water conservation will be necessary over the next seven months. (The state regulations expire at the end of January.)

For example, the <u>Los Angeles Department of Water and Power</u> had most recently been under orders to cut its water use by 14% compared with 2013. In a statement, officials on Thursday said that restriction was no longer in effect, but urged customers to keep conserving.

Coachella Valley Water District, which at one point was told to cut its water use by 36%, also determined it has more than enough water to set its target at 0%. The area relies on a vast underground aquifer for much of its supply.

In calculations submitted to the state, district officials said they have about 10 million more acre feet of water than they need to meet their customers' demand.

They said customers had saved about 9.5 billion gallons of water since June 2015, reducing their consumption by about 25%.

"We expect our customers will be able to voluntarily maintain these reduced levels of water use," General Manager Jim Barrett said in a statement. "If not, new mandates may be developed,"

The water district was one of four that the state fined last year for failing to meet their savings mandates. Beverly Hills, which also was fined, said in a statement Friday that it had submitted a conservation target of 0% to the state, but locally "an aggressive water conservation program" remains in place. To comply with that program, residents will need to continue to cut their water usage by 30% until officials adopt a new target.

The Long Beach Water Department also determined it has enough water to meet future demands.

State regulators will review suppliers' calculations this week and reserve the right to reject them if something appears "materially false," said Max Gomberg, the water board's climate and conservation manager.

"Even if lots of agencies come up with zero [percent], their customers may continue to conserve at significant levels," Gomberg said.

Water wholesalers that sell their supply to local retail agencies such as the DWP were also required to submit an analysis to the state this month. The Metropolitan Water District of Southern California found it has enough water to meet its customers' future demands.

Some of MWD's member agencies, such as Beverly Hills, said the wholesaler's forecast influenced their own.

"We are constantly assessing conditions to ensure we have sufficient supplies," Metropolitan General Manager Jeffrey Kightlinger said in a statement. "That said, if we have an exceptional drop in supplies, or an unusual spike in demand, we will absolutely turn to our other tools ... to ensure that we maintain water reliability." Like its northern neighbor, the Municipal Water District of Orange County said it had enough water to meet the state's stress test. But the agency also called on residents to voluntarily reduce water consumption by 10%.

In a nod to the state's improved hydrology, the water board <u>approved changes</u> to the emergency regulation that allowed water districts to set their own conservation standards.

However, when regulators proposed the stress test in May, some experts and environmental advocates worried that many local agencies would end mandatory conservation if given the chance.

Tracy Quinn, a water policy analyst for the Natural Resources Defense Council, said the slew of 0% targets sends a "confusing message to Californians."

"It's certainly not the time to back off of conservation," Quinn said. "We did such a great job of getting people to change their behaviors ... and now we're saying, 'Oh <u>the drought</u>'s over' — and that's simply not the case."

Water districts are inherently interested in selling more water — not less, Quinn added. And history has shown that voluntary conservation isn't typically effective.

The water board's Gomberg said regulators would assess California's conservation throughout the summer, and "go from there."



CVWD JOINS INNOVATIVE, NEW PARTNERSHIP FOR CLEAN WATER

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Coachella Valley Water District (CVWD) today announced its participation as a Charter Subscriber of the Partnership for Clean Water, a new voluntary initiative that seeks to help wastewater utilities optimize the operations, performance, and efficiency of their treatment facilities

Participation as a Partnership for Clean Water Charter Subscriber identifies CVWD as part of a select group of utilities that has made the commitment to improve wastewater treatment performance using the program's rigorous self-assessment and optimization process.

"I'm proud to announce that CVWD is committed to being a national leader in this field by becoming one of the first utilities to participate in this process," said Assistant General Manager Robert Cheng. "This program will allow the District to better serve its ratepayers by saving money through improving process efficiency in its six wastewater treatment plant operations."

After working closely with AWWA staff for over a year on the program design, Cheng announced the official launch of CVWD's participation nationally at the 2016 American Water Works Association Annual Conference and Exposition today in Chicago

Developed by the American Water Works Association (AWWA), in collaboration with

the other industry organizations, the Partnership for Clean Water is a global optimization and recognition program for wastewater utilities. As members of the Partnership for Clean Water, utilities pledge to their communities to continually improve operational efficiency and water quality performance.

CVWD is a public agency governed by a five-member board of directors. The district provides domestic and irrigation water, agricultural drainage, wastewater treatment and reclamation services, regional storm water protection, groundwater management and water conservation. It serves approximately 108,000 residential and business customers across 1,000 square miles, located primarily in Riverside County, but also in portions of Imperial and San Diego counties

The Partnership for Clean Water is a voluntary optimization and recognition program for wastewater utilities. With an initial focus on wastewater treatment plant optimization, program subscribers are committed to the Partnership's goals of improving water quality performance and process efficiency through achieving operational excellence in wastewater treatment. Partnership for Clean Water subscribers participate in a rigorous four-phase self-assessment and peer review process, developed by industry experts, and are recognized industry-wide for their commitment to wastewater utility optimization.



\$250 million plan to treat drinking water approved

lan James, The Desert, June 29, 2016

The Coachella Valley Water District has approved a plan to start building treatment plants to remove the potentially hazardous heavy metal chromium-6 from drinking water.

The district's managers say it will be their costliest infrastructure project ever. They estimate it will cost \$250 million to erect small treatment plants for nearly a third of the district's 92 wells in communities from Thermal to Rancho Mirage.

The agency is one of many across California taking steps to meet the state's new drinking water standard for chromium-6, a carcinogen also known as hexavalent chromium. But the district's managers have also questioned the science behind the regulation and have said they will consider joining a lawsuit to challenge the state's limit.

CVWD has more wells affected by the rule than any other water district in California, said Steve Bigley, the district's director of environmental services. The agency has 30 wells that pump water with levels of chromium-6 exceeding the limit of 10 parts per billion.

The district's plan calls for treating the water from 28 wells, in most cases by installing ion-exchange treatment units that use resin beads to strip chromium-6 from water. Those resin beads will regularly be cleaned for reuse at a specialized plant, which will be built in Thermal next to an existing wastewater treatment plant.

The district's board approved an environmental impact report for the plan in a 4-1 vote Tuesday after making one change to eliminate a treatment plant in La Quinta. That plant, which would have treated water from two wells, had drawn strong opposition from homeowners in PGA West, who raised concerns about noise, the routine removal of waste from the plant, and its location next to the Greg Norman golf course.

The district's staff will study other ways to deal with those two wells in La Quinta. Bigley said one of the options would be to drill new wells in another area where the levels of chromium-6 in the groundwater are lower.

Board member Cástulo Estrada cast the lone vote against the plan, saying he was concerned the costs of forgoing the La Quinta treatment plant hadn't yet been studied.

"If in fact it does have a significantly higher cost, it's going to be covered by all the payers of CVWD," Estrada said. "I'm told it could be cheaper or it may be the same cost, but there is no real answer at this point."

CVWD's board voted earlier this month to approve a major rate increase, in large part to cover the costs of chromium-6 treatment. In addition to the estimated \$250 million in construction costs, the district projects it will need to spend \$8 million a year for operations and maintenance costs.

The district plans to apply for a loan from the state to finance the construction of its water treatment plants. The board approved a budget totaling \$448.9 million on Tuesday, an increase of 33.8 percent from the previous year. A significant portion of that increase was due to a projected \$88.7 million in spending on chromium-6 projects.

In large portions of the aquifer beneath the Coachella Valley, the water has levels of chromium-6 that exceed the state limit. Mangers of water agencies say the heavy metal occurs naturally, dissolving from rocks into the groundwater. Chromium-6 can also be released into the environment as pollution from sources such as cooling towers and industrial plants.

State regulators adopted the new standard for chromium-6 in 2014. Water agencies have been given until 2020 to comply with the limit of 10 parts per billion.

California's standard is the first in the country to focus specifically on hexavalent chromium. The U.S. Environmental Protection Agency limits the level of any chromium compound to 100 parts per billion.

The potential dangers of chromium-6 were highlighted in the 1990s by a court case brought by then-legal clerk Erin Brockovich against Pacific Gas & Electric Company, claiming groundwater contamination in the Mojave Desert town of Hinkley. After that case became widely known through the 2000 film "Erin Brockovich," the California Legislature in 2001 passed a law instructing public health agencies to develop a drinking water standard for chromium-6.

RIVERSIDE LOOSENS BELT ON WATER USE

Residents – who already had been successful at conservation – now can water lawns when they like as city moves to less stringent level.

Story and photo by ALICIA ROBINSON

STAFF WRITER

Riverside has returned to the least stringent level of water-use restrictions, but city officials say conservation remains an important goal.

The City Council voted Tuesday to move to stage 1 conservation, which offers voluntary guidelines on when people should irrigate their yards and suggests efficient ways to use water. Before, property owners had been limited to watering three times a week during certain hours.

But don't expect to see city code officers ticketing homeowners for brown lawns yet. A state ban on such enforcement during the drought ends in January.

Riverside's move to loosen water-use restrictions follows the State Water Resources Control Board's May decision to drop a 25 percent statewide conservation mandate.

Riverside had been ordered to cut 28 percent but challenged it in court. The city dropped the suit after the water board's recent de- cision.

Since 2013, Riverside Public Utilities' water fund lost at least \$38 million in revenue because of reduced water use during the drought. But officials say the relaxed rules don't mean they want people to waste water so the utility makes more money.

Riverside Public Utilities' Assistant General Manager for Water Todd Jorgenson said officials expect water use to rebound about 50 percent from its low point, but it's unclear how long it will take to get there. City finance officials projected the general fund would net \$205,000 more from the water fund transfer in 2016-17 and another \$590,000 in 2017-18 because of increasing water use.

Residents already had been doing a good job conserving water before the state-imposed cut, and that's expected to continue, Jorgenson said.

With city-owned wells and guaranteed water from court judgments, Jorgenson said, the state requirement was "well beyond what we needed in order to live within our means."

Utility officials will continue to educate people about how to use water efficiently, he said.

Riverside Public Utilities board member Justin Scott-Coe said he hasn't heard grumbling about the relaxed rules from people who made big changes, such as replacing their lawns with desert plants.

Scott-Coe equipped his yard and home to trap rainwater and runoff, reuse water from the washing machine and irrigate landscaping with drip lines, but he did it because "it's the right thing to do," not because of city rules, he said.

City code enforcement manager Gary Merk said it's not clear whether Gov. Jerry Brown will extend the brown lawn ticket ban. If it expires in 2017, "We will revert back to our regular enforcement," which has always included giving people a chance to fix the issue before citing them, he said.

Merk said calls complaining about landscape maintenance violations, which include more than just brown lawns, decreased significantly in the past year compared with the previous year – 375 complaints from June 2015 to May 2016, versus 800 complaints from June 2014 to May 2015.

It's possible people thought drought restrictions were to blame for uglier yards, Merk said, adding, "I think the state may have done a good job in getting their message across, 'brown is the new green.' "

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State regulators adopted the new standard for chromium-6 in 2014. Water agencies have been given until 2020 to comply with the limit of 10 parts per billion.

California's standard is the first in the country to focus specifically on hexavalent chromium. The U.S. Environmental Protection Agency limits the level of any chromium compound to 100 parts per billion.

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DESERT WATER AGENCY

PUBLIC INFORMATION ACTIVITIES

JUNE 2016

Activities: 6/1/16-6/30/16	Vicki Petek conducted 5 Turf Buy Back post-conversion and follow-up inspections.							
6/02/16	Ashley Metzger was on a live conservation segment with KESQ on irrigation tips.							
6/05/16	WA had a booth and water station at PS World Environment Day.							
6/09/16	Ashley Metzger was on a live conservation segment with KESQ on updated water restrictions.							
6/14/16	Ashley Metzger attended the rate hearing at Coachella Valley Water District.							
6/16/16	Ashley Metzger was interviewed by CV Independent on conservation and water rates.							
6/16/16	Ashley Metzger was on a live conservation segment with KESQ on recycled water car washes and DWA's car wash program.							
6/23/16	Ashley Metzger was interviewed by KMIR on updated mandatory restrictions.							
6/23/16	Ashley Metzger was on a live conservation segment with KESQ on heat wave tips.							
6/30/16	Ashley Metzger was on a live conservation segment with KESQ on July 4 th tips.							
6/30/16	Ashley Metzger was interviewed by Joey English on updated restrictions and irrigation tips.							

Public Information Releases:

- June 07, 2016 Desert Water Agency will allow more watering days through summer.
- June 16, 2016 Consumer confidence report notification was sent to all customers.

June 28, 2016 – DWA announces turf buy back workshops to be held July 21.

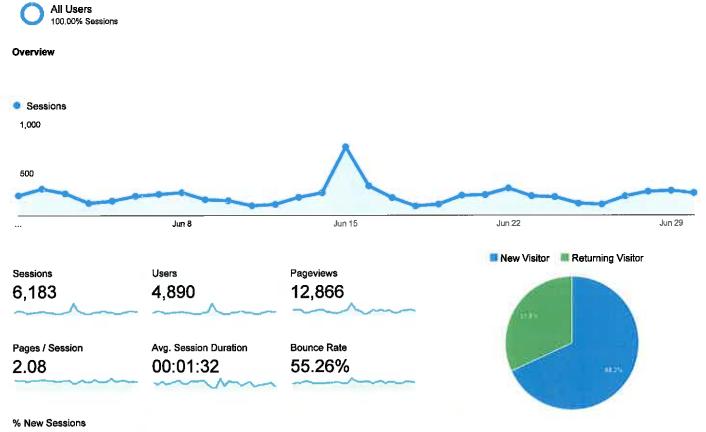
Water Conservation Reviews

City of Cathedral City Auto Park	Via Isla Condos
Canyon Vista	American Garden
Diplomat	Canyon Colony West
Mesquite Canyon Estates	Canyon Sands Condos
Sundance Condos	Estados South
Sunrise Oasis Condos #1	Fairways Condos
Sunrise Oasis Condos #2	Racquet Club Condos
Sunrise Racquet Club	Twin Palms Homeowners
Sunrise Villas	

Water Conservation Reviews are annual mailings sent to large water users. The Reviews include a 5-year consumption report, facility map, and information brochures. The purpose is to help customers save water by summarizing their consumption, and offering suggestions for reducing usage.

Jun 1, 2016 - Jun 30, 2016

Audience Overview



68.17%

Language	Sessions % Sessions	
1. en-us	4,561	3.77%
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4. en-gb	26 0.42%	
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8. fr	7 0.11%	
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10. <i>es</i>	4 0.06%	

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DESERT WATER

Desert Water Agency Facebook Analytics June 2016

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IRRIGATION SCHEDULE

BEFORE 780 A.M. OR AFTER 780 P.M. THROUGH OCTOBER 31, 2016

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Desert Water Agency Facebook Analytics June 2016

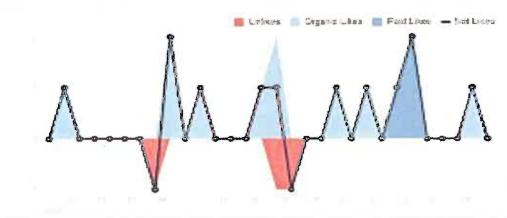
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STAFF REPORT TO DESERT WATER AGENCY BOARD OF DIRECTORS

JULY 19, 2016

RE: JUNE 2016 WATER USE REDUCTION FIGURES

Desert Water Agency and its customers achieved a 33 percent reduction in total water production during June 2016 compared to the same month in 2013 – the baseline year used by the State Water Resources Control Board (State Water Board) to measure statewide conservation achievements. Desert Water Agency's cumulative water savings June 2015 through June 2015 is 27.5 percent.

The State Water Resources Control Board changed the way that they calculate mandatory restrictions. The new methodology factors in local supply. Starting in June, the adopted regulations do not require DWA to achieve mandatory reduction; however, DWA is still asking its customers to save 10-13% to help achieve long-term sustainability. DWA must still report its production to the state on a monthly basis.

Below is additional information reported to the State Board for June 2016.

Water Production for June 2016	2,494.4 AF
Water Production for June 2013	3,742.4 AF
Quantity of potable water delivered for all commercial, industrial, and institutional users for the reporting month	664.8 AF
The percentage of the Total Monthly Potable Water Production going to residential use only for the reporting month	68.5%
Population (inclusive of seasonal residents)	105,598
Estimated R-GPCD	175.9
How many public complaints of water waste or violation of conservation rules were received during the reporting month?	72

How many contacts (written/ verbal) were made with customers for actual/ alleged water waste or for a violation of conservation rules?	84
How many formal warning actions (e.g.: written notifications, warning letters, door hangers) were issued for water waste or for a violation of conservation rules?	75
How many penalties were issued for water waste or for a violation of conservation rules?	26

Comments: The Agency's service area is highly seasonal making population analysis a complex task. The State Water Resources Control Board (State Board) analyzes data on a per capita basis. Historically, DWA has submitted data based on the permanent population of the service area; however that data does not accurately reflect water use in DWA's service area which has a highly seasonal population. Based on local data, the correct population is higher than previously reported. The Residential Gallons Per Capita Per Day (R-GPCD) is being submitted using the corrected population.

DWA would like it noted that the amount of fresh water outflow to the ocean during the month of June was 417,719 acre feet.

Additionally, since it began recycling water Desert Water Agency has reclaimed 87,909 acre feet. If our recycled water production for June was taken into consideration against our potable production, the conservation achieved would have been several percentage points higher.

STAFF REPORT TO DESERT WATER AGENCY BOARD OF DIRECTORS

JULY 19, 2016

RE: WHITEWATER POWER PLANT – RENEWABLE MARKET ADJUSTING TARIFF (RE-MAT) UPDATE

After more than two years working with our consultant, JTN Energy, the California Independent System Operator (CAISO) granted a certificate of compliance for the Whitewater Hydro Plant on July 8, 2016, satisfying the CAISO interconnection portion of the Re-MAT contract; the plant is officially operating under the Re-MAT power purchase agreement.

On July 5, 2016, Metropolitan Water District (MWD) began delivering the remaining Quantification Settlement Agreement (QSA) water to Coachella Valley Water District (CVWD) at the Whitewater Spreading Basin. The deliveries started with 50 cfs flow, increasing 50 cfs on July 6 and again on July 7, totaling 150 cfs. On July 8, 2016 at 9:00am, the water was diverted to the Whitewater Hydro penstock and the flow was increased to 180 cfs, allowing Agency staff to start the generator with an output of 1.1MW. MWD agreed to deliver water at this rate for the remaining QSA delivery of 22,375 AC-FT.

At a rate of 180 cfs (357 AC-FT/day), the Whitewater Hydro Plant should operate for the next 60 days with an anticipated total production of 1,464 MWh. Under the previous tariff, the amount of money generated would have been approximately \$38,000; however, with the Re-MAT contract, the allocation should produce approximately \$131,000, a 344% increase.