# LARGE WATER SYSTEM 2018 ANNUAL REPORT TO THE DRINKING WATER PROGRAM FOR YEAR ENDING DECEMBER 31, 2018 [Section 116530 Health & Safety Code]

WATER SYSTEM INFORMATION			
Water System No.:	CA3410020		
Water System Name:	CITY OF SACRAMENTO MAIN		
Water System Ownership (See descriptions below):	Local Government		
Physical location: (address line 1, address line 2, city, zip) Note: <u>NO</u> P.O. Box	1395 35TH AVENUE SACRAMENTO 95822		
General Office Phone: 7 (with area code)			
Web site address:	www.cityofsacramento.org		

BOXES COLORED YELLOW ARE MANDATORY QUESTIONS AND MUST BE ANSWERED TO COMPLETE THIS REPORT

Water System Ownership Descriptions:

- Local Government: e.g., city, county, or special district, local school district, junior colleges, county or community parks, etc.
  State or Federal Government: e.g., state or national park, BLM, USFS and COE campgrounds and recreation facilities,
- state hospitals, State universities and colleges, California Veterans Home, County or District Fairs and Expositions, Caltrans rest stop, military base, other state or federal facility
- Privately owned, non-PUC-regulated (Community Water System): e.g., mobile home park, apartment or condominium
- Privately owned business (non-community): e.g., church, private school, restaurant, amusement park, RV park/campground, motel, ranch/farm, factory, other business establishment



#### COMMUNITY WATER SYSTEMS ONLY

Your water system classification is: Community Water System

#### IF YOU ARE NOT A COMMUNITY WATER SYSTEM, SKIP THIS SECTION

# CERTIFICATION FOR REDUCTION OF ANNUAL FEES FOR PUBLIC WATER SYSTEMS SERVING A DISADVANTAGED COMMUNITY (DAC) 3

 $\Box$  By checking this box, you are a community water system who would like to request a fee reduction and is serving a DAC as defined in Title 22, Division 4, Chapter 14.5, section 64300 of the California Code of Regulations <u>OR</u> has previously submitted documentation to the State Water Resource Control Board certifying that you are serving a DAC.

To request a DAC fee reduction or to continue receiving a reduced annual fee you must complete a DAC certification form and upload the form to the "DAC" tab for the State Water Resources Control Board to review.

Click HERE for instructions on how to upload your completed DAC certification form. To upload a DAC Certification Form, click HERE

If you have questions about completing this section of the report, please contact the Program Liaison Unit at DDW-PLU@waterboards.ca.gov or call (916) 449-5158.

REPORT SUBMITTED BY:3				
Note: Your name and title, email address, and work phone number are disclosable report information that may be obtained through the Public Records Act.				
Name:	Pravani Vandeyar			
Title:	WQ Superintendent			

Work phone:	916-808-3765
Cell phone:	
Email address:	pvandeyar@cityofsacramento.org



Please be aware that all comment boxes throughout this electronic annual report will be made publicly available WITH THE EXCEPTION of the comment box below. Only Waterboard staff and other people with your water system's DRINC login credentials will have access to this comment box. You are encouraged to provide any comments that you believe may help improve this annual report process.

PRIVATE COMMENTS: ⑦ Change Pravani's title from WQ Superintendent to Water Division Manager

#### 1. Public Water System Contacts 3

<u>Click here</u> to learn how to Modify, Add and Delete Contacts in the table below.

# IMPORTANT: Each water system must have one and only one Administrative Contact AND one and only one Financial Contact. The same person may be both the Administrative and Financial Contacts.

Please provide an email address for the Administrative Contact as most email communication, particularly email blasts, from the Division of Drinking Water will be sent to the email address of the Administrative Contact.

PHONE TYPE: Home – if you use your home or personal phone number as your business number, use the HOME phone type instead and leave the BUSINESS phone type blank.

Only the BUSINESS phone type will appear in Drinking Water Watch (https://sdwis.waterboards.ca.gov/PDWW/), which can be viewed by the public, if the General Office phone number is not provided (see Water System Information section under the Intro tab).

NAME, TITLE & ADDRESS	PHONE TYPE	PHONE NO.	EMAIL	CONTACT (pick all that	
	Business	916-808-1434		□ ** Delete Contact	
BUSATH, BILL	Home		wbusath@cityofsacramento.org	☐ Administrative	□ Operator
DIRECTOR OF UTILITIES	Facsimile			☐ Financial	□ Emergency
1395 35th Avenue	Mobile	916-202-3030		Designated Operator In Charge	□ Water Quality
SACRAMENTO CA 95822	Emergency			Owner	🖂 Legal
				□ Funding	□ Contract Operator
HEDDMANN DAVID	Business	916-808-5652		□ ** Delete Contact	
HERRMANN, DAVID	Home			□ Administrative	Operator
O&M SUPERINTENDANT	Facsimile			□ Financial	□ Emergency
301 Water Street	Mobile	916-882-4444		Designated Operator In Charge	U Water Quality
SACRAMENTO CA 95811	Emergency			□ Owner	□ Legal
				□ Funding	Contract Operator
SEVEREID, MARK	Business	916-808-8667		□ ** Delete Contact **	
SEVERED, MARK	Home		MSevereid@cityofsacramento.org	Administrative	□ Operator
WQ SUPERINTENDENT	Facsimile			□ Financial	□ Emergency
7501 Collegetown Drive	Mobile	916-262-4970		□ Designated Operator In Charge	☑ Water Quality
SACRAMENTO CA 95826	Emergency			□ Owner	□ Legal
				□ Funding	

					□ Contract Operator
				<u> </u>	
	Business			□ ** Delete Contact **	
	Home			□ Administrative	□ Operator
	Facsimile			□ Financial	□ Emergency
	Mobile			Designated Operator In Charge	U Water Quality
	Emergency			□ Owner	□ Legal
				□ Funding	□ Contract Operator
	Business			□ ** Delete Contact **	
	Home			Administrative	
	Facsimile			☐ Financial	□ Emergency
	Mobile			Designated Operator In Charge	□ Water Quality
	Emergency			□ Owner	🗆 Legal
				□ Funding	Contract Operator
		í			
	Business Home			□ <b>** Delete Contact</b> ** □ Administrative	□ Operator
	Facsimile				□ Emergency
	N 11			☐ Designated	
	Mobile			Operator In Charge	U Water Quality
	Emergency		<u> </u>		□ Legal
				□ Funding	Operator
	Business			□ ** Delete Contact	[
	Home			Administrative	□ Operator
	Facsimile				Emergency
	Mobile			Designated Operator In Charge	□ Water Quality
	Emergency	,			🗆 Legal
				□ Funding	□ Contract Operator
	Business			□ ** Delete Contact **	
	Home			☐ Administrative	□ Operator
	Facsimile			□ Financial	□ Emergency
	Mobile			Designated Operator In Charge	□ Water Quality
	Emergency			Owner	🗆 Legal
				□ Funding	□ Contract Operator
Add Additional Contact ⑦				(pick all tha	at apply)
Contact Name	Business	(999) 999- 9999	XXXXX@XXXXX.XXX	☐ Administrative	□ Operator

Title	Home	(999) 999- 9999		□ Financial	□ Emergency
Address Line 1 Address Line 2	Facsimile Mobile	(999) 999- 9999	XXXXX@XXXXX.XXX	☐ Designated Operator In Charge	□ Water Quality
CityST 99999	Emergency	(999) 999- 9999		□ Owner	□ Legal
				□ Funding	□ Contract Operator
Add Additional Contact	)			(pick all	that apply)
Contact Name	Business	(999) 999- 9999		Administrative	□ Operator
Title	Home	(999) 999- 9999	XXXXX@XXXXX.XXX	$\Box$ Financial	□ Emergency
Address Line 1 Address Line 2	Facsimile Mobile	(999) 999- 9999	XXXXX@XXXXX.XXX	Designated Operator In Charge	□ Water Quality
CityST 99999	Emergency	(999) 999- 9999		□ Owner	□ Legal
				□ Funding	Contract Operator
Add Additional Contact 3	)			(pick all	that apply)
Contact Name	Business	(999) 999- 9999		Administrative	□ Operator
Title	Home	(999) 999- 9999	XXXXX@XXXXX.XXX	□ Financial	□ Emergency
Address Line 1 Address Line 2	Facsimile Mobile	(999) 999- 9999	XXXXX@XXXXX.XXX	Designated Operator In Charge	□ Water Quality
CityST 99999	Emergency	(999) 999- 9999		□ Owner	□ Legal
				□ Funding	□ Contract Operator
Add Additional Contact				(pick all	that apply)
Contact Name	Business	(999) 999- 9999		□ Administrative	□ Operator
Title	Home	(999) 999- 9999	XXXXX@XXXXX.XXX	□ Financial	□ Emergency
Address Line 1 Address Line 2	Facsimile Mobile	(999) 999- 9999	XXXXX@XXXXX.XXX	□ Designated Operator In Charge	□ Water Quality
CityST 99999	Emergency	(999) 999- 9999		Owner	Legal
				□ Funding	□ Contract Operator

# 2. POPULATION SERVED

Permanent population or number of long-term residents*:	501344	

\*Long-term resident means someone who resides within the water system service area for more than half of the year.

Method used to determine population:	Other ~

If permanent population is based on "Other", identify the methods or sources of how it was estimated::

State of California Department of Finance, Demographic Research Unit, http://www.dof.ca.gov/Forecasting/Demographics/

Seasonal Maximum Population (If applicable):

Provide season ⑦:

Begin Date		End	Date
ММ	DD	MM	DD

List the names of communities served by the system identifying both incorporated and unincorporated areas:

Retail service to the City of Sacramento and a small portion of unincorporated land in the Fruitridge area. Wholesale and Wheeling of surface water to other water agencies in Sacramento County. Other agencies include Sacramento County Water Agency, Sacramento Suburban Water Agency, California American Water Company, and Fruitridge Vista Water Company

COMMENTS (Note: Comments will be made publicly available): 3

#### 3. NUMBER OF SERVICE CONNECTIONS(as of December 31, 2018)

A. Active Service Connections:

Total Active Potable Water Connections currently in Division of Drinking Water database:

157312

The total number of Service Connections as of December 31, 2018 must be reported as either <u>Unmetered</u> or <u>Metered</u> for each Service Connection Type as appropriate.

	Potable Water			Recycled Water			
TYPE Do NOT report fire sprinkler connections and fire hydrants. These connections are not counted toward "service connections" for compliance purposes.	Unmetered	Metered	Total*	Unmetered	Metered	Total*	
Single-family Residential: single family detached dwellings	14934	105509	120443	0	0	0	
<u>Multi-family Residential:</u> Apartments, condominiums, town houses, duplexes and trailer parks	3517	7874	11391	0	0	0	
<u>Commercial/Institutional:</u> Retail establishments, office buildings, laundries, schools, prisons, hospitals, dormitories, nursing homes, hotels, churches	265	6902	7167	0	0	0	
Industrial: All manufacturing	0	0	0	0	0	0	
Landscape Irrigation: Parks, play fields, cemeteries, median strips, golf courses	51	2128	2179	0	0	0	
Agricultural Irrigation: Irrigation of commercially-grown crops	0	0	0	0	0	0	
Total Active Connections*	18767	122413	141180	0	0	0	

#### \*Calculated field

To update totals click here

	Potable Water			Recycled Water		
ТҮРЕ	Unmetered	Metered	Total*	Unmetered	Metered	Total*
Other: Fire suppression, street cleaning, line flushing, construction meters, temporary meters	2149	158	2307	0	0	0

B. Number of Inactive Connections (all types)	
Include only service connections that have been physically disconnected (e.g, meter removed) from the water system. All other service connections should be considered as "Active."	229
C. Number of NON-residential customers required to have dedicated outdoor irrigation meters (excluding agricultural connections) ③	1870

COMMENTS (Note: Comments will be made publicly available): ⑦ A. Counts and sums of active water service agreements types as of 12/31/2018. In certain cases, also considered premise types. Number of residential tracking SAs must be offset by an equal reduction in the number of residential flat SAs (otherwise these connections are double-counted as both metered and unmetered). B. Distinct premises with Termination field activities prior to 12/31/2018 where no Restoral field activity exists after that Termination. C. Distinct account numbers with metered water irrigation service agreements active on 12/31/2018 for non-residential premise types.

#### 4. GROUNDWATER (GW) AND SURFACE WATER (SW) SOURCES

Туре	<b>Total No.</b> <b>Approved</b> (by permit)	Total No. New/ Added in 2018	Total No. Inactivated in 2018	Total No. Destroyed in 2018
Active Groundwater Intakes (Wells) 🝞	33	0	0	0
Active Surface Water Intakes (Raw) 3	2	0	0	0
Active Purchased Water (GW) Connections 3	0	0	0	0
Active Purchased Water (SW) Connections 3	0	0	0	0
Standby Sources <sup>1</sup> ⑦	0	0	0	0
Emergency Interconnections	2	0	0	0
Inactive Sources <sup>2</sup>	0		0	0

Are your water sources metered?	Yes 🗸
Do you routinely monitor the <i>static</i> water levels in your wells?	Yes
Do you routinely monitor the <i>pumping</i> water levels in your wells?	Yes
Are these levels recovering, declining or steady?:	Steady

<sup>1</sup>If a standby source ⑦ was used in 2018, provide the following information.

Name of the Standby Source used in 2018:	No. of days the Standby Source was in operation:	Were customers notified? (Y/N)	Was the Division of Drinking Water notified? (Y/N)	Describe the reason the Standby Source was used:

<sup>2</sup>Inactive sources are not approved as sources of supply and must be physically disconnected or similarly isolated.

COMMENTS (Note: Comments will be made publicly available): ⑦ Total No. New/Added (Well 165,166,167 although drilled are not yet permitted). The two emergency interconnection with permits are SSWD (Sacramento Suburban Water District) and SCWA (Sacramento County Water Agency).

#### 5. WATER PRODUCED, PURCHASED AND SOLD

The <u>Maximum Day</u> is the day during 2018 with the highest total water usage. Provide the *date* for that day in Column B, then complete Columns C, D and E, indicating how much of the water on that day was from each source.

Units of Measure for this table: Million Gallons  $\checkmark$ 

Volumes are based on: METERED VOLUMES ~

Α	В	С	D	Е	F	G	Н	I
		Potable Water						
	Date/ Month	Water Produced from Groundwater (Wells)	Water Produced from Surface Water <sup>2</sup>	Finished Water Purchased or Received from another PWS <sup>5</sup>	Total Amount of Potable Water <sup>3*</sup>	Water Sold to Another PWS <sup>5</sup>	Non- potable (exclude recycled)	Recycled
Maximum Day <sup>1</sup>	6/30/2018	24	109	0	133	0		
January		787.8	782.8	0	1570.6	11	0	0
February		685.2	874.8	0	1560	9.6	0	0
March		737.7	935.1	0	1672.8	11.1	0	0
April		699.7	1206.9	0	1906.6	11	0	0
May		727.5	2018.6	36.3	2782.4	15.3	0	0
June		711.8	2597.0	0	3308.8	14.6	0	0
July		685.9	2824.8	295.8	3806.5	46.3	0	0
August		680.2	2459.2	485.0	3624.4	47.5	0	0
September		705.2	2004.0	481.8	3191	56.9	0	0
October		729.3	2153.9	0	2883.2	46.9	0	0
November		656.5	1593.7	0	2250.2	44.3	0	0
December		652.7	1045.8	0	1698.5	20.2	0	0
Annual Total*		8459.5	20496.6	1298.9	30255	334.7	0	0
Percent Treated <sup>4</sup> 100							•	

PWS = Public Water System

\*Calculated field

Non-potable = water supplies, except recycled water, that do not enter the drinking water distribution system and are for non-potable uses only such as irrigation

Recycled = domestic wastewater which as a result of treatment is suitable for uses other than potable use such as irrigation or toilet flushing

<sup>1</sup>Only report Maximum Day if it is actually measured or determined from production records. It should not be the average day demand during the maximum month of production.

<sup>2</sup>Do not include raw water purchased; report only volume of water that was treated.

<sup>3</sup>(F) Total Amount of Potable Water = Sum of Columns (C), (D) and (E), automatically calculated. <u>Total water production includes water that is sold to</u> <u>another water system</u>. To update, click below

To update totals click here

<sup>4</sup>This is the percentage of the total annual volume for Groundwater produced that was provided treatment to meet drinking water standards other than precautionary disinfection and fluoridation.

#### <sup>5</sup>If water was <u>*Purchased*</u> from or <u>Sold</u> to another PWS, complete the table below:

Specify whether water was <i>Purchased</i> or <i>Sold</i>	Name of PWS
Sold	CALAM – Suburban
Sold	Sacramento International Airport
Sold	Fruitridge Vista Water Company
Purchased	Sacramento Suburban Water District

If recycled water was supplied to your customers, complete the table below:

Specify the level of treatment (e.g., tertiary, disinfected secondary)	Name of Recycled Water supplier

COMMENTS (Note: Comments will be made publicly available): 🕜

# 6. WATER RATES AND DELIVERIES

#### A. WATER RATES ⑦

If you have questions about completing this section of the report, please contact <u>Kathy.Frevert@Waterboards.ca.gov</u>, 916-322-5274 or <u>Mary.Yang@Waterboards.ca.gov</u>, 916-322-6507.

#### A1. Residential Water Rates



A1.a. Indicate the type of residential water rate structure ⑦ used by your water system (select those that apply):

#### Base Rate – (Non-Volumetric Rates) 3

□Fixed Base Rate - Basic or fixed charge that is the same for all customers regardless of use.

☑ Variable Base Rate - Basic charge is different for customers depending on size of pipe, water meter, elevation, peak use, or other factors. Usage Rate (Volumetric Rates) ⑦

Uniform Usage Rate - The charge per 100 cubic feet of water is the same regardless of use.

□ Variable Usage Rate - Increasing Block or Tier Rate. The charge per 100 cubic feet or other increment of water increases as water use increases. Other Rates

#### ☐ Flat Rate (often unmetered)- One rate for providing drinking water regardless of the volume of water used, not combined with a usage rate. ⑦ If you have a Flat Rate, please skip questions A1.b, A1.d, A1.f, A1.g and A3. Enter your flat rate in A4.

Allocation Based 3

Other rate structure (specify your rate structure in the comment box, provide a weblink 1j below)

U We do not charge a water rate (explain in next question)

A1.b. If your water system doesn't have rates, explain why: --Pick one---

Comments on rate structure (Note: Comments will be made publicly available):

#### If you are a water supplier without water rates, check this box $\Box$ , then move to <u>Section 6B Water Deliveries</u>.

A1.c. What is your billing frequency?	monthly $\checkmark$	
A1.d. If charges change with different levels of water consumption or features, what is the number of tiers or levels of charges? 3	Not Tiered $$	
A1.e. Identify any aspects or factors used to determine or adjust residential water rates (mark those that apply). 😨		
Agricultural use (non-commercial or commercial)		
Elevation		
Evaportive Coolers		
□ Fire protection - water to irrigate vegetation		
Home-based business		
□Livestock or large animals		
□ Lot size		
☑ Meter size		
$\Box$ Mitigation of high levels of total dissolved solids		
Occupancy (All-year)		
Occupancy (Seasonal)		
□ Pressure zone		
□ Soil compaction and dust control		
□ Supplement ponds and lakes to sustain wildlife		
□ Other :		
□ None of the above		
A1.f. Units of Measure (UOM) for this table on Residential Water Rates: ⑦	Hundred Cubic Fee	et $\checkmark$

A1.g. Table on Residential Water Rates, Single-family 3 and Multi-family 3

If your water system uses an allocation or flat base rate structure, add a direct weblink to more information on your <u>rate structure (A1.j)</u>, provide information in the box <u>"Comments on Residential Rate Structure" (A1.k)</u>, and leave this table blank.

**Provide information on residential water rates based on consumption.** If a feature of your rate structure, (e.g., meter size, elevation, or other) affects water rates, provide the water rate associated with the most common situation. Enter zero "0" if not applicable. See examples

	Single-family		Multi-family		
	Upper volume of water ⑦ included in base rate in Units of Measure (UOM)	Cost per Billing Period	Upper volume of water ⑦ included in base rate in Units of Measure (UOM)	Cost per Billing Period	
	If there is no base rate or volume of water associated with a base rate, enter the number zero "0".		If there is no base rate or volume of water associated with a base rate, enter the number zero "0".	(Dollars)	
Base Rate (non-volumetric rates) 🕜	32.47	0	32.47	0	
Usage Rate (volumetric rates) ⑦ The rows that follow do not include a base rate or fixed charge.	Upper level of water volume for each level in UOM	Cost per UOM (Dollars)	Upper level of water volume for each level in UOM	Cost per UOM (Dollars)	
Rate Structure level 1					
Rate Structure level 2 Rate Structure level 3					
Rate Structure level 4 Rate Structure level 5					
Rate Structure level 5 Rate Structure level 6 Rate Structure level 7					

A1.h. Date of most recent update to the rate structure: 3 MM/DD/YYYY

A1.i. Describe the changes to rate changes that were made in the update:

06/09/2009 Realigned fixed and variable cost basis A1.j. Provide a direct link to a web page that explains water rates and fees, if available. ⑦ http://www.cityofsacramento.org/Utilities/Water/Water-Service A1.k. Comments on Residential Rate Structure. Explain allocation rate, if applicable. ⑦

## **A2. RESIDENTIAL SERVICE CONNECTIONS**

A2.a. Select the most common single-family residential meter size:	1 inch	$\sim$
A2.b. Select the most common multi-family residential meter size:	1 inch	$\sim$
A2.c. What is, approximately, the service connection fee for <i>single-family brand-new construction</i> based on the most common meter size listed above (\$)? ⑦	3076.72	
A2.d. Date of most recent update to the new connection fee for single-family brand-new construction: MM/DD/YYYY 🔞	07/01/2018	
A2.e. What is the one-time connection fee to open a new account for an <i>existing single-family home</i> based on the most common meter size indicated above (\$)? ③	3076.72	
A2.f. What is, approximately, the connection fee for <i>multi-family new construction</i> based on the most common meter size indicated above (\$)?	3076.72	

A2.g. Check items included in new residential connection fees:

$\square$	Existing infrastructure buy-in (e.g., water treatment/ conveyance/sewage treatment )
$\square$	Upgrades to infrastructure (seismic retrofits, pipe replacements, etc.)
	Storm water management system
	Debt service charge
$\square$	Development of new water supplies
	Other :

A2.h. Comments on Residential Service Connections (publicly available):

#### A3. NON-RESIDENTIAL WATER RATES 3

A3.a. Select the most common non-residential meter size: 1 inch

A3.b. Complete the table below providing specific water rates applied to your **<u>non-residential</u>** customers:

Connection	BASE RATE (BR)	If BR + UUR, what is the volume allowed before UUR applies	UNIFORM USAGE RATE (UUR)	VARIABLE BASE RATE (provide range) (VBR)		USAGI (provid	ABLE E RATE e range) UR)
Туре	\$ (Base)	HCF 📀	\$ per HCF	\$ Low	\$ High	\$ per HCF Low	\$ per HCF High
Commercial	32.47	.01	1.3261	0	0	0	0
Institutional	32.47	.01	1.3261	0	0	0	0
Industrial	32.47	.01	1.3261	0	0	0	0
Landscape Irrigation	32.47	.01	1.3261	0	0	0	0
Agricultural Irrigation	32.47	.01	1.3261	0	0	0	0
Other	32.47	.01	1.3261	0	0	0	0

Comments on non-residential water rates (publicly available):

#### A4. AFFORDABLE DRINKING WATER

# For each amount of water delivered to a single-family residential customer shown below, what is charged (in dollars) to a customer?

For each of the three water volumes shown below, provide what would be the monthly water bill for a single-family residential customer. Enter the monthly Water Charges and Other Charges for each water volume. For example, if a single-family customer used 12 HCF in a month, the total bill would include water charges for using 12 HCF and other charges that are added to the bill. Other charges vary locally and may include property tax, city tax, utility users tax, services for fire suppression, waste water or sewer, stormwater or other non-water surcharges. If the "other charges" varies by certain features (e.g., by climate, lot size, landscaped area) use the lowest charge in your calculation. Click the "Update Totals" button to automatically add the charges together to show a Total Monthly Water Bill that a residential customer would pay when its household used the specified amount of water.

A4.a. 6 HCF 🕐		
Drinking Water Charges (Fixed and variable water charges)	40.43	Dollars/month
Other Charges (e.g., property tax, fire suppression, waste water, other)	40.34	Dollars/month
Total Monthly Water Bill (Automatic sum of Water Charges and Other Charges)	* 80.77	Dollars/month
A4.b. 12 HCF 🕜		
Drinking Water Charges (Fixed and variable water charges)	48.38	Dollars/month
Other Charges (e.g., property tax, fire suppression, waste water, other)	40.34	Dollars/month
Total Monthly Water Bill (Automatic sum of Water Charges and Other Charges)	∗ 88.72	Dollars/month
A4.c. 24 HCF 😨		
Drinking Water Charges (Fixed and variable water charges)	64.30	Dollars/month
Other Charges (e.g., property tax, fire suppression, waste water, other)	40.34	Dollars/month
Total Monthly Water Bill (Automatic sum of Water Charges and Other Charges)	∗ 104.64	Dollars/month

\*If "Other Charges" varies, (e.g., by climate, lot size, landscaped area, or other features) use the lowest charge in your calculation.

Calculated field: To update calculated field, click button below

To update totals click here

Comments on Affordable Drinking Water(publicly available):



#### A5. SHUT-OFFS 🝞

Completing this section will fulfill the 2018 requirements of Senate Bill 998 - Discontinuation of residential water service.

Click the "Update Totals" button to automatically add the Single Family and Multifamily Accounts

Community Water Systems that have water rates and more than 200 connections must complete this section. If your community water system does not meet these criteria for completing this Section, then you must mark the boxes "did not collect information" below in order to avoid completion errors.

If a water supplier tracks the number of services connections but did not collect information on whether residences were occupied or unoccupied at the time of disconnection, put the total number of disconnections in the "unknown accounts" column in the tables in this section. If a water supplier does not differentiate between single-family or multi-family, then enter all information as single-family.

A5.a. How many accounts for residential service connections had their water shut off once during the year of 2018 due to failure to pay?

If there was no information collected for question A5.a, mark the check box "Did not collect information" 🗌 and skip below table.

	Occupied Accounts	Unoccupied Accounts	Unknown Accounts ⑦	Total*
Single-Family Accounts	0	0	484	484
Multi-family Accounts	0	0	0	0

A5.b. How many accounts for residential service connections had their water shut off more than once during 2018 due to failure to pay?

If there was no information collected for question A5.b, mark the check box "Did not collect information"  $\Box$  and skip below table.

	Occupied Accounts	Unoccupied Accounts	Unknown Accounts 🕜	Total*
Single-Family Accounts	0	0	60	60
Multi-Family Accounts	0	0	0	0

A5.c. What is the residential reconnection fee to restore drinking water service due to failure to pay during operating hours? 3

Single-Family Accounts 254 Multi-family Accounts 0

A5.d. What is the residential reconnection fee to restore drinking water service due to failure to pay during non-operating hours? ③

Single-Family Accounts 0 Multi-Family Accounts 0

A5.e. What was the median duration of the shut-offs (in days) for continuously occupied residential service accounts? 3

If there was no information collected for question A5.e, mark the check box "Did not collect median duration of shut-offs (in days) for occupied residents" 🛛 and skip below table.

	Occupied Accounts	Unoccupied Accounts	Unknown Accounts 🕜	Total*
Single-Family Accounts				0
Multi-Family Accounts				0

A5.f. If you offer an extended repayment or other customer payment assistance plan, how many continuously occupied residential customer accounts participated?

Single-Family Accounts 143 Multi-family Accounts Total\* 143

A5.g. How many of the continuously occupied residential accounts were shut off at least once during calendar year 2018 and were enrolled in an extended repayment plan or other customer payment assistance plan at the time of the service disconnection?

Single-Family Accounts 143 Multi-family Accounts Total\* 143

\*Calculated field, to update calculated field, click button below

To update totals click here

A5.h. Do you have a written policy on discontinuation of residential service? 🕐 Yes 🛛 🗸

A5.i. Comments on Shut-offs (publicly available): A5C & A5D: Multi-family accounts are excluded from water termination program. Reconnections are not provided during non-operating hours. A5E: Did not track continuously occupied accounts.

#### A6. Affordable Drinking Water Assistance

1	A6.a. Do you provide options for low-income assistance?	Yes 🗸
1	A6.b. If yes, how was the program funded?	The General Fund finances the program using proceeds from the 11% general tax transferred from the enterprise fund transfer
1	A6.c. How much funding was allocated to the program in 2018?	3800000
	A6.d. What form of benefit was given per account (dollar amount, percentage, or volume) and how much? ⑦	Dollar amount; \$15.13/month
	A6.e. How many residential accounts received the low-income subsidy?	8750
4	A6.f. What are the eligibility criteria to qualify for assistance?	
	Disabled	
	□ Low Income Families	
	Seniors	
	Special Medical Need	
	Other Please describe:	

A6.g. At this time, does your agency have a policy to allow for alternative payment? 2 No

Comments on Affordable Drinking Water Assistance (publicly available):

## **B. WATER DELIVERIES**

Units of Measure (UOM) for this table: Million Gallons  $\checkmark$ 

Provide monthly metered water deliveries for all water sources (potable and non-potable) in the table below.

Α	В	С	D	Е	F	G	Н	I	J
	Single- family Residential	Multi- family Residential	Commercial/ Institutional	Industrial	Landscape Irrigation	Other	Total Urban Retail <sup>1*</sup>	Agricultural	Other PWS
Check if Recycled Water is included:									
January	517	185	416	0	15	0	1133	0	11

February	487	184	405	0	15	0	1091	0	10
March	474	169	360	0	17	0	1020	0	11
April	537	198	466	0	20	0	1221	0	11
May	732	222	604	0	93	5	1656	0	15
June	968	274	655	0	201	8	2106	0	15
July	1137	263	539	0	167	10	2116	0	46
August	1320	335	818	0	271	14	2758	0	48
September	1213	326	786	0	236	10	2571	0	57
October	994	278	672	0	178	11	2133	0	47
November	922	272	615	0	140	7	1956	0	44
December	632	205	434	0	36	2	1309	0	20
Total*	9933	2911	6770	0	1389	67	21070	0	335

PWS = Public Water System

\*Calculated field

<sup>1</sup>Total Urban Retail = Sum of Columns (B) thru (G), automatically calculated. To update, click below

To update totals click here

COMMENTS (Note: Comments will be made publicly available): ⑦ % of metered retail account rose from 74% in January 2018 to 86% in December 2018

## 7. WATER QUALITY



Date of Emergency Notification Plan:	7/12/2018
Is the Emergency Notification Plan up to date?	Yes ∨

## DIRECT ADDITIVES

Pursuant to Section 64590, Title 22 of the California Code of Regulations, (effective January 1, 1994), all chemicals or products, including chlorine, added directly to the drinking water as part of a treatment process must meet the ANSI/NSF Standard 60. Please complete the following table for each chemical used by this water system. If you are not sure whether a chemical you are using meets this standard, contact the manufacturer or distributor of the chemical.

If you do not use any direct additives, put "NONE" in each column of the first row.

Name of Chemical	Name of Manufacturer	Purpose of using chemical	Chemical is ANSI/NSF Standard 60 certified ⑦ (Y/N)	Use initiated in 2018 7 (Y/N)
Chlorine	Thatcher	Disinfectant	Y	Y
Aluminum Sulfate	CHEMTRADE	Coagulant	Y	Y
Lime	Graymont	pH Adjustment	Y	Y
Fluoride	Solvay	Fluoride	Y	Y
Non Ionic Polymer	Polydyne Inc.	Floc Aid	Y	Y
Sodium Hydroxide	Univar	Pre-Treatment pH Control	Y	Y

## **INDIRECT ADDITIVES**

As of March 9, 2008, a water system shall not use any chemical, material, lubricant, or product in the production, treatment or distribution of drinking water that comes in contact with the drinking water that does not have certification of meeting NSF/ANSI standard 61.

Does your water system have procedures to ensure all future equipment and materials meet this standard?

If you have any questions on the requirements related to indirect additives, you may contact your local regulatory agency.

COMMENTS (Note: Comments will be made publicly available): ??

#### 8. CROSS-CONNECTION CONTROL 3

	Total Number in System in 2018 <sup>1</sup>	Number Installed in 2018	Number Tested in 2018 <sup>2</sup>	Number Failed in 2018	Number Repaired/ Replaced
Backflow Assemblies ⑦ on the Service Connections or Meter (Reduced Pressure Principle and Double Check Valve assemblies)	8169	255	8056	375	401
Backflow Assemblies On- site but not on the Service Connections or Meter <sup>3</sup> (Reduced Pressure Principle and Double Check Valve assemblies)	34	0	0	0	0
Air-gap Separation 🕜	43	43			

Notes:

<sup>1</sup> Total Number in System in 2018 – Total number of active Backflow Prevention Assemblies including new devices installed in 2018, but excluding inactive devices.

<sup>2</sup> Number Tested in 2018 – includes all active devices that were tested in 2018 and either passed or failed.

No. of Inactive Backflow Preven	710				
Date of last cross-connection co If ongoing, enter the last day of	12/31/2018				
Cross Connection Control Program Coordinator					
Name:			Luis E. Huerta Torrez		
Certification Number:			02643		
Business Phone:	lhuerta@cityofsacramento.org				
Certification or training received: Cert by AWWA / Training by the University of Southern California					

Describe any cross-connection incidents ⑦ that occurred during 2018:

#### N/A

COMMENTS (Note: Comments will be made publicly available): ⑦ 1. Backflow Assemblies on Service connections: Presented count includes 34 Temporary hydrants site meters 2. Number of Internal assemblies approved: Number includes 1-meter testing facility, and 33 wells. Assemblies have been tested in in the first quarter of 2019. 3. Air-gap Separation: Includes 43 permitted water transport vehicles, using hydrant meters. 4. Inactive Backflow Assemblies: Including removed, stolen, out of business sites. 28 Internal protection, 663 point of connection assemblies, and 19 temporarily. 5. Cross-Connection: A direct cross-connection was discovered by the Sacramento County Environmental Management Department on August 9, 2018 at the Sacramento Power Authority Cogeneration Plant located at 3215 47th Avenue, Sacramento California 95824, while performing a Site Survey and a cross-connection test.

#### 9. OPERATOR CERTIFICATION 3

A. Please list the State certified Water Treatment Plant Operators employed by your water system that supervise and direct the operation of your water treatment plants, beginning with the chief operator(s) ??.

Your Highest Treatment System Classification is: T5 🕜

Check this box if your public water system has designated a Chief Treatment Operator.

Name of Chief Treatment Operator (First name Last name): David Herrmann Grade of Chief Treatment Operator (1, 2, 3, 4 or 5): 5 Treatment Operator Number (4 or 5 digits): 12488 Treatment Certification Expiration Date (MM/DD/YYYY): 06/01/2020

Treatment Operator Name (First name Last name)	Grade of Treatment Operator (1, 2, 3, 4, or 5)	Chief or Shift <sup>1</sup> (C, S or X)	Treatment Operator Number (4 or 5 digits)	Treatment Certification Expiration Date (MM/DD/YYYY)
George Avalos	3	S	28540	8/1/2019
Charles Capron	5	S	28725	7/1/2020
Richard Dare	4	S	28728	8/1/2018
Jeffrey Emocling	4	S	22924	2/1/2021
David Herrmann	5	С	12488	6/1/2020
Keith Johnson	5	С	20928	1/1/2020
Amy Kral	5	С	20674	7/1/2021
Justin Krellwitz	4	S	24836	11/1/2020
Mickey Carson	2	S	34481	07/01/2021
Howard Moreland	5	S	27423	1/1/2021
Mike Morillo	3	S	35890	8/1/2019
Joe Quist	4	S	33438	11/1/2020
Michael Ragan	5	С	24377	9/1/2020
Eric Solomon	4	S	29192	9/1/2018
Christopher Martin	2	S	31475	2/1/2022
Paul Munoz	2	S	26909	1/1/2020
Benjamin Palmberg	2	S	35137	8//2021
Craig Robinson	2	С	36519	7/1/2020
Robert Strebel	2	С	35902	1/1/2020
Ty Wallis	1	С	26492	2/1/2020

<sup>1</sup>Use "C" for Chief Operator and "S" for Shift Operator. If neither, put an "X". Do not leave blank.

Do your Chief and Shift Treatment Plant Operators have the minimum level required? Yes

B. Please list the State certified Water Distribution System Operators employed by your water system that supervise and direct the operation of your distribution systems, beginning with the chief operator(s) 3.

 $\sim$ 

Your Distribution System Classification is: D4 3

Check this box if your public water system has designated a Chief Distribution Operator.

Name of Chief Distribution Operator (First name Last name): Craig Robinson Grade of Chief Distribution Operator (1, 2, 3, 4 or 5): 4

Distribution Operator Number (4 or 5 digits):

23578 Distribution Certification Expiration Date (MM/DD/YYYY): 10/1/2020

Distribution Operator Name (First name Last name)	Grade of Distribution Operator (1, 2, 3, 4, or 5)	Chief or Shift <sup>1</sup> (C, S or X)	Distribution Operator Number (4 or 5 digits)	Distribution Certificatio Expiration Date (MM/DD/YYYY)
Charles Capron	3	S	35185	6/1/2020
Richard Dare	2	S	32320	4/1/2022
David Hermann	5	С	3406	12/1/2021
Keith Johnson	4	С	18501	12/1/2019
Justin Krellwitz	2	S	25318	05/01/2020
Howard Moreland	4	S	30493	09/01/2019
Michael Morillo	2	S	35147	10/01/2020
Michael Ragan	3	S	31279	04/01/2020
Anthony Richard	2	S	41010	04/01/2021
Dan Atterberry	2	S	44181	11/1/2020
Frank Azevedo	2	S	43202	11/1/2019
David Boisa	2	S	23186	10/1/2020
Mickey Carson	3	S	40508	3/1/2020
Mike Casazza	2	S	41101	11/1/2020
Jon Connover	5	С	30054	6/1/2020
Sean Copeland	1	S	47820	11/1/2019
Chris Davila	2	S	48197	5/1/2020
Michael Denico	2	S	46349	8/1/2021
Daniel Duenas	1	s	29008	6/1/2020
Jason Dyke	1	S	47499	11/1/2019
Jacob Estep	2	S	37896	9/1/2021
James Evans	3	S	36122	5/1/2021
Mark Farinias	2	S	31807	12/1/2021
Alexander Fellos	2	S	44011	12/1/2020
Ted Florez	1	S	44910	2/1/2021
Armando Garcia	1	S	44313	11/1/2020
Dave Garrett	2	S	43975	5/1/2020
Richard Glenn	4	С	35174	7/1/2021
Gene Graye	2	S	46580	2/1/2021
Trevor Hagan	2	S	45057	5/1/2021
Kyle Hamilton	2	S	28446	7/1/2019
Mathew Harrington	1	S	46128	11/1/2018
Kyle Harris	2	S	44068	7/1/2021
Arnoldo Herrera	2	S	42082	2/1/2019
Dustin Herrington	2	S	40200	11/1/2020
Luis Huerta Torres	2	S	46168	11/1/2021
John James	2	S	27348	3/1/2022

Joe Kelly	2	S	18973	4/1/2020
Jared Lachapelle	2	S	35409	6/1/2019
Hung-Yi Lai	2	S	23346	4/1/2021
Cesar Limon	3	С	32781	8/1/2019
Paul Magaoay	3	S	48009	9/1/2021
Christopher Martin	2	S	37312	2/1/2022
Andrew McGee	3	S	43343	10/1/2021
George Mells	1	S	43702	5/1/2020
Sal Miano	2	S	31900	12/1/2021
Michael Montero	3	S	38958	8/1/2020
Alejandro Morfin	3	S	44385	12/1/2021
Paul Munoz	4	S	38565	10/1/2021
Benjamin Palmberg	3	S	40968	5/1/2020
Nick Pauly	4	S	33119	6/1/2020
Mike Petrali	1	S	43774	5/1/2020
Dominic Petrilla	3	S	33331	6/1/2019
Chris Powell	3	S	3954	5/1/2020
Sean Pratt	2	S	48408	5/1/2020
Terry Prior	2	S	48064	2/1/2020
Juan Ramirez	2	S	41087	5/1/2021
Dillon Sams	1	S	48628	5/1/2020
Larry Shelton	2	S	31763	12/1/2021
Mike Shilliday	3	S	18588	12/1/2019
Robert Strebel	5	С	28985	8/1/2021
Ramazan Sumovic	3	S	34165	11/1/2021
Artur Synkov	3	S	34717	11/1/2019
Alec Takacs	2	S	38785	6/1/2019
Jeff Thomas	2	S	14972	7/1/2021
Ty Wallis	3	С	22857	1/1/2021
Jose Torres	2	S	44888	1/1/2021
Michael Ward	1	S	40819	4/1/2021
James Whitaker	2	S	38872	11/1/2021
Ryan Whitwell	2	S	46824	5/1/2019
Dan Yarbrough	4	S	42346	9/1/2021
Fernando Yeh	2	S	45805	10/1/2021

<sup>1</sup>Use "C" for Chief Operator and "S" for Shift Operator. If neither, put an "X". Do not leave blank.

Do your Chief and Shift Distribution System Operators have the minimum level required?  $\fbox{\sc Yes}$ 

#### COMMENTS (Note: Comments will be made publicly available): ⑦ Mathew Harrington: Renewed Late

#### **10. WATER SYSTEM IMPROVEMENTS**

The California Waterworks Standards (Section 64556) require an amended permit for any of the following improvements or modifications:

- · Addition of a new distribution reservoir with a capacity of 100,000 gallons or more
- Modification or extension of the existing distribution system using an alternative to the requirements of the California Waterworks Standards (see Sections 64570 through 64578)
- Modification of the water supply by:
  - Adding a new source
  - · Changing the status of an existing source (for example, active to standby) or
  - · Changing or altering a source, such that the quality or quantity of water supply could be affected
- · Any addition or change in treatment, including
  - Design capacity
  - Process
- Expansion of the existing service area by 20 percent or more of the number of service connections specified in your current permit.

If your water system made any improvements or modifications during 2018 for which a permit was not obtained, please describe the improvements or modifications below.

The final close out for the Sacramento River Water Treatment Plant (SRWTP) Rehab project was issued in 2018. The City of Sacramento continued to replace water mains and place meters in 2018 as part of the Accelerated Water Meter Program (AWMP) which is on schedule to be completed by the end of 2020. To date the program has installed over 28 miles of new main and 24,500 meters bringing the City to approximately 88% metered. The entire AWMP is on schedule to place over 40,000 meters and 60 miles of new main. There were several more projects in construction in 2018 that were still under construction at year's end. They include: meter retrofit and pipeline replacement projects, Shasta Improvements Project consisting of a 4MG Reservoir and 2- 2MGD wells (construction was extended into 2019), Fairbairn Water Treatment Plant Filters #9-16 Rehabilitation project (rehabbing filters and coating filter basins and bulkheads) and Miscellaneous Improvements at the Sacramento River Water Treatment Plant (includes items the Rehab contractor didn't complete, the Rehab contract, and items identified after the completion of the Rehab project).

#### Indicate any planned improvements or modifications for 2019.

Continuation of the projects in construction as described in the 2018 improvement section above. Also, planned construction for 2019: Florin Reservoir improvements, Miscellaneous Improvements Phase 2 at the Sacramento River Water Treatment Plant, Freeport Reservoir Pump Upgrades, Flush to Waste at Various Well Sites, Well Abandonments, SRWTP Intake structure Sedimentation Removal.

COMMENTS (Note: Comments will be made publicly available): ⑦

#### 11. COMPLAINTS REPORTED (WRITTEN OR VERBAL)

Type of Complaint	No. of Complaints Reported by Customers	No. of Complaints Investigated	No. of Complaints reported to the Division of Drinking Water or Local County Staff	Brief Description of Cause and Corrective Action taken	
Taste and Odor	30	30	0	No Action Required	
Color	21	21	0	No Action Required	
Turbidity	1	1	0	No Action Required	
Visible Organisms	1	1	0	No Action Required	
Pressure (High or Low)	321	321	0	No Action Required	
Water Outages <sup>1</sup>	187	187	0	Shutdowns for repairs, contractor tie-in and abandonments	
Illnesses (Waterborne)	4	4	0	No Action Required	
	33	33	0		

Other (Specify)				Calcium deposits 1; cross-contamination 1; dissolved oxygen 4; fluoridation 1; garden 1; general complaint 1; hardness 1; lead 2; pH 1; rash 1; suspended solids 8; TDS 1; toilet discoloration 1; VOCs 1; water safety 8
Total No. of Complaints*	598	598	0	

<sup>1</sup>These are customer complaints of a water outage and not necessarily the same as the water outages reported under "System Problems" in the Distribution Section of the EARDWP.

\*Calculated field

To update totals click here

COMMENTS (Note: Comments will be made publicly available): ⑦

# 12. RECYCLED WATER USE ??

Do you have recycled water in your service area (provided by you or another utility)?	No 🗸

Recycled Water (RW) Use Sites	Total No. of Approved Sites as of Dec. 31, 2018	No. of New Sites Approved in 2018	No. of Sites Proposed for 2019
Irrigation, Agriculture	0	0	0
Irrigation, Landscape	0	0	0
Industrial	0	0	0
Dual-plumbed ⑦ (In-building)	0	0	0
Dual-plumbed (Single-family lot)	0	0	0
Cooling Towers	0	0	1
Other	0	0	0
Total*	0	0	1

To update totals click here

Name of the recycled water coordinator:	Brett Ewart
Business Phone:	916-808-1725
Email address:	bewart@cityofsacramento.org
How many inspections of recycled water use sites were conducted in 2018?	0
How many pressure/shutdown tests were performed in 2018?	0
Do all of your recycled water uses sites have an on-site supervisor?	No
How many recycled water uses sites do not have an on-site supervisor?	

COMMENTS (Note: Comments will be made publicly available): ⑦ Construction and permitting of recycled water to SPA/Cogen facility in progress. Anticipate completed in late 2019. Cross Connection inspection and testing is occurring, but this

# **13. SYSTEM OPERATION - TREATMENT**

A. GROUNDWATER TREATMENT (respond only if groundwater treatment is provided, exclude chlorination treatment)



Groundwater Treatment Plant Name	Treatment Process	Date of Operations Plan	Is Operations Plan Current? (Y/N)	Contaminant Removed
Well 83	Disinfection/Fluoride	5/26/2010	Y	
Well 91	Disinfection/Fluoride	5/26/2010	Y	
Well 93	Disinfection/Fluoride	5/26/2010	Y	
Well 94	Disinfection/Fluoride	5/26/2010	Y	
Well 107	Disinfection/Fluoride	5/26/2010	Y	
Well 107	T1	1.0	Disinfection/Fluoride	5/26/2010
Y	Well 111	T1	1.4	Disinfection/Fluoride
5/26/2010	Y	Well 112	T1	.9
Disinfection/Fluoride	5/26/2010	Y	Well 114	T1
1.0	Disinfection/Fluoride	5/26/2010	Y	Well 116
T1	.7	Disinfection/Fluoride	5/26/2010	Y
Well 120	T1	.8	Disinfection/Fluoride	5/26/2010
Y	Well 122	T1	.8	Disinfection/Fluoride
5/26/2010	Y	Well 123	T1	1.3
Disinfection/Fluoride	5/26/2010	Y	Well 124	T1
.8	Disinfection/Fluoride	5/26/2010	Y	Well 126
T1	1.0	Disinfection/Fluoride	5/26/2010	Y
Well 127	T1	1.0	Disinfection/Fluoride	5/26/2010
Y	Well 129	T1	.7	Disinfection/Fluoride
5/26/2010	Y	Well 131	T1	.7
Disinfection/Fluoride	5/26/2010	Y	Well 134	T1
1.2	Disinfection/Fluoride	5/26/2010	Y	Well 137
T1	1.0	Disinfection/Fluoride	5/26/2010	Y
Well 138	T1	.8	Disinfection/Fluoride	5/26/2010
Y	Well 139	T1	1.2	Disinfection/Fluoride
5/26/2010	Y	Well 142	T1	1.3
Disinfection/Fluoride	5/26/2010	Y	Well 143	T1
.7	Disinfection/Fluoride	5/26/2010	Y	Well 144
T1	.8	Disinfection/Fluoride	5/26/2010	Y
Well 154	T1	.7	Disinfection/Fluoride	5/26/2010
Y	Well 155	T1	.08	Disinfection/Fluoride
5/26/2010	Y	Well 159	T1	1.3
Disinfection/Fluoride	5/26/2010	Y	Well 164	T1
1.6	Disinfection/Fluoride	5/26/2010	Y	Well 133

T1	1.2	Disinfection/Fluoride	5/26/2010	Y
Well 153	T1	1.4	Disinfection/Fluoride	5/26/2010
Y	Well 156	T1	1.0	Disinfection/Fluoride
5/26/2010	Y	Well 158	T1	1.4
Disinfection/Fluoride	5/26/2010	Y		

Describe any plant problems, process failures, major shutdowns, etc., which occurred in 2018 and substantially affected the plant performance AND/OR any significant modifications or maintenance provided to the plant(s):

Wells 91,93,112,114,123,139 have their Risk Management Plan. Well 91 and 139 are waiting for pump and motor change out. Well 127 Shutdown with plans for demolition and possible re-drill. Well 154 off due to chromium problems. Well 144 never came on-line because it did not meeting Title 22 requirements. VOCc problem. Well 159 is off line due to draw down and sucking air because of clogged screens, City plans to destroy and re-drill. Plans for demolition: Well 116 & 142.

B. SURFACE WATER TREATMENT (respond only if surface water treatment is provided)



Surface water Treatment Plant Name	Date of Operations Plan	Is Operations Plan Current? (Y/N)
Sacramento River Water Treatment Plant	1/20/2016	Y
E.A. Fairbairn Water Treatment Plant	10/20/2014	Y

Describe any plant problems, process failures, major shutdowns, etc., which occurred in 2018 and substantially affected the plant performance AND/OR any significant modifications or maintenance provided to the plant(s):

Sacramento River Water Treatment Plant: Corrective maintenance upon inspections of all equipment during our annual Shutdown, including one filter nozzle replacement, and Master Backwash valve replacement. Newly installed pressure reducing valve in the Backfill piping to reduce vibration due to cavitation. E.A. Fairbairn Water Treatment Plant: There were no process failures, major shutdowns or significant modifications or maintenance activities in 2018.

TD = Treatment or Distribution operator at any level

NR, N/A, NA = There are no facilities subject to the Certified Treatment Plant Operator requirements

Date of current Emergency Disinfection Plan (EDP)*:	1/20/2016	
*As required under Section 64660(c)(2). The EDP may be included in your water system's Emergency Response Plan or Operations Plan. If so, provide the Name and Date of those plans below:.		
Name of Document that includes the Emergency Disinfection Plan:	Operations Plan	
Date of document that includes the Emergency Disinfection Plan:	1/20/2016	

Date of last watershed sanitary survey report 7:	12/20/2018		
Date planned to complete next watershed sanitary survey report*:	12/31/2023		
*As required under Section 64665, each watershed sanitary survey shall be updated at least every 5 years.			

COMMENTS (Note: Comments will be made publicly available): ⑦ Date of current EDP: E.A. Fairbairn WTP 10/20/2014, Sacramento River WTP 1/20/2016. Date of last Watershed Sanitary Survey report: American River 12/20/2018, Sacramento River 12/16/2015; Date planned to complete next Watershed Sanitary Survey report: American River 12/31/2023, Sacramento River 12/31/2020. The Emergency Disinfection Plan for Sacramento River Water Treatment Plant is included in the Operations Plan dated 1/20/2016. The Emergency Disinfection Plan for the E. A. Fairbairn Water Treatment Plant is included in the Operation Plan dated 10/20/2016.

# 14. SYSTEM OPERATION – DISTRIBUTION

#### A1. DEAD-END FLUSHING PROGRAM

Total No.	No. with	No. Flushed	Frequency of
in System	Blowoffs	in 2018	Flushing
2919	1618	10	As Needed

Comments on DEAD-END FLUSHING PROGRAM (publicly available):

#### A2. ALL FLUSHING OPERATIONS

Units of Measure for total volume reported below:	Gallons ∨
Total Volume in units of measure selected above; include all types of flushing, not just dead-end flushing: ⑦	336950

Comments on ALL FLUSHING OPERATIONS (publicly available):

## **B. VALVE EXERCISE PROGRAM**

Size Range of Valves	Total No. in System	No. Exercised in 2018	Frequency of Valve Exercising
4" to 60"	30623	1178	As Needed

Comments on VALVE EXERCISE PROGRAM (publicly available):

#### C. STORAGE TANK/RESERVOIR INSPECTION/CLEANING PROGRAM

(Do not include pressure tanks)



Tank name	Capacity (in million gallons, MG)	Year installed	Date of last inspection ⑦	Date of last cleaning	Date re-lined or coated	Corrosion protection(*)	Material of construction
EAFWTP	20	1964	2018	2016	01/01/1000	None	
EAFWTP	6	2005	2018	2016	01/01/1000	None	
EAFWTP CT	3	2005	2018	2016	01/01/1000	None	
EAFWTP WWT	1	1964	2018	2018	01/01/1000	None	
SRWTP #1	5	1924	2017	2016	1996	None	
SRWTP #2	9.5	1937	2018	2018	01/01/1000	None	
SRWTP #3	2.8	2004	2017	2017	01/01/1000	None	

SRWTP CT	2.8	2004	2014	2016	01/01/1000	None	
Florin Reservoir	15	1972	2016	2016	01/01/1000	None	
Freeport Reservoir	3	1961	2018	2018	2004	Impressed Current	
Alhambra Reservoir	3	1938	2018	2018	2002	Impressed Current	
City College Reservoir	3	1938	2018	2018	2002	Impressed Current	
Med Center Reservoir	3	1938	2017	2017	2001	Impressed Current	
Riverside Reservoir	3	1963	2017	2017	01/01/1000	Impressed Current	
Capitol Gateway Reservoir	3	1988	2016	2016	01/01/1000	Impressed Current	
Robla Reservoir	3	1988	2017	2017	2004	Impressed Current	
San Juan Reservoir	3	2002	2016	2016	01/01/1000	Impressed Current	
El Centro Reservoir	3	2003	2018	2018	01/01/1000	Impressed Current	
Elk Horn Reservoir	3	2007	2015	2015	01/01/1000	Impressed Current	

\*Coatings and linings do not count as corrosion protection for table Subsection C.

# **D. SYSTEM PROBLEMS**

Type of Problem	No. of Problems	No. of Problems Investigated	No. of Problems Reported to the Division of Drinking Water or Local County Staff	Brief Description of Cause and Corrective Action Taken
Service Connection Breaks/ Leaks	494	494		Repaired/renewed water services
Main Breaks/Leaks	178	178		Repaired water mains
Water Outages ⑦	187	187		Shutdowns for repairs, contractor tie-in and abandonments
Boil Water Orders	0	0		
Total*	859	859	0	

To update totals click here

Comments on SYSTEM PROBLEMS (publicly available):

# SECTION E AND F BELOW ARE ONLY FOR RETAIL COMMUNITY WATER SYSTEMS WITH >3,000 SERVICE CONNECTIONS OR SUPPLY >3,000 AF/YEAR

If you have questions about completing this section of the report, please contact Kartiki.Naik@waterboards.ca.gov or call (916) 319-9468.

The information in the section below will be used to help develop water loss performance standards for urban retail water suppliers, as required by SB 555 (2015).

#### E. INFRASTRUCTURE AND PRESSURE 3

#### Pipe Material in Distribution System

1. Which materials does your distribution system pipe consist of? Please check all that apply:

☑ Plastic (Including Poly Vinyl Chloride and HDPE)
 ☑ Steel
 ☑ Cast Iron
 ☑ Galvanized Iron

# ☑ Ductile Iron ☑ Cement Concrete ☑ Asbestos Cement

Pipeline Material	Percentage of distribution pipe system composed of the materials selected above	Average Age (in years)
Plastic	27	18
Steel	4	55
Cast Iron	17	87
Galvanized Iron	0.1	84
Ductile Iron	4	19
Cement Concrete	5	41
Asbestos Cement	42	54
other:	1	57

2. Percentage of distribution system composed of pipes with a nominal diameter ⑦ larger than 18 inches 8 %

#### **Pressure Management**

1. Into how many pressure zones is your distribution system divided? 2

2. Specify the minimum operating pressure, averaged across your distribution system, required to maintain minimum pressure requirements at critical pressure points ③ in your distribution system as per the California Waterworks Standards (California Code of Regulations, Title 22, Division 4, Chapter 16, Article 8, §64602). 45 psi

Comments on the minimum operating pressure in Question 2 (publicly available) 30 psi is the minimum level of service goal. Average pressure throughout the system is 45 psi. To maintain these service pressures, the Utility typically discharges from sources at 50-55 psi

Comments on Pressure Management (publicly available):

# F. REAL LOSS REDUCTION MEASURES



1. Has your system implemented real loss reduction and detection measures 3 (excluding pressure reduction) in the past five years? If yes, please check the box and proceed to (2) 🖂

If not, skip questions 2 and 3 below.

2. Check the box if Component Analysis been conducted for your system

a. Which year was the component analysis ⑦ conducted? (YYYY)

b. What was the expenditure incurred? (Amount in \$)

3. (a) Provide details on water loss measures implemented, if known. ⑦

Measure implemented for water loss detection						
Measure	Implementation Level	Comments				
Listening rods	Not Tracked					
Ground microphones	Not Tracked					
Hydrophones	Not Considered $\checkmark$					
Leak noise correlators	Full-scale ~					
Leak noise loggers	Planning ~					
Inline acoustic devices	Piloted ~					
Inline pressure devices	Not Considered $\lor$					
Inline imaging devices	Not Considered ∨					
Tracer gas	Not Considered $\checkmark$					

Electromagnetic field detection	Not Considered $\checkmark$
District Metered Areas	Piloted ~
Ground Penetrating Radar	Not Considered >
Thermography	Not Considered ~
Satellite imaging	Not Considered ~
Machine learning	Not Considered ~
Step testing	Not Considered $\checkmark$
Visual surveys	Full-scale ~
Reduced response time to fix breaks/leaks	Full-scale ~
Meter testing	Not Tracked V
Other	Not Tracked

Provide the following information for the prior five years (2014 through 2018):

5-Year Summary for Water Loss Detection Measures					
Total Number of Leaks Detected from Year 2014 to 2017	2920				
Total Number of Leaks Detected (2014 to 2018) *	882				
Net Volume of Water Loss Identified (2014 to 2018)	18				
Total Expenditure Incurred for Detection Measures (\$) (2014 to 2018)	956000				

\*Total Number of Leaks Detected for each year is the sum of No. of Problems for <u>Service Connection Breaks/Leaks</u> and <u>Main Breaks/Leaks</u> reported on subsection <u>D. SYSTEM PROBLEMS</u>.

Comments on 5-Year Summary for Water Loss Detection Measures (publicly available):

Select water volume units for the table below: Million Gallons  $\checkmark$ 

Infrastructure renewal implemented for water loss reduction							
Intervention ⑦	Portion of distribution system over which implemented (%)	Real loss reduced (Select unit above)	Number of leaks reduced	Expenditure incurred (\$)	Not tracked	Comments	
Repair		19	556	956000		% of system appears N/A for repairs	
Rehabilitation	0	0	0	0			
Replacement as a result of leak detection	0	0	0	0			
Total estimates for all interventions as a result of leak detection <b>?</b>	0	18	556	956000			

4. (a) Provide details on measures employed for monitoring operational pressure and pressure transients in your system, if known.

Measures implemented to monitor operational pressure and pressure transients						
Measure	Implementation Level	Comments				
Pressure loggers	Full-scale ~					
Hydraulic models	Full-scale V					
Pressure transient loggers	Not Tracked					
Other	Not Tracked					
Enter total expenditure if known (\$)						

4. (b) Please provide details on interventions implemented to reduce operational pressure and pressure transients in your system, if known.

Intervention implemented to reduce operational pressure or pressure transients								
Intervention ③	Portion of distribution system	Average pressure	Expenditure for	Not tracked	Comments			

	over which implemented (%)	reduced (psi)	intervention used (\$)	
Pressure reduction/modulation				See general comments below.
Booster pump stations				See general comments below.
Reduced pressure during low demand				City adjusts discharge pressure at source water facilities up/down at varying demands to maintain similar average system wide pressure. Overall result is similar pressure year- round pressure.
Pressure transient control devices				
Other				
Enter total expenditure if known ⑦				

5. Provide the name of a contact person at your organization for water loss control programs (First Name, Last Name): Julie Friedman

Comments on real loss reduction measures employed (publicly available) \*DOU surveyed 18% of its distribution network in FY2017, 18% in FY2016 and 10% in FY2015. DOU conducts proactive leak detection with a dedicated 2-man crew currently. The pilot District Metered Areas (DMAs) established by DOU over the past three years cov

COMMENTS (Note: Comments will be made publicly available): ⑦ City of Sacramento does not apply intervention programs specifically to reduce pressure. The City is characterized as having fairly flat terrain ranging from 5 to 75 feet. Water is lifted from the rivers or aquifer to supply all needs. Lowest level pumping head at source is employed (45-60 psi) to meet a low pressure level of service of 30 psi throughout the system.

#### **15. EMERGENCY PREPAREDNESS AND RESPONSE**

#### A. EMERGENCY RESPONSE PLANS

# PUBLIC WATER SYSTEMS WITH AT LEAST 3,300 OR MORE PERSONS SHOULD REVIEW AND REVISE THEIR EMERGENCY RESPONSE PLAN TO ENSURE THAT THE PLANS ARE SUFFICIENT TO ADDRESS POSSIBLE DISASTER SCENARIOS.

Do you have an Emergency Response Plan (ERP) that addresses the procedures for the restoration of water service for your water system?	Yes 🗸
Date of your current Emergency Response Plan:	4/1/2018
Date ERP was last exercised with a tabletop or other activity:	10/1/2018

#### **B. AUXILIARY POWER SUPPLY**

Does your water system have backup power for:			
1. Sources:	Some ~		
2. Pumping Stations:	Some ~		
3. Water Treatment Plants:	All 🗸		
If your system has backup power, how many times per year is it exercised?	12		
Can your system maintain system pressure either by backup power or by storage during power outages of 2 hours or less?	Yes 🗸		
Is your backup power system automatic or manual start?:	Automatic ~		

COMMENTS (Note: Comments will be made publicly available): 3

#### 16. WATER CONSERVATION AND DROUGHT PREPAREDNESS

Date of your revised Drought Preparedness Plan or Water Shortage Contingency any:	y Plan, if 6/21/16
Units of Measure for this section: ⑦	100 cubic feet $\checkmark$
If you experienced water shortages in 2018, please estimate the amount of short selected for this section:	tfall in units
How many water-shortage response stages are in your drought plan? For "non-a enter zero.	applicable", 4
Did drought conditions cause you to activate emergency standby wells in 2018?	? No ~
Do you project water shortages in the current calendar year? ③	No V
Did you implement NEW water conservation measures in 2018? 3	No V
If you implemented NEW water conservation measures in 2018, please estimate volume of water in units selected for this section % reduction in demand	e how much water was conserved ⑦
Do you anticipate having to go to mandatory rationing in the upcoming year?	No 🗸
I don't for the method your water eveters were to	(Check as applicable)

Identify the method your water system uses to discourage excessive water use in support of SB 814 (2016) : 🝞

surcharges above

base rates for excessive water use)

 $\square$  Excessive water use ordinance, rule, or tariff condition

□ Not implementing

Т

□ Not applicable: not an urban retail water supplier ⑦

COMMENTS REGARDING SB 814 (Note: Comments will be made publicly available) : 🕐

COMMENTS (Note: Comments will be made publicly available): ??

# 17. CLIMATE CHANGE ADAPTATION AND RESILIENCY FOR WATER UTILITIES

Per Waterboard Resolution 2017-0012, dated 3/7/17, water system inspections are required to address climate change impacts & concer

#### ONLY FOR COMMUNITY WATER SYSTEMS

Your water system classification is: Community Water System 😨

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If you have questions about completing this section of the report, please contact Joseph.Crisologo@waterboards.ca.gov or call (818) 551-2046.

A. CLIMATE THREATS				
What climate-related impacts are of concern for your water system (check all that apply)? ③				
Drought Groundwater Depletion Water Quality Degradation Flooding Sea Level Rise				
$\square \text{ Extreme Heat } \square \text{ Fire} \qquad \square \text{ Other} \qquad \square \text{ None or N/A}$				
B. SENSITIVITY AND MAGNITUDE OF IMPACTS				
Qualitatively assess climate change sensitivity of your facilities, and criticality or consequence of disruption. Consider identified climate threats using past experience, and expert judgement based on the magnitude of expected change and extreme events in the future. You do not need numeric answers. USEPA provides a risk assessment tool, called CREAT, to help utilities identify which environmental changes can impact water supply: <a href="https://www.epa.gov/crwu/build-resilience-your-utility">https://www.epa.gov/crwu/build-resilience-your-utility.</a> More resources are available that may help you complete this section.				

	Decreased water storage (low lake and reservoir levels)	Choose an item Medium Sensitivity
Drought   Groundwater Depletion	Groundwater depletion (increased extraction, reduced groundwater recharge, etc.)	Choose an item Medium Sensitivity
	Change in seasonal runoff and/or loss of snowmelt	$\begin{array}{c} \text{Choose an item} \\ \hline \text{High or Already Experiencing} \lor \end{array}$
	Region relies on water diverted from the Delta, imported from the Colorado River, or other climate-sensitive area	Choose an item Medium Sensitivity
	Salt-water intrusion into aquifers	Choose an item None to Low Sensitivity
Water Quality Degradation	Altered water quality during storm events (turbidity shifts, debris flows)	Choose an item High or Already Experiencing $\checkmark$
	Surface water quality issues related to eutrophication, algal blooms, invasive species	Choose an item Medium Sensitivity
	High flow events and flooding	$\begin{array}{c} \text{Choose an item} \\ \hline \text{High or Already Experiencing} \searrow \end{array}$
Flooding   Sea Level Rise	Inundation due to sea level rise, high tides, and/or coastal storm surges	$\frac{\text{Choose an item}}{\text{None to Low Sensitivity}} \checkmark$
	Aging flood protection infrastructure (levees), or insufficient impoundment capacity	Choose an item Medium Sensitivity
Extreme Heat	Peak demand volume surges (due to extreme heat, temperature trends, etc.)	Choose an item High or Already Experiencing $\checkmark$
	Increases in agricultural water demand or energy sector needs	Choose an item None to Low Sensitivity
Fire   Other Impacts	Increased fire risk and altered vegetation, e.g., wildfires	Choose an item High or Already Experiencing $\checkmark$
	Disruption of power supply	Choose an item Medium Sensitivity
	Other Water Quality impacts from wildfire activity	$\begin{array}{c} \text{Choose an item} \\ \hline \text{High or Already Experiencing} \searrow \end{array}$

# C. ADAPTATION MEASURES

Identify measures to increase resiliency and reduce vulnerabilities based on identified water system sensitivities. Indicate status for all projects that your organization has completed or plans to implement to increase resiliency of the water system to climate change? Adaptation measures planned or achieved for reasons other than climate change should be put in the "Other" box along with the reason for the measure. USEPA's Adaptation Strategies Guide for Water Utilities provides examples of adaptation: <a href="https://www.epa.gov/crwu/learn-how-plan-extreme-weather-events">https://www.epa.gov/crwu/learn-how-plan-extreme-weather-events</a>

Install new and deeper drinking water wells, or modify existing wells to increase pumping capacity	Choose an item In Progress $\checkmark$
Develop local supplemental water supply, enhanced treatment, or increased storage capacity (e.g. recycled water, storm runoff for groundwater recharge, desalination, new reservoir)	Choose an item In Progress $\checkmark$
Interconnection with other utilities (transfers, mutual aid agreements with neighboring utilities)	Choose an item In Progress $\checkmark$
Relocate facilities, construct or install redundant facilities	Choose an item In Progress $\checkmark$
Modify facilities (e.g., install barrier or levee, raise a wall, seal a door, elevate construction)	Choose an item In Progress $\checkmark$
Conservation measures (demand management, enhanced communication and outreach)	Choose an item In Progress $\checkmark$
Fire prevention – brush management, partnerships	Choose an item In Progress $\checkmark$
Alternative or backup energy supply	Choose an item In Progress $\checkmark$
On-site energy generation	Choose an item In Progress $\checkmark$
Enhance monitoring program, budget for additional testing and treatment, chemicals	Choose an item In Progress $\checkmark$
Other	Choose an itemPick one V

COMMENTS (Note: Comments will be made publicly available): 3

#### **18. LEAD SERVICE LINE REPLACEMENT**



# ONLY FOR COMMUNITY WATER SYSTEMS

Your water system classification is: Community Water System

Section 116885 of the California Health and Safety Code, Lead Service Lines in Public Water Systems, added to the Health and Safety Code by Senate Bill 1398 (2016) and amended by Senate Bill 427 (2017), requires all community water systems (CWS) to compile an inventory of known partial or total lead user service lines in use in its distribution system by July 1, 2018. All CWSs will need to provide DDW an inventory form through this 2018 electronic annual report (eAR) explaining how the inventory was determined and the results. DDW is utilizing this 2018 electronic annual report (eAR) to gather and update this information.

IMPORTANT: In the 2017 electronic Annual Report, all CWSs were required to submit the lead service line inventory to the DDW. The INVENTORY TABLE below were PRE-FILLED with information provided in the 2017 eAR, please review the table below and take this opportunity to make changes and update your inventory. All pipe materials that does not apply to your system must not be left blank. You must enter zero, otherwise errors will be generated at the end of the eAR report.

The inventory must include all user service lines that are active and those that are reasonably expected to become active in the future. Also, Section 116885 requires that CWS identify areas that may have lead user service lines in use, and/or identify any areas within the CWS distribution system that the CWS cannot identify the material that is being used for the service line. If a CWS indicates the existence of lead user service lines or unknown material user service lines or lead/unknown fittings associated with user service lines, by July 1, 2020, the CWS will need to submit to DDW a timeline to replace all lead and unknown material user service lines. Please include the updated information on your user service line inventory below so DDW can track the progress of your system. For additional information, please visit

https://www.waterboards.ca.gov/drinking\_water/certlic/drinkingwater/lead\_service\_line\_inventory\_pws.html

If you have questions about completing this section of the report, please contact David.Pimentel@Waterboards.ca.gov or call (916) 323-0572.

If your water system is a wholesaler and your system contain no user service lines, you are not required to complete this form: Please check this box: 🗆

Date lead service line inventory was completed (MM/DD/YYYY): 04/20/2018

#### A. User service line inventory:

"User service line" means the pipe, tubing, and fittings connecting a water main to an individual water meter or service connection.

Pipe Material		Estimated Number of Service Lines (Enter "0" if none)	Estimated Total Length of Service Lines (In feet), if applicable
A. Lead		0	
B. Unknown material		27644	143552982
C. Copper		47849	
D. Cast iron (ductile pipe)		0	
E. Ductile iron		0	
F. Galvanized steel		50	
G. Polyvinyl chloride (PVC)		150	
H. Polyethylene (PE)		0	
I. High density polyethylene (HDPE)		62356	
J. Polybutylene (PB)		0	
K. Transite/asbestos cement		0	
L. Other materials not listed above:			
Identify material 1		0	
Identify material 2		0	
Identify material 3		0	
Identify material 4		0	
Total number of service lines inventoried* (calculated field)		138049	
Total number of service connections from Section 3 of the EAR		157342	
Fittings or fittings connecting a water main:			1

M. <u>Lead fittings NOT</u> on a lead pipe(e.g., goosenecks, pigtails, and corporation stops)	1468
N. <u>Lead fittings ON</u> a lead pipe (e.g., goosenecks, pigtails, and corporation stops)	0
O. <u>Fittings of unknown material</u> (e.g., goosenecks, pigtails, and corporation stops)	75543
Total number of lead service lines** (calculated field)	1468

\*Total number of service lines inventoried (calculated field) = Sum of A through L

\*\*Total number of lead service lines (calculated field) = Sum of A and M

To Update calculated field, click button below

To update totals click here

#### B. Method(s) used to prepare the lead service line inventory in Part A (check all that apply):

Tap Cards or tickets from initial service installation

Plans from water main installation, rehabilitation, and replacement

Records indicating when buildings were constructed

Meter replacement records

Distribution maps, drawings, or GIS

☑ Visual confirmation of pipe material by plumbers or utility crews during maintenance or installation activities

Interviews with water system personnel and/or past employees

Field investigations

 $\Box$  Other (describe below):

Disclosure: Be advised that Sections 116725 and 116730 of the California Health and Safety Code states that any person who knowingly makes any false statement on any report or document submitted for the purposes of compliance may be liable for a civil penalty not to exceed five thousand dollars (\$5,000) for each separate violation for each day that the violation continues. In addition, the violators may be prosecuted in criminal court and upon conviction, be punished by a fine of not more than \$25,000 for each day of the violation, or be imprisoned in county jail not to exceed one year, or both the fine and imprisonment.