2018 Consumer Confidence Report

Water System Name: **MWD of So. California – Julian Hinds Pumping Plant** Report Date: **May 28, 2019**

We test the drinking water quality for many constituents as required by state and federal regulations. This report shows the results of our monitoring for the period of January 1–December 31, 2018 and may include earlier monitoring data. ***All primary drinking water standards were met during this period****.*

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

Type of water source(s) in use: River

Name & location of source(s): Colorado River at Lake Havasu, Whitsett Intake Pumping Plant

Drinking Water Source Assessment information: *Metropolitan completed a Source Water Assessment of its Colorado River supplies upstream of the Whitsett Intake Pumping Plant in December 2002 and submitted the Colorado River Watershed Sanitary Survey 2015 in December 2016. This source is considered to be most vulnerable to treated wastewater discharges, urbanization in the watershed, and recreation, which may contribute sources of nutrients, pathogens, metals, and other chemicals of concern.*

Time and place of regularly scheduled board meetings for public participation: *12:00 PM, 2nd Tuesday of every month, 700 N. Alameda St., Los Angeles, California 90012*

For more information, contact: *Sun Liang, Ph.D., P.E.* *Phone:* *(909) 392-5273*

TERMS AND DEFINITIONS USED IN THIS REPORT

Average: Result based on arithmetic mean

$CaCO_3$ Calcium Carbonate

CFU: Colony-forming Units

DLR: Detection Limit for Purposes of Reporting

DWS: Drinking Water Standards

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

Secondary Drinking Water Standards (SDWS): MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWS do not affect public health at the MCL levels.

Level 1 Assessment: A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in the water system.

Level 2 Assessment: A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an *E. coli* MCL violation has occurred and/or why total coliform bacteria have been found in the water system on multiple occasions.

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs*)* as is economically and technologically feasible. Secondary MCLs are set to protect the aesthetics (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 known or expected risk to health. MCLGs are set by the United States Environmental Protection Agency (USEPA).

Maximum Residual Disinfectant Level (MRDL): The highest level of disinfectant allowed in drinking water. 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. EPA sets MRDLG based on the best available science to prevent potential health problems.

Median: The number in the middle of a set of numbers.

NA: Not Applicable

ND: Not Detected at Testing Limit or Reporting Level

Notification Level (NL): The level of unregulated chemicals in drinking water that lack MCLs, advisory in nature, and not enforceable standards. If the chemical is present over its NL, notification of the water system's governing body is required.

NTU: Nephelometric turbidity unit

pCi/L: picocuries per liter (a measure of radioactivity)

ppb: parts per billion or micrograms per liter (µg/L)

ppm: parts per million or milligrams per liter (mg/L)

Public Health Goal (PHG): The level of a contaminant in drinking water that does not pose a significant risk to public health. PHGs are not enforceable drinking water standards. California Environmental Protection Agency's Office of Environmental Health Hazard Assessment (OEHHA) sets the PHGs.

RAA: Running annual average; *highest RAA* is the highest of all RAA calculated as average of all the samples collected within a 12-month period; the calculated RAA for the first three quarters (quarters 1–3) are based on results from previous quarters of the past calendar year.

LRAA- Locational Running Annual Average is calculated for selected site locations.

Range: Results based on minimum and maximum values; range and average values are the same for samples collected once or twice annually.

Regulatory Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements set by SWRCB, which a water system must follow.

SWRCB: State Water Resources Control Board (State Board), Division of Drinking Water

TON: threshold odor number

µS/cm: microSiemen per centimeter

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

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.

Contaminants that may be present in source water include:

- *Microbial contaminants*, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- *Inorganic contaminants*, such as salts and metals, which 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, which are byproducts of industrial processes and petroleum production, and can also, come from gas stations, motorized water-craft, urban storm water runoff, agricultural applications, and septic systems.
- *Radioactive contaminants*, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (EPA) and the State Board prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration (FDA) and California law also establish limits for contaminants in bottled water that provide the same protection for public health.

Tables 1 through 8 show results for constituents detected during the current reporting period. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The State Board allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, are more than one year old.

There were no violations of an action level, maximum contaminant level, maximum residual disinfectant level, or treatment technique in the current reporting period.

TABLE 1A – JULIAN HINDS PUMPING PLANT DISTRIBUTION SYSTEM SAMPLING RESULTS FOR COLIFORM BACTERIA

Microbiological Contaminant	Highest No. of Detections	No. of Months in Violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria (State Total Coliform Rule)	0 *(In a month)*	0	No more than 1 positive monthly sample	0	Naturally present in the environment
E. coli (State Total Coliform Rule)	0 *(In the year)*	0	Acute Violation: A routine sample and a repeat sample are total coliform positive, and at least one of these is also *E. coli* positive	0	Human and animal fecal waste
E. coli (Federal Revised Total Coliform Rule)	0 *(In the year)*	0	Routine and repeat samples are total coliform-positive and either is *E. coli*-positive or system fails to take repeat samples following *E. coli*-positive sample or system fails to analyze total coliform-positive repeat sample for *E. coli*	0	Human and animal fecal waste

TABLE 1B – JULIAN HINDS PUMPING PLANT RAW WATER SUPPLY SAMPLING RESULTS FOR COLIFORM BACTERIA (1)

Microbiological Contaminant	Sample Date (Frequency)	Range Average	Results	Typical Source of Bacteria
Total Coliform Bacteria (CFU/100 mL)	1/18–12/18 (Monthly)	*Range*	770–47,000	Naturally present in the environment
		Median	4,000	
E. coli (CFU/100 mL)	1/18–12/18 (Monthly)	*Range*	ND–7	Human and animal fecal waste
		Median	1	

TABLE 1C – JULIAN HINDS PUMPING PLANT RAW WATER SUPPLY SAMPLING RESULTS FOR *E. COLI* UNDER THE FEDERAL LONG TERM 2 ENHANCED SURFACE WATER TREATMENT RULE (LT2ESWTR) (1)

Microbiological Contaminants	Sample Date (Frequency)	Range Average	Results	Trigger (2) Level	PHG (MCLG)	Typical Source of Bacteria
E. coli (CFU/100 mL)	1/18–9/18 (Bi-weekly)	*Range*	ND–7	10	(0)	Human and animal fecal waste
		Average	2			

(1) Samples were taken from the Colorado River Aqueduct prior to Hinds' sand trap. Reporting level is 1 CFU/100 mL for total coliform and *E. coli*.

(2) If the average annual *E. coli* detected exceeds the trigger level of 10 CFU/100 mL, the water system will be required to monitor for *Cryptosporidium* at least twice per month for one year, or once per month for two years. LT2ESWTR monitoring period was from October 2017 to September 2018.

TABLE 2 – JULIAN HINDS PUMPING PLANT DISTRIBUTION SYSTEM MONITORING RESULTS FOR LEAD AND COPPER [3]

Lead and Copper	Reporting Unit	Sample Date	No. of Samples Collected	90th Percentile [4] Level Detected	No. Sites Exceeding AL	AL	PHG	Typical Source
Lead	ppb	July 2017	5	ND	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper	ppm	July 2017	5	0.440	0	1.3	0.3	Internal corrosion of household water plumbing systems; erosion of natural deposits; leaching from wood preservatives

TABLE 3 – JULIAN HINDS PUMPING PLANT SOURCE WATER MONITORING RESULTS FOR SODIUM AND HARDNESS [5]

Chemical or Constituent	Reporting Unit	Sample Date	Range Average	Result	MCL	PHG (MCLG)	Typical Source
Sodium	ppm	April 2018; October 2018	Range	87–91	None	None	Generally found in ground and surface water
			Average	89			
Hardness (as $CaCo_3$)	ppm	April 2018; October 2018	Range	282–292	None	None	Generally found in ground and surface water
			Average	287			

TABLE 4 – JULIAN HINDS PUMPING PLANT SOURCE WATER MONITORING RESULTS FOR CONSTITUENTS WITH A PRIMARY DRINKING WATER STANDARD [5]

Chemical or Constituent	Reporting Unit	Sample Date (Frequency)	Range Average	Result	MCL	PHG (MCLG)	Typical Source of Contaminant
Arsenic	ppb	April 2018	*Range*	2.3	10	0.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
			Average				
Fluoride	ppm	April 2018; October 2018	*Range*	0.3	2.0	1	Erosion of natural deposits; discharge from fertilizer and aluminum factories
			Average				
Nitrate (as Nitrogen)	ppm	April 2018	*Range*	0.4	10	10	Runoff and leaching from fertilizer use; septic tank and sewage; natural deposits erosion
			Average				
Gross Alpha Particle Activity [3]	pCi/L	2017 (Quarterly)	*Range*	3.3-6.3	15	(0)	Erosion of natural deposits
			Average	4.3			
Gross Beta Particle Activity [3]	pCi/L	2017 (Quarterly)	*Range*	5.1-5.3	50	(0)	Decay of natural and man-made deposits
			Average	5.2			
Uranium [3]	pCi/L	2017 (Quarterly)	*Range*	2.5-3.0	20	0.43	Erosion of natural deposits
			Average	2.7			

(3) Data are from samples collected (triennially) during four consecutive quarters of monitoring in 2017 and reported for three years until the next samples are collected.
(4) Compliance for lead and copper is based on the 90th percentile of all samples collected.
(5) Samples were taken from the Colorado River at Lake Havasu, Whitsett Intake Pumping Plant.

TABLE 5 – JULIAN HINDS PUMPING PLANT DISTRIBUTION SYSTEM MONITORING RESULTS FOR DISINFECTION BYPRODUCTS AND DISINFECTANT RESIDUALS (6)

Chemical or Constituent	Reporting Unit	Sample Date (Frequency)	Range Average	Result	MCL	PHG	Typical Source
Total Trihalomethanes (TTHM)	ppb	1/18–12/18 (Quarterly)	*Range*	ND - 28	80	None	Byproduct of drinking water chlorination
			Highest LRAA	26			
Haloacetic Acids (HAA5)	ppb	1/18–12/18 (Quarterly)	*Range*	ND – 5.1	60	None	Byproduct of drinking water chlorination
			Highest LRAA	5.2			
Chlorine Residual (as Free Chlorine)	ppm	1/18–12/18 (Quarterly)	*Range*	0.57 – 1.1	MRDL=4.0	MRDLG=4.0	Drinking water disinfectant added for treatment
			Highest RAA	0.97			

TABLE 6A – JULIAN HINDS PUMPING PLANT DISTRIBUTION SYSTEM MONITORING RESULTS FOR CONSTITUENTS WITH A SECONDARY DRINKING WATER STANDARD (7)

Chemical or Constituent	Reporting Unit	Sample Date	Range Average	Result	MCL	Typical Source
Odor Threshold	TON	September 2018	*Range*	2	3	Naturally-occurring organic materials
			Average			
Turbidity (8)	NTU	1/18–12/18	*Range*	ND–0.11	5	Soil runoff
			Average	ND		

TABLE 6B – JULIAN HINDS PUMPING PLANT SOURCE WATER MONITORING RESULTS FOR CONSTITUENTS WITH A SECONDARY DRINKING WATER STANDARD (5)

Chemical or Constituent	Reporting Unit	Sample Date	Range Average	Result	MCL	Typical Source
Chloride	ppm	April 2018; October 2018	*Range*	84–90	500	Runoff/leaching from natural deposits
			Average	87		
Color	units	April 2018; October 2018	*Range*	2–5	15	Naturally-occurring organic materials
			Average	4		
Specific Conductance	µS/cm	April 2018; October 2018	*Range*	958–959	1,600	Substances that form ions in water; seawater influence
			Average	958		
Sulfate	ppm	April 2018; October 2018	*Range*	216–233	500	Runoff/leaching from natural deposits; industrial waste
			Average	224		
Total Dissolved Solids	ppm	April 2018; October 2018	*Range*	603–624	1,000	Runoff/leaching from natural deposits
			Average	614		

TABLE 7 – JULIAN HINDS PUMPING PLANT MONITORING RESULTS FOR UNREGULATED CONSTITUENTS

Chemical or Constituent	Reporting Unit	Sample Date	Range Average	Result	NL	Health Effects Language
Boron (5)	ppb	April 2018	*Range*	110	1,000	The babies of some pregnant women who drink water containing boron in excess of the notification level may have an increased risk of developmental effects, based on studies in laboratory animals.
			Average			
Chlorate (7)	ppb	August 2018	*Range*	173	800	High doses of chlorate can interfere with thyroid function and can cause oxidative damage to red blood cells.
			Average			

(6) Compliance with the state and federal MCLs is based on the highest LRAA or RAA, as appropriate.
(7) Samples were taken from the facility domestic tank effluent.
(8) The turbidity levels for grab samples at this location were in compliance with the Secondary Standard. Turbidity results below the State DLR of 0.1 NTU are reported as ND in this report.

Additional General Information on Drinking Water

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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline (1-800-426-4791).

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 from their health care providers about drinking water. U.S. EPA/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).

Lead-Specific Language: 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.

The **Julian Hinds Pumping Plant** is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. 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. Please contact Metropolitan's Water Quality Hotline (1-800-354-4420) and leave a message for questions regarding water testing. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at http://www.epa.gov/lead.

For Systems Providing Surface Water as a Source of Drinking Water

TABLE 8 – JULIAN HINDS PUMPING PLANT SAMPLING RESULTS SHOWING TREATMENT OF SURFACE WATER SOURCES

Treatment Technique (9)	Microfiltration
Turbidity Performance Standards (10) (that must be met through the water treatment process)	**Not applicable** for Julian Hinds Pumping Plant domestic water system since it is considered a small water system having at least 5, but no more than 14 service connections and does not regularly serve drinking water to more than an average of 25 individuals daily for more than 60 days out of the year. It meets the provisions set forth in California Code of Regulations Title 22, Chapter 14, Article 3 - State Small Water Systems.
Highest single turbidity measurement during the year	0.10 NTU

(9) A required process intended to reduce the level of a contaminant in drinking water.
(10) Turbidity (measured in NTU) is a measurement of the cloudiness of water and is a good indicator of water quality and filtration performance. Turbidity results, which meet performance standards, are considered to be in compliance with filtration requirements.

Summary Information for Federal Revised Total Coliform Rule
Level 1 and Level 2 Assessment Requirements

Level 1 or Level 2 Assessment Requirement Not Due to an *E. coli* MCL Violation

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system.

No coliforms were found in the water treatment system or distribution system. No Level 1 assessment(s), or violations occurred.

Level 2 Assessment Requirement Due to an *E. coli* MCL Violation

E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children, the elderly, and people with severely-compromised immune systems.

No *E. coli* bacteria were found in the water treatment system or distribution system. No MCL violations and no Level 2 assessment(s) occurred.

Consumer Confidence Report
Certification Form

(To be submitted with a copy of the CCR)

(to certify electronic delivery of the CCR, use the certification form on the State Board's website at http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/CCR.shtml

Water System Name: Metropolitan Water District of Southern California – Julian Hinds Pumping Plant

Water System Number: 3301317

The water system named above hereby certifies that its Consumer Confidence Report was distributed on May 28, 2019, to customers (and appropriate notices of availability have been given). Further, the system certifies that the information contained in the report is correct and consistent with the compliance monitoring data previously submitted to the State Water Resources Control Board, Division of Drinking Water.

Certified by: Name: Sun Liang, Ph.D., P.E.

Signature:

Title: Water Purification Unit Manager

Phone Number: (909) 392-5273 Date: May 28, 2019

To summarize report delivery used and good-faith efforts taken, please complete this page by checking all items that apply and fill-in where appropriate:

☒ CCR was distributed by mail or other direct delivery methods (attach description of other direct delivery methods used). **Water system emailed the CCR as an electronic file email attachment.**

☒ "Good faith" efforts were used to reach non-bill paying consumers. Those efforts included the following methods:

- ☐ Posting the CCR on the Internet at www._____
- ☐ Mailing the CCR to postal patrons within the service area (attach zip codes used)
- ☐ Advertising the availability of the CCR in news media (attach copy of press release)
- ☐ Publication of the CCR in a local newspaper of general circulation (attach a copy of the published notice, including name of newspaper and date published)
- ☒ Posted the CCR in public places **(Hinds Pumping Plant bulletin board)**
- ☐ Delivery of multiple copies of CCR to single-billed addresses serving several persons, such as apartments, businesses, and schools
- ☐ Delivery to community organizations (attach a list of organizations)
- ☐ Other (attach a list of other methods used)

☐ *For systems serving at least 100,000 persons*: Posted CCR on a publicly-accessible internet site at the following URL: www._____

☐ *For privately-owned utilities*: Delivered the CCR to the California Public Utilities Commission

This form is provided as a convenience and may be used to meet the certification requirement of section 64483(c), California Code of Regulations.