2011 Consumer Confidence Report

Water System Name: **MWD of So. California – Julian Hinds Pumping Plant** Report Date: **May 29, 2012**

We test the drinking water quality for many constituents as required by State and Federal Regulations. This report shows the results of monitoring for the period of January 1 – December 31, 2011.

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: *In December 2002, Metropolitan completed a Source Water Assessment (SWA) of its Colorado River supplies upstream of the Whitsett Intake Pumping Plant. This source is considered to be most vulnerable to treated wastewater discharges, urbanization in the watershed, and recreation. Treated wastewater discharges and urbanization may contribute sources of nutrients, pathogens, metals, and other chemicals of concern. If you would like more information about the SWA, please call (213) 217-6850.*

Time and place of regularly scheduled board meetings for public participation:
12:00 P.M., 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 USED IN THIS REPORT:

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 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 U.S. Environmental Protection Agency (USEPA).

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

Maximum Residual Disinfectant Level (MRDL): The level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLGs are set by the U.S. Environmental Protection Agency.

Notification Level: The level at which notification of the water system's governing body is required.

Primary Drinking Water Standards (PDWS): MCLs and MRDLs for contaminants that affect 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 SDWSs do not affect the health at the MCL levels.

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

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

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

CFU: colony-forming units

DLR: State's detection limit for purposes of reporting

ND: not detected at testing limit or reporting level

NA: not applicable

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

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

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

RAA: running annual average

TON: threshold odor number

µS/cm: microSiemen per centimeter

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 USEPA and the state Department of Public Health (Department) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

Tables 1, 2, 3, 4, 5, 6, and 7 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The Department allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change significantly from year to year. Some of the data, though representative of the water quality, are more than one year old.

TABLE 1A - DISTRIBUTION SYSTEM SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA

Microbiological Contaminants	Highest No. of Detections	No. of Months in violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria	0 *(In a month)*	0	No more than 1 positive monthly sample	0	Naturally present in the environment
E. coli	0 *(In the year)*	0	Acute Violation: A routine sample and a repeat sample are total coliform positive, and one of these is also *E. coli* positive	0	Human and animal fecal waste

TABLE 1B - RAW WATER SUPPLY SHOWING THE DETECTION OF COLIFORM BACTERIA [(1)]

Microbiological Contaminants	Sample Date	Range Average	Levels of Detection	Trigger Level [(2)] (MCL)	PHG (MCLG)	Typical Source of Bacteria
Total Coliform Bacteria (CFU/100 ml)	1/11–12/11	*Range*	ND–1,600	(None)	(None)	Naturally present in the environment
		Median	360			
E. coli (CFU/100 ml)	1/11–12/11	*Range*	ND–6	100 (None)	(None)	Human and animal fecal waste
		Median	ND			

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

(2) If the *E. coli* levels exceed 100 CFU/100 ml as a weekly median, additional treatment or operational controls will be provided.

TABLE 2 - DISTRIBUTION SYSTEM SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER (3)

Lead and Copper (and reporting units)	No. of Samples Collected	90th Percentile Level Detected	No. Sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	5	1	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	5	0.40	0	1.3	0.3	Internal corrosion of household water plumbing systems; erosion of natural deposits; leaching from wood preservatives

TABLE 3 – SAMPLING RESULTS FOR SODIUM AND HARDNESS (4)

Chemical or Constituent (and reporting units)	Sample Date	Range Average	Levels of Detection	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	April 2011; October 2011	*Range*	87	None	None	Generally found in ground and surface water
		Average	87			
Hardness (ppm)	April 2011; October 2011	*Range*	290	None	None	Generally found in ground and surface water
		Average	290			

TABLE 4 – DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD (4)

Chemical or Constituent (and reporting units)	Sample Date	Range Average	Levels of Detection	MCL	PHG (MCLG)	Typical Source of Contaminant
Arsenic (ppb)	April 2011	*Range*	2.6	10	0.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
		Average	2.6			
Barium (ppb)	April 2011	*Range*	120	1,000	2,000	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits
		Average	120			
Fluoride (ppm) (naturally-occurring)	April 2011	*Range*	0.3	2.0	1	Erosion of natural deposits; discharge from fertilizer and aluminum factories
		Average	0.3			
Nitrate as Nitrogen (ppm) (5)	April 2011; October 2011	*Range*	ND–0.4	10	10	Runoff and leaching from fertilizer use; septic tank and sewage; natural deposits erosion
		Average	0.4			
Perchlorate (ppb) (6)	April 2011	*Range*	1.5	6	6	Industrial waste discharge
		Average	1.5			
Gross Alpha Particle Activity (pCi/L) (7)	1/11–12/11	*Range*	3–6	15	(0)	Erosion of natural deposits
		Average	4			
Gross Beta Particle Activity (pCi/L) (7,8)	1/11–12/11	*Range*	ND–5	50	(0)	Decay of natural and man-made deposits
		Average	ND			
Uranium (pCi/L) (7)	1/11–12/11	*Range*	2–3	20	0.43	Erosion of natural deposits
		Average	2			

(3) Results based on the August 2011 triennial monitoring.

(4) Samples were taken from the Colorado River at Lake Havasu, Whitsett Intake Pumping Plant.

(5) State MCL is 45 ppm as nitrate, which equals 10 ppm as Nitrogen.

(6) Metropolitan uses a reporting level of 0.1 ppb which is lower than the State DLR of 4 ppb.

(7) Results based on the 2011 quarterly monitoring.

(8) The gross beta particle activity MCL is 4 millirem/year annual dose equivalent to the total body or any internal organ. The screening level is 50 pCi/L.

TABLE 5 - DISTRIBUTION SYSTEM SAMPLING RESULTS FOR DISINFECTION BY-PRODUCTS AND DISINFECTANT RESIDUALS

Chemical or Constituent (and reporting units)	Sample Date	Range Average	Levels of Detection	MCL[9] [MRDL]	PHG [MRDLG]	Typical Source of Contaminant
Total Trihalomethanes (TTHM) (ppb)[10]	1/11–12/11	*Range*	4.0–91 [10]	80	None	By-product of drinking water chlorination
		Highest RAA	44			
Haloacetic Acids (Five) (HAA5) (ppb)[10]	1/11–12/11	*Range*	ND–4.4	60	None	By-product of drinking water chlorination
		Highest RAA	5.0			
Chlorine (Free) Residual (ppm)	1/11–12/11	*Range*	0.35–1.2	[4.0]	[4.0]	Drinking water disinfectant added for treatment
		Highest RAA	0.76			

TABLE 6A - DISTRIBUTION SYSTEM SAMPLING RESULTS FOR CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	Sample Date	Range Average	Levels of Detection	MCL	PHG (MCLG)	Typical Source of Contaminant
Odor Threshold (TON)	October 2011	*Range*	2	3	NA	Naturally-occurring organic materials
		Average	2			
Turbidity (NTU)	1/11–12/11	*Range*	0.04–0.14	5	NA	Soil runoff
		Average	0.07			

TABLE 6B - DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD [4]

Chemical or Constituent (and reporting units)	Sample Date	Range Average	Levels of Detection	MCL	PHG (MCLG)	Typical Source of Contaminant
Chloride (ppm)	April 2011; October 2011	*Range*	81–86	500	NA	Runoff/leaching from natural deposits
		Average	84			
Color (units)	April 2011; October 2011	*Range*	3–5	15	NA	Naturally-occurring organic materials
		Average	4			
Specific Conductance (µS/cm)	April 2011; October 2011	*Range*	950–980	1,600	NA	Substances that form ions in water; seawater influence
		Average	960			
Sulfate (ppm)	April 2011; October 2011	*Range*	220	500	NA	Runoff/leaching from natural deposits; industrial waste
		Average	220			
Total Dissolved Solids (ppm)	April 2011; October 2011	*Range*	600–620	1,000	NA	Runoff/leaching from natural deposits
		Average	610			

TABLE 7 - DETECTION OF UNREGULATED CONTAMINANTS

Chemical or Constituent (and reporting units)	Sample Date	Range Average	Levels of Detection	Notification/ [PHG] Level	Health Effects Language
Boron (ppb) [4]	April 2011	*Range*	120	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	120		
Chromium VI [4 11] (ppb)	April 2011	*Range*	0.05	[0.02]	Industrial waste discharge; could be naturally present as well
		Average	0.05		
Chlorate (ppb) *(Domestic Tank Effluent)*	August 2011	*Range*	230	800	By-product of drinking water chlorination; industrial processes
		Average	230		

(4) Samples were taken from the Colorado River at Lake Havasu, Whitsett Intake Pumping Plant.

(9) Compliance was based on a running annual average.

(10) Metropolitan's reporting level is 0.5 ppb for each of the TTHMs (bromodichloromethane, bromoform, chloroform, and dibromochloromethane) which is lower than the State DLR of 1 ppb. See Attachment 1 for explanation on TTHM levels detected. The State DLRs for HAA5 are 1.0 ppb for each of the following: dichloroacetic acid, trichloroacetic acid, monobromoacetic acid, dibromoacetic acid; and 2.0 ppb for monochloroacetic acid.

(11) Metropolitan's chromium VI reporting level is 0.03 ppb, which is lower than the State DLR of 1 ppb.

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 USEPA's Safe Drinking Water Hotline (1-800-426-4791) or visiting the website http://www.epa.gov/OGWDW/.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791) or visit the website http://www.epa.gov/OGWDW/crypto.html.

Additional Special Language for Lead

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. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

Summary Information for Violation of a MCL, MRDL, AL, TT or Monitoring and Reporting Requirement

VIOLATION OF A MCL, MRDL, AL, TT, OR MONITORING AND REPORTING REQUIREMENT				
Violation	**Explanation**	**Duration**	**Actions Taken to Correct the Violation**	**Health Effects Language**

For Systems Providing Surface Water as a Source of Drinking Water

TABLE 8 - SAMPLING RESULTS SHOWING TREATMENT OF SURFACE WATER SOURCES

Treatment Technique [12] (Type of approved filtration technology used)	Microfiltration
Turbidity Performance Standards [13] (that must be met through the water treatment process)	Turbidity of the filtered water must: 1 - Be less than or equal to 0.2 NTU in 95% of measurements in a month. 2 - Not exceed 0.5 NTU for more than eight consecutive hours. 3 - Not exceed 5.0 NTU at any time.
Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1.	100
Highest single turbidity measurement during the year	0.10 NTU
The number of violations of any surface water treatment requirements	0

(12) A required process intended to reduce the level of a contaminant in drinking water

(13) 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.

** Any violation of a TT is marked with an asterisk. Additional information regarding the violation is provided below.*

Summary Information for Violation of a Surface Water TT

VIOLATION OF A SURFACE WATER TT				
TT Violation	**Explanation**	**Duration**	**Actions Taken to Correct the Violation**	**Health Effects Language**

Summary Information for Operating Under a Variance or Exemption

ATTACHMENT 1

Summary Information for Contaminant Levels Detected

The Department requires that all regulated public water systems be tested for chemical and microbial constituents to ensure compliance with drinking water standards. The Department also requires that drinking water agencies issue a Consumer Confidence Report (CCR) to each of its customers regardless of the regulatory status of the system. The CCR guidance states that "consumers have the right to know what is in their drinking water and where that water comes from".

Julian Hinds Pumping Plant, unlike larger public water systems, is not subject to many regulatory requirements because it is considered a "State Small System" (i.e., less than 15 service connections and/or serves less than 25 people; it is not considered a community water system). However, routine monitoring at Julian Hinds Pumping Plant facility is conducted to ensure that safe water is also provided by this system. The following paragraphs describe information about certain contaminants in the Hinds Pumping Plant drinking water system. We are providing this information in accordance with the provisions of the CCR and for your convenience.

Trihalomethanes

The running annual averages for total trihalomethanes (TTHMs) collected from the Julian Hinds Pumping Plant water system in 2011 were 44 ppb, 37 ppb, 30 ppb, and 25 ppb for the first, second, third, and fourth quarters, respectively. Compliance with the Disinfectants and Disinfection By-products Rule is based on the running annual averages. The water system did not exceed any drinking water standard nor violate any treatment or monitoring and reporting requirement.

State-of-the-art granular activated carbon (GAC) treatment has been operational at the plant since July 2005, which reduced THM levels to mostly below 80 ppb except when the GAC unit was taken out of service on 3/15/11 for preventive maintenance, resulting in an increase in the TTHMs to a maximum level of 91 ppb on 3/29/11. The GAC unit was returned to service after media replacement on 4/7/11 and the TTHM level was reported at 4.4 ppb on 4/19/11.

Trihalomethanes are by-products of drinking water chlorination and some people who use water containing THMs in excess of the MCL over many years may experience liver, kidney, or central nervous system problems, and may have an increased risk of getting cancer.

ATTACHMENT 2

Consumer Confidence Report
Certification Form

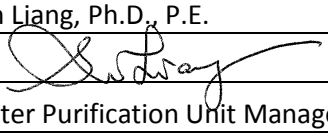
(to be submitted with a copy of the CCR)

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

Water System Number: 33-01317

The water system named above hereby certifies that its Consumer Confidence Report was distributed on May 29, 2012, 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 Department of Public Health.

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

Signature: 

Title: Water Purification Unit Manager

Phone Number: (909) 392-5273 Date: May 29, 2012

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

☒ CCR was distributed by mail or other direct delivery methods. Specify other direct delivery methods used: E-mail

☒ "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)

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

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