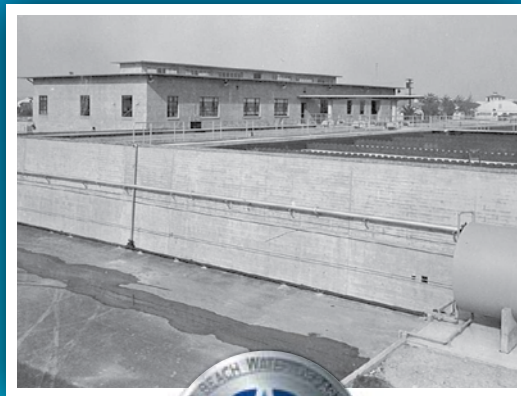


Annual
WaterQualityReport

Water testing performed in 2010



Presented By

Long Beach Water Department

Leader in Water Conservation and Environmental Stewardship

PWS ID#: 1910065

Message from the General Manager:

For the past 100 years, the Long Beach Water Department has provided Long Beach residents with a reliable high-quality drinking water supply. In 2011, the Water Department is celebrating its first 100 years of service to the Long Beach community.

On June 27, 1911, the citizens of Long Beach voted their support for the formation of a municipal water agency dedicated to providing drinking water to Long Beach residents. Three days later, the Long Beach City Council passed an emergency ordinance thereby creating the Long Beach Water Department.

Twenty years later, in 1931, the Water Department was put under the governance of the Long Beach Board of Water Commissioners. This five-member, independent commission is charged with overseeing all water works necessary to the acquisition, treatment, sale, and distribution of water served to the City, as well as the collection and disposal of the City's sanitary sewage. That same year, Long Beach became a founding member agency of the regional water wholesaler, the Metropolitan Water District of Southern California (MWD).

Today, the Water Department provides water and sewer services to nearly half a million customers through more than 90,000 service connections citywide. Long Beach water and sewer customers enjoy some of the lowest rates in California. Rates are kept low despite an aggressive infrastructure rehabilitation program that in recent years has significantly reduced the annual number of water main breaks and sanitary sewer overflows.

Throughout 2011, the Water Department will promote its "100 by 100" initiative, a water conservation program with the goal of reducing average daily per capita water consumption in Long Beach to 100 gallons or less by the end of the year, coinciding with the conclusion of the Water Department's Centennial Anniversary. If the city is able to achieve this mark, the Long Beach water supply would be deemed 100 percent reliable (through a recent vote of the MWD Board of Directors), which would be a huge economic asset for city residents and businesses.

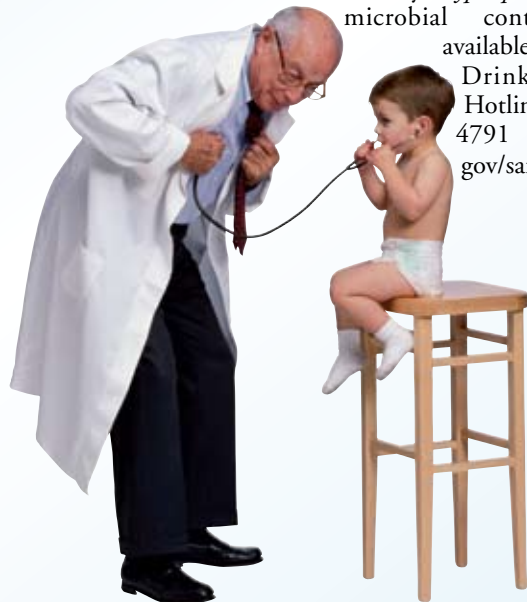
We believe that the Long Beach Water Department has some of the most dedicated employees in the nation, and it's this dedication that ensures that our customers are provided with the most reliable, affordable, and the highest quality water and sewer services available anywhere. We look forward to continuing our service to the Long Beach community for many years to come.

Kevin L. Wattier, General Manager, Long Beach Water Department

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other

microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or <http://water.gov/safewater/hotline/>.



Cryptosporidium

Cryptosporidium is a microscopic organism that, when ingested, can result in diarrhea, fever, and other gastrointestinal symptoms. The risk of the microorganisms being in LBWD's water supply is extremely low. Groundwater, which makes up 58 percent of LBWD's potable water supply, is free of these organisms because of natural filtration through the soil. With respect to imported surface water supplies, MWD did not detect *Cryptosporidium* in any of the treated water samples collected in 2010. Additionally, MWD has monitored for *Cryptosporidium* since 1994 and has initiated an extensive effort to prevent *Cryptosporidium* and other microorganisms from reaching its treated water.

There are other pathways for exposure to *Cryptosporidium*, including poor hygiene and eating contaminated foods. USEPA and Centers for Disease Control guidelines on the appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Questions?

If you have any questions about your water quality or this report, please call the LBWD at (562) 570-2491 (TDD: 570-2499), Monday through Friday between 8 a.m. and 4:30 p.m. This information is available in an alternative format by request to Ms. Melissa Keyes at (562) 570-2309, or write to:
Long Beach Water Department
1800 E. Wardlow Road, Long Beach, CA 90807

Long Beach Water Department

Since its formation in 1911, the Long Beach Water Department (LBWD) has served the same goal: to provide you with a safe and dependable water supply, 24 hours per day, 7 days per week, 365 days per year. We are pleased to report that we have met this goal for 100 years and continue to be proactive in protecting and providing a reliable supply of quality water to our customers at a reasonable price. Currently, LBWD serves a total population of 462,257 through 902 miles of pipelines. This water is tested on a routine basis for microbiological as well as chemical quality.

During 2010, the staff of skilled water scientists, engineers, and technicians performed over 100,000 tests to analyze for more than 100 drinking water contaminants. This is to ensure that the water quality meets or better all federal and state standards. We are pleased to inform you that no constituent was detected over the enforceable limit that the California Department of Public Health (CDPH) has set.

Public Meetings

The Long Beach Water Department Board of Water Commissioners meets the first and third Thursday of each month at 9:00 a.m. at our Administration Building. The public is encouraged to participate in these meetings. For further information, please call (562) 570-2300.

Board of Water Commissioners:

Mr. John D.S. Allen, Mr. Paul C. Blanco, Mr. Frank Clarke,
Dr. Suzanne Dallman, Mr. William B. Townsend

Water Conservation in Long Beach

For years, the City of Long Beach relied on imported water supplies to meet about two-thirds of its drinking water needs. Long Beach purchases imported water from two main sources: the Colorado River and the Sacramento-San Joaquin Bay Delta. Over the last decade, these water supplies have become less reliable due to environmental regulations, law suits, and periodic droughts.

Along with providing high-quality water, one of the Long Beach Water Department's highest priorities is water reliability. Through a multi-year, strategic water conservation initiative, our City's use of imported water has dropped to roughly 40 percent of its total drinking water needs, down from about two-thirds. This additional reliability represents a huge value to the City, its residents, and economy and was made possible, in part, by the thousands of Long Beach residents that have conserved tremendous amounts of (imported) drinking water over the last few years.

Although the most recent California drought may be over for the time being, the other challenges to reliability remain – and we know there will be other droughts. One of the keys to maintaining our City's water reliability is for each of us to use water wisely – to use what we need but conserve where we can.

Here are some of the ways in which you can conserve:

1. Replace your grass lawn with a California-friendly landscape; you may even qualify for our Lawn to Garden rebate of \$2.50 per square foot of lawn removed: www.lblawntogarden.com.
2. Water your lawn no more than three days per week (Monday, Thursday, and Saturday) and only before 9:00 a.m. or after 4:00 p.m., for a maximum of 10 minutes per station.
3. Go to our website to find other engaging ways to conserve water, such as attending our free landscape classes: www.lbwater.org.

Please remember: Water conservation reduces your water and sewer bills, benefits the environment, and helps your City successfully manage its dependence on increasingly unreliable supplies of imported drinking water.

Thank you for conserving water.

Source Water Assessment

As required under the 1996 Safe Drinking Water Act amendments, a source water assessment must be completed for all active drinking water sources. The goal of the source water assessment is to inventory all potential activities that may degrade the source water quality. MWD completed its source water assessment of its Colorado River and State Water Project supplies in December 2002. It was found that Colorado River supplies are most vulnerable to recreation, urban/storm water runoff, increasing urbanization in the watershed, and wastewater. State Water Project supplies are considered to be most vulnerable to urban/storm water runoff, wildlife, agriculture, recreation, and wastewater. A copy of the assessment can be obtained by contacting MWD by phone at (213) 217-6850.

LBWD completed the required source water assessments for its active wells in April 2003. New wells that are constructed after this date must also undergo a similar assessment. To summarize, the assessment concluded that all active wells are considered most vulnerable to the community sewer collection system. Depending on location, some wells are considered vulnerable to gas stations, dry cleaners, confirmed leaking underground fuel tanks, airport activities, and historic landfills. However, although the wells are considered vulnerable to the aforementioned activities, LBWD performs water quality monitoring for each active well annually and has not detected any constituents that suggest contamination. Please contact the LBWD by phone at (562) 570-2300 for more details if you would like to review this document.

Interesting Facts

Trihalomethanes and Haloacetic Acids

Disinfection of drinking water was one of the major public health advances in the 20th century. It was a major factor in reducing waterborne diseases caused by pathogenic bacteria and viruses. Long Beach Water Department utilizes chloramine in its disinfection process. We carefully monitor the amount of disinfectant, adding the lowest quantity of chloramine necessary to protect the safety of your water throughout the distribution system, without compromising taste. However, chloramine can react with naturally occurring materials in the water to form disinfection byproducts (DBPs), which may pose as a health risks. DBPs, including total trihalomethanes (TTHMs) and haloacetic acids (HAA5), are suspected to be carcinogenic in humans.

Some people consuming water containing TTHMs 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. To lower the risk from ingesting water containing DBPs, the Stage 1 Disinfectants/Disinfection Byproducts Rule, regulated by the USEPA, in 2002, lowered the acceptable TTHM level from 100 ppb to 80 ppb and added to the list HAAs at an acceptable MCL level of 60 ppb. To better protect health, the USEPA, in 2006, regulated utilities to meet the Stage 2 D/DBP Rule by 2012. This new rule builds on the existing Stage 1 D/DBP regulations by requiring water systems to meet disinfection byproduct maximum contaminant levels (MCLs) at each disinfection monitoring site in the distribution system.

The MCLs for TTHM and HAA5 have not changed from the Stage 1 D/DBP Rule. However, the method of calculating compliance has changed. Instead of using the system-wide running annual average (RAA) required under the Stage 1 D/DBP Rule, Stage 2 D/DBP Rule compliance determination is based on locational running annual averages (LRAAs) of TTHM and HAA5 concentrations. Compliance must be met at each monitoring location. The LRAA is obtained by averaging the individual sampling sites over the period of a year. LBWD began Stage 2 monitoring in 2009. Both TTHM and HAA5 values from 2010 monitoring were in compliance with the Stage 2 Rule requirements. The TTHMs in the distribution system ranged from 35–59 ppb, and the highest LRAA was 50 ppb, or well below the MCL of 80 ppb. The distribution system HAA5 concentrations ranged from 10–19 ppb, and the highest LRAA was 15 ppb, also well below the MCL of 60 ppb.

Bromate

Systems using ozone to treat drinking water are required to monitor for bromate at the treatment plant's effluent. Bromate, also a disinfection byproduct, is formed when ozone reacts with naturally occurring bromide found in the source water. LBWD does not ozonate our waters; however, the purchased treated MWD surface water may have detectable levels of bromate.

Exposure to high concentrations of bromate over a long period of time caused cancer in rats and kidney effects in laboratory animals, and it is suspected of potential reproductive effects in humans. The USEPA developed an MCL of 10 ppb that it considers protective of non-cancer health effects from long-term exposure in humans. MWD's drinking water bromate levels (the running annual average) for 2010 were reported as high as 7.2 ppb. During 2010, MWD supplied purchased water to LBWD that had detectable levels of bromate. This resulted in

a maximum detected bromate value of 2.6 ppb in the MWD Zone, in 2010. LBWD blends the purchased MWD surface water with treated groundwater before distribution into the Blend Zone, and bromate was not detected in the 2010 monitoring of the Blend Zone distribution water.

Boron

Boron is naturally present in the environment. Exposure to high concentrations of boron in excess of the notification levels by women who are pregnant may increase their risk of having babies with developmental effects, based on studies in laboratory animals. The levels of boron found in LBWD's water was 150 ppb, well below the state's notification level of 1,000 ppb.

Perchlorate

Perchlorate is an inorganic chemical used in the manufacturing of rocket fuels and explosives. At high concentrations in drinking water, it can interfere with the thyroid gland's ability to produce hormones necessary for normal growth and development. Perchlorate was first detected in drinking water wells in northern California in 1997 and was later detected in many water wells throughout the state as well as in the Colorado River. The source of contamination of the Colorado River has been determined to be an industrial site in Nevada. Colorado River water is an important source of drinking water for southern California, and much of the water that Long Beach purchases from MWD comes from this source.

MWD initiated voluntary monitoring for perchlorate in 1997. Levels found in the Colorado River supply have ranged between 4 and 9 ppb. Since 1997, the Nevada EPA has taken significant steps to mitigate the leaching of perchlorate into the river, and as a result, there were no detectable perchlorate levels in MWD's water in 2010, despite a new lower reporting level of 2 ppb. On October 18, 2007, CDPH adopted an MCL for perchlorate at 6 ppb. No perchlorate has been detected in MWD's State Project water or in LBWD's wells.

Fluoridation

Fluoride is one of the most plentiful elements on earth. It occurs naturally in water supplies throughout California and elsewhere. When fluoride is present in drinking water at optimal levels, it has been shown to promote oral health by preventing tooth decay. Water systems are considered naturally fluoridated when the natural level of fluoride is greater than 0.7 ppm. Water fluoridation refers to the practice of adjusting the level of fluoride to 0.7 to 1.2 ppm. Blending fluoridated water from different sources does not increase total fluoride levels in drinking water. Currently, about 67 percent of the U.S. population on public water supplies has access to fluoridated water.

The CDPH and the U.S. Centers for Disease Control and Prevention strongly agree that fluoridated water helps promote dental hygiene and helps reduce the risk of caries (cavities) in children and adults. For these reasons and because it is a cost-effective public health measure, the Long Beach City Council, in 1971, mandated that LBWD add fluoride at a dose to achieve a level of 1.0 mg/L in the drinking water, the level recommended by the American Dental Association. Please refer to www.cdph.ca.gov/certlic/drinkingwater/Pages/Fluoridation.aspx if you have questions regarding fluoride and fluoridation.

Lead and Drinking Water

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. Long Beach Water Department 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>.

Source of Drinking Water

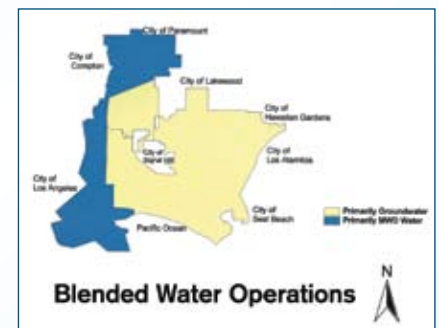
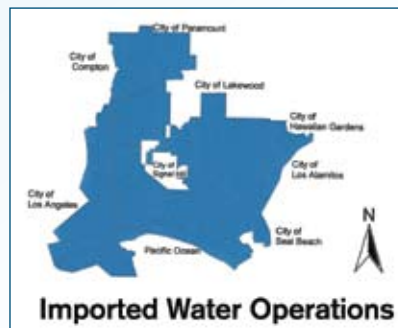
Approximately 58 percent of the potable water serving the City is supplied by groundwater, and the remaining 42 percent is through purchased imported surface water. The sources of drinking water (for both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As the water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

LBWD purchases treated surface water from the Metropolitan Water District of Southern California (MWD) and treats groundwater pumped from 30 wells around the Long Beach area at our Groundwater Treatment Plant. Both the purchased surface water and the treated groundwater better the federal and state water quality standards. The federal regulations are set by the U.S. Environmental Protection Agency (USEPA), and the state standards are set by the California Department of Public Health (CDPH).

Two major aqueducts supply the surface waters feeding MWD's five regional treatment plants. Colorado River water, which has a higher mineral content of the two supplies, is brought into Southern California through the 242-mile-long Colorado River Aqueduct. This aqueduct, constructed and operated by MWD, originates at Lake Havasu and terminates in Southern California at Lake Mathews. State Project water, which contains a lower mineral content but higher organic matter content, is conveyed through the California Aqueduct. This aqueduct, constructed and operated by the California Department of Water Resources, transfers water originating from Lake Oroville in Northern California through 441 miles before terminating in Southern California.

The groundwater treated at the LBWD Groundwater Treatment Plant originates from the San Gabriel Watershed. The watershed is fed by rain and snow melt, and it flows through washes and creeks into the San Gabriel River and Whittier Narrows before percolating into the underground aquifer of the Central Basin area of Los Angeles. The City of Long Beach is a part of the Central Basin service area.

The Long Beach service area may be divided up into two main hydraulic regions: the MWD zone, which primarily receives purchased treated surface water, and the blended zone, which may receive a combination of treated groundwater and purchased treated surface water. LBWD sometimes makes changes in blends of water in our system, and the residents may notice the associated changes to the water quality. Regardless of the area in Long Beach that you work or live in, LBWD's goal is to provide water meeting or bettering all water quality regulations to our consumers at the most reasonable cost. The following graphs show the areas that may be affected by the change in the water blend.



Contaminants Prior to Treatment

Natural contaminants present in source water prior to treatment may include:

Microbial Contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife;

Inorganic Contaminants, such as salts and metals, that can be naturally occurring or can result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;

Pesticides and Herbicides, that may come from a variety of sources, such as agriculture, urban storm water runoff, and residential uses;

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and which can also come from gas stations, urban storm water runoff, agricultural applications, and septic systems;

Radioactive Contaminants, that can be naturally occurring or can be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the CDPH prescribes regulations which limit the amount of specific contaminants in water provided by public water systems. The Long Beach Water Department takes these regulations very seriously, and in all instances, we treat our water to comply or be better than CDPH's regulations.

More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline at (800) 426-4791.



Sampling Results

During the past year, we have taken hundreds of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants. The tables included in this report list all the drinking water contaminants that we detected during the 2010 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table are from the testing performed from January 1 to December 31, 2010. The State requires us to monitor for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	Blended Zone		MWD Zone		VIOLATION	TYPICAL SOURCE
				AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH		
Aluminum (ppb)	2010	1,000	600	86	60–119	97	50–149	No	Erosion of natural deposits; residue from some surface water treatment processes
Arsenic ¹ (ppb)	2010	10	0.004	ND	NA	2.9	NA	No	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Bromate (ppb)	2010	10	0.1	MWD Jensen Plant Effluent: 7.2 ppb HRAA; Range: ND–11 ppb LBWD_MWD Zone HRAA = <2 ppb; Range: ND–2.6 ppb				No	By-product of drinking water disinfection
Chloramines (ppm)	2010	[4.0 (as Cl ₂)]	[4 (as Cl ₂)]	City-wide: 2.2 ppm HRAA; Range: 0.62–3.1 ppm				No	Drinking water disinfectant added for treatment
Fluoride (ppm)	2010	2.0	1	0.85	0.77–0.92	0.81	0.75–0.87	No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Haloacetic Acids (ppb)	2010	60	NA	City-wide: 15 ppb highest LRAA; Range: 10–19 ppb				No	By-product of drinking water disinfection
Nitrate [as nitrate] (ppm)	2010	45	45	0.15	ND–0.53	0.53	0.25–0.61	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
TTHMs [Total Trihalomethanes] (ppb)	2010	80	NA	City-wide: 50 ppb highest LRAA; Range: 35–59 ppb				No	By-product of drinking water disinfection
Total Coliform Bacteria [Total Coliform Rule] (% positive samples)	2010	More than 5.0% of monthly samples are positive	(0)	City-wide: 1.29% highest monthly; Range: 0–1.29%				No	Naturally present in the environment
Turbidity ² (NTU)	2010	TT	NA	0.13	0.06–0.13	0.14	0.05–0.14	No	Soil runoff
Turbidity (Lowest monthly percent of samples meeting limit)	2010	TT=95% of samples<0.3	NA	100	NA	100	NA	No	Soil runoff

Radiologicals

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Gross Alpha Particle Activity ³ (pCi/L)	2010	15	(0)	ND	NA	3.5	NA	No	Erosion of natural deposits
Uranium ⁴ (pCi/L)	2010	20	0.43	ND	NA	2.6	NA	No	Erosion of natural deposits

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	PHG (MCLG)	AMOUNT DETECTED (90TH% TILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppb)	2010	1,300	300	124	0/159	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	2010	15	0.2	ND	0/159	No	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits

SECONDARY SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	PHG (MCLG)	Blended Zone		MWD Zone		VIOLATION	TYPICAL SOURCE
				AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH		
Chloride (ppm)	2010	500	NS	48	37–81	88	77–97	No	Runoff/leaching from natural deposits; seawater influence
Color (Units)	2010	15	NS	1	ND–2	1	ND–2	No	Naturally occurring organic materials
Odor–Threshold ¹ (TON)	2010	3	NS	1	NA	1	NA	No	Naturally occurring organic materials
Specific Conductance (µS/cm)	2010	1,600	NS	526	434–774	844	629–1,037	No	Substances that form ions when in water; seawater influence
Sulfate (ppm)	2010	500	NS	60	26–148	184	146–244	No	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	2010	1,000	NS	309	240–456	533	444–656	No	Runoff/leaching from natural deposits

UNREGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	NL	Blended Zone		MWD Zone		TYPICAL SOURCE
			AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	
Boron ¹ (ppb)	2010	1000	120	NA	150	NA	Naturally present in the environment
Chlorate ¹ (ppb)	2010	800	NA	NA	85	NA	By-product of drinking water chlorination; industrial processes
N-Nitrosodimethylamine (NDMA) (ppt)	2010	10 (PHG=3)	2.8	ND–5	6.7	4–10	Formed through natural, industrial, and disinfection processes

OTHER SUBSTANCES OF INTEREST

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	Blended Zone		MWD Zone	
		AMOUNT DETECTED	RANGE (LOW-HIGH)	AMOUNT DETECTED	RANGE (LOW-HIGH)
Alkalinity (ppm)	2010	120	98–132	101	86–114
Calcium (ppm)	2010	22	ND–31	58	45–73
Hardness (ppm)	2010	102	71–187	223	177–283
Hardness (gpg)	2010	6.0	4.2–11	13	10–17
Magnesium (ppm)	2010	6.0	2.1–16	19	15–24
pH (Units)	2010	8.02	7.82–8.22	7.85	7.70–8.14
Potassium (ppm)	2010	2.7	1.6–4.6	4.6	3.9–5.5
Silica (ppm)	2010	16	10–21	8.5	6.2–12
Sodium (ppm)	2010	73	68–86	87	79–97

¹ Amount detected is a single value, unless otherwise indicated.

² Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

³ Source water from MWD Weymouth and Diemer plant effluents detected Gross Alpha in the range of ND - 7.6 and 3.8 - 9.3 pCi/L, respectively. (sampled 2008)

⁴ MWD plant effluent detected range: 1.6 - 3.7 pCi/L (sampled 2008)

Definitions

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

µS/cm (microsiemens per centimeter): A unit expressing the amount of electrical conductivity of a solution.

gpg (grains per gallon): Grains of compound per gallon of water.

HRAA: Highest running annual average.

LRAA: Locational running annual average.

MCL (Maximum Contaminant Level): 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 (SMCLs) are set to protect the odor, taste, and appearance of drinking water.

MCLG (Maximum Contaminant Level Goal): 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. EPA.

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

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

NA: Not applicable.

ND (Not detected): Indicates that the substance was not

found by laboratory analysis.

NL (Notification Level): NLs are health-based advisory levels established by CDPH for chemicals in drinking water that lack MCLs. When chemicals are found at concentrations greater than their notification levels, certain requirements and recommendations apply.

NS: No standard.

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

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

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

PHG (Public Health Goal): 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 EPA.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

ppt (parts per trillion): One part substance per trillion parts water (or nanograms per liter).

TON (Threshold Odor Number): A measure of odor in water.

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