



Huntington Beach Utilities Division

2015 Drinking Water Quality Report



Your 2015 Water Quality Report

Since 1990, California public water utilities have been providing an annual Drinking Water Quality Report to their customers. **This year's report covers all drinking water quality testing performed in calendar year 2014.**

The City of Huntington Beach Public Works Utilities Division vigilantly safeguards your water supply and, as in years past, the water delivered to your home or business meets all drinking water quality standards required by federal and state regulatory agencies. The U.S. Environmental Protection Agency (USEPA) and the State Water Resources Control Board, Division of Drinking Water (DDW) are the agencies responsible for establishing and enforcing drinking water quality standards.

In some cases, the City goes beyond what is required by testing for unregulated chemicals that may have known health risks, but do not have drinking water standards. In addition, the Orange

County Water District (OCWD), which manages the groundwater basin, and the Metropolitan Water District of Southern California (MWDSC), which supplies imported treated surface water to the City, test for unregulated chemicals in our water supplies. Monitoring for unregulated chemicals helps USEPA and DDW determine where certain chemicals occur and whether new standards need to be established for those chemicals in order to protect public health.

Your drinking water is constantly monitored from source to tap for regulated and unregulated constituents through drinking water quality testing programs carried out by OCWD for groundwater, MWDSC for treated surface water and the Huntington Beach Public Works Utilities Division for groundwater wells, reservoirs, and distribution system.

The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, may be more than one year old.



The Quality of Your Water is Our Primary Concern

Sources of Supply

Orange County's water supplies are a blend of ground-water provided by OCWD and water imported from Northern California and the Colorado River by the Municipal Water District of Orange County (MWDOC) via MWDSC. Groundwater comes from a natural underground aquifer that is replenished with water from the Santa Ana River, local rainfall, OCWD's Groundwater Replenishment System, and imported water. The groundwater basin is 350 square miles and lies beneath north and central Orange County from Irvine to the Los Angeles County border and from Yorba Linda to the Pacific Ocean. More than 20 cities and retail water districts draw from the basin to provide water to homes and businesses.

In 2014, the City of Huntington Beach water consisted of 70% local groundwater and 30% imported treated surface water. The City operates 10 groundwater wells and 3 imported surface water connections. Huntington Beach also has emergency water connections with the neighboring cities of Fountain Valley, Seal Beach, and Westminster.

Orange County's Water Future

For years, Orange County has enjoyed an abundant, seemingly endless supply of high-quality water. However, as water demand continues to increase statewide, we must be even more conscientious about our water supply and maximize the efficient use of this precious natural resource.

OCWD and MWDOC work cooperatively to evaluate new and innovative water management and supply development programs, including water reuse and recycling, wetlands expansion, recharge facility construction, ocean and brackish water desalination, surface and underground storage, and water use efficiency programs. These efforts are helping to enhance long-term countywide water reliability and water quality.

A healthy water future for Orange County rests on finding and developing new water supplies, as well as protecting and improving the quality of the water that we have today. Your local and regional water agencies are committed to making the necessary investments today in new water supply and management projects to ensure an abundant and high-quality water supply for our future.

Basic Information About Drinking Water Contaminants

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 land, or through the layers of the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animal and human activity.

Contaminants that may be present in source water include:

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

In order to ensure that tap water is safe to drink, USEPA and the DDW prescribe regulations that limit the amount of certain contaminants in water provided by public



water systems. DDW regulations also establish limits for contaminants in bottled water that must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline at (800) 426-4791.

Fluoridation

Fluoride occurs naturally in Huntington Beach's water supplies. In addition to the natural levels, the City adds a small amount of fluoride to the water to promote dental benefits per a majority vote of the community during the early 1970s.

Fluoridation's primary benefit is to help prevent tooth decay in children. Because of the dramatic health benefits of fluoridating drinking water, a 1997 Assembly Bill of the State of California mandated all large system water suppliers to begin fluoridating their systems.

The City's water is fluoridated to the DDW optimal levels within a range of 0.7 to 1.3 parts per million (ppm).

For additional information about the fluoridation of drinking water, please visit:

U.S. Centers for Disease Control and Prevention:

www.cdc.gov/fluoridation/

State Water Resources Control Board, Division of Drinking Water:

www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Fluoridation.shtml

Conservation Tips for Inside Your Home

Collect water used to wash fruits and vegetables

Use it to water your houseplants

Wash only full loads of laundry and dishes:

Saves up to 50 gallons per week

Plug the sink instead of running water to rinse your razor

Saves up to 300 gallons a month

Install low-flow shower heads

Saves 2.5 gallons per shower

Buy water-saving devices like high-efficiency toilets and clothes washers. You'll save gallons of water per day, and many of these items are eligible for rebates. To learn more, visit: www.ocwatersmart.com.

Talk to your family and friends about saving water.

If everyone does a little, we all benefit a lot.



Questions about your water? Contact us for answers.

For information or concerns about this report, or your water quality in general, please contact Derek Smith or Jon Erickson at (714) 536-5921, or send an e-mail to dsmith@surfcity-hb.org. You may also address your concerns at the regularly scheduled City Council Meetings held at City Hall at 2000 Main Street in Huntington Beach on the first and third Mondays of each month at 6:00 pm in the City Hall Council Chambers, or at the monthly Public Works Commission meeting on the third Wednesday of every month at 5:00 pm (refer to the City website — www.huntingtonbeachca.gov/ — for location). Please feel free to participate in these meetings. The City firmly believes in the public's right to know as much as possible about the quality of their drinking water and the health of their aquifer. Your input and concerns are very important to us.

For more information about the health effects of the listed contaminants in the following tables, call the USEPA hotline at (800) 426-4791.

Important Information the EPA Would Like You to Know

Issues in Water Quality that Could Affect Your Health

Immuno-Compromised People

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

Cryptosporidium

Cryptosporidium is a microscopic organism that, when ingested, can cause diarrhea, fever, and other gastrointestinal symptoms. The organism comes from animal and/or human wastes and may be in surface water. MWDSC tested their source water and treated surface water for *Cryptosporidium* in 2014 but did not detect it. If it is ever detected, *Cryptosporidium* is eliminated by an effective treatment combination including sedimentation, filtration and disinfection.

The USEPA and the federal Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from USEPA's Safe Drinking Water Hotline at (800) 426-4791

What are Water Quality Standards?

Drinking water standards established by USEPA and DDW set limits for substances that may affect consumer health or aesthetic qualities of drinking water. The chart in this report shows the following types of water quality standards:

- **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.
- **Maximum Residual Disinfectant Level (MRDL):** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- **Secondary MCLs:** Set to protect the odor, taste, and appearance of drinking water.
- **Primary Drinking Water Standard:** MCLs for contaminants that affect health along with their monitoring and reporting requirements and water treatment requirements.
- **Regulatory Action Level (AL):** The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements that a water system must follow.

How are Contaminants Measured?

Water is sampled and tested throughout the year. Contaminants are measured in:

- parts per million (ppm) or milligrams per liter (mg/L)
- parts per billion (ppb) or micrograms per liter (µg/L)
- parts per trillion (ppt) or nanograms per liter (ng/L)

What is a Water Quality Goal?

In addition to mandatory water quality standards, USEPA and DDW have set voluntary water quality goals for some contaminants. Water quality goals are often set at such low levels that they are not achievable in practice and are not directly measurable. Nevertheless, these goals provide useful guideposts and direction for water management practices. The chart in this report includes three types of water quality goals:

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

between 7 a.m. to 1 p.m. Pacific Time, or visit them on the web at www.epa.gov/drink.

Chloramines

Huntington Beach imports water from MWDSC which produces water that is treated with chloramines, a combination of chlorine and ammonia, as its drinking water disinfectant. Chloramines are effective killers of

bacteria and other microorganisms that may cause disease. Chloramines form fewer disinfection by-products and have no odor when used properly. People who use kidney dialysis machines may want to take special precautions and consult their physician for the appropriate type of water treatment. Customers who maintain fish ponds, tanks or aquaria should also make necessary adjustments in water quality treatment, as

2014 City of Huntington Beach Drinking Water Quality Local Groundwater and Metropolitan Water District Treated Surface Water

Chemical	MCL	PHG (MCLG)	Avg. Groundwater Amount	Avg. Imported MWD Amount	Range of Detections	MCL Violation?	Typical Source of Contaminant
Radiologicals – Tested in 2009 and 2014							
Alpha Radiation (pCi/L)	15	(0)	ND	ND	ND – 4.0	No	Erosion of Natural Deposits
Beta Radiation (pCi/L)	50	(0)	NR	5	4.0 – 6.0	No	Decay of Man-made or Natural Deposits
Uranium (pCi/L)	20	0.43	3.2	3.0	1.4 – 7.6	No	Erosion of Natural Deposits
Inorganic Chemicals – Tested in 2014							
Aluminum (ppm)	1	0.6	ND	0.17	ND – 0.31	No	Treatment Process Residue, Natural Deposits
Arsenic (ppb)	10	0.004	<2.0	ND	ND – 2.4	No	Erosion of Natural Deposits
Barium (ppm)	1	2	ND	0.11	ND – 0.11	No	Refinery Discharge, Erosion of Natural Deposits
Fluoride (ppm) naturally-occurring	2	1	0.38	NR	0.26 – 0.46	No	Erosion of Natural Deposits
Fluoride (ppm) treatment-related	Control Range 0.7 – 1.3 ppm Optimal Level 0.8 ppm		See Footnote (1)	0.80	0.7 – 1	No	Water Additive for Dental Health
Nitrate as NO ₃ (ppm)	45	45	1.4	ND	ND – 4.7	No	Agriculture Runoff and Sewage
Nitrate and Nitrite as N (ppm)	10	10	<0.4	ND	ND – 1.1	No	Agriculture Runoff and Sewage
Secondary Standards* – Tested in 2014							
Aluminum (ppb)	200*	600	ND	170	ND – 310	No	Treatment Process Residue, Natural Deposits
Chloride (ppm)	500*	n/a	56	90	14 – 120	No	Runoff or Leaching from Natural Deposits
Color (color units)	15*	n/a	1.1	1.0	ND – 7.0	No	Runoff or Leaching from Natural Deposits
Odor (odor units)	3*	n/a	<1.0	1.0	ND – 8.0	No	Naturally-occurring Organic Materials
Specific Conductance (µmho/cm)	1,600*	n/a	571	980	370 – 1,000	No	Substances that form ions in Water
Sulfate (ppm)	500*	n/a	65	230	29 – 240	No	Runoff or Leaching from Natural Deposits
Total Dissolved Solids (ppm)	1,000*	n/a	368	630	210 – 650	No	Runoff or Leaching from Natural Deposits
Turbidity (NTU)	5*	n/a	0.10	ND	ND – 1.0	No	Runoff or Leaching from Natural Deposits
Unregulated Chemicals – Tested in 2014							
Alkalinity, total (ppm as CaCO ₃)	Not Regulated	n/a	161	120	120 – 210	n/a	Runoff or Leaching from Natural Deposits
Boron (ppm)	NL = 1	n/a	<0.1	0.1	ND – 0.13	n/a	Runoff or Leaching from Natural Deposits
Calcium (ppm)	Not Regulated	n/a	64	72	23 – 143	n/a	Runoff or Leaching from Natural Deposits
Hardness, total (ppm)	Not Regulated	n/a	205	290	64 – 450	n/a	Runoff or Leaching from Natural Deposits
Hardness, total (grains/gal)	Not Regulated	n/a	12	17	3.8 – 26	n/a	Runoff or Leaching from Natural Deposits
Magnesium (ppm)	Not Regulated	n/a	9.9	26	1.7 – 27	n/a	Runoff or Leaching from Natural Deposits
pH (pH units)	Not Regulated	n/a	8.0	8.1	7.9 – 8.2	n/a	Hydrogen Ion Concentration
Potassium (ppm)	Not Regulated	n/a	2.8	4.6	1.8 – 4.8	n/a	Runoff or Leaching from Natural Deposits
Sodium (ppm)	Not Regulated	n/a	49	94	36 – 99	n/a	Runoff or Leaching from Natural Deposits
Total Organic Carbon (ppm)	Not Regulated	TT	<0.30	2.6	ND – 2.9	n/a	Various Natural and Man-made Sources
Vanadium (ppb)	NL=50	n/a	<3.0	ND	ND – 6.9	n/a	Runoff or Leaching from Natural Deposits

ppb = parts-per-billion; ppm = parts-per-million; pCi/L = picoCuries per liter; NTU = nephelometric turbidity units; µmho/cm = micromhos per centimeter; NR = Not Required to be analyzed; ND = not detected; < = average is less than the detection limit for reporting purposes; MCL = Maximum Contaminant Level; (MCLG) = federal MCL Goal; PHG = California Public Health Goal; NL = Notification Level; n/a = not applicable; TT = treatment technique *Contaminant is regulated by a secondary standard. (1) The City of Huntington Beach and the Metropolitan Water District of Southern California add fluoride to the naturally-occurring levels in order to help prevent dental cavities. The fluoride level in the treated water is maintained within an optimal range of 0.7 to 1.3 as required by the California Department of Public Health regulations.

Turbidity – combined filter effluent Metropolitan Water District Diemer Filtration Plant	Treatment Technique	Turbidity Measurements	TT Violation?	Typical Source of Contaminant
1) Highest single turbidity measurement		0.3 NTU	No	Soil Runoff
2) Percentage of samples less than 0.3 NTU		95%	No	Soil Runoff

Turbidity is a measure of the cloudiness of the water, an indication of particulate matter, some of which might include harmful microorganisms. Low turbidity in Metropolitan's treated water is a good indicator of effective filtration. Filtration is called a "treatment technique" (TT). A treatment technique is a required process intended to reduce the level of contaminants in drinking water that are difficult and sometimes impossible to measure directly.

Unregulated Chemicals Requiring Monitoring

Chemical	Notification Level	PHG	Average Local Groundwater	Average MWD Surface Water	Range of Detections	Most Recent Sampling Date
1,4-Dioxane (ppb)	1	n/a	0.3	ND	ND – 1.18	2014
1,1-Dichloroethane (ppb)**	MCL = 5	3	< 0.03	ND	ND – 0.12	2014
Chlorate (ppb)	800	n/a	9.9	53	ND – 99.9	2014
Chromium, Hexavalent (ppb)***	MCL = 10	0.02	0.19	0.07	0.03 – 0.51	2014
Chromium, Total (ppb)****	MCL = 50	MCLG = 100	< 0.2	<0.2	ND – 0.5	2014
Molybdenum, Total (ppb)	n/a	n/a	4.93	4.7	3.5 – 6.8	2014
Strontium, Total (ppb)	n/a	n/a	591	931	236 – 1,240	2014
Vanadium, Total (ppb)	50	n/a	2.83	2.8	1 – 6.4	2014

**1,1-Dichloroethane is regulated with an MCL of 5 ppb but was not detected, based on the detection limit for purposes of reporting of 0.5 ppb. 1,1-Dichloroethane was included as part of the unregulated chemicals requiring monitoring.
 ***Hexavalent chromium is regulated with an MCL of 10 ppb but was not detected, based on the detection limit for purposes of reporting of 1 ppb. Hexavalent chromium was included as part of the unregulated chemicals requiring monitoring.
 ****Total chromium is regulated with an MCL of 50 ppb but was not detected, based on the detection limit for purposes of reporting of 10 ppb. Total chromium was included as part of the unregulated chemicals requiring monitoring.

chloramines are toxic to fish.

For further information please visit www.epa.gov/safewater/disinfection/chloramine.

Disinfectants and Disinfection Byproducts

Disinfection of drinking water was one of the major public health advances in the 20th century. Disinfection was a major factor in reducing waterborne disease epidemics caused by pathogenic bacteria and viruses, and it remains an essential part of drinking water treatment today.

Chlorine disinfection has almost completely eliminated the risks of microbial waterborne diseases from our lives. Chlorine is added to your drinking water at the source of supply (groundwater well or surface water treatment plant). Enough chlorine is added so that it does not completely dissipate through the distribution system pipes. This "residual" chlorine helps to prevent the growth of bacteria in the pipes that carry drinking water from the source into your home.

However, chlorine can react with naturally-occurring materials in the water to form unintended chemical byproducts, called disinfection byproducts (DBPs), which may pose health risks. A major challenge is how to balance the risks from microbial pathogens and DBPs. It is important to provide protection from these microbial

pathogens while simultaneously ensuring decreasing health risks from disinfection byproducts. The Safe Drinking Water Act requires the USEPA to develop rules to achieve these goals.

Trihalomethanes (THMs) and Haloacetic Acids (HAAs) are the most common and most studied DBPs found in drinking water treated with chlorine. In 1979, the USEPA set the maximum amount of total THMs allowed in drinking water at 100 parts per billion as an annual running average. In January 2002, the Stage 1 Disinfectants / Disinfection Byproducts Rule lowered the total THM maximum annual average level to 80 parts per billion and added HAAs to the list of regulated chemicals in drinking water. Your drinking water complies with the Stage 1 Disinfectants / Disinfection Byproducts Rule.

Stage 2 of the regulation was finalized by USEPA in 2006, which further controls allowable levels of DBPs in drinking water without compromising disinfection itself. A required distribution system evaluation was completed in 2008 and a Stage 2 monitoring plan has been approved by DDW. Full Stage 2 compliance began in 2012.

About Lead in Tap 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.

The City of Huntington Beach Utility Division 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 at (800) 426-4791 between 6 a.m. to 2 p.m. Pacific Time, or visit them on the web at www.epa.gov/safewater/lead.

Conservation Tips for Outside Your Home

Huntington Beach Permanent Water Conservation Requirements (M.C. 14.18.050)

- Irrigation is prohibited between 9 am and 5 pm, and limited to no more than 2 days per week
- No excessive water flow or water runoff is permitted
- Repair leaks, breaks and malfunctions promptly

Water your lawn no more than 2 days per week.

Apply the Soak-and-Cycle function.

Saves up to 840 gallons per week.

Check your sprinkler system monthly for leaks, overspray and broken sprinkler heads.

Saves up to 500 gallons per month.

Please use a broom instead of a hose to clean driveways and sidewalks.

Saves up to 150 gallons each time



Water your plants in the early morning or evening to reduce evaporation and water loss. The wind and the sun can waste up to 80% of your irrigation water.

Consider replacing your lawn with drought tolerant plants, synthetic turf, or permeable hardscape. Install rotating sprinkler nozzles, a weather-based irrigation controller, or drip irrigation to enhance your water efficiency. Rebates are available for water efficient landscape devices and turf removal. Add 3-4" of mulch to cover the soil and retain moisture.

For further water conservation tips, rebate information, water efficient practices and free landscaping classes please visit:

www.huntingtonbeachca.gov/hbwater
or www.bewaterwise.com

Want Additional Information?

There's a wealth of information on the internet about Drinking Water Quality and water issues in general.

A good place to begin your own research is the City of Huntington Beach website:

www.ci.huntington-beach.ca.us.

In addition to extensive information about your local water and the support and services we offer, you'll find links for many other local, statewide, and national resources.

2014 City of Huntington Beach Distribution System Water Quality

Disinfection Byproducts	MCL (MRDL/MRDLG)	Average Amount	Range of Detections	MCL Violation?	Typical Source of Contaminant
Total Trihalomethanes (ppb)	80	44	17 – 51	No	Byproducts of Chlorine Disinfection
Haloacetic Acids (ppb)	60	20	7 – 22	No	Byproducts of Chlorine Disinfection
Chlorine Residual (ppm)	(4 / 4)	0.85	0.04 – 2.7	No	Disinfectant added for treatment
Aesthetic Quality					
Odor (threshold odor number)	3*	1.0	1.0 – 3.0	No	Naturally-occurring Organic Materials
Turbidity (NTU)	5*	< 0.1	0.01 – 0.56	No	Erosion of Natural Deposits

Eight locations in the distribution system are tested quarterly for total trihalomethanes and haloacetic acids; six locations are tested weekly for color, odor, and turbidity. Color was not detected in 2014. MRDL = Maximum Residual Disinfectant Level; MRDLG = Maximum Residual Disinfectant Level Goal
*Contaminant is regulated by a secondary standard to maintain aesthetic qualities (taste, odor, color).

Bacterial Quality	MCL	MCLG	Highest Monthly Positive Samples	MCL Violation?	Typical Source of Contaminant
Total Coliform Bacteria	5%	0	1.59%	No	Naturally Present in the Environment

No more than 5% of the monthly samples may be positive for total coliform bacteria. The occurrence of 2 consecutive total coliform positive samples, one of which contains fecal coliform/E. coli, constitutes an acute MCL violation.

Lead and Copper Action Levels at Residential Taps

	Action Level (AL)	Health Goal	90 th Percentile Value	Sites Exceeding AL / Number of Sites	AL Violation?	Typical Source of Contaminant
Lead (ppb)	15	0.2	ND	0 out of 63	No	Corrosion of Household Plumbing
Copper (ppm)	1.3	0.3	0.33	1 out of 63	No	Corrosion of Household Plumbing

Every three years, at least 50 selected residences are tested for lead and copper at-the-tap. The most recent set of 63 samples was collected in 2012. Lead was detected in 5 homes, none of which exceeded the regulatory lead action level (AL). Copper was detected in 47 samples, one of which exceeded the copper AL. A regulatory action level is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Unregulated Chemicals Requiring Monitoring in the Distribution System

Chemical	Notification Level	PHG	Average Amount	Range of Detections	Most Recent Sampling Dates
Chlorate (ppb)	800	n/a	<20	ND – 38	2014
Chromium, Hexavalent (ppb)**	MCL = 10	0.02	0.15	0.07 – 0.23	2014
Molybdenum, Total (ppb)	n/a	n/a	4.9	4.6 – 5.3	2014
Strontium, Total (ppb)	n/a	n/a	600	500 – 780	2014
Vanadium, Total (ppb)	50	n/a	1.7	1.4 – 2.2	2014

**Hexavalent chromium is regulated with an MCL of 10 ppb but was not detected, based on the detection limit for purposes of reporting of 1 ppb. Hexavalent chromium was included as part of the unregulated chemicals requiring monitoring.

Source Water Assessments

Imported (MWDCS) Water Assessment

Every five years, MWDCS is required by DDW to examine possible sources of drinking water contamination in its State Water Project and Colorado River source waters.

In 2012, MWDCS submitted to DDW its updated Watershed Sanitary Surveys for the Colorado River and State Water Project, which include suggestions for how to better protect these source waters. Both source waters are exposed to stormwater runoff, recreational activities, wastewater discharges, wildlife, fires, and other watershed-related factors that could affect water quality.

Water from the Colorado River is considered to be most vulnerable to contamination from recreation, urban/stormwater runoff, increasing urbanization in the watershed, and wastewater. Water supplies from Northern California's State Water Project are most vulnerable to contamination from urban/stormwater runoff, wildlife, agriculture, recreation, and wastewater.

USEPA also requires MWDCS to complete one Source Water Assessment (SWA) that utilizes information collected in the watershed sanitary surveys. MWDCS completed its SWA in December 2002. The SWA is used to evaluate the vulnerability of water sources to contamination and helps determine whether more protective measures are needed.

A copy of the most recent summary of either Watershed Sanitary Survey or the SWA can be obtained by calling MWDCS at (213) 217-6850.

Groundwater Assessment

An assessment of the groundwater sources for Huntington Beach was completed in December, 2002. The groundwater sources are considered most vulnerable to the following activities not associated with detected contaminants: dry cleaners, electrical/electronic manufacturing, gas stations, known contaminant plumes, metal plating, finishing, or fabricating, military installations and plastics/ synthetics producers. You may request a summary of the assessment by contacting Brian Ragland, the City's Utilities Manager, at (714) 536-5921.

The Need to Conserve has Never Been Greater

As California enters its fourth year of drought, water conservation has become vitally important for us all. There are many areas within our homes where we can save water, particularly outdoors, where our gardens and lawns receive almost 60% of all the water

we use. To learn more about the drought, or to find useful tips for how to conserve water, visit:

www.SaveOurWater.com

or www.BeWaterWise.com

To learn about programs and devices that can help save water, along with information on rebates for these water saving resources, visit:

www.OCWaterSmart.com



This report contains important information about your drinking water.

Translate it, or speak with someone who understands it.

*Este informe contiene información muy importante sobre su agua potable. Para mas información ó traducción, favor de contactar a Customer Service Representative.
Telefono: (714) 536-5921.*



City of Huntington Beach

Public Works Utilities Division

2000 Main Street

Huntington Beach, California 92648



Cover photo courtesy of
Visit Huntington Beach - Surf City USA
www.surfcityusa.com

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The California State Water Project
 The State Water Project, one of the largest water systems in the world, collects water from rivers in Northern California and transports it, through a network of canals, pipelines and tunnels, over many hundreds of miles to Southern California, where it's distributed throughout the region. Along the way, it's lifted almost 3,800 feet, with the highest single lift of 1,926 feet over the Tehachapi Mountains, which separate the San Joaquin Valley from Southern California. To view a short YouTube video that shows the length and complexity of the State Water Project, [click here](#).

The Need to Conserve — — Has Never Been Greater

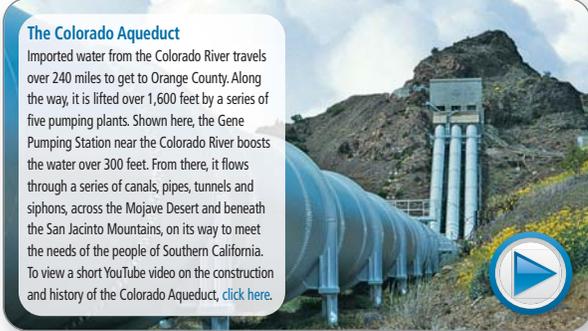
As California enters its fourth year of drought, water conservation has become vitally important for us all. There are many areas in and around our homes where we can save water, particularly outdoors, where our gardens and lawns receive almost 60% of all the water we use. To learn more about the drought, or to find useful tips for how to conserve water, click the logos to visit:

bewaterwise.com® or 

To learn about programs and devices that can help save water, along with information on rebates for these water saving resources, visit:

www.OCWaterSmart.com

To view a short YouTube video on multiple ways to conserve water, [click here](#).



The Colorado Aqueduct
 Imported water from the Colorado River travels over 240 miles to get to Orange County. Along the way, it is lifted over 1,600 feet by a series of five pumping plants. Shown here, the Gene Pumping Station near the Colorado River boosts the water over 300 feet. From there, it flows through a series of canals, pipes, tunnels and siphons, across the Mojave Desert and beneath the San Jacinto Mountains, on its way to meet the needs of the people of Southern California. To view a short YouTube video on the construction and history of the Colorado Aqueduct, [click here](#).

Conservation Tips for Inside Your Home . . .



Collect water used to wash fruits and vegetables:
Use it to water your houseplants

Don't run water to thaw food:
Defrost in the refrigerator

Install aerators on kitchen and bathroom faucets:
Reduces flow to less than 1 gallon per minute



Turn off the water while you brush your teeth:
Saves up to 2.5 gallons per minute

Spend only 5 minutes in the shower:
Saves up to 8 gallons each time

Install low-flow shower heads:
Saves 2.5 gallons per shower

Plug the sink instead of running water to rinse your razor:
Saves up to 300 gallons a month



. . . and More Tips for Outside Your Home

Check your sprinkler system for leaks, overspray and broken sprinkler heads and repair promptly:
Saves up to 500 gallons per month

Use a broom instead of a hose:
Saves up to 150 gallons each time

Water your plants in the early morning or evening:
Saves up to 25 gallons each time

Remove the turf from your yard:
Saves about 42 gallons per square foot/per year

Rain barrels: **Saves about 600 gallons per year**

Rotating nozzles for pop-up spray heads:
Uses 20% less water than conventional sprinkler heads

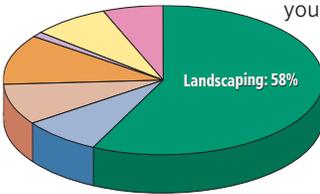
Additional water saving steps and devices are also available, and some of these are eligible for substantial rebates. Consider replacing your lawn with drought tolerant plants, synthetic turf, or permeable hardscape. Add rotating sprinkler nozzles, or a drip line to enhance your automated irrigation system. Adding organic mulch saves hundreds of gallons of water each year.

For complete rebate information for these water saving resources, visit:
www.ocwatersmart.com.

Talk to your family and friends about saving water. If everyone does a little, we all benefit a lot.

How Residential Water is Used in Orange County

Outdoor watering of lawns and gardens makes up approximately 60% of home water use. By cutting your outdoor watering by 1 or 2 days a week, you can dramatically reduce your overall water use.



● Showers & Baths: 8% ● Dishwashers: 1%
 ● Clothes Washers: 9% ● Leaks: 7%
 ● Toilets: 11% ● Faucets: 6%

Data is representative of average consumption; your water usage may vary.