Your 2016 Drinking Water Quality Report

Since 1990, California public and private 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 2015.

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 treated imported surface water to the City, test for regulated and 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 at the City’s 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 2015, the City of Huntington Beach water consisted of 68% local groundwater and 32% imported treated surface water. The City operates 9 groundwater wells and 3 MWDOC 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, groundwater 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 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 the land, or through the layers of the earth, 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 0.6 to 1.2 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

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

Soak pots and pans instead of letting water run while you scrub them clean
- **Saves water and makes the job easier**

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

Keep a pitcher of drinking water in the refrigerator
- **Saves gallons of water and it’s always cold**

Cook food in as little water as possible: **Saves water and retains food nutrients**

Buy water-saving devices like high-efficiency toilets and clothes washers. You’ll save many gallons of water per day, and many of them are eligible for rebates.

To learn more, visit [www.ocwatersmart.com](http://www.ocwatersmart.com).

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.
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.

Disinfectants & Disinfection By-products

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 as it travels through the water distribution system. 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

### 2015 City of Huntington Beach Drinking Water Quality

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<tr>
<th>Local Groundwater and Metropolitan Water District Treated Surface Water</th>
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<tr>
<td><strong>Chemical</strong></td>
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<tr>
<td><strong>Radiologicals – Tested in 2014 and 2015</strong></td>
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<td>Alpha Radiation (pCi/L)</td>
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<td>Beta Radiation (pCi/L)</td>
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<td>Uranium (pCi/L)</td>
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<td><strong>Inorganic Chemicals – Tested in 2015</strong></td>
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<td>Aluminum (ppm)</td>
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<td>Arsenic (ppm)</td>
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<td>Barium (ppm)</td>
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<td><em><em>Secondary Standards</em> – Tested in 2015</em>*</td>
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<td>Aluminum (ppm)</td>
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<td>Chlorine (ppm)</td>
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<td>Copper (ppm)</td>
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<td>Iron (ppm)</td>
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<td>Lead (ppm)</td>
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<td><strong>Unregulated Chemicals – Tested in 2015</strong></td>
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<td>Alkalinity, total (ppm as CaCO3)</td>
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<td>Boron (ppm)</td>
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<td>Calcium (ppm)</td>
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<td>Sodium (ppm)</td>
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<td>Total Organic Carbon (ppm)</td>
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<td>Vanadium (ppm)</td>
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*Note: Regulatory Action Level (AL): 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.

### 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. 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.

A contaminant is regulated if there is a link to a cancer risk or if it is detectable in water. A contaminant is unregulated if there is no known or expected effect to health.

### 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? (WQG)

In addition to mandatory water quality standards, USEPA and DDW have set voluntary water quality goals for some contaminants. These goals provide useful guidance and direction for water management practices. The chart in this report includes the following types of water quality standards:

- **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.
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.

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. MWDS C tested their source water and treated surface water for Cryptosporidium in 2015 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 between 7 a.m. to 1 p.m. Pacific Time, or visit them on the web at www.epa.gov/safewater.

Chloramines

Huntington Beach imports water from MWDS C 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 chloramines are toxic to fish.

For further information please visit www.epa.gov/dwreginfo/chloramines-drinking-water.

Immo no-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.

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 10 minutes per station.
• No excessive water flow or water runoff is permitted.
• Repair leaks, breaks and malfunctions promptly. Leaks must be fixed within 5 days.
• When watering your lawn, 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.
• Use a broom instead of a hose to clean driveways & 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.

Conservation Tips for Outside Your Home

• Consider replacing your lawn with drought tolerant plants, synthetic turf, or permeable pavement. 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.

Carbonate Quality

No additional information for this location.

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For further information please visit www.epa.gov/dwreginfo/chloramines-drinking-water.
Water Conservation: Be Water Wise All Year Long

Winter storms this year boosted California’s largest reservoirs to their historically average levels, but other key reservoirs remain critically low as our historic drought keeps its grip on the state. One average season does not overcome the effects of four dry years, and rain and snowfall were well below average in Southern California. Conserving water in our homes and businesses remains vitally important. 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:


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. If you do not understand it, speak with someone who can explain it.

Este informe contiene información muy importante sobre su agua potable. Para más información, favor de contactar a Customer Service Representative.

Telefeno: (714) 536-5921.