



City of  
**Newport Beach**  
Municipal Operations  
Department

LET'S GET  
**SMART** ABOUT **WATER**



DATA FOR 2015

# 2016 Water Quality Report



# Your 2016 Water Quality Report

Since 1990, California public water utilities have been providing an annual Water Quality Report to their customers. **This year's report covers calendar year 2015 drinking water quality testing and reporting.**

Your City of Newport Beach Municipal Operations Department (City) vigilantly safeguards its water supply and, as in years past, the water delivered to your home meets the 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. For example, 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 supply. Unregulated chemical monitoring helps USEPA and DDW determine where certain chemicals occur and whether new standards need to be established for those chemicals.

Through drinking water quality testing programs carried out by OCWD for groundwater, MWDSC for treated surface water and the City for the distribution system, your drinking water is constantly monitored from source to tap for regulated and unregulated constituents.

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, are 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 groundwater managed by OCWD and water imported from Northern California and the Colorado River by the Municipal Water District of Orange County (MWDOC) via the MWDSC. Groundwater comes from a natural underground aquifer that is replenished with water from the Santa Ana River, local rainfall 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.



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: (800) 426-4791.

## 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 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 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, 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 storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining and farming.
- **Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production or mining activities.
- **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 by-products of industrial processes and petroleum production, and can also come from gasoline stations, urban stormwater runoff, agricultural application and septic systems.

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

## 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 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: [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).



## 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.

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 10 a.m. and 4 p.m. Eastern Time (7 a.m. to 1 p.m. in California).

## Questions about your water? Contact us for answers.

For information about this report or your water quality information in general, please contact the City Municipal Operations Department at (949) 644-3011.

The City of Newport Beach Council meetings begin at 7:00 p.m. on the second and fourth Tuesday of each month and are open to the public. Meetings are held at the Council Chambers located at 100 Civic Center Drive, Newport Beach. Matters from the public are heard at each meeting. Please feel free to participate in these meetings.

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

## Disinfectants and Disinfection Byproducts

Disinfection of drinking water was one of the major public health advances in the 20<sup>th</sup> 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 from our lives the risks of microbial waterborne diseases. 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. Effective 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.

## Chloramines

The City 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 these disinfectants are toxic to fish.

For further information or if you have any questions about chloramines please call (949) 644-3011.

## 2015 Metropolitan Water District of Southern California Treated Surface Water

Chemical	MCL	PHG, or (MCLG)	Average Amount	Range of Detections	MCL Violation?	Typical Source of Chemical
<b>Radiologicals – Tested in 2014</b>						
Alpha Radiation (pCi/L)	15	(0)	ND	ND – 4	No	Erosion of Natural Deposits
Beta Radiation (pCi/L)	50	(0)	5	4 – 6	No	Decay of Man-made or Natural Deposits
Uranium (pCi/L)	20	0.43	3	2 – 3	No	Erosion of Natural Deposits
<b>Inorganic Chemicals – Tested in 2015</b>						
Aluminum (ppm)	1	0.6	0.155	0.073 – 0.24	No	Treatment Process Residue, Natural Deposits
Arsenic (ppb)	10	0.004	2.3	2.3	No	Production Wastes, Natural Deposits
Barium (ppm)	1	2	0.125	0.125	No	Refinery Discharge, Erosion of Natural Deposits
Fluoride (ppm) treatment-related	Control Range 0.6 – 1.2 ppm Optimal Level 0.7 ppm		0.8	0.6 – 1	No	Water Additive for Dental Health
<b>Secondary Standards* – Tested in 2015</b>						
Aluminum (ppb)	200*	600	155	73 – 240	No	Treatment Process Residue, Natural Deposits
Chloride (ppm)	500*	n/a	100	98 – 101	No	Runoff or Leaching from Natural Deposits
Color (color units)	15*	n/a	1	1	No	Naturally-occurring Organic Materials
Odor (threshold odor number)	3*	n/a	2	2	No	Naturally-occurring Organic Materials
Specific Conductance (µmho/cm)	1,600*	n/a	1,040	1,040	No	Substances that Form Ions in Water
Sulfate (ppm)	500*	n/a	257	253 – 261	No	Runoff or Leaching from Natural Deposits
Total Dissolved Solids (ppm)	1,000*	n/a	663	660 – 665	No	Runoff or Leaching from Natural Deposits
<b>Unregulated Chemicals – Tested in 2015</b>						
Alkalinity, total as CaCO <sub>3</sub> (ppm)	Not Regulated	n/a	126	120 – 131	n/a	Runoff or Leaching from Natural Deposits
Boron (ppm)	NL = 1	n/a	0.12	0.12	n/a	Runoff or Leaching from Natural Deposits
Calcium (ppm)	Not Regulated	n/a	78	76 – 80	n/a	Runoff or Leaching from Natural Deposits
Hardness, total as CaCO <sub>3</sub> (ppm)	Not Regulated	n/a	303	300 – 306	n/a	Runoff or Leaching from Natural Deposits
Hardness, total (grains/gallon)	Not Regulated	n/a	18	18	n/a	Runoff or Leaching from Natural Deposits
Magnesium (ppm)	Not Regulated	n/a	27	26 – 27	n/a	Runoff or Leaching from Natural Deposits
pH (pH units)	Not Regulated	n/a	8.1	8.1	n/a	Hydrogen Ion Concentration
Potassium (ppm)	Not Regulated	n/a	4.9	4.8 – 5	n/a	Runoff or Leaching from Natural Deposits
Sodium (ppm)	Not Regulated	n/a	101	98 – 104	n/a	Runoff or Leaching from Natural Deposits
Total Organic Carbon (ppm)	TT	n/a	2.6	2.3 – 2.7	n/a	Various Natural and Man-made Sources

## 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.

ppb = parts-per-billion; ppm = parts-per-million; pCi/L = picoCuries per liter; µmho/cm = micromhos per centimeter; ND = not detected; MCL = Maximum Contaminant Level; (MCLG) = federal MCL Goal; PHG = California Public Health Goal; NL = Notification Level; n/a = not applicable; TT = treatment technique \*Chemical is regulated by a secondary standard.

Turbidity – combined filter effluent Metropolitan Water District Diemer Filtration Plant	Treatment Technique	Turbidity Measurements	TT Violation?	Typical Source of Chemical
1) Highest single turbidity measurement	0.3 NTU	0.04	No	Soil Runoff
2) Percentage of samples less than 0.3 NTU	95%	100%	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. NTU = nephelometric turbidity units  
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 chemicals in drinking water that are difficult and sometimes impossible to measure directly.

## Unregulated Chemicals Requiring Monitoring at Entry Points to the Distribution System

Chemical	Notification Level	PHG	Average Amount	Range of Detections	Most Recent Sampling Dates
Chlorate (ppb)	800	n/a	53	41 – 68	2013
Chromium, Hexavalent (ppb)**	MCL = 10	0.02	0.07	0.03 – 0.11	2013
Chromium, Total (ppb)***	MCL = 50	MCLG = 100	<0.2	ND – 0.5	2014
Molybdenum, Total (ppb)	n/a	n/a	4.7	4.5 – 5	2014
Strontium, Total (ppb)	n/a	n/a	930	850 – 1,100	2014
Vanadium, Total (ppb)	50	n/a	2.8	2.3 – 3	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.

\*\*\*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.

## 2015 City of Newport Beach Groundwater Quality

Chemical	MCL	PHG (MCLG)	Average Amount	Range of Detections	MCL Violation?	Most Recent Sampling Date	Typical Source of Contaminant
<b>Radiologicals</b>							
Gross Alpha (pCi/L)	15	(0)	2.09	ND – 4.68	No	2014	Erosion of Natural Deposits
Uranium (pCi/L)	20	0.43	3.03	ND – 6.06	No	2014	Erosion of Natural Deposits
<b>Inorganic Chemicals</b>							
Arsenic (ppb)	10	0.004	<2	ND – 3.7	No	2015	Erosion of Natural Deposits
Fluoride (ppm)	2	1	0.49	0.42 – 0.6	No	2015	Erosion of Natural Deposits
Nitrate (ppm as N)	10	10	1.64	ND – 3.18	No	2015	Fertilizers, Septic Tanks
Nitrate+Nitrite (ppm as N)	10	10	1.64	ND – 3.18	No	2015	Fertilizers, Septic Tanks
<b>Secondary Standards*</b>							
Color (color units)	15*	n/a	0.75	ND – 3	No	2015	Naturally-occurring organic materials
Chloride (ppm)	500*	n/a	37.3	12.5 – 58.9	No	2015	Erosion of Natural Deposits
Specific Conductance (µmho/cm)	1,600*	n/a	515	252 – 760	No	2015	Erosion of Natural Deposits
Sulfate (ppm)	500*	n/a	70.6	17.8 – 132	No	2015	Erosion of Natural Deposits
Total Dissolved Solids (ppm)	1000*	n/a	317	142 – 490	No	2015	Erosion of Natural Deposits
<b>Unregulated Chemicals</b>							
Alkalinity, total (ppm as CaCO <sub>3</sub> )	Not Regulated	n/a	131	82 – 163	n/a	2015	Erosion of Natural Deposits
Bicarbonate (ppm as HCO <sub>3</sub> )	Not Regulated	n/a	170	100 – 231	n/a	2015	Erosion of Natural Deposits
Boron (ppm)	NL = 1	n/a	0.16	0.14 – 0.17	n/a	2015	Erosion of Natural Deposits
Calcium (ppm)	Not Regulated	n/a	52.2	16 – 88.3	n/a	2015	Erosion of Natural Deposits
Hardness, total (ppm as CaCO <sub>3</sub> )	Not Regulated	n/a	165	46.9 – 285	n/a	2015	Erosion of Natural Deposits
Magnesium (ppm)	Not Regulated	n/a	8.55	1.7 – 15.7	n/a	2015	Erosion of Natural Deposits
pH (units)	Not Regulated	n/a	7.9	7.7 – 8	n/a	2015	Acidity, Hydrogen Ions
Potassium (ppm)	Not Regulated	n/a	2.7	1.7 – 3.8	n/a	2015	Erosion of Natural Deposits
Sodium (ppm)	Not Regulated	n/a	41.5	33.9 – 48.9	n/a	2015	Erosion of Natural Deposits
Vanadium (ppb)	NL = 50	n/a	5	3.3 – 9.1	n/a	2015	Erosion of Natural Deposits

ppb = parts-per-billion; ppm = parts-per-million; pCi/L = picoCuries per liter; NTU = nephelometric turbidity units; ND = not detected; n/a = not applicable; < = 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; µmho/cm = micromho per centimeter \*Contaminant is regulated by a secondary standard to maintain aesthetic qualities (taste, odor, color).

## Unregulated Chemicals Requiring Monitoring at Entry Points to the Distribution System

Chemical	Notification Level	PHG	Average Amount	Range of Detections	Most Recent Sampling Dates
1,4-Dioxane (ppb)	1	n/a	1.3	0.83 – 1.8	2014
Chlorate (ppb)	800	n/a	210	130 – 290	2014
Chromium, Hexavalent (ppb)**	MCL = 10	0.02	0.21	0.21	2014
Molybdenum, Total (ppb)	n/a	n/a	4.9	4.8 – 4.9	2014
Strontium, Total (ppb)	n/a	n/a	470	430 – 510	2014
Vanadium, Total (ppb)	50	n/a	4.3	4.1 – 4.5	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.

## 2015 City of Newport 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	38	9.9 – 52	No	Byproducts of chlorine disinfection
Haloacetic Acids (ppb)	60	16	ND – 20	No	Byproducts of chlorine disinfection
Chlorine Residual (ppm)	(4 / 4)	1.8	0.37 – 2.8	No	Disinfectant added for treatment
<b>Aesthetic Quality</b>					
Color (color units)	15*	<1	ND – 2.5	No	Naturally-occurring organic materials
Odor (threshold odor number)	3*	<1	ND – 1	No	Erosion of natural deposits
Turbidity (NTU)	5*	<0.1	ND – 1.24	No	Erosion of natural deposits

Eight locations in the distribution system are tested quarterly for total trihalomethanes and haloacetic acids; thirty locations are tested monthly for color, odor and turbidity; color and odor were not detected in 2014.

MRDL = Maximum Residual Disinfectant Level; MRDLG = Maximum Residual Disinfectant Level Goal \*Contaminant is regulated by a secondary standard.

## Lead and Copper Action Levels at Residential Taps

	Action Level (AL)	Health Goal	90 <sup>th</sup> Percentile Value	Sites Exceeding AL / Number of Sites	AL Violation?	Typical Source of Contaminant
Copper (ppm)	1.3	0.3	0.17	0 / 30	No	Corrosion of household plumbing
Lead (ppb)	15	0.2	ND	0 / 30	No	Corrosion of household plumbing

Every three years, 30 residences are tested for lead and copper at-the-tap. The most recent set of samples was collected in 2015. Lead was not detected in any home. Copper was detected in 7 homes; none exceeded the action level.

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	150	54 – 270	2014
Chromium, Hexavalent (ppb)**	MCL = 10	0.02	0.14	0.03 – 0.26	2014
Chromium, Total (ppb)***	MCL = 50	MCLG = 100	<0.2	ND – 0.2	2013
Molybdenum, Total (ppb)	n/a	n/a	5	4.5 – 5.4	2014
Strontium, Total (ppb)	n/a	n/a	740	370 – 1,100	2014
Vanadium, Total (ppb)	50	n/a	3.4	2.4 – 4.3	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.

\*\*\*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.

## Outdoor Water Conservation Tips

Check your sprinkler system and correct for overspray and broken sprinkler heads

**Saves 12-15 gallons each time you water**

Choose drip irrigation for your trees and shrubs

**Saves up to 15 gallons each time you water**

Use a broom instead of a hose  
**It takes very little time to sweep and the water savings add up**

Water plants in the early morning  
**Reduces evaporation and ensures deeper watering**



Use organic mulch around trees and plants to reduce evaporation, improve the soil & prevent weeds

**Saves about 20-30 gallons per 1,000 sq. ft. each time you water**

Plant drought-resistant trees and plants  
**Saves about 30-60 gallons per 1,000 sq. ft. each time you water**

Additional water saving steps and devices are also available, and some of these are eligible for substantial rebates. Also, water your garden deeply to promote healthier, stronger plants. Regular pruning will help your plants use water more efficiently.

For complete rebate information for these water saving resources, visit: [www.ocwatersmart.com](http://www.ocwatersmart.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 Newport Beach website:

[www.newportbeachca.gov](http://www.newportbeachca.gov)

## Source Water Assessments

### Imported (MWDSC) Water Assessment

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

In 2012, MWDSC 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 MWDSC to complete one Source Water Assessment (SWA) that utilizes information collected in the watershed sanitary surveys. MWDSC 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 MWDSC at (800) CALL-MWD (225-5693).

### Groundwater Assessment

An assessment of the drinking water sources for the City was completed in December 2002. The ground water sources are considered most vulnerable to the following activities not associated with detected contaminants: dry cleaners, gas stations, and known contaminant plumes.

A copy of the complete assessment is available at State Water Resource Control Board, Division of Drinking Water, Santa Ana District, 28 Civic Center Plaza, Room 325, Santa Ana, California 92701. You may request a summary of the assessment by contacting the City at (949) 644-3011.



# We All Need to Be Water Wise All Year Long

*One Average Rainy Season Does Not Overcome the Effects of Four Dry Years*

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

**bewaterwise.com**® or **Save Our WATER** 

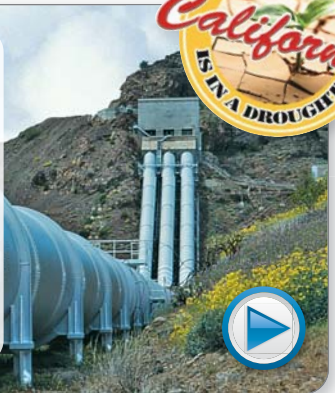

To learn about programs and devices that can help save water, along with information on rebates for these water saving resources, visit:

[www.OCWaterSmart.com](http://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](#).

**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 is distributed throughout the region. Along the way, it is 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](#).




## Conservation Tips for Inside Your Home . . .

Install aerators on the kitchen faucet

**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**

Cook food in as little water as possible

**Saves water and helps retain food nutrients**

Keep a pitcher of drinking water in the refrigerator

**Saves gallons of water and it's always cold**

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**

Don't run water to thaw food:

**Defrost in the refrigerator**



# We Use the Most Water in Our Homes on the Outside

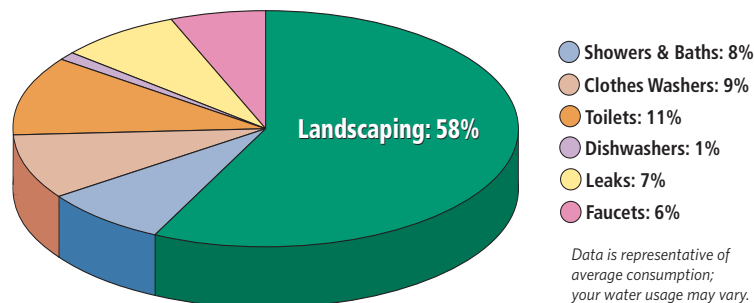
*Save the Most Where You Use the Most: Make Your Outdoor Use Efficient!*

Outdoor watering of lawns and gardens makes up approximately 60% of home water use. By reducing your outdoor water use — by either cutting back on irrigation or planting more drought tolerant landscaping — you can dramatically reduce your overall water use.

For rebates on water saving devices, visit:

[www.OCWaterSmart.com](http://www.OCWaterSmart.com)

## How Residential Water is Used in Orange County



## Tips for Conserving Water Outside Your Home. . .

Use a broom instead of a hose

***It takes very little time to sweep and the water savings add up***

Water plants in the early morning

***Reduces evaporation and ensures deeper watering***

Plant drought-resistant trees and plants

***Saves about 30-60 gallons per 1,000 sq. ft. each time you water***

Remove the turf from your yard:

***Saves about 42 gallons per square foot/per year***

Check your sprinkler system for leaks, overspray and broken sprinkler heads and repair promptly:

***Saves 12-15 gallons each time you water***

Use organic mulch around trees and plants to reduce evaporation and improve the soil

***Saves about 20-30 gallons per 1,000 sq. ft. each time you water***

Additional water saving steps and devices are also available, and some are eligible for substantial rebates. You should consider a cover for your swimming pool or hot tub to reduce evaporation. And water your garden deeply to promote healthier, stronger plants. Regular pruning will help your plants use water more efficiently. You won't need to water as often, either.

For complete rebate information for these water saving resources, visit: [www.ocwatersmart.com](http://www.ocwatersmart.com).

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



**City of Newport Beach  
Municipal Operations Department**

P.O. Box 1768  
100 Civic Center Drive  
Newport Beach, California 92658-8915

# This report contains important information about your drinking water. Translate it, or speak with someone who understands it.

يحتوي هذا التقرير على معلومات هامة عن نوعية ماء الشرب في منطقتك. يرجى ترجمته، أو ابحث التقرير مع صديق لك يفهم هذه المعلومات جيدا.

## *Arabic*

이 보고서에는 귀하가 거주하는 지역의 수질에 관한 중요한 정보가 들어 있습니다. 이것을 번역하거나 충분히 이해하시는 친구와 상의하십시오.

## *Korean*

这份报告中有些重要的信息，讲到关于您所在社区的水的品质。请您找人翻译一下，或者请能看得懂这份报告的朋友给您解释一下。

## *Chinese*

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

## *Spanish*

この資料には、あなたの飲料水についての大切な情報が書かれています。内容をよく理解するために、日本語に翻訳して読むか説明を受けてください。

## *Japanese*

Bản báo cáo có ghi những chi tiết quan trọng về phẩm chất nước trong cộng đồng quý vị. Hãy nhờ người thông dịch, hoặc hỏi một người bạn biết rõ về vấn đề này.

## *Vietnamese*