



CITY OF WESTMINSTER WATER DIVISION

2021 Water Quality Report

















Our Water Quality Meets State & Federal Standards

As you read this report, you will find laboratory test results show that the City of Westminster's water system once again meets all the water quality standards put forth by the U.S. Environmental Protection Agency and the State Water Resources Control Board, Division of Drinking Water.

Your drinking water was tested more than 64,000 times last year for regulated and non-regulated constituents.

Westminster Well 4 ~ Gillespie Park

The Variable Frequency Drive pump (VFD) that powers Well 4 automatically adjusts the electrical power frequency to modulate the pressure and flow to match demand. When installed in 2010, Southern California Edison offered a financial incentive for the conversion, as VFD uses less electricity to run. And coupled with a new, more efficient pump design, it helped cut operational costs by 20%, which was passed on to the City's consumers. This helped keep our water costs in the lowest 1/3 compared to the rest of Orange County.







Your 2021 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 all drinking water quality testing performed in calendar year 2020.

The City of Westminster Water Division 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 (SWRCB) 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 constituents 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 constituents in our water supply. Unregulated constituent monitoring helps USEPA and SWRCB determine where certain constituents occur and whether new standards need to be established for those constituents.

Through drinking water quality compliance testing programs carried out by OCWD for groundwater, MWDSC for treated surface water, and the Westminster Water Division for the water production and distribution system,



Quality Water is Our Priority

Turn the tap and the water flows, as if by magic. Or so it seems. The reality is considerably different, however. Delivering high-quality drinking water to our customers is a scientific and engineering feat that requires considerable effort and talent to ensure the water is always there, always safe to drink.

Colorado



Because tap water is highly regulated by state and federal laws, water treatment and distribution operators must be licensed and are required to complete on-the-job training and technical education before becoming a state certified operator.

Our licensed water professionals have an understanding of a wide range of subjects, including mathematics, biology, chemistry, physics, and engineering. Some of the tasks they complete on a regular basis include:

- Operating and maintaining equipment to purify and clarify water;
- Monitoring and inspecting machinery, meters, gauges, and operating conditions;
- Conducting tests and inspections on water and evaluating the results;
- Documenting and reporting test results and system operations to regulatory agencies; and
- Serving our community through customer support, education, and outreach.

So, the next time you turn on your faucet, think of the skilled professionals who stand behind every drop.

your drinking water is constantly monitored from source to tap for regulated and unregulated constituents.

The State allows Westminster 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.

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 Mr. Roberto Anaya.

Telefono: (714) 548-3694.

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.

يحتوي هذا التقرير على معلومات هـامـة عـن نـوعـيـة مـاء الشرب في منطقتك. يرجى ترجمته، أو ابحث الـتقرير مع صديـق لك يفهم هـذه المعلومات جيداً.

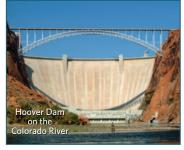
この資料には、あなたの飲料水 についての大切な情報が書かれ ています。内容をよく理解する ために、日本語に翻訳して読む か説明を受けてください。 这份报告中有些重要的信息, 讲到关于您所在社区的水的品质。请您找人翻译一下,或者 请能看得懂这份报告的朋友给 你解释一下

이 보고서에는 귀하가 거주하는 지역의 수질에 관한 중요한 정보 가 들어 있습니다. 이것을 변역 하거나 충분히 이해하시는 친구 와 상의하십시오.

Constant Monitoring Ensures Continued Excellence

Sources of Supply

The City of Westminster's water supply is a blend of groundwater managed by the Orange County Water District (OCWD) and water imported from Northern California and the Colorado River. Imported



water is purchased from MWDSC by the Municipal Water District of Orange County (MWDOC), who distributes it to water agencies in Orange County. 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 border, and from Yorba Linda to the Pacific Ocean.

Westminster has 10 groundwater wells located throughout the City and three import water connections. On average, 75% of our drinking water is produced from our groundwater wells and 25% is imported.

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.

Westminster would consider future participation in the Ocean Water Desalination Program if costs of program participation and costs of water supplied by the Program were comparable to that of groundwater or imported water. More information from OCWD and MWDOC would be needed to determine how Westminster could be incorporated into the regional water system used for the delivery of desalinated water.

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.
- 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.
- Radioactive contaminants can be naturally occurring or the result of oil and gas production or mining activities.
- 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 storm water runoff, agricultural application and septic systems.

 Pesticides and herbicides may come from a variety of sources such as agriculture, urban storm water runoff and residential uses.

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

The U.S. Food and Drug Administration regulations and

California law 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.

To Safeguard Against Issues that May Affect Your Health

We Comply with All State & Federal Water Quality Regulations

Chloramines

The City of Westminster imports treated drinking water from MWDSC.
Metropolitan treats its filtered surface water with chloramines, which are chemical disinfectants formed by combining chlorine with ammonia.



Chloramines are effective killers of microscopic organisms that may cause disease and chloramines also help prevent re-growth of bacteria in the City's distribution system. Chloramines form fewer disinfection byproducts than other disinfectants and have no odor when properly used.

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 aquariums should also make necessary adjustments in water quality treatment as these chloramines are toxic to fish.

For further information or if you have any questions about chloramines, please call Paul Kalix at (714) 548-3699.

Immunocompromised People

Some people may be more vulnerable to contaminants in drinking water than the general population.

Immunocompromised 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 to infection. These people should seek advice about drinking water from their health care providers.

USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial

contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Total Coliform Rule

This Consumer Confidence Report (CCR) reflects changes in drinking water regulatory requirements instituted during 2016. All water systems are required to comply with the state Total Coliform Rule. Effective April 1, 2016, all water systems are also required to comply with the federal Revised Total Coliform Rule.

The federal rule protects public health by ensuring the integrity of the drinking water distribution system by monitoring for the presence of microbials (i.e., total coliform and *E. coli* bacteria). The USEPA anticipates greater public health protection as the rule requires water systems that are vulnerable to microbial contamination to identify and resolve



potential issues. Water systems that exceed a specified frequency of total coliform occurrences are required to conduct an assessment to determine if any sanitary defects exist. If found, these must be corrected by the water system.

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 Westminster Water Division is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components in your home.

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.

Arsenic Advisory

While your drinking water meets the Federal and State standard for arsenic, it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The U.S. Environmental Protection Agency continues to research the health effects of low levels



of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

2020 City of Westminster Drinking Water Quality Local Groundwater and Metropolitan Water District (MWD) of Southern California Treated Surface Water

Constituent	MCL	PHG (MCLG)	Avg. Local Groundwater	Avg. MWD Surface Water	Range of Detections	MCL Violation?	Typical Source in Drinking Water
Radiologicals – Tested in 2020							
Alpha Radiation (pCi/L)	15	(0)	<3	<3	ND - 3.94	No	Erosion of Natural Deposits
Beta Radiation (pCi/L)	50	(0)	NR	<4	ND - 7	No	Decay of Natural and Man-made Deposits
Combined Radium (pCi/L)	5	(0)	<1	ND	ND - 1.16	No	Erosion of Natural Deposits
Uranium (pCi/L)	20	0.43	5.28	2	1 – 9.3	No	Erosion of Natural Deposits
Inorganic Chemicals – Tested in 202	20						·
Aluminum (ppm)	1	0.6	ND	0.137	ND - 0.26	No	Treatment Process Residue, Natural Deposits
Arsenic (ppb)	10	0.004	<2	ND	ND - 5.6	No	Runoff or Leaching from Natural Deposits
Barium (ppm)	1	2	<0.1	0.107	ND - 0.107	No	Refinery Discharge, Erosion of Natural Deposits
Bromate (ppb)	10	0.1	NR	1.9	ND - 1.3	No	Byproduct of Drinking Water Ozonation
Fluoride (ppm) naturally-occurring	2	1	0.49	NR	0.39 - 0.56	No	Runoff or Leaching from Natural Deposits
Fluoride (ppm) treatment-related	2	1	NR	0.7	0.5 - 0.9	No	Water Additive for Dental Health
Nitrate (ppm as N)	10	10	1.63	ND	ND - 4.65	No	Agriculture Runoff and Sewage
Nitrate+Nitrite (ppm as N)	10	10	1.63	ND	ND - 4.66	No	Agriculture Runoff and Sewage
Secondary Standards* – Tested in 2	2020						
Aluminum (ppb)	200*	600	ND	137	ND - 260	No	Treatment Process Residue, Natural Deposits
Chloride (ppm)	500*	n/a	38.1	94	12.1 – 94	No	Runoff or Leaching from Natural Deposits
Color (color units)	15*	n/a	ND	1	ND - 1	No	Runoff or Leaching from Natural Deposits
Manganese (ppb)	50*	n/a	<20	ND	ND - 40.1	No	Runoff or Leaching from Natural Deposits
Odor (threshold odor number)	3*	n/a	ND	2	ND - 2	No	Naturally-occurring Organic Materials
Specific Conductance (µmho/cm)	1,600*	n/a	617	970	408 - 975	No	Substances that Form Ions in Water
Sulfate (ppm)	500*	n/a	78.3	216	35.4 - 217	No	Runoff or Leaching from Natural Deposits
Total Dissolved Solids (ppm)	1,000*	n/a	376	592	248 - 603	No	Runoff or Leaching from Natural Deposits
Turbidity (NTU)	5*	n/a	<0.1	ND	ND - 0.2	No	Soil Runoff
Unregulated Constituents – Tested	in 2018 and 2	020					
Alkalinity, total (ppm as CaCO ₃)	Not Regulated	n/a	174	118	117 – 211	n/a	Runoff or Leaching from Natural Deposits
Boron (ppm)	Not Regulated	n/a	ND	0.13	ND - 0.13	n/a	Runoff or Leaching from Natural Deposits
Bromide (ppm)	Not Regulated	n/a	0.12	NR	0.035 - 0.341	n/a	Refinery Discharge
Calcium (ppm)	Not Regulated	n/a	74.8	66	40.7 - 124	n/a	Runoff or Leaching from Natural Deposits
Germanium (ppb)	Not Regulated	n/a	ND	0.1	ND - 0.4	n/a	Erosion of Natural Deposits; Industrial Discharge
Hardness, total (ppm as CaCO ₃)	Not Regulated	n/a	239	265	133 – 396	n/a	Runoff or Leaching from Natural Deposits
Magnesium (ppm)	Not Regulated	n/a	12.7	26	7.7 – 26	n/a	Runoff or Leaching from Natural Deposits
Manganese (ppb)**	50*	n/a	ND	1.7	ND - 2.5	n/a	Runoff or Leaching from Natural Deposits
N-nitrosodimethylamine (ppt)	NL = 10	n/a	NR	3.1	3.1	n/a	Byproduct of Drinking Water Chloramination, Industrial Processes
pH (pH units)	Not Regulated	n/a	7.9	8.1	7.8 – 8.1	n/a	Hydrogen Ion Concentration
Potassium (ppm)	Not Regulated	n/a	3.1	4.6	2.1 – 4.7	n/a	Runoff or Leaching from Natural Deposits
Sodium (ppm)	Not Regulated	n/a	37.4	96	32.5 – 98	n/a	Runoff or Leaching from Natural Deposits
TOC (ppm) – Surface water	Π	n/a	NR	2.4	2.2 – 2.7	n/a	Various Natural and Man-made Sources
			0.18	NR	0.07 - 0.31		Various Natural and Man-made Sources

ppb = parts-per-billion; ppm = parts-per-million; ppt = parts-per-trillion; ppt = parts-per-trillion; pci/L = picoCuries per liter; NTU = nephelometric turbidity units; µmho/cm = micromhos per centimeter; n/a = not applicable; ppb = parts-per-billion; ppm = parts-per-million; ppt = parts-per-milli

Turbidity – combined filter effluent Metropolitan Water District Diemer Filtration Plant	Treatment Technique	Turbidity Measurements	TT Violation?	Typical Source in Drinking Water
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. Low turbidity in the treated water is a good indicator of effective filtration. Filtration is called a "treatment technique" (TT).

NTU = nephelometric turbidity units

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.

Chart Legend

What are Water Quality Standards?

Drinking water standards established by USEPA and SWRCB set limits for substances that may affect consumer health or aesthetic qualities of drinking water. The charts in this report show 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 are set to protect the odor, taste, and appearance of drinking
- 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.

What is a Water Quality Goal?

In addition to mandatory water quality standards, USEPA and SWRCB 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 charts in this report include 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.

How are Contaminants Measured?

throughout the year.

- Water is sampled and tested parts per million (ppm) or milligrams per liter (mg/L) parts per billion (ppb) or micrograms per liter (μg/L)
- Contaminants are measured in:
 - parts per trillion (ppt) or nanograms per liter (ng/L)

2020 City of Westminster Distribution System Water Quality						
	MCL (MRDL/MRDLG)	Average Amount	Range of Detections	MCL Violation?	Typical Source of Contaminant	
Aesthetic Quality						
Color (color units)	15*	0.04	ND – 4	No	Erosion of Natural Deposits	
Turbidity (NTU)	5*	<0.1	ND - 1	No	Erosion of Natural Deposits	
Disinfection Byproducts**						
Total Trihalomethanes (ppb)	80	17	ND - 24	No	Byproducts of Chlorine Disinfection	
Haloacetic Acids (ppb)	60	7	ND - 5.2	No	Byproducts of Chlorine Disinfection	
Chlorine Residual (ppm)	(4 / 4)	0.91	0.19 - 2.8	No	Disinfectant Added for Treatment	

Eight locations in the distribution system are tested quarterly for disinfection byproducts:

fifteen locations are tested monthly for color, odor and turbidity. Odor was not detected in 2020.

MRDL = Maximum Residual Disinfectant Level; MRDLG = Maximum Residual Disinfectant Level Goal

^{**}Disinfection Byproducts average values are based on a locational running annual average.

Lead and Copper Action Levels at Residential Taps						
	Action Level (AL)	Public Health Goal	90 th Percentile Value	Sites Exceeding AL / Number of Sites	AL Violation?	Typical Source in Drinking Water
Lead (ppb)	15	0.2	ND	0 / 32	No	Corrosion of Household Plumbing
Copper (ppm)	1.3	0.3	0.23	0 / 32	No	Corrosion of Household Plumbing

Every three years, 32 residences are tested for lead and copper at-the-tap. The most recent set of samples was collected in 2018.

Lead was not detected in any of the samples. Copper was detected in 19 samples; none exceeded the action level.

A regulatory action level is the concentration of a constituent which, if exceeded, triggers treatment or other requirements that a water system must follow

In 2020, no school submitted a request to be sampled for lead.

Unregulated Chemicals Requiring Monitoring in the Distribution System						
Chemical	Notification Level	PHG	Average Amount	Range of Detections	Most Recent Sampling Date	
Bromochloroacetic Acid (ppb)	n/a	n/a	0.5	ND - 2.7	2020	
Bromodichloroacetic Acid (ppb)	n/a	n/a	0.25	ND - 2.1	2020	
Chlorodibromoacetic Acid (ppb)	n/a	n/a	0.25	ND - 1.3	2020	
Dibromoacetic Acid (ppb)	n/a	n/a	0.53	ND - 2.8	2020	
Dichloroacetic Acid (ppb)	n/a	MCLG = 0	0.43	ND - 2.8	2020	
Manganese (ppb)	SMCL = 50	n/a	4	ND - 24.4	2020	
Monobromoacetic Acid (ppb)	n/a	n/a	0.05	ND - 0.6	2020	
Trichloroacetic Acid (ppb)	n/a	MCLG = 20	0.23	ND - 2.5	2020	

SMCL = secondary MCL

Source Water Assessments

Imported (MWDSC) Water Assessment

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

The most recent watershed sanitary surveys of its source water supplies from the Colorado River was updated in 2015 and the State Water Project was

updated in 2016.

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 of Westminster was completed in December of 2002 and is continuously being updated.

Westminster groundwater supply wells are considered most vulnerable to the following potential contaminant sources: gas stations, high density housing, dry cleaners, parks, and road right of ways.

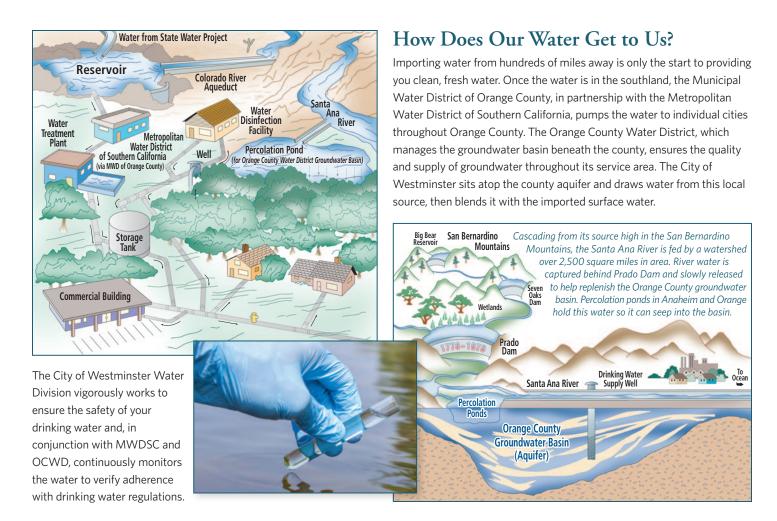
You may request a summary or copy of this assessment by contacting Scott Miller, Water Superintendent, Westminster Water Division at (714) 548-3693.



Constituent is regulated by a secondary standard to maintain aesthetic qualities.

Where Does Our Water Come From?

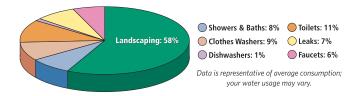




Where Do We Use Water the Most?

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.

Save the most where you use the most: Make your outdoor use efficient.



Where Can You Learn More?

There's a wealth of information on the internet about Drinking Water Quality and water issues in general. Some good sites to begin your own research are:

Metropolitan Water District of So. California: www.mwdh2o.com

California Department of Water Resources: www.water.ca.gov
The Water Education Foundation: www.watereducation.org

To learn more about Water Conservation & Rebate Information:

www.bewaterwise.com

www.ocwatersmart.com

And to see the Aqueducts in action, checkout these two videos:

Wings Over the State Water Project: youtu.be/8A1v1Rr2neU

Wings Over the Colorado Aqueduct: youtu.be/KipMQh5t0f4

We Invite You to Learn More About Your Water's Quality

For information about this report, or your water quality in general, please contact Paul Kalix at (714) 548-3699. To find out about opportunities to participate in public meetings, contact the Westminster City Clerk's office at (714) 898-3311. The City Council meets every second and fourth Wednesday in the Council Chambers at 8200 Westminster Boulevard. We are also reachable by mail at the City of Westminster Water Division, 14381 Olive Street, Westminster, California 92683.

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

City of Westminster Water Division

14381 Olive Street • Westminster, California 92683

(714) 548-3690 • www.westminster-ca.gov