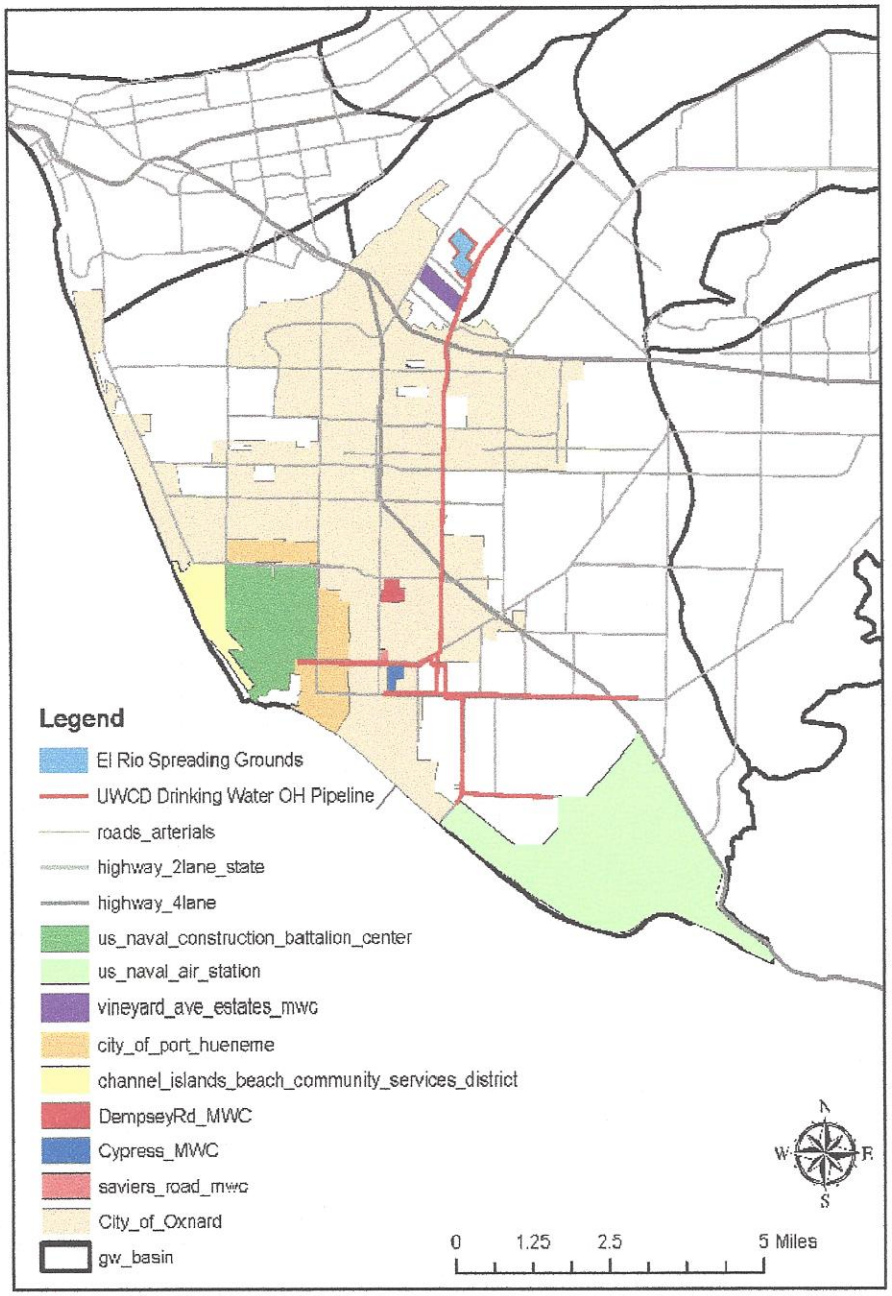
United Water Conservation District

Oxnard-Hueneme Water Delivery System

2011 Consumer Confidence Report

UWCD Drinking Water Customer Service Area



Testing and Results

Last year we conducted thousands of tests for over 180 chemicals and contaminants that could be found in your drinking water. We did not detect any contaminants that would make the water unsafe to drink. This report highlights the quality of water we delivered to our customers last year. Included are details about where your water comes from, what it contains, and how it compares to State standards. For more information about your water, please call our Operations & Maintenance Manager, Mike Ellis at (805) 485-5114.

Public Meetings

Our monthly Board meetings are usually held on the second Wednesday of every month at 1:00 PM in our board room at 106 North 8th Street in Santa Paula. Our meetings are open to the public and we would welcome your questions and comments.

About Your Water Supply

United Water's Oxnard-Hueneme Delivery System supplies about 15,000 acre-feet of water per year to several agencies in the Oxnard Plain, including the cities of Oxnard and Port Hueneme, two Naval bases, and several smaller water companies. Those agencies supply our water to over 222,000 people, most of it treated or blended with other supplies. Our water source is 100% local groundwater, pumped from wells near El Rio, north of Oxnard. Water from those wells has its origin in the mountains and valleys of the 1,600 square mile Santa Clara River watershed. The wells are in an aquifer called the Oxnard Forebay. Our water is naturally high in minerals that affect its taste, but is safe to drink. Our groundwater is considered to be "under the influence of surface water," which means we do extensive monitoring of turbidity and other parameters to meet health regulations.

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Water produced by our wells is naturally filtered through the ground. We use chlorine as a disinfectant to kill bacteria, parasites, and viruses. Then we add chloramines to provide a long-lasting disinfection residual to keep the water safe until it reaches our customers. Due to the longer-lasting residual of chloramines, owners of pet fish must treat their tap water before putting it into aquariums or ponds.

Types of Potential Contamination

In general, 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 ground, it dissolves, naturally-occurring minerals and, in some cases, radioactive material can pick up substances resulting from the presence of animals or from 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 stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming

Organic chemical contamination, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.

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

Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap is safe to drink USEPA and the California Department of Public Health prescribes regulations that limit the amount of certain contaminants in public drinking water. We treat our water to meet these health regulations. The Department's regulations also establish limits for contaminants in bottled water, which must provide the same protection for public health. Scientists and health experts are continually studying the effects of various chemicals in drinking water to make sure the public water supply is safe.

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 (1-800-426-4791).

Definitions

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.

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 the U.S. Environmental Protection Agency.

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. Secondary MCLs are set to protect to odor, taste and appearance of drinking water.

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

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.

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

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

Detection Limit for Reporting (DLR): The level above which a chemical is to be reported.

NA: Not applicable

ppm: parts per million, or milligrams per litre

ppb: parts per billion, or micrograms per litre

ND: none detected

pCi/L: picocuries per litre (a measure of radioactivity)

Turbidity

Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our water treatment. Turbidity is measured in units called NTUs. We achieved 100% compliance with turbidity standards in 2011.

Contaminants Detected in 2011

Chemical	State MCL MRDL	State DLR	PHG MCLG MRDLG	Units	Range	Avg	Date	Major Sources in Drinking Water
Primary Standards - Clarity								
Delivered water turbidity	TT	N/A	N/A	NTU	0.14 - 0.04	0.07	2011	Well corrosion byproducts. Microscopic soil particles.
Primary Standards - Radioactivity Contaminants								
Gross Alpha	15	3	NA	pCi/L	6.68 - 4.30	5.29	2011	Decay of natural and man-made deposits.
Uranium	20	1	0.43	pCi/L	8.41 - 4.63	6.64	2011	Erosion of natural deposits.
Radon	N/A	100	NA	pCi/L	364 - 129	273.25	2011	Decay of natural deposits.
Primary Standards - Inorganic Contaminants								
Arsenic	10	2	0.04	ppb	3 - ND	1.5	2011	Erosion of natural deposits.
Fluoride	2	0.1	1	ppm	0.8 - 0.7	0.75	2011	Erosion of natural deposits.
Nitrate (as NO_3)	45	2	45	ppm	9.5 - 4.7	6.72	2011	Leaching from fertilizers and septic systems.
Selenium	50	5	30	ppb	9 - 5	7	2011	Erosion of natural deposits. Discharge from mines, runoff from livestock lots.
Primary Standards - Disinfection								
Chloramine Residual (as Cl_2)	4	4	4	ppm	2.4 - 1.3	1.91	2011	Drinking water disinfectant added for treatment.
Total Haloacetic Acids	60	NA	NA	ppb	6 - 1	4.06	2011	By-product of drinking water disinfection.
Dibromoacetic Acid	N/A	2	NA	ppb	6 - 4	5.45	2011	By-product of drinking water disinfection.
Monobromoacetic Acid	none	1		ppb	1 - 1	1	2011	By-product of drinking water disinfection.
Trichloeoacetictic Acid	none	1		ppb	1 - 1	1	2011	By-product of drinking water disinfection.
Primary Standards - Disinfection By-Products								
Total Trihalomethanes	80	N/A	1.8	ppb	49.8 - 19.8	30.3	2011	By-product of drinking water disinfection.
Bromodichloromethane	N/A	1	NA	ppb	6.2 - 3.3	4.5	2011	By-product of drinking water disinfection.
Bromoform	N/A	1	NA	ppb	23.7 - 7.8	12.5	2011	By-product of drinking water disinfection.
Chloroform	N/A	1	NA	ppb	1.3 - 0.6	1	2011	By-product of drinking water disinfection.
Dibromochloromethane	N/A	1	NA	ppb	19.1 - 8.0	12.4	2011	By-product of drinking water disinfection.
Microbiological Contaminants								
Total Coliform bacteria	Systems that collect <40 samples/month: no more than 1 positive		0	Absense/ Presence/ 100ml	Absent	Absent	2011	Naturally present in the environment.
Fecal Coliform bacteria and *E.coli*	A routine and repeat sample are total coli-form positive, and one of these is fecal or E.coli positive		0	Absense/ Presence/ 100ml	Absent	Absent	2011	Human and animal fecal waste.
Secondary Standards								
Sodium	N/A	N/A	N/A	ppm	79 - 71	75	2011	Leaching from natural mineral deposits.
Sulfate	500	0.5	N/A	ppm	420 - 308	374.31	2011	Runoff/leaching from natural deposits.
Total Dissolved Solids, TDS	1,000	NA	N/A	ppm	900 - 670	803.85	2011	Leaching from natural mineral deposits.
Total Hardness	N/A	N/A	N/A	ppm	467 - 400	433.5	2011	Leaching from natural mineral deposits.
Total Organic Carbon (TOC)	N/A	0.3	N/A	ppb	1.3 - 0.8	1.03	2011	Naturally present in the environment.
Unregulated Chemicals								
Boron	N/A	100	N/A	ppb	600 - 500	550	2011	Erosion of natural deposits.

Water Quality Data

The table on page 3 lists all of the drinking water contaminants that we detected during the 2011 calendar year. The presence of these contaminants in the water does not indicate that the water poses a health risk. In addition to the contaminants on the table, we tested for many other chemicals which were not detected at significant levels. Please call us if you would like a copy of the complete list of chemicals we tested for and the test results.

Total Dissolved Solids and Sulfate

Total Dissolved Solids, or TDS, is a measure of the total mineral content of the water. TDS and sulfate are secondary standards related to the taste of the water, and water exceeding the MCL is generally safe for human consumption. Our water exceeds the secondary standards for TDS and sulfate because of naturally occurring minerals in the water.

Source Water Assessment

United Water completed a Source Water Assessment for its drinking water wells in October 2001. The current report is available for public review at our office in Santa Paula. The assessment provides a survey of potential sources of contamination of the groundwater that supplies our wells. Activities that constitute the highest risk to our water are the following: petroleum storage tanks and fueling operations, septic systems, and animal feed lots that are no longer in use. The most recent update for the Surface Water Sanitary Survey was completed in January of 2011 and was submitted to the Department of Health Services.

Cryptosporidium

Cryptosporidium is a microbial pathogen found in surface water throughout the U.S. Although filtration removes Cryptosporidium, the most commonly-used filtration methods cannot guarantee 100 percent removal. Our monitoring indicates the presence of these organisms in our source water and/or finished water. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of Cryptosporidium may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult with their doctor regarding appropriate precautions to take to avoid infection. Cryptosporidium must be digested to cause disease, and it may be spread through means other than drinking water.

Radon

Radon is a radioactive gas that you cannot see, taste or smell. It is found throughout the U.S. Radon can move up through the ground and into a home through cracks and holes in the foundation. Radon can build up to high levels in all types of homes. Radon can also get into indoor air when released from tap water from showering, washing dishes and other household activities. Compared to radon entering the home through soil, radon entering the home through tap water will be a small source of radon in indoor air. Radon is a known human carcinogen. Breathing air containing radon can lead to lung cancer. Drinking water containing radon may also cause increased risk of stomach cancer. If you are concerned about radon in your home, you may test the air in your home. There are simple ways to fix a radon problem that are not too costly. For additional information, call the National Safety Council's Radon Hotline (800-SOS-RADON).

About Nitrate

Nitrate in drinking water at levels above 45 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in a serious illness. Symptoms include shortness of breath and blueness of the skin. High nitrate levels may also affect the ability of the blood to carry oxygen in some individuals, such as pregnant women and those with certain specific enzyme deficiencies. Nitrate levels may rise quickly because of rainfall or agricultural activity and groundwater movement. If you are caring for an infant, or are pregnant, you should ask advice from your doctor, or choose to use bottled water for drinking and for mixing formula and juice for your baby.

Immuno-compromised Persons

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly and infants, can be particularly at risk from infections. 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).

Security of your Water

We have completed a Vulnerability Assessment of our OH water facilities. This work, funded by an EPA grant, has improved the security and safety of our water supply.

Hablamos Español

Para información en español llámenos al (805) 525-4431.