

A community's drinking water supply is a valuable resource and have a significant impact on a community's economy and quality of life. Given the importance of the Sacramento River to West Sacramento's continuing growth and to the health and well-being of our residents, the City actively participates in several source water protection programs.

#### SOURCE WATER PROTECTION

In addition to surface water, the City has two ground water wells. These wells are currently on standby status and are available to supply additional water during emergencies. The City did not utilize ground water in 2011.

The City of West Sacramento's main water supply is the Sacramento River. Our intake structure is located at Bryte Bend, upstream of the confluence of the Sacramento and American rivers. To ensure an adequate water supply for West Sacramento's current and future needs, the City maintains water supply contracts with the federal Bureau of Reclamation, the state Central Valley Project and with the North Delta Water Agency.

#### WATER SUPPLY SOURCES

Landlords who receive this report should forward it to tenants residing within the city, for their information. Additional copies are available upon request. Please contact the City of West Sacramento Public Works Department, (916) 617-4850. This report is also available at the City of West Sacramento web site [www.cityofwestsacramento.org/city/depts/pw/public\\_operations](http://www.cityofwestsacramento.org/city/depts/pw/public_operations) **Este informe contiene información importante sobre su agua potable. Tradúzcalo, o hable con alguien que pueda entenderlo.** **Данный отчет содержит важную информацию о вашей питьевой воде. Переведите его или проконсультируйтесь с тем, кто его понимает.**

The City of West Sacramento is dedicated to supplying its customers with a safe and reliable supply of high quality drinking water. We are pleased to present this annual report, which conforms to a federal regulation that requires community water systems to provide customers with detailed information about their drinking water. It includes information about water supply sources, water treatment, water quality, drinking water regulations and source water protection programs. We hope that the information in this report increases your understanding of the water treatment process and your confidence in the quality of the water you drink.

#### INTRODUCTION



# WEST SACRAMENTO

# WATER QUALITY



## 2011 CONSUMER CONFIDENCE REPORT

Recent legislation of regional water management and water supply issues resulted in the implementation of these water conservation programs.

■ **The Regional Water Authority Water Efficiency Program** partners with water agencies throughout the Greater Sacramento Region working to help agencies better meet regulations in water conservation programs. Water conservation programs include education, water efficiency surveys for residents, commercial, industrial, and institutional water users. Wise water use such as landscaping with low water demanding plants and water timers.

■ **The Drinking Water Source Assessment Program (DWSAP)** allows us to identify sources of contamination and respond to possible contamination near our water treatment plant and throughout the watershed. Our Source Water Assessment was completed in November 2000. The DWSAP survey identified agricultural drainage as the activity to which West Sacramento's surface water source is most vulnerable. A copy of the survey is available for your review at the Public Works Department, 1110 West Capitol Avenue in West Sacramento.

■ **The Sanitary Survey of the Sacramento River Watershed**, an ongoing project in partnership with the City of Sacramento, the Placer County Water Agency, the County of Roseville and East Bay Municipal Utility District, keeps us up to date on developments in the Sacramento Valley watershed. The Sanitary Survey of 2010 was completed and is available for review at the Public Works Department, 1110 West Capitol Avenue in West Sacramento.

■ **The Keep the Waters Clean Campaign**, in partnership with the City of Sacramento, the County of Sacramento and the East Bay Municipal Utility District, protects water quality by encouraging boaters and other recreational users of the Sacramento River to use pumpouts and public restrooms rather than the river to dispose of wastes.

■ **The Rice Pesticide Workgroup**, in partnership with the City of Sacramento, the County of Sacramento and the East Bay Municipal Utility District, keeps us up to date on this important water quality issue. Our program of frequent monitoring at our raw water intake during rice season has been expanded to include new rice pesticides. In addition, we continually voice our concerns about the impact of rice growing activities on source water quality in meetings with the California State Department of Pesticide Regulation, the Regional Water Quality Board (RWQCB), the California Rice Commission, and Agriculture Commissioners of the major rice growing counties. We have also presented our concerns directly to the RWQCB and to rice growers.

#### WATER CONSERVATION

Over 4.3 billion gallons of high quality drinking water was produced at the BBWTP in 2011. Most of this water was not used for drinking, but for landscape watering. An easy and effective way to conserve water is to follow the City's water conservation ordinance by using an odd-even watering schedule for outdoor landscaping. If your home address is an odd number, water on Mondays, Wednesdays or Fridays. If your address is an even number, water on Tuesdays, Thursdays or Saturdays. Remember, most lawns will be healthier if watered thoroughly once a week or twice weekly during the hot summer months. Consult a lawn care professional for further information.

#### QUESTIONS AND COMMENTS

We hope you find this report to be useful and informative. If you have any questions or comments about this report or about your drinking water, please call Dan Mount, Utilities Superintendent, (916) 617-4860.

#### OUR COMMITMENT TO YOU

The City of West Sacramento has delivered over 30 billion gallons of high quality, treated water to our residents since the opening of the Bryte Bend Water Treatment Plant in 1988. Today, as West Sacramento grows, our commitment to you continues. We are proud of the service we provide and promise to continue to deliver the highest quality drinking water to you and your family.



Bryte Bend Water Treatment Plant  
400 North Harbor Blvd.  
West Sacramento, CA 95605  
JUNE, 2012

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#### Water Conservation-Odd/Even Watering Days

Your efforts to improve water efficiency will save energy in your home and in the community. Landscapes will be healthier and better-looking. A reduction in pollution in our streams by stopping wasteful runoff from our landscapes to storm drains will insure cleaner waters for fish, flora and fauna.

[www.cityofwestsacramento.org/city/depts/pw/public\\_operations/environmental\\_prog](http://www.cityofwestsacramento.org/city/depts/pw/public_operations/environmental_prog)

The City of West Sacramento promotes water conservation at all times. Wise water use is foremost in our commitment to the community. Considering the many uses of our drinking water in our day-to-day lives, water efficiency is now a way of life. For more information on this topic visit:

#### WATER EFFICIENCY

For further information about the water treatment process, please contact the BBWTP at (916) 617-4860.

■ A vigorous program of preventative maintenance helps us to operate equipment at maximum efficiency.

■ Membership in local, regional and national water industry organizations allows us to draw on expertise and experience outside of our own city.

■ Monitoring current research on water treatment, and continuing education and training at our treatment plant assures you of a motivated, professional staff focused on producing the best quality water possible.

■ The City of West Sacramento maintains the high quality of our treatment process through the following:

■ A vigorous program of preventative maintenance helps us to operate equipment at maximum efficiency.

■ Membership in local, regional and national water industry organizations allows us to draw on expertise and experience outside of our own city.

■ **Water Treatment: Surface Water**  
Water withdrawn from the Sacramento River is treated at the City's Bryte Bend Water Treatment Plant (BBWTP), which is operated 24 hours a day by state-certified Water Treatment Plant Operators. Over 4.3 billion gallons of Sacramento River water was treated in 2011.

#### ADDITIONAL INFORMATION

- **For questions about this report:**  
**Dan Mount**  
Utilities Superintendent  
(916) 617-4860
- **For additional copies of this report:**  
**Public Works Department**  
(916) 617-4850
- **To report problems after hours:**  
**Public Works Department**  
(916) 372-3375
- **For billing questions:**  
**Finance Department**  
(916) 617-4589
- **For water meter retrofit program:**  
**Dereck Goodwin**  
(916) 617-4750
- **For water quality complaints:**  
**Bryte Bend Water Treatment Plant**  
(916) 617-4860
- **EPA Safe Drinking Water Hotline**  
(800) 426-4791
- **City of West Sacramento web site:**  
[www.cityofwestsacramento.org](http://www.cityofwestsacramento.org)
- **City Council Meetings:**  
Twice monthly - Wednesdays at 7 p.m. in the City Council Chambers, 1110 West Capitol Ave. For specific dates check the "City Calendar" on [www.cityofwestsacramento.org](http://www.cityofwestsacramento.org) or phone (916) 617-4500.



Bryte Bend Water Treatment Plant  
Sacramento River Intake Pumps

# WATER QUALITY ANALYSIS RESULTS

The City of West Sacramento routinely monitors your drinking water according to federal and state laws. The following table shows selected results of our monitoring tests for the period of January 1st to December 31st, 2011. A complete and detailed listing of water quality analysis results for the four most recent quarters is available on the City of West Sacramento web site, [www.cityofwestsacramento.org/community/Detail2011WaterReport.pdf](http://www.cityofwestsacramento.org/community/Detail2011WaterReport.pdf)

To help you better understand the terms and abbreviations used in the report, we've provided the following definitions:

**California detection level for purposes of reporting (DLR)** - the concentration of a contaminant in drinking water at or above which is reported to the California department of public health

**Parts Per Million (PPM) or milligrams per liter (mg/L)** - A measurement of chemical concentration.

**Parts Per Billion (PPB) or micrograms per liter (µg/L)** - A measurement of chemical concentration.

**Picocuries per liter (pci/l)** - A unit of measurement of a chemical concentration.

**Regulatory action level (AL)** - the concentration of a contaminant which, if exceeded, triggers treatment or other requirement that a water system must follow.

**Maximum Contaminant Level Goal (MCLG)** - The level of a contaminant in drinking water below which there is no known or expected risk to health.

**Maximum Contaminant Level (MCL)** - The maximum level of a contaminant that is allowed in drinking water. It is set as close to the Maximum Contaminant Level Goal as feasible, using the best available treatment technology.

**Maximum residual disinfectant level (MRDL)** - The highest level of 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. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants

**Micro ohms per centimeter (umhos/cm)** - A unit of measurement.

**N/A** - Not applicable.

**Nephelometric Turbidity Unit (NTU)** - A measurement of the clarity of water. Turbidity in excess of 5 NTU is noticeable to the average person.

**Primary Drinking Water Standard** - MCLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment techniques.

**Public Health Goal (PHG)** - The level of a contaminant in drinking water below which there is no known or expected risk to health. The California Environmental Protection Agency sets Public Health Goals.

**Secondary Drinking Water Standard** - MCLs for contaminants that may influence consumer acceptance of water, but are not otherwise harmful. These standards relate to taste, odor, color, mineral content and clarity.

**Treatment technique (TT)** - a required process intended to reduce the level of a contaminant in drinking water

**HARDNESS** There is no MCL for hardness. We are frequently asked for the hardness of West Sacramento water in grains per gallon. One grain/gallon is equal to 17.1 mg/L of hardness.

## 2011 TEST RESULTS

Contaminant	Type of MCL	Violation Y / N	Maximum Level Detected	Units of Measurement	DLR	MCL	California PHG	Likely Source of Contamination
<b>Inorganic Contaminants</b>								
Fluoride	Primary	N	0.97	PPM	0.1	2	1	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Sodium	N/A	N	13	PPM	N/A	N/A	N/A	naturally occurring in the environment
Total Hardness	N/A	N	62	PPM	N/A	N/A	N/A	erosion of naturally occurring mineral deposits
Aluminum	Primary	N	39	PPB	50	1,000	600	erosion of natural deposits; residue from some surface water treatment processes
Barium	Primary	N	23	PPB	100	1,000	2,000	discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Chloride	Secondary	N	6.4	PPM	N/A	250	N/A	runoff/leaching from natural deposits; seawater influence
Arsenic	Primary	N	1.3	PPB	2	10	0.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
<b>Other</b>								
Specific Conductance	Secondary	N	160	UMHOS/CM	N/A	900	N/A	substances that form ions when in water; seawater influence
Sulfate	Secondary	N	6.8	PPM	0.5	250	N/A	runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids	Secondary	N	100	PPM	N/A	500	N/A	runoff/leaching from natural deposits
Calcium	N/A	N/A	13	PPM	N/A	N/A	N/A	runoff/leaching from natural deposits
Magnesium	N/A	N/A	7.0	PPM	N/A	N/A	N/A	runoff/leaching from natural deposits
Potassium	N/A	N/A	0.95	PPM	N/A	N/A	N/A	runoff/leaching from natural deposits
<b>Disinfection Byproducts</b>								
Total Trihalomethanes	Primary	N	34.3	PPB	N/A	80	N/A	by-product of drinking water disinfection
<b>Radioactive Contaminants</b>								
Gross Beta	Primary	N	0.34	pCi/L	4	50	N/A	decay of natural and manmade deposits

## WATER HARDNESS SCALE

Grains Per Gallon	Miligrams Per Litre (mg/L) Parts Per Million (PPM)	Classification
1.0 - 3.5	LESS THAN 17.1	SOFT
LESS THAN 1.0	LESS THAN 17.1	SLIGHTLY HARD
	17.1 - 60	MODERATELY HARD
3.5 - 7.0	60 - 120	HARD
7.0 - 10.5	120 - 180	VERY HARD
OVER 10.5	OVER 180	VERY HARD

## WATER QUALITY

All public water supplies must meet stringent federal and state standards. Treated water delivered to you and your family not only meets, but surpasses state and federal standards for quality and safety. We know this because we continually test our water using modern equipment and procedures, in our own state-certified laboratory and commercial laboratories. This regular program of water analysis, including sampling at over fifty representative households throughout the city, assures safe water for you and your family.

## 2011 WEST SACRAMENTO WATER HARDNESS

Grains Per Gallon	Miligrams Per Litre (mg/L) Parts Per Million (PPM)	Classification
3.63	62	MODERATELY HARD

# WHAT YOU SHOULD KNOW ABOUT...

## ARSENIC

The city's water treatment plant produces drinking water that meets the Federal and State MCL for arsenic; the detected level of arsenic found in the chart above was over seven times lower than this MCL. Arsenic is in the carcinogenicity health risk category as determined by the U.S. and California E.P.A. The city's water treatment plant is not required to take any action to reduce or eliminate any exceedance of a public health goal, and will continue its current water treatment process.

## FLUORIDE

The city water system treats your water by adding FLUORIDE to the naturally occurring level in order to promote dental health in consumers. The fluoride levels in the treated water for 2011 were maintained within an average monthly range of 0.80 to 0.99 mg/L. The maximum level of Fluoride measured in West Sacramento during 2011 was 0.97 mg/L. The California MCL for fluoride is 2.0 mg/L. A Public Health Goal (PHG) of 1 ppm (1,000 ppb) is developed for fluoride in drinking water. This level is intended to be an approximate year-round average. The U.S. Environmental Protection Agency's (U.S. EPA's) Maximum Contaminant Level (MCL) for fluoride is 4 mg/L. U.S. EPA's MCL was set to protect against crippling skeletal fluorosis, with a secondary MCL of 2 mg/L to protect against dental fluorosis (in mild cases, fluorosis is a slight discoloration of teeth, in more severe cases it can lead to pitting and breaking of the teeth). Moderate to severe dental fluorosis is rare when the drinking water fluoride level is in the range of 1 mg/L, but begins to become significant at concentrations close to 2 mg/L. The PHG is based on a no-observed-adverse effect-level (NOAEL) of 1 mg/L for dental fluorosis in children. A relative source contribution of 100% (1) was applied yielding a calculated PHG of 1 mg/L. This level is judged to be the optimum level for reducing the prevalence of dental fluorosis while providing protection against dental caries. In reviewing the available data on health effects of fluoride, studies have been found which provide some indication that there may be a causative relationship between lifetime consumption of fluoridated drinking water and increased incidence of hip fracture in the elderly. However, this health endpoint is not sufficiently established at present to provide the basis for calculating a PHG. Therefore, OEHHA calculates a PHG of 1 mg/L (1 ppm) for fluoride in drinking water.

## SODIUM

We are also frequently asked about the sodium content of the West Sacramento water. Sodium is a naturally occurring chemical element and is present in our source water. The maximum level of sodium measured in West Sacramento water during 2011 was 13 mg/L. At this level an individual will ingest 13 mg of sodium for every liter of water consumed. There is no MCL for sodium in drinking water.

Sodium in the diet is also measured in milligrams (mg). There is no recommended dietary allowance for sodium. However, the National Academy of Sciences states that a person should consume at least 500 mg a day and healthy adults should stay within the range of 1,100 to 3,300 mg a day. Individuals concerned with the effect of West Sacramento water on their daily intake of sodium should consult a healthcare professional. **Additional information about potential health effects of drinking water can be obtained by calling the EPA's Safe Drinking Water Hotline at (800) 426-4791.**

## LEAD and COPPER

In accordance with federal regulations, the City of West Sacramento tests your water for lead and copper every three years to determine if any leaching has occurred from household plumbing. Our last round of lead and copper testing took place in the summer of 2010. Samples from thirty homes were tested. Results for lead testing ranged from non-detectable to 1.0 PPB. The 90th percentile value for lead was non-detectable. These results are well below the 15 PPB federal Action Level for lead. Results for copper testing ranged from non detectable to 0.03 PPM. The 90th percentile value for copper was 0.027 ppm. These results are below the 1.3 PPM federal Action Level for copper. Our next round of lead and copper testing will take place in the summer of 2013.

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in and the age of your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested by a certified commercial laboratory. You may also wish to flush your tap for 30 seconds to two minutes before drinking the tap water. **Additional information is available from the EPA's Safe Drinking Water Hotline at (800) 426-4791.**

## NITRATE

Nitrate in drinking water at levels above 45 mg/L is a health risk for infants of less than six months of age. Such 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. Nitrate levels above 45 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider. The 2011 Bryte Bend Water Treatment Plant drinking water results for nitrate was non-detectable.

## IMPORTANT INFORMATION FOR IMMUNO-COMPROMISED PERSONS

**Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer and 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 healthcare providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the EPA Safe Drinking Water Hotline, (800) 426-4791.**

## DRINKING WATER CONTAMINANTS

All 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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at (800) 426-4791. The sources of drinking water (both tap water and bottles 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 materials and can pick up substances resulting from the presence of animals or from human activity.

## Contaminants in source water may include:

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

## WATER METER IMPLEMENTATION PROGRAM

The City of West Sacramento is continuing with the Water Meter Program and working toward complying with California State Law, Assembly Bill No. 514 (AB 514) by continuing to install meters to be able to quantify the water use of the City. Last year the program changed meter types being installed to comply with the recently enacted AB 1953 which requires water purveyors like the City to reduce the amount of lead in the system. The Water Meter program began to install environmental brass (EB) meters on both residential and commercial services as of January 2011. The program's main focus last year was to implement a Fixed Base System (FBS) that can remotely read meters more readily. The FBS allows both the Finance and Public Works departments to fully access data on any meter. This system allows the City to verify if a meter is not working properly as well as verifying a resident's request to see if there is a potential leak in their system by being able to collect data hourly if needed. The City has worked toward and programmed funding for the next 4 years to be able to complete all residential meters that currently do not have one. The City will be installing a minimum of 250 meter along with repairing or replacing several feet of backyard water mains in 2012 with larger projects and neighborhoods to follow. Residents can request a meter be installed at any time. This program, along with other pertinent information, can be viewed on the City's website. **For additional information about the water meter program, contact project manager Dereck Goodwin, Associate Civil Engineer or Jay Davidson, Senior Civil Engineer at (916) 617-4850.**

