

Public Works Department Water Division



City of Greenfield

Annual Water Quality Report 2011 Reporte Anual De calidad del Sistema De Agua 2011

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. Tradúzcalo ó hable con alguien que lo entienda bien. Llamenos si tiene preguntas al (831) 674-5591.

The City of Greenfield is committed to providing a safe, reliable supply of excellent quality drinking water. The City encourages public interest and participation in decisions affecting the community's drinking water supply. Our City Council meets regularly at 6:00 P.M. on the second & fourth Tuesday of each month at 599 El Camino Real in the City's Council Chambers. Occasionally special meetings are called to address issues of public interest that need immediate attention. The times and locations for these special meetings will be posted in front of City Hall in the public bulletin board.

Last year, as in years past, your tap water met all EPA and State drinking water health standards. Local water vigilantly safeguards its water supplies and once again we are proud to report that our system has never violated a maximum contaminant level or any other water quality standard. This brochure is a snapshot of last year's water quality. Included are the details about where your water comes from, what it contains and how it compares to State standards. We are committed to providing you with information because informed customers are the best allies.

The California Department of Health Services (CDHS), Drinking Water Field Operations Branch requires water agencies to annually notify their customers of the contaminants or elements in their drinking water. *This is not the result of punitive action, nor is it indicative of any violation of treatment practices. It is strictly a mandated public information service legislated to keep you informed each year of the facts about your drinking water.*

The City of Greenfield derives its municipal water supply from ground-water well sources within the Salinas Valley Ground Water Basin. The City currently operates Well 1, Well 6 and Well 7 which vary in depth. In 2011, these wells supplied 603 million gallons of water (1850 Acre Feet) for Greenfield's 17,898 residents. In 2011, these wells supplied our residents with water for personal & commercial use. After the water comes out of these wells, we treat it with chlorine for disinfection to protect against microbial contaminants.

To meet the growing needs of our customers the City of Greenfield is continually developing and improving our water system. For fiscal year 2012-2013 the City has budgeted funds for the drilling and development of a new well. This well will not only insure a safe and adequate water supply for our customers, but will also allow the city to use time of day pumping to save money and conserve power during peak demand. The new well along with a the installation of a new 12" water line from Walnut Avenue & 14th Street to Walnut Avenue and 10th Street to help supply our 1.5 million gallon tank. The Public Works Department will be replacing all manual read water meters with new digital automatic digital water meters, which will cut meter reading time in half, and insure a more accurate meter read. We will also be replacing fifty (50) fire hydrants through out the City limits. In 2011 we tested 313 backflow assemblies and repaired 1 of those devices. A backflow is a device that prevents reversal of water flow, protecting the City's potable water supply from any contamination.

Personnel in charge of delivering safe drinking water in all domestic drinking water systems must be certified. The City of Greenfield has met this challenge to upgrade the certification of personnel which is earned by experience, education and testing.

The City has performed an assessment of our source water that was completed in July 2001. Well 1 is considered most vulnerable to the following activities not associated with any detected contaminants Crops, irrigated; Fertilizer, Pesticide/Herbicide Application. Well 6 is considered most vulnerable to the following activities associated with contaminants that have been detected in the water supply: Crops, irrigated; and is considered most vulnerable to the following activities not associated with any detected contaminants: Fertilizers, Pesticides/Herbicide Application. A copy of the completed assessment may be viewed at the following locations: City of Greenfield, 599 El Camino Real, Greenfield, Ca. or the Department of Health Services (DHS), Drinking Water Field Operations Branch 1 Lower Ragsdale Dr., Building 1, Suite 120, Monterey, Ca. 93940

GENERAL INFORMATION ABOUT WATER:

The safety of public water supplies has received much attention in recent years. City of Greenfield customers should know that your water supply meets all regulatory standards. The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

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 EPA's Safe Drinking Water Act Hotline (1-800-426-4791)

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-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 persons, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Center for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbiological contaminants are available from the Safe Drinking Water Hotline. (1-800-426-4791)

Types of contaminants that may be present in some source waters prior to treatment could 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 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, 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.

California drinking water regulations require that water delivered by public water systems be, at all times, pure, wholesome and potable, as required by the Federal and State Safe Drinking Water Acts. To accomplish this mandate, domestic water must meet strict standards, as provided in the California Domestic Water Quality and Monitoring Regulations. This regulation includes primary and secondary maximum contaminant levels (MCL) and monitoring frequencies for specified microbiological, chemical and radionuclide contaminants. Primary contaminants are those, which may have an adverse health effect. Secondary contaminants are those which may adversely affect the aesthetic quality of the drinking water. The regulation includes the provisions adopted by the federal Safe Drinking Water Act of 1974. The State has direct enforcement responsibility for all.

The following table lists all the drinking water contaminants that we detected during the 2010 and 2011 calendar year. In order to ensure that tap water is safe to drink, the California Department of Health prescribes regulations, which limit the amount of certain contaminants in water provided by public systems. We treat our water according to the Departments regulations. The Department's Food and Drug Branch establishes limits for contaminants in bottled water that must provide the same protection for the public. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, Data presented in this table is an average of testing done on all 3 wells. 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 the data, though representative of the water quality, is more than a year old. As you can see by the table, our system had no violations. We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some contaminants have been detected. The USEPA has determined that your water IS SAFE at these levels.

DEFINITIONS OF TERMS AND ABBREVIATIONS USED IN THE TABLE:

- > **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 economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.
- > **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.
- > **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 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. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- > **Primary Drinking Water Standard (PDWS):** MCLs and MRDLs for contaminants that affect health, along with their monitoring and reporting requirements, and water treatment requirements.
- > **Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.
- > **Regulatory Action Level (AL):** The concentration of a contaminant that, if exceeded, trigger's treatment or other requirements that a water system must follow.

WATER CONSERVATION TIPS FOR CONSUMERS

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference – try one today and soon it will become second nature.

- * Take short showers – a 5 minutes shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- * Shut off water while brushing your teeth, washing your hair and shaving and save up to 500 gallons a month.
- * Use a water-efficient showerhead. They are inexpensive, easy to install, and can save you up to 750 gallons a month.
- * Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- * Water plants only when necessary.
- * Fix leaking toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.
- * Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.
- * Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill!

Visit www.epa.gov/watersense for more information.

Additional information about the content of this report (and additional copies) can be obtained by call (831) 674-2635 / or stopping by Greenfield City Hall, 599 El Camino Real, Greenfield, CA 93927, or Email: publicworks@ci.greenfield.ca.us

SUMMARY OF WATER QUALITY DATA FOR THE YEAR 2011 - WELLS 1, 6 AND 7

Primary Standards - Mandated Health Related Standards

Coliform Bacteria	Number of Detections	MCL	PHG	MCLG	Likely Source of Contamination
Total Coliform Bacteria (Total Coliform Rule)	0	No more than one positive monthly sample	0	0	Naturally present in the environment
Fecal Coliform Bacteria (Total Coliform Rule)	0	A routine sample and a repeat sample are total coliform positive, and one of these is also fecal coliform or E.coli positive	0	0	Human and animal fecal waste

Radioactive Contaminants	Violation Y/N	Level Detected	Range	Unit	MCL or [MRDL]	PHG	MCLG	Likely Source of Contamination
Gross Alpha particle activity	N	4.8	2.94-7.64	pCi/L	15	15	0	Erosion of natural deposits
Combined radium	N	0.52	ND-1.6	pCi/L	5	5	0	Erosion of natural deposits
Uranium	N	6.2	2-7.4	pCi/L	20	20	0.43	Erosion of natural deposits

Contaminant	Violation Y/N	Level	Range	Unit	MCL or [MRDL]	PHG	MCLG	Likely Source of Contamination
Inorganic Contaminants								
Arsenic	N	1.7	1-2	ppb	10	N/A	N/A	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Nitrate (as NO3)	N	13	ND-31	ppm	45	45	N/A	Runoff and leaching from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium	N	1	ND-33	ppb	50	30	N/A	Discharge from petroleum, glass, and metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers; runoff from livestock lots (feed additive)

Secondary Standards - Aesthetic Standards

Color	N	1.3	ND-31	Units	15	N/A	N/A	Naturally occurring organic materials
Turbidity	N	0.13	ND-0.35	Units	5	N/A	N/A	Soil runoff
Total Dissolved Solids	N	523	358-715	ppm	1000	N/A	N/A	Runoff/leaching from natural deposits
Specific Conductance	N	776	563-1046	µS/cm	1600	N/A	N/A	Substance that form ions when in water: seawater influence
Chloride	N	45	19-81	ppm	500	N/A	N/A	Runoff/leaching from natural deposits; sea water influence
Sulfate	N	140	87-217	ppm	500	N/A	N/A	Runoff/leaching from natural deposits; industrial waste

Other Constituents

Sodium	N	46	30-77	ppm	N/A	N/A	N/A	Generally found in ground and surface water
Total Hardness	N	18	13-22	Grains per Gallon	N/A	N/A	N/A	Generally found in ground and surface water

LEAD and COPPER	# Of Samples	90th Percentile	# Of Sites	AL	PHG	MCLG	MCLG	Likely Source of Contamination
Lead (ppb)	60	ND	0	15	0.2	0.2	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	60	0.264	0	1.3	0.3	0.2	0.2	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

Key to Table

ND: not detectable at testing limit
µS/cm: a measure of specific conductance

ppm: parts per million or milligrams per liter (mg/L)
ppb: parts per billion or micrograms per liter (ug/L)