



CITY OF GREENFIELD

Annual Water Quality Report 2014 Reporte De Sistema De Agua 2014

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 and 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 USEPA 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 varying in depth. In 2014, these wells supplied 585 million gallons of water (1795 Acre Feet) for Greenfield's 17,898 residents. In 2014, these wells supplied our residents with water for personal and 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. The city is currently working with a consulting firm to develop the City's Water Master Plan. This plan is to determine the future needs of the City and it's current water storage facilities. This study 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 PG&E demand. In 2014, we tested 275 backflow prevention assemblies to protect the City's water distribution system from cross 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.

In August of 2014 The City of Greenfield has adopted a Water Contingency Plan. This plan is a four stage plan with dictates water conservation and the necessary steps to prevent water waste and shortage during the times of drought. As mandated by the office of Governor Brown's executive order, the State Water Resources Control Board has imposed restrictions on potable water usage to achieve a statewide reduction of 25%. The City of Greenfield is currently in forcing Stage three of the Contingency Plan that restricts outdoor landscape water use to two days per week, no watering of ornamental turf on public street medians, no washing down of hard or paved surfaces and new construction will install drip or micro spray irrigation systems.

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 USEPA'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/Centers 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 2013 and 2014 calendar year. In order to ensure that tap water is safe to drink, the California Department of Health Services prescribes regulations, which limit the amount of certain contaminants in water provided by public water 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.

Federal Unregulated Contaminants Monitoring Rule-3 (UCMR-3)

In 2014, the District participated in the third phase of the Unregulated Contaminant Monitoring Rule (UCMR3). Unregulated contaminants are those for which the EPA has not established drinking water standards. Monitoring assists the EPA in determining the occurrence of these compounds and whether or not regulation is warranted. Our system conducted Assessment Monitoring (List 1) completing testing for

twenty-one UCMR-3 chemicals specified by the US Environmental Protection Agency (USEPA). The results were reported directly to the USEPA. Some UCMR3 chemicals were detected in Greenfield community. Detections are summarized in the UCMR3 table, along with typical contaminant sources. Marina Coast Water District's UCMR3 report is available in full by telephoning the District at 384-6131. Visit <http://water.epa.gov/lawsregs/rulesregs/sdwa/ucmr/ucmr3> for general information on UCMR3.

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

City of Greenfield's stage three water restriction

1. Landscape Irrigation: Landscape watering using sprinkler or irrigation systems is permitted only two days per week before 10 a.m. or after 7 p.m. Addresses ending in even numbers (0, 2, 4, 6, and 8,) may water on Monday and Thursday. Addresses ending in odd numbers (1, 3, 5, 7, and 9) may water on Tuesday and Friday. If there is no street address, you may water on Wednesday and Saturday. Watering in a manner that allows water to run off the property onto sidewalks, gutters, streets, ditches, or storm drains is prohibited.
2. Vehicle and Equipment Washing: Non-commercial washing of vehicles is permitted and allows you to wash your vehicle one day a week but requested that you wash your vehicle either before 10:00 a.m. or after 7:00 p.m on any given day.
3. Hose Nozzles: All hoses must be equipped with a shut-off nozzle.
4. Washing Down Hard or Paved Surfaces: Washing sidewalks, walkways, driveways, parking lots, patios, or other paved surfaces is not permitted.
5. Washing of Exteriors: Washing the exterior of dwellings, buildings or structures is prohibited.
6. Swimming Pools and Spas: Filling new swimming pools is prohibited. Draining and refilling existing swimming pools is permitted only if repairing a pool leak or repairing, maintaining, or replacing a pool component that has become hazardous. All pools and tubs must be covered when not in use to reduce evaporation.
7. Uncorrected Plumbing Leaks: Plumbing leaks, whether indoors or outdoors, must be repaired within 24 hours or the City must be notified when the repair will be made.
8. Commercial Lodging Establishments: Hotels and motels must offer lodgers the option to forego daily laundering of towels, sheets, and linens.

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 7
- 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!

For more information or you can visit <http://www.waterawareness.org> or www.epa.gov/watersense

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

City of Greenfield: Where Historic El Camino Real Meets Monterey Wine Country

SUMMARY OF WATER QUALITY DATA FOR THE YEAR 2014 - 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	5.6	3.6-7.64	pCi/L	15	15	15	Erosion of natural deposits	
Combined radium	N	0.72	ND-1.6	pCi/L	5	5	5	Erosion of natural deposits	
Uranium	N	6.2	1.97-8.82	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	0.004	0.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes	
Barium	N	0.042	0.03-0.06	ppm	1	2	2	Discharge from oil drilling wastes and from metal refineries; erosion of natural deposits	
Chromium	N	5	4-6	ppb	50	100	100	Discharge from Steel and pulp mills and chrome plating; erosion from natural deposits	
Hexavalent Chromium	N	2.1	1.7-2.6	ppb	10	0.02	0.02	Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities; erosion of natural deposits	
Fluoride	N	0.3	0.2-.04	ppm	2	1	1	Erosion of natural deposits; water additive that promotes strong teeth, discharge from fertilizer and aluminum factories.	
Nitrate (as NO3)	N	8	1-16	ppm	45	45	45	Runoff and leaching from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits	
Nitrite (as NO2)	N	0.13	ND-.02	ppm	1	1	1	Runoff and leaching from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits	
Selenium	N	1.33	ND-2	ppb	50	30	30	Discharge from petroleum, glass, and metal refineries; erosion of natural deposits; discharge from mines and chemical	
Total Trihalomethanes	N	1.25	ND-5.3	ppb	80	N/A	N/A	By-product of drinking water disinfection	
Secondary Standards - Aesthetic Standards									
Color	N	0.67	ND-2	Units	15	N/A	N/A	Naturally occurring organic materials	
Turbidity	N	0.08	ND-0.15	Units	5	N/A	N/A	Soil runoff	
Total Dissolved Solids	N	527	380-706	ppm	1000	N/A	N/A	Runoff/leaching from natural deposits	
Specific Conductance	N	782	563-1046	µS/cm	1600	N/A	N/A	Substance that form ions when in water: seawater influence	
Chloride	N	47	20-81	ppm	500	N/A	N/A	Runoff/leaching from natural deposits; sea water influence	
Iron	N	35	ND-85	ppb	300	N/A	N/A	Leaching from natural deposits; industrial wastes	
Sulfate	N	148	97-221	ppm	500	N/A	N/A	Runoff/leaching from natural deposits; industrial waste	
Other Constituents									
Sodium	N	52	24-82	ppm	N/A	N/A	N/A	Generally found in ground and surface water	
Total Hardness	N	17	13-22	Grains per Gallon	N/A	N/A	N/A	Generally found in ground and surface water	
LEAD and COPPER	# Of Samples Collected	90th Percentile Level	# Of Sites Exceeding AL	AL	PHG			Likely Source of Contamination	
Lead (ppb)	30	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)	30	0.163	0	1.3	0.3	0.2	0.2	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives	
Unregulated Contaminant Monitoring									
UCMR3		Entry Point to the Distribution System			Distribution System Maximum Residence Time			Major Sources in Drinking Water	
Detected Contaminants	Units	Annual Average	Range Low High	Tested Year	Annual Average	Range Low-High	Violation	Major Sources in Drinking Water	
Chromium	ppt	2300	2100-2500	2014	2150	2100-2200	No	Erosion of Natural Deposits	
Molybdenum	ppb	22	13-31	2014	26	25-27	No	Erosion of Natural Deposits	
Strontium	ppb	630	430-820	2014	725	710-740	No	Erosion of Natural Deposits	
Vanadium	ppb	13.75	13-14	2014	13	12-14	No	Erosion of Natural Deposits	
Hexavalent Chromium	ppt	2125	1800-2400	2014	2300	1900-2700	No	Erosion of Natural Deposits	
Chlorate	ppb	135	ND-160	2014	160	150-170	No	Disinfectant added for treatment, an agricultural defoliant or desiccant	
Key to Table									
ND: not detectable at testing limit					ppm: parts per million or milligrams per liter (mg/L)				
µS/cm: a measure of specific conductance					ppb: parts per billion or micrograms per liter (ug/L)				
					ppt: parts per trillion or nanograms per liter				