

City of Fernley

Consumer Confidence Report

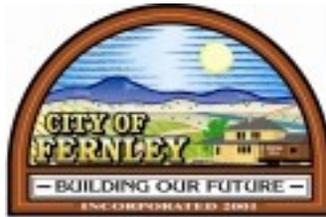
20th Annual Report • January - December 2017

This brochure is a synopsis of the quality of water that the City of Fernley produced last year for our customers. Included in this report are details about where the City's water comes from, what it contains and how it compares to Environmental Protection Agency (EPA) and State Standards.

We are committed to providing our consumers with as much information as we can because well informed customers are the City's best advocates. It is important that our customers be aware of the efforts that are being made annually to improve the water system. To learn more, please attend any of the regularly scheduled Fernley City Council Meetings, which are held on the first and third Wednesday of each month, or contact the Public Works Department at (775) 784-9910. You can also review the City's budget and see what capital improvement projects (CIPs) are planned for this up coming year at www.cityoffernley.org.

Inside this issue:

Messages from the EPA	1
Water Quality/Treatment	2
Terms/Abbreviations:	2
Water Quality Data:	3
Did you know?:	4



City of Fernley
Public Works Department
Dave Whalen, P.E., CEM
Public Works Director
595 Silver Lace Blvd.
Fernley, NV 89408
(775) 784-9910

MESSAGES FROM THE EPA

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, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control and Prevention (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 (800-426-4791).

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 Environmental Protection Agency's Safe Drinking Water Hotline at (800) 426-4791.

The sources of drinking water (both tap 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 activities.

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.

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

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff and septic systems.

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 water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Water Quality and Treatment

In 2017, the City of Fernley's public water system tested a minimum of 20 samples per month in accordance with the Total Coliform Rule for microbiological contaminants. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are performed to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public by newspaper, television or radio.

The City of Fernley's public water system provided 1,230,641,000 gallons of safe drinking water to the residents of Fernley in 2017. Your state certified water treatment and distribution systems operators are dedicated to providing residents with quality service, by consistently ensuring that an ample supply of safe drinking water is provided to the taps.

Please feel free to visit www.cityoffernley.org > Departments > Public Works > Water for additional resources regarding the City's drinking water.

The Safe Drinking Water Act (SDWA) requires states to develop a Source Water Assessment (SWA) for each public water supply that treats and distributes raw source water in order to identify potential contamination sources. The state has completed an assessment of our source water. For results of the source water assessment, please contact the Nevada Division of Environmental Protection/Bureau of Safe Drinking Water at (775) 687-9520.



Where does my water come from?

The City of Fernley is serviced by six municipal ground water wells. Our ground water is recharged from perennial recharge. The water is then piped to the Water Treatment Plant for arsenic removal and disinfection for safe consumption.

Reporting water leaks: If at any time, you notice water rising up through the blacktop or sidewalks overflowing, please report it to the City of Fernley by contacting the Public Works Department at (775) 784-9910 during normal business hours (8:00 AM-5:00PM, Monday-Friday). After normal business hours, please contact the Lyon County Sheriff's Department dispatch number and they will notify the City's on-call person. Please do your part in helping conserve our most valuable resource.

Household Treatment Appliances:

Household water treatment devices installed in homes are the responsibility of the homeowner. Please consult with your family care provider/physician if you choose to install a household water treatment device. The City of Fernley does not make recommendations for use of any household water treatment device as our water meets federal standards for consumption and use.



Terms and abbreviations:

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG): The "goal" is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

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.

Non-Detects (ND): Laboratory analysis indicates that the constituent is not present or is at levels below laboratory detection limits.

Parts per Million (ppm): or milligrams per liter (mg/L).

Parts per Billion (ppb): or micrograms per liter (ug/L).

Picocuries per Liter (pCi/L): picocuries per liter is a measure of the radioactivity in water.

Millirems per Year: (mrem/yr): measure of radiation absorbed by the body.

Running Annual Average (RAA): Average over the sampling period.

Water Quality Data

The tables below list all of the drinking water constituents that were detected during the 2017 calendar year. The presence of these contaminants does not necessarily indicate that the water poses a health risk. Unless noted, the data presented in this table is from testing done January 1st through December 31st, 2017. The state requires the City of Fernley to test for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the 2017 year quality, is more than one year old. The City of Fernley supplies water that is regulatory compliant.

Microbiological	Result	MCL	MCLG	Typical Source
Coliform (TCR)	No positive samples reported in 2017	MCL: Systems that collect less than 40 samples per month—no more than 1 positive monthly sample	0	Naturally present in the environment

Disinfection By-products	Monitoring Period	RAA	Range	Unit	MCL	MCLG	Typical Source
Total Haloacetic Acids (HAA5)	2017	9.4	3-13	ppb	60	0	By-product of drinking water disinfection
Total Trihalomethanes (TTHM)	2017	35.8	12-57	ppb	80	0	By-product of drinking water chlorination

Lead & Copper	Collection Date	90th Percentile	Unit	AL	Sites over AL	Typical Source
Copper	09/29/2017	0.21	ppm	1.3	0	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead	09/29/2017	2	ppb	15	0	Corrosion of household plumbing systems; erosion of natural deposits

Regulated Contaminants	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
Antimony, Total	07/13/2015	1	1	ppb	6	6	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Arsenic	10/03/2017	4	4	ppb	10	0	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium	07/13/2015	0.033	0.033	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride	07/10/2017	0.1	0.1	ppm	2	2	Natural deposits; water additives which promotes strong teeth
Nitrate	03/06/2017	2.2	1.8 - 2.2	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits

Radionuclides	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
Combined Uranium	07/13/2015	3	3	ug/L	30	0	Erosion of natural deposits
Gross Alpha including Radon and Uranium	07/13/2015	4.41	4.41	pCi/L	15	0	Decay of natural and man-made deposits
Gross Beta particle activity	07/13/2015	4.78	4.78	pCi/L	50	0	Decay of natural and man-made deposits
Radon	07/13/2015	369	369	pCi/L			

Secondary Contaminants	Collection Date	Highest Value	Range	Unit	SMCL	MCLG
ALKALINITY, BICARBONATE	7/10/2017	150	150	mg/L CaCO3		
ALKALINITY, TOTAL	7/10/2017	150	150	mg/L CaCO3		
CHLORIDE	7/10/2017	67	67	mg/L	400	
HARDNESS, TOTAL (AS CaCO3)	7/10/2017	190	190	mg/L CaCO3		
MAGNESIUM	7/10/2017	16	16	mg/L	150	
MANGANESE	7/10/2017	0.002	0.002	mg/L	0.1	
pH	7/10/2017	7.80	7.80	pH Units	6.5 - 8.5	
SULFATE	7/10/2017	160	160	mg/L	500	
TDS	7/10/2017	550	550	mg/L	1000	

Violations:
No violation(s) occurred during the 2017 Calendar Year.

WATER CONSERVATION TIPS

In the kitchen:

- Plug up the sink or use a wash basin if washing dishes by hand.
- Use a dishwasher - and when you do, make sure it's fully loaded.
- Scrape your plate instead of rinsing it before loading the dishwasher.
- Keep a pitcher of drinking water in the refrigerator instead of letting the faucet run until the water is cool.
- Add food wastes to your compost pile instead of using the garbage disposal.
- Wash fruits and vegetables in a basin. Use a vegetable brush.

In the bathroom:

- Turn off the tap while shaving or brushing teeth
- Showers use less water than baths, as long as you keep an eye on how long you've been lathering up.
- Consider purchasing WaterSense labeled products.

In the laundry room:

- Wash only full loads of laundry or use the appropriate water level or load size selection on the washing machine.

Equipment:

- Homes with high efficiency plumbing fixtures and appliances save about 30% of indoor water use and yield substantial savings of water, sewer, and energy bills.
- Consider purchasing high-efficiency toilets.
- Install low-flow faucet aerators and showerheads.
- Consider purchasing a high efficiency washing machine which can save over 50% in laundry water and energy use.
- Repair all leaks. A leaky toilet can potentially waste 200 gallons per day. To detect leaks in the toilet, add food coloring to the tank water. If the colored water appears in the bowl without flushing, the toilet is leaking.

Landscaping:

- Use regionally appropriate, low water-using and native plants.
- Recognize site conditions and plant appropriately.
- Group plants according to their water needs.
- Place turf grass strategically.
- Minimize steep slopes.
- Aerate your soil.
- Use mulch around shrubs and garden plants.

WATER LEAKS

Small household water leaks can add up to gallons of water lost every day. It is recommended that homeowners check their plumbing fixtures and irrigation systems each year. The average U.S. family loses 10,000+ gallons of water per year in leaks, which is equivalent to 270+ loads of laundry or one trillion gallons of water annually, which is equivalent to water use in eleven million homes. If you notice a leak in your home, you can contact the City of Fernley Public Works/Utility Billing Department at (775) 784-9930 during normal business hours (Monday - Friday, 8:00 AM - 5:00 PM) to request that your water be turned off at the meter by a City technician. Once the repair has been made, you can contact the City at the same numbers to ask that your water be turned back on. If a leak occurs after normal business hours, please contact the Lyon County Sheriff's Department dispatch number at (775) 575-3383.

Once again, for leaks noticed within the public right-of-way:

Please report the leak directly to the City of Fernley Public Works Department at (775) 784-9910 during normal business hours. You can also contact the Lyon County Sheriff's Department dispatch number at (775) 575-3383 for any reports of leaks found after normal business hours.

WATER SOURCE PROTECTION

Easy things to do to protect drinking water sources:

- Use and dispose of harmful materials properly.
- Don't dump hazardous waste on the ground. It can contaminate the soil, which could also contaminate the ground water or nearby surface water. A number of products used at home contain hazardous or toxic substances that can contaminate ground or surface waters, such as: motor oil, pesticides, leftover paints/paint cans, mothballs, flea collars, household cleaners or a number of medications.
- Don't overuse pesticides or fertilizers. Many fertilizers and pesticides contain hazardous chemicals. These can travel through the soil and contaminate ground water. Use pesticides and fertilizers in moderation and per manufacturers instructions.