

## Water Trivia & Facts;

1. Water is the only substance found on earth naturally in three forms.  
True (**Solid, liquid and gas**)
2. Does water regulate the earth's temperature? **Yes (it is a natural insulator)**
3. At what temperature does water freeze? **32 degrees F, 0 degrees C**
4. At what temp. does water vaporize? **212 degrees F, 100 degrees C**
5. How long can a person live without food? **More than a month**  
How long can a person live without water? **Approx. 1 week, depending upon conditions**
6. How much of the human body is water? **66%**
7. How much of the earth's surface is water? **80%**
8. How much water must a person consume per day to maintain health?  
**2.5 quarts from all sources (i.e. water, food)**
9. Of all the earth's water, how much is ocean or seas? **97%**
10. How much of the world's water is frozen and therefore unusable? **2%**
11. How much of the earth's water is suitable for drinking water? **1%**
12. Is it possible for me to drink water that was part of the dinosaur era?  
**Yes - water is constantly recycled.**
13. What is the most common substance found on earth? **Water**
14. How much water does the average residence use during a year?  
**Over 100,000 gallons (indoors and outside)**
15. How much water does an individual use daily? **Over 100 gals (all uses)**
16. What does a person pay for water on a daily basis? **National average is 25 cents**
17. How many community public water systems are there in the United States? **54,000**
18. How much water do these utilities process daily? **38 billion gals**
19. What does it cost to operate the water systems throughout the country annually? **Over \$3.5 billion**
20. How many miles of pipeline and aqueducts are in the United States and Canada? **Approx one million miles, or enough to circle the earth 40 times**
21. What were the first water pipes made from in the US? **Fire charred bored logs**
22. Where was the first municipal water filtration works opened and when? **Paisley, Scotland in 1832**
23. Of the nation's community water supplies, what percentage are investor- owned? **15 %**
24. How many households use private wells for their water supply?  
**More than 13 million**
25. How much water is used to flush a toilet? **2-7 gallons**
26. How much water is used in a five-min. shower? **15-25 gallons**
27. How much water is used on the average for an automatic dishwasher?  
**9-12 gallons**
28. On the average, how much is used to hand wash dishes? **9-20 gals**
29. How much does one gallon of water weigh? **8.34 pounds**
30. What is the weight of water in one cubic foot? **62.4 pounds**

This Institution is an equal opportunity provider, and employer.

## Water Conservation:

Water conservation is the most cost-effective and environmentally sound way to reduce our demand for water. It is important and strongly encouraged by the City of Wheatland to remember that water conservation is not just for drought or times of water shortage, but should be practice all the time. Sound water use practices reduce the amount of stress that we place on our city on our sewage treatment facilities. So we all must do our part to learn and teach the importance of water and the wise use of it. Water conservation stretches our supplies farther and will ensure an adequate supply of water for us and future generations and it also saves you money!

The following top ten tips will get you started and get you saving.

### Ten things that will save the most water:

1. Water your lawn only when it needs it. Step on your grass. If it springs back, when you lift your foot, it doesn't need water. So set your sprinklers for more days in between watering. Saves 750-1,500 gallons per month. Better yet, especially in times of drought, water with a hose. And best of all, convert your lawn to native plants.
2. Fix leaky faucets and plumbing joints. Saves up to 600 gallons per month for every leak stopped.
3. Don't run the hose while washing your car. Use a bucket of water and a quick hose rinse at the end. Saves 150 gallons each time. For a two-car family that's up to 1,200 gallons a month.
4. Install water-saving shower heads or flow restrictors. Saves 500 to 800 gallons per month.
5. Run only full loads in the washing machine and dishwasher. Saves 300 to 800 gallons per month.
6. Shorten your showers. Even a one or two minute reduction can save up to 700 gallons per month.
7. Use a broom instead of a hose to clean driveways and sidewalks. Saves 150 gallons or more each time. At once a week, that's more than 600 gallons a month.
8. Don't use your toilet as an ashtray or wastebasket. Saves 400 to 600 gallons per month.
9. Capture tap water. While you wait for hot water to come down the pipes, catch the flow in a watering can to use later on house plants or your garden. Saves 200 to 300 gallons per month.
10. Don't water the sidewalks, driveway, or gutter. Adjust your sprinklers so that water lands on your lawn or garden where it belongs--and only there. Saves 500 gallons per month

# CITY OF WHEATLAND



# Your Water and Sewer Rates

**CITY WATER SYSTEM**

Water supply for the City of Wheatland originates from six deep groundwater sources known as Wells #3, #4, #5, #6, #7 and # 8. Sodium hypochlorite solution (bleach) is added at each well source head to disinfect and kill any possible disease causing bacteria. The water system has one ground level storage tank which holds 660,000 gals and one elevated storage tank that hold 72,000 gals. The elevated storage tank is used primarily to keep a static pressure of approximately 52 PSI throughout the water line grid. The water system is controlled by a computer system which monitors On/Off status, flow rate, pressure, chlorine residual level, and well casing pumping water level at each well site. This computer system also has an alarm system that dials a 24 hr standby operator on duty if problems occur after hours or weekends. The average water consumption in the summer months is approximately 1,250,000 gals per day with a peak flow of 1,700,000 gals per day. The water department has high standards to follow and meet, and is regulated by the CA Public Health Dept. (CAPHD) The water system is required to follow all regulations requirements set forth by CA PHD and U.S. Environmental Protection Agency including a strict sampling and testing schedule.

The city levies monthly charges for water service provided to its customers. The monthly water charges reflect the costs to the City of providing water service; including the cost of operation, maintenance, repair and replacement of the facilities, equipment, materials, supplies, associated labor, and administered cost. Under a 2002 USDA grant/loan program (\$1 million grant, \$3 million loan), old water mains throughout the city were replaced, computer telemetry (SCADA) radio system/program to monitor water system was installed, a new storage tank with booster pumps were constructed, and a new water operations/control

building with offices were also added. The base rate also includes and provides for an annual repayment of \$175,000 to the USDA loan. There is a Cost of Living Adjustment (COLA) made annually on water rate charges. All city water customers are metered and the monthly water charge is determined by the amount of water used and water meter size. Meter monthly base rate usage level is set at **15 units or below**.

**Note:** One unit = 748 gals or 100 cu/ft of water.

The water usage rates are set as follows:

**Water Usage Rates -as of OCT 2016**

Tiers	METER SIZE		
	5/8-1"	1 1/2"	2"
<b>1st Tier - Base Rate</b> -Up to 15 Units	<u>\$47.47</u>	<u>\$94.96</u>	<u>\$151.93</u>
<b>2nd Tier-</b> up to 45 Units	\$0.45	\$0.45	\$0.45
<b>3rd Tier-</b> Over 45 Units	\$0.60	\$0.60	\$0.60
Tiers	METER SIZE		
	3"	4"	6"
<b>1st Tier - Base Rate</b> -Up to 15 Units	<u>\$303.83</u>	<u>\$474.77</u>	<u>\$949.51</u>
<b>2nd Tier-</b> up to 45 Units	\$0.45	\$0.45	\$0.45
<b>3rd Tier-</b> Over 45 Units	\$0.60	\$0.60	\$0.60

**CITY SEWAGE SYSTEM**

The city sewage collection system consist of approximately 13.2 miles of gravity and force mains with sewer line diameters from 4” to 10 “. There are 5 sewage pump lift station through out the city. The main sewage treatment plant is an extended aeration activated sludge process. The

average sewage flow to the plant is 280,000 gals per day with a design flow of 620,000 gals per day. Plant includes headworks with trash removal, an oxidation ditch, clarifier, with plant discharged pumped to rapid sand infiltration beds. Process sludge is dried in sludge drying beds and is removed annual by hauling to Ostrum landfill. Sewage treatment system is permitted and regulated by CA Regional Water Quality Control Board. All permit monitoring levels set forth in the Wastewater Discharged Permit are constantly being exceeded. A new USDA loan was obtained in 2006 by the city to replace old equipment at the sewage treatment plant, replace old sewage mains throughout the city, and to add a telemetry computer system that will monitor the all lift stations and treatment plant.

The monthly sewage charges reflect the costs to the City of providing sewage treatment service; including the cost of operation, maintenance, repair and replacement of the facilities, equipment, materials, supplies, associated labor, and administered cost. The sewage base rate also includes and provides for an annual repayment to the USDA loan (\$4 million). There is a Cost of Living Adjustment (COLA) made annually on sewage rate charges. The monthly sewage rates are calculated by the number of Dwelling Units (DU)

**SEWAGE RATES - as of OCT 2016**

The monthly sewage rates are calculated as follows:

**Single Family Dwelling Unit** =1 DU@ \$49.33

**Duplex, Triplex, & Fourplex Unit** = 1 DU@ \$49.33

**Apartments 1st four Units**= 1 DU@ \$49.33

Plus for ea unit of 4= 0.578 DU@ \$28.51

**Commercial business** DU rates are determined by a number of criteria including number of customer seating, working employees, students, each professional building tenant, bar, etc.