

## Source of Supply

Our water source is surface water drawn from the Rogue River. The Rogue River has supplied the City of Grants Pass with its drinking water since 1888. From 1888 to 1930 water was pumped from the Rogue River and chlorinated to kill bacteria; however it was not filtered. At certain times of the year the drinking water was very turbid. There was a definite need for filtration to make the water a clear and pleasant tasting commodity. From the 1930's to 1983 the Water Filtration Plant was expanded to our present capacity of 18.2 million gallons per day. Depending on the time of year and customer demand, the water treatment plant presently produces between 1.2 and 10.6 million gallons per day and distributed over 1.7 billion gallons of water.

## Water Treatment

Water drawn from the Rogue River is mixed with a coagulant called Alum (Aluminum Sulfate). Alum causes suspended materials in the water to clump together and form larger particles called "floc". The water enters sedimentation basins, where the floc (which now is heavier than water) settles to the bottom of the tanks. The water then flows through the sedimentation basins into multi-media filters. The filters remove any remaining particles in the water.

In the final step, chlorine is added to the water for disinfection and to keep it safe in the distribution system as it travels to a reservoir or to your tap.

Plant operators are certified by the Department of Human Services Drinking Water Program (DHS-DWP) and are trained in all aspects of water treatment. They are required to complete continuing education classes in order to maintain their certification and to keep up to date on the latest information and technology used in water treatment. We are pleased to report that our drinking water is safe and meets Federal and State requirements.

## Storage and distribution

Treated water piped from the plant is pumped and stored by fourteen remote pumping stations and eight reservoirs. The distribution system is made up of five different elevation zones located throughout the city and over 150 miles of distribution lines varying in size from 2 to 36 inches in diameter. liquid chlorine is added at strategic points in the distribution system to maintain the chlorine residual mandated by the DHS-DWP.

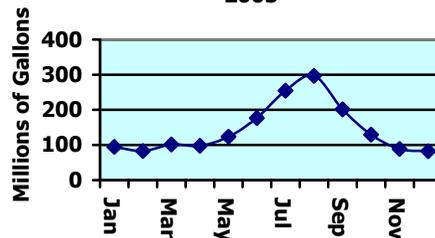
## Monitoring and reporting requirements

The Grants Pass Water Filtration Plant routinely monitors for contaminants in your drinking water according to Federal and State laws. The data within this report comes from the monitoring of our drinking water supply for the period of January 1, 2004 to December 31, 2004. *All drinking water, including bottled drinking water, may reasonably be expected to contain at least small amounts of some contaminants. It's important to remember that the presence of these contaminants does not necessarily pose a health risk.*

Federal and State regulations include procedures and schedules for monitoring water from the source to the tap. The DHS ensures that public water systems comply with all regulations, follow monitoring schedules, and report monitoring results.

Rogue River Turbidity (2005 Averages)	
Summer Daily Avg.	2.6 NTU's
Winter Daily Avg.	19.9 NTU's
Maximum Daily Turb.	323 NTU's

How Much Water We Used In  
2005



If you have any questions about this report or concerning your water source, please contact Utility Director Dave Wright at 474-6355, or at 101 NW. "A" Street., Grants Pass, OR 97526. We want our valued customers to be informed about their water utility. We at the Grants Pass Water Filtration Plant and Distribution Department work hard to provide the highest quality water to every tap. The Rogue River is the center piece of our community and we ask that all of our customers help us to protect this valuable resource.

### More information:

More information about contaminants and potential health effects can be obtained by calling the following numbers:

**Environmental Protection Agency Safe Drinking Water Hotline at:**  
1-800-426-4791

**Department of Human Services Drinking Water Program:**  
(503) 731-4010

**City of Grants Pass Water Filtration Plant:**  
(541) 474-6353

**Josephine County Health Department:**  
(541) 474-5325



101 NW "A" St.  
Grants Pass, OR



## City of Grants Pass

## 2005 Water Quality Report



### **Dear Water Customer,**

*We are pleased to present to you our Annual Water Quality Report for the 2005 calendar year. This report is designed to inform you about the quality water and services we deliver to your home every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water.*

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-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/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).

**Acronyms and Key Definitions**

**MCL**

Maximum Contaminant Level, the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

**MCLG**

Maximum Contaminant Level Goal, the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

**NTU**

Nephelometric Turbidity Unit. Unit of measure used to describe water clarity. The smaller the number the clearer the water.

**ppb**

Parts per Billion. One ppb is approximately equal to one drop of water in a swimming pool that is 30 feet in diameter and 4 feet deep (one drop into 21,195 gallons of water)

**ppm**

Parts per Million. This is the same as 1 mg/l (milligram per liter). An example of 1 part per million is one drop of water into 22 gallons.

**ND@**

Not Detected at a particular detection point because laboratory instruments are only able to detect chemicals to certain minimum levels.

**Contaminant**

Any substance found in water; however, not all contaminants are harmful.

Results of Turbidity and Microbiological Analysis of Treated Water After Disinfection (All results meet State and Federal drinking water regulations)				
Variable	Maximum Amount Found	Maximum Contaminant Level (MCL)	Maximum Contaminant Level Goal (MCLG)	Source of Contaminant
Physical Testing Characteristic Turbidity	0.40 NTU 0.03 NTU Yearly Daily Average	0.50 NTU	5 NTU	Soil erosion and stream sediment
Microbiological Testing Total Coliform Bacteria	Zero positive tests	5% samples test positive	Zero positive tests	Soil bacteria and animal feces
Fecal Coliform Bacteria	Zero positive tests	Zero positive tests	Zero positive tests	Human & animal feces
Disinfection Residual	All samples had detectable chlorine residual	Not regulated at this time	Not regulated at this time	Chlorine is used as a disinfectant in the water treatment process

**NOTES:**  
**Turbidity and NTU's.** Turbidity is regulated because it can provide a medium for bacterial growth. Turbidity is measured in NTU's. The filtration plant consistently treats water that is well under Federal and State standards. The daily yearly average for treated water turbidity that is pumped to the city equals 0.030 NTU's.  
**Total Coliform Bacteria.** Testing for these bacteria after disinfection helps confirm the effectiveness of the disinfection process. (Bacteria may have been present in the source water) Total coliform bacteria are also indicators of possible contamination that might occur after treatment.  
**Chlorine Residual.** Federal and State drinking water regulations require detectable disinfectant residual (chlorine) throughout our water distribution system. Water entering the Grants Pass distribution system has approximately 1.0 part per million of chlorine. Chlorine is also added at various points in the distribution system to ensure that a measurable trace of chlorine is present at all times. Health regulations must balance the risk of waterborne disease with the risk from disinfectants. Proposed regulations suggest a maximum residual of 4.0 parts per million.

Additional water Quality Tests Analysis (All results meet State and Federal drinking water regulations)		
Variable	Maximum Amount Found	Maximum Contaminant Level Goal (MCLG)
Chloride	7.7 ppm	250 ppm*
Fluoride	ND @ 0.10 ppm	4.0 ppm*
Hardness as CaCo3	40.5 ppm (2.37 grains per gallon)	250 ppm*

These guidelines are secondary standards, no MCL's have been established for these contaminants. They are generally based on aesthetics rather than health concerns.

Results of Disinfection By-product Analysis (All results meet State and Federal drinking water regulations)						
Variable	Average Amount Found	Range of Multiple Tests	Maximum Contaminant Level (MCL)	Maximum Contaminant Level Goal (MCLG)	Source of Contaminant	
Total Trihalomethanes (TTHM's)	42.8 ppb	2.9—85.9 ppb	80 ppb	Zero ppb	By-products of chlorination used in the water treatment process.	
Haloacetic Acids (HAA5's)	43.7 ppb	<7.0—62.5 ppb	60 ppb	Zero ppb		

**NOTES:**  
 During disinfection, certain by-products form as a chemical reaction between chlorine and naturally occurring organic matter in the water. The disinfection process is carefully controlled so that the disinfection effectiveness is maintained while keeping the levels of disinfection by-products below regulatory limits.

Results of Lead and Copper Analysis (All results meet State and Federal drinking water regulations)			
Variable	Maximum Amount Found	Action Level* (AL)	Source of Contaminant
Copper	1.220 ppm	Action Level: 90% of the homes tested must have levels less than 1.3 ppm	Corrosion of Household plumbing; Erosion of natural deposits; Leaching from wood preservatives.
Lead	0.0069 ppm (6.9 ppb)	Action Level: 90% of the homes tested must have levels less than 0.015 ppm (15 ppb)	

**\*Action Levels. The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.**  
**NOTES:**  
 Plumbing components may contribute to elevated lead and copper at the tap. There is no detectable lead in Grants Pass water supply sources. Copper occurs naturally at very low levels. Some homes and buildings may have elevated lead levels at the tap if water stands in the pipes for several hours. Lead may leach from faucets or plumbing components. Leaching may also occur in copper pipes that are joined with lead-based solder. The lead and copper results reported here are from a targeted group of homes in Grants Pass retail and wholesale service area. This group of homes meets criteria for being at risk for elevated levels of lead and copper at the tap.

**Frequently asked questions**  
**Does the City add fluoride to the water?**  
 No, we do not add fluoride to the water. However there is naturally occurring fluoride in the drinking water, this level is not beneficial for cavity fighting nor does it present a health hazard  
**Why does the taste and odor of my water sometimes differ?**  
 Water naturally varies in taste and odor at different times of the year. Taste and odor problems in your drinking water can come from new or old pipelines, plumbing fixtures or changes in raw water quality.

**Is Grants Pass water soft or hard?**  
 Grants Pass water is soft to moderately soft. It ranges from 1.90 to 3.4 grains of hardness per gallon (less than 59 parts per million CaCO<sub>3</sub>).  
**What is the pH of the City's water?**  
 Grants Pass water after treatment is 7.2 pH units.