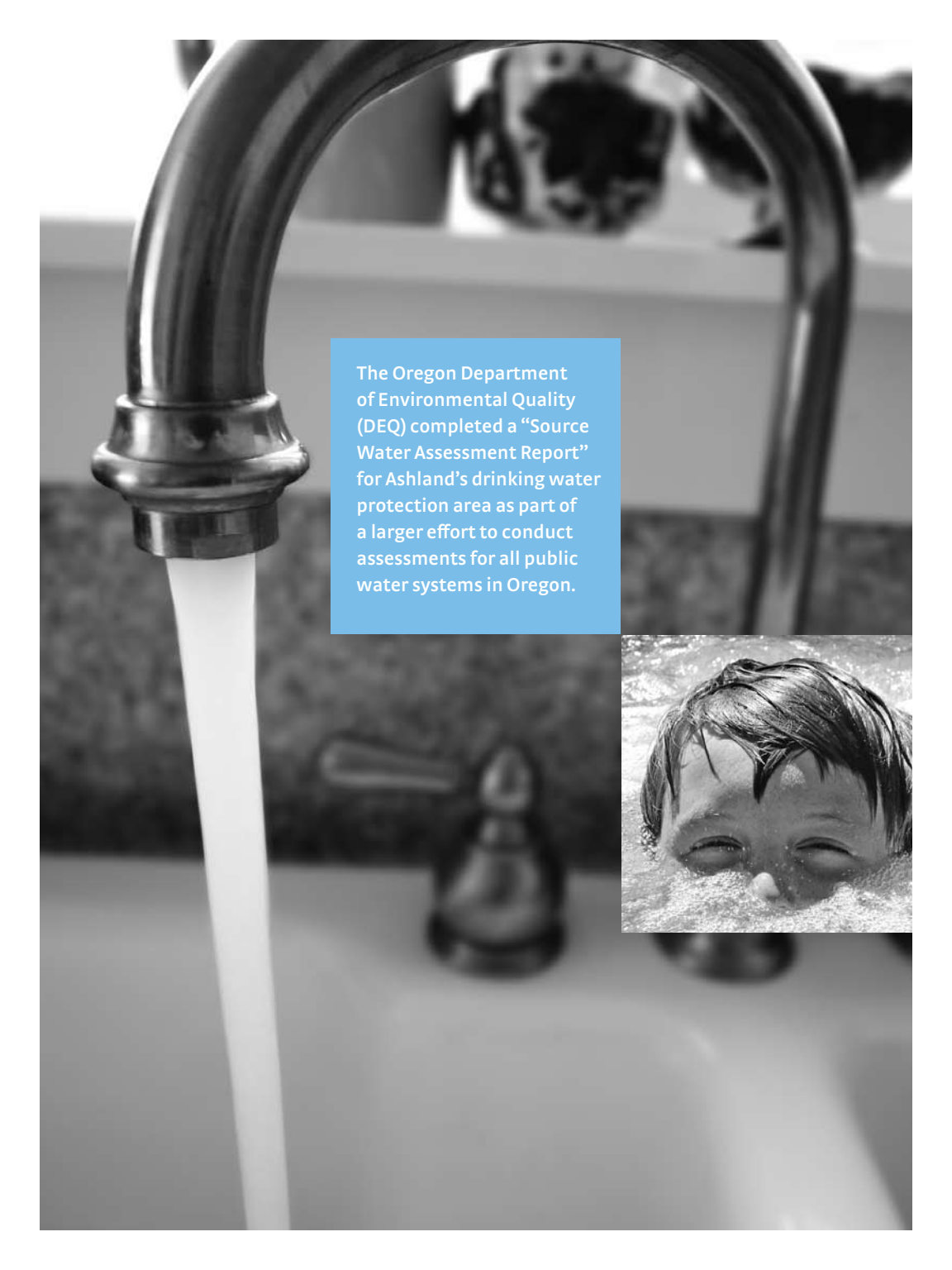


# H<sub>2</sub>oh!

City of Ashland, OR  
2007 Water Quality Report





The Oregon Department of Environmental Quality (DEQ) completed a "Source Water Assessment Report" for Ashland's drinking water protection area as part of a larger effort to conduct assessments for all public water systems in Oregon.





Highest potential risks if not managed correctly include erosive soils, sediments and turbidity, microbiological contamination and nutrients. Ashland's treatment process includes testing for and eliminating these risks from the finished drinking water.

Copies of this report may be viewed at the Public Works Administration Office at 51 Winburn Way.

## A Complicated Business

This report describes Ashland's drinking water sources, treatment process, quality, and programs that protect the high quality of our water supply. This publication conforms to a federal regulation requiring water utilities to provide this information annually. We supported the passage of this regulation and believe the information provides a valuable service to our consumers. In this report we attempt to balance pertinent facts against the sheer volume of information available.

Our commitment to water quality excellence has carried us beyond state and federal drinking water standards to the leading edge of water treatment technology. We are committed to excellence in customer service. This annual report is intended to provide current, factual information about your drinking water and some of the programs and technologies which make it among the safest in the world.

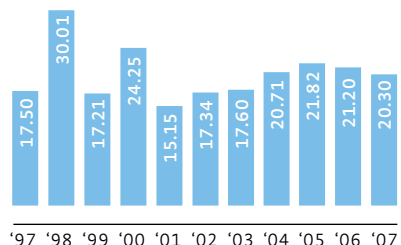
## What You Need to Know

Safe drinking water is an essential resource for our citizens. The bottom line is this: We have no water quality violations and our water quality meets or is better than state and federal standards.

The details of the information summarized in this report are also submitted formally and routinely to the Oregon Health Department's Drinking Water Program as well as to the United States Environmental Protection Agency. Both agencies monitor our compliance with the many regulatory standards and testing protocols required to assure safe drinking water.

The average snowfall on Mt. Ashland is 263 inches with an average maximum depth of 120 inches. This is based on daily records kept by Mt. Ashland from 1983 to 2002. In drought years such as 1993 and 2001, water can also be taken from the Talent Irrigation District (TID) canals, which are fed by Howard Prairie Reservoir and Hyatt Lake.

1997-2007 ASHLAND YEARLY RAINFALL  
(in inches)



### State & federal agencies monitor water quality.

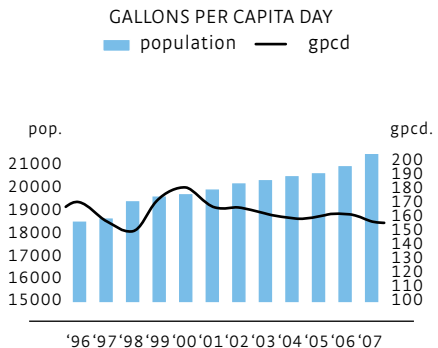
In order to ensure that tap water is safe to drink, the United States Environmental Protection Agency (EPA) prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water.

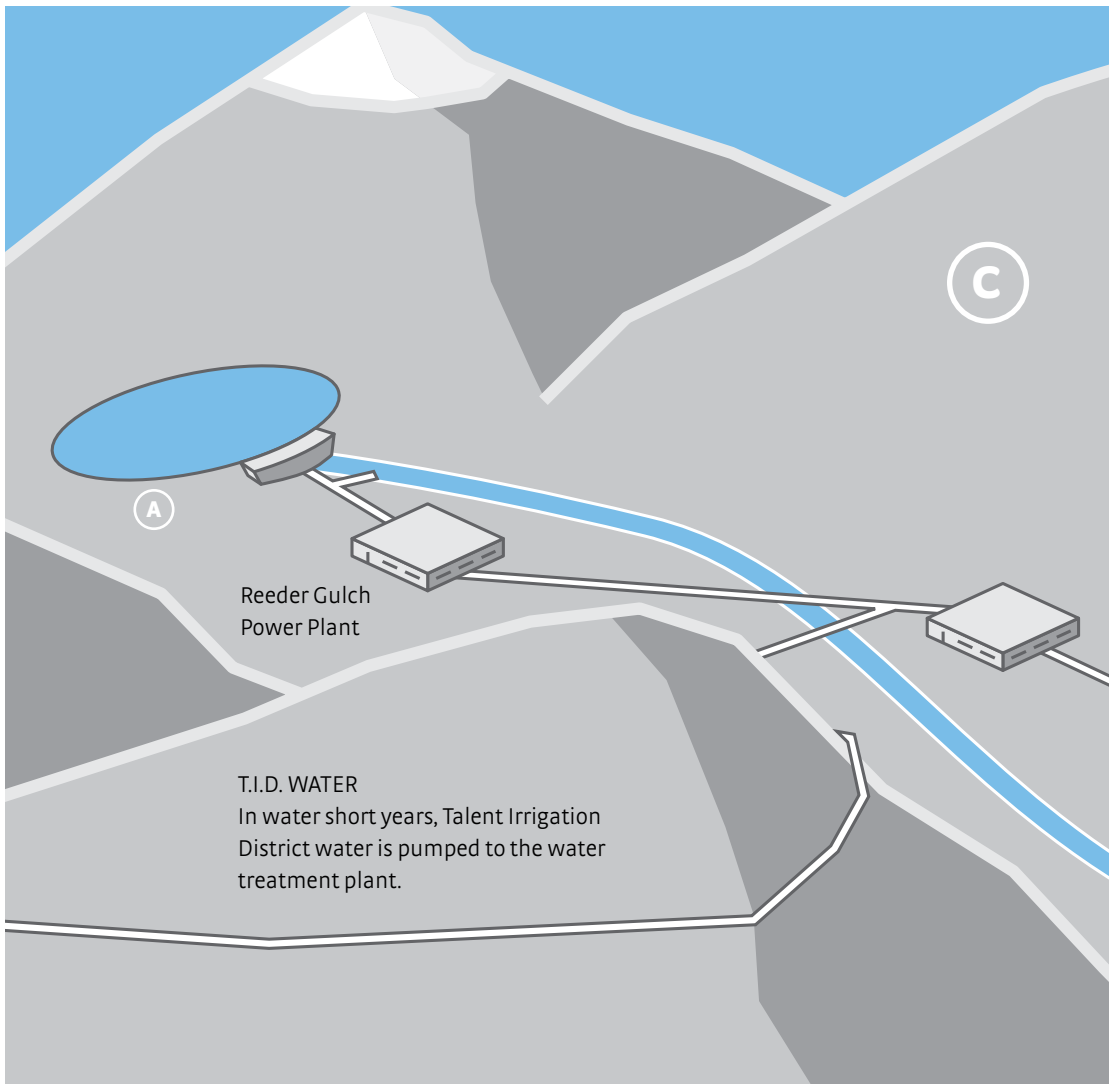
Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (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, 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 microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Other than the air we breathe, water is the single most important element in our lives—and is a limited resource. Remember to use only the water you need and keep looking for new ways to conserve water in and around your home. The City of Ashland has numerous water conservation programs. **Call 552-2062 for more information.**

Reeder Reservoir is small in comparison to summer water demands. Our city was cautious in recent drought years and has continued the conservation trend. Call Water Conservation at 552-2062 to learn how you can help.





A

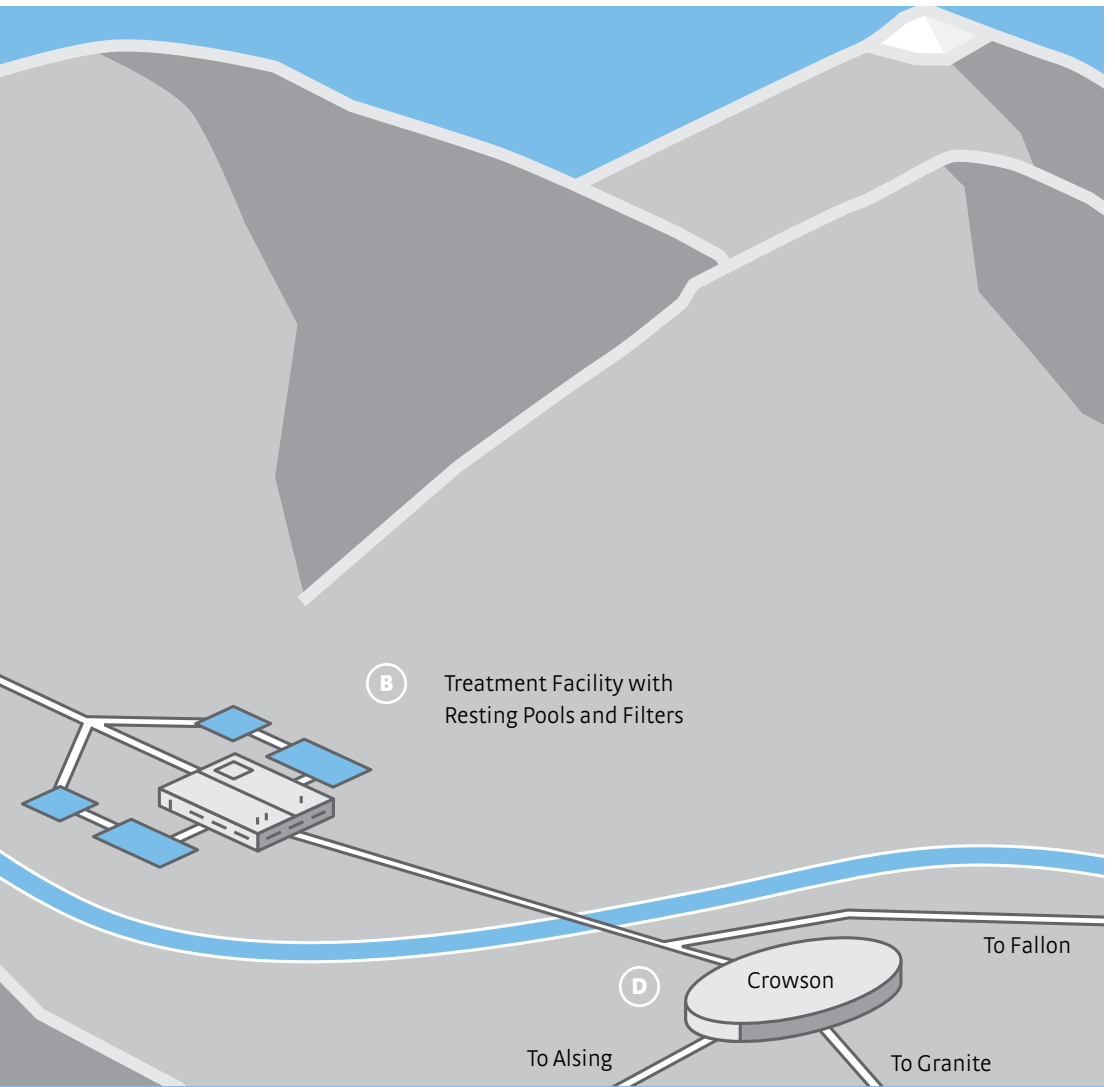
### Water Collection

Water collected in Reeder reservoir is piped to the treatment plant. Water is also directed back into Ashland Creek.

B

### Water Treatment

Aluminum sulfate, chlorine, and polymers are added to the water. These coagulating chemicals “stick” to harmful micro organisms. The chemicals attached to the micro organisms are given time to grow while in resting pools. This treated water then flows into filtration tanks that remove the chemicals, large particles and harmful organisms.



**B** Treatment Facility with Resting Pools and Filters

**C**

**Protected Water**

Since 1929, Ashland’s watershed has been protected to insure water quality. No herbicides or pesticides have ever been used. No recreational uses are permitted within the immediate reservoir area of the watershed.

**D**

**Water Distribution**

Clean water fills 2.2 million gallon Crowson reservoir, with overflows going to Granite reservoir. Water is pumped to Alsing and Fallon at the east and west ends of town. From these four reservoirs, water enters the system that feeds Ashland’s homes and businesses.

## The Source of Water

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. Contaminants that may be present in source water include:

**Inorganic contaminants**, such as salts and metals, which can be naturally occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

**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.

**Microbial contaminants**, such as viruses and bacteria, which may come from untreated sewage, septic systems, agricultural livestock operations, and wildlife.

**Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.

**Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production and mining activities.

### Glossary:

**Maximum contaminant level goal (MCLG).** The level of contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

**Maximum contaminant level (MCL).** 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.

**Non-detectable (ND).** Not detected at an established minimum reporting level.

**Action level.** The concentration of a contaminant which, if exceeded, triggers treatment or other requirement which a water system must follow.

**Treatment technique (TT).** A required process intended to reduce the level of contaminant in drinking water.

**(ppm)** Parts per million

**(ppb)** Parts per billion



## Water Quality Analysis Results

The US Environmental Protection Agency requires that water systems report annually on contaminants that have been detected in their water supplies. The City of Ashland monitors for over 100 contaminants, including coliform bacteria, micro organisms, herbicides, organics, inorganics, and pesticides. We collect samples from the watershed, plant, distribution system, and at customers' taps. Ashland's water supplies meet or surpass federal and state drinking water standards.

### Lead and Copper

Variable	90th PERCENTILE VALUES	# OF SAMPLES EXCEEDING ACTION LEVELS	ACTION LEVEL	MAXIMUM CONTAMINANT LEVEL GOAL	SOURCE OF CONTAMINANT
Copper	0.3505 parts per million	0 of 31 samples collected.	Exceeds Action Level if more than 10% of homes tested have copper levels greater than 1.3 parts per million	1.3 parts per million. Treatment Technique required	Corrosion of plumbing systems
Lead	0.0016 parts per million	0 of 31 samples collected.	Exceeds Action Level if 10% of homes tested have lead levels greater than 0.015 parts per million	Zero	Corrosion of plumbing systems

Test was conducted in 2005—next due in 2008. Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested. Additional information is available from the Safe Drinking Water hotline (800-426-4791).

### Inorganics

Variable	UNITS	ASHLAND'S DETECTED LEVEL	MAXIMUM CONTAMINANT LEVEL	MAXIMUM CONTAMINANT LEVEL GOAL	SOURCE OF CONTAMINANT
Barium	Parts per million	0.0051	2	2	Erosion of natural deposits

Test was conducted in 2004—next due in 2013.

## Control of Disinfection By-Products Total Organic Carbon (TOC)

Variable	UNITS	ASHLAND'S DETECTED LEVEL	MAXIMUM CONTAMINANT LEVEL	MAXIMUM CONTAMINANT LEVEL GOAL	SOURCE OF CONTAMINANT
TOC Raw	Parts per million (ppm)	Average: 2.5 Range: 1.4-5.9	Treatment technique	None	Naturally present in the environment
TOC Finished	Parts per million (ppm)	Average: 1.0 Range: 0.64-1.8	Treatment technique	None	Naturally present in the environment

No health effects, however, TOC provides a medium for the formation of Disinfection By-Products (DBP) which may lead to adverse health effects as described under TTHM's and HAA's. Reference chart at top of page 11.

## Turbidity

Variable	UNITS	MAXIMUM AMOUNT DETECTED	ASHLAND'S DETECTED LEVEL	MAXIMUM CONTAMINANT LEVEL	MAXIMUM CONTAMINANT LEVEL GOAL	SOURCE OF CONTAMINANT
Turbidity	NTU	.08	Average 0.02 Range 0.02-0.08 100% of the samples within limits	0.30	N/A	Soil erosion and stream sediments

Turbidity is measured in NTUs (nephelometric turbidity units: a measure of the clarity of water.) Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

## Asbestos

Variable	UNITS	ASHLAND'S DETECTED LEVEL	MAXIMUM CONTAMINANT LEVEL	MAXIMUM CONTAMINANT LEVEL GOAL	SOURCE OF CONTAMINANT
Asbestos	Mean fiber concentration (MFL)	0.40	7.0	7.0	Decay of asbestos cement water mains

Some people who drink water containing asbestos in excess of 7.0 MFL over many years may have an increase of developing intestinal polyps. Asbestos is tested every 9 years. The next test is due in 2012.

## Disinfection By-Products (DBP)

Variable	UNITS	ASHLAND'S DETECTED LEVEL	MAXIMUM CONTAMINANT LEVEL	MAXIMUM CONTAMINANT LEVEL GOAL	SOURCE OF CONTAMINANT
<b>Total Trihalo-methanes</b>	Parts per billion (ppb)	Average: 38 Range: 22-57	80	N/A	By-products of chlorination used in water treatment
<b>Haloacetic Acids</b>	Parts per billion (ppb)	Average: 33 Range: 20-37	60	N/A	By-products of chlorination used in water treatment

Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous system, and may have an increased risk of getting cancer. Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.

### More facts about Ashland's water...

Ashland water is very soft. It ranges from 30 to 50 ppm of calcium. Ashland's water has a pH of 7.2—which is essentially neutral. Ashland does not add fluoride to the water. Parents of young children may want to consult with their dentist about the need for fluoride treatments to prevent tooth decay.

Daryl McVey Water Plant Supervisor 488-5345	Jim Olson Interum Public Works Director 488-5587	Oregon Depart- ment of Human Services 503-731-4031	Jackson County Health Department 774-8026  TTY Number (hear- ing impaired) 800-735-2900  Spanish 800-735-3896
Terry Ellis Public Works Superintendent 488-5353	Robbin Pearce Water Conservation Analyst 552-2062	EPA Safe Drinking Hotline 800-426-4791	

### Information and Input Opportunities

City Council meetings (482-6002) 1st and 3rd Tuesdays at 7:00 pm	Ashland Watershed Partnership RVCOG (779-6785)
Budget Committee (482-6002) Usually in April and May each year	Talent Irrigation District Board Meetings (535-1529)
Forest Land Commission (488-5587)	<a href="http://www.ashland.or.us">www.ashland.or.us</a>