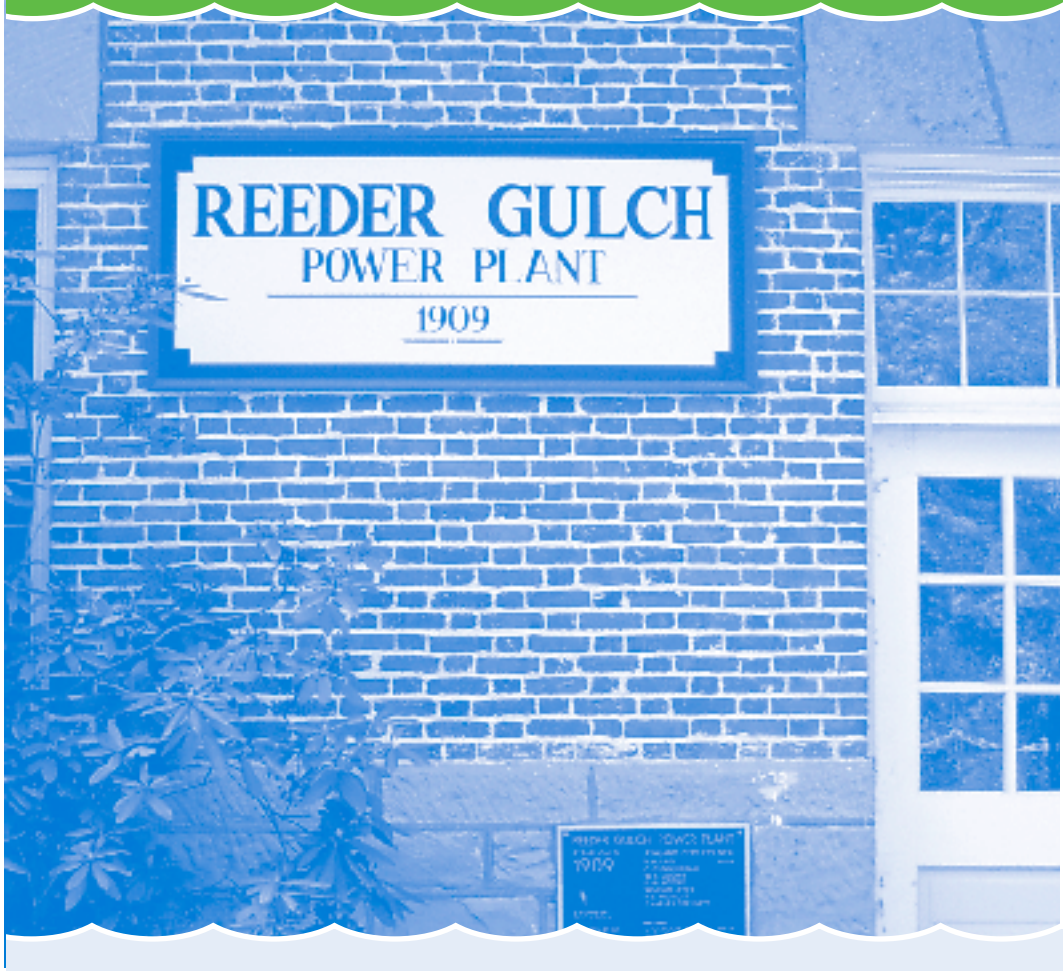
The City of Ashland, Oregon — 2005 Water Quality Report

FACT

300 million gallons of water are needed to produce a single day's supply of the world's newsprint.



Ashland's Source Water Assessment Report

Recently, 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.

Ashland's assessment included the entire Ashland Creek watershed, which includes Mount Ashland. Ashland receives the majority of its water as surface runoff from the Mount Ashland watershed, including several tributaries. Of 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 distributed to the community.

Copies of this report may be viewed at the Public Library at Siskiyou and Gresham Street and at the Public Works Administration Office at 51 Winburn Way.

TIP

To minimize water loss from evaporation, don't water your lawn during the hottest part of the day or when it's windy.

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.

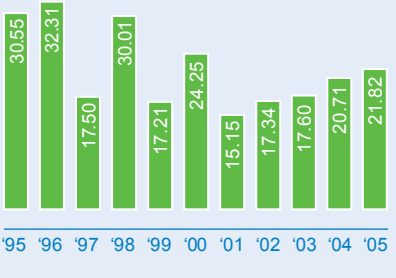
The details of the information summarized in this report are also submitted formally and routinely to the Oregon Health Department's Drinking Water Program as well as to the United States Environmental Protection Agency. Both agencies monitor our compliance with the many regulatory standards and testing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

This is important information. We think it makes sense to make the report attractive and readable. The cost of producing and mailing this report is less than $1.36 per copy.

For more information, please call our Water Quality Division at 488-5353.

The average snowfall on Mt. Ashland is 80 inches. 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 and Hyatt Lake.

1995-2005 ASHLAND YEARLY RAINFALL
(in inches)



FACT

You can survive a month without food but only five to seven days without water.

Ashland Water Treatment Plant Facts and Figures

TYPE	High Rate Filtration
BUILT	1949 (initial filtration plant 5.5 mgd)
UPGRADES	1960's to latest in 1996; filters, process improvements
CAPACITY	10 mg/day
'05 WATER VOLUME	produce 1220 million gallons of water for use by the city
'05 MAX MONTH	Aug at 209 mg/month (avg. 6.8 mg per day)
'05 MIN MONTH	February at 54 mg/month (avg. 1.91 mg per day)
'05 MAX DAY	August 15 (7.2 mg per day)

Stop drips and leaks. A dripping faucet wastes up to 2,000 gallons a year. A leaky toilet wastes as much as 200 gallons per day.

TIP

State and 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).

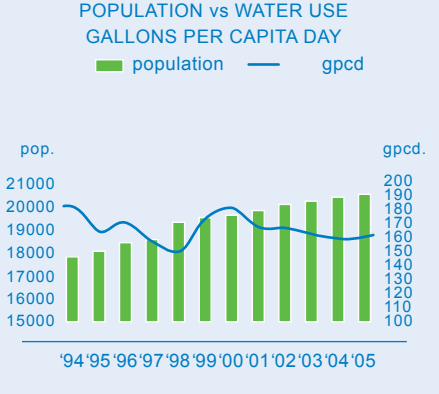
Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants 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 552-2063 for more information.

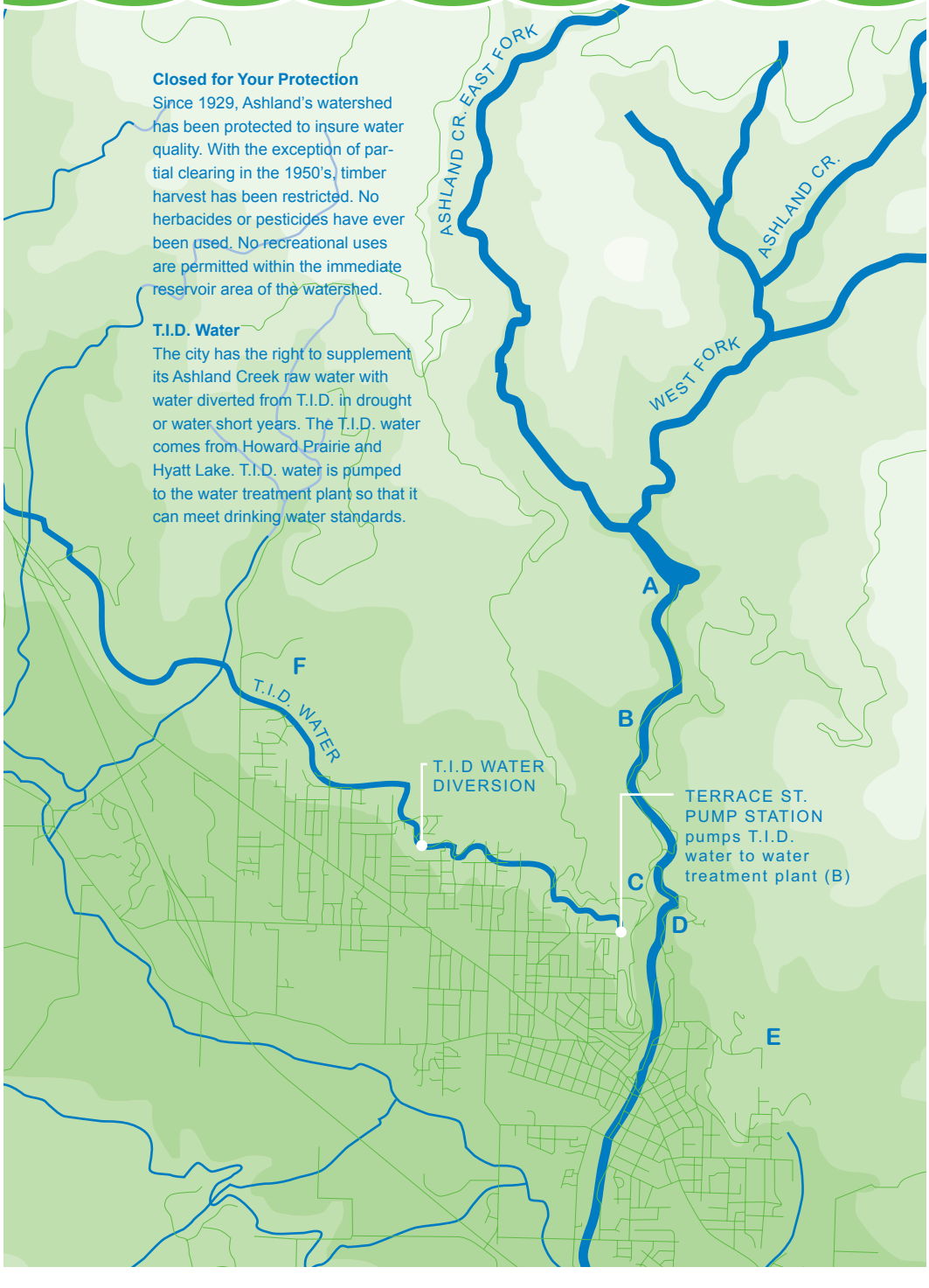
Every drop counts! Reeder Reservoir is small in comparison to summer water demands. The Ashland community was cautious in recent drought years, and has continued the conservation trend. Contact the Water Conservation division to learn how you can help.

552-2062



FACT

Ashland's Reeder Gulch power plant still supplies energy to illuminate the downtown street lights.

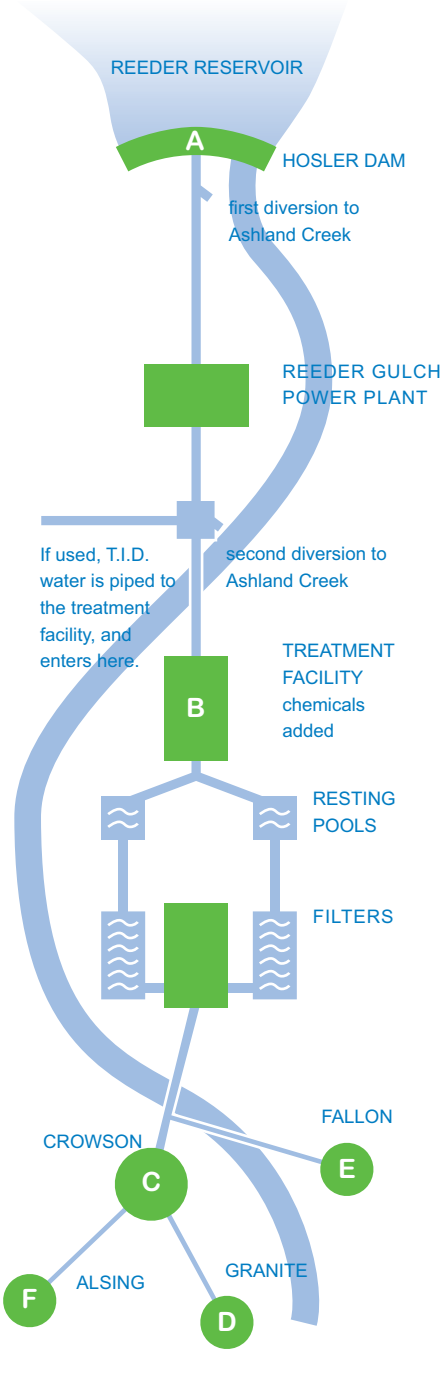


Closed for Your Protection
Since 1929, Ashland's watershed has been protected to insure water quality. With the exception of partial clearing in the 1950's, timber harvest has been restricted. No herbacides or pesticides have ever been used. No recreational uses are permitted within the immediate reservoir area of the watershed.

T.I.D. Water
The city has the right to supplement its Ashland Creek raw water with water diverted from T.I.D. in drought or water short years. The T.I.D. water comes from Howard Prairie and Hyatt Lake. T.I.D. water is pumped to the water treatment plant so that it can meet drinking water standards.

Instead of using running water, defrost frozen food in the refrigerator or microwave.

TIP



From the watershed...

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

The treatment process:

Aluminum sulfate, chlorine, and polymers are added to the water. These coagulating chemicals “stick’ to harmful microorganisims.

The chemicals attached to the microorganisms 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.

Clean drinking water:

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.

FACT

Since the mid 1800's, Ashland has utilized rain and snow melt from the 20 Sq. mile watershead above town.

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	MAXIMUM CONTAMINANT 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 and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water hotline (800-426-4791).

Asbestos

VARIABLE	UNITS	ASHLAND'S DETECTED LEVEL	MAXIMUM CONTAMINANT LEVEL	MAXIMUM CONTAMINANT LEVEL GOAL	SOURCE OF CONTAMINANT
ASBESTOS	Mean fiber concen-tration (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.

Instead of using a hose, use a broom to clean your driveway or sidewalk.

TIP

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: 2.7 Range: 1.3-4.5	TT	None	Naturally present in the environment
TOC FINISHED	Parts per million (ppm)	Average: 1.1 Range: 0.2-1.7	TT	None	Naturally present in the environment

No health effects, however, TOC provides a medium for the formation of DBP's which may lead to adverse health effects as described under TTHM's and HAA's.

Turbidity

VARIABLE	UNITS	MAXIMUM AMOUNT DETECTED	ASHLAND'S DETECTED LEVEL	MAXIMUM CONTAMINANT LEVEL	MAXIMUM CONTAMINANT LEVEL GOAL	SOURCE OF CONTAMINANT
TURBIDITY	NTU	.06	Average 0.02 Range 0.02-0.06 100% 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.

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

Inorganics are explained on the last page.

FACT

A dairy cow must drink four gallons of water to produce one gallon of milk.

Disinfection By-Products

Variable	UNITS	ASHLAND'S DETECTED LEVEL	MAXIMUM CONTAMINANT LEVEL	MAXIMUM CONTAMINANT LEVEL GOAL	SOURCE OF CONTAMINANT
Total TrihAlo-methanes	Parts per billion (ppb)	Average: 43 Range: 29-58	80	N/A	By-products of chlorination used in water treatment
HALOACETIC ACIDS	Parts per billion (ppb)	Average: 35 Range: 2-46	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.

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.

Microbal contaminants, such as viruses and bacteria, which may come from untreated sewage, septic systems, agri-cultural 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.

Reduce the amount of water used by an older toilet by placing something in the tank to displace water flows.

TIP

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

More facts about Ashland's water...

Ashland water is very soft. It ranges from 30 to 50 parts per million. 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.

Sources for More Water Information

Daryl McVey
Water Plant
Supervisor
488-5345

Mike Morrison
Public Works
Superintendent
488-5353

Paula Brown
Public Works
Director
488-5587

Robbin Pearce
Water Conservation
Analyst
552-2062

Oregon Department
of Human Services
503-731-4077
TTY 503-731-4031

EPA Safe Drinking
Hotline
800-426-4791

Jackson County
Health Department
774-8206

TTY Number
(hearing impaired)
800-735-2900

Spanish
800-735-3896

Opportunities to Hear Information and Provide Input

City council meetings (482-6002)
1st and 3rd Tuesdays at 7:00 pm

Budget Committee (482-6002)
Usually in April and May each year

Forest Commission (488-5587)

Ashland Watershed Partnership
RVCOG (779-6785)

Talent Irrigation District Board Meetings
(535-1529)

www.ashland.or.us