



# 2010 WATER QUALITY REPORT

Water quality reports are to inform you, the consumer, about water quality, characteristics, and treatment procedures of the City of Woodland's drinking water. This annual publication complies with Federal law requiring all water utilities to provide water quality information to customers each year and is provided in addition to other notices required by law.

This report includes mandatory information regulated by State Department of Health (DOH) as well as the Environmental Protection Agency (EPA), and also facts and details unique to the City of Woodland's water system. We support the consumer's right to know the results of our water quality monitoring and encourage public participation in decisions which affect your drinking water. More extensive information of water quality testing results is available at the Public Works Department Office at 219 Davidson Avenue.

The State-regulating agency is the Department of Health (DOH) and the Federal agency is the Environmental Protection Agency (EPA). Our water is monitored and tested daily by certified water treatment personnel and also regularly tested through certified laboratories. DOH and EPA regulators routinely monitor our compliance and testing procedures to ensure safe delivery of water to our customers.

### ***Woodland's water meets or exceeds EPA water quality requirements!***

Security and emergency response are essential in proper management of our drinking water system. We have complied with the required system vulnerability assessment and have submitted an emergency water system response plan to the Environmental Protection Agency (EPA).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as those with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune systems disorders, and 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 and Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the Safe Drinking Water Hotline at (800) 426-4791 or on the web at <http://www.epa.gov/safewater>.

## **SOURCE AND TREATMENT OF WOODLAND'S WATER**

The source of Woodland's water supply is the aquifer beneath the North Fork of the Lewis River. The water collection system, called a *Ranney well*, is located below the river bottom and is relatively safe from any potential contamination or flooding damage which may take place in the river. The Lewis River watershed is fed by glacier melt from Mt. Adams and smaller tributaries such as Cedar Creek. The Lewis River is one of the cleanest and most pristine rivers in the region; however, the source is naturally high in iron.

The City of Woodland Water Filtration Plant began operation in late May of 1999. The filtration plant uses chlorine for disinfection of any potential contaminants and to remove iron. Soda ash is also used in the iron removal process, as well as for corrosion control in the distribution system. Fluoride is added for strengthening and enhancement of teeth. Filter aid coagulants and positive charge polymers are also used in the treatment process for coagulation (the process causes smaller particles to attract to one another to form larger particles, which are then trapped on the filter surface). The treatment plant is designed for a 24-hour peak flow of 3,000,000 gallons per day (3 MGD). In addition to iron removal, the treatment process also reduces turbidity, color, and disinfects potential contaminants which may include the following:

- Microbial contaminants, such as viruses, bacteria, giardia, and cryptosporidium, which may come from wildlife.
- Inorganic contaminants, such as salts and metals, which can occur in nature.
- Pesticides and herbicides, which may come from a variety of sources such as farming, home or business use, and storm water runoff.
- Radioactive contaminants which can occur naturally.
- Organic chemical contaminants, including synthetic and volatile organic chemicals which are by-products of industrial processes, solvents, petroleum production, or from gas stations, storm water runoff and septic systems.

## **WATER CONSERVATION AND WATER USE EFFICIENCY RULE**

Municipal water systems have recently become subject to the "Water Use Efficiency Rule", effective January 22, 2007. Along with several other requirements, this rule requires distribution system leakage be reduced to 10% or less. The City of Woodland currently estimates their total amount of lost and unaccounted for water at 15%. The City staff continues to keep unaccounted for water as small as possible. Additionally, we request the public's assistance in reporting to the Public Works office, (360)-225-7999, any known leaks or other un-metered losses from our drinking water system.

## WATER QUALITY MONITORING RESULTS

The EPA requires that public water systems report annually on contaminants detected in their water supply. Woodland monitors over 150 of these. In addition, the City also collects samples from consumer taps to monitor for chlorine, coliform, lead and copper. We also collect samples at our reservoirs, distribution system, and at the source. When contaminants were detected, they were below the levels that the Environmental Protection Agency (EPA) considers of concern.

### Nitrates

The City of Woodland sampled for nitrate contaminants on our source water in the year 2010 and had a test result of 0.22 mg/l. This result is well below the EPA's maximum contaminant level (MCL) of 10 mg/l.

### Lead and Copper

Lead and copper samples were taken from 30 different residential sites in 2009. The results met the State requirement and no additional corrosion control treatment is necessary. The City will test for lead and copper again in 2012.

### General Pesticides (SOC-525.2)

The City of Woodland tested for General Pesticides in 2009. SOC-525.2 testing is comprehensive in that over 24 compounds are tested for compliance. All of the potential contaminants tested showed results lower than Department of Health (DOH) MCL's.

### Disinfection Byproduct Samples (DBP's)

The disinfection of drinking water is one of the major public health advances of the past century. One hundred years ago typhoid and cholera epidemics were common throughout American cities. Disinfection was a major factor in reducing these epidemics, and it is an essential part of drinking water treatment today. However, the disinfectants themselves can react with naturally occurring materials in the water to form unintended organic and inorganic byproducts which may pose health risks. A major challenge for water suppliers is how to balance the risks from microbial pathogens and disinfection byproducts. It is important to provide protection from these microbial pathogens while insuring decreasing health risks to the population from disinfection byproducts (DBP's). The EPA requires us to sample and test our drinking water for the above mentioned DBP's. Results from all of the samples taken in 2010 were less than the EPA's MCL.

## CROSS-CONNECTION / BACKFLOW PREVENTION

**What is a cross-connection?** A cross-connection, as defined by the Washington Administration Code, is "any actual or potential physical connection between a public water system or the consumer's water system and any source of non-potable liquid, solid, or gas that could contaminate the potable (drinking) water supply by backflow."

**What is my responsibility as a consumer?** As property and business owners, it is your responsibility to eliminate cross-connections that pose a potential health hazard by ensuring proper installation of a backflow prevention assembly.

**What is the City's responsibility?** As water purveyor, it is the responsibility of the City of Woodland to ensure that all its customers have a safe drinking water supply and that contaminants cannot enter the system somewhere between the time the water leaves the source of supply and when it enters their home or business.

**What is a water purveyor?** A purveyor is defined as an agency, subdivision of the state, municipal corporation, company, person, or other entity owning or operating a public water system, such as the City of Woodland.

**What is a Backflow Prevention Assembly?** A backflow prevention is a device that is installed somewhere in the consumer's water system that prevents contamination from entering the potable water supply. These devices are normally required and found on fire suppression systems and in-ground irrigation systems. While there are many types of devices, the following three are the most common and each have their own specific use.



Reduced Pressure Backflow Assembly  
(RPBA)



Double Check Valve Assembly  
(DCVA)



Pressure Vacuum Backflow Assembly  
(PVBA)

**QUESTIONS? Contact Woodland Public Works at (360) 225-7999.**