University of Idaho 2010 Drinking Water Report

2009 Water Use by the University of Idaho (PWS ID2290042)



The **University of Idaho** pumps groundwater from the Grande Ronde aquifer for drinking water and uses treated wastewater (reclaimed water) from the Moscow wastewater treatment plant to irrigate the golf course and playing fields. Last year, **UI pumped 173 million gallons** of groundwater. **The University of Idaho uses about 7 percent of the total water pumped in a year from the Grande Ronde aquifer.** The University saved 79 million gallons of Domestic water by using Reclaimed waste water to irrigate with. From 1979 when the reclaimed irrigation system was first installed the University has saved over 1 Billion gallons of deep aquifer water.

This Picture is of the new west wall of the Kibbie Dome. To the right is the new 2 million gallon Chilled water tank. This tank stores chilled water made at night and distributed during the days to cool campus buildings.

The Palouse Basin Aquifer Committee

The University of Idaho, along with WSU, the cities of Moscow, Pullman, Colfax, Latah County, and Whitman County, are members of the Palouse Basin Aquifer Committee. The Palouse groundwater basin supplies drinking water to all these groups from two basalt aquifers, the shallow Wanapum Aquifer and the deep Grande Ronde Aquifer. The Goal of the Palouse Basin Aquifer Committee is "To ensure a long-term, quality water supply for the Palouse Basin region".

Help Save Water On Campus

In the gym, take a quick shower and make sure the shower is completely turned off when you are finished.

Turn off the water when soaping your hands.

Contact Facilities about leaky faucets and toilets. (208) 885-6246

For more information Visit the PBAC website at http://www.uidaho.edu/pbac or Contact PBAC at (208) 885-4569

Testing required for this year

<u>Test</u>	Frequency	Quantity
Coliform	Monthly	10 samples per month
Nitrate	Yearly	1 sample per source
Disinfection By-product	Yearly	1 sample
Arsenic	Every 3 years	1 sample per source

University of Idaho's Drinking Water Report - 2009 Sampling Results

During recent years we have sampled for over 80 different chemicals and results have shown very little contamination. Contamination is defined as anything other than pure water. We sample monthly for total coliform bacteria as an indicator of microorganisms that should not be present. The table below lists the drinking water contaminants that we tested for or detected during the 2009 calendar year or in our most recent test as noted. 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 a health risk. More information about contaminants and potential health effects can be obtained by calling our office at Facilities 885-6288 or the U.S. Environmental Protection Agency (EPA) Safe Drinking Water Hotline (1-800-426-4791)

Maximum Contaminant Level Goal (MCLG): 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.

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.

Action Level (AL): the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Regulated Contaminant	MCLG	MCL	U of I s Water	Range of Detection	Sample Date	Violation	Typical Source of Contaminant	Comments
Total coliform bacteria	0	2	0		2009	no	Leaks in service lines	Tested Monthly
Nitrate as N (ppm)	10	10	n/d		2009	no	Run off from fertilizer	None Detected
Lead (ppb)	0	15AL	11	**	2009	no	Corrosion of household plumbing systems; Erosion of natural deposits.	Normal
Copper (ppm)	1.3	1.3AL	0.398		2009	no	Corrosion of household plumbing systems; Erosion of natural deposits.	Normal
Alpha/Radiation (pCi/L)	0	15	0.9		2001	no	Erosion of natural deposits	Normal
Fluoride (ppm)	4	4	0.777		2007	no	Naturally occurring	1.0 is considered ideal for teeth
Barium (ppb)	2	2	0.168		2007	no	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits	Normal
Chromium (ppb)	100	100	1.12		2006	no	Discharge from steel and pulp mills; Erosion of natural deposits	
Mercury (ppt)	0	2	.34		2007	no	Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills;	
Sodium (ppm)			19.1		2007	no	Runoff from cropland. Naturally occurring	

n/d: not detectable at testing limit ppm: parts per million or milligrams per liter ppb: parts per billion or micrograms per liter ppt: parts per trillion or nanograms per liter pci/L: picocuries per liter (a measure of radiation)

Total Coliform: Coliform are bacteria that are naturally present in the environment and are used as an indicator that other potentially harmful bacteria may be present. Coliform bacteria found in two or more samples is a warning of potential problems and usually triggers a precautionary boil notice.

About Nitrate: Nitrate in drinking water at levels above 10 ppm is a health risk for infants less than six months of age. When levels approach 10 ppm, ask for advice from your care provider about blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of well construction, usage, rainfall, and local contamination. None were detected in 2009.

Lead: 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). ** Two site out of twenty

tested were above the action level.	Lead testing results at the University wells are < 0.005 ppm.	Lead tests are taken straight from tap after a minimum of 6 hours standing time.

Sources of drinking water, both tap water and bottle water originate as surface water from rivers and lakes or as ground water from springs and wells. As water travels over the surface of land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material. Water picks up wastes from both human and animal activities. Surface water must be carefully filtered and disinfected to remove bacteria, viruses, and protozoa. Ground water is usually filtered naturally.

Source Water Assessment for the University of Idaho Water system can be found at: http://www.deq.idaho.gov/water/SWARepor

Contaminants that may be present include:

ts/internetResults.cfm

Microbial Contaminants such as bacteria, viruses, and protozoa are very small living creatures that may be natural and harmless, or harmful if originating from septic systems, agricultural livestock operations or wildlife.

Inorganic contaminants such as heavy metals, can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges.

Pesticides and herbicides may come from agriculture and residential uses.

Radioactive contaminants are naturally occurring

Organic chemical contaminants are usually man-made (synthetic) and vaporize easily (volatile). Petroleum products and degreasers are examples of gas station and dry cleaner waste transported by storm water and sewers.

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/Center for Disease Control guidelines on appropriate means to lessen the risk of infection by Crypto sporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

EPA ensures that tap water is safe to drink, by writing regulations that limits both natural and man-made contaminants. We treat our water according to both Idaho and EPA's regulations. Interstate bottled water is regulated by the U.S. Food and Drug Administration.

If you want to further protect yourself:

Remember that bacteria can grow on the end of your faucet and lead can dissolve from your home plumbing. Flush your system by running your water for about thirty seconds or until cold before drinking.

If you detect problems or have questions please call: Mike Holthaus at 885-6288 or Facilities at 885-6246. In after hour emergencies please call the Power Plant at 885-6271.