

University of Idaho 2005 Drinking Water Report

2004 Water Use by the University of Idaho



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 206 million gallons** of groundwater and **saved 87.5 million gallons** of groundwater by the use of reclaimed water. **The University of Idaho uses 10 percent of the total water pumped in a year from the Grande Ronde aquifer.**

Last year the University took 120 Bacteria samples, 2 nitrate samples, disinfection byproduct samples, and asbestos samples. We also installed new water mains to feed reclaimed water to the Administration lawn, this will save even more deep aquifer water.

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**. Groundwater levels in wells that pump from the Grande Ronde aquifer have declined over 100 feet in 100 years. The goal of the Palouse Basin Aquifer Committee is to bring an end to the declining water levels in local wells and ensure a sustainable supply of water for the future.

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>	<u>Frequency</u>	<u>Quantity</u>
Coliform	Monthly	10 samples per month
Nitrate	Yearly	1 sample per source

University of Idaho's Drinking Water Report - 2004 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 2004 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 885-6246 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		2004	no	Leaks in service lines	Tested Monthly
Nitrate as N (ppm)	10	10	n/d		2004	no	Run off from fertilizer	None Detected
Lead (ppb)	0	15AL	6	**	2003	no	Corrosive water & home plumbing	Normal
Copper (ppm)	1.3	1.3AL	0.3		2003	no	Corrosive water & home plumbing	Normal
Alpha/Radiation (pCi/L)	0	15	0.9		2001	no	Erosion of natural deposits	Normal
Fluoride (ppm)	4	4	0.3		2001	no	Naturally occurring	1.0 is considered ideal for teeth
Barium (ppb)	2	2	0.18		2001	no	Naturally occurring	Normal
Chromium (ppb)	100	100	8.0		2001	no	Naturally occurring	
Antimony (ppb)	6	6	1.0		2001	no	Naturally occurring	
Toluene (ppb)	1000	1000	0.5		2001	no	Degreaser	
Dichloromethane (ppb)	5.0	5.0	0.5		2001	no	Disinfection byproduct	

n/d: not detectable at testing limit **ppm:** parts per million or milligrams per liter **ppb:** parts per billion or micrograms 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 2001.

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). ** One 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.

Contaminants that may be present include:

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 ten 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.

Front page picture circa 1940's Life Science and Morrill Hall