# University of Idaho 2012 Drinking Water Report

## 2011 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 170 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 78.4 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 1.6 Billion gallons of deep aquifer water.

This Picture is looking across the pond at the University of Idaho Arboretum. The Arboretum is located on the South side of Campus adjacent to the University's Golf Corse. The Arboretum and the Golf Course are both watered with Reclaimed 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.** 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

| Test | Frequency | Quantity |
|------|-----------|----------|
| Coliform | Monthly | 10 samples per month |
| Nitrate | Yearly | 1 sample per source |
| Lead and Copper | Every 3 years | 20 total samples |

# University of Idaho's Drinking Water Report – 2011 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 2011 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** | | 2011 | no | Leaks in service lines | Tested Monthly |
| Nitrate as N (ppm) | 10 | 10 | **n/d** | | 2011 | 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; Runoff from cropland. | |
| Sodium (ppm) | | | **19.4** | | 2010 | no | 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 2011.

**Lead**: If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children.  Lead in drinking water is primarily from materials and components associated with service lines and home plumbing.  The University of Idaho is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components.

When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking.  If you are concerned about lead in your drinking water, you may wish to have your water tested.  Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available form the Safe Drinking Water Hotline (1-800-426-4791) or at http://www.epa.gov/safewater/lead..  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/SWAReports/internetResults.cfm

**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 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.