2023 Water Use by the University of Idaho (PWS ID2290042)

We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is a snapshot of last year's water quality. We are committed to providing you with information because informed customers are our best allies.

Where does my water come from?

The University of Idaho pumps groundwater from the Grande Ronde aquifer for drinking water.

The Grande Ronde aquifer is the deeper of the two aquifers in this area and together with the Wanapum aquifer makes up the Palouse groundwater basin. The U of I has two primary domestic water deep wells used for supplying the Moscow campus with water for domestic use, research, and fire protection. Last year, the U of I pumped 136.7 million gallons of groundwater, which is only 5% of the total water pumped last year from the Grande Ronde and Wanapum aquifers. In 1977 the University of Idaho built a reuse water facilities plant system that takes treated wastewater from the City of Moscow wastewater treatment plant that normally would discharge to Paradise Creek and uses it to irrigate the golf course and parts of campus instead. In 2023 alone, the U of I reclaimed 88.1 million gallons of water. Since 1977, when the reclaimed irrigation system was first installed, the university has reclaimed over 3.2 billion gallons of water. That is 3.2 billion gallons of fresh water saved that wasn't pumped from the aquifer.

HELP SAVE WATER ON CAMPUS

WATER CONSERVATION TIPS

Did you know that the average U.S. household uses approximately 400 gallons of water per day, or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference – try one today and soon it will become second nature.

- Take short showers – a 5-minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for bath.
- Shut off water while brushing your teeth, washing your hair, and shaving and save up to 500 gallons a month.
- Use a water-efficient showerhead. They're inexpensive, easy to install, and can save you up to 750 gallons a month.
- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- Water plants only when necessary.
- Fix leaky toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.
- Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation. (Irrigating early morning or at night.)
- Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill!
- Visit www.epa.gov/watersense for more information.
- Contact U of I Facilities about leaky faucets and toilets at (208) 885-6246.

THE PALOUS BASIN AQUIFER COMMITTEE

The **University of Idaho**, along with **Washington State University**, the **City of Moscow**, the **City of Pullman**, the **City of Palouse**, **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".

SOURCE WATER PROTECTION

Protection of drinking water is everyone's responsibility. You can help protect your community's drinking water source in several ways:

- Eliminate excess use of lawn and garden fertilizers and pesticides – They contain hazardous chemicals that can reach your drinking water source.
- Pick up after your pets.
- If you have your own septic system, properly maintain your system to reduce leaching to water sources or consider connecting to a public water system.
- Dispose of chemicals properly; take used motor oil to a recycling center.
- Volunteer in your community. Find a watershed or wellhead protection organization in your community and volunteer to help. If there are no active groups, consider starting one. Use EPA's Adopt Your Watershed to locate groups in your community or visit the Watershed Information Network's How to Start a Watershed Team.
- Organize a storm drain stenciling project with your local government or water supplier. Stencil a message next to the street drain reminding people "Dump No Waste – Drains to River" or "Protect Your Water." Produce and distribute a flyer for households to remind residents that storm drains dump directly into your local water body.

Do I need to take special precautions?

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

Why are there contaminants in my drinking 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 (EPA) Safe Drinking Water Hotline (800-426-4791). 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.

In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. These include microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife; inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, or farming; pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses; 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 stormwater runoff, and septic systems; and radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

WATER QUALITY DATA TABLES

UNIT DESCRIPTIONS AND DEFINITIONS

Unit Descriptions	
Term	**Definition**
ppm	ppm: parts per million, or milligrams per liter (mg/L)
ppb	ppb: parts per billion, or micrograms per liter (µg/L)
pCi/L	pCi/L: picocuries per liter (a measure of radioactivity)
% positive samples/month	% positive samples/month: Percent of samples taken monthly that were positive
NA	NA: not applicable
ND	ND: Not detected
NR	NR: Monitoring not required, but recommended.

Important Drinking Water Definitions	
Term	**Definition**
MCLG	MCLG: Maximum Contaminant Level Goal: 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.
MCL	MCL: Maximum Contaminant Level: 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.
TT	TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
AL	AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Variances and Exemptions	Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
MRDLG	MRDLG: Maximum residual disinfection level goal. The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
MRDL	MRDL: Maximum residual disinfectant level. The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
MNR	MNR: Monitored Not Regulated
MPL	MPL: State Assigned Maximum Permissible Level

LEAD AND COPPER

Contaminants	MCLG	AL	Your Water	Sample Date	# Samples Exceeding AL	Exceeds AL	Typical Source
Copper							
Copper - action level at consumer taps (ppm)	1.3	1.3	0.139	2021	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead							
Lead - action level at consumer taps (ppb)	.015	.015	0.007	2021	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

ADDITIONAL INFORMATION FOR 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. Your Community Water System 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 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 from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

WATER QUALITY TEST RESULTS

In order to ensure that tap water is safe to drink, the EPA prescribes regulations which limit the amount of contaminants in water provided by public water systems. The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. Although many more contaminants were tested, only those substances listed below were found in your water. All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased protection of public health. A few naturally occurring minerals may actually improve the taste of drinking water and have nutritional value at low levels. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than one year old. In this table you will find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have provided the definitions below the table.

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Detected In Your Water	Range		Sample Date	Violation	Typical Source
				Low	High			
Disinfectants & Disinfection By-Products								
Haloacetic Acids (HAA5) (ppb)	NA	60	ND	NA	NA	2023	No	By-product of drinking water chlorination
TTHMs [Total Trihalomethanes] (ppb)	NA	80	ND	NA	NA	2023	No	By-product of drinking water disinfection
Microbiological Contaminants								
Total Coliform (RTCR)	NA	TT	NA	NA	NA	2023	No	Naturally present in the environment
Inorganics Contaminants								
Nitrate	10	10	ND	NA	NA	2023	No	Run off from fertilizer
Nitrite	10	1	ND	NA	NA	2023	No	Run off from fertilizer
Sodium	NA		21.3	NA	NA	2023	No	Naturally Occurring
Asbestos	NA		N/A	NA	NA	2022	No	Naturally Occurring

UNDETECTED CONTAMINATES

The following contaminants were monitored for, but not detected, in your water.

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Detected In Your Water	Range		Sample Date	Violation	Typical Source
				Low	High			
Undetected Contaminants								
1,1,1-Trichloroethane (ppb)	200	200	ND	NA	NA	2019	No	Discharge from metal degreasing sites and other factories
1,1,2-Trichloroethane (ppb)	3	5	ND	NA	NA	2019	No	Discharge from industrial chemical factories
1,1-Dichloroethylene (ppb)	7	7	ND	NA	NA	2019	No	Discharge from industrial chemical factories
1,2,4-Trichlorobenzene (ppb)	70	70	ND	NA	NA	2019	No	Discharge from textile-finishing factories
1,2-Dichloroethane (ppb)	0	5	ND	NA	NA	2019	No	Discharge from textile-finishing factories
1,2-Dichloropropane (ppb)	0	5	ND	NA	NA	2019	No	Discharge from textile-finishing factories
2,4,5-TP (Silvex) (ppb)	50	50	ND	NA	NA	2019	No	Residue of banned herbicide

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Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Detected In Your Water	Range		Sample Date	Violation	Typical Source
				Low	High			
2,4-D (ppb)	70	70	ND	NA	NA	2019	No	Runoff from herbicide used on row crops
Alachlor (ppb)	0	2	ND	NA	NA	2019	No	Runoff from herbicide used on row crops
Antimony (ppb)	6	6	ND	NA	NA	2019	No	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder; test addition
Arsenic (ppb)	0	10	ND	NA	NA	2019	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Atrazine (ppb)	3	3	ND	NA	NA	2019	No	Runoff from herbicide used on row crops
Barium (ppm)	2	2	ND	NA	NA	2019	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Benzene (ppb)	0	5	ND	NA	NA	2019	No	Discharge from factories; Leaching from gas storage tanks and landfills
Benzo(a)pyrene (ppt)	0	200	ND	NA	NA	2019	No	Leaching from linings of water storage tanks and distribution lines
Beryllium (ppb)	4	4	ND	NA	NA	2019	No	Discharge from metal refineries and coal-burning factories; Discharge from electrical, aerospace, and defense industries
Cadmium (ppb)	5	5	ND	NA	NA	2019	No	Corrosion of galvanized pipes; Erosion of natural deposits; Discharge from metal refineries; runoff from waste batteries and paints
Carbofuran (ppb)	40	40	ND	NA	NA	2019	No	Leaching of soil fumigant used on rice and alfalfa
Carbon Tetrachloride (ppb)	0	5	ND	NA	NA	2019	No	Discharge from chemical plants and other industrial activities
Chlordane (ppb)	0	2	ND	NA	NA	2019	No	Residue of banned termiticide

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Detected In Your Water	Range		Sample Date	Violation	Typical Source
				Low	High			
Chlorobenzene (monochlorobenzene) (ppb	100	100	ND	NA	NA	2019	No	
Dalapon (ppb)	200	200	ND	NA	NA	2019	No	Runoff from herbicide used on rights of way
Di (2-ethylhexyl) adipate (ppb)	400	400	ND	NA	NA	2019	No	Discharge from chemical factories
Di (2-ethylhexyl) phthalate (ppb)	0	6	ND	NA	NA	2019	No	Discharge from rubber and chemical factories
Dibromochloropropane (DBCP) (ppt	0	200	ND	NA	NA	2019	No	Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards
Dichloromethane (ppb)	0	5	ND	NA	NA	2019	No	Discharge from pharmaceutical and chemical factories
Dinoseb (ppb)	7	7	ND	NA	NA	2019	No	Runoff from herbicide used on soybeans and vegetables
Endothall (ppb)	100	100	ND	NA	NA	2019	No	Runoff from herbicide use
Endrin (ppb)	2	2	ND	NA	NA	2019	No	Residue of banned insecticide
Ethylbenzene (ppb)	700	700	ND	NA	NA	2019	No	Discharge from petroleum refineries
Ethylene dibromide (ppt)	0	50	ND	NA	NA	2019	No	Discharge from petroleum refineries
Glyphosate (ppb)	700	700	ND	NA	NA	2019	No	Runoff from herbicide use
Haloacetic Acids (HAA5) (ppb)	NA	60	ND	NA	NA	2019	No	By-product of drinking water chlorination
Heptachlor (ppt)	0	400	ND	NA	NA	2019	No	Residue of banned pesticide
Heptachlor epoxide (ppt)	0	200	ND	NA	NA	2019	No	Breakdown of heptachlor
Hexachlorobenzene (ppb)	0	1	ND	NA	NA	2019	No	Discharge from metal refineries and agricultural chemical factories
Hexachlorocyclopentadiene (ppb)	50	50	ND	NA	NA	2019	No	Discharge from chemical factories

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Detected In Your Water	Range		Sample Date	Violation	Typical Source
				Low	High			
Lindane (ppt)	200	200	ND	NA	NA	2019	No	Discharge from chemical factories
Mercury [Inorganic] (ppb)	2	2	ND	NA	NA	2019	No	Erosion of natural deposits; Discharge from refineries and factories; Runoff from cropland
Methoxychlor (ppb)	40	40	ND	NA	NA	2019	No	Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, livestock
Nitrate [measured as Nitrogen] (ppm	0		ND	NA	NA	2019	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Nitrite [measured as Nitrogen] (ppm)	0		ND	NA	NA	2019	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Oxamyl [Vydate] (ppb)	200	200	ND	NA	NA	2019	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
PCBs [Polychlorinated biphenyls] (ppt)	0	500	ND	NA	NA	2019	No	Runoff from landfills; Discharge of waste chemicals
Pentachlorophenol (ppb)	0	1	ND	NA	NA	2019	No	Discharge from wood preserving factories
Picloram (ppb)	500	500	ND	NA	NA	2019	No	Herbicide runoff
Selenium (ppb)	50	50	ND	NA	NA	2019	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
Simazine (ppb)	4	4	ND	NA	NA	2019	No	Herbicide runoff
Styrene (ppb)	100	100	ND	NA	NA	2019	No	Discharge from rubber and plastic factories; Leaching from landfills
TTHMs [Total Trihalomethanes] (ppb)	NA	80	ND	NA	NA	2019	No	By-product of drinking water disinfection
Tetrachloroethylene (ppb)	0	5	ND	NA	NA	2019	No	Discharge from factories and dry cleaners

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Detected In Your Water	Range		Sample Date	Violation	Typical Source
				Low	High			
Thallium (ppb)	.5	2	ND	NA	NA	2019	No	Discharge from electronics, glass, and Leaching from ore-processing sites; drug factories
Toxaphene (ppb)	1	1	ND	NA	NA	2019	No	Discharge from petroleum factories
Toxaphene (ppb)	0	3	ND	NA	NA	2019	No	Runoff/leaching from insecticide used on cotton and cattle
Trichloroethylene (ppb)	0	5	ND	NA	NA	2019	No	Discharge from metal degreasing sites and other factories
Vinyl Chloride (ppb)	0	2	ND	NA	NA	2019	No	Leaching from PVC piping; Discharge from plastics factories
Xylenes (ppm)	10	10	ND	NA	NA	2019	No	Discharge from industrial chemical factories
cis-1,2-Dichloroethylene (ppb)	70	70	ND	NA	NA	2019	No	Discharge from industrial chemical factories
cis-1,2-Dichloroethylene (ppb)	600	600	ND	NA	NA	2019	No	Discharge from industrial chemical factories
p-Dichlorobenzene (ppb)	75	75	ND	NA	NA	2019	No	Discharge from industrial chemical factories
trans-1,2-Dichloroethylene (ppb)	100	100	ND	NA	NA	2019	No	Discharge from industrial chemical factories

If you detect problems or have questions, please call Elmer Johnson, the McKinstry Incident Report Center, or University of Idaho Facilities. In after hour emergencies, please call University of Idaho Campus Security or the McKinstry Incident Report Center.

Contact	Phone Number	After Hours
Elmer Johnson (water purveyor)	208-301-0662	
McKinstry Incident Reporting Hotline (24/7)	1-855-936-3685	1-855-936-3685
U of I Facilities	208-885-6246	
U of I Campus Security (24/7)	208-885-7054	208-885-7054