

Is Drinking Water Safe at Your School?

Source Water Protection Tips For Schools that Operate their own Public Water System

1. Investigate your School's Drinking Water Protection Area
2. Plan for Action ([create a drinking water protection program](#))
 - 💧 Limit Activities at the Source (wellhead)
 - 💧 Handle Chemicals and Fuel with Care
 - 💧 Train Staff on Chemical and Emergency Procedures
 - 💧 Secure Water System Facilities and Hazardous Materials
 - 💧 Communicate with Staff, Students and Neighbors
 - 💧 Save Water and Money
 - 💧 Pay Attention to Drinking Water when the School Expands
 - 💧 Update Plans and Procedures over Time

ADEQ Source Water Protection staff members are available for on-site guidance and technical support to aid in developing a drinking water protection plan.

For further information about Source Water Protection and ways to protect school drinking water contact:

Arizona Department of Environmental Quality
Drinking Water Monitoring & Protection Unit
AZ toll free: (800) 234-5677, ext. 771-4641
www.azdeq.gov

Schools are responsible for providing safe drinking water to their students, staff and visitors. Many school systems do not have access to a nearby public water supplier and provide drinking water by operating their own public water system.

Rain falling on the land near the well water system eventually makes its way to the wells used to provide drinking water. State drinking water programs have designated these lands as drinking water protection areas. As water moves across the land or through the soil, it may pick up pollutants and carry them into the ground water used by the school's well. For this reason, it is important to keep pollutants off these lands whenever possible.

1. Investigate Your School's Drinking Water Protection Area.

- 💧 Contact your state drinking water program – Arizona Department of Environmental Quality: 602-771-4641 or AZ toll free, (800) 234-5677, ext. 771-4641, www.azdeq.gov.
- 💧 Inspect your school's drinking water protection area for activities that might release contamination into the area (examples: septic systems, leaking fuel storage tanks and piping, pesticide applications, automobiles, or spills in parking areas).
- 💧 Find out where floor drains discharge. Release of toxic or hazardous materials through spills into floor drains that discharge to the ground or a septic system can lead to contamination.
- 💧 Check the sanitary seal and well cap on drinking water wells. If the seal around your school's well has cracked, or is not intact, bacteria and other contaminants can enter the well water system, potentially making people sick.

2. Plan for Action.

- 💧 Create a drinking water protection program for your school's drinking water supply. Map the supply's protection area, list all potential sources of contamination in that area, and lessen the threat of contamination or overuse of the supply. Check with the Arizona Department of Environmental Quality to get a copy of the Source Water Assessment for your system. It will have information about your system's susceptibility to contamination.
- 💧 Prepare or update an emergency response plan. Identify potential threats to your drinking water, appropriate response actions, and the responsibilities of all staff during an emergency. Post emergency contact numbers and keep a copy handy at all times. Be sure to involve all the school staff in writing the plan, including teachers, custodians, groundskeepers, the certified water operator, and food preparation staff.

Limit Activities at the Source (wellhead).

- 💧 Limit activities around wells. The most critical area for protection to a well is often called the sanitary radius or source water assessment area. This information is found in the Source Water Assessment report, available from ADEQ.
- 💧 Do not use or store pesticides, fertilizers, hazardous or toxic chemicals, and deicing materials near the well.
- 💧 Direct storm water runoff from parking areas and streets away from the well in accordance with local requirements.
- 💧 When possible, move fuel storage tanks and onsite wastewater systems away from the well in accordance with state and local regulations.

Handle Chemicals and Fuel with Care.

- 💧 **Develop policies and procedures for chemical acceptance, purchasing and inventory.** Use non-toxic cleaning products if possible and do not purchase hazardous materials unless absolutely necessary. Try to buy low waste, low toxicity chemical laboratory materials and art supplies. Assign a staff person who knows about potential chemical risks, and proper storage and disposal practices, to oversee all chemical purchasing.
- 💧 **Inspect and maintain fuel and chemical storage systems** on school grounds. Oversee fuel tank and chemical storage refilling to prevent overflows and avoid refilling near storm drains and unpaved areas. Do regular leak detection testing and keep track of fuel and chemical use so that abnormally high usage is noticed, indicating a possible leak. Try to remove underground storage tanks located in drinking water protection areas and replace them with above-ground tanks with spill containment structures, in accordance with state requirements.
- 💧 **Avoid pesticide and fertilizer applications** on playing fields and school grounds, especially within drinking water protection areas. Develop an integrated pest management plan, which makes use of natural controls to lesson the need for pesticides on school grounds and facilities.
- 💧 **Limit road salting** in drinking water protection areas to the extent practical, but do not compromise safety.

Train Staff on Chemical and Emergency Procedures.

- 💧 **Train staff to be sure they know how to properly use, store and dispose of hazardous materials.** Be sure to train students that will use these materials too. Post signs to announce responsibilities and procedures for collection of hazardous wastes from shops, storage areas, laboratories, cafeterias and art rooms. Label areas where hazardous materials are kept.
- 💧 **Be sure staff are trained so they know how to respond in a drinking water emergency.** Carry out a mock drill of your emergency response plan, and involve all staff and the local fire and police departments.

Secure Water System Facilities and Hazardous Materials.

- 💧 **Prevent access to all wells and water supply facilities.** Lock entrances and well caps, put up gates, and post signs to keep students and unauthorized people away from the water system. Cap and secure all vents, access ports and other openings. Inspect backflow devices and replace them as needed.
- 💧 **Keep all hazardous and toxic materials locked up** when not used to keep them away from students and unauthorized users.
- 💧 **Properly close (seal) any wells that are no longer used or needed** in the foreseeable future according to state guidelines (contact AZ Department of Water Resources). An improperly sealed abandoned well can serve as a direct contamination route to groundwater.

Communicate with Staff, Students and Neighbors.

- 💧 **Get students involved as customers of the school's drinking water supply** by asking for their help in its protection.
- 💧 **Locate storm water drainage catch basins and work with students** to stencil, "Do Not Dump, Flows to ..." at the drain to discourage dumping of non storm water materials.

- 💧 Speak with any neighbor whose property is in the school's drinking water protection area about ways they can help to keep the school's water supply safe. Ask your town for help with protecting the school's drinking water source.
- 💧 Post signs announcing, "This is a Drinking Water Protection Area", prohibit dumping of hazardous or toxic materials down drains, and remind staff and students about the need to conserve water.

Save Water and Money.

- 💧 Conserve water to maintain the school's water quality and lower long-term costs for water, wastewater, and energy.
- 💧 Use a master water meter to track water use in the school.
- 💧 Check for and repair water leaks.
- 💧 Install water-saving landscape irrigation devices, low flow plumbing fixtures, and faucet aerators. Water landscape wisely. Plant native, drought-resistant landscaping.
- 💧 Teach students and staff about ways they can save water.

Pay Attention to Drinking Water when the School Expands.

- 💧 Locate new parking areas, fuel tanks, septic systems and playing fields outside the drinking water protection area, or as far as possible from the school's well.
- 💧 Install new wells away from storm water collection devices, pesticide and fertilizer application areas, fuel storage systems, and hazardous material storage areas.
- 💧 Do not install floor drains that drain to the ground surface in areas where hazardous or toxic chemicals are used (examples: boiler rooms, fuel storage tanks, chemical storage areas).

Update Plans and Procedures over Time.

- 💧 Continue to make changes to improve the school's protection program and be sure to tell all staff about these changes. As you carry out actions to protect your school's drinking water supply, you will learn about new, better ways to get the job done.

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5 main components of a Source Water Protection Plan

- Compile available information about your water system
- Delineate a protection area around your well or water source
- Identify potential sources of contamination
- Develop strategies to protect your drinking water source and aquifer
- Implement protection activities and involve the community

Our Water. Our Future. Ours to Protect.