## WATER WELLS

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## FARM\*A\*SYST Farm/Ranch Self-Assessment System for Arizona



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This fact sheet is taken from the Arizona Farm\*A\*Syst workbook. Farm\*A\*Syst is a voluntary groundwater pollution prevention program designed for farmers and rural residents. The goals of the program are to help rural residents: understand potential causes of groundwater contamination, identify farmstead management practices that pose risks to groundwater, and develop a plan to reduce those risks.

The majority of people who live in rural Arizona get their drinking water from wells. Most wells provide clean and safe water. If, however, a well is not constructed or maintained properly, the water quality could be affected. Bacteria, pesticides, fertilizers or other contaminants may get into the water and make it unfit for human or farm use. If your water becomes contaminated, it can affect the health of your family and your livestock. It may also affect the quality of water in nearby lakes, streams, or other wells. Your neighbors and community may all be affected.

Certain farm structures and management practices can create risks for water supplies. Potential contamination sources include feedlots, animal yards, septic systems, manure storage, fertilizers, and pesticides. The amount of risk depends upon the condition of your well and the proximity of pollutants. For example, cracks or gaps in the material surrounding your well casing allow easy access for contaminants. Storing, mixing, or loading petroleum products, pesticides, and fertilizers near a well can also lead to groundwater contamination.

Cleaning up contaminated groundwater supplies can be difficult and expensive. Therefore, pollution prevention is the most cost-effective approach to protecting water quality.

## What can you do?

- 1. Make sure the water you drink and the groundwater that supplies your well are protected from contamination.
- 2. Test your water regularly.
- 3. Handle fertilizer, pesticides, and other potential contaminants carefully.

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ltem	Question	Yes	No
1. Position of water well in relation to potential sources of contamination.	<b>a.</b> Well is upslope from all sources of contamination.		
	<b>b.</b> Well is downslope from most sources of contamina- tion, and some surface runoff may reach well.		
2. Distance from well to potential sources of contamination.	<b>a.</b> Well is greater than 100 feet from potential sources of contamination.		
	<b>b.</b> Well is <u>less</u> than 100 feet from potential sources of contamination.		
3. Condition of well casing.	<b>a.</b> Casing extends 12 inches or more above normal ground level.		
	<b>b.</b> Casing extends <u>less</u> than 12 inches above ground level.		
4. Backflow prevention	<b>a.</b> Antibackflow devices are on all faucets with hose connections.		
	<ul> <li><b>b.</b> Antibackflow devices are not used.</li> </ul>		

The questions listed above can help you determine whether your drinking water has a high or low potential of becoming polluted.

Take a few minutes to complete the questions. If you answered **yes** to mostly "**a**" questions, you're drinking water is probably safe from becoming polluted at the wellhead site. If you answered **yes** to mostly "**b**" questions, then your drinking water may be at high risk of becoming polluted.

Worksheet number two in the Farm\*A\*Syst book will give you a more complete assessment of the condition of your drinking water well. If you are interested in obtaining a copy of Arizona's Farm\*A\*Syst workbook, please contact the University of Arizona's College of Agriculture Publications Distribution Center, 4042 North Campbell Avenue, Tucson, Arizona 85721. The office phone number is (520) 621-1713 and the FAX number is (520)795-8508. The cost of the workbook is \$5.00 plus shipping. Contact your county extension office or NRCS office if you have questions about how to use the workbook.

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