

LANDOWNER'S SURVEY:

WHAT'S THE RISK TO YOUR WELL WATER?

Utah Homestead Assessment for Groundwater and Surface Water Protection

Survey 1

Revised March 2012

Many rural residents obtain their drinking water from a well. To protect the health of their families, they must take special care to protect their water source from contamination. Locating and controlling sources of pollution to groundwater can be challenging, but is far preferable to the cost and difficulty of cleaning up contaminated groundwater. Remember, wells (even those not used as a drinking source) are often the most direct route for pollutants to get into your groundwater.



INSIDE:

USING THIS SURVEY

TAKE THE SURVEY

- Location & Site
- Construction
- Maintenance

ASSESSING YOUR RISK

INTERPRETING YOUR RISK

HOW TO USE THIS SURVEY

Use this survey to determine the level of risk to your well water quality posed by various farm activities. The survey asks a series of questions about common risks to well water quality. The survey is divided into different sections to help you identify the specific practices or conditions on your farmstead that should be addressed to reduce risk of water contamination.

The results of this survey are intended to provide general information and recommendations regarding farmstead practices and potential risks to water quality. Keep this survey as your private record and use it as a guide to taking action to reduce these risks.



Water is Life : Quality Matters



See Glossary in Fact Sheet #1 for clarification of terms in this survey.

SURVEY INSTRUCTIONS

For each question circle the answer that best describes your situation. At the end of each section add together the numbers that correspond to each answer. When you have completed the survey, add together the section totals for the total risk assessment score.

Location & Site Characteristics

1. What is the texture of the soil around your well?

- Clay (1)
- Loam (2)
- Sand (3)
- Don't know (3)

2. At the well site, is the water table or bedrock more than 20 feet from the ground surface?

- Yes (1)
- Don't know (2)
- No (3)

3. Is there a depression or sign of soil settlement near or around your well?

- No (1)
- Yes (3)

4. Does surface runoff ever reach your well?

- Never (1)
- Occasionally (2)
- Frequently (3)

5. Is the water well upslope from all potential pollution sources?

- Yes, all (1)
- No (3)

6. What is the separation distance between the water well and each of the following? Record 0 for items not present on your farm.

- | | |
|----------------------|---|
| a. Sewer/drain inlet | Greater than 15 feet (1) Less than 15 feet (3) |
| b. Septic tank | Greater than 50 feet (1) Less than 50 feet (3) |
| c. Outdoor privies | Greater than 50 feet (1) Less than 50 feet (3) |
| d. Absorption field | Greater than 100 feet (1) Less than 100 feet (3) |
| e. Manure pit | Greater than 50 feet (1) Less than 50 feet (3) |

- | | |
|---|---|
| f. Nearest stream, lake, pond, or ditch | Greater than 25 feet (1) Less than 25 feet (3) |
| g. Nearest property line | Greater than 15 feet (1) Less than 15 feet (3) |
| h. Nearest dwelling | Greater than 5 feet (1) Less than 5 feet (3) |
| i. Chemical storage | Greater than 100 feet (1) Less than 100 feet (3) |

Location & Site Characteristics section total _____



Construction & Condition

7. How was your well constructed?

- Drilled (1)
- Driven (2)
- Dug (3)

12. Are there any holes or tears in the casing?

- No (1)
- Yes, or not sure (3)

8. How old is your well?

- Less than 20 years old (1)
- Between 20 to 70 years old (2)
- More than 70 years old (3)

13. How far does the well casing extend above the ground surface?

- 12 inches or more (1)
- Between 0 to 11 inches (2)
- Below grade (in pit or basement) (3)

9. How deep is your well?

- Greater than 100 feet (1)
- 25 to 100 feet (2)
- Less than 25 feet (3)

14. Are there any cracks or holes in your well cap?

- No (1)
- Yes, or well cap is missing (3)

10. Does the well have a casing?

- Yes (1)
- No, or not sure (3)

15. Describe the fit of the well cap.

- Tight (1)
- Loose (3)

11. Does the casing extend the full depth of the well?

- Yes (1)
- No, or not sure (3)

16. Does the well have a vent?

- Yes, with screen (1)
- Yes, no screen (2)
- No vent (3)

Construction & Condition section total _____

Maintenance & Testing

17. Are there any cross connections between your water supply line and potential sources of contaminated water?

- No (1)
- Yes, or not sure (3)

20. Do you have your water tested on a regular basis?

- Annually (1)
- Occasionally (2)
- Never (3)

18. How many faucet and hose connections have anti-backflow devices?

- All (1)
- Some (2)
- None (3)

21. Does your water meet state and federal drinking water quality standards?

- Always (1)
- Usually (2)
- Seldom, or not sure (3)

19. Are there any unused or abandoned wells on your property that have not been capped or plugged using a procedure approved by the Utah Department of Environmental Quality?

- No (1)
- Uncertain (2)
- Yes (3)

22. Does one or more of the following indicators of your drinking water quality change during wet periods or following a storm: color, clarity, odor or taste?

- No (1)
- Yes (3)

Maintenance & Testing section total _____

RISK RATING

| Add the following totals: | <u>Low</u> | <u>Moderate</u> | <u>High</u> |
|--|------------|-----------------|-------------|
| Location & Site Characteristics section total = _____ | 0 – 14 | 15 – 28 | 29 – 42 |
| Construction & Condition section total = _____ | 0 – 10 | 11 – 20 | 21 – 30 |
| Maintenance & Testing section total = _____ | 0 – 6 | 7 – 12 | 13 – 18 |

SURVEY 1 TOTAL SCORE _____



INTERPRETING YOUR RISK RATING

Locate your total risk score on the spectrum above to get a general idea of the potential contamination risk to your well. Next, compare your risk scores for each section with the ratings low, moderate, and high. For sections that are moderate or high, look back into the survey for questions which you marked with a high score (3). These are the areas you should address to reduce the risk of well water contamination.

Follow Up

Refer to Fact Sheet #1-How To Protect Your Well Water, for contacts and information about safe well operation. Contact your county Extension office, or the Extension web page (<http://extension.usu.edu/waterquality>) for more information.