EC98-747 Farm*A*Syst Nebraska's System for Assessing Water Contamination Risk Summary Worksheet 1: Overall Assessment

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Authors
Getting started

You will return to this worksheet after completing all other worksheets. It is designed to review your total activities and give you a summary of areas of concern. It is suggested that you complete Worksheet 2 first and then complete all additional worksheets that pertain to your farm, ranch, or homesite. Transfer results from individual worksheets to complete this overall summary.

1: If you haven’t already done so, go back to each of the worksheets you’ve completed and identify any individual activities or structures that you ranked as high risk. You may have already done this as you completed each worksheet.

2: List each activity of concern on the chart. Fill in the first three blanks (to the left of the dark vertical line on the chart).

3: For each activity that you listed, fill in the “response options” and “taking action” section to the right of the dark vertical line on the chart.

4: Keep this list handy and refer to it often. It provides important information for you as you plan how to begin to more effectively protect the groundwater that provides drinking water to you and your family, and surface water resources.
High Risk Activities

After completing each of the assessments appropriate to your site, list any individual activities or structures that you ranked as high risk. Fill in the worksheet number, the worksheet name, the individual activity of concern, response options, and taking action.

<table>
<thead>
<tr>
<th>Worksheet number</th>
<th>Worksheet name</th>
<th>High Risk Activities and Activities Impacted by Site Vulnerability</th>
<th>Response Options</th>
<th>Taking Action</th>
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<td>Immediate action possible</td>
<td>Further planning required</td>
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A few final words

After doing all you can to reduce the risk of water contamination on your farm, ranch or homesite, you may still have well test results showing high levels of some contaminants.

- Contamination of groundwater is not easily and rapidly cleaned up. The contaminants can continue to move toward a well for many years.

- Some nonpoint source contamination, such as nitrate leaching from cropland, cannot be totally eliminated.

- Problems could originate in more distant areas, too. Depending on the geology of an area, activities off your property could result in groundwater contamination flowing slowly toward your property and the groundwater you drink. It may take years for a spill on someone else’s land to show up in your well. Leaking petroleum tanks, dumps, and waste pits away from your property all have the potential to affect your drinking water — just as activities on your farm, ranch or homesite have the potential to affect the drinking water of your neighbors and even others living some distance away from you.

You may want to keep track of potential sources of groundwater contamination beyond your property. You may also want to encourage your neighbors to use this assessment.

On the other hand, despite the fact that results of your well water quality tests may be quite good, your worksheet results may show the need for changes. Your well may be upslope from potential contamination sources on your property. That doesn’t mean, however, that contaminants are not entering the groundwater and affecting someone else’s drinking water. You need to be as careful as you can about managing potential contamination sources, especially if your site is on land vulnerable to groundwater or surface water contamination.

You may have several “high risk” pollution potential rankings, or you may also be concerned about your well water quality test results and want to know more about how your activities might have influenced them. If so, after completing the Assessment System, you may want to seek advice or obtain a detailed site analysis and look more closely at potential sources to determine the causes of the contamination.

The following diagram gives you avenues to take to seek further information. For additional information about potential sources of groundwater or surface water contamination on your farm, ranch or homesite, contact your local University of Nebraska Cooperative Extension office, Natural Resources District, Natural Resources Conservation Service office, or another natural resources agency.
Farm*A*Syst Worksheet Rankings

No high risk rankings

Consider testing water and review fact sheets for improved practices.

Water tested?

Yes

No

Good quality

Poor quality

Annual water tests

Identify contamination source? Contact experts

One or more high risk rankings

Test Water (from all drinking water sources)

Is water safe?

No

Yes

Alternative water supply or treatment

Periodic testing

Farm*A*Syst Fact Sheets

Action to address suspected sources of contamination

Resource List

University of Nebraska Cooperative Extension: local resources, contacts, Best Management Practices, domestic water, waste management.


Department of Environmental Quality: water quality regulations, monitoring, wastewater, local situations, waste management.

Nebraska Health and Human Services System: well construction, testing, health impact issues, wastewater, local and area site contamination situations, waste management.

Natural Resources District: Best Management Practices, cost sharing, regulations, monitoring, local and area site contamination situations.

Paid consultant: detailed reconnaissance, solutions, design, confidential assessment, identifying sources, testing.
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The views expressed in this publication are those of the author and do not necessarily reflect the views of either the technical reviewers or the agencies they represent.

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