

Drinking Water Well Condition: Assessing Drinking Water Contamination Risk

For each category, read across to the right and circle the statement that BEST describes the condition on your property. If you do not have enough information to make a selection, skip that item. Mark the box at the end of each row that represents your risk. Make a list of those items that are ranked Moderate to High or High Risk and what you plan to do to reduce the risks.

		LOW RISK	LOW to MODERATE RISK	MODERATE to HIGH RISK	HIGH RISK	YOUR RISK
LOCATION ASSESSMENT						
1	Position of well in relation to pollution sources	Upslope from all pollution sources. No surface water runoff reaches well. Surface water diverted from wellhead.	Upslope from or at grade with pollution sources. No surface water runoff reaches wellhead.	Downslope from most pollution sources. Some surface water runoff may reach wellhead.	Downslope from pollution sources. Surface water runoff from livestock yard, pesticide and fertilizer use or storage or other hazardous material reaches wellhead.	<input type="checkbox"/> Low <input type="checkbox"/> Moderate <input type="checkbox"/> High
2	Separation distances between well and pollution sources	Meets or exceeds all state minimum required separation distances.*	Meets all required separation distances and almost meets recommended distances. Possible contamination source is downhill, small amount, and contained.		Does not meet one or more required separation distances. Other upslope contamination sources or nearby higher density or poorly contained contaminants.	<input type="checkbox"/> Low <input type="checkbox"/> Moderate <input type="checkbox"/> High
3	Soil type	Fine-textured soils (clay loams, silty clay loam).	Medium-textured soils (silt loam, loam).	Medium-textured or coarse textured soils.	Coarse-textured soils (sand, sandy loam).	<input type="checkbox"/> Low <input type="checkbox"/> Moderate <input type="checkbox"/> High
4	Subsurface conditions	Silt/clay, competent (no major fracture patterns) and unweathered bedrock	Dominantly silt, clay or competent and unweathered rock, some sand, gravel or fractured bedrock.	Mostly sand, gravel or fractured bedrock, some silt, clay, or hard competent rock.	Sand, gravel or highly fractured bedrock.	<input type="checkbox"/> Low <input type="checkbox"/> Moderate <input type="checkbox"/> High
5	Depth to the aquifer (water-bearing zone)	Greater than 200 feet	100 to 200 feet	50 to 100 feet	Less than 50 feet	<input type="checkbox"/> Low <input type="checkbox"/> Moderate <input type="checkbox"/> High
CONDITION ASSESSMENT						
6	Well age	Less than 20 years old.	20 to 35 years old.	35 to 50 years old.	More than 50 years old.	<input type="checkbox"/> Low <input type="checkbox"/> Moderate <input type="checkbox"/> High

7	Well type	Drilled	Drilled well with unknown construction (no well log)	_____	Driven-point (sand point), Dug well OR well type is unknown.	<input type="checkbox"/> Low <input type="checkbox"/> Moderate <input type="checkbox"/> High
8	Condition of casing and well cap (seal)	No holes or cracks. Cap tightly secured. Screened vent.	No defects visible. Well vented but not screened.	No holes or cracks visible. Cap loose.	Holes or cracks visible OR Cap loose or missing OR cap is buried underground.	<input type="checkbox"/> Low <input type="checkbox"/> Moderate <input type="checkbox"/> High
9	Casing and seal below ground surface	Grout and casing extends at least 18 feet below ground and consists of neat cement or bentonite clay material	_____	_____	Grout around casing extends less than 18 feet below ground and is of unknown material.	<input type="checkbox"/> Low <input type="checkbox"/> Moderate <input type="checkbox"/> High
10	Casing height above land surface	More than 12 inches above grade, more than 2 feet above 100- year flood plain.	8-12 inches above grade, less than 2 feet above 100- year flood plain.	At grade or up to 8 inches above.	Below grade or in pit or basement.	<input type="checkbox"/> Low <input type="checkbox"/> Moderate <input type="checkbox"/> High
MANAGEMENT ASSESSMENT						
11	Backflow prevention	Anti-backflow devices installed on all faucets with hose connections. No cross-connections between water supplies.	Anti-backflow devices install on some faucets with hose connections.	No anti-backflow devices. Air gap maintained.	No anti-backflow devices. Air gap not maintained. Cross-connections between water supplies.	<input type="checkbox"/> Low <input type="checkbox"/> Moderate <input type="checkbox"/> High
12	Unused well on your property	No unused, unsealed wells.	Buried or properly abandoned well in area.	Unused, unsealed well in area. Unused well not properly abandoned.	Open well, or unused, unsealed well in proximity. Unused well not properly abandoned.	<input type="checkbox"/> Low <input type="checkbox"/> Moderate <input type="checkbox"/> High
13	Water testing	Test performed yearly. Bacterial negative, nitrate not detected.	Testing performed less frequently than yearly. Bacteria negative, nitrate less than 3 milligrams per liter (or ppm).	Occasional positive bacteria, nitrate 3 to 7 milligrams per liter (ppm).	No water tests done OR consistent positive bacteria or nitrate greater 7 milligrams per liter (ppm) OR Persistent change in color, clarity, odor or taste.	<input type="checkbox"/> Low <input type="checkbox"/> Moderate <input type="checkbox"/> High

Adapted with permission from Home*A*Syst: An Environmental Risk-Assessment Guide for the Home, NRAES-87.

Action Plan

Moderate to High OR High Risks	Proposed Action	Resources Available	Target Date	Completed Date

***Required Separation Distances from Well:**

OAR 690-210-0030

Septic Tank	50 feet	Confined animal feeding area or holding operation	50 feet
Septic Drainfield	100 feet	Animal waste holding lagoon or storage site	50 feet
Closed sewage or storm drain system	50 feet	Property line	10 feet
Hazardous waste storage or disposal	500 feet		

These separation distances represent minimums and do not guarantee that the well is protected from contamination.