

Nebraska Extension Rapid Assessment Form for Wells & Onsite Wastewater Systems Affected by Wildfire

Use this form to quickly assess risks to drinking water from household wells, as well as damage to water & onsite wastewater system infrastructure after a wildfire.

Property owner: _____ Phone: _____

Address: _____

County: _____ Associated fire name (if known): _____

GPS location of residence/business: Latitude: _____ Longitude: _____

OUTDOORS

1. Observe fire damage to the building or property.

- a. Does the building have power? Yes No
- b. If no power, is a generator being used? Yes No N/A
Undersized generators can damage the pumping system. A Nebraska licensed water well pump installation contractor, electrician, or power company should determine the proper generator to avoid damage to the pump and well system.
- If yes, is the generator located outside and at least 20 feet away from doors, windows, and vents? Yes No
*Never use a generator inside, even if doors and windows are open.
Use generators and any gas-powered equipment outside, at least 20 feet away from doors, windows, and vents.
- c. Is the exterior of the building burned or showing signs of heat damage? Yes No
A Nebraska licensed water well contractor may need to inspect the system if the outside of the building or yard area near the well is burned.
- d. Are chemicals and combustibles stored a minimum of 100 feet away from the water well? Yes No
Known sources of contamination must be a minimum distance of 100 feet away from a water well in accordance with Title 178 NAC12.
If no, what type: _____
- e. Are large fuel or chemical tanks located a minimum of 100 feet away from the water well? Yes No
Known sources of contamination must be a minimum distance of 100 feet away from a water well in accordance with Title 178 NAC12.
If no, what type: _____

- f. Is a functional onsite wastewater system able to treat wastewater discharges from the house or building? Yes No
- g. Was aerial fire retardant or fire fighting foam used at or in close proximity of the wellhead or septic system? Yes No

2. Observe fire damage associated with the well.

Damage to electrical wires, controls, pipes, pressure tanks, and other components of these systems may affect system performance and may compromise the safety of the water supply. It could also affect the proper disposal of wastewater.

- a. Is the sanitary well seal/cap missing or damaged? Yes No
*A missing or damaged sanitary well seal/cap can allow ash, animals, insects, and other debris to enter uncovered wells and contaminate the well. *Temporarily cover to prevent contaminants from entering.**
- b. Is surface water able to enter the exposed well? Yes No
Firefighting water and rainwater runoff after a fire can allow ash, debris, or other contaminants to enter the well.
- c. Are rubber gaskets missing or damaged in the sanitary well seal/cap on or near the top of the well casing or pitless unit? Yes No
- d. Are any electrical wiring, connectors, and conduits (including controls) that supply power to the well damaged or nonoperational? Yes No
**Do not handle the wiring or touch the casing if there is damage or exposed electrical wiring.* Even if the pump is functioning, burned wires not visible from the surface could cause damage to the pumping equipment.*
- e. Are the well casing or polyvinyl chloride (PVC) or high-density polyethylene (HDPE) liners inside the well damaged? Yes No
Damaged and melted plastic casing, liner, or pipe may contaminate the well with volatile or semi-volatile organic compounds and other contaminants.
- f. Is there damage to the aboveground or encased plumbing that brings water from the well to the house or building? Yes No
High temperatures could cause contamination to the well.
- g. Are pressure tank(s) damaged or nonoperational? Yes No N/A
Water pressure bladder tanks exposed to high temperatures could contaminate the well.
- h. Is there damage to the well house or other structures used to protect well components? Yes No N/A
Damaged or burned well houses can indicate heat damage to well components and the potential for well contamination.
- i. Is water treatment equipment in the well house or other structure damaged or nonoperational? Yes No N/A

- j. Is there damage to water storage tanks, vents, or overflow pipes? Yes No N/A
- k. Is there damage to the septic tank inspection ports or manhole cover? Yes No N/A
- l. Is there damage to the leach field or mound system inspection ports? Yes No N/A
- m. Is there damage to the lagoon cleanout pipes? Yes No N/A
- n. Did large equipment drive over your drainfield or septic tank areas?
**Large vehicles or agricultural equipment being driven over a drainfield area or septic tank can cause structural damage to the system.* Yes No N/A
- o. Are there abnormal wet spots in the yard, sewage odors, or odd sounds from mechanical components?
**These detections can be indicators of structural damage to the onsite wastewater system. Contact a Nebraska certified onsite wastewater professional to further assess the system.* Yes No N/A

INDOORS

3. Observe the interior of the building for fire damage, plumbing leaks, and changes in operation.

- a. Is water flow interrupted with air escaping when faucets are turned on?
Interrupted flow of water suggests loss of pressure. Yes No
- b. Does the water look or smell different (for example, an earthy or smoky smell or an odor of petroleum or gas)? Yes No
- c. Is water treatment equipment inside the house or building damaged or nonoperational? Yes No N/A
- d. Are there visible leaks associated with the house or building plumbing system? Yes No

If you answered “Yes” to any of the questions in sections #2 or #3, this indicates that you have wildfire damage to your well and/or onsite wastewater system(s). To best protect the health of your family, Nebraska Extension strongly recommends contacting your local Nebraska licensed well or certified wastewater professional to further assess the system(s) and make necessary repairs.