Wellhead Protection

One of the best things a well owner can do regularly is to visually check the wellhead (the portion of the well above the surface) and the area around the wellhead. By doing so, you may detect potential issues before they become problems that jeopardize your water quality.

Here is a checklist you can use:

- Casing (pipe protruding from the ground)--Check the general condition and check if the casing extends at least 6 inches above ground. If not, hire a qualified professional to investigate remedial action.
- Well cap (cap on top of casing)--Check the condition of the cap and any seals present, that it is securely attached, and that it will keep out insects and rodents. If not, hire a qualified professional to repair or replace the well cap. In doing so, the water well systems professional can evaluate other considerations for the condition of the well. A compromised wellhead (cap) may allow entry for ants, bees, spiders, earwigs, etc.
- Electrical conduit (if present)--Look to visually verify that all connections are secure. If not, hire a qualified professional to investigate and repair or replace as needed.
• Survey the area above ground surrounding the well for potential sources of contamination, flooding, and physical dangers.
• Look for chemicals such as paint, fertilizer, pesticides, or motor oil--remove these if possible.
• Maintain at least 50 feet between the well and any kennels, pastures, feeding areas, or livestock operations--remove these if possible.
• Ensure a proper distance is maintained from buildings, waste systems, or chemical storage areas (including fuel tanks)--a water well systems professional should know local codes and requirements. If there is any concern, contact your water well systems professional or your local health department.

![Diagram showing Good, Fair, and Poor well conditions](image)

• Be sure the ground surrounding the wellhead is sloping away from the well to divert surface runoff. If not, consider allowing for the ground to slope away from the well casing, while maintaining a proper height of the casing above the ground. A water well systems professional can extend the height of the casing if needed.
• If the well is equipped with a vented well cap, check for the presence of the vent screen in the well vent, and clear away any debris that has accumulated on the vent screen. Check the condition of the vent screen to ensure it can prevent insects and animals from entering.
• Any growth of weeds, trees, shrubs, or grasses with damaging root systems within 10 feet of the well should be physically removed. Avoid the use of chemicals or herbicides near the wellhead.
• The well should not be in a roadway or driveway. If it is within close proximity to a roadway or driveway, it should be properly marked to avoid being hit by vehicles. You can protect your well by placing bumper posts near the well's vulnerable position(s) to increase visibility.
• Special care should be observed if your well is located near a driveway and you live where it snows. Wells easily disappear below snow cover and are easily overlooked when pushing snow takes place.
- Be conscious of any other potential threats to the wellhead--garages, ATVs, sledding hills, debris, dirt, surface water, fuels and chemicals (including fertilizers), and runoff water from kennels, pastures, or feedlots.
- Keep the well out of dog runs or animal pens.
- If your well is located in a low-lying area prone to flooding, you should consider having your water well systems professional raise the well casing to at least 12 inches above the historic record flood level, properly sealing the wiring conduit and providing casing bump protection if floating debris is a concern. Another option is to construct a new well at a location outside the flood-prone area.