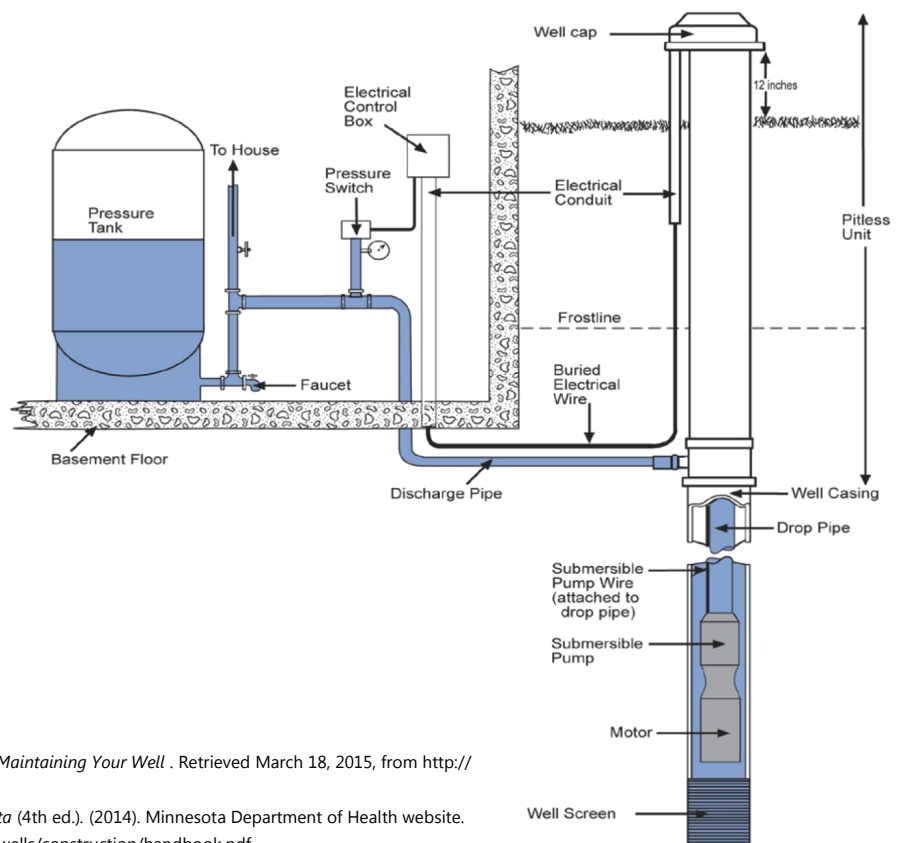


# Simple Steps to Maintain Your Well

Here's a homeowner's well maintenance checklist from the National Groundwater Association:

- Always use licensed or certified water well drillers and pump installers when a well is constructed, a pump is installed, or the system is serviced.
- An annual well maintenance check, including a bacterial & nitrate test, is recommended. Any source of drinking water should be checked any time there is a change in taste, odor or appearance, or anytime a water supply system is serviced. Check with your local county health department to see if you should test for local contaminants such as arsenic.
- Keep hazardous chemicals, such as paint, fertilizer, pesticides and motor oil away from your well.
- Periodically check the well cover or well cap on top of the casing (well) to ensure it is in good repair.
- Always maintain proper separation between your well and buildings, waste systems, or chemical storage facilities.
- Don't allow back-siphonage. When mixing pesticides, fertilizers or other chemicals, don't put the hose inside the tank or container.
- When landscaping, keep the top of your well at least one foot above ground. Slope the ground away from your well for proper drainage.
- Take care in working or mowing around your well. A damaged casing could jeopardize the sanitary protection of your well. Don't pile snow, leaves or other materials around your well.
- Keep your well records in a safe place. These include the construction reports, as well as annual water well systems maintenance and water testing results.
- Be aware of changes in your well, the area around your well, or the water it provides.
- When your well has come to the end of its serviceable life (usually more than 20 years), have your qualified water well contractor properly seal your well after constructing your new system.

## Well & Water System



Treyens, Cliff. (2008) *What's a Private Well Owner to do? Eight Tips for Maintaining Your Well*. Retrieved March 18, 2015, from <http://www.wellowner.org>

*Well Owner's Handbook: A Consumer's Guide to Water Wells in Minnesota* (4th ed.). (2014). Minnesota Department of Health website. Retrieved March 18, 2015 from <http://www.health.state.mn.us/divs/eh/wells/construction/handbook.pdf>

# Treatment

Make sure your treatment unit is from a reputable and knowledgeable dealer and read the specs carefully to ensure the unit removes the contaminants of concern.

## **Water Treatment System Registration Program**

The Water Treatment System Registration Program is responsible for:

1. Confirming that water treatment systems sold in Iowa with claims to reduce health-related contaminants have appropriate third-party verification of the claims.
2. Reviewing third-party testing agencies to ensure proper qualifications and capabilities.
3. Maintaining a registry of water treatment systems that comply with Iowa law.
4. Technical assistance to consumers and preliminary investigation of complaints regarding sale of unregistered water treatment systems or that are making unsubstantiated claims.

For more information, contact:

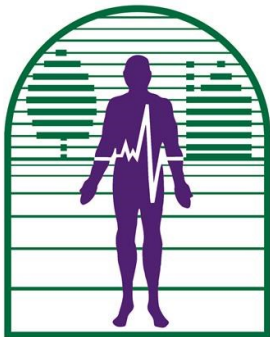
Iowa Bureau of Environmental Health Services

Randy Lane

Ph: (515) 281-5894

[www.idph.state.ia.us/EHS/](http://www.idph.state.ia.us/EHS/)

[WaterTreatmentSystems.aspx](http://www.idph.state.ia.us/EHS/WaterTreatmentSystems.aspx)



*Cerro Gordo County  
Department of Public Health*



# The Well Quiz

How well do you know your well? Answer the following questions about your well...

## Is your well...

- A minimum 30m / 100ft from potential sources of contamination, such as a septic field, chicken coop, compost pile, garbage cans, refuse piles, herbicide or fertilizer use or storage, above and below ground storage tanks, parking areas?
- In a high, dry location?
- Easily accessible for maintenance?

**YES**   **NO**   **MAYBE**

|                          |                          |                          |
|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

## Well Construction

- Is the ground mounded around your well to deflect runoff?
- Is the well cap at least 30cm / 12" above-ground and is it watertight?
- If your well is drilled, do you have a copy of the driller's log?
- Is the well casing grouted and watertight to a depth of 0.9m if your well is less than 15m deep or at least 4.6m if your well is deeper than 15m?
- Does your water system include backflow prevention devices?

|                          |                          |                          |
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| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

## Well Type

- Is your well deeper than 15m / 50ft?
- Does your well serve only one house?
- Has your water ever been tested for naturally high levels of chemicals / minerals?

|                          |                          |                          |
|--------------------------|--------------------------|--------------------------|
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| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

## Well Maintenance & Water Quality

- Has your well and water system been cleaned and disinfected within the last six months?
- Has your well been tested for bacteria within the last six months?
- Have you pumped your septic system within that last three years?
- If your lot is smaller than 1hs (2.5 acres), has your neighbor pumped their septic system within the last three years?
- Do you have enough water all year?

|                          |                          |                          |
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| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

## Abandoned Wells

- Are there any abandoned wells on your property or in your neighborhood?
- If there are abandoned well, are they filled and sealed?

|                          |                          |                          |
|--------------------------|--------------------------|--------------------------|
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| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

## Well Quantity

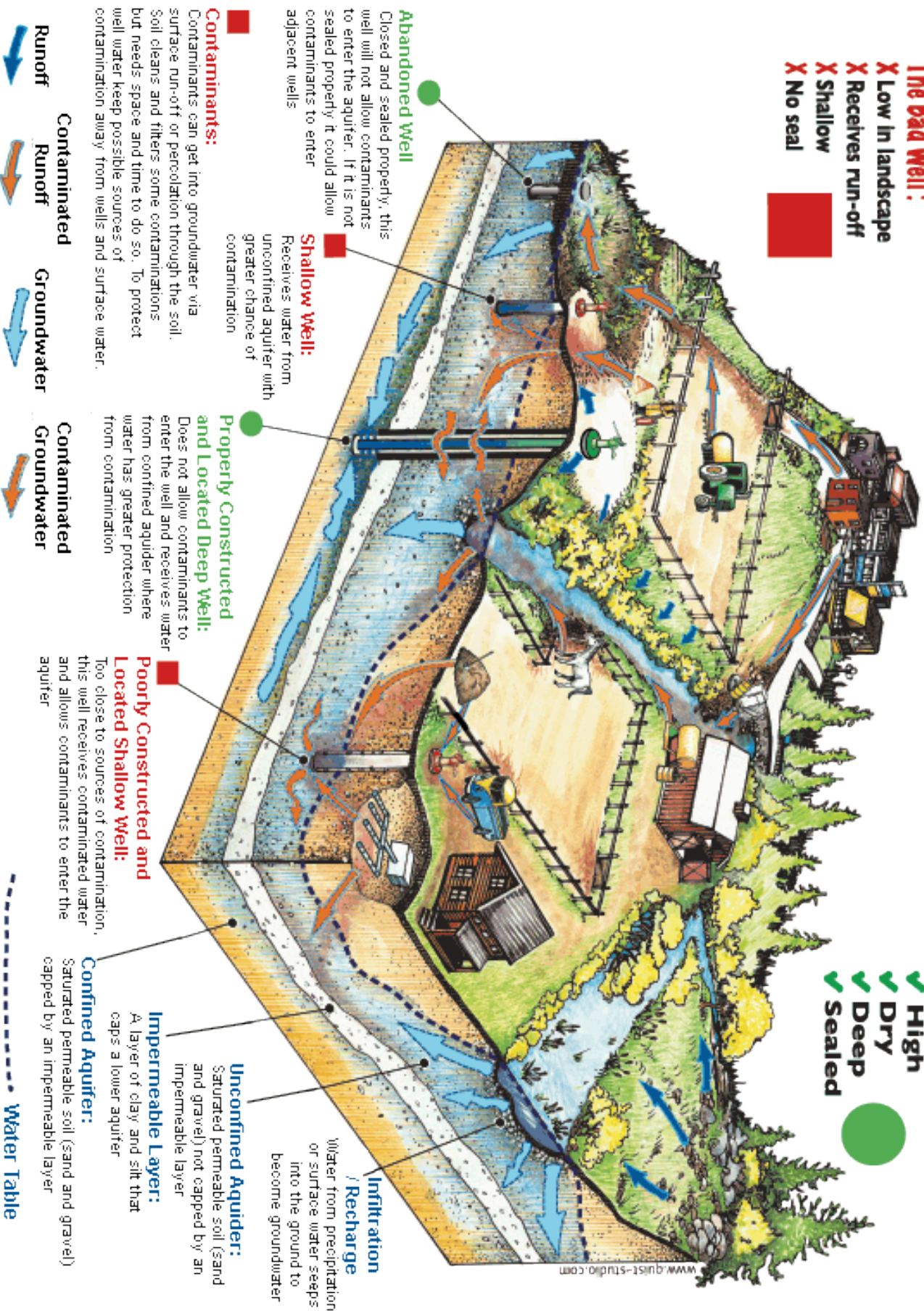
- Do you have adequate water all year round?
- Do you use low water use fixtures?
- Do you practice low water use gardening?

|                          |                          |                          |
|--------------------------|--------------------------|--------------------------|
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| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

# Good Well vs. Bad Well

- The Bad Well:**
- X Low In landscape
  - X Receives run-off
  - X Shallow
  - X No seal

- The Good Well:**
- ✓ High
  - ✓ Dry
  - ✓ Deep
  - ✓ Sealed



**Abandoned Well**  
Closed and sealed properly, this well will not allow contaminants to enter the aquifer. If it is not sealed properly it could allow contaminants to enter adjacent wells

**Shallow Well:**  
Receives water from unconfined aquifer with greater chance of contamination

**Contaminants:**  
Contaminants can get into groundwater via surface run-off or percolation through the soil. Soil cleans and filters some contaminations but needs space and time to do so. To protect well water keep possible sources of contamination away from wells and surface water.

**Properly Constructed and Located Deep Well:**  
Does not allow contaminants to enter the well and receives water from confined aquifer where water has greater protection from contamination

**Poorly Constructed and Located Shallow Well:**  
Too close to sources of contamination, this well receives contaminated water and allows contaminants to enter the aquifer

**Unconfined Aquifer:**  
Saturated permeable soil (sand and gravel) not capped by an impermeable layer

**Impermeable Layer:**  
A layer of clay and silt that caps a lower aquifer

**Confined Aquifer:**  
Saturated permeable soil (sand and gravel) capped by an impermeable layer

**Infiltration / Recharge**  
Water from precipitation or surface water seeps into the ground to become groundwater



----- **Water Table**