# **General Information for Existing Wells**

## Well Plugging and Rehabilitation

Contamination of our groundwater is most common through old, abandoned wells and poorly constructed wells. The groundwater moves through the soil, and any well that taps into this vital resource is a potential channel for pollution.

- The Grants-to-Counties Program provides cost-share assistance to plug and correct well construction problems that can allow contaminants to enter the groundwater supply.
- Many wells can be rehabilitated.

### **Common Well Integrity Issues**

- Abandoned wells often are not adequately covered. Small animals can enter the well, drown and remain floating in the water. The polluted well then has direct contact with water used for everyday drinking and bathing.
- Poorly constructed wells can be a channel for pollution.
- Large-diameter brick wells can allow contamination to enter at all levels of the well.

#### **Certified Well Pluggers**

For the DNR's list of people certified to plug wells, go to <u>Iowa DNR</u>. Click on "Reports" and select "Well Diggers," "Pump Installers" or "Well Pluggers." This list is not an endorsement of any specific well drillers or plugging contractors, nor is it meant to be exclusive of any other certified well drillers or plugging contractors.

## **Water Testing**

Union County's water testing programs are provided to ensure a safe water supply for drinking. If you obtain your drinking water from a private well and would like to have it tested, please contact our office at (641) 782-7803. Water tests through the Grants-to-Counties Program are FREE.

### Water Testing Available in Union County

- Coliform bacteria, E. coli bacteria and nitrates are the most common forms of contamination found in private water wells.
- Tests for lead and other contaminants can also be arranged on a request basis. Testing for lead and other contaminants is not covered under the Grants-to-Counties program.

Our staff makes every effort to determine the source of contamination for unacceptable test results, and then works with the well owner to make necessary corrections to ensure a safe drinking water supply.

## **Coliform Bacteria**

Total coliform bacteria testing provides an indication of the bacteriological quality of the drinking water. The presence of coliform bacteria in a drinking water supply indicates contamination from surface or shallow subsurface sources such as soil, septic or cesspool leakage, animal feedlot runoff, treatment failures, etc. Their presence also suggests that disease-causing organisms may enter the drinking water supply in the same manner.

## E. Coli Bacteria

E. coli bacteria are commonly found in sewage, septic system discharge and animal manure. Presence of E. coli bacteria suggests that water containing human or animal waste products is entering the water supply. This poses a serious health threat because disease-producing organisms are often found in these wastes.

## Nitrate

Nitrate is used in fertilizer and is found in sewage and wastes from humans and/or farm animals and generally gets into drinking water from those activities. Excessive levels of nitrate in drinking water have caused serious illness and sometimes death in infants less than six months of age. The serious illness in infants is caused because nitrate is converted to nitrite in the body. Nitrite interferes with the oxygen-carrying capacity of the child's blood.