# Florida's water-what you should know.

### **Ground Water**

Many places in the United States rely on surface water for their drinking water supply. Because we live in Florida, we are lucky to have a plentiful source of ground water. Ground water wells supply over ninety-two percent of the water we need to drink, bathe, flush toilets, wash laundry and water our lawns. The majority of these wells produce water that tastes good and is free of harmful contaminants. Unfortunately, certain chemicals and bacteria that may cause disease have been found in some wells in Florida. Chemicals have gotten into ground water because of leaking gasoline storage tanks, pesticide applications, landfills, im-proper disposal of toxic wastes, and ignorance or disregard for our water resources. Bacteria can get into drinking water through poorly maintained septic systems, livestock areas, or as a result of poorly constructed wells.

### **Private Wells**

About 80% of Florida's residents are served by public water systems covered by the Federal Safe Drinking Water Act. The other 20% receive their water from smaller, limited-use public, or private water systems. The Centers For Disease Control and Prevention in Atlanta have reported that consumption of contaminated drinking water in the United States has

resulted in thousands of cases of illness each year. Although public water supplies are required to test for a variety of contaminants such as pathogenic organisms, radioactive elements, and toxic substances, the water quality of private water wells is the responsibility of the owner. Routine testing for a few common contaminants is strongly recommended for the owners of private water systems.

The most common and widespread contaminants in Florida are bacteria, nitrates and lead. Other chemicals like ethylene dibromide (EDB), tetrachlorethylene (PCE) and temik have also been found in isolated areas. Contaminated drinking water can cause a number of diseases, and is sometimes fatal to vulnerable people.

## Take the Test

The most common test for bacteria in water is the coliform test. Coliform bacteria in themselves are not harmful. They are found in the intestinal tract of warmblooded animals. But their presence is an indication that other harmful bacteria may also be present. Diarrhea is one of the most common symptoms of drinking water that is contaminated with bacteria. After initial satisfactory testing, wells should be tested again for coliform bacteria after any well repairs, if the well was flooded, or if testing of

nearby wells indicates the need. Changes in color, taste or smell of your water may also indicate the need for testing.

# Testing Can Help Babies

Private well owners should also consider testing for nitrate, especially if you live in an agricultural area. Nitrate in drinking water above the national standard poses an immediate threat to children under three months of age. In some infants, excessive levels of nitrate have been known to react with hemoglobin in the blood to produce an anemic condition commonly known as "blue baby syndrome," whereby the infant is literally starved of oxygen, sometimes resulting in death. After an initial satisfactory test, the well should be retested for nitrate every three to five years.

### Lead

Lead in drinking water usually is the result of the use of lead piping, lead solder, or other lead containing components of your plumbing system, not the well water itself. Like nitrate, lead is especially dangerous to young children. Excessive amounts of lead in the blood (above the national standard of .015 mg/L) may result in nervous system disorders, >>>

>>> or brain or kidney damage. Water should be tested for lead initially and again after any plumbing work every three to five years.

Even though these three contaminants are the most common threats to the health of you and your family, your water well may also be susceptible to other drinking water contaminants, depending on present and past land use activities near your well.

# Chemical Contaminants

Agricultural activities and commercial facilities have also had a significant impact upon Florida's groundwater quality.

Poeticides such as othylene dibromide (FDR)

Pesticides such as ethylene dibromide (EDB) have been detected in water wells within citrus growing areas, and other rural areas of the state. But perhaps the largest source of groundwater contamination has been leaking underground petroleum storage tanks, which the state is currently addressing in its SUPER Act clean-up program.

# As a private well owner you need to be familiar with these potential problems.

Periodic testing of your well through a certified laboratory is highly recommended. The Florida Department of Health has a program which offers water testing through your local county health department for a set fee.

# **Collecting Samples**

Samples must be collected in a certain way using special containers in order for the results to be valid. Contact the health department for current fees and sampling instructions.

Private laboratories (certified by the state) are also available to perform water quality testing, although the fees and time required varies from lab to lab.

The Department of Health wants to ensure that all residents and visitors to the state have water that is safe to drink. If you have any questions or concerns regarding the safety of your private water system, or desire further information regarding the testing of your water well, please contact your local county health department at the address listed below:



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# drinking water

# Is yours safe.

Florida Department of Health