The Well Owner

The well owner plays an important role in ensuring long-term safety of the well and groundwater resources.

After the well has been constructed, the well owner is responsible for:

- Maintaining the wellhead. This is the portion extending above the ground. State law requires the wellhead to extend at least one foot above grade. Prevent damage to the wellhead from lawn mowers, tractors and other equipment.
- Maintaining minimum setback distances from septic systems, sewers, fuel tanks, chemicals, animal feedlots, etc.
- Keeping a wellhouse free from gasoline or chemical storage.
- Inspecting the well for cracks in the casing, a loose well cap or other problems.
- Keeping the area around the well free from debris such as leaves, weeds or trash.
- Contacting a permitted well or pump contractor, as required by law, to correct problems or perform service work.
- Plugging abandoned or unused wells. These wells can be a direct pathway for contamination to Missouri's groundwater.
- Using the well for its intended use.

MISSOURI DEPARTMENT OF NATURAL RESOURCES
Missouri Geological Survey

Contact Us

If you have questions or concerns about your water well, please contact:

Missouri Department of Natural Resources

Missouri Geological Survey
Geological Survey Program
Well Installation Section
Phone: 573-368-2165
Fax: 573-368-2317
welldrillers@dnr.mo.gov
PO Box 250, Rolla, MO 65402

Online Information

Permitted contractors and existing well records are available online at **dnr.mo.gov/mowells**.

Use GeoSTRAT to locate existing wells and other information online at **dnr.mo.gov/geology/geostrat.htm**.

Additional Resources

Missouri Department of Health and Senior Services
dhss.mo.gov
573-751-6400

Natural Resource Conservation Service
nrcs.usda.gov
573-876-0900

Nothing in this document may be used to implement any enforcement action or levy any penalty unless promulgated or authorized by statute.

Missouri Geological Survey Director:
Joe Gillman

PUB2280 – 2/20

YOUR NEW WATER WELL

MISSOURI DEPARTMENT OF NATURAL RESOURCES
Missouri Geological Survey

Constructing Your Water Well from Start to Finish

A well provides a reliable, safe source of drinking water when the well is properly located, constructed and maintained.

A water well is an expensive investment. Well owners should take an active role in maintaining their drinking water source, which will help to protect Missouri's groundwater.

The construction of a safe well involves a partnership between the Missouri Department of Natural Resources, the well contractor and the well owner. Each has specific individual responsibilities and all need to be involved in the process.

Missouri Department of Natural Resources

The department is responsible for:

- Establishing minimum well construction standards designed to protect Missouri's groundwater.
- Licensing all well and pump contractors performing any work on wells in Missouri.
- Investigating citizen concerns.

Well Contractor

The well contractor is responsible for:

- Ensuring the well is properly located and a safe distance from contamination sources.
- Using materials that meet established standards.
- Disinfecting the well after completion.
- Submitting a well certification form and fee to the Missouri Department of Natural Resources.

Water Well Drilling Areas

Area 1 — Majority of the state. This area has a large quantity of good quality drinking water.

Area 2 — Western Missouri. Water bearing zones from these formations are thin and often yield mineralized water.

Area 3 — Most of northern Missouri. Generally, water from this area is highly mineralized and seldom used for drinking water.

Area 4 — Northeast Missouri. Generally, water from this area is highly mineralized and seldom used for drinking water.

Area 5 — Southeast Missouri and major stream and river flood plains. This area has a large quantity of readily available shallow groundwater.

Area 6 — St. Francois Mountain area. Wells in this area generally produce a low yield of one to two gallons per minute if granite is encountered.

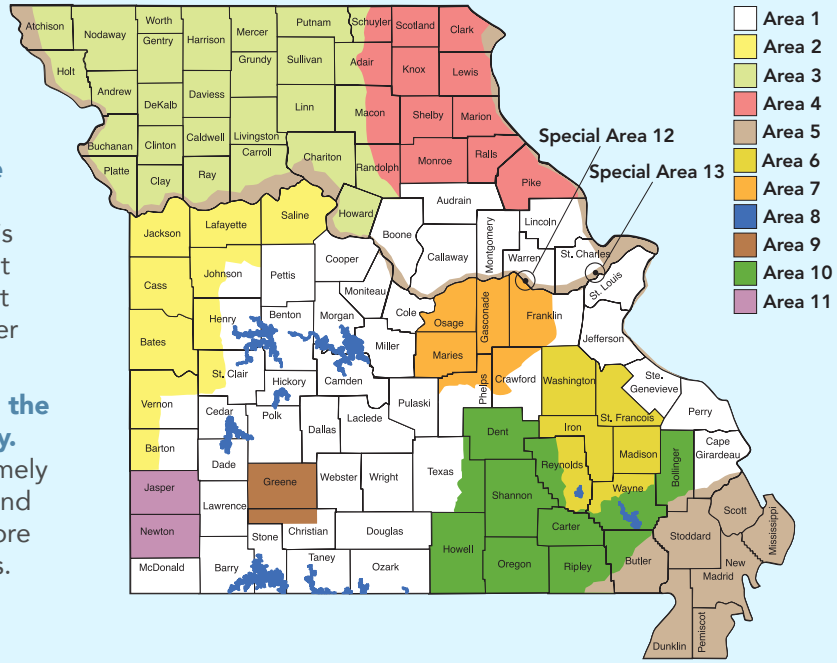
Area 7 — East-central Missouri. This area has naturally-occurring problems or fragile groundwater environments that may be threatened by population growth.

Area 8 — The area within one quarter mile of each of the major lakes. Wells drilled in this area require casing to extend at least 50 feet below the deepest part of the lake to prevent water from entering the well.

Area 9 — Greene County and the panhandle of Christian County. This area is located in an extremely sensitive and fragile geologic and hydrologic setting requiring more stringent well drilling standards.

Area 10 — South-central Missouri. This area contains deeply weathered and highly fractured bedrock requiring more stringent well drilling standards.

Area 11 — Newton and Jasper counties. Portions of the upper aquifer are contaminated with lead and cadmium from historic mining activity and trichloroethylene, requiring more stringent well drilling standards.

Area 12 — Portions of Franklin County within and south of the city of New Haven. Portions of the aquifer are contaminated with chemicals such as perchloroethylene, trichloroethylene and their degradation products. These concerns require more stringent drilling standards in this area.

Area 13 — Portions of St. Charles County west of the city of Weldon Spring. Portions of the aquifer are contaminated by one or more of the following chemicals: TNT, dinitrotoluene, trichloroethylene, uranium, nitrate, nitrobenzene and dinitrobenzene. These concerns require more stringent drilling standards in this area.