

For More Information . . .

Call Your Local NRCS/SWCD Office. There may be opportunities for cost-share assistance to protect sinkholes in your county.

Here are a few local numbers:

Barry County:

(417) 847-4309, Ext. 3

Christian County:

(417) 581-2719, Ext. 3

Greene County:

(417) 831-5246, Ext. 3

Stone County SWCD:

(417) 357-6609

Webster County:

(417) 468-4176

For more information about James River Basin Partnership, call (417) 836-8878, Toll Free (888) 924-WATER or visit our website at

www.jrbp.missouristate.edu



Missouri Department of Natural Resources

U.S. Environmental Protection Agency Region VII, through the Missouri Department of Natural Resources, has provided partial funding for this project Under Section 319 of the Clean Water Act.



James River Basin Partnership
Monroe Hall
901 S. National
Springfield, MO 65897

SINKHOLES



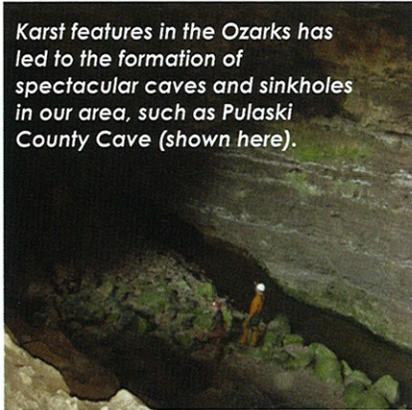
You
can help
protect and improve
these karst features
on
your
property

NONPROFIT.ORG.
US POSTAGE
PAID
SPRINGFIELD, MO
PERMIT #777

We Must Protect Sinkholes in the Ozarks

Don't use sinkholes as trash dumps! They provide a direct conduit to groundwater sources!

Karst features in the Ozarks has led to the formation of spectacular caves and sinkholes in our area, such as Pulaski County Cave (shown here).



The Salem-Springfield Plateau area of Missouri and Arkansas is only one of four karst regions found in the U.S. A karst landscape has distinctive landforms and drainages caused by the action of water on soluble underlying rocks. Over time, this solution results in caves and sinkholes. Most sinkholes are marked by closed depressions of various sizes and shapes and some rare sinkholes can be sheer vertical drops opening into a cave.

"As with most natural systems, damage is easy, fixing is difficult and prevention is best."

—Tom Aley, Hydrologist

Why is this a problem?

The sinkhole "eye" is a direct inlet point connecting surface water to groundwater recharge. This means that stormwater runoff allows surface contaminants direct access to our groundwater supply! This is in contrast to surface water that naturally and slowly percolates through soils, which filter out many contaminants before they reach groundwater.

Rapid development of the Ozarks increases the amount of runoff. Another major pollution contributor is leaky septic tanks. We must do what we can in order to reduce runoff to sinkholes.

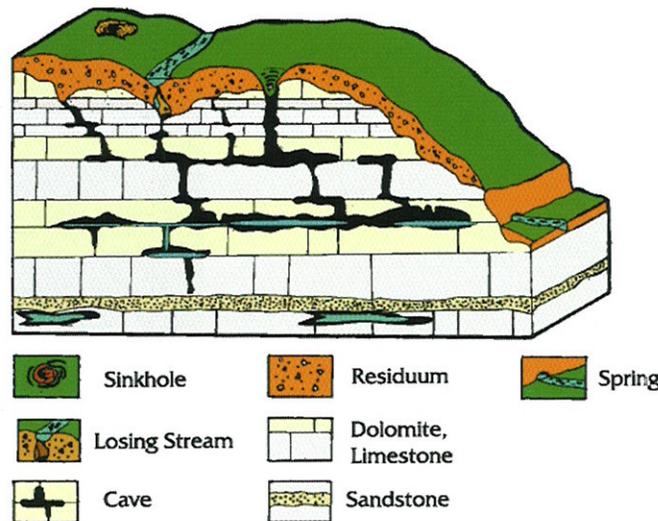


Illustration By Jo Schaper

Protect and Improve

Protecting sinkholes means being responsible property owners! There are different ways we can help protect our groundwater supply from sinkhole contamination.

Unfortunately, some people use sinkholes as trash dumps. Sinkholes provide a direct conduit for pollution to enter the groundwater! If you know of areas on your property where sinkholes have been used in this manner, clean them up!

Vegetative barriers can be used to help filter sediments and contaminants from surface runoff. When constructing these vegetative barriers, use dense low-growing plant materials. Fescue and bluegrass are two cool-season options that work well. Bermudagrass is a warm-season option. There are many grasses that work well for vegetative barriers. You should contact your local NRCS office for technical assistance specific to your sinkhole site.

Keep cattle away from sinkhole areas. Again, sinkholes allow pollution to run directly into groundwater sources.

Vegetative barriers:

- Improve recharge water quality.
- Improve groundwater quality.
- Improve chemical & nutrient management.
- Reduce soil erosion within sinkhole watersheds.

Visit our website at www.jrbp.missouristate.edu