



*Caring for the “Natural State”*

## LIVING ON KARST

The Ozark region is a karst topography characterized by sinkholes, caves, underground streams and aquifers that supply our wells and springs. Sinkholes — natural surface depressions or drainage points — serve to conduct surface water to underground passages. The comparatively rapid transmission of groundwater flow through sinkholes in karst provides little opportunity for natural filtering or other purifying effects. As a result, surface pollutants enter a water supply more easily in karst than in other terrains.

## HERE'S WHAT WE CAN DO.

### MINIMIZE LAND DISTURBANCE:

The extraction of rocks, soil, vegetation and water will clearly interrupt the processes that produce and maintain karst. Such uses should be carefully planned and executed to minimize environmental impact.

### PROTECT SINKHOLES:

- Ensure that sinkholes are marked and secured with fence, rope or taped very clearly.
- Check carefully for signs of the sinkhole enlarging, especially toward buildings, septic tanks, drain fields, and wells (flowing water into a sinkhole will continue or accelerate its growth). This can be done by pushing a thin hard metal rod into the soil. Areas near the sink will offer less resistance to the rod than the unaffected soil.
- Do not throw any waste into a sinkhole or use it as a drainage system. Pesticides and other wastes seep easily through the sinkhole into the aquifer - your drinking water.
- Stabilize a sinkhole if it is a hazard to health and safety.
  - Contact a specialist (see agencies listed on back).
  - Create a vegetated zone. A 100 foot wide grass filter strip is ideal. A wide natural buffer of trees and understory vegetation around sinkholes is more effective in removing sediment from deeper sinkholes and holes located in gullies or ravines.



# HERE'S MORE **WE** CAN DO.

## PROTECT WELL WATER:

- Situate wells away from barns, feed lots, livestock pens, sinkholes, dumps, septic systems and fuel tanks to keep polluted surface water out.
- Line well with welded steel pipe, grouted in place.
- Keep fertilizer, pesticides, petroleum products and other chemicals away from zone around wells.
- Keep standing water from accumulating around wells.
- Check your water at the County Health Unit.

## SEEK ADVICE:

Arkansas Department of  
Environmental Quality (ADEQ)

[www.adeq.state.ar.us](http://www.adeq.state.ar.us)

Arkansas Game and Fish Commission

[www.agfc.com](http://www.agfc.com)

Friends of the North Fork & White Rivers, Inc.

[www.friendsoftherivers.org](http://www.friendsoftherivers.org)

Army Corps of Engineers, Little Rock District

[www.swl.usace.army.mil/offices/contact.html](http://www.swl.usace.army.mil/offices/contact.html)

## Your County Cooperative Extension Office:

Baxter County – (870) 425-2335

Fulton County – (870) 895-3301

Independence County – (870) 793-8840

Izard County – (870) 368-4323

Marion County – (870) 449-6349

Stone County – (870) 269-3336



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