

Water Quality

Great Water for Great Communities

Do's and Don'ts

- Don't over apply fertilizer or pesticides in your yard.
- Keep septic systems in good working order.
- Clean your recreational equipment after use to stop aquatic hitchhikers.

The impact of one lake

In 2010, Millwood Lake in south Arkansas had more than 461,000 visitors.

These visitors spent over \$16 million within 30 miles of the lake.

Revenue generated by the lake supported 173 jobs in the local community, according to the U.S. Army Corps of Engineers.



Environmental protection begins in your own backyard

Your actions impact the health of the lake

Are lakes important to you? Do you depend on a lake for fishing or for drinking water? The lake depends on you to protect its health.



You protect fishing when you protect the health of a lake.

Environmental Concerns

If a lake suffers from problems such as extensive weed growth or algal scum, fish kills, or filling in with sediments, often the problem can be linked to activities within the lake's watershed.

The lake's health can be threatened by too many nutrients, leading to algal blooms and excessive plant growth, depleting oxygen supplies for fish. Nutrients come from human and animal wastes, and products such as fertilizer. Phosphorus is "junk food" for algae. When phosphorus is washed into lakes, the algae grows out of control, which can:

- Cause fish kills
- Add a foul taste and smell to drinking water
- Become a nuisance
- Produce poor water quality for fish, wildlife and humans
- Reduce property values

Another problem is **runoff soil,** filling lakes and destroying habitats for plants and animals. Runoff also clogs fish gills and smothers fish eggs.

And **leaking septic systems** contribute to lake pollution when they flow into shallow groundwater. This can also increase the load of nutrients, bacteria and other organic wastes.

What you can do to protect the lake



Protect your lake, protect your watershed

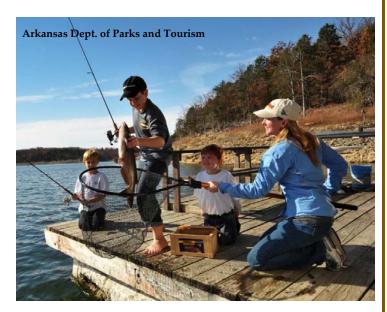
A watershed is the land area that drains to a single body of water. Land elevation determines the size of a watershed, with the highest points of elevation serving as boundary lines.

Watersheds cross county, state, and national boundaries. No matter where you are or where you live, you are in a watershed.

A lake is the reflection of its watershed and the everyday actions that take place within the watershed.

Protect water quality, fish and habitat whether you are on the lake or on your own property:

- Do not over apply fertilizers. Consider using organic or slow release fertilizers, or phosphorus-free fertilizer.
- Dispose of waste properly. Don't pour paint or toxic materials into a ditch or storm drain.
 Never use storm drains, creeks or streams to dispose of yard wastes. Don't litter on or near the lake. Don't create illegal dumps.
- Property owners should grow a buffer strip along the shore. A buffer strip of natural vegetation will promote a healthy ecosystem. On a gentle slope, cultivate at least a 30-foot strip of natural vegetation between the shore and your lawn. You will reduce erosion, maintain water quality and provide habitat and travel corridors for wildlife.
- Maintain your septic system. Have it pumped out every three years to remove sludge and scum. Practice water conservation to prevent overworking your system. Repair or replace malfunctioning or outdated septic systems.
- Clean your lake equipment after use to stop aquatic hitchhikers from riding with you to the next waterway.
- **Use Best Management Practices** (BMPs) for farming and timber activities, chicken litter



application, grazing practices, and for stormwater runoff protection. For assistance with BMPs contact your county U.S. Department of Agriculture office.

- Work with your community to protect the lake and watershed. The decisions we make in regards to Arkansas's landscape determines the impacts we have on our water resources.
- Contact ADEQ's watershed coordinator. The Department helps develop and provides resources to local watershed groups that take action to protect the environment locally. ADEQ's watershed staff provide technical assistance, presentations and education workshops.

The Arkansas Department of Environmental Quality

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