

water and jobs

All Arkansas economic sectors depend on water

Farms large and small, family businesses, industry and even office jobs — all depend on abundant, high-quality water. If the water dries up, so do the jobs. Water buoys the state's economy, but water quantity and quality are both threatened.

Water quantity

It seems like there's water everywhere in Arkansas, with more falling from the sky. However, groundwater (that's water in underground sources) is being depleted at an alarming rate. We depend on groundwater for 80% of crop irrigation, and 95% of that comes from the alluvial aquifer in eastern Arkansas. The alluvial aquifer will be unable to supply good quality water by 2015. Another major underground store, the Sparta aquifer in southern Arkansas, will be in similar condition by about 2030. Without a comprehensive, long-term plan to recharge these aquifers, farming as currently practiced in Arkansas is in imminent danger without sacrificing water used by other sectors of the economy.

Two other priority "quantity" issues are flooding and drought. When a watershed's natural filtering and flow processes are interrupted by too much paving and clearing, flooding increases and invades new areas. And if surface and underground water sources are overused in "good" years, then there aren't sufficient reserves to provide for drought.

Water quality

In addition to dwindling supply, the state's water bodies face a host of quality issues related to pollution, accumulation of silt, and other forms of degradation. Currently in Arkansas, 10 lakes and 59 stream segments (totalling 1,010 miles) are listed as impaired. Eight Arkansas watersheds have been declared nutrient surplus areas, cited for silt, dissolved solids, copper, pathogens, excess nutrients and chlorides.

And, beyond source water issues, water infrastructure in the state is aging and ailing. Sixty per cent of Arkansas mayors list water infrastructure as a major concern, with an estimated total of \$1.5 billion dollars of repair needed. A town without safe, reliable water infrastructure cannot keep residents, much less attract industry.

Arkansans rely on water to maintain current employment levels and for increasing economic development. Make your voice heard as our collective water future is determined.

If the water dries up, so do the jobs.



Arkansas is at a critical juncture in water management.

Decisions we make now can move the state toward or away from crisis. Citizens and institutions have the opportunity to participate in those decisions now and in the next few years, or risk being left high and dry after decisions are made by others.

Arkansas' Water Future Coalition maintains that well-managed water, both now and in the future, must start with the protection of water quality, water quantity, healthy natural habitats and the recharge of groundwater aquifers.

The **Winthrop Rockefeller Foundation** commissioned the following efforts to promote policy options that achieve sustainable water resources in Arkansas.

Water Issues in Arkansas: An Unfinished Story, 2008

A summary report and a larger companion report include references, literature review and multiple perspectives on Arkansas water use.

Troubled Water (2008 AETN)

This documentary film summarizes water issues and aired in April 2008.

Arkansas' Water Future Coalition (2008)

The Coalition includes Audubon Arkansas, Arkansas Public Policy Panel, and The Nature Conservancy. The Coalition will assist the Foundation with strategies that engage Arkansans in efforts that focus on improving water policy.

Thirsty for more?

Water Issues in Arkansas:

An Unfinished Story can be found at www.wrfoundation.org

Other websites of interest:

www.anrc.arkansas.gov
www.adeq.state.ar.us
www.arkansaswater.org
www.awag.org
www.watersheds.cast.uark.edu

Arkansas' Water Future Coalition Members:

www.ar.audubon.org
www.arpanel.org
www.nature.org/wherewework/northamerica/states/arkansas



A Coalition of Audubon Arkansas, Arkansas Public Policy Panel & The Nature Conservancy, Arkansas Field Office. Funded by the Winthrop Rockefeller Foundation.

Water Glossary

Watershed

A watershed is an area of land that drains rain and snow into a particular lake or river. Arkansas has 57 "coded" watersheds, sometimes called hydrologic units, and seven regional watersheds. Decisions made by stakeholders in a watershed will affect others.

Aquifer

Groundwater is contained in aquifers, underground beds of saturated soil or rock. Arkansas is the fourth largest user of groundwater in the U.S. Water level declines and other measures indicate that aquifer withdrawals in the state are occurring at an unsustainable rate.

Riparian Zones

A general term for land areas directly influenced by a body of water. Stream banks, lake borders and marshes are typical riparian zones. A healthy riparian zone contains native plants that filter sediment and other contaminants from water and provide wildlife habitat. Loss of healthy native riparian zones reduces water quality.

Runoff

Runoff, as the term suggests, is any amount of water that runs off a surface, either into a waterway or absorbed by the soil. Runoff can transport sediment, nutrients and contaminants into surface and groundwater, and is a major culprit in loss of water quality.

Sedimentation

Sediment is the largest pollutant of water worldwide. It's the deposit and accumulation of eroded soil into waterways. Erosion from deforestation, urbanization, roads and agriculture can contribute.

Point and Nonpoint Pollution

In order to manage pollution's impact on a body of water, we must determine its starting point. If a pollutant can be traced back to a particular source, it's referred to as "point" pollution. If not, the pollution is referred to as "nonpoint."