

## FACT SHEET

### *Reduce erosion from unpaved roads*

Unpaved roads are an integral part of Arkansas's rural communities. They provide access to homes, recreation, and logging areas. These roads are the backbone of our rural communities, but unmanaged unpaved roads can have detrimental effects on water quality and our watershed environment.

During rainfall events, rain runoff can channel and erode unpaved roads, which in turn, increases erosion and sediment deposition into our streams, rivers, and lakes. Sediment is the number one threat to water quality in the Beaver Lake watershed.

***Sediment in waterways has a variety of negative effects including:***

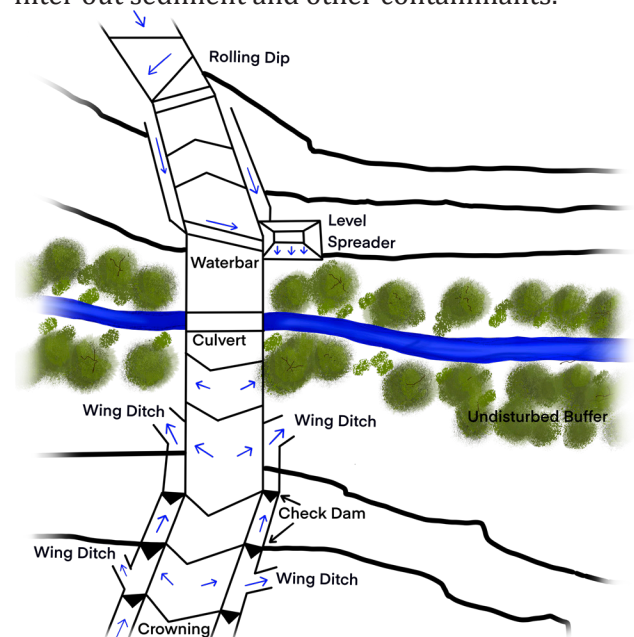
- Decline in aquatic life
- Increased water treatment costs for drinking water
- Increased flood damage because of deposition and erosion

### *Benefits of Using Best Management Practices*

Properly constructed unpaved roads will save county road crews time and money because they require less maintenance after rain events. Adding a riparian buffer further slows runoff and helps to filter out sediment and other contaminants.



Dirt roads connect Arkansans to our scenic mountains and rivers.





# ASSESSMENT

There are many factors that go into the design and maintenance of unpaved roads. Private unpaved roads can be a major financial responsibility to landowners. Proper construction and maintenance of dirt and gravel roads can save the landowner money and protect local waterways. Identifying and assessing the causes of unpaved road erosion will lead to how to fix the problem. The main factors that influence unpaved roads are topography, soils and land cover. Counties can apply for programs that assist with unpaved road improvements. Contact the Alliance to learn more.

## Best Management Practices for Unpaved Roads

Best Management Practices (BMPs) are used to correct unpaved road issues by providing better drainage, stabilizing ditches, and creating a harder, more stable driving surface. Some examples of unpaved road BMPs that landowners can implement on their property include broad-based dips, rolling dips, wing ditches, pipe culverts, grassed ditches, and water bars.



If a road lacks a crown, then potholes and corrugation form because the road cannot properly drain water. Also, weak road base material can contribute to erosion, poor driving conditions, or make the road impassable (as shown in this photo).



Rain events can cause erosion and weaken unpaved roads, especially around incorrectly sized culverts and clogged culverts. In this photo, the road has narrowed because erosion washed out a six-foot section of culvert.



**Beaver Watershed Alliance is formed of a diverse stakeholder group representing agricultural, recreation, conservation, water utility, business, and private landowner perspectives who all work together for the benefit of Beaver Lake and its watershed.**

**To learn more about the Alliance, best management practices for water quality, or how you can become involved in voluntary watershed protection go to [www.beaverwatershedalliance.org](http://www.beaverwatershedalliance.org) or contact us by calling 479-750-8007 or emailing [info@beaverwatershedalliance.org](mailto:info@beaverwatershedalliance.org).**