



The Illinois River Sub-Basin and Eucha-Spavinaw Lake Watershed Initiative (IRWI) is helping landowners in Arkansas and Oklahoma improve water quality and enhance economic viability of agriculture operations.

What is IRWI?

The Illinois River Sub-Basin and the Eucha-Spavinaw lake Watershed provide drinking water for the urban center of Tulsa, Oklahoma, as well as many smaller nearby municipalities. Water quality issues, including elevated concentrations of nitrogen and phosphorous, sediment and bacteria, have been identified in the region. Addressing the contribution of agricultural activities to these impairments is critical to ensuring adequate and safe water supplies for local communities.

The Natural Resources Conservation Service (NRCS) works with poultry and livestock producers in the IRWI region to improve water quality through voluntary conservation practices that also enhance the long-term sustainability of producers' operations. Key priorities of this initiative include improving the application of animal manure and litter for fertilizer on farmlands, and reducing surface runoff to minimize erosion.

How will the IRWI Benefit the Public?

Through IRWI, NRCS promotes conservation practices which lessen unwanted excess nutrient levels within the watershed to improve water quality today and for generations to follow.

Among many benefits to the IRWI area, better water quality will decrease water treatment costs and will also improve fishing, recreation and tourism on the scenic Illinois River. Producers may qualify for financial and technical assistance to implement conservation practices to improve water quality.

What will the IRWI Accomplish?

IRWI aims to reduce nutrients, bacteria and sediment within the Illinois River Sub-Basin and EuchaSpavinaw Lake Watershed of Arkansas and Oklahoma through a comprehensive and collaborative approach toward conservation.

At the local level, NRCS works closely with producers and landowners to reduce nutrient levels in key water sources, maintain adequate nutrient levels in fields, and help ensure producers' operations are profitable and sustainable over the long term.

Monitoring the impacts of conservation efforts each year is critical to ensuring our techniques and strategies are appropriate and effective. NRCS uses in-stream monitoring data obtained from Arkansas and Oklahoma state water quality agencies and the U.S. Geological Survey (USGS). Existing water quality monitoring is used as an initial baseline to measure IRWI's progress. Soil sampling will be used to measure the success of nutrient management. Edge-of-field on-farm monitoring has been put in place to evaluate the performance of conservation practices.

How will the IRWI Achieve Our Mission?

Many landowners have installed land treatment and structural practices in the IRWI areas using Environmental Quality Incentives Program (EQIP) assistance.

NRCS offers conservation planning and recommends conservation practices to avoid, trap and control pollutants. Core practices include nutrient management, waste utilization and manure storage and transfer.

High priority is given to participants implementing a suite of complimentary conservation practices to address agriculturally related excess phosphorous and nitrogen runoff, and leeching into groundwater.

Who are the IRWI Partners?

NRCS partners with various organizations at the local, state and national level in order to maximize coordination and cooperation to effectively improve the environmental health of the IRWI area.

- Conservation districts in each IRWI-area county
- Arkansas and Oklahoma Associations of Conservation Districts
- Arkansas Natural Resources Commission
- Arkansas Department of Environmental Quality
- Arkansas Forestry Commission
- Arkansas Game and Fish Commission
- Oklahoma Conservation Commission
- Oklahoma Water Resources Board
- Oklahoma Scenic Rivers Commission
- Oklahoma Forestry Services
- Farm Service Agency in Arkansas and Oklahoma
- Cooperative Extension Service in Arkansas and Oklahoma
- The Illinois River Watershed Partnership
- U.S. Geological Survey
- The U.S. Environmental Protection Agency

More Information

For more information and updates about the Illinois River Sub-Basin and the EuchaSpavinaw Lake Watershed Initiative and other NRCS conservation efforts, please refer to the Natural Resources Conservation Service Web site www.nrcs.usda.gov.

The IRWI Focus Area



The IRWI project area includes 576,517 acres in Arkansas and 739,156 acres in Oklahoma.