OVERVIEW
After nearly 50 years, the Grand Prairie Irrigation Project moved another step closer to fruition in 2020 when USDA announced the Natural Resources Conservation Service (NRCS) would receive $48 million in federal funds to be used with local funding to construct Phase 1 of the delivery system for this project.

These funds will construct the first 13 miles of the main canal, eight miles of a lateral canal and all associated pipelines and landowner off takes to convey water from the source reservoir to individual farms. Construction on this phase is expected to be completed in the next three years.

The project plan calls for pumping water from the White River through a U.S. Army Corps of Engineers (USACE) built pumping station at DeValls Bluff, Ark., and sending it through canals and pipelines to farms throughout the Grand Prairie.

The Grand Prairie Irrigation Project is divided into three subwatersheds, in portions of Arkansas, Lonoke, Monroe and Prairie counties.
  • The North Subwatershed is 43,370 acres with approximately 22,730 acres of irrigated cropland.
  • The Southeast Subwatershed is 224,920 acres with approximately 154,433 acres of irrigated cropland.
  • The Southwest Subwatershed is 95,890 acres with approximately 68,194 acres of irrigated cropland.

The overall project will provide continued irrigated production on 245,357 acres of cropland.

PROJECT BENEFITS
Agricultural water management will increase irrigation efficiencies and provide supplemental water for agricultural crops utilizing the White River as the surface water source. Other benefits include energy savings and increased yields due to the increased managed use of surface water. NRCS

Canal 1000 will deliver water from White River to irrigate roughly 37,800 acres of cropland. Canal 1000 starts below the the regulating reservoir outlet structure in the foreground. NRCS and the White River Irrigation District are constructing the canal.
serves as a technical adviser to project sponsors because of its engineering and environmental expertise and ability to deliver science-based technology and knowledge about the watershed’s natural resources and ecosystem.

**PROJECT GOALS**
To preserve the area’s groundwater resources by providing an adequate and dependable supplemental source of irrigation water for crop production by providing 92% of the average annual agricultural water need. This meets the objective of protecting and preserving the Alluvial and Sparta Aquifers, thereby allowing the region to maintain its output of agricultural products and its economy.

**PREVIOUS PROJECTS**
Congress authorized the USACE to develop the Grand Prairie Demonstration Project in 1991 in conjunction with the Arkansas Natural Resources Commission, NRCS and the White River Irrigation District.

Since then, work on a pumping station at DeValls Bluff and on farm conservation projects have been ongoing in the area.

From 2000 through June 2009, NRCS wrote 243 contracts for more than $25 million to install conservation practices in the project area. With this funding, landowners built 111 reservoirs, 244 tail water recovery pits, rebuilt 48 reservoirs and installed more than 1 million feet of pipeline. This work resulted in more than 36,000 acre-feet of on-farm water storage.

In 2012, NRCS announced funding for the Grand Prairie Mississippi River Basin Initiative. The goals of the project were to improve water quality by reducing nitrogen, phosphorous, and sediment levels in the watershed; enhance wetlands; improve fish and wildlife habitat benefits; and maintain agricultural productivity by utilizing a combination of conservation practices. Water quality and water quantity was enhanced through conservation practices in the project area to improve water quality and reduce ground water mining of the aquifer.

Through the application of voluntary practices such as irrigation reservoirs, grade stabilization structures and nutrient management the following water quality and quantity milestones were achieved:
- Nitrogen load reduced by 126,041 pounds.
- Phosphorus load reduced by 147,453 pounds.
- Water savings of 45.7 billion gallons of groundwater conserved per year.

**PARTNERS**
The project is a joint effort between the Natural Resources Conservation Service, United States Army Corps of Engineers, White River Irrigation District (WRID), and the Arkansas Department of Agriculture.

**FOR MORE INFORMATION**
For more information about the Grand Prairie Irrigation Project or NRCS Watershed Program, contact Randy Childress at (501) 301-3131 or visit the NRCS Arkansas Web site at: www.ar.nrcs.usda.gov.

**Work on Canal 1000 in Prairie County.**

AR 2022 • April 2022

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