DEPARTMENT OF THE ARMY
MEMPHIS DISTRICT CORPS OF ENGINEERS
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Reply to
Attention of:

For Immediate Release

Grand Prairie Area Demonstration Project FAQs

Frequently Asked Questions

Following are the public's most frequently asked questions about the Grand Prairie Area Demonstration Project:

1. **How much water will the Grand Prairie Area Demonstration Project (GPADP) divert from the White River?**

   The project will divert less than two percent of the flow of the White River. During waterfowl season, the project will divert less than one half of one percent of the White River's seasonal flow.

2. **Who will benefit from the project?**

   Everyone in the Grand Prairie region will benefit from the project. The GPADP is critical to maintaining economic stability within the region. Without the project, the region's agricultural economy will be devastated.

   Farm revenues will decrease by 47 percent, with 77 percent of currently irrigated cropland no longer able to be irrigated by 2015. Rice production and flooded rice field habitat will decrease by 77 percent with $46 million in farm receipts in the Grand Prairie region lost. Everyone from farmers to farm-related businesspersons will be affected. Further, the area's tax base will shrink as the value of farm real estate decreases by more than $100 million.

   In addition, everyone in the region who drinks water from the aquifers, or those who will have to find an alternate commercial source of water, will be affected.

3. **Will the project protect the aquifers?**

   Yes. The GPADP will help save both aquifers. The project uses little or no water from the deeper sparta aquifer to supply the area's needs because of the aquifer's relatively low yield and recharge, high purity, and increased cost for pumping. The project would still use the alluvial aquifer at its safe yield or an amount that could be pumped without further depleting the aquifer.

4. **Were alternate plans presented? What were the results? Are the results available?**

The U.S. Army Corps of Engineers studied several plans in order to select the best alternative. Options determined to be not feasible, unacceptable or which did not meet the needs of the area, were not considered during re-evaluation of the plans.

Alternative 1 *– No Action*
With no action taken only 22 percent of the land that is currently irrigated would remain viable for irrigated agricultural use. This alternative was used as the basis for comparing all other alternatives.

Alternative 2 *– Additional Storage*
This plan outlined the construction of additional on-farm storage reservoirs without a water import system or conservation measure in place. Initial studies indicated irrigation water available for use on a farm might actually decrease if additional reservoirs were built without a source for any additional supply of water. The analysis showed that farmers in the Grand Prairie are already capturing a high percentage of the rainfall available. Building more reservoirs would not allow existing reservoirs to be filled to capacity and would increase water loss due to evaporation and infiltration as water is spread over more surface acreage. Further, additional reservoirs could only be filled in wet years without import water.

Alternative 3 *– Conservation with Storage*
This plan called for conservation measures without any import water to be implemented to maximize the use of existing water resources. Conservation measures would result in only 31 percent of the land remaining useable for irrigated agriculture.

Alternative 4 *– Import System and Conservation without Additional Storage*
This alternative couples conservation measures (without additional reservoirs) with an import system, which diverts water from the White River. Studies conducted by the National Resources Conservation Service (NRCS) showed that desired conservation impact could not be achieved without additional storage.

Alternative 5 *– Combination Conservation, Storage and Importation of Water*
This plan combines conservation, increased on-farm storage and a 1,800 cubic feet per second water import system. Arkansas state law limits potential water withdrawals.

Alternative 6 *– Combination Alternative Plus Additional Storage*
This plan was the same as the one listed above, but included 25 percent more storage capacity. According to studies by the NRCS, increased levels of on-farm storage above the optimum level were not considered feasible. Any increased benefit that was provided by additional storage was more than offset by the cost of building the storage facility.

Alternative 7 *– Combination Alternative and Optimization of the Import System*
This plan was the same as Alternative 5, except this plan optimizes the import system. Prior alternatives were used to optimize the on-farm components such as conservation measures and storage. In order to optimize the import system, on-farm components were held constant with four different import systems: 7A – 1,480 cubic feet per second import

system, 7B – 1,640 cubic feet per second import system, 7C – 1,800 cubic feet per second import system, and 7D – 1,900 cubic feet per second import system. All were evaluated as separate alternatives.

5. **What studies have been performed regarding the feasibility of using the Arkansas River as a supplemental water supply to the current plan?**

The Arkansas River was studied as a source of irrigation water in the 1980s. The best area for receiving irrigation water was Bayou Meto, while the best areas for receiving irrigation water from the White River were located within the Grand Prairie region. An engineering review of the project water source has recently been completed. The report concluded that the White River is the appropriate source. The state of Arkansas created an oversight committee to provide input and the committee, which included representatives of the U.S. Fish and Wildlife Service and the Nature Conservancy, agreed. All environmental compliance activities have been completed and the project is ready for construction.

6. **Is the groundwater depletion problem truly serious?**

Yes. Studies have been conducted on the problem for several years. First recognized as a problem in the 1940s, more recent studies by the U.S. Army Corps of Engineers, U.S. Geological Survey (USGS), NRCS, and several universities and the state of Arkansas have all confirmed a critical groundwater problem in the Grand Prairie region. The region has been declared a "critical groundwater depletion area."

7. **What is a "critical groundwater depletion area"?**

According to the Arkansas Water Plan developed by the Soil and Water Conservation Commission a "critical groundwater depletion area" designation occurs when:

In a confined aquifer such as the deeper sparta, the following occur:

1) Water levels are below the top of the formation.
2) Water level declines of more than one foot per year for a 5-year period have been observed. (*The entire available period of record is also evaluated.*)
3) Trends indicate a decline in water quality.

In an unconfined aquifer such as the alluvial, the following occur:

1) The saturated thickness of the formation is less than 50 percent of the total thickness of the formation. *(This is also considered the saturated thickness of the aquifer.*)
2) Water level declines of more than one foot per year for a 5-year period have been observed. (*The entire available period of record is also evaluated.*)
3) Trends indicate a decline in water quality.

8. **What effect will the project have on waterfowl?**

With more food available from rice and soybean fields, the project is expected to maintain, if not increase, the number of waterfowl frequenting the Grand Prairie region.

9. What effect will the project have on White River wetlands?

Studies conducted by the U.S. Army Corps of Engineers covering fisheries, mussels, wetlands and waterfowl show the project's potential environmental impact to be insignificant.

10. What effect will the project have on water quality?

The project will not diminish the water quality of the White River and may improve water quality by trapping contaminants.

11. How much will the farmer or landowner be assessed? When will assessments begin? Will those on the south end of the GPADP have to begin paying at the same time as those on the north end?

The board of the White River Irrigation District (WRID) has set the annual assessment at $1 to $3 per irrigated acre.

If your land derives more benefits from this project, your assessment will be on the upper end of this range. If your land derives fewer benefits, your assessment will be in the low end of this range. An assessor determines the benefits to each tract of land and the assessment is recorded in each county.

The assessment will begin after the Improvement Project Area is formed. Assessments will be district-wide from the beginning, as all tracts of land will ultimately benefit, even though they do not initially receive district water.

12. Will the White River Irrigation District (WRID) tell a farmer or landowner when he or she is required to take water?

No. However, sufficient water may not be available at all times and some irrigation may need to be scheduled during water shortages.

13. At what point does the White River Irrigation District's responsibility for water end and the landowner's responsibilities begin?

The district is responsible for getting the water to the farm. It is then sold to the farmer or landowner for use as he or she sees fit.

14. What criteria were used to determine use of an open canal vs. a pipeline?

Considerations used to determine whether an open canal or a pipeline would be used included:

- Topography – Flat topography prohibits the use of pipelines over long distances without pumping, which significantly increases cost
- Right of way restrictions

- Relocation of facilities – the project was designed to minimize major alterations to existing infrastructure and utilities
- Development – existing or proposed future commercial, industrial and residential development
- Flow volumes – large flows made the use of pipelines prohibitive both in terms of engineering and cost
- Economic – analysis show the use of canals as the most cost-effective alternative for conveying large flows

A reanalysis of all canals with smaller flows (less than 30 cubic feet per second) is scheduled to be completed in mid-February 2001. Unless there are other overriding factors the majority of these canals are expected to be converted to pipelines.

Ownership was not a consideration in the location of canals and pipelines or a determining factor in whether a canal or pipeline would be used.

15. Will farmers or landowners be compensated for the land utilized as canals or for pipelines? How?

The White River Irrigation District (WRID) will be purchasing lands, easements and rights of way where required. The district will own the pumping station site as well as the land on which eight major water control structures will be built.

The district will be negotiating with landowners for easements for canals, pipelines and low water weirs. The District is also considering leasing easements at current cash-rent rates. The easements would be perpetual for the life of the project. The district will be flexible in negotiating the amount and form of compensation and is also considering credit toward water purchases as a compensation option.

16. If the canals tear up a farmer's or landowner's existing underground pipelines or wells, will they be compensated?

Yes. The appraisal of lands will include all improvements and costs necessary. For example, if a well is removed, compensation will be provided for the well, or if a pipeline is removed, the cost of restoring the pipeline to a different location will be covered in the project's costs and paid for by the district.

17. Who will control access to canals on a landowner's property? Can someone boat, hunt or fish there without permission?

The landowner controls property access. The district will have an easement for the purpose of canal operation and maintenance only. The district will not have access for any other purposes and cannot grant anyone access for any other purpose. Landowners still own the land and will continue to control access to their own canals and reservoirs.

In addition, no boating or swimming will be allowed in any of the canals built for the distribution of district water. The landowner will control any other access on his/her own property.

18. What is the goal of the White River Irrigation District (WRID)?

The goal of the district is to establish a system to provide excess river water for irrigation and stabilize the Grand Prairie's aquifers at a reasonable cost.

19. Where can I get information about the project?

Information about the project is available through the office of the White River Irrigation District (WRID) at 807 North Main in Stuttgart, Ark. Office hours are 8:30 a.m. to 4:30 p.m., Monday through Friday. You may contact the office by mail at P.O. Box 498, Stuttgart, AR 72160, by telephone at 870-673-8836, by fax at 870-673-4090, or on the Internet at *wrid@futura.net*.

20. How will the canals and/or pipelines affect property access? Who will be responsible for creating and maintaining access points?

If any access is severed, comparable access acceptable to the landowner will be reestablished or compensation paid. Access points are a project cost. The district will have access only to maintain and operate the water distribution system.

21. How long will it take to pay for the project?

If the project is financed with 30-year bonds, the project will be paid for 30 years after the final year of construction. Construction is scheduled to be completed in six years with the project being paid for in 36 years. Once the project is paid for, funds from the sale of water will only be used for operations and maintenance.

22. What is the financial structure of the project?

Funding for the project will come from federal and non-federal sources. Federal funding will be appropriated by Congress. Non-federal funding will come from taxes, the sale of water, from the state and from donations.

Cost and revenue considerations are as follows:

- The district is a non-profit organization, as such; the cost of water will be adjusted to ensure no profits are made.
- Bonds will be issued to underwrite the White River Irrigation District's financial obligation.

23. What will the on-farm management plan consist of? How does a landowner sign up for on-farm work? What is the cost share? What if farmers disagree with the on-farm water management plan? Will farmers be forced to build it anyway?

The on-farm water management plan will outline the expected water needs, the layout of the irrigation and drainage system, the plans, designs and cost estimates for the improvements and the sources of irrigation water.

The landowner requests assistance through the WRID office. The district sets the priorities and the NRCS does the planning. The federal cost share will be at least 65 percent.

The farmers will develop the water management plan with assistance from the NRCS. The farmers determine what goes into the plan and if and when it is constructed.

24. Will a landowner have to buy water from the irrigation district? If so, how much?

No. There will be no minimal contractual amount of water that landowners must purchase from the district. For each acre of irrigated land, landowners will have the opportunity to purchase up to 1.5 acre-feet of water. If all available water is not contracted for in the initial sign-up period for irrigation, the district will sell the remainder to landowners who have bought their full allotment and want more, to municipal water systems or other rural water districts.

25. Who will determine the water needs on the farm? How will they be determined?

The NRCS will assist farmers in determining water needs when the water management plan is developed and make a recommendation. The landowner will make the final management decisions.

26. Will water always be available when I need it? Will the water supply for landowners at the south end of the project be as dependable as for those on the north end?

No. The availability of water in the delivery system depends upon the flow of the White River. There are restrictions on minimum flows in the White River. Water can only be diverted in accordance with state law.

On-farm reservoirs will be used to store water for use when diversion of the White River flow is restricted. When the White River can provide the water necessary for irrigation, imported water should be used or transferred into storage in reservoirs for later use. The diversion system is approximately 87 percent reliable.

The WRID is responsible for the equitable distribution of water to all users throughout the system. There will be a system of checks and balances in place to prohibit excessive withdrawals during periods when the import system cannot meet demand.

27. What impact will the project have on waterfowl hunting on the White River?

None. The waterfowl hunting season and the irrigation season do not occur at the same time. The project will only pump a minimum amount of water during November, which will be used for flooding rolled rice fields for waterfowl. The pumping station will not operate during December. The amount of pumping in January will be minimal.

28. Why is the project important to everyone in the area?

The rural economy of the Grand Prairie depends on farming and related agribusiness. While there is some non-agriculture-related manufacturing along with a small number of service providers, it is agriculture, which drives the region's economy.

The general population of the Grand Prairie including the bankers, grocers, service stations, mechanics, equipment and automotive dealers, along with all of the many other small businesses they support, depend on agriculture to ensure their survival.

29. **What is the project status?**

The GPADP's on-farm management plans are currently being implemented. In addition, an engineering review of available water sources has been performed. The report concluded that the White River is the appropriate source.

The state of Arkansas created an oversight committee to provide input and the committee, which included representatives of the U.S. Fish and Wildlife Service and the Nature Conservancy, agreed. All environmental compliance activities have been completed and the project is ready for construction.

30. Will the GPADP significantly lessen the frequency, intensity and duration of flooding in the lower White River System?

No. Once the water flow exceeds the bank elevation and the river's predetermined flood stage, even pumping at maximum capacity would only result in a small reduction in the river's level.