

DEPARTMENT OF THE ARMY
MEMPHIS DISTRICT, CORPS OF ENGINEERS
167 NORTH MAIN STREET, ROOM B-202
MEMPHIS, TN 38103-1894

OFFICIAL BUSINESS

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PM-E-40

**PUBLIC NOTICE
PIGGOTT RELIEF WELLS – TEST REACH
CLAY COUNTY, ARKANSAS**

OUR PUBLIC NOTICES ARE NOW AVAILABLE ON THE WORLD WIDE WEB AT OUR MEMPHIS DISTRICT HOME PAGE (<http://www.mvm.usace.army.mil/>). After reaching our District Home Page, click on **Environmental** then click on **Public Notices**. If you have any trouble please call Mike Thron at (901) 544-0708.



**US Army Corps
of Engineers** ®
Memphis District

ISSUE DATE: 1 October 2004

PUBLIC NOTICE

**EXPIRATION DATE:
1 November 2004**

JOINT PUBLIC NOTICE
**U.S. ARMY CORPS OF ENGINEERS
AND STATE OF ARKANSAS**

Availability of Draft EA/FONSI

REPLY TO:

ATTN: Mike Thron

Environmental Analysis Branch

U.S. ARMY CORPS OF ENGINEERS

167 North Main Street, Room B-202

Memphis, Tennessee 38103-1894

Tele: (901) 544-0708

Fax: (901) 544-3955

E-mail: John.m.thron@mvm02.usace.army.mil

TITLE: Piggott Relief Wells – Test Reach

AUTHORITY: The Flood Control Act of 1936, as amended, authorizes this project.

LOCATION: The proposed seepage control project is located in Clay County in northeast Arkansas, approximately eight miles southeast of Piggott. The relief wells will be installed along the landside toe of the St. Francis River Levee. Wells will be placed between Miles 15/52+00 and 17/44+00. The work limits are shown on the Project Map (Figure 1).

TO WHOM IT MAY CONCERN: Pursuant to the National Environmental Policy Act of 1969, as amended, the U.S. Army Corps of Engineers, Memphis District, is issuing this notice to update environmental coordination on the authorized project ~~and obtain water quality certification from the State of Mississippi.~~

PURPOSE: The relief wells are needed to control the seepage that occurs during flood conditions on the St. Francis River and to assure that the levee system is safe from a project flood event. Seepage could undermine the levee if unabated.

ALTERNATIVES: There were six alternatives considered for this project.

Alternative 1: No Action: The no-action alternative is defined as termination of the project. Continued seepage during flood conditions would keep carrying sands and silts under the levee. This could eventually lead to levee failure during a major flood event. Failure of the levee would result in property damage and could cause human injuries and/or loss of life.

Alternative 2: Install riverside blankets to control seepage: This alternative would involve depositing earthen material riverside of the levee to control seepage. Riverside blankets were not considered practical because of the adverse environmental effects on the existing wetlands riverside of the levee and the close proximity of the St. Francis River channel in some reaches.

Alternative 3: Install an impervious cutoff wall to control seepage: This alternative would involve constructing an impervious cutoff wall (slurry trench) riverside of the Mississippi River mainline levee to control seepage under the levee. Impervious cutoff walls would have to penetrate the entire aquifer to be effective and would adversely impact groundwater recharge. Therefore, this alternative was not considered feasible.

Alternative 4: Construct a berm to control seepage: This alternative would involve constructing a berm along the landside toe of the St. Francis River Levee to control seepage under the levee. Ditches currently located adjacent to the levee would need to be filled and relocated at an appropriate distance from the levee. Suitable soils would need to be obtained from on-site or off-site borrow areas, and a small number of hardwood trees would be removed.

Alternative 5: Install interceptor channel: This alternative would involve a 0.5 year frequency, 5-foot water table, seepage interceptor channel located approximately 400 feet landside of the levee toe. The interceptor channel would be placed in existing agricultural land landside of the levee. Intercepted seepage would be conveyed to existing streams.

Alternative 6: Install relief wells to reduce seepage pressures: This alternative would involve installing a test reach of relief wells to control seepage. Relief wells would be installed between St. Francis River Levee Miles 15/52+00 and 17/44+00. A collector ditch would be constructed, and approximately 12,065 feet of an existing drainage ditch would be cleaned out and enlarged to convey the excess seepage water from the collector ditch to Mayo ditch.

After careful consideration of all alternatives, it was determined that Alternative 1 (no action) was unacceptable. Alternative 2 (riverside blankets) was not feasible due to the adverse environmental effects and the close proximity of the St. Francis River in some reaches. Due to the depth of the aquifer, Alternative 3 (cutoff wall) was too costly and would adversely impact groundwater recharge. Alternative 4 (landside berm) was too costly and had greater impacts due to the relocation of existing landside ditches, the removal of hardwood trees, and the need for borrow areas. Alternative 5 (interceptor channel) was not considered feasible due to the amount of agricultural land that would be taken out of production and the opposition from local interests. Consequently, Alternative 6 (relief wells) was recommended as the preferred plan.

DESCRIPTION OF WORK: Work consists of installing seventy-six 8 and 10-inch diameter relief wells placed landside of the St. Francis River Levee between St. Francis River Levee Miles 15/52+00 and 17/44+00 as shown on the project map in appendix. Additionally, an existing landside ditch located approximately 100 feet from the levee toe will be cleaned out and extended to act as a collector ditch for the relief well flows. The excavated material from the collector ditch cleanout and extension will be spread on the open field on the levee side of the ditch. Approximately, 12,065 feet of an existing drainage ditch will also be cleaned out and enlarged to convey the excess seepage water from the collector ditch to Mayo Ditch. The excavated material from the outlet ditch will be spread on existing spoil adjacent to the site.

WATER QUALITY CERTIFICATION: There will be no deposition of material into any wetlands or other waters of the U.S. Thus, a section 404 (b) 1 permit and water quality certification are not required.

ENDANGERED SPECIES: Corps of Engineers biologists conducted an endangered species survey of the project area on July 14, 2004. No endangered or threatened species, or critical habitats, were observed or known to occur within the project area. Correspondence with the U.S. Fish and Wildlife Service revealed that no impacts to threatened or endangered species should occur due to the proposed relief well installation and ditch work. Requirements of Section 7 of the Endangered Species Act have been fulfilled.

CULTURAL RESOURCES: The Memphis District Archaeologist has coordinated with the State Historic Preservation Officer (SHPO) and Federally recognized tribes. An intensive cultural resources survey has been completed for the proposed project area, and the results of the survey were sent to the SHPO and Federally recognized tribes. The SHPO determined that no known historic properties would be affected by the project.

PUBLIC INTEREST REVIEW: The purpose of this public notice is to advise all interested parties of the proposed activities and to solicit comments and information necessary to evaluate the probable impact on the public interest. This notice is being circulated to federal, state and local agencies.

The decision to proceed with this project will be based on an evaluation of the probable impact, including cumulative impacts, of the activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The potential benefits that reasonably may be expected to accrue from the activity must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the activity will be considered, including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and, in general, the needs and welfare of the people.

The Corps of Engineers is soliciting comments from the public; federal, state and local

agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of the proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to modify or condition the project. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in preparation of the final environmental assessment and/or draft environmental impact statement pursuant to the National Environmental Policy Act and are also used to determine the overall public interest of the proposed activity. The draft environmental assessment and draft finding of no significant impact (FONSI) will be circulated to agencies and any other parties that request them. A copy of each document has been placed on the District's website at:

<http://www.mvm.usace.army.mil/regulatory/public-notices/pn.htm>

PUBLIC HEARING: Any person may request in writing, within the comment period specified in this notice, that a public hearing be held to consider this proposed project. Requests for a public hearing shall clearly state the reason for holding a public hearing. The District Engineer will determine if the issues raised are substantial and whether a hearing is needed in order to reach a decision on the project. Failure of any agency or individual to comment on this notice will be interpreted to mean that there is no objection to the proposed work.

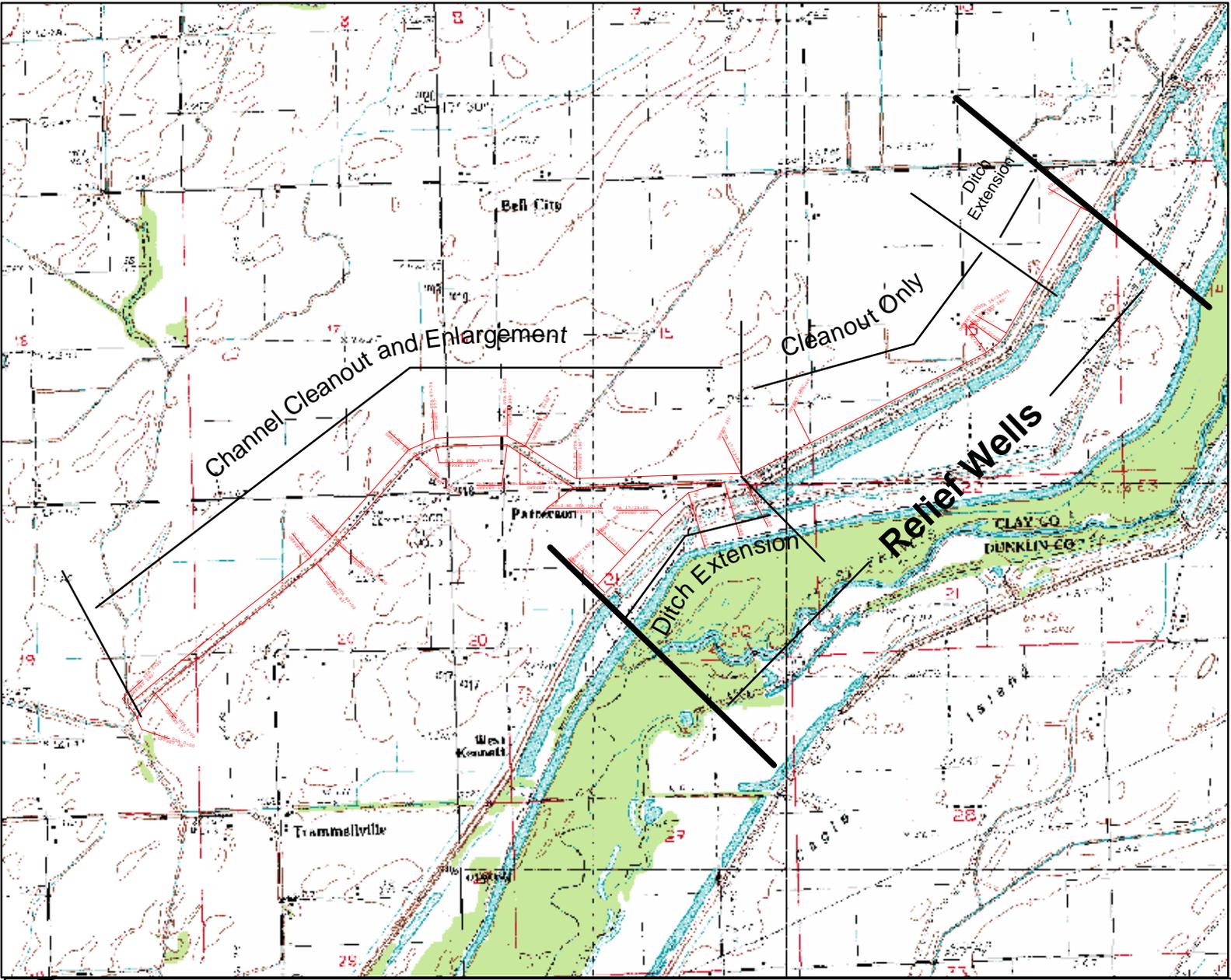
COMMENTS OR REQUEST FOR ADDITIONAL INFORMATION: If you wish to obtain additional information or to submit comments on this proposal, contact Mike Thron at the U.S. Army Corps of Engineers, Environmental Analysis Branch (PM-E), 167 North Main Street, Room B-202, Memphis, Tennessee 38103-1894, telephone 901/544-0708. **Comments should be forwarded to this office by November 1, 2004.**

Sincerely,



David L. Reece
Chief, Environmental Analysis Branch

Enclosure



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Project Map

source USGS quads:
Kennett North AR-MO
Greenway AR

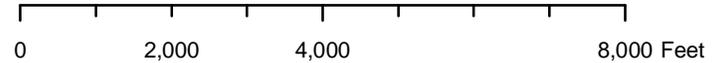
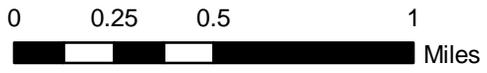


Figure 1.
Piggott Relief Wells
St. Francis River Basin
USACE Memphis District

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