TITLE: St. Francis Basin Maintenance, Stateline Ditch 29 Levee Maintenance, Mississippi County, Arkansas

AUTHORITY: The renovation of the State Line Ditch 29 Levee and associated mitigation is authorized and would be funded as part of the St. Francis River Basin Maintenance portion of the Mississippi River and Tributaries (MR&T) Project. The St. Francis Basin Project was authorized by the Flood Control Act of 1936, P.L. 678, 74th Congress which amended the Mississippi River and Tributaries (MR&T) Act of May 15, 1928. The MR&T Project is authorized by the Flood Control Act of 15 May 1928, as amended. More specifically, the Belle Fountain Ditch and Tributaries project is authorized by the Flood Control Act of 1968.

LOCATION: The proposed project location is a 3-mile stretch of levee between Arkansas Highways 151 and 150 approximately 3 miles north of Gosnell, Arkansas (Figure 1).

TO WHOM IT MAY CONCERN: Pursuant to the National Environmental Policy Act (NEPA) of 1969, as amended, the U.S. Army Corps of Engineers (USACE), Memphis District, is issuing this notice of the intention to improve approximately 3 miles of the degraded State Line Ditch 29 levee in Mississippi County, Arkansas (Figure 1) to meet USACE Levee Safety Standards.
Figure 1. Aerial of proposed Stateline Ditch 29 Levee Maintenance Project showing culvert locations, project limits, and wooded areas expected to be impacted. Culvert replacements would offset by approximately 50-100 feet up or downstream of the existing culverts to increase stability.
PURPOSE: The State Line Ditch 29 Levee system does not meet current USACE levee safety standards and cannot be properly maintained by the local sponsor. The dimension and condition of the levee currently prevents mowing and prevents occasional sediment removal from the channel. Culverts within the existing levee do not meet USACE Levee Safety standards and are subject to erosion causing potential damage to surrounding lands. Flood conditions may lead to a bank failure, which could result in damage to residential and agricultural properties, and significant economic damages.

ALTERNATIVES: Three alternatives were considered to accomplish the renovation of the State Line Ditch 29 Levee: 1) no-action; 2) renovate the existing levee to create a major levee that is maintainable, replace 4 existing culverts with culverts that meet USACE Levee Safety Standards and permanently remove 2 culverts re-routing flow through new drainage ditches; or 3) renovate the existing levee to create a major levee that is maintainable, replace all 6 existing culverts with culverts that meet USACE Levee Safety Standards.

2.1 Alternative 1 – No-action alternative. The no-action alternative would result in the continued degradation of the State Line Ditch 29 Levee as no project features would be constructed. Continued erosion of the culverts from heavy rains and during flood conditions would eventually lead to bank failure. Sinkholes and levee slides would worsen and continue to endanger the levee and the areas it protects. Additionally, woody vegetation encroachment would continue to increase the risk of seepage through the levee and prevent proper inspections and maintenance. The MVM has determined that this alternative would not address the problems associated with the unmaintainable levee, and the levee would continue to not meet the USACE Levee Safety Standards. Therefore, this alternative was removed from further consideration.

2.2 Alternative 2 – Renovate the existing levee to create a levee that is maintainable, replace 4 existing culverts with culverts that meet USACE Levee Safety Standards and permanently remove 2 culverts re-routing flow through new drainage ditches. This alternative would include the renovation of the existing levee to meet current USACE Levee Safety Standards. A 50-foot berm would be created between the top bank of the State Line Ditch 29 and the levee toe for slope stability and to provide access to the ditch for maintenance. Four corrugated metal pipe (CMP) culverts ranging in size from 32 to 42 inches would be replaced with 32-inch to 42-inch reinforced concrete pipe (RCP) culverts to meet USACE Levee Safety Standards. To reduce the risk of culvert failure, 2 existing culverts would be removed and flow would be re-routed with newly constructed drainage ditches. Environmental impacts would include the clearing of approximately 3 acres of riparian buffer strips along drainage swales/ditches. The MVM determined that constructing new drainage ditches was not authorized pursuant to statutory authority, which removed this alternative from further consideration.

2.3 Alternative 3 – Renovate the existing levee to create a levee that is maintainable and replace all 6 existing culverts with culverts that meet USACE Levee Safety Standards. This alternative, as described under section “1.1 Project Action”, would comply with the USACE Levee Safety Program requirements, maintain drainage from landside agriculture fields to the State Line Ditch 29, and create integrity and stability of the State Line Ditch 29 Levee by constructing uniform slopes, removing sinkholes, and providing access for inspections and maintenance. All six CMP
culverts ranging in size from 32 to 42 inches would be replaced with 48-inch RCP culverts to meet USACE Levee Safety Standards. Environmental impacts would not differ from Alternative 2. MVM has determined that this is the preferred alternative.

All factors considered, Alternative 3 is the most practicable solution for flood risk reduction. Therefore, this is the preferred alternative for the project assessed in this EA.

**DESCRIPTION OF WORK:** The project would reshape a 3-mile section of the State Line Ditch 29 Levee (Figure 1) to meet the USACE Levee Safety Standards of a major levee. The local sponsor would then provide minor maintenance on the levee. The *Final Environmental Impact Statement, St. Francis River Basin Project, Arkansas and Missouri* (1973) considered activities associated with ditch maintenance. However, the proposed action requires an additional right-of-way that was not previously considered under NEPA. The new right-of-way extends approximately 100 feet landward of the existing levee for the length of the project, totaling approximately 36.4 acres. The maintenance work would include an approximate 50-foot berm between the top bank of State Line Ditch 29 and the toe of the levee, reshaping the existing levee, and filling gaps and degraded areas of the levee to maintain the previously authorized levee. Clearing of trees and brush would occur along the levee and the required 15-foot vegetation-free zone on the land-side of the levee. The levee, berm and vegetation-free zone would be maintained in perpetuity by regular mowing. The 50-foot berm would increase slope stability of the levee and ditch bank and would be maintained by the mowing of vegetation, providing access to the ditch for regular maintenance which is not currently possible. Six culverts currently provide drainage from adjacent agriculture fields through the existing levee via a series of small, unregulated ditches. These culverts would be replaced with culverts that meet USACE Levee Safety Standards, and provide similar drainage capabilities as the existing culverts. Gravel would be placed on the levee crown as part of the project to provide a 15-foot access road for inspections, routine maintenance, and emergency access. Gravel road construction and repair of sinkholes and levee slides would not impact wetlands or require tree clearing.

**WATER QUALITY CERTIFICATION:** The proposed action is part of the MR&T project which is authorized by the Flood Control Act of 1928, as amended. The project action to replace the existing State Line Ditch 29 Levee culverts is considered maintenance of an existing flood control facility which is covered under Nationwide Permit #31, which is described below:

*NWP 31. Maintenance of Existing Flood Control Facilities. Discharges of dredged or fill material resulting from activities associated with the maintenance of existing flood control facilities, including debris basins, retention/detention basins, levees, and channels that: (i) were previously authorized by the Corps by individual permit, general permit, or 33 CFR 330.3, or did not require a permit at the time they were constructed, or (ii) were constructed by the Corps and transferred to a non-Federal sponsor for operation and maintenance. Activities authorized by this NWP are limited to those resulting from maintenance activities that are conducted within the “maintenance baseline,” as described in the definition below. Discharges of dredged or fill materials associated with maintenance activities in flood control facilities in any watercourse that have previously been determined to be within the maintenance baseline are authorized under this NWP. To the extent that a Corps permit is required, this NWP authorizes the removal*
of vegetation from levees associated with the flood control project. This NWP does not authorize
the removal of sediment and associated vegetation from natural water courses except when these
activities have been included in the maintenance baseline. All dredged material must be placed
in an area that has no waters of the United States or a separately authorized disposal site in
waters of the United States, and proper siltation controls must be used.

The project does not trigger any new permit requirements set forth in the conditions noted
in the Arkansas Nationwide Permit Regional Conditions for all Nationwide Permits. This EA
serves as the maintenance baseline for the State Line Ditch 29 Levee Rehabilitation. If future
project construction exceeds this baseline, additional coordination would be required.

THREATENED AND ENDANGERED SPECIES: USACE does not expect the proposed
action to impact threatened or endangered species. In September 2016, USACE, U.S. Fish and
Wildlife Service (USFWS), and Arkansas Game and Fish Commission biologists conducted
freshwater mussel surveys upstream and downstream of all culverts proposed for replacement to
determine the presence or likely absence of the fat pocketbook mussel (*Potamilus capax*) or any
other listed species. During this survey, USACE, USFWS and AGFC did not collect or observe
listed species. On September 14, 2016, USFWS concurred with the USACE determination that
the proposed actions were not likely to adversely affect *P. capax*, and that the project was outside
of the zone of consultation for the Indiana bat (*Myotis sodalis*) and the northern long-eared bat
(*M. septentrionalis*).

CULTURAL RESOURCES: The MVM District Archaeologist has determined that the
proposed work on and within the levee has no potential to affect historic properties. Impacts to
the land surface from tracked vehicles will be confined to a narrow corridor approximately 100’
south of the spoil bank. This area has been surveyed for cultural resources with negative results.
Pursuant to 36 CFR 800.4, the Arkansas State Historic Preservation Officer concurred with this
determination by letter dated October 24, 2016. The Quapaw Tribal Historic Preservation
Officer also concurred by letter dated November 8, 2016.

MITIGATION: The *St. Francis Basin Project, Arkansas and Missouri, Final Impact Statement*
(1973), included herein by reference, considered maintenance to include sediment removal from
the ditch and vegetative clearing along the levee and is included herein by reference; therefore,
compensatory mitigation for impacts that would occur within the existing right-of-way has
already been completed and is currently in the process of being transferred to the Arkansas Game
and Fish Commission (AGFC). However, the *St. Francis Basin Project, Arkansas and Missouri,
Final Impact Statement* (1973) did not consider the additional right-of-way required to complete
all of the proposed action. It was determined by the USACE that the majority of the
approximately 36.4 acres of additional right-of-way exists as non-wet agricultural land.
However, riparian buffer strip habitat loss of 3 acres would be expected with the proposed
action. This acreage is not forested wetland and compensatory mitigation is being proposed
which would offset the loss in habitat value. As this is not forested wetland, and models such as
the Habitat Evaluation Procedures, are not meant to measure impacts to wildlife within a small,
isolated area, USACE proposes a compensatory mitigation ratio of 2 acres of restoration to 1
acre of impacts based on coordination with state and federal agencies. The 6 acres proposed for
compensatory mitigation would be added to future compensatory mitigation acquisitions to
enhance the value of the 6 acres from an ecological perspective. Ideally, these acquisitions would occur adjacent to an existing state or federally owned wildlife management area.

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.

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; Native American 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 EA and draft FONSI will be circulated to agencies and any other parties that respond to this notice requesting copies. Copies of these documents have been placed on the District’s website under Memphis District Civil Works Projects at:


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.

COMMENTS OR REQUEST FOR ADDITIONAL INFORMATION: If you wish to obtain additional information or to submit comments on this proposal, contact Andrea Carpenter at the U.S. Army Corps of Engineers, Environmental Compliance Branch, 167 North Main Street, Room B-202, Memphis, Tennessee 38103-1894, telephone 901/544-0817, or e-mail Andrea.L.Carpenter@usace.army.mil. Comments should be forwarded to this office by April 10, 2017.
Sincerely,

Edward P. Lambert
Chief, Environmental Compliance Branch,
Regional Planning and Environmental Division South