



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

**ISSUE DATE:** February 23, 2018

**EXPIRATION DATE:** March 25, 2018

## **JOINT PUBLIC NOTICE**

### **U.S. ARMY CORPS OF ENGINEERS**

#### **Availability of draft Environmental Assessment, draft Finding of No Significant Impact, and draft Section 404(b)(1) Evaluation**

**TITLE:** Mississippi River Mainline Levee, Below Commerce and Below Charleston Seepage Control Measures, Scott and Mississippi Counties, Missouri.

**JOINT PUBLIC NOTICE:** This public notice is issued jointly with the Missouri Department of Natural Resources (MDNR). The MDNR will use the comments to this notice in deciding whether to grant Section 401 water quality certification.

**AUTHORITY:** The project is authorized by the Flood Control Act of 1928, as amended.

**LOCATION:** The proposed seepage control measures are located along the Mississippi River Mainline Levee (MRL), located near the towns of Commerce, in Scott County, and Charleston, in Mississippi County, Missouri (Figure 1). The proposed actions are in the vicinity of upper Mississippi River levee mile posts 5, 15, and 24.

**TO WHOM IT MAY CONCERN:** Pursuant to the National Environmental Policy Act of 1969, as amended, and Section 404 of the Clean Water Act, the U.S. Army Corps of Engineers, Memphis District, is issuing this notice of the proposed installation of seepage control measures along the Mississippi River mainline levee, located near the towns of Commerce, Missouri, and Charleston, Missouri.

**PURPOSE:** Seepage that occurs during flood conditions on the Mississippi River needs to be controlled in order to ensure that the levee system does not fail during a project flood event. Seepage could undermine the levee causing it to breach if unabated and flood the surrounding lands and residential areas. A levee breach would threaten the lives and property of residents within the flooded areas.

**DESCRIPTION OF THE PROPOSED ACTION:** The proposed project includes installing 29 relief wells, modifying existing drainage systems to accommodate additional seep water, placement of rip-rap at drainage confluences to prevent potential scour, and clearing vegetation from existing ditches. The location of each proposed action is presented in Figures 1 - 4. Conventional earth moving equipment (e.g., bulldozer and excavators) would be used to construct the drainage ditches and to clean

out the existing ditches. Compensatory mitigation for unavoidable impacts associated with the proposed action consists of restoring approximately 25 acres of cleared agricultural lands to bottomland hardwood forest as described in the draft environmental assessment (EA).

At the Below Commerce Mile 5 site (Figure 2), the existing ditch proposed to be modified is dry throughout most of the year, covered in various grasses and weed species, farmed to top bank on the north side, bound by a utility line right-of-way on the south side, and empties into North Cut Ditch. The proposed alignment for the relief wells lies adjacent to approximately 11.4 acres of farmed wetlands, which was determined through coordination with the Natural Resource Conservation Service (NRCS). Excavated material obtained from the proposed ditch modifications at the Below Commerce Mile 5 site would be used to facilitate seep water drainage into the modified ditch, impacting the farmed wetlands previously noted. Additionally, rip-rap would be placed at the confluence of the modified ditch and North Cut Ditch to prevent erosion. Compensatory mitigation for these impacts is addressed in the Mitigation Section below.

At the Below Commerce Mile 15 site (Figure 3), the proposed alignment for the relief wells abuts a portion of Highway N and agricultural land currently in production. Along the existing drainage system, small patches of vegetation totaling approximately 1 acre are expected to be removed from within 40-feet of existing relief wells. This area is dominated by sugarberry and silver maple, with a minor constituency of cottonwood, black willow and hickory. Compensatory mitigation for this impact is addressed in the Mitigation Section below.

At the Below Charleston Mile 24 site (Figure 4), the proposed alignment for the relief wells are located in land planted in grass and subject to routine mowing. The existing ditch proposed to be modified is dry throughout most of the year, covered in various grasses and forb species, and farmed to top bank on both sides. Vegetation that will be removed near the eastern limits of the existing ditch to be modified consists of sugarberry, silver maple, cottonwood, black walnut, sycamore, and box elder. Rip-rap would be placed at the confluence of the ditch proposed for modification and Stevenson Bayou. Compensatory mitigation for this impact is addressed in the Mitigation Section below.

**Alternatives Considered:** Three alternatives were considered for this project: 1) no action; 2) installation of relief wells and associated drainage work; and 3) construct a landside berm.

**1. No Action:** In the future without project condition (no-action), the proposed action would not be constructed. The no-action alternative would result in continued seepage during flood conditions. Sands and silts would be carried under the levee, potentially causing sand boils. This could eventually lead to levee failure during a major flood event. Failure of the levee could result in property damage, human injuries and/or loss of life.

**2. Alternative 2: Install relief wells with associated drainage work:** This alternative consists of installing 29 relief wells, modifying existing drainage systems to accommodate additional seep water, placement of rip-rap at drainage confluences to prevent potential scour, and clearing vegetation from existing ditches. The excavated material from the ditch modification at the Below Commerce Mile 5 site would be used to facilitate seep water drainage into the modified ditch, resulting in impacts to approximately 11.4 acres of farmed wetlands. Approximately 1 acre of vegetation would be cleared from existing ditches at the Below Commerce Mile 15 and Below Charleston Mile 24 sites to facilitate seep water drainage.

**3. Alternative 3: Construct a landside berm to control seepage:** This alternative consists of constructing a berm along the landside toe of the MRL to control seepage under the levee. As the case with alternative 2, alternative 3 would also result in impacts to approximately 11.4 acres of farmed wetlands. However, borrow material would be needed to construct a seepage berm. Additional time required to locate a suitable borrow source and to obtain the land or borrow rights would delay project implementation. Additionally, construction of berms is more expensive than relief wells due to the cost to obtain the land or borrow rights, excavation of large quantities of earthen material needed, and to transport the material to the project site. Furthermore, if the borrow areas were to be located in wooded or farmed wetlands, additional adverse environmental impacts would result and increase costs for project compensatory mitigation requirements. Impacts to local roadways and the public use of those roads would also result, as haul trucks would be needed to transport the tons of material to the project site.

After careful consideration of all alternatives, it was determined that alternative 1 (no-action) was unacceptable because of risks to human life and property. If the seepage problem is not addressed, levee failure resulting in catastrophic impacts could ultimately result. Due to increased adverse environmental effects coupled with the potential time delay associated with locating suitable borrow areas, it was determined that alternative 3 (landside berms) is not practicable or reasonable. Alternative 2 (relief wells and associated drainage work) has higher maintenance costs than the other alternatives, but has fewer adverse environmental impacts. All factors considered, alternative 2 is the most practical solution for seepage control and is the preferred alternative for the proposed project.

**MITIGATION:** Mitigation requirements would consist of planting 25 acres in bottomland hardwood species and restoring hydrology, if applicable, within tracts of cleared agricultural land. Mitigation would occur as part of the ongoing overall MRL mitigation acquisition in New Madrid and Mississippi counties, Missouri. The environmental interagency team (IAT) concurred that, due to the overall ecological benefits of a large tract size, mitigation to offset the impacts as a result of project implementation should be included with the ongoing MRL acquisition. Please note, overall MRL mitigation requirements credited at these tracts would be adjusted to account for this project. The IAT was consulted, and it was concluded that a mitigation ratio of 2:1 would sufficiently offset project impacts. Therefore, approximately 25 acres of the ongoing MRL mitigation acquisition would be dedicated to offset impacts associated with project implementation. The MRL Mitigation Plan for the mitigation sites would be followed, and success would not be declared until conditions specified in the document are achieved.

**WATER QUALITY CERTIFICATION:** Impacts to water quality within the Mississippi River would be minimal or have no effect, as the river normally carries a heavy sediment load. Thus, no significant impacts to water quality would occur as a result of the proposed project. A Section 404(b)(1) Evaluation was prepared for the proposed project action and is included as an appendix in the associated draft EA. A state water quality certification is requested from the State of Missouri, Department of Natural Resources.

**THREATENED AND ENDANGERED SPECIES:** In the fall of 2017, Corps of Engineers biologists conducted a site assessment of the project area. Results of the site assessment concluded that although trees were present larger than 3 inches DBH, no evidence of suitable/potential habitat for the Indiana and northern long-eared bat was noted. Additionally, no evidence of bald eagles, or their nests, were observed at any project location. Therefore, USACE has determined that the proposed project would have no effect on any threatened or endangered species or their critical habitats.

**CULTURAL RESOURCES:** A literature review and cultural resources survey within the project's Area of Potential Effect (APE) were completed in the fall of 2017. The investigation identified two significant cultural resources within the APE. However, both sites are outside, but adjacent to the project area. Furthermore, no historic properties are listed in or determined eligible for inclusion in the National Register of Historic Places within the project's APE. Therefore, no additional cultural resources investigations are recommended because the proposed project would have no effect on cultural resources. The Missouri State Historic Preservation Office concurred with the no effect determination on November 28, 2017.

**AGRICULTURAL LANDS, PRIME AND UNIQUE FARMLANDS:** The existing ditches to be modified at the Below Commerce Mile 5 and Below Charleston Mile 24 transect, and are adjacent to, agricultural fields currently in production. Coordination with the NRCS confirmed the presence of prime and unique farmland in the project vicinity; however, the NRCS noted that there would be no adverse impacts to this overall cropland type since such a small acreage would be involved.

**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 environmental agencies. The decision to proceed with the proposed modifications 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 of the activity must be balanced against its reasonably foreseeable detriments. Potential direct, indirect, and cumulative effects of the activity on the human environment will be considered.

The Corps of Engineers is soliciting comments from the public, federal, state, and local agencies and officials; Indian Tribes; and other interested parties to consider and evaluate the impacts of the proposed activity. Any comments received will be considered by CEMVM to determine whether to proceed with the proposed action. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and other public interest factors. Comments are also used in preparation of the final EA pursuant to the National Environmental Policy Act and to determine the overall public interest of the proposed activity. The Draft Environmental Assessment, Draft Finding of No Significant Impact, and Draft Section 404(b)(1) Evaluation have been completed and will be circulated to agencies and any other party that responds to this notice requesting a copy. A copy has been placed on the District's website at: <http://www.mvm.usace.army.mil/About/Offices/Regulatory/Public-Notices/>.

**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 action. Requests for a public hearing should 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 to reach a decision on the project. Should any agency or individual decline comment on this notice, it will be interpreted by CEMVM to mean that there is no objection to the proposed work.

**COMMENTS OR REQUEST FOR ADDITIONAL INFORMATION:** Send comments to the Corps of Engineers, Memphis District, and MDNR. Comments may be sent via mail or email to the following:

U.S. Army Corps of Engineers – Memphis District  
ATTN: Joshua Koontz  
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MDNR  
Water Protection Program  
P.O. Box 176  
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Comments must be received by the expiration date listed on page one of this notice.

Sincerely,

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



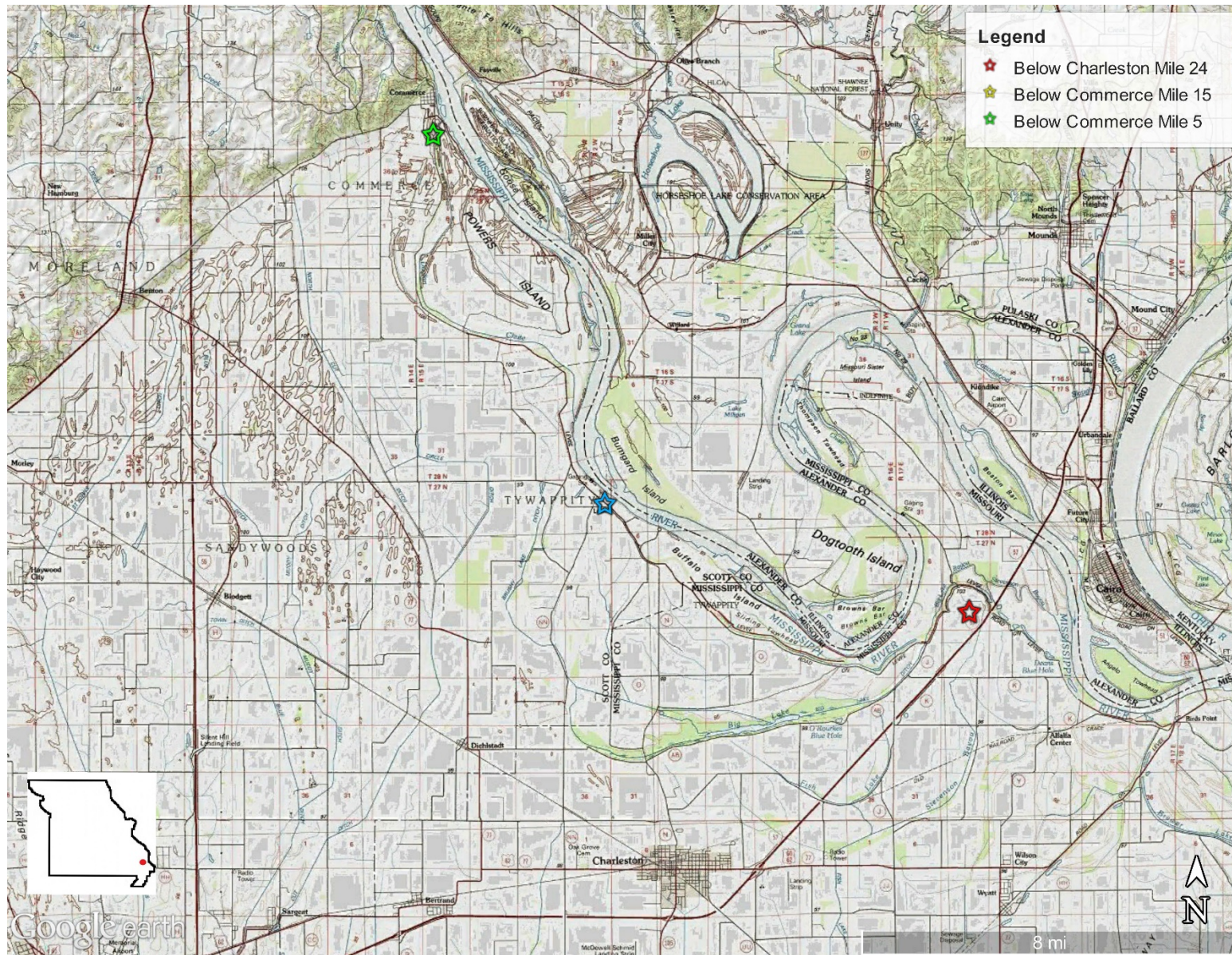


Figure 1. Location of proposed seepage control measures along the Mississippi River mainline levee, located near the towns of Commerce, in Scott County, and Charleston, in Mississippi County, Missouri.



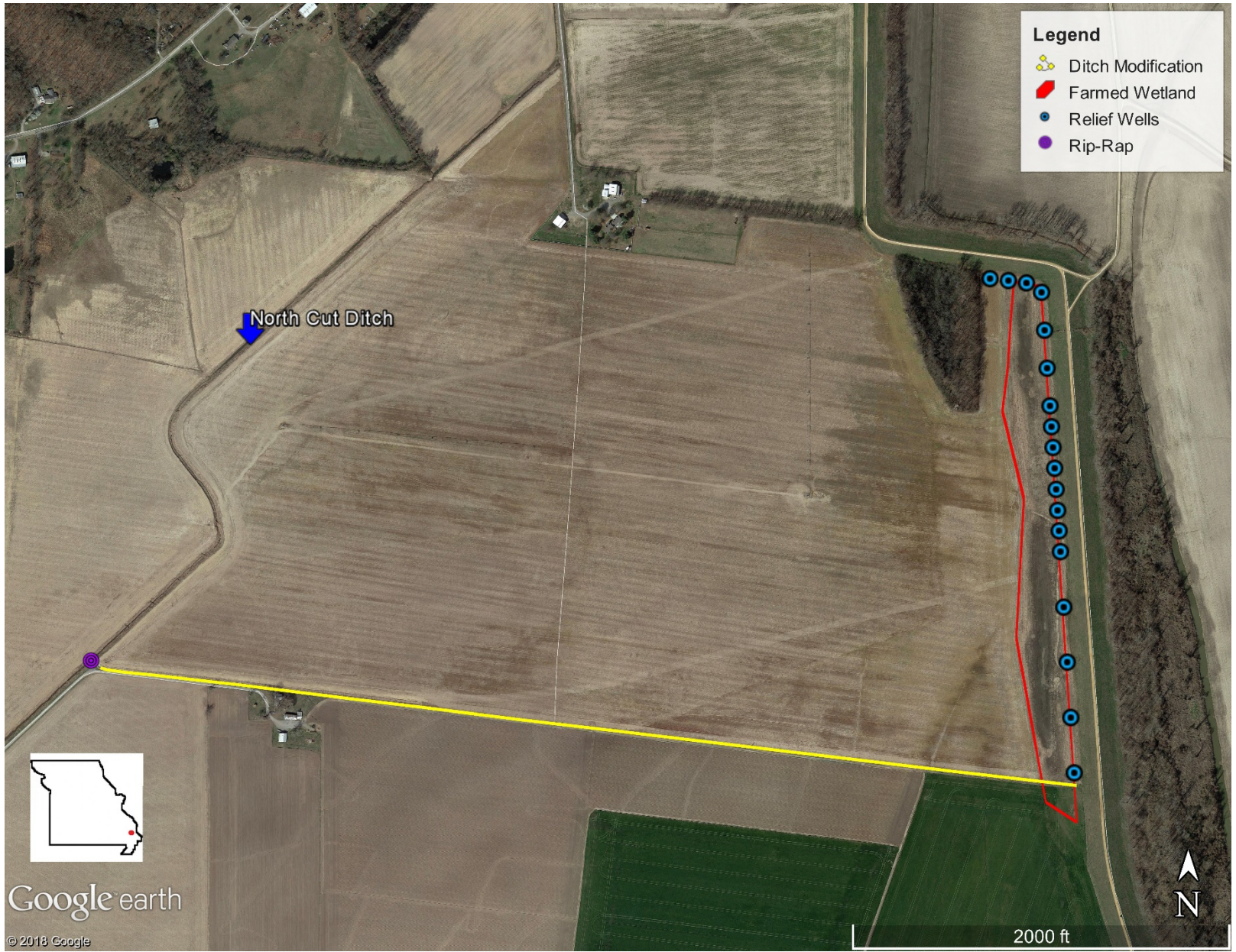


Figure 2. Proposed seepage control measures along the Mississippi River mainline levee at the Below Commerce Mile 5 project area, Scott County, Missouri.





Figure 3. Proposed seepage control measures along the Mississippi River mainline levee at the Below Commerce Mile 15 project area, Scott County, Missouri.



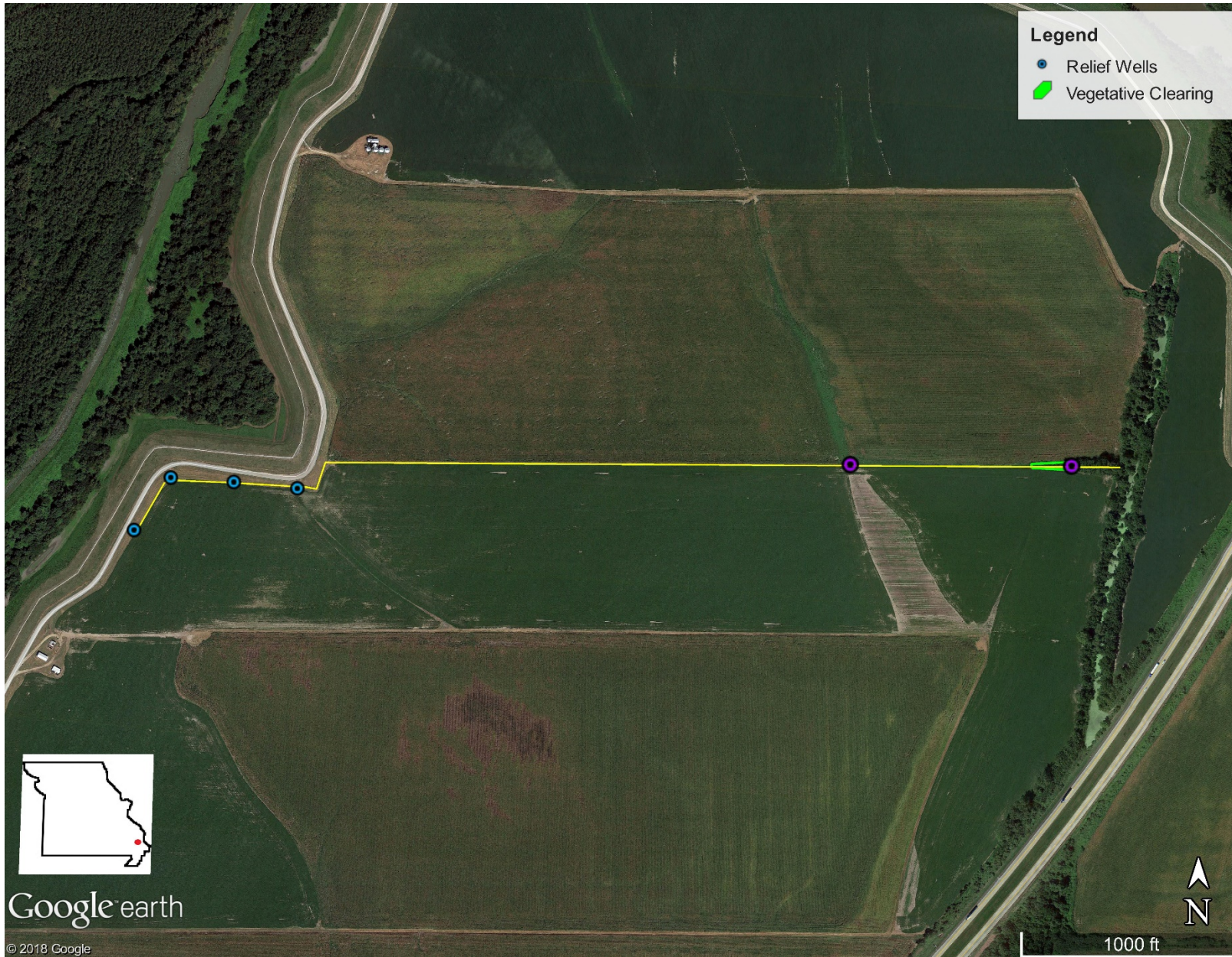


Figure 4. Proposed seepage control measures along the Mississippi River mainline levee at the Below Charleston Mile 24 project area, Mississippi County, Missouri.