



US Army Corps  
of Engineers

# OPERATION MAKE SAFE PROJECT UPDATE

Dec. 7, 2011

Birds Point - New Madrid Floodway  
Missouri

New Madrid Project Office

Memphis District

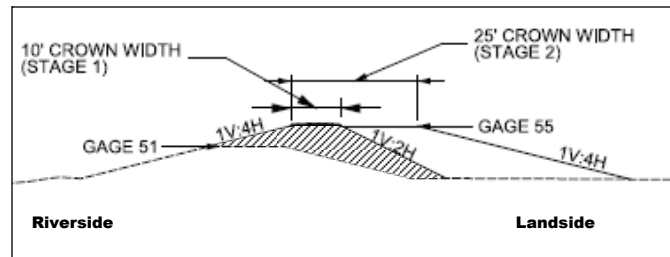
## Schedule

Authorization to proceed:	June 15, 2011
Began construction:	June 16, 2011
Original required completion:	Nov. 30, 2011
Current required completion:	Nov. 30, 2011
Current scheduled completion:	Nov. 30, 2011
- Upper crevasse (to 51 feet):	Nov. 16, 2011
- Upper crevasse (to 55 feet):	To be determined
- Center crevasse:	Nov. 30, 2011
- Lower crevasse:	Oct. 9, 2011



## Progress

Location:	Scheduled Progress:	Actual Progress:
Upper crevasse (to 51 feet):	100%	99%
Upper crevasse (to 55 feet):	N/A	15%
Center crevasse:	100%	90%
Lower crevasse:	100%	98%



The hatched area is the modified section of the upper crevasse levee. The modified section will be built as weather permits and will provide protection to 55 feet on the Cairo gage. The full levee section will be constructed after spring highwater recedes and will provide additional stability and durability to the levee.

## Funding

Expended to date: (As of Nov. 30)	\$15,491,000
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## Scope of work

During activation of the Birds Point - New Madrid Floodway, three artificial crevasses in the levee were opened to allow floodwater to flow through the Floodway, reducing water elevations and pressure on the flood control system. Phase I of this project repairs the levee at the three crevasse locations to provide interim protection to a flood elevation of 51 feet on the gage at Cairo, Ill. (39 feet on the gage at New Madrid) by Nov. 30. Phase II improves protection at the upper crevasse to 55 feet on the gage.

The upper crevasse is located at Birds Point, near the confluence of the Mississippi and Ohio rivers. Repairs are required for 9,000 feet of levee at this location. Work here includes filling five scour holes back to level grade, repairing four levee segments and constructing one segment realignment.

The center crevasse is located near Seven Island Conservation Area. Repairs are required for 800 feet of levee at this location. A scour hole developed here, connecting with the existing 1937 scour hole. Work here includes separating the two scour holes, filling the new scour hole using sand dredged from the river bottom, and repairing the levee to the interim grade.

The lower crevasse is located near Donaldson Point Conservation Area. Repairs are required for 4,700 feet of levee at this location. Work here includes removing excess water at the foundation, and repairing the levee to the interim grade.

**Current Progress**

**The District is now authorized and funded to continue improvements at the upper crevasse to 55 feet on the Cairo gage as part of Make Safe.**

**Upper crevasse:** A Corps of Engineers crew consisting of 26 personnel and 30 pieces of heavy equipment is on site here and at a maintenance facility. Survey results indicate that the entire 9,000 feet of levee is at or above a (Cairo) gage elevation of 51 feet as of Oct. 28. Weather conditions are no longer favorable for earthwork. The District was directed Tuesday to proceed with installing HESCO bastions as a temporary structure to provide protection to 55 feet on the Cairo gage. Installation began today. The HESCO bastions are wire baskets with a heavy fabric liner that will be filled with sand. Heavy plastic sheeting will cover the HESCOs and the levee to provide an impermeable barrier. This work is part of an orderly shutdown of the project for winter. Permanent repairs will resume after spring highwater recedes.

**Center crevasse:** A Corps of Engineers crew consisting of 27 personnel and 20 pieces of heavy equipment is on site. The crew reached the required Make Safe elevation Dec. 3. The interim levee stands 15 feet high above the surrounding ground and provides flood protection to approximately 55 feet on the Cairo gage. The crew also completed covering the levee in heavy plastic sheeting to resist against erosion by rain and wave wash. The crew today moved to Birds Point to assist in the installation of HESCOs there.

**Lower crevasse:** Interim repairs were completed Oct. 10 and Corps crews have demobilized from the site. The two percent of work remaining is seeding the levee with grass to prevent erosion.

**Blasting agent removal:** The need to reconfigure the packaging has temporarily delayed shipment of the desensitized blasting agent. Additional permits are now required from the State of Missouri and USDOT.

**OPERATION RESTORE**

The follow-on project to Operation "Make Safe", called Operation "Restore", will reconstruct the Floodway system to the pre-operational level of protection. The construction schedule is contingent on the availability of funding.



**Newly-installed heavy plastic sheeting covers the levee at the center crevasse Tuesday. This view looks west.**



**Crews cover the newly-constructed levee segment at the center crevasse with heavy plastic sheeting Tuesday. The plastic sheeting will help protect the levee against erosion caused by wave action and rainfall. This view looks east along the levee.**



**Crews reconstruct the levee at the center crevasse Dec. 3.**