



US Army Corps  
of Engineers

# OPERATION MAKE SAFE PROJECT UPDATE Oct. 21, 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 (Phase I):	Nov. 16, 2011
- Center crevasse:	Nov. 30, 2011
- Lower crevasse:	Oct. 9, 2011



## Progress

Location:	Scheduled Progress:	Actual Progress:
Upper crevasse (Phase I):	79%	91%
Center crevasse:	49%	50%
Lower crevasse:	100%	96%



**Clay embankment is placed landside of the levee at the upper crevasse Monday to prevent seepage.**

## Funding

Expended to date: (As of Oct. 20)	\$8,477,000
--------------------------------------	-------------

## 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. Work will begin when repairs to 51 feet are complete. Earthwork resumed Friday afternoon after work was suspended due to rain. Dredge production was unaffected.*

**Upper crevasse:** A Memphis District crew consisting of 22 personnel and 16 pieces of heavy equipment is on site here, at a nearby borrow site, and at a maintenance facility. Crews are restoring the bed of clay on the land side of the levee to prevent seepage. A total of 6,800 feet of levee meets or exceeds a (Cairo) gage elevation of 51 feet at this location. Low reaches have been raised and await inspection.

**Center crevasse:** A Memphis District crew consisting of seven personnel and ten pieces of heavy equipment is on site here and at a nearby borrow site. The crew has ceased harvesting sand from the surrounding fields and is now preparing to extract clay from a borrow site near Ten Mile Pond Conservation Area. The dredge lowa began pumping sand from the Mississippi River into the scour hole Oct. 8. Pumping will last up to 30 days. The dredge has pumped 165,000 cubic yards of sand into the scour hole to date.

**Lower crevasse:** A Vicksburg District crew consisting of 14 personnel and 16 pieces of heavy equipment is on site here and at a nearby borrow site. Approximately two days of dressing and finish-grading remain to be completed, as well as repairs to two washed-out segments that were not part of the original scope of work. Repair of the washout areas are 20 percent complete.

**Blasting agent removal:** Desensitized blasting agent remains stored at the upper and lower crevasses. The results of a laboratory characterization confirmed the blasting agent is not an explosive risk. A contractor requires additional equipment to transfer the blasting agent. Removal has been delayed until the equipment arrives.

### 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.



**The dredge contractor pumps sand into the scour hole at the center crevasse Friday.**



**The District hosted a press conference today at the center crevasse to discuss current progress and future repairs of the Floodway levee. Speaking were Maj. Gen. Michael Walsh (Commander, Mississippi Valley Division), U.S. Rep. Jo Ann Emerson (MO-8), members of the Mississippi River Commission, and Col. Vernie Reichling (Commander, Memphis District).**



**The dredge (background) pumps sand to a booster pump (on barge, center), to the shore pipeline via a section of flexible pipe (foreground), and then to the scour hole at the center crevasse.**