



US Army Corps  
of Engineers

# OPERATION MAKE SAFE PROJECT UPDATE Oct. 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:	Nov. 16, 2011
- Center crevasse:	Nov. 30, 2011
- Lower crevasse:	Oct. 9, 2011



## Progress

Location:	Scheduled Progress:	Actual Progress:
Upper crevasse:	66%	76%
Center crevasse:	33%	31%
Lower crevasse:	94%	89%

## Funding

Expended to date: (As of Oct. 6)	\$7,131,000
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**Clay embankment is placed behind the levee at the upper crevasse Thursday to prevent seepage.**

## 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. 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).

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**

**Upper crevasse:** A Memphis District crew consisting of 22 personnel and 16 pieces of heavy equipment is on site. Crews are currently filling the final of five scour holes, as well as reconstructing the levee over the top of the previously-filled scour holes. Responses to a new haul service contract were due 2 p.m. today. The District will review responses and award the contract shortly. Nearly 7,000 feet of levee is awaiting inspection. A total of 1,800 feet of levee have been built to a (Cairo) gage elevation of 51 feet at this location.

**Center crevasse:** A Memphis District crew consisting of seven personnel and ten pieces of heavy equipment is on site. The crew continued harvesting sand for use as fill material in the scour hole. The dredge contractor is currently constructing a pipeline that will be used to pump sand from the Mississippi River to the scour hole. Testing of the pipe is anticipated for this weekend and production will begin afterwards.

**Lower crevasse:** A Vicksburg District crew consisting of 14 personnel and 16 pieces of heavy equipment is on site. The crew is constructing the remaining 1,200 feet of levee at this site. The levee is expected to reach the interim elevation as scheduled Oct. 9, but additional work will continue after this date. Work includes dressing, finish-grading, applying turf, and repairing two washed-out segments nearby that were not part of the original scope of work.

**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. The Corps has received one of two required permits from the US Department of Transportation. Receipt of the second permit and removal of the blasting agent is now estimated for mid-October. The blasting agent will remain secured inside a fenced perimeter at each site until removed.

**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.



**Engineers installed a silt curtain at the center crevasse this week. The silt curtain will prevent silt plumes from entering the existing scour hole (visible in background).**



**Constructing levee at the lower crevasse. Clay is first dumped (top), then spread to a depth of one foot or less (middle), and finally compacted (bottom). The process is repeated until the levee is at the proper elevation.**



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