



US Army Corps
of Engineers

OPERATION MAKE SAFE PROJECT UPDATE

Dec. 2, 2011

Birds Point - New Madrid Floodway
Missouri

New Madrid Project Office

Memphis District

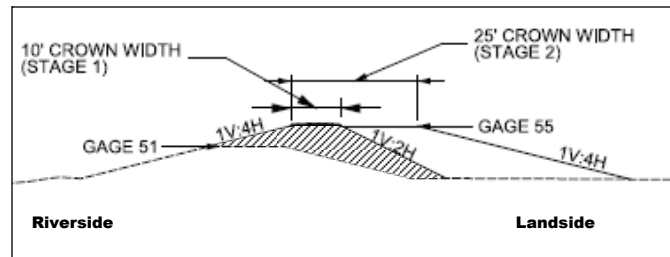
Schedule

| | |
|--------------------------------|------------------|
| 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: | 93% | 81% |
| 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 and will provide additional stability and durability to the levee.

Funding

| | |
|--------------------------------------|--------------|
| Expended to date: (As of Nov. 30) | \$15,491,000 |
|--------------------------------------|--------------|

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.

Earthwork resumed Thursday after rain and snow had suspended work for four days.

Upper crevasse: A Corps of Engineers crew consisting of 26 personnel and 30 pieces of heavy equipment is on site here, at two nearby borrow sites, 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. Crews have shifted efforts to enlarging the levee to a gage elevation of 55 feet. Contracted delivery of clay resumed this morning.

Center crevasse: A Corps of Engineers crew consisting of 27 personnel and 20 pieces of heavy equipment is on site here and at a nearby clay borrow site. Earthwork resumed Thursday afternoon. The Make Safe levee will be 15 feet high above the surrounding ground. Crews have constructed nine feet of levee as of Friday morning. Compaction and moisture test results are all within allowable limits and show soil conditions are close to optimal.

Lower crevasse: Interim repairs are complete 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.



Crews reconstruct the levee at the center crevasse Friday. Earthwork resumed Thursday afternoon.



Make Safe authorizes repairs at the center crevasse to an elevation of 310.5 feet above sea level. Crews have constructed the levee to an elevation of 304 feet as of Friday morning, nine feet above ground level.



Crews reconstruct levee at the center crevasse Friday to close an 800-foot gap here.