

MISSISSIPPI-OHIO RIVER CONFLUENCE UPDATE

US Army Corps of Engineers

Illinois, Kentucky, Missouri, Tennessee

Memphis District May 4, 2012

In September of 2011 the Memphis District completed an assessment of risks within the confluence area for interim levels of protection for the Birds Point New Madrid Floodway. This assessment indicated that risks within the confluence were manageable for interim levee heights of the Floodway levee not exceeding an equivalent of 55 feet on the Cairo gage. Based on this assessment reconstruction of the Floodway levee to 55 feet was approved and achieved in advance of our orderly shutdown for winter.

To ensure we looked at this risk assessment from all possible angles, Mississippi Valley Division Commander Maj. Gen. John Peabody directed that a Safety Assurance Review (SAR) be performed of the analyses supporting the establishment of the 55 feet interim level of protection within the Floodway. Under the SAR process an Independent External Peer Review (IEPR) team reviewed our prior analyses. Their assignment was to review our decision document to ensure our decisions are supported by sound engineering analysis and judgment and thus further ensure that our risks during reconstruction are appropriately balanced across the confluence area. Last week that IEPR Team validated our original findings.

This week our Request for Proposals from contractors to perform construction closed. We are now in the process of evaluating these proposals and selecting contractors. We are on schedule to make our first award later this month for reconstructing the upper crevasse to 55' and full width. Once these contractors begin work we will post photos and videos of the rebuilding as it progresses.

— Col. Vernie Reichling Memphis District Commander

You can view the interim report referenced above at: http://www.mvm.usace.army.mil/publicaffairs/News/press releases/bpnm/EC Interim Levee Report 6Oct11.pdf and the IEPR SAR at: http://www.mvm.usace.army.mil/publicaffairs/News/press releases/bpnm/Bird's Point IEPR Report Design.pdf



Above Cairo (Slurry Trench)

Award date: September 2011 Forecasted completion: January 2013

On schedule

In construction

In construction

Ahead of schedule

7,200 linear feet of soil-bentonite will create an impermeable barrier, reducing the risk of seepage underneath the Mississippi River levee. The site was cleared last fall before the project entered a non-work period. Excavation for the slurry trench will begin when field conditions and river stages allow. This contract is valued at \$5.4 million.



Above Cairo (Relief wells)

Award Date: September 2011

Forecasted completion: January 2013

28 relief wells will reduce uncontrolled seepage underneath the Mississippi River levee north of Cairo. Existing ditches and culverts will be cleaned along roadways to ensure adequate drainage. Thanks to favorable field conditions this winter we project the contractor will be able to finish the work this summer. This contract is valued at \$1.2 million.



Memphis District—U.S. Army Corps of Engineers

Birds Point—New Madrid Floodway (Levee Repairs)

In design

On schedule

Construction began: June 2011 Forecasted completion: Dec. 2012 Estimated value: \$44.7 million

Task	Crevasse		Forecasted	Forecasted	
<u>Order</u>	Location	Scope of work	<u>Award</u>	Completion	T.O. value
TO #1	Upper	Earthwork to 55 feet (full width)	May 2012	September 2012	_
TO #2	Center	Earthwork to 55 feet (full width)	June 2012	September 2012	_
TO #3	Lower	Earthwork to 55 feet (full width)	June 2012	September 2012	_
TO #4	Upper	Earthwork 55 to 62.5 feet*	September 2012	December 2012	_
TO #5	Center	Earthwork 55 to 62.5 feet*	September 2012	December 2012	_
TO #6	Lower	Earthwork 55 to 62.5 feet*	September 2012	December 2012	

^{*}Schedule is highly dependent on risk mitigation within the confluence area and updating operational plans. Also includes installation of activation method and any required seepage control measures.

Memphis District hired labor forces have completed dewatering the three borrow pits to be used in reconstruction of the levee (upper borrow pit shown below, left). They also continue to do other preparatory work in the area for construction to resume upon award of a task order to a contractor that is scheduled for later this month. In addition our crews are repairing scour damage to the levee at its intersection with O'Bryan's Ridge (below, right).





Island 8 (Relief Wells)

In design

Forecasted award: July 2012
Forecasted completion: December 2013

On schedule

111 relief wells will improve the resiliency of a mainline Federal levee protecting 350,000 acres in Kentucky and Tennessee. Engineering plans are complete and the project is awaiting right-of-way acquisition by the project sponsor. The estimated project value is \$6.0 million.



Cairo-Mound City (Slurry trench)

In design

Forecasted award: September 2012 Forecasted completion: December 2013

On schedule

Two landside earthen berms and 4,200 feet of soil-bentonite slurry trench will reduce the risk of seepage underneath the Ohio River levee north of Cairo. Engineering plans are complete and the project is awaiting right-of-way acquisition by the project sponsor. The estimated project value is \$8.5 million.



City of Cairo Floodwall (Relief wells)

In design

Forecasted award: August 2012 Forecasted completion: December 2013

On schedule

28 relief wells will reduce the risk of uncontrolled seepage underneath the floodwall in Cairo. Engineering plans are near completion and the project is awaiting right-of-way acquisition by the project sponsor. The estimated project value is \$2.5 million.

