

ST. LOUIS POST-DISPATCH

Levee fixes are on schedule, Metro East officials say

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Metro East officials say they are on track to complete their share of Mississippi River levee improvements to meet federal accreditation requirements by year's end, a status linked to insurance rates in the area.

Meanwhile, the Army Corps of Engineers says underground boulders near the Melvin Price Locks and Dam, an area for which it is responsible, are delaying improvements there.

The Federal Emergency Management Agency had threatened to downgrade the levees if they weren't upgraded, and to issue new flood maps that would designate the area as at significant risk for flooding.

The good news for the affected area's 156,000 residents and 7,000 businesses is that FEMA officials say the Corps' contingency plans in the event of flooding near the dam could be deemed sufficient to qualify for accreditation.

Madison, St. Clair and Monroe counties have drawn from a one-fourth-cent sales tax to fund construction projects estimated to cost close to \$100 million by the time work is completed at the end of this year.

Much of the project is already completed, according to Chuck Etwert, chief supervisor of the Southwestern Illinois Flood Prevention District Council.

Etwert is an engineer who previously worked for the St. Louis Metropolitan Sewer District. Last year, he replaced longtime Metro East levee czar Les Serman as head of the improvement project.

Etwert said much of the work may go unnoticed by the public.

"Most of the improvements we are making are underground," Etwert said. "The problem was not with the height of the levees but rather their ability to prevent underseepage."

In underseepage, water finds its way under and behind the levees, which can cause their failure.

To that end, the flood prevention district is installing berms, relief wells, blanket drains and other defenses along the 74-mile length of the system.

This week, Etwert led a reporter on a tour of a shallow cutoff wall under construction near the Alton Marina. The 1,600-foot structure installed in a trench 30 feet deep will consist of soil and bentonite, a highly absorbent material.

“In other places, we have installed cutoff walls that are 100 feet deep,” Etwert said.

The levees were built with federal funding in the 1940s and '50s to stand up to a 500-year flood.

The system protects the vast, low-lying American Bottom area, a flood plain that includes all or parts of many communities, including East St. Louis, Granite City, Alton, Cahokia, Wood River, Roxana, Sauget and Hartford.

The system has never failed, but underseepage prompted FEMA to announce in 2007 that it had doubts the levees would protect against even a 100-year flood, for which there is one percent chance in any given year.

Failure to secure FEMA's blessing would lead banks and other lenders to require expensive flood insurance for anyone living or doing business in the area.

To head off that threat, officials in Madison, St. Clair and Monroe counties established the flood protection district and levied the sales tax. Collection began in January 2009, with annual proceeds averaging about \$11 million.

For years, Metro East leaders have pointed toward an 8,000-foot segment of the levee near the dam as a potential weak link.

The Corps of Engineers is responsible for upgrading that portion because construction of the massive dam, just south of Alton, exacerbated the underseepage problem there.

Corps officials have readily accepted responsibility for the section. But they say natural obstacles and funding have slowed repair work in the area.

“We discovered some unique geological conditions only existing in that linear area ... that had made it very difficult and risky and costly to construct and have required us to step back and reassess what is the best solution,” Mike Feldmann, a project manager for the Corps, said Friday.

Those geological conditions are buried “boulders and cobbles” wider than the trenches that would be dug for cutoff walls.

Their discovery has delayed the design process and funding estimates, Feldmann said.

However, he said the Corps recently tested new relief wells and other defenses and found that they would withstand the pressure of a 100-year flood.

Etwert said he hoped the FEMA would look kindly on the corps' contingency plan and accredit the system early next year.

FEMA also is behind schedule in publishing its new flood maps. The agency had expected to have completed them by 2012. That process was slowed in the wake of congressional

requests — prompted by officials around the country worried about skyrocketing insurance rates — that FEMA refine its accreditation process.

Eric Kuklewski, a risk analysis specialist with FEMA in Chicago, said the agency no longer took an “all-or-nothing” approach to accreditation.

Kuklewski would not speculate as to the agency’s verdict on a system that would meet FEMA specifications but for the stretch near the dam for which the Corps would vouch.

“But we have heard that progress is being made down there, which is fantastic,” Kuklewski said. “And we would take into account a level of flood protection (near the dam) based on data and circumstances on the ground.”