



Memo to: Board of Directors

From: Les Sterman

Subject: Program Status Report for September, 2012

Date: September 14, 2012

Work continued in August and September to complete the design of the project. As reported last month, the Corps has not agreed to our proposed design parameters for graded filters, a key design feature used to control underseepage. While accepting the concept, the Corps has conditioned their approval on incorporating the use of number of very conservative design assumptions. Doing so either dramatically increases the costs of these features or makes their construction impractical. While there was continued dialogue to attempt to resolve our differences with the Corps, I concluded that there was little likelihood of resolving this disagreement and it made little sense for us to continue to spend money for further analysis and design of the disputed features in a vain attempt to satisfy the Corps. While our entire design team and experts continues to believe that our proposal is safe and effective, the ultimate decision will not be ours, so we have little choice but to alter our proposal. Accordingly, I asked AMEC to seek alternative designs that would consist of more traditional underseepage controls that would be more likely to meet with Corps approval as well as satisfy FEMA criteria.

Initial results of the design review by AMEC have been promising. It appears that most, if not all, of the deep graded filters that were in dispute can be replaced by relief wells and berms. Ironically, the revised designs will result in a lesser degree of flood protection, but will likely satisfy the Corps' concern about diminishing performance at the authorized 54' river elevation (the 500-year flood elevation is 50.6 feet). While no revised cost estimate has been produced yet, I am hopeful that costs will not increase beyond our financial capacity. The plan is to meet with the Corps as quickly as possible to review pending design changes so we can resume completing the 100% design of the project.

As I've indicated for the last few months we will have a very limited ability to absorb any further delays in the schedule or cost increases without compromising our 2015 goal for certification.

The Corps continues to suggest that we should better align the design of our project with their proposal to meet the 54' level of protection so that we can shift some of the work to the Corps. While this is reasonable in theory, it seems impractical. The Corps has no current budget or schedule for their work, and while they are willing to entertain changes to their design, it could take two years to amend their project development reports before they would even be eligible for

funding. Further, the Corps has indicated that it is highly unlikely that funds will ever be forthcoming for the Prairie DuPont and Fish Lake districts because of a low benefit/cost ratio for those projects. We would far prefer for the Corps to concentrate its funding and its efforts on the problematic Mel Price reach for which they have responsibility. In short, were we to shift part of the responsibility for the project to the Corps, there would be no chance that the project would be finished in 2015 and would likely extend for several years beyond that deadline. Doing so would have very damaging economic effects on our area.

The review of the financing schedule has started. ButcherMark Financial Advisors, the firm that completed our financial plan, is now reviewing the financial modeling for the project to determine how changes in interest rates, project schedule and other factors will affect how much money can be raised from the proceeds of the FPD sales tax. I am hopeful that these changing conditions will result in an increase of available funding for the project.

Work is ongoing on the Council's first construction contract, a small contract with Noeth Excavating Systems for restoration of culverts and trench drains in the MESD area.

Discussions with the Illinois Environmental Protection Agency continue on the contents and approach of the Sec. 401 water quality permit. We met with IEPA recently and addressed many of their questions. We also agreed on the general process that we would follow to provide remaining data and analysis so the permitting process can be completed. While we have some reservations about the need for the extensive information that they are seeking, we cannot afford any more lost time in disputing their approach, so we are focusing efforts on meeting their requests.

Paul Bergkoetter and I were asked to attend a meeting last week concerning the de-accreditation of the levee protecting a part of New Athens. The takeaway from that meeting from FEMA representatives was that the new procedures for de-accrediting levees should be finalized "early next year." The process for de-accreditation will take upwards of two years, given both for the technical extensive outreach activities. That would suggest that meeting the Council's objective of completing certification documentation in 2015 is essential.

Marks and Associates developed a draft of our minority business/workforce utilization plan. She will report on the draft at September Board meeting. Our construction management and contracting team will be reviewing the draft before we finalize it and present it to the Board for adoption.

There has been a quite a bit of recent media coverage on the project, noting the five year anniversary since FEMA and the Corps made the initial announcement of their determination to de-accredit the levee system in Metro-East. Of particular note are an editorial and two op-ed piece in the Belleville News-Democrat and an op-ed piece in the Post-Dispatch. Copies of these items are attached.

Greatest levee risk is doing nothing

Published: August 27, 2012

The U.S. Army Corps of Engineers stresses the urgency of fixing the metro-east levees. In May it classified the Metro East Sanitary District segment of the levees as at "extremely high risk" of failing in a flood.

Unfortunately, that sense of urgency isn't translating into action on the Corps part.

The Southwestern Illinois Flood Protection District has a plan to upgrade the levees to FEMA standards, put together by private engineers willing to stake their careers on its soundness. Local taxpayers took on the task because the Corps wouldn't have the money to improve the levees until years from now.

But instead of approving the plan, the Corps is demanding the addition of costly -- and maybe impossible-to-construct -- requirements.

Les Sterman of the local district estimates the Corps' inaction has already delayed the project six to eight months and has added hundreds of thousands of dollars, may millions, to its cost. Neither the local district nor the Corps can afford that.

Col. Christopher Hall, the St. Louis District commander, says that its No. 1 concern is public safety and the long-term viability of the levees. But how is leaving levees in place that the Corps admits are at risk of failing helping? The flood district's plan obviously is not everything the Corps wants, but it is superior to what we have now.

We're approaching the 20th anniversary of the devastating 1993 flood. So far our region has been fortunate enough not to experience another bad flood, but the clock is ticking.

The Corps will be held responsible by the public if the levees aren't fixed before the next big flood. The greatest risk to public safety is doing nothing.

Levee safety won't be compromised to ensure a faster process

Published: September 1, 2012

Much has been accomplished by the St. Louis District of the U.S. Army Corps of Engineers and the local levee boards to restore the full level of protection the levees were designed to provide. In the last 20 years, the Corps of Engineers has performed more than \$140 million in work in rehabilitating the levees that protect the lives and economic well-being of the metro-east.

While much remains to be done, we find ourselves in a changing landscape regionally and nationally, with a renewed emphasis on managing flood risk, thanks in large part to the efforts of the residents and leaders in the metro-east.

Since 2007, when news of FEMA's flood insurance map modernization reached the metro-east, there has been a sharp focus on the levees at the local level. The efforts of the Madison, Monroe and St. Clair counties and the Southwest Illinois Flood Prevention District Council helped reinvigorate the conversation about reducing flood risk on a national level, and made incredible strides toward that goal.

The St. Louis District team worked tirelessly to support the Flood Prevention District's efforts to meet FEMA's requirements and avoid costly increases in flood insurance. We provide real-time feedback for their engineers in the design process to avoid delays in submitting a final plan for approval. We worked to streamline our permissions process, and we continue looking for ways share in their efforts and move the project forward. We understand the sense of urgency to complete work by 2015 to reach a 100-year level of protection.

However, one accommodation we can't make is sacrificing safety. Our duty and first priority is to ensure that any work done on the levees won't increase the risk to the lives and livelihoods in the metro-east.

Our policies and processes exist to protect and improve the safety, economy and quality of life of the American people.

This is not a debate about the level of protection the levees provide. We need to be deliberate and responsible in determining whether some features being considered will hurt the integrity of the levee and put lives and communities at risk.

The use of graded filters on the FPD's draft designs has caused a great deal of concern and discussion.

These underground filters are largely untested in levees along major rivers. In the thousands of miles of levees along the Mississippi River and its tributaries, graded filters have never been used. Without being able to see where problems occur, we would be unable to use flood-fighting techniques such as in past floods. If they fail during a flood, the failure would be unforeseen and catastrophic.

The proper design of these graded filters by the FPD has been the main source of delay to their work.

The Corps of Engineers and the Flood Prevention District Council's engineering firm met to consult on these features and agreed on safety criteria in May 2012. Also included were engineering experts in the field invited by both parties. We will continue to work with the Council and its engineering firm as they develop a final plan to reach their goals.

We are also committed to continuing work toward fully restoring the levees as funding allows. Designed to withstand a flood reaching 54 feet on the St. Louis gage -- roughly a 500-year flood -- the metro-east levees protect against floods even greater than the Flood of 1993, which peaked at 49.5 feet, a 380-year flood.

In the face of the greatest flood on record in our region, the metro-east levees held. This happened through the tremendous efforts of the local residents, the levee boards and the St. Louis District team.

We continue to be a long-term partner with the levee boards as well as the communities where we live and serve.

We continue to work with the Flood Prevention District Council and their engineers through their design process and will continue to meet all of our review deadlines. Through a unity of effort, we will find the best way forward to reduce risk for the residents, businesses and communities where we live.

Col. Christopher Hall is commander of the St. Louis District, U.S. Army Corps of Engineers.

The slower Corps moves on levees, the more at risk we are

Published: September 1, 2012

It's no secret that since before the 1993 flood, the Corps of Engineers knew of significant weaknesses in the area's levee system. The real mystery is why it's taking so long to fix a serious problem that the Corps has known about for at least 20 years. I think we now know the answer to that question. We also know what to do about it. Let me try to explain.

In July 1993, the Mississippi River experienced its flood of record, perhaps a 300-year event. The levee system protected the 174-square-mile American Bottom from flooding since it was designed and built by the Corps in the 1940's and 1950's did its job, but it showed significant weaknesses suggesting it might fail in the future.

Soon thereafter, the Corps declared the levee system was suffering from a "design deficiency," a euphemism coined by the Corps so they could acknowledge their responsibility for fixing the problem.

In the more than 19 years since the 1993 flood, there has been little movement by the Corps to fix the "design deficiency." There has been some investment in repairing aged pump stations and other above-ground structures, but little to address the fundamental problem of seepage under the levee system.

While the Corps has fixed the one 10-mile stretch of the system that it owns, the remaining 64 miles of locally owned levees are traveling in the Corps' slow lane. To date, progress consists mainly of a growing number of thick reports, multiple inspections, and oft-repeated dire warnings. In 2009, the Corps declared that it would take another 30-40 years and as much as a half-billion dollars to fully address the problem. The problem that the Corps accepted as theirs has gradually become ours.

In the absence of action, the Corps and the Federal Emergency Management Agency steadily ratchet up the rhetoric used to describe the situation. Most recently, in May, the Corps announced the levee system operated by the Metro-East Sanitary District is "among those with the highest inundation risk in the USACE portfolio."

Those urgent words belie the agonizingly slow pace of progress. This situation is a continuing threat to public safety and the region's economy. 155,000 people and 55,000 jobs are at risk. To their credit, local leaders mobilized with unprecedented unity and urgency to find a local solution. An organization was formed, a funding source created, and construction plans developed, all within a period of three years. Two national

engineering firms have designed affordable improvements that will meet FEMA's standards. With another two years of construction, we can dramatically improve flood protection. If only it were that simple.

An obscure federal law, Section 408 of the Rivers and Harbors Act of 1899, tasks the Secretary of the Army with granting permission for the alteration of any levee built by the federal government if, in his judgment, it "will not be injurious to the public interest or impair the usefulness of such work." That simple and sensible policy led to hundreds of pages of internal guidance developed by the Corps to determine how and when to give that permission.

There is now an entire federal bureaucracy engaged in our levee improvement project, even though not a penny of federal money will pay for it. By their own admission, the Corps is reviewing the project as if it was a federal project, effectively meaning that time and money don't matter. As Col. Christopher Hall, commander of the St. Louis District of the Corps, said recently in describing the agency's approach to design and construction to the New York Times, "we build cathedrals."

The problem is that it takes a long time and a lot of money to build a cathedral, two commodities that are in very short supply. Between 1993, when the problem first became clear, to the middle of this century, when the Corps thinks it might finish the job, is a span of more than 50 years. We should never accept a situation that exposes our communities and our businesses to the risk of a catastrophic flood for so long.

One could argue that, with diminishing federal money to pay for basic infrastructure, the Corps would do well to encourage states and local governments to begin assuming some of those costs. Paradoxically, the Corps seems to be doing everything imaginable to make the job more difficult, more costly and take longer.

To be sure, there are smart, hard-working people working for the Corps, but they are working within an inflexible, stifling, multilayered bureaucracy that slavishly adheres to rules of their own making, even when the outcome makes little sense. Our representatives in Congress have worked tirelessly in a bipartisan, unified manner on our behalf, but it is testimony to the enduring power of the bureaucracy that they have made only small headway.

We have a plan, we have the money, and we have the passion and motivation to secure our region from flood risk. All we need now is for the federal government to say yes.

Les Sterman is chief engineer for the Southwestern Illinois Flood Prevention District Council.

Guest commentary: Five years in, cooperation remains key to recertification of Metro East levees

September 05, 2012 12:00 am • By Rich Conner



Towboats push barges south through the swollen Chain of Rocks canal north of downtown St. Louis on June 15, 2011. The area to the left is protected by the Chain of Rocks and Metro East Sanitary District levees. This photo was taken from a Gateway Helicopter Tour. Photo by J.B. Forbes, jforbes@post-dispatch.com

Last month marked an important milestone in southwestern Illinois' ongoing effort to improve the levees protecting the American Bottom flood plain. It was in August, five years ago, that the Federal Emergency Management Agency surprised the region with the announcement that it no longer considered the Metro East levees to be

adequately providing protection at the 100-year flood level. Since then, we've learned that FEMA reached that conclusion through a faulty process that did not include any specific documentation from the Army Corps of Engineers. Despite this, the announcement triggered a process that, if allowed to run its course, would declare almost all of the American Bottom a special flood hazard area, with potentially devastating economic outcomes for the St. Louis region, particularly for the 150,000 residents, 4,000 employers and 56,000 jobs protected by the levees.

Fortunately, FEMA's ill-planned action also triggered a remarkable regional response. That response was aimed at preventing impacted businesses and residents from having to purchase mandatory flood insurance or adhere to new elevation standards for building construction once the new flood maps become final. Once it became apparent that the corps' time frame of 2044 for repairs of the levees would not be in sync with the FEMA time frame for issuing its new maps, the Metro East regional leadership took command of the process, improvements and funding. With little or no assistance from

federal agencies, local and state leaders worked through the critical issues and developed a plan to improve our levees to the new federal standards.

The progress so far is a testimony to the region's ability to work together in the face of real crisis. Early successes included the creation of the Southwestern Illinois Flood Prevention District Council to facilitate continued collaboration between the three counties working together to oversee the restoration of the levees, and the authorization by Madison, St. Clair and Monroe counties of a quarter-cent sales tax dedicated to funding the levee repair work. The subsequent launch of the St. Louis Metro East Levee Issues Alliance has helped to build a growing coalition of business and civic organizations, community leaders and concerned citizens all working together to help ensure the timely completion of improvements so the levees meet new federal standards. On the legal front, the region celebrated FEMA's announcement in open court that it had abandoned its proposed flood insurance rate maps reflecting a de-accreditation of the Metro East levee systems.

Unfortunately, FEMA is back at the drawing board revamping its remapping process in order to issue its new maps in the near future, so it's imperative that the levee improvement project move forward in a timely manner. While construction began on a small piece of the \$161 million project this past June, it is now apparent that the corps' requested modifications to one key element of the proposed design will result in a design plan that cannot be implemented within the FPD Council's budget. The current lack of consensus on the design approach stems from the fact that the FPD Council designs are focused on reaching the FEMA-required 100-year flood protection mark. This will provide better protection than exists today and can be locally funded and completed by 2015. The corps' ultimate goal is to improve the levees to the 500-year standard, a project they don't currently have the funding to do. The challenge of finding a design approach that satisfies both objectives has created an impasse that has delayed the project by seven months and forced the Levee Issues Alliance to stop its countdown clock tracking the project's progress.

The FPD Council is working diligently on a plan that will receive the corps' approval and the necessary permits. We must have the highest level of priority and a commitment to a collaborative approach from the Corps of Engineers. Further delays are harmful to the economic condition of our region and prevent the levee upgrades that improve the safety of the businesses and residents of the American Bottom.

The Levee Issues Alliance has engaged all the parties involved, and we expect to find a path forward to complete this project in early 2015, protecting lives and livelihoods in the

American Bottom, and reaffirming that it is a place where businesses can invest with confidence.

Rich Conner is president of the Leadership Council Southwestern Illinois, a member-based, economic development organization representing Madison and St. Clair counties. The council administers the Levee Issues Alliance.