

METRO EAST UPDATE

Covering the Levee Systems of Metropolitan East Sanitary District, Wood River, Chain of Rocks, Prairie du Pont/Fish Lake

January 2012

EVENTS & ACTIVITY

■ DEC 21 - SWIFPDC

Bruce Munholand and Gary Andruska attended this meeting on behalf of the Corps.

■ NOV 9; NOV 15; NOV 16 - AMEC MEETINGS

Meetings between the Corps of Engineers and AMEC were held to coordinate levee design specifics and permit requirements and aid in the permit submission process.

■ JAN 12 - MEETING WITH SWIFPDC SUPERVISOR OF CONSTRUCTION

St. Louis District Commander Col. Christopher G. Hall met with SWIFPDC Chief Supervisor of Construction and the Works, Les Sterman, to discuss steps forward and project details.

From the desk of the Program Manager

New Year brings new excitement to Metro East Program

As we ring in 2012, I look at the progress we've made and the path forward. In the past year, we have had a renewed energy with the program, and I'm excited as the Program Manager to be a part of what lays in store for 2012. We not only have our own continuing federal projects restoring the levees to their designed level of protection, but are an integrated member of the Southwest Illinois Flood Protection Council team, assisting them in achieving their critical goal of completing construction on upgrades to the levee systems to provide 100-year level of protection.

The Corps has a mandate to ensure that the citizens behind the levees remain protected from the impacts of flooding by ensuring the proposed plans do in fact increase the level of protection as planned by SWIFPD council. We've assembled a district team of experts to be continuously available to the Council's engineers (AMEC) as a design is developed to address potential issues as they arise. This partnership will help expedite design and permit application reviews and move the permit issuance process forward as rapidly as possible. We feel confident that the processes we have in place, and continually refine, will help avoid permit issuance obstacles.

This process has also been very beneficial to the completion of our federal projects in the Metro East, allowing us to fully integrate the efforts of AMEC with our designs to ensure the public receives the maximum benefit of the improvements being performed by AMEC.

I feel strongly that the ongoing communication and collaboration we've had with the Council will further benefit the public as we all move ever-closer to starting construction.

Our District Engineer, Col. Hall, emphasized recently that reducing the risks associated with flooding is a shared responsibility. The Metro-East Community has taken a serious, proactive approach to address the levee issues facing them, and we fully embrace our responsibility to do our part to help bring their vision to reality.

Bruce Munholand

Metro East Levees Program Manger

Looking back: 1993 Flood brings attention to deficiencies in Metro East Levees

In 1993, a devastating flood hit the Midwest and St. Louis area. The flood, which peaked at 49.58 on the St. Louis gage (approximately a 200-year flood), caused approximately \$15 billion in damages. Thousands were evacuated from their homes and 50 people died.

While the Metro East Levees did not breach or overtop, hundreds of other levees failed. While the impact of the flood was lessened with flood fighting and sandbagging, the Metro East Levee System was tested.

As the water receded, the U.S. Army Corps of Engineers began accessing the levees and informed stakeholders and partners of the damage.

The conclusion following the '93 Flood was that of increased risk due to levee deficiencies and a need for reconstruction or rehabilitation.

Twelve years following the flood, Hurricane Katrina resulted in more than 50 levee breaches and catastrophic flooding damage over large portions of southern Mississippi



U.S. Army Corps of Engineers photo

Above: Volunteers place sandbags to combat rising waters during the flood of 1993.

and Louisiana.

The '93 Flood, Hurricane Katrina and additional natural disasters the U.S. experienced brought added attention to the levee systems that reduce risk to those living and working behind them.

Metro East Levees: Understanding the basics, steps necessary to move forward

The Metro East Levee System

The Metro East St. Louis Levees consists of five levee projects located in Madison, St. Clair and Monroe Counties in Illinois.

These urban levees are authorized to provide a 0.2% (500-year) flood chance level of protection, or 52' on the St. Louis gage, with an additional 2' as freeboard.

The total length of the levees is 64.6 miles. Combined, the projects protect approximately 111,700 acres and a population of approximately 288,000 residents and employees.

The levees included are: Wood River Levee, Chain of Rocks Levee, Metro East Sanitary District and Prairie du Pont and Fish Lake Levees.

System Deficiencies

The Corps of Engineers completes Periodic (once every 5 years) and Annual Inspections of levee systems in the USACE Levee Safety Program.

Inspections are completed to provide a detailed assessment of the overall condition of the levee system, with the goal of identifying deficiencies will reduce flood risk to the public.

The Corps is in the process of completing Periodic Inspections on the Wood River and Prairie du Pont and Fish Lake Levees.

After completing a Periodic Inspections of the levee system, an Unacceptable (U) rating was given to the MESD system based on the National Levee Safety Program standards.

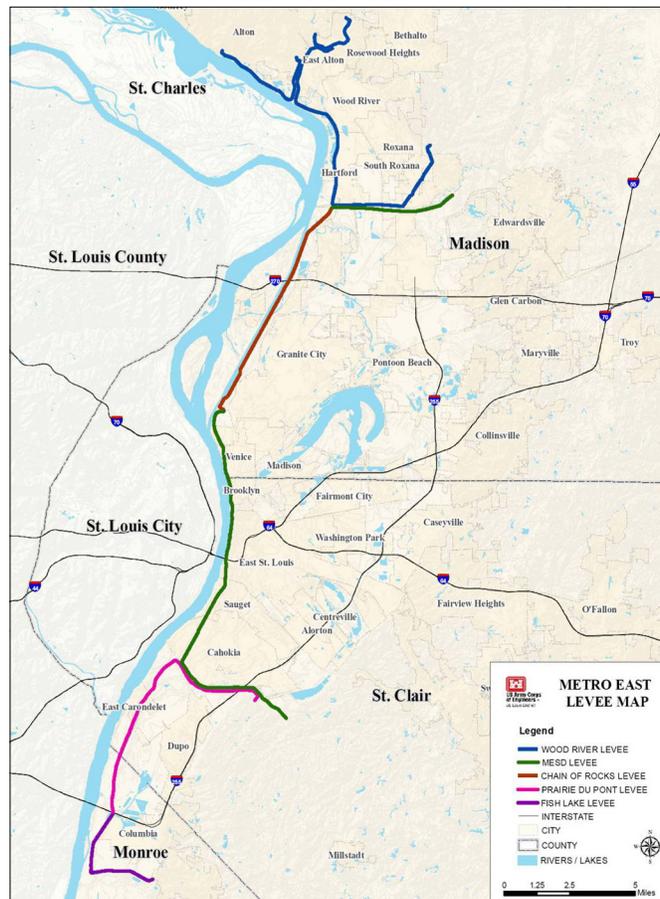
The Corps gives an U rating to levee systems with deficiencies that would prevent the system from performing as intended.

Deficiencies may include underseepage, erosion, animal burrows, vegetation on levees, or other conditions that may weaken the levee.

The Metro East Levee sponsors addressed all the deficiencies they could.

The largest issue with the levees is that of underseepage. The Corps is working with Metro East sponsors on how to fix the underseepage deficiency.

Underseepage is a historic problem with the levee system and one that is seen



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U.S. Army Corps of Engineers graphic

nation-wide in aging infrastructure.

Working Toward a Solution

The leadership of the affected Metro East counties came together to focus attention on rehabilitating the levees.

They passed a sales tax and formed the Southwest Illinois Flood Prevention District Council to pay for and restore the levees of Madison, St. Clair and Monroe counties to the 100-year level of protection for FEMA accreditation.

Next Steps

Before altering the levees, the SWIFPDC must submit a complete permit under 33 USC 408. Proposed modifications are sent to the Corps by the local sponsors in a complete application package.

The package will be reviewed by the District Engineer (Col. Christopher G. Hall). Hall will send his recommendations to the Mississippi Valley Division Commander (Maj.

Gen. John W. Peabody). Based on the Division Commander's determination, further approval may be necessary.

The first step in the process is for levee sponsors to submit to the Corps a written request for approval of the project modification/alteration, a description of the existing project, a description of the proposed modification and need for the modification, as well as a public interest determination, appropriate NEPA documentations, indirect effects of the alterations and a full technical analysis.

These steps are required by law and help to ensure modifications to the levees are not injurious to public interest or safety.

NOTE: Future editions of the Metro East Update will further explain the issues surrounding the Metro East levees. Information can also be found on the St. Louis District homepage, www.mvs.usace.army.mil. Specific questions can be sent to Mary Markos at email address below.