



Levee System Summary

New Orleans West Bank Levee System

St. Charles, Lafourche, West Jefferson, Algiers, and Plaquemines Levee Districts

U.S. ARMY CORPS OF ENGINEERS

BUILDING STRONG®

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Project Description:

The New Orleans West Bank Levee System is approximately 115 miles and is made up of Mississippi River Levees (MRL) and the Hurricane and Storm Damage Risk Reduction System (HSDRRS). The MRL was federally funded and constructed. The MRL is locally operated and maintained; however, the U.S. Army Corps of Engineers (USACE) has major maintenance responsibility. The HSDRRS is 100% locally operated and maintained. The HSDRRS levees were federally constructed but cost share funded. The Levee System is made up of 10 segments extending through 4 different parishes and maintained by 5 different levee districts. The system totals approximately 93 miles of levees and 22 miles of floodwalls. USACE began to construct the MRL in 1927, while the HSDRRS levees began construction anywhere from 1960's to the 1980's. The new HSDRRS levees were completed to 100-year risk reduction in 2011. The highest loading for a riverine event took place in 1927 and for a hurricane event was Hurricane Katrina in 2005. The leveed area has an estimated population of 246,048 and total assets valued at \$41.1 billion.



Risk Characterization: The New Orleans West Bank Levee System is classified as Moderate to High risk due to the high consequences associated with the system in combination with the likelihood of overtopping or breach. Risks are driven by the fact that, if overtopped or breached, both commercial and residential areas in St. Charles, Jefferson, Orleans, and Plaquemines parishes would be inundated with water. Another risk driver of the levee system is a breach prior to overtopping due to the lack of armoring. Armoring for all of the HSDRRS levees with High Performance Turf Reinforcement Mats are currently being installed to add resiliency to the levees. The system is designed to reduce the risk associated with a storm surge event that has a one-percent chance of occurring every year, or a 100-year storm surge. All 100-year risk reduction features were completed in 2011. The levees are in good condition and expected to perform well under future loads.

**What is driving the risk?
(Listed in order of priority)**

**What is being/ should be being done about it?
(Risk Management)**

<p>Consequences: With a population of 246,048 people and total assets valued at \$41.1 billion, the high potential consequences in the event of a failure is a major risk driver for this system.</p>	<p>The Louisiana Governor's Office for Homeland Security and Emergency Preparedness (GOHSEP) has a comprehensive evacuation plan, the unified shelter plan, which oversees all parishes in the state.</p>
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**What is driving the risk?
(Listed in order of priority)**

**What is being/ should be being done about it?
(Risk Management)**

<p><i>A breach prior to overtopping due to erosion and scour potential leading to instability.</i></p>	<p><i>Armoring with High Performance Turf Reinforcement Mats on all HSDRRS levees to add resiliency to the system against land side overtopping erosion concerns.</i></p>
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What Is Important to Know? *Residents within the leveed area should have a working knowledge of flood warning and evacuation procedures. Residents should be aware of evacuation routes to exit the levee system. Evacuations are limited to Highway 90 East and West over the Mississippi River. Residents should also stay well informed through television, radio, and text messaging during periods of high water. If flooding were to take place as a result of levee breach or overtopping, traffic congestion may prevent safe evacuation. Residents should plan ahead and know whether sheltering in place would be safer.*

PREPARE

- Prepare an emergency kit that includes: flashlights, radio, batteries, candles, matches, first-aid kit and a list and supply of all medications, blankets, water, food, etc.
- Keep important documents and valuable possessions on an upper level of the structure or as high as possible.
- Make a list of items to take with you and have a plan for your pets. Establish a family meeting place.
- Know how to safely shut off your utilities.
- Listen for emergency instructions from authorities.
- Prepare and practice your evacuation plan with your family.

PREVENT

- Keep storm drains, gutters and ditches clear.
- Check with the Parish flood control district to see if a permit is required if you plan to build on, fill, alter or re-grade your property.
- Never excavate, modify, landscape, or build anything on any levee or flood control easement without permits from the appropriate Parish, state, and federal agencies.

PROTECT

- Never drive through flooded streets or roads: more people are trapped and die in their vehicles than anywhere else during floods.
- Never try to escape rising floodwater by going into the attic unless you have roof access or no other safe options.
- Consider buying flood insurance.

Ongoing Activities and Studies: *All HSDRRS levees are getting armored with High Performance Turf Reinforcement Matting (HPTRM) to add resiliency to the levee systems. Some levees are being raised before the HPTRM is placed. Armoring for all of the HSDRRS levees is expected to be completed in 2020.*

<p>Latest Inspection and Rating:</p>	<p><i>The system is comprised of 10 levee segments. The most recent inspections for all 10 segments were routine inspections done in 2017. The inspections were conducted by a team comprised of members from USACE, the levee sponsors, and Coastal Protection and Restoration Authority. The 10 segments of the levee system were given a Minimally Acceptable rating. A rating of Minimally Acceptable signifies that one or more items were noted during the inspection that requires maintenance, however these items will not prevent the system from performing as intended during the next flood event.</i></p>
<p>Rehabilitation Program Eligibility Status:</p>	<p><i>The Mississippi River Levees are part of the Mississippi River and Tributaries (MR&T) project and federally authorized by the Flood Control Act of 15 May 1928. Levee projects under the MR&T authorization are not included in the Rehabilitation Program; however, the levee segments classified as HSDRRS are in the Rehabilitation Program.</i></p>
<p>National Flood Insurance Program Status:</p>	<p><i>The levee system is currently shown as accredited on the Flood Insurance Rate Maps. FEMA sent accreditation letter for HSDRRS on 2/20/2014. This information is current as of July 20, 2018. FEMA is aware of the ongoing collaborative efforts by local governments and technical support by the Corps of Engineers and has currently not scheduled a date for remapping.</i></p> <p><i>Access NFIP flood hazard mapping products, including Flood Insurance Rate Maps, at the FEMA Flood Map Service Center website: https://msc.fema.gov/</i></p>

