

Q: What is a levee system?

A: A levee is composed of multiple segments.

In a levee system, each segment is dependent upon the performance of the other segments in the system – if one segment fails, the entire system fails.

Q: What is a levee segment?

A: The basic unit of a levee. Typically, adjacent levee segments have different sponsors.

Q: Why does the Corps of Engineers build levees that can't stop all flooding?

A: The U.S. Corps of Engineers did not build many of the levees in Arkansas. In many cases, the Corps worked with local communities to design a levee that would provide the best protections for the money available to build that levee.

No levee is flood-proof. Levees reduce the risk of flooding but no levee system can eliminate all flood risk. A levee is generally designed to control a certain amount of floodwater. If a larger flood occurs, the floodwaters will flow over a levee and may cause a breach in the levee.

Q: How can we have two or three “100 or 500-year” floods in a matter of ten years?

A: A 100-year flood is a description used for a flood with a 1-100 chance of happening in a given year. It is possible to have one or more “100-year” floods in a year or in back-to-back years when the weather patterns permit heavy rains to dump on the same area day after day.

Q: What are the basic provisions of the System-Wide Improvement Framework?

A: The system-wide improvement framework policy allows levee sponsors to remain eligible for rehabilitation assistance while they implement broader system-wide improvements to their levee.

- The system-wide improvement framework policy allows eligible levee sponsors to correct deficiencies as part of a larger system-wide improvement plan. Improvements can be implemented in a prioritized "worst first" way to optimize achieving risk reduction.
- We recognize that implementing system-wide improvements will need to be done within a collaborative intergovernmental framework and that it will take time to develop and implement improvements. One of the more complex improvements may include addressing environmental and ESA considerations in order to ensure that both levee safety imperatives and environmental and ESA concerns are adequately served.
- We recognize that situations will vary across the nation and the system-wide improvement framework policy allows for consideration of regional differences.

- Submitting a system-wide improvement framework plan is a two step process. A Letter of Intent is submitted followed by submission of a SWIF plan. The applicant can have up to two years to develop the plan.
- The system-wide improvement framework policy is part of an overall strategy to reduce flood risk and is synchronized with updating of the policy for obtaining a permanent vegetation variance process and developing the next phase of research and development regarding the interaction between vegetation and levees.

Q: How often are levees inspected and who gets notified?

A: Periodic Inspections are generally performed every 5 years. Routine Inspections are about every two years. Frequency of inspections depends on funding.

- The public sponsor is notified prior to an inspection and after inspection receives a letter from USACE concerning the results of the inspection. If there is no public sponsor for the levee, the County Judge receives the letter.
- Inspections are generally NOT conducted if the sponsor of an “Inactive” levee has made no improvement to the levee, or if a levee has no active sponsor.

Q: How many Arkansas levees do not have active sponsors?

A: Of the Little Rock District, 18 levee segments do not have active sponsors.

Q: What do you do with the inspection results if there is no active sponsor?

A: The letter of inspection results is provided to the County Judge.

Q: How does someone get a new levee accepted into the Rehabilitation and Inspection Program (RIP)?

A: This is accomplished through entering an agreement with the Corps of Engineers and undergoing an Initial Eligibility Inspection (IEI) which must determine the levee to be structurally sound and to have been constructed with good engineering practices. The Corps will evaluate items such as soil borings, side slopes, crown width, and soil compaction to determine structural stability and good engineering practices.

Q: What is a federal levee?

A: A federal levee is a levee that was constructed by the Corps of Engineers. They were constructed under specific authorization such as the 1936 Flood Control Act or other federal law. A more appropriate term is “federally constructed levee”.

Q: What is a non-federal levee?

A: A non-federal levee is a levee that was constructed by organizations other than the federal government. They are not associated with specific federal legal authorization.

Q: How does USACE work with the Arkansas Department of Emergency Management to respond to levee issues?

A: EM gives a PL 84-99 presentation to the ADEM staff at least once per year briefing their staff on our response authorities regarding flood fighting. Typically, the local County EM Coordinator will contact ADEM requesting assistance. Once ADEM contacts EM, we coordinate the Technical Assistance or Direct Assistance as needed. Sometimes the local County/City will contact SWL directly and we refer them back to ADEM (as per ADEM's procedures).

Q: How many levees and what types are in Arkansas?

A: There are 93 levee segments in Arkansas

- 16 are non-Federal levees
- 78 are Federally-constructed levees.
- 23 are funded under the MRT (all Federally-constructed)
- 15 are Federally-maintained, MRT levees
- 3 are Federally-maintained, non-MRT levees (all Federally-constructed)
- 8 MRT levees are locally sponsored
- All non-Federal levees and 60 Federally-constructed levees are locally sponsored

Q: Are there levee systems in Arkansas that are not a part of the RIP? If so, how are those managed?

A1: 41 levee segments are not active in the RIP.

A2: There are an unknown number of levees in Arkansas that are not in the Corps Rehabilitation and Inspections Program. WRDDA 2014 directed the Corps to seek out these structures, include them in the National Levee Database and perform a one-time inspection and risk screening of these levees to determine the condition and assess the risk of living behind these structures.

- Inspections are performed regularly if the sponsors are making improvements or maintaining the levee.
- For Federally-constructed levees, occasional inspections are conducted on inactive levees where maintenance is no longer performed to monitor the condition.
- Non-Federal levees where maintenance is no longer performed are not inspected.
- In some cases, progress is being made by the sponsors to where these levees could be brought back into active status in the RIP. The Corps encourages these levee districts to enter into a SWIF agreement.

Q: What are the predominant problems with Arkansas levees?

A: Typical and recurring problems for levees (both in Arkansas and Nationwide):

- Culvert structures – leaking/deteriorated culverts, undermined headwalls, failing gates

- Encroachments – cuts for roads into levees, structures built on levees, levee used for borrow material
- Unwanted vegetation – trees growing on levees, thick brush that blocks growth of grass cover, thorns making inspection dangerous

Q: What's the "average" protection level of most of the levees in Arkansas?

A: Not sure there is such a thing.

- Some levees and floodwalls have extremely high protection levels (maybe in excess of 1000 year event) whereas some rural agricultural levees may provide protection levels of 10 years or less
- An “average” might be between 50 & 100 year.

Q: When were most of the levees in Arkansas built?

A: Mostly from the 1930's through the 1960's. The average age of levees in the National Levee Database is 54 years, this accounts for only 14,800 miles of an estimated 100,000 miles — or more — of levees in the United States. Only the federally constructed were turned over. Levee ownership was transferred to the State or to another local or regional authority, which then becomes responsible for documenting and maintaining the levee.

Q: How are MR&T levees different than "normal" levees?

A: MRT levees are designated by federal law. The Flood Control Act of 1928 and subsequent law established the levees under the MRT. In general, these levees are along the Mississippi River and sections of its tributaries subject to backwater due to Mississippi River flooding.

Q: Why can't the MR&T dollars be used to improve levees in Arkansas?

A: MRT levees in Arkansas are funded under this program. Federal Law must designate certain projects subject to the MRT funding.

Q: What is FEMA certification?

A: Levee certification is the process that deals specifically with the design and physical condition of the levee, and is the responsibility of the levee owner or community in charge of the levee's operations and maintenance. Certification must be completed for the levee to be eligible for accreditation by the Federal Emergency Management Agency (FEMA). Certification consists of documentation, signed and sealed by a registered Professional Engineer, as defined in Chapter 44 of the Code of Federal Regulations (44 CFR), Section 65.2.

Q: Have any Arkansas levees been certified?

A: Yes. 17 levees have been certified (not including Federal O&M levees). In SWL there are 9 levees that have been certified: (Van Buren; Crawford County; Lower Hartman; Russellville Dike; Riverdale; Little Rock Pulaski; Rock Creek; Fourche Island; Newport).

Q: What will it mean if a levee isn't certified and the protected area shows up as inundated on a FEMA map?

A: The areas behind the uncertified levees are mapped as high-risk areas, and flood insurance is mandatory for buildings behind the levee with a federally backed or federally regulated mortgage.

Q: What is the Silver Jackets Program? Related to levees?

A: Silver Jackets teams in states across the country bring together multiple state, federal, and sometimes tribal and local agencies to learn from one another and apply their knowledge to reduce the risk of flooding and other natural disasters in the United States and enhance response and recovery efforts when such events do occur. Examples of Silver Jackets programs related to levees would be hydraulic modeling, inundation mapping, risk communications, and emergency action plans.

Q: How does flood insurance work? Can people get it if they live behind an "unacceptable" levee?

A: Yes. In 1968, Congress created the National Flood Insurance Program (NFIP) to help provide a means for property owners to financially protect themselves. The NFIP offers flood insurance to homeowners, renters, and business owners if their community participates in the NFIP. Participating communities agree to adopt and enforce ordinances that meet or exceed FEMA requirements to reduce the risk of flooding. Homes and buildings in high-risk flood areas with mortgages from federally regulated or insured lenders are required to have flood insurance.

- The USACE RIP and FEMA flood insurance are not necessarily related. The Corps' concern with levees is the levee itself and repairs to the levee after a disaster. FEMA concerns are the properties in flood-prone areas.