408 Permissions

Process

The 408 Permissions process is mandated by law and is in place to ensure the **construction efforts do not cause harm to the levee, the public, or the economic value of** (location such as Metro East).

408 Permissions

Process

Through the 408 process, the modifications presented are **reviewed by technical experts** to ensure they will not bring harm to the levee or resident of (location such as Metro East).

Levee

Certification

It is not Corps policy to evaluate segments or portions of a levee system - we must work within policy.

**Levee**

**Certification**

**(Chain of Rocks)**

We will provide a **complete levee evaluation** for the Chain of Rocks Levee to the Southwestern Illinois Flood Prevention District Council that should meet their requirements for FEMA accreditation.

**Metro East**

**Levee Program**

We understand the Southwestern Illinois Flood Prevention District Council’s construction schedule and **we are prepared to meet our commitments to support that schedule**.

**Metro East**

**Levee Program**

We must remain deliberate in our actions as there are more than 355,000 residents and $4.65 Billion in economic value depending on the safety and stability of the levee.

**Metro East**

**Levee Program**

We are working closely with and communicating regularly with the Southwest Illinois Flood Prevention District Council and the levee districts in the Metro East.

**Permitting / Permissions**

**Process**

Corps policies, regulations and procedures are in place to ensure the construction efforts do not cause harm to the levee, the public, or the economic value of (location such as Metro East).

**St. Louis District**

The District covers more than 28,000 square miles:

**• 400 miles of navigable waterways**

**• 700 miles of levees and floodwalls**

**• 5 navigation locks**

**• 5 reservoirs** that lower flood risk and have more than **17M visitors annually**

**St. Louis District**

The St. Louis District is a team of professionals that serves the public, by providing **water resources development**, as well as **engineering and technical services to the region, the nation and worldwide.**

**USACE**

The U.S. Army Corps of Engineers is the **world’s largest engineering organization**.

**USACE**

The Corp’s Civil Works Program supports a commitment to the **revitalizing infrastructure, restoring the environment,** and **reducing dependence on foreign, non-renewable energy sources.**

**MVD**

The Mississippi Valley Division’s civil works along the Mississippi represent critical investments in our nation’s future.

**Mississippi River**

The Mississippi River, the world’s 3rd largest watershed, drains 41% of our nation’s interior and serves as a unique resource and the best example of a multi-purpose river in the United States.

**St. Louis District**

The Corps has had a presence in the St. Louis region for more than 170 years.

**Stewardship**

We are committed to being a leader in the wise management and stewardship of our nation’s greatest natural resources.

**Ecosystem**

**Restoration**

Ecosystem Restoration is part of a balanced approach to the Upper Mississippi River System and is necessary to maintain the river system as both a nationally significant ecosystem and nationally significant navigation system.

**Flood Risk Management**

Public safety is the number one goal of the USACE Flood Risk Management Program - Managing and communicating flood risk is a shared responsibility.

**Navigation**

The Corps supports and sustains economic development by providing safe and efficient navigation channels.

**Emergency Response**

The Corps of Engineers provides emergency response to floods, natural disaster and other emergencies. In the St. Louis Area, the Corps monitors and provides flood fight assistance to Levee Districts during high water.

**MVS Lakes**

The St. Louis District operates and manages 5 lakes and hosts more than 17 million visitors each year. These lakes serve to reduce flood risk and provide recreation opportunities.

**Regulatory**

The Corps regulatory process works toward a cleaner, safer environment by ensuring federal laws are upheld.

**USACE**

- 9 Divisions

- 45 Districts

**USACE**

**Inland Waterways**

- 12,000 miles of Commercial Inland Waterways

- 238 navigation lock chambers at 192 sites

- 926 Harbors

**Flood Risk Management**

Public safety is the number one goal of the USACE Flood Risk Management Program - Managing and communicating flood risk is a shared responsibility.

**US Ports / Waterways**

- US Ports and Waterways convey >2B Tons of Commerce

- Foreign Trade alone creates >$160 B in Tax Revenues

**Metro East and Risk**

Metro East Levee System is at risk for failure during high water events and will remain so until all deficiency corrections are completed.

**Risk**

Living with dams and levees comes with risk. It is a **shared responsibility** to reduce that risk.

Levee Safety Program

* 14,700 miles of levees, or approximately 2,300 systems
* 14 million people live or work behind USACE levees
* 694 dams
* Prevented $28.1billion in damages in 2010
* $7.17 in damages prevented per every $1 invested from 1928-2010

**St. Louis Levee Safety**

* 51 Federal Levee segments

**Metro East:**

* 64.6 miles non-federally owned levees
* 75.8 miles of levees TOTAL

**Risk Assessment**

To assess risk, we ask:

* How likely is it that the hazard (flood, earthquake) will occur?
* How will the infrastructure perform during this hazard?
* What are the consequences if the infrastructure doesn't perform well— **lifeloss of paramount concern**

**Dam Safety Action Classification** and **Levee Safety Action Classification**

We use Dam Safety Action Classification and Levee Safety Action Classification systems to guide key risk management decisions.

**Dam Safety Action Classification** and **Levee Safety Action Classification**

The Corps of Engineers’ dam and levee safety programs use a **risk informed approach** to make **investment decisions**, **communicate** the benefits and risks of the infrastructure, **and work with stakeholders** when solutions are required.

**Emergency Operations** The Corps of Engineers has provided disaster relief since 1882.

**Emergency Operations**

In any disaster, USACE’s top priorities are: support immediate emergency response priorities; sustain lives with critical commodities, temporary emergency power and other needs; and, initiate recovery efforts by assessing and restoring critical infrastructure.

**Flooding**

Flooding is the most common, costly and deadly natural disaster in the United States each year.

**St. Louis Gage Frequency**

**Computed Level Design Level**

**(50% Confidence) (90% Confidence)**

**500-year: 50.56 53.56**

**200-year: 47.86 50.86**

**100-year: 46.06 49.06**

**50-year: 44.06**

**LSAC Classification**

The Levee Safety program uses **consequences** and **performances** to determine a numerical Levee Safety Action Classification.

I - **Urgent and Compelling**- Probability of inundation due to breach prior to overtopping, overtopping with subsequent breach, and system component failure in combination with loss of life, economic, or environmental consequences results in **extremely high risk**.

**LSAC I Classification**

An LSAC rating of I does not mean it is in imminent danger of breach, overtopping or component malfunction.

It means we have identified levee safety issues that don’t meet industry levee safety standards and the risk to life safety is unacceptable.

**LSAC Classifications**

Levee safety classifications are primarily based on consequence and performance.

**LSAC Classifications**

The Levee Safety Action Classification is **NOT** a statement of the quality of the levee or the quality of the levee construction. It is a statement that analyses risk.

**Value of LSAC**

Evaluating and understanding risk in the Metro East Sanitary District will help determine levee safety priorities and maintain a nationwide focus on levee safety.