

Fighting the Flood:
Current Political, Regulatory
and Financial Challenges
for Levee Owners

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Emerging Policy, Programs and Tools
for the Management of
Levee Systems

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Presentation Outline

- *What is driving change*
- *Key concepts*
- *Policy, Programs and Tools*
 - *NAS Study by the Committee on Levees and the NFIP: Improving Policies and Practices*
 - *National Levee Safety Program*
 - *System Wide Improvement Framework (SWIF)*
- *Conclusion*

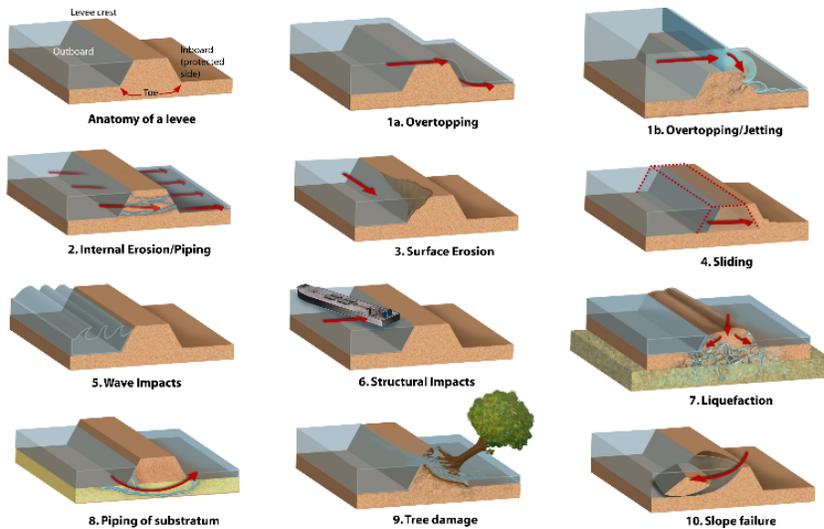
Drivers for Change

- *Map Modernization (FEMA)*
- *Hurricane Katrina and failure of levees in New Orleans (USACE)*
- *California Central Valley floods (State)*

3 Key Concepts

- *Residual Risk*
- *Levee Systems*
- *Shared Responsibility*

Residual Risk



What is a “Levee System?”

FEMA

- *Levee System* means a flood protection system which consists of a levee, or levees, and associated structures, such as closure and drainage devices, which are constructed and operated in accordance with sound engineering practices.

44 cfr 59

USACE

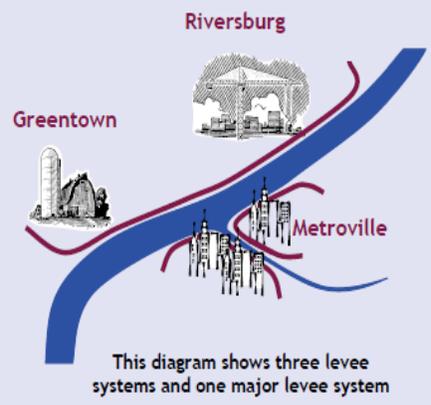
- *Levee System* - One or more levee segments and other features such as floodwalls and pump stations, which are interconnected and necessary to ensure exclusion of the design flood from the associated leveed area.

USACE.army.mil

- Corps' Levee Safety Program

Levee System

A Major Levee System:
Comprised of multiple individual levee systems that are inter-related from a flood risk management perspective.



A new definition of “Levee System”

LEVEE SYSTEM.—The term “levee system” means 1 or more levee segments, including all levee features that are interconnected and necessary to ensure protection of the associated leveed areas—

(A) that collectively provide flood damage reduction to a defined area; and

(B) the failure of 1 of which may result in the failure of the entire system.

WRDA 2012 Discussion Draft

Shared Responsibility



Emerging Policy, Programs and Tools

- *NAS Levee Committee: Improving Policies and Practices*
- *National Levee Safety Program*
- *System Wide Improvement Framework (SWIF)*

Committee on Levees and the National Flood Insurance Program: Improving Policies and Practices

- *Risk analysis (residual risk)*
- *Flood Insurance (risk-based)*
- *Risk Reduction (mitigation)*
- *Risk Communication (2-way)*

Risk Analysis

- Current risk analysis and mapping procedures (LAMP)
- Existing Special Flood Hazard Areas (SFHA) and behind accredited and non-accredited levees
- Existing requirements for levee accreditation under 44 CFR §65.10

Flood Insurance

- Flood insurance pricing options for areas behind levees
- Direct annualized flood loss estimates for residential and commercial structures
- Waiving mandatory flood insurance purchase requirements for areas behind accredited levees

Risk Reduction

- Floodplain management, building standards, and land use practices
- Engineered overtopping and breaches
- Existing and proposed levee-related grants and personal assistance policies
- Mitigation options to offset risks as investments grow leveed areas

Risk Communication

- Existing FEMA levee outreach activities, programs and materials
- Concept of “shared responsibility”
- Incentives for communities to mitigate and reduce levee related risks
- Non-regulatory products for risk communication

What you can do

- Report is science-based and is intended to inform policy makers
- Review NAS report
- Share your thoughts on the conclusions/recommendations
 - Pros and cons of risk-based approaches
 - Challenges with implementation
- Policy makers and others
 - FEMA
 - Congress
 - MLDDA, MOARC



National Levee Safety Program

- National levee database
- Inventory and inspection
- Levee safety standards
- Hazard potential classification system
- R & D
- Public education and awareness
- Coordination of levee safety, FP management and environmental protection activities
- State and tribal programs
- Technical assistance
- Levee safety guidelines
- Levee safety advisory board

Levee rehabilitation, improvement, and flood mitigation fund

- Cost-shared basis for non-federally operated & maintained levee systems
- Promote responsible risk management
- Not eligible - levees owned and operated by the federal government

Flood Protection Structure Accreditation Task Force

- USACE and FEMA with the NCLS
- Align USACE ICW and FEMA accreditation
 - Info/data collected can be used interchangeably
 - Info /data collected by or for the ICW is sufficient to satisfy NFIP accreditation requirements
- Solicit feedback from key stakeholders – local and state governments and levee sponsors
- Long-term and short-term policy and process changes for USACE and FEMA

What you can do

- Review NLSP in draft WRDA
 - Available on Spica website
- Make your voice heard
 - On components of a NLSP
 - Levee Rehabilitation Fund
 - Congress, USACE/ASA
 - MLDDA, MOARC
- Participate in stakeholder feedback sessions for FPSATF
 - Spica will inform you
 - NCLS, USACE, FEMA



System Wide Improvement Frameworks (SWIF)

- USACE policy established in November 2011
- Responds to increased scrutiny of levees and more unacceptable inspection items (UIIs)
- Provides extension of PL84-99 eligibility
- Can be for multiple levee systems within a watershed
- Plan for addressing UIIs prioritized way to optimize flood risk reduction (worst first)
- Facilitate interagency collaboration

SWIF Process

- Developed and implemented by levee sponsor
- LOI gets 2 yr extension
- Progress check @ 1 yr on SWIF development
- SWIF Reviewed and accepted by USACE
- Monitored by USACE
- Extension after SWIF acceptance dependent on achieving milestones

Minimum SWIF Requirements

- ID levee system or systems in framework
- Describe improvements/justify risk reduction
- Plan for interagency collaboration
- Agreements sponsor, USACE, etc. (§408)
- Regional consideration, approaches and tools
- Interim maintenance standards for UIIs
- IRRM and risk communication plan
- Schedules and milestones
- Inform FEMA of SWIF for accreditation

What you can do

- Use SWIF to get USACE approval for your levee system improvements
 - Delay adverse decision
 - Establish schedule/financing
 - Facilitate communication
 - Manage expectations
- Be proactive in understanding the impacts of the “levee system” approach
- Use SWIF to define your “levee system”
 - Assure “levee system” is feasible to manage at the local O/O level
 - Consider governance options
 - Umbrella board
 - County/Regional
 - Consider financing
 - Taxing structures
 - Public-private partnerships



Conclusion

*As **risk-based approaches** for levee systems are incorporated into **levee policy** and **programs** it is important that local levee owner/operators, communities and states engage to assure that **tools** you can use are developed and that what emerges is a culture of **shared responsibility** rather than merely a shift away from federal involvement.*

