

National Flood Risk Management Program

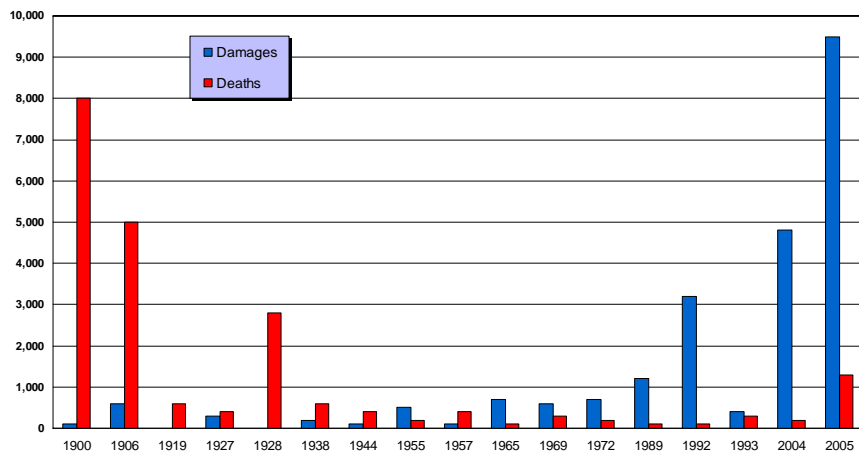


Kim Gavigan, P.E., CFM

National Flood Risk Management Program



U.S. Natural Disasters that Caused the Most Death and Damage to Property



National Flood Risk Management Program



Flood Risk Management Program

Vision: To lead collaborative, comprehensive and sustainable national flood risk management to improve public safety and reduce flood damages to our country.

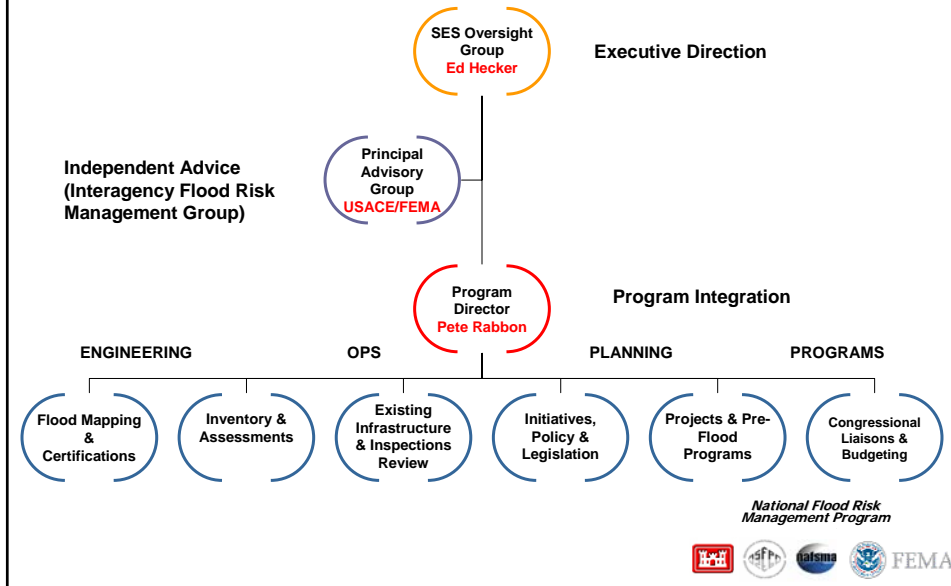
Mission: To integrate and synchronize the ongoing, diverse flood risk management projects, programs and authorities of the US Army Corps of Engineers, and with counterpart projects, programs and authorities of FEMA, other Federal agencies, state organizations and regional and local agencies.



National Flood Risk Management Program



Flood Risk Management Program



Flood Risk Management Program

Strategic Goals

1. Provide current accurate floodplain information to the public and decision makers.
2. Identify and assess flood hazards posed by aging flood damage reduction infrastructure.
3. Improve public awareness and comprehension of flood risk.
4. Integrate flood damage and flood hazard reduction programs across local, State, and Federal agencies.
5. Improve capabilities to collaboratively deliver and sustain flood damage reduction and flood hazard mitigation services to the nation.

National Flood Risk
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FRMP - Objectives

Bring everyone to the table

Develop/maintain strong partnerships

Improve processes, identify gaps, and make recommendations

Leverage resources and information

Be active participants with State-wide planning

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Flood Risk Management Program

Existing Infrastructure & Inspections Review

- **Single inspection program**
- **Increased robustness**
- **Consistent and complete inspections**
- **Inspections to meet USACE and FEMA requirements**
- **Inspection of Completed Works - Trees on levees**

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Flood Risk Management Program

Inventory & Assessments

- **Developed a GIS spatial database**
- **National levee inventory**
- **Assessment methodology**
- **List of deficiently maintained levees**
- **Legislation for a national program to include non-federal levees**

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Flood Risk Management Program

Flood Mapping & Certifications

- **Reprioritized inspection funds**
- **Engineering Technical Letter**
- **Collaborative Policy with FEMA**
- **Certification guidance**
- **Risk Analysis .vs. Freeboard**
- **Provisionally Accredited Levees and Maintenance Deficiency Correction Period**

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Flood Risk Management Program

Initiatives, Policy & Legislation

- **Silver Jackets**
- **National Policy Summit**
- **Internal administrative changes**
- **Interagency Flood Risk Management Committee**
- **WRDA**
- **Risk communication**
- **Policy guidance**
- **Outreach**

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Flood Risk Management Program

Projects & Pre-Flood Programs

- **Seamless programs within USACE**
- **Align federal and local programs**
- **Watershed approach**
- **Apply best policies**

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Flood Risk Management Program

Congressional Liaisons & Budgeting

- **Transparency**
- **Funding**

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Levee Safety Program Mission



West Columbus, Ohio

Assess the integrity and viability of levees and recommend actions to assure that levee systems do not present unacceptable risks to the public, property, and the environment

- FEMA – CORPS Coordination
- National Levee Inventory
- Risk Assessment Methodology
- Corps New Levee Safety Program
- NFIP Levee Certifications for FEMA
- I-walls

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Phase II - Risk Assessments

Seepage and Piping Toolbox

H&H Toolbox

Stability Toolbox

Structural Stability Toolbox

Erosion Toolbox

Seismic Toolbox

Mechanical Toolbox

Human Factor Toolbox

Consequence Toolbox (Economics, Loss of Life)

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Flood Inundation



**Do these
people know
the risk?**



Dam Breaks



Other Risks To Consider

- Risks due to **erosion** hazard potential
- Risks due to **sedimentation**, vegetation, and avulsion
- Risks due to **inadequate** emergency preparedness
- Risks due to **inadequate** design
- Risks due to **upstream** construction
- Risks due to **inadequate** monitoring
- Risks due to changed **hydrologic** conditions
 - Fires or upstream development
- Risks due to **deferred** maintenance

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Why Communicate Risk?

from the Emergence of Risk Communication Studies, Plough and Krimsky

The transition from folk discourse to modern risk communication was necessitated by “the rise of the modern state with an implied responsibility for general social welfare functions.”

“The modern state’s legitimacy, in part, derives from its claim to protect the population from physical harm.”

“When risk communication becomes **embedded in the political arena, it is less about risks per se than about responsibility or accountability for certain events.”**

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Risk Communication Problems

Receiver Problems

Lack of Interest in Risk Information

—“yet another thing for me to worry about...?”

Incorrect Estimation of Risk

—people often underestimate the risk of occurrences that are actually more common

Misunderstanding of Probability

—“it just happened, so it won’t happen again for a while...”



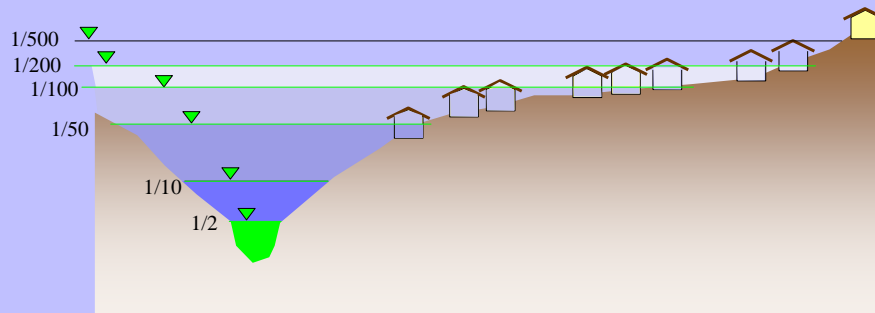
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FEMA

Before Effort to Limit Risk...

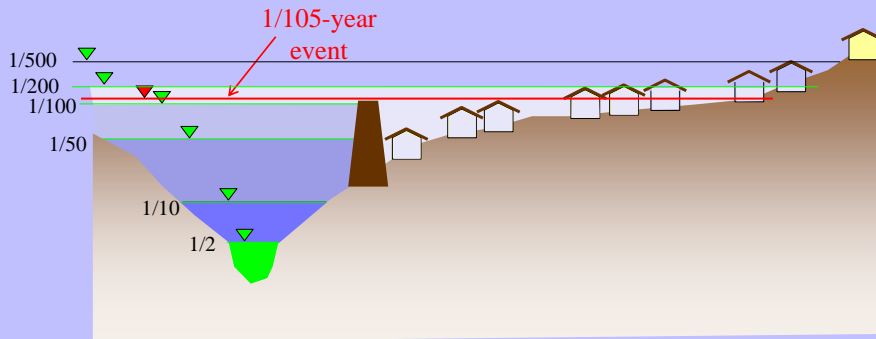


Corps of Engineers
IWR-HEC



FEMA

Risk That Remains after FDR Measure

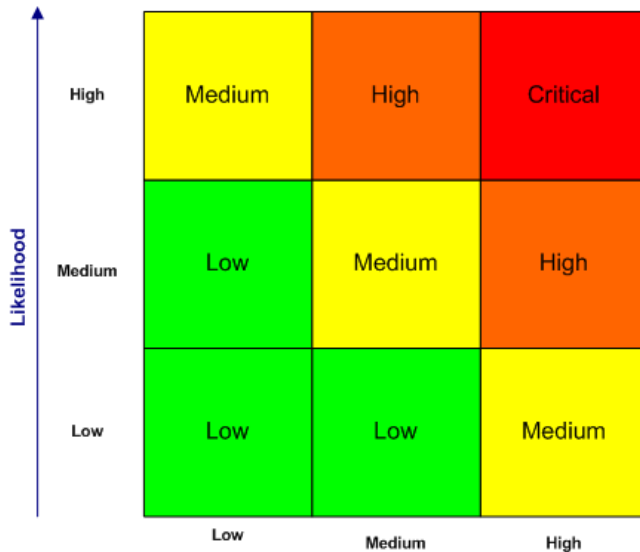


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Risk = Probability X Consequences

Threat Level



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NATIONAL FLOOD RISK MANAGEMENT PROGRAM

US Army Corps of Engineers | FEMA | OFP | NAFMA

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Current Issues and Topics in the Future

Learn More About the National Flood Risk Management Program

Guidance and Policy

Regional Coordination Action

Regionally Aligned Operations

Resilience, Taking Pains and Best Storms

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The U.S. Army Corps of Engineers (USACE) established the National Flood Risk Management Program in 2006 for the purpose of integrating and synchronizing USACE flood risk management programs and activities with existing and emerging activities of the Department of Homeland Security, Federal Emergency Management Agency (FEMA), and other agencies, state, territorial and local agencies.

Some of the specific goals of the National Flood Risk Management Program include:

- Providing content and ensure reciprocal information to the public and decision makers;
- Identifying and assessing flood hazards posed by aging flood damage reduction infrastructure;
- Increasing public awareness and comprehension of flood hazards and risk;
- Integrating flood damage and flood hazard reduction programs across local, state, and federal agencies; and
- Integrating operations to improve water and reduce flood damage reduction and flood hazard reduction activities to the nation.

On this web site you will find more information about the program that is available in a PDF under the heading about the National Flood Risk Management Program. Under the heading about the National Flood Risk Management Program you will find more information about the program and how it is being implemented. Under the heading about the National Flood Risk Management Program you will find more information about the program and how it is being implemented. Under the heading about the National Flood Risk Management Program you will find more information about the program and how it is being implemented.

www.iwr.usace.army.mil/nfrmp

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