USACE Levee Safety Program

Committee on Levee Safety
Kickoff Meeting
October 7, 2008

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Topics

- Path to a Safety Program
- Mission
- Organization
- Inventory and Inspections
- Levee Certification
- Current Activities
- Challenges
Path to a Safety Program

Pre-2005
- Business as Usual
- Annual Inspections
- Different criteria for non-Fed. vs Fed.
- Inconsistent application
- More “100 yr” levees
- No risk communication

Post-Katrina
- National Levee Safety Act
- Inventory
- Assessments
- Inspections

Levee Safety Program

Levee Safety Program Mission

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.

Program Objectives:
- Hold Public Safety Paramount
- Reduced Economic Impacts
- Maximize Cost Effectiveness
- Develop Reliable and Accurate Information
- Build Public Trust and Acceptance

West Columbus, Ohio
Levee Safety Program Organization

Levee Safety Community of Practice

HQUSACE Levee Safety Management Team
Levee Safety Officer – Steve Stockton
Special Assistant – Eric Halpin
Program Manager – Tammy Conforti

Inventory & Database
Team Lead
Tim Pangburn

Assessments
Team Lead
Andy Harkness

Inspections
Team Lead
Dale Munger

Policy & Procedures Team
Team Lead
Michael Bart

Division Levee Safety Teams

District Levee Safety Teams

Inventory & Database
Team Lead
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Levee Safety Program

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Michael Bart

Levee Categories

1. Federal
2. Local
3. Built
4. Unbuilt

Level of Protection

100-year

FEMA NFIP
Objective: Communicate the most current information for flood insurance purposes.

NFIP & CORPS

1. Federal
2. USACE
3. Local
4. Unbuilt

CORPS only

NFIP only

USACE Dec07

No Prior Nexus with USACE or FEMA

2100 mi
3600 mi
2250 mi

Levee Saftey Act

2100 mi
3600 mi
2250 mi

Levee Categories

1. Federal
2. USACE
3. Local
4. Unbuilt

WRDA Authorities
Objective: Inventory all levees in nation; lead strategic plan for a National Levee Safety Program
Levee System: All components and features which collectively provides protection (reduces the probability of flooding) to a defined area up to a specific event.
**Inspection Program**

- **Routine Inspections:**
  - Verifies O&M, More Rigorous Standards, Improved Communication, System-based, Every Year

- **Periodic Inspections:**
  - Verifies O&M, Evaluates Structure Stability, Compares Constructed Criteria to Current Criteria, Every 5 Years

- **Periodic Assessments:**
  - Periodic Inspection + Potential Failure Mode and Consequences Analysis, Every 5 Years

- **Risk Assessments:**
  - Data Intensive, Determine Likelihood and Consequences of Failure, Every 10 Years

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**Levee Certification**

- Some authorities to perform certifications.
- Agency policy not to fund certifications.
- Reimbursable process is difficult.
- **EC 1110-2-6067**
  - Risk analysis is required for H&H.
  - No partial certifications – systems approach.
  - Requires a report approved by LSO.
  - 10 year validity period.
Levee Screening Tool

- Developed in FY08 to assess the condition and consequences of levees in the Corps of Engineers portfolio.
- Combines information from -
  - National Levee Database
  - Revised routine levee inspections
  - Limited engineering assessment of project features.
- Starting “Beta Testing”

Levee Screening Tool Outcomes

- Identification of relative risk
- Assist in the assignment of the Levee Safety Action Classification
- Guide setting priorities
- Identify performance concerns and potential consequences of levee failures
- Identify issues to assist in prioritizing interim risk reduction measures
### Other Policy/Procedure Activities

- Draft Interim Risk Reduction Methods
- Engineer Regulation on Levee Safety
- Communication Products
- Levee Safety Action Classification
- Portfolio Risk Management Process for Levees
- Organizational Roles, Training, et al.

### Challenges

- Not just about USACE
  - Shared Responsibilities
- Not just about engineering
  - Multiple Business Lines
- Not just about constrained funding
  - Prioritization
- Not about business as usual
  - Transparency
At least coordination should be easy....

...well, at least we're getting closer.

Discussion