FEMA Region IX
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Best Practices and Successes

A Presentation for the USSD Workshop, Levee Safety Branch, November 2, 2015
AGENDA

- Congress’ Directive for FEMA & USACE to collaborate
- USACE/FEMA Pilot on Risk Communication
  - Sharing our internal processes
    - USACE Levee Safety Program
    - FEMA Program
  - Common Ground Directives: Cross-walk of USACE guidance for levee IRRMs with the FEMA CRS program items (CRS vs IRRMs)
  - Improvement through collaboration between Agencies
  - Joint issues to consider in establishing a strategy for implementation of collaborating risk communication
- Risk Communication: Roles and Responsibilities
Acronyms

USACE: U.S. Army Corps of Engineers
SPD: South Pacific Division of USACE
SPL: Los Angeles District under SPD
ECB: Engineering Construction Bulletin
PGL: Policy Guidance Letter
LSAC: Levee Safety Action Classification
LSS: Levee System Summary
FEMA: Federal Emergency Management Agency
Risk MAP: Mapping, Assessment, and Planning
EPP: Emergency Preparedness Plan
EAP: Emergency Action Plan
LLPT/LAMP: Local Levee Partnership Team/Levee Analysis and Mapping Procedures
Congress’ Directive for USACE and FEMA to Collaborate on Levee Risk Communications

- Directive - Water Resources and Reform Development Act (WRRDA) 2014 and draft USACE Policy Guidance Letter
  - The two parties: FEMA National Flood Insurance Program and USACE Levee Safety Program
  - Collaboration codified via USACE/FEMA MOU signed Nov 13, 2014
  - Purpose: to identify processes that will clarify areas of direct alignment and ensure levee information can be used interchangeably between both agencies and to formalize the commitment between FEMA and USACE to establish a coordinated approach for levee activities that is aligned with the policies and goals of both agencies to promote life safety, flood risk reduction, risk communication, and sound national investments.
Congress’ Directive for USACE and FEMA to Collaborate on Levee Risk Communications

- SPD and FEMA IX have been coordinating some projects, sharing information, and inviting to outreach meetings for several years.

- In 2015 SPD and FEMA Region IX began a pilot in this collaboration. In a workshop format meeting we
  - Shared our internal processes
  - Reviewed and compared our individual directives
  - Considered how shared information could improve effectiveness
  - Considered how we might begin implementing this information
Status in Implementing the USACE Levee Safety Program

Answer the Basic Questions
- Inventory
- Periodic Inspections

Tell the Story
- Risk Assessments
- Communication

Build Shared Solutions
- Advise
- Plan Path Forward

Condition

Context

Action

- National Levee Database
- Inspection Ratings And Eligibility

- Sponsor Meetings
- Public Dialogue

- Plan solutions
- Silver Jackets
- SWIFs
- 408s, 216s

Initiated 2006 - 2009

Initiated in 2010

I. Sharing our internal processes
USACE Levee Safety Program Communicating Risk

- The Corps of Engineers is developing a Risk Communication Effort to relay the risk that levees pose and recommend risk reduction measures to include PREPARE, REPAIR, PLAN AND EDUCATE. SPL specific actions will include:
  - Relay the risk of each levee to owner
  - Assist in writing Emergency Preparedness and Action Plans
  - Take part in emergency exercises
  - Write EPP and EAPs for SPL District O&M levees
- USACE rolled out a new web site with helpful information & links to accomplish / improve risk communication
  - Introduced in October 2015
  - Now in Internal USACE feedback stage
  - Will be updated regularly to incorporate comments
  - Corps Risk Analysis Gateway
FEMA Community Engagement Risk Communication Program

- FEMA is in 6th year of Risk Mapping Assessment and Planning (Risk MAP) program
  - FEMA is coordinating with the USACE on policy and risk communication product development
  - Results from levee system analyses, inspections, and mapping actions are of interest to all parties for the communication of risk
  - FEMA is communicating policy and requirements regarding levees through more levee subject specific community engagement
Levee Analysis and Mapping Process

I. Sharing our internal processes

*The new levee analysis and mapping approaches are not intended to change the current treatment of non-levee embankments or other structures not designed, constructed, operated as flood control projects. The application of sound engineering methods for such structures continues to be the acceptable practice.*
Common Ground
FEMA’s CRS vs USACE IRRMs

- FEMA uses Community Rating System (CRS) as motivation for local entities to implement flood risk reduction measures in exchange for reduced insurance rates.

- USACE has implemented Interim Risk Reduction Measures as one of the next steps in the levee safety program.

- When each of these is compared, there are 27 occurrences of overlap. This indicates that FEMA & USACE are emphasizing similar goals for smaller entities.
<table>
<thead>
<tr>
<th>Chapter</th>
<th>Description</th>
<th>Activity</th>
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</thead>
<tbody>
<tr>
<td>5a</td>
<td>Nonstructural IRRMs Emergency Preparedness Plans</td>
<td>610</td>
<td>Flood Warning &amp; Response</td>
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<td></td>
<td></td>
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<td>Includes informing public</td>
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<tr>
<td>5b</td>
<td>Develop response plans with trigger points</td>
<td>610</td>
<td>Flood Stage forecast map &amp;</td>
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<td></td>
<td></td>
<td></td>
<td>provide residents of actions to take</td>
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<tr>
<td>5c</td>
<td>Emergency Exercises</td>
<td>610</td>
<td>Coordinate flood response activities</td>
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<td></td>
<td></td>
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<td>to reduce the threat to life and property</td>
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<tr>
<td>5d</td>
<td>Stock piles emergency supplies</td>
<td></td>
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<tr>
<td>5f</td>
<td>Map and document levee system performance concerns</td>
<td>620</td>
<td>The activity is intended to quickly identify impending levee failures</td>
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<tr>
<td>5G</td>
<td>Engineering analysis to confirm potential failure modes</td>
<td></td>
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<tr>
<td>5h</td>
<td>Adapt local NLD to accommodate use during emergency response</td>
<td>440</td>
<td>Flood Data Maintenance- GIS layer showing natural floodplain functions</td>
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<tr>
<td>USACE ECB on IRRM</td>
<td>FEMA: CRS</td>
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<td>Chapter</td>
<td>Description</td>
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<tr>
<td>5j</td>
<td>Work with local communities to promote flood mitigation and emergency response. Inform them of opportunities and resources available to them.</td>
<td>330</td>
<td>Outreach Projects – Community distributes information about the flood hazard, flood insurance, flood protection measures, and/or the natural and beneficial functions of floodplains</td>
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<tr>
<td>5k</td>
<td>Create and implement a communication plan to actively advise people about the levee condition and potential inundation risk, flood insurance availability and EPP measures</td>
<td>350</td>
<td>Flood Protection Information Posted on website or library</td>
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<td>5l</td>
<td>Enact and enforce regulations that exceed FEMA’s NFIP minimum standards</td>
<td>360</td>
<td>Flood Protection Assistance Provide advice on floodproofing</td>
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<td></td>
<td></td>
<td>420</td>
<td>Open Space Preservation Community keeps flood-prone land free of development</td>
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<td></td>
<td></td>
<td>430</td>
<td>Higher Regulatory Standards Community enacts regulations exceeding the NFIP’s minimum criteria for restricting development.</td>
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## USACE ECB on IRRM

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<tr>
<td>5m</td>
<td>Prepare, adopt, implement, evaluate, and update a comprehensive Floodplain Management Plan</td>
<td>510</td>
<td><strong>Floodplain Management Planning</strong> Community prepares, adopts, implements and updates a comprehensive flood hazard mitigation plan</td>
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<td>540</td>
<td><strong>Drainage System Maintenance</strong> – Community conducts periodic inspections of channels and retention basins &amp; removed debris</td>
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<tr>
<td>5n</td>
<td>Reinforce Landward Critical Facilities such as medical and emergency services</td>
<td>530</td>
<td><strong>Flood Protection</strong> – Community protects buildings from flood damage by flood proofing, elevation, or minor structural projects</td>
</tr>
<tr>
<td>5o</td>
<td>Other non-structural flood proofing</td>
<td>520</td>
<td><strong>Acquisition and Relocation</strong></td>
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II. Common Ground Directives
Improved through Collaboration

**USACE SPD**
- Share Project Schedules
- Share HH results when complete
- Utilize FEMA Levee Standings during Screenings
- Collaborate if discrepancies between Agencies is found
- Provide Levee Screening results
- Attend FEMA community engagement meetings as much as possible

**FEMA IX**
- Prioritize database update considering USACE schedule of project completions
- Consider use of HH results from USACE to inform FEMA mapping projects
- Provide most recent FEMA levee accreditation status and back-up information
- Coordinate w/USACE if revisions are needed
- FEMA review for potential impact on accreditation
- Collaboration initiated between Agencies to develop adjusted risk message as necessary
- Open Invitation to USACE Project Sponsor meetings

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III. Improvement through collaboration

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Coordinate USACE scheduled planning studies and CWMS with FEMA IX floodplain study priorities.

- Each Agency shares study planning schedule
  
  - USACE establishes Periodic Inspection, Levee Screening, and CWMS multi-year study schedules
  
  - FEMA establishes multi-risk Risk MAP floodplain studies, Levee Analysis and Mapping, and community engagement risk communication project schedules
  
  - Both agencies share, communicate, and coordinate their schedule information so alignment of activities can be supportive of each other’s program tempo

III. Improvement through collaboration
Joint issues to consider in establishing a strategy for implementation of collaborating risk communication

SPD Districts will be developing their individual process for communicating risk. As they do this, they will be including FEMA IX. The specific benefits of this collaboration are:

- Improves and deepens USACE-FEMA IX relationships
- FEMA has experience and many tools that USACE can capitalize on and use
- Improves the “consistent messaging” we are working to attain
- Reveals gaps between the two Agencies
- Reinforces federal and community shared responsibility to manage risk
- Mitigation of risk is consistent through FEMA’s Risk MAP program

IV. Joint issues to consider
Emergency Plan Guidance

DRAFT
Guidance for Emergency Plans for Dams and Levees

January 2015
U.S. Army Corps of Engineers
Dam Safety and Levee Safety Programs

- Emergency Plan Development
- Responsibility for Uniformity and Coordination
- Guidelines for Federal Agency Project Owners
- EAP
- EPP
- Emergency Communications, Announcements, Dissemination
- Project Owner’s Responsibilities
- Emergency Exercise Requirements, Frequency, Levels.
- Homeland Security Exercise & Evaluation Program (HSEEP)
- Incident Management Authorities & Responsibilities
- Security Provisions
- Responsibility for Evacuation (Non-Federal)
- Review & Approval of Emergency Plan
Roles and Responsibilities

**USACE**
- Assist Sponsor in Preparing EAPs
- Attend Public Meetings if Invited
- Inspect & Report to Sponsor
- Encourage Repairs
- Communicate Risk
- Drive the risk down

**Sponsor / Levee Owner**
- Implement Public Meetings & Ads
- Implement Table Top Exercises
- Communicate Risk to Public
- Prepare EPPs and EAP
- Drive the risk down
- Inspect & Repair

**Individual**
- Buy Flood Insurance
- Have an evacuation route
- Respond when given warning
- Be aware of & Understand local risks
- Make educated decisions on where to live

**Emergency Responder**
- Participate in Table Top Exercises
- Communicate Evacuation to Public
- Review & Comment on EPPs & EAPs
Thank you from

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SPL District Public Website
www.spl.usace.army.mil/Missions/CivilWorks/LeveeSafetyProgram

FEMA IX Public Website
http://www.FEMA.gov