ASSESSMENT OF USACE COLLABORATIVE LEVEE FLOOD RISK COMMUNICATION INITIATIVE: CHALLENGES & LESSONS LEARNED

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Levee Safety Risk Communication Initiative

1) Why focus on risk communication of leveed areas?

2) How did this initiative materialize?

3) Where did the funding come from?

4) Who participated in the risk communication projects?

5) What did the risk communication projects accomplish?
Levee Safety Risk Communication Projects

1) Cairo, IL
2) Los Angeles River Tabletop Exercise
3) MLDDA Newsletters
4) Huntington West Virginia tabletop
5) Salina, KS Tabletop
6) Manhattan, KS Tabletop
7) East Bank – West Bank, New Orleans
8) Omaha, NE Risk Com
9) Sacramento Risk Com Products
10) Mapbook – Rock Island
11) East Coast: NYSDEC, Prince George, DC Risk Com meetings

UNCERTAINTIES IN THE UNDERSTANDING OF HAZARDS, PERFORMANCE, AND CONSEQUENCES IMPACT OUR PERCEPTION OF RISK.
CAIRO, ILLINOIS LEVEE SYSTEM

Cairo is SURROUNDED by levees, between the Mississippi and Ohio Rivers
2011 FLOOD EVENT BOILS

05/07/2011 09:34

250 feet

500 feet
CAIRO, ILLINOIS LAST RESORT EVACUATION PLAN

Boat and Life Jacket
**Communication Objectives:**
1. Increase Cairo Residents’ awareness of the city’s flood risk.
2. Stress the need to evacuate during a flood if authorities issue an evacuation order.

**Key Messages:**
1. Flood Risk Awareness Week is an important opportunity for Cairo residents to learn about the potential for flooding and the importance of having a flood evacuation plan of action.
2. Every Cairo resident should continue to be confident and feel secure in the levee system’s proven reliability.
3. While the levee system is flood-ready, it’s not flood-proof. There’s always the potential for waters to rise above or breech the system.
4. Every resident should be prepared to evacuate if authorities issue a mandatory evacuation order.

**Communication Products:**
1) 2019 Cairo Flood Risk Awareness Week Proclamation
2) Media Alert: Mayor proclaims Flood Awareness Week
3) News Release: Mayor proclaims Flood Awareness Week
4) Media Opportunity: On-air and print media interviews w/Mayor
5) PSA (30 sec.): Cairo Flood Risk Awareness Week
6) Article: “Creating a FloodSmart Cairo”
7) Brochure: FloodSmart Cairo
8) Social Media posts

**Communication Tactics:**
1) Meeting w/Cairo Leaders
2) Reading of Proclamation at meeting
3) Invite media to meeting
4) Issue press release after meeting
5) Arrange on-air and print media interviews
6) Publish article by Mayor
7) Publish social media posts
8) Distribute brochure and utility bill insert

**Communication Activities:**
1) Meeting w/Cairo Leaders
2) Pitching on-air and print appearances
3) Publishing social media posts
4) Issuing press release and alerts
5) Submitting Mayor’s article to publications
6) Distributing brochure and bill insert
7) Requesting PSA airing
8) Facilitating school poster contest
Purpose: To conduct a flood risk tabletop exercise simulating a flood event caused by levee overtopping along the Los Angeles River.

“The exercise demonstrated the importance of agencies sharing their expertise to maximize effectiveness in a critical incident.”
Purpose of Project: Develop 6 newsletters together with the MLDDA and others to communicate flood risk to those who live and work behind levees.

Final Issue
Communicating the Unknown
Interagency Dialogue on Levees
Regional Communications for Flood Control
Extending our Team - New Faces
USACE Releases Levee Sponsor’s Guide
USACE Corner
Weblinks

Communications and the Final Issue
Tom Winter, Chairman, Missouri Levee and Drainage District Association

This is the sixth and final issue of the River Crest. A joint effort between the USACE, SEMA, FEMA, the Missouri Levee and Drainage District Association and the Silver Jackets Program. We hope the information has been helpful.

In this issue, we focus on the importance of communication. As I write, local, state and Federal agencies are sending warnings to help thousands of people whose lives have been disrupted by Hurricane Florence and the associated flooding. We have seen the importance of communication throughout this recent storm event. Beginning with the first warnings from the National Weather Service about a hurricane forming, throughout the storm, and during the current recovery, communication has played an important role in informing the public, directing people, preparing for the storm, and assisting our recovery efforts.

These newsletters contain information for various agencies, and contacts you may find useful now and in the future.

As all those involved in different places, with different responsibilities, and different capabilities learn to better communicate, dealing with actual disaster and emergency becomes more efficient, timely, and helpful for those who serve.

These newsletters contain information for various agencies, and contacts you may find useful now and in the future. Please feel free to reach out to any of them for help or questions.

On behalf of the Missouri Levee and Drainage District Association, I’d like to thank all those involved with the production of the newsletter. Coordinating the newsletter has helped each of us involved learn a little more about our respective organizations and how we prepare for and face flood events. Finally, thank you, the reader, for taking time to read and think about the important topics we have discussed.

Communicating the Unknown
Eric Lyons, Flood Risk Management Program Manager, USACE Kansas City District

Communication is important in any endeavor, even more when discussing risk to life and property. The words we use can too often get in the way of the message. This is especially true when communicating predictions of risk to a future that is unknown and constantly changing.

For years we have calculated 100-year flood flows based on 50 to 70 years of records for the Missouri, one of the most dramatic rivers in the USA. Flow calculations using today’s data will almost certainly differ from next year’s because once data will be available. We make our best estimate of flow knowing that there’s no such thing as “The Number.” USACE Engineering Regulation Planning: Risk Assessment for Flood Risk Management Studies tell us that all measured or estimated project development values are inaccurate because of inherent natural flooding variability, and limited but important knowledge about estimating project worth and performance parameters. We must communicate accurately to tell the whole story.

Technology complicates discussing flood flow estimates. Terms such as 100 or 500-year flood, have been in use for a long time, are familiar to levee owners and communities, and we still use today, although they

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MISSOURI LEVEE AND DRAINAGE DISTRICT ASSOCIATION (MLDDA) NEWSLETTERS

FIND the 6 MLDDA Newsletters here:
https://silverjackets.nfrmp.us/State-Teams/Missouri/MLDDA-Newsletters

Newsletter Themes:

- Introduction of the partners and purpose
- Preparing for Floods
- Response and Flooding
- Flood Recovery
- Changing with Mitigation
- What We Learned
Purpose: Project focused on improving flood risk awareness and emergency planning efforts associated with levee breaching and overtopping in a very densely populated area.
Strong core team collaboration and participation in planning meetings including:

- WVDHS EM
- Cabell OES
- Huntington Stormwater Utility
- USACE

Team members assisted with stakeholder list development
SEQUENCE OF PLANNING TASKS

Before
- Review Plan
- Conduct Needs and Capability Assessment
- Determine Scope
- Write Purpose Statement
- Prepare Objectives
- Identify and Engage Stakeholders
- Organize Planning Team
- Develop Planning Timeline
- Write Scenario Narrative
- List Major & Detailed Events
- Finalize Exercise Products
- Develop Evaluation Format

During
- Conduct Exercise

Video tape or record the exercise

After
- Conduct Post Exercise Meeting
- Conduct Follow-up Activities
- Conduct Exercise Video or record the exercise
- Write After Action Report
- Capture Lessons Learned
- Conduct Follow-up Activities

US Army Corps of Engineers®
U.S. Army
Outcomes
- Facilitated operation based drills
- Exercised traffic closures
- Identified several problems/gaps
- Recommended by many to make this an annual event

Challenges
- Communicating exercise value (why attend?)
- Developing a plausible yet challenging scenario

Lessons Learned
- Identified additional key stakeholders
- Resource needs and constraints
SALINA, KANSAS TABLETOP

Objectives: Promoting awareness of Salina area flood risk, simulating emergency response activities and interactions, and identifying potential areas for improvement.
A FEMA resource often used in developing a tabletop exercises, the Homeland Security Exercise and Evaluation Program (HSEEP), can be found here: https://preptoolkit.fema.gov/web/hseep-resources.
MANHATTAN, KANSAS TABLETOP

Participants:
- Kansas Hazard Mitigation Team
- Kansas Department of Agriculture Division of Water Resources
- Kansas Department of Emergency Management
- City of Manhattan, Riley County and Pottawatomie County Staff
DON’T BE LIKE C3PO…

I AM FLUENT IN OVER 6 MILLION FORMS OF COMMUNICATION

BUT I AM AFRAID RISK COMMUNICATION IS NOT ONE OF THEM.

FIND YOUR YODA!

Please contact me if you have specific questions for the PM’s of any of these projects:

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RISK COMMUNICATION SKILLS

STRONG IN THIS ONE ARE