Have You Exercised Lately?

Stephanie Gerlach, PE
Agenda

• Why?
• What are exercises?
• Planning
• Help!

Exercise
Some motivation required.
Why?

- Oroville Dam – February 2017
- Hurricane Harvey – August 2017
- Hurricane Irma – September 2017
- Hurricane Maria – September 2017
- Moccasin Dam – March 2018
Why?

Sunnycove FRS
April 2015

Sunnycove FRS
July 2015
Why?

Mesa, 2014
Why?

• AZ Administrative Code
  – *Each owner of a high or significant hazard potential dam shall prepare, maintain, and exercise a written emergency action plan...*
Why?

- Natural Resources Conservation Service
  - Title 180, Part 500.51 Responsibility
  - (3) Review and revise the EAP annually and exercise the EAP at least once every 5 years
Why?

- NFIP CRS:
  - Activity 611.b. (6) requires one exercise and evaluation of the flood warning and response plan each year that is compliant with the National Incident Management System (NIMS). This process is described in the Homeland Security Exercise Evaluation Program.

An annual exercise of the warning and response plan must include:

- A description of the exercise;
- An evaluation of the threat recognition procedures, warning dissemination, response operations; and
- Recommended changes to the plan.

The exercise requirement can also be met if the community responds to an actual flood or threat of a levee or dam failure, provided that the items listed above are discussed in an after-action (or similar) report.
What is an Exercise?

- A simulation of possible flood scenarios to test various manuals, SOPs, operational capabilities, communication between response entities, tools, etc.
Pre-Exercise Activities

• Who can declare an evacuation?
• Who makes the notifications?
• Who is responsible for plan updates, contact changes, etc.?
• Who plans the exercises?
• Who prepares the inundation maps and who prepares the evacuation maps?
Seminars/Workshops

- Flood fights, seepage monitoring and remediation measures
- Principal and emergency spillway flow events
- Set Common Terms
- Set Action Levels
  - Dams
  - Other structures
- Responsibilities
Tabletop Exercises

- A discussion based exercise where typically all participants are in one room.
- Internal Only vs Multiagency Involvement
- Small vs Large
Games/Drills

- Games – using games for learning
  - Not So Trivial Trivia
- Drills – test a single operation or function
Full-Scale Exercises

• An exercise that includes the deployment of resources and field personnel, opening of emergency centers, and other activities as if a real incident has occurred.
Exercise Planning

• Who should be involved in planning?
  – Subject Matter Experts
    • Engineers
    • Operations & Maintenance
    • Flood Warning
  – Support agencies
    • Emergency Managers
    • Transportation Department
    • Police/Fire
    • NWS
  – Other jurisdictions affected by an event
  – Senior elected and appointed officials
Exercise Planning

Who should be involved in the exercise?

- Controllers / Evaluators
  - Exercise Planners
  - Subject Matter Experts
- Participants
  - Public Information Office (PIO)
  - Other jurisdictions
  - Transportation, Health, Police/Sheriff, Fire, etc.
  - Emergency Management (local, county & state)
  - Red Cross/Other Emergency Aid Organizations
  - HAM operators
  - Animal Control
  - Senior elected and appointed officials
Exercise Planning

EDUCATION OF LOCAL ELECTED OFFICIALS AND STAFF

It is critical that local elected officials understand emergency management in order to make informed decisions on behalf of the county and its residents and businesses. To do this, elected officials must take the time to participate in county emergency drills, read—and understand—the county’s hazard mitigation plan and attend educational sessions.

Managing Disasters at the County Level: A Focus on Flooding, National Association of Counties, February 2017
Exercise Planning

- Exercise Design
  - Objectives & Core Capabilities
  - Scope and Scenario
    - Master Scenario Events List (MSEL)
- Location(s) and Time
- Resources (meeting rooms, vehicles, etc.)
- Planning Meeting Schedule
- Evaluation Documentation

Food!
Exercise Evaluation

- Start in the planning stage
- Train the evaluators
  - How to document
  - What to look for
  - Provide plans, policies, procedures, agreements and Master Events Scenario List (MESL) prior to exercise
After-Action Report/Improvement Plan

- Hot Wash
- Use the following to develop report
  - Evaluation Reports
  - Event/Historian Logs
  - Photos/Video
  - Participant Evaluation Reports
- Required by CRS for credits
HSEEP Policy and Guidance

The Homeland Security Exercise and Evaluation Program (HSEEP) doctrine consists of fundamental principles that frame a common approach to exercises. Applying these principles to both the management of an exercise program and the execution of individual exercises is critical to the effective examination of capabilities.

- Guided by elected and appointed officials
- Capability-based, objective driven
- Progressive planning approach
- Whole community integration
- Informed by risk
- Common methodology

Homeland Security Exercise and Evaluation Program (HSEEP) 2013

What's New and Different

Updated EEGs that reflect the changes in the National Preparedness Goal Second Edition September 2015 are now available—see below

An effective exercise program is an essential component of our national preparedness as it validates plans, tests operational capabilities, maintains leadership effectiveness, and examines ways we utilize the whole community. Exercise program management involves a collaborative approach that integrates resources, organizations, and individuals in order to identify and achieve program priorities.
Help - Classes

- Emergency Management Institute
  - Independent Study (IS) Program
    - An Introduction to Exercises
    - How to be an Exercise Evaluator
    - Exercise Design and Development
  - Master Exercise Practitioner Program
  - EMI e-Forums

- Arizona Department of Emergency & Military Affairs
Help!

- Association of State Dam Safety Officials
- American Society of Civil Engineers
- Local Workshops
Questions

Stephanie Gerlach
Special Projects Branch Manager
Flood Control District of Maricopa County
StephanieGerlach@mail.Maricopa.gov