JUST IN TIME TRAINING PROGRAM

Presented By:
Elizabeth Avelar, P.E., CFM
April 25th, 2018

Presented To:
Coordination Committee of the Central Valley Flood Protection Board

April 25th, 2018
OVERVIEW

1. Background and Purpose
2. Overview of MUSR Flood Response Tools
3. Existing Training Standards
4. Just in Time Training
Mid-Uppr Sacramento River Regional Flood Management Plan

• Assess regional flood management needs and long-range improvement plans.

• The flood emergency response component produced a gap analysis and strategic improvement plan.
Mid-Upper Sacramento River Flood Emergency Response Project

- **DWR** awarded **$1.2M** to the six-county joint application sponsored by Reclamation District 108.
- The goal was to develop regionally consistent and integrated flood emergency response plans, unified flood fight commands, and **training program**.
- Success of MUSR Phase I continued to **MUSR Phase II**
BACKGROUND

Mid-Upper Sacramento River Flood Emergency Response Project

• MUSR Project Phases I and II has been recognized by several professional societies

ASCE Sacramento Section 2016
Outstanding Public Safety Award

ACEC Sierra Chapter 2016
Engineering Excellence Award
Best Flood Control Project

ACEC California 2017
Engineering Excellence Commendation Award
OVERVIEW OF RESPONSE TOOLS

- Emergency Operations Plan
- Flood Contingency Maps
- Preliminary Engineering Designs (PEDs)

16 LMAs

Levee Maintaining Agencies

- Unified Commands with Map
- Special Case Map
- Flood Response Command and Control

5 Unified Commands

Command and Control

GIS-Based Map Products

- GIS Technical Manual
- Standardized GeoDatabase

Innovative Training

- Just in Time Training
FLOOD SAFETY PLANS

Emergency Operations Plan – Basic

EOP

Flood Annex

Flood Contingency Map (FCM)
PUBLIC SAFETY SPECIAL CASE MAPS

Achieving Flood Risk Reduction

- Respond Coordination
- Vulnerable populations
- Rally Points

Due West:
- Take HWY 20 West to Williams to I-5

Colusa Bridge
- COL (CDEC Gauge)

City of Colusa
- Colusa Regional Medical Center
- Assisted Senior Living
- City of Colusa #1 EOC
- City of Colusa #2
- City of Colusa #3

CSA-04
- Colusa County Fairgrounds
- City Supply Yard

TC
- Care and Shelter Facility
- Our Lady of Lourdes

R:
- Water Tank Farm
- 36" Dia. Abandoned Pipe
- Critical Levee Section North End

Well #1:
- Water Station

Well #2:
- James M. Burchfield

Well #3:
- Care and Shelter Facility

Well #4:
- The screen

PS (SS & SD)

PS (SS LS)

PS (SS LS)

PS (SS LS)

Ross PS

Indian Oak PS
UNIFIED COMMANDS – MAP AND MANUAL

Regional Flood Emergency Response Project

Mid and Upper Sacramento River Unified Flood Fight Command System Operations Manual

April 2015
MUSR Phase II – Regional Stockpiles

- Purchased fully-stocked ConEx containers for each LMA
- Established MUSR regional stockpile system
- Purchased radios to improve communications among agencies throughout the region
MUSR PHASE II – TABLE TOP EXERCISES

- Combined ICS Training and Table Top Exercise in Fall/Winter 2016
- LMA, County, and State to practice and identify any gaps in procedure
- Develop trust and comfort working together prior to activation
CONCERNS AND SOLUTIONS

Concern
• LMAs were facing loss of critical historical knowledge, as “grey-haired” local experts begin to retire, and no formal documented procedures for flood emergency response

Solution
• Assisted Levee Maintaining Agencies (LMAs) to document and formalize maintenance and emergency operations procedures
• Established formal triggers, spending authorities
• Documented historical knowledge
• Facilitated information sharing
• Introduced LMAs to SEMS/NIMS
• Developed or reinforced relationship between LMA and County OES
Concerns and Solutions

Concern
• Critical gauges used to prompt emergency actions, such as beginning patrols, use different reference datums (USED, NGVD29, and NAVD88)

Solution
• Identified critical gauges for the region
• Prioritized gauges and conducted field surveys to convert to NAVD88
• Documented conversion factors within Flood Safety Plans
Concerns and Solutions

**Concern**
- Inconsistencies in flood response tools could cause confusion during an event, particularly if Mutual-Aid is requested

**Solution**
- Established regional standards for symbology
- Consistent format across 9 counties
- Documented methods in GIS Technical Manual
Concerns and Solutions

Concern
• Independent flood fight efforts could be less efficient

Solution
• Used a regionally coordinated approach
  - More Efficient Resource Allocation!
• Process of establishing Unified Commands allowed County, Fire, Law, and LMA staff to consider solutions together
• Gave LMAs confidence to engage in County Emergency Operations
• Provided tools to secure this as an ongoing regional effort
CONCERNS AND SOLUTIONS

Concern

- Difficult to meet and **maintain training standards** – 40+ Hours
  - Staff Turnover (Retirement, New Staff, etc.)
  - Young Staff
  - Long Periods of Time in Between Floods
- Levee Maintaining Agencies (LMAs) have limited staff and resources
- Standard courses are often not applicable or retainable

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<th>SEMS-E</th>
<th>ICS 402</th>
<th>IS 100</th>
<th>IS 200</th>
<th>IS 700</th>
<th>DWR Flood Fight Methods (DWR-1)</th>
<th>DWR Levee Threat Monitoring Guidelines (DWR-2)</th>
<th>Review of Local Flood Safety Plan</th>
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WHY TRAINING IS IMPORTANT?

1. Safely perform flood fighting and levee patrol functions
   - New Staff
   - Volunteers (e.g., farmworkers)
   - Mutual Aid (e.g., County Dept. of Health)

2. Condition to receive FEMA disaster assistance
   - **CA State**: Standardized Emergency Management System (SEMS)
   - **FEMA**: National Incident Management System (NIMS)
   - **DWR**: Position-specific training, flood fighting & levee patrols

3. Recognized the challenges of maintaining well-trained staff
GOALS

1. Practical – Can safely perform flood fighting and levee patrols

2. Time Efficient Training

3. Can be completed at the time a flood event is emerging (you know who is there!)

4. Complies with NIMS/SEMS, DWR Flood Fighting protocols, and OSHA
Welcome to the Just in Time Training Program's Emergency Levee Worker Course. This course is designed to provide essential training for the emergency levee worker function where extreme time constraints apply for proper flood emergency response training. This course is composed of five modules comprised of training videos covering subjects are listed below. It is not intended as a substitute for completion of standard training courses that may be recommended by the State or county during non-emergency periods. In addition, the Find Your Flood Safety Plan searchable database allows users within the Mid-Upper Sacramento River Region to look up individual Flood Safety Plans and Maps. Please click on the video you would like to view.

The Emergency Levee Worker

0100 - Introduction

0101 - Basic Duties, Safety, and Worker's Comp

0102 - Levee Patrol Equipment and Procedures

0103 - Helping Document Response Costs
## 0100 The Emergency Levee Worker

- 0101 Basic Duties, Safety, and Workers’ Comp
- 0102 Levee Patrol Equipment and Procedures
- 0103 Helping Document Response Costs

## 0200 Levee Threat Monitoring Guidelines

- 0201 Levee Terms and Preparing Lathes
- 0202 Seepage
- 0203 Boils
- 0204 Wave Wash
- 0205 Slope Instability
- 0206 Cracking
- 0207 Sink Hole
- 0208 Erosion

## 0300 Basic Flood Fight Methods

- 0301 Basic Flood Fight Methods

## 0400 Flood Response Organization

- 0401 National Incident Management System & Standardized Emergency Management System
- 0402 Regional Multi-Agency Coordination
- 0403 Incident Command System (ICS)
- 0404 ICS for the Levee Maintaining Agency
- 0405 Understanding ICS Tactical Facilities
- 0406 The Incident Commander Position

## 0500 The Flood Safety Plan

- 0501 Purpose, Content, and Use
- 0502 Understanding Datum and Elevations

### Flood Safety Plan Lookup Module

Click on this link to look up information for your levee maintaining agency for subjects discussed in the videos.

[WWW.MUSRFLOOD.COM](http://WWW.MUSRFLOOD.COM)
### STANDARD TRAINING COURSES

- **Existing Standard Training Courses** – *40+ Hours*

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<th>STANDARD NIMS/SEMS REQUIRED COURSES FOR TYPE 4 INCIDENTS</th>
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<td>NIMS/SEMS Required Courses by Position and Function</td>
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- **Just in Time Training Program** – *4 minute videos, 2.5 Hours*

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<th>ALTERNATIVE TO STANDARD NIMS/SEMS REQUIRED COURSES</th>
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MUSR CREATES THEIR OWN REGIONAL TRAINING PROGRAM

GOALS

1. Practical – Can safely perform flood fighting and levee patrols
2. Time Efficient Training
3. Can be completed at the time a flood event is emerging
4. Complies with NIMS/SEMS, DWR Flood Fighting protocols, and OSHA

ACHIEVEMENTS

1. Flood Fight and Levee Patrol Courses
2. 2.5 Hours to complete
3. On-Demand Training Videos
4. Training program streamlined standard courses to make them applicable to LMA-specific needs
WIDELY USED DURING THE 2017 FLOODS

JUST IN TIME TRAINING PROGRAM

Emergency Levee Worker Course
1. MUSR RFMP process provides platform for local agencies to work together;

2. MUSR designed their own flood-specific Just in Time Training Program;

3. Just in Time Training Program takes 2.5 hours to complete;

4. Proven to work – widely used by MUSR and other counties during the 2017 high-water event; and

5. Build upon the success of these videos.
Thank you

Questions?

WWW.MUSRFLOOD.COM
Please send comments and suggestions to:

Elizabeth Avelar, P.E., CFM
eavelar@ksninc.com
(916) 403-5900