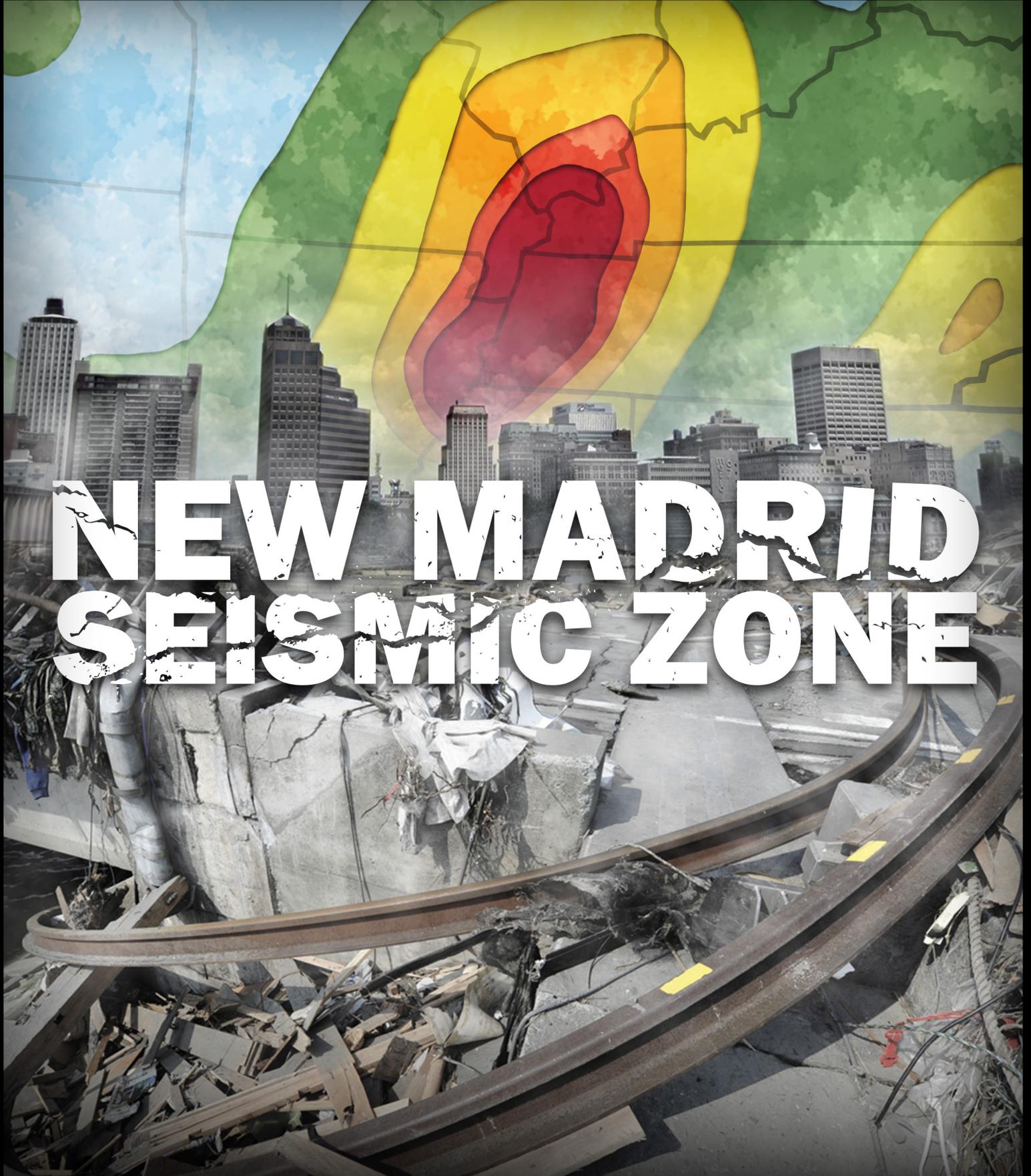




**2015 USACE**



# **NEW MADRID SEISMIC ZONE**

***Table Top Exercise***

## Agenda

- Purpose
- Orientation
- New Madrid OPLAN Overview
- USACE Response Matrix
- Questions

## Impacts

- No-notice event, with multiple aftershocks
- Mass care/shelter/resources may be inadequate
- Housing/evacuation/population relocation challenges
- Long-term impacts to incident area and the Nation requiring years to recover
- National Assessment (7.7 magnitude event, source Mid-America Earthquake Center Report)
  - Households without
    - Water 1,089,814
    - Power 2,481,271
  - Tons of debris 50,056,000
  - Injuries 82,500
  - Fatalities 3,500
  - Buildings damaged 715,000
  - Bridges damaged 3,600
- Loss of power (Eastern Interconnect) will severely degrade internal and interagency communications capability.

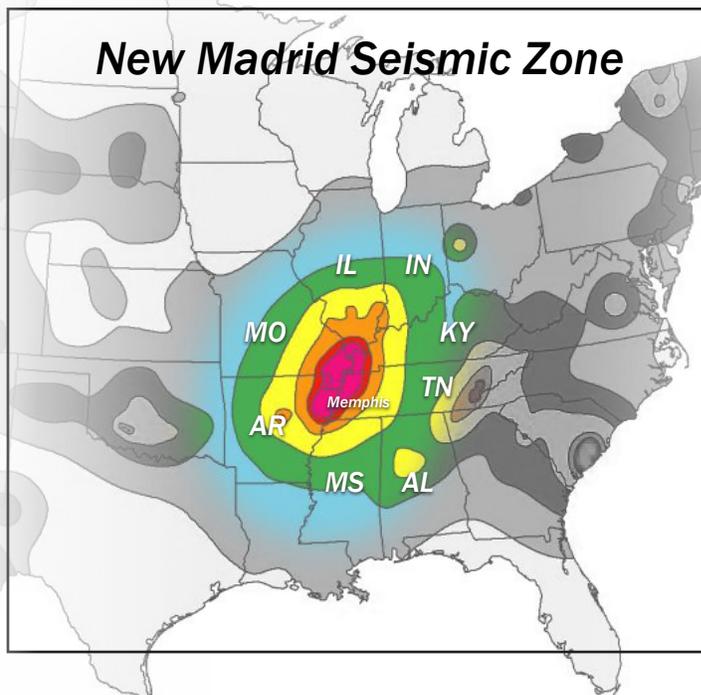
## NMSZ OPLAN

Original plan was a product of NLE 2011:

- **Triggers: Alert and Deploy notice from FEMA, ground shake and loss of communications, media reporting**
- Main effort is Tennessee
  - Ordered priority of effort is Tennessee, Arkansas, Missouri, Kentucky
- USCG Marine Transportation System Recovery Unit (MTSRU) is the coordinating lead for navigable waterways
- Utilizes Scalable Response Annex from All Hazards OPOD
- Integration Cells at NORTHCOM/ARNORTH/JTF and Dual Status Commands

## Purpose

Provide Senior Leaders with an overview of the USACE's New Madrid Earthquake response plan and rehearse the initial operational phases in order to ensure a synchronized effort that fully supports and integrates with the Interagency response.



## Facts

- A major “no-notice” earthquake along the New Madrid causes significant damage and loss of life due to the collapse of structures.
- Estimates include 86,000 casualties, including 3,500 fatalities; 715,000 damaged buildings; and 7.2 million people displaced, with 2 million of those seeking shelter, primarily due to the lack of utility services.
- Primary utility systems (electric, water, gas, and sewage treatment) will be seriously impaired and inoperable throughout much of the area surrounding the major cities of Memphis and St Louis. **Power and Communications may be lost for most of the Eastern U.S.**
- Significant road network damage and substantial damage will occur within Alabama, Arkansas, Illinois, Indiana, Kentucky, Mississippi, Missouri and Tennessee due to shaking. This will impact ability to move commodities and resources.
- River damage will impact navigation and the ability to move commodities and resources.
- Landslides will block roads, damage and destroy homes, and disrupt local water mains, sewer systems, and power lines.

## Issues

- Loss of Power/Eastern Interconnect and USACE Communications; prioritization of limited USACE DTOS assets and possible NORTHCOM Communications support
- Mobilization Mission Assignment/“Go to Battle Stations”
- RSO&I: Deploy through MSC vs. Virtual RSO&I at ISB
- HQUSACE C2 Forward - integration/execution of SCRP annex (written after NMSZ Plan) - clear Task and Purpose
- Multi-State and Region Resource Prioritization across response - process?
- FEMA Policy for NRCC control of Type I event - HQUSACE interaction

## Assumptions

- MVS and MVM will be rendered operationally ineffective and unable to execute current Civil Works programs or support resulting ESF #3 mission assignments.
- Operations at the USACE Logistics Activity (ULA) and the USACE Finance Center (UFC) in Millington, TN will be impacted, hindering logistics response and resource management.
- USACE will not have enough PRTs to fully support NRF response efforts throughout the impacted area. Many USACE personnel living within the impacted area may not be available to respond.
- The Central Data Processing Center in Vicksburg will maintain business operations and internet connectivity for an extended period of time.
- Given the need to execute and affect operations during this critical period, portions of the plan will be executed prior to formal taskings from FEMA or HQUSACE, including the deployment of personnel.

## Specified Tasks

- Conduct immediate personnel accountability and perform COOP or Devolution as necessary.
- Assess and repair USACE Civil Works infrastructure.
- Support USCG restoration of navigable waterways and essential ports.
- Provide Public Works and Engineering (ESF #3) support to DHS/FEMA under the NRF.
- Provide technical engineering and contract construction support to impacted DA / DoD facilities.

## Implied Tasks

- Establish a USACE Forward or Integration Cell at critical nodes (CG, FEMA, ISB etc.)
- Coordinate with DoD and FEMA to perform emergency route clearance.
- Assist state, local, and tribal entities in determining their priority for critical infrastructure restoration.
- Convene Infrastructure Systems-Recovery Support Function to begin long-term recovery.

## Essential Tasks

- Conduct immediate personnel accountability and perform COOP or Devolution as necessary.
- Provide impacted MSCs with additional staffing for mission execution.
- Assess and repair USACE Civil Works infrastructure.
- Support USCG restoration of navigable waterways and essential ports.
- Provide Public Works and Engineering (ESF #3) support to DHS/FEMA under the NRF.
- Provide technical engineering and contract construction support to impacted DA / DoD facilities.
- Deploy USACE TF-Forward to priority states (TN, AR, MO, and KY) and coordination cells to key nodes as appropriate.



## ***Mission***

USACE surges forces into the Central United States in response to a catastrophic NMSZ earthquake in order to assess and repair USACE Civil Works infrastructure, execute missions in support of DHS/FEMA under the NRF, support the U.S. Coast Guard in the restoration of navigable waterways and ports and provide technical engineering and contract construction support to impacted DA/DoD facilities.

## ***Commander's Intent***

**Purpose:** USACE immediately begins response activities under its own authorities and in support of FEMA and the National Response Framework in order to fully support Local, State, Tribal and Federal response efforts in order to sustain lives, reestablish public works and essential services and restore critical infrastructure after a catastrophic earthquake impacts the Central United States.

### **Key Tasks:**

- Conduct immediate personnel accountability and conduct COOP or Devolution for impacted USACE elements.
- Rapidly assess and repair damaged USACE Civil Works infrastructure that is deemed critical.
- Deploy and conduct ESF #3 missions under the NRF and provide supported MSCs with additional staffing .
- Restore navigable waterways and essential ports in coordination with the USCG.
- Deploy USACE TF-Forward to priority states (TN, AR, MO, and KY) and coordination cells to key nodes as appropriate.
- As directed, perform work for others to assess and repair critical infrastructure.

### **Endstate:**

- Impacted Districts are sufficiently resourced to resume and sustain mission essential operations.
- Critical USACE civil works infrastructure is restored to its authorized operational condition.
- Critical ports and navigable waterways are re-opened and functional.
- Essential public services are re-established.

## ***Response Phases of the Operation***

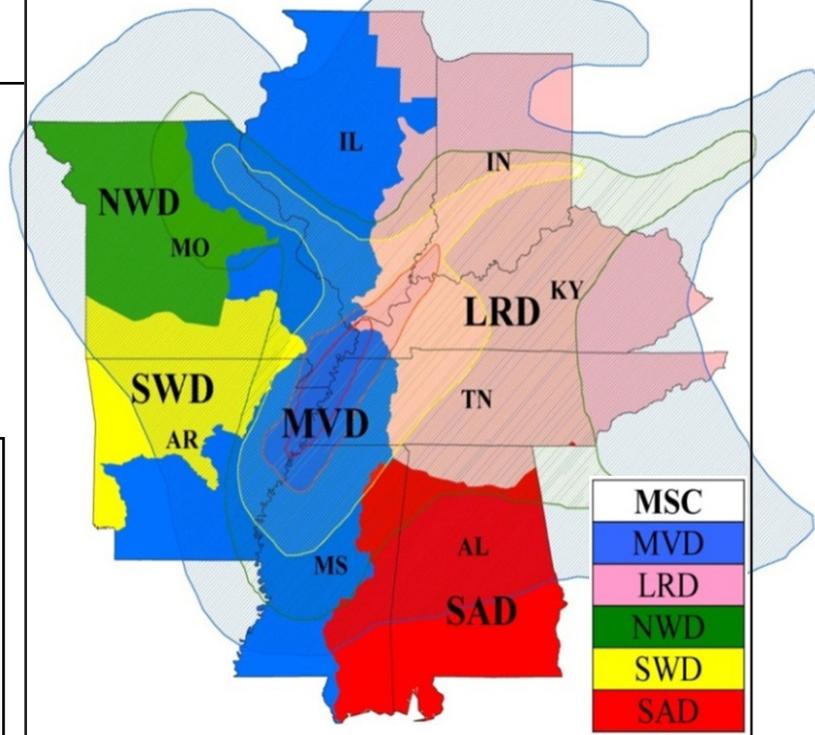
- Phase 1 – Steady State (Prior to NMSZ event)
- Phase 2a – Immediate Response and Restoration of Navigation (0-24 hours after NMSZ event)
- Phase 2b – Deployment (24-72 hours after NMSZ event)
- Phase 2c – Employment and Sustained Response (72 hours – 30 days after NMSZ event)

## Concept of Operations

### Civil Works Response

- Support to USACE Civil Works Projects will be within current Civil Works boundaries.

## Civil Works Boundaries

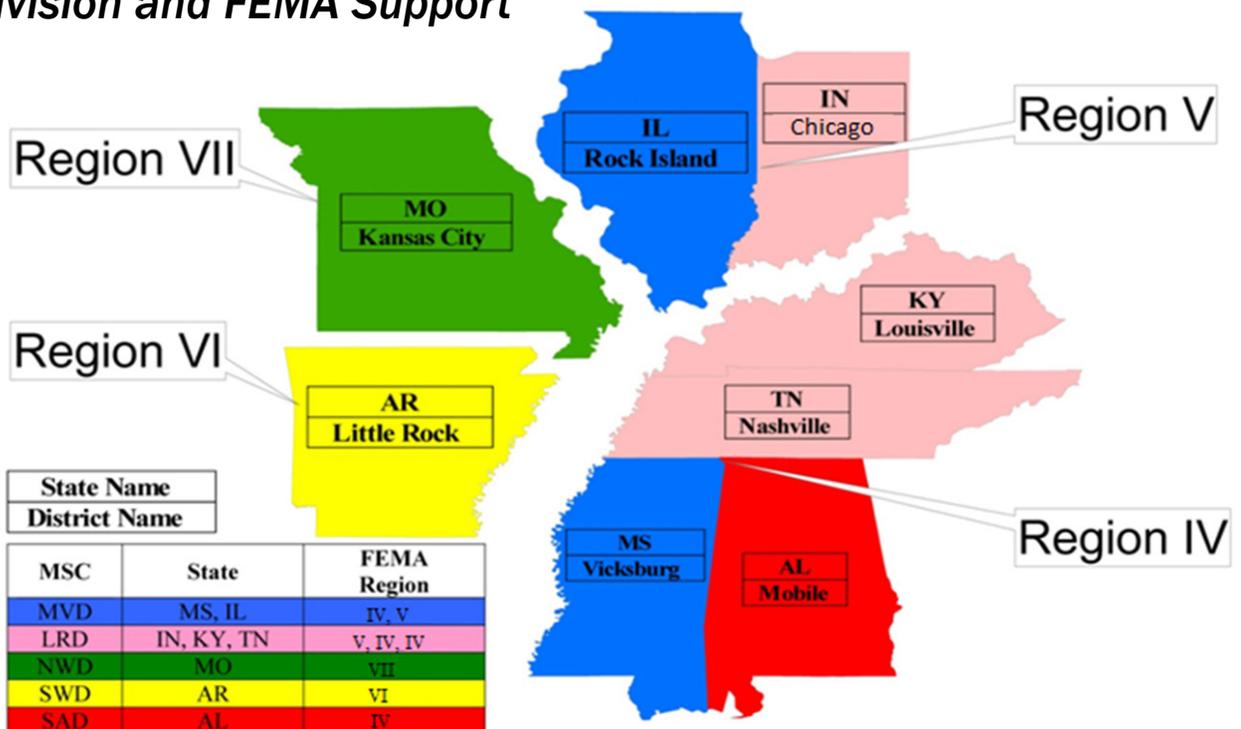


## Concept of Operations

### USACE Support to FEMA

- MSCs and Districts responsibilities aligned by state.
- Support FEMA/DHS through traditional ESF #3 mission assignments as well as nontraditional missions.
- Worst case scenario assumes Memphis and St. Louis will be impacted districts (their PRTs are not available and the districts are incapable of district missions).

## Lead Division and FEMA Support



# Phase 1- Steady State



## Divisions' Own Authorities

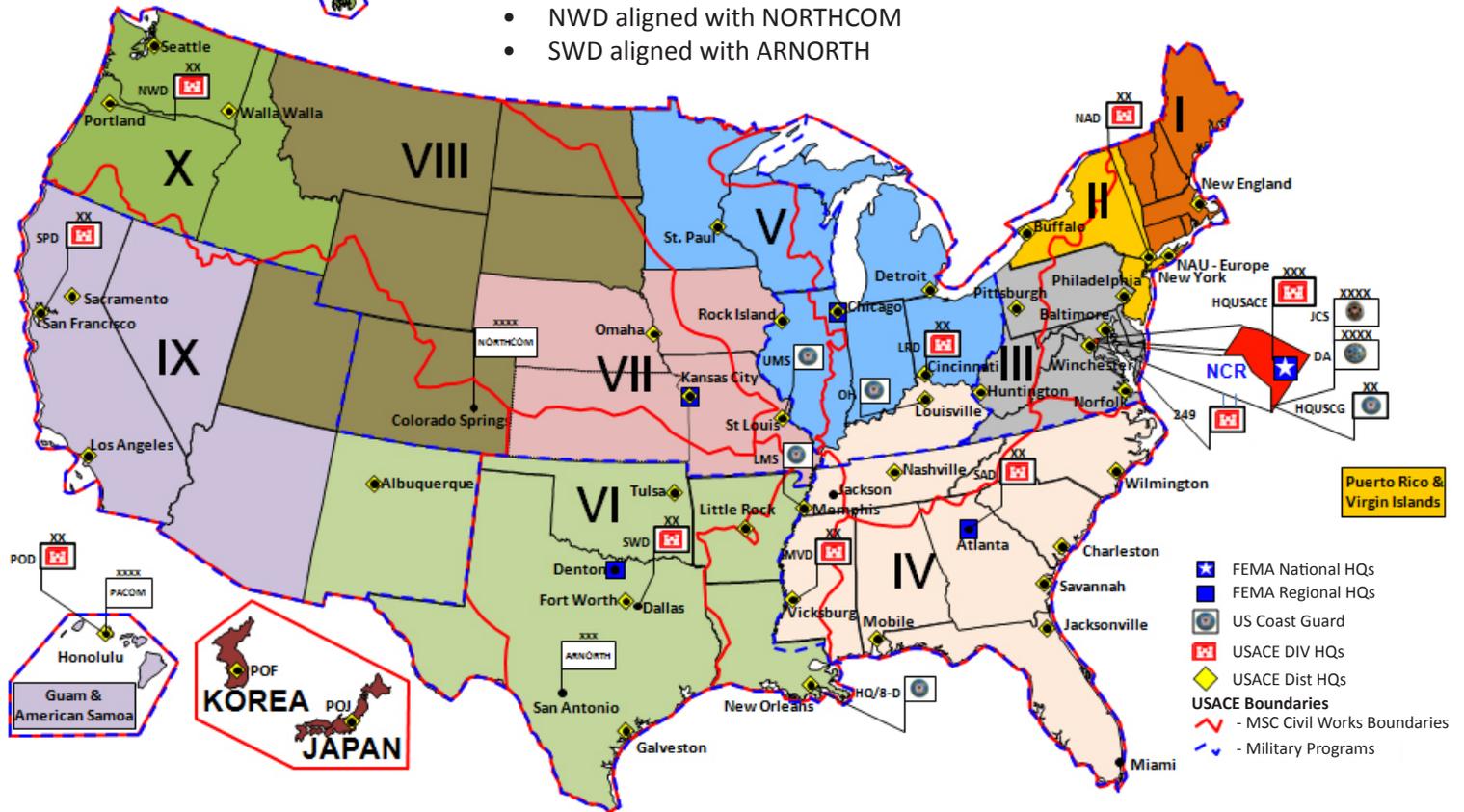
- Restore flood protection/civil works
- Mississippi River: MVD w/ SAD in DS
- Ohio River: LRD w/NAD in DS

## NRF/ESF #3 Support

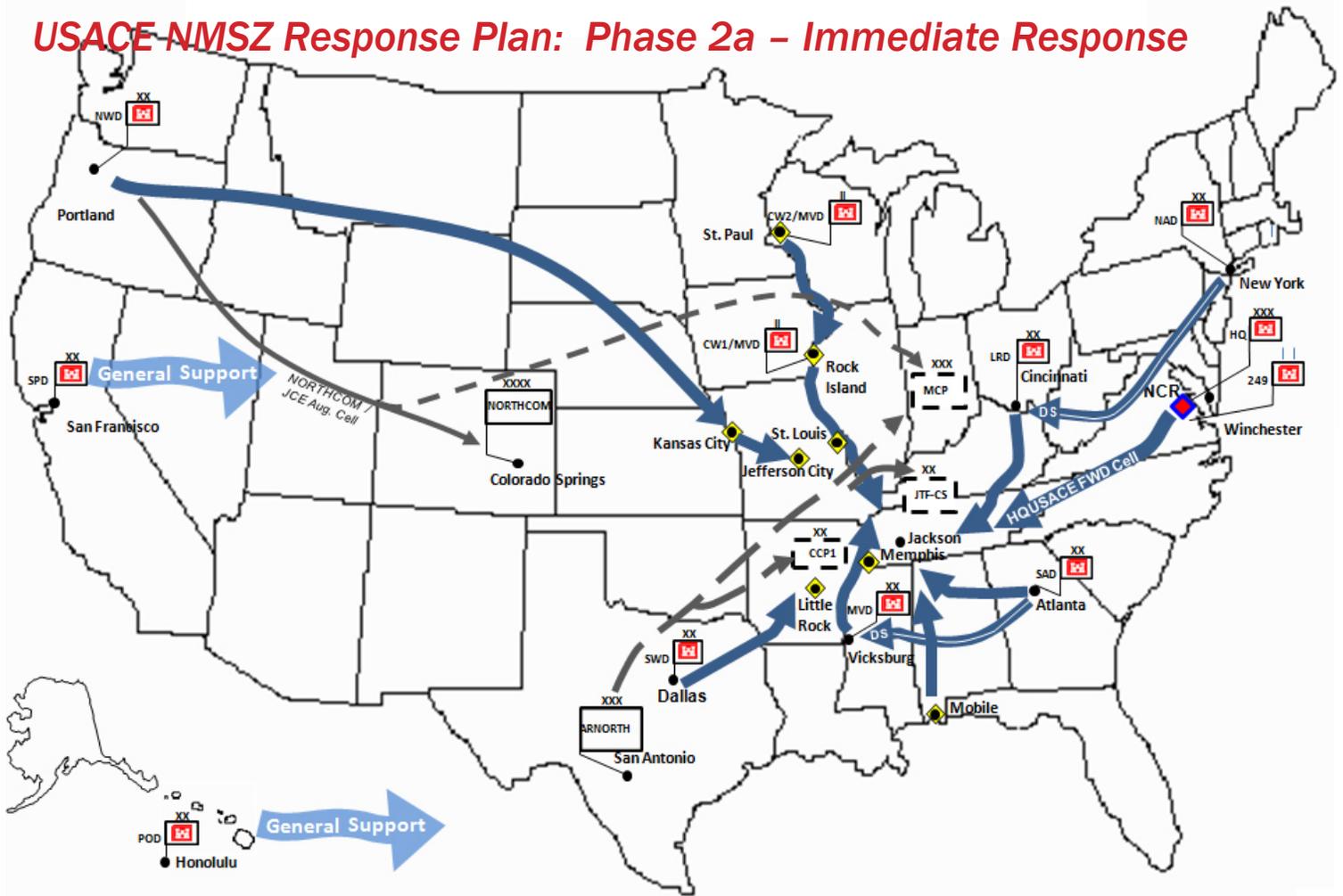
- TN is the Main Effort
- Priority States: TN, AR, MO, KY

## NORTHCOM/ARNORTH

- NWD aligned with NORTHCOM
- SWD aligned with ARNORTH



# USACE NMSZ Response Plan: Phase 2a - Immediate Response



## MVD

Task: Lead Div ISO FEMA & USCG in MS & IL and the Mississippi River  
Purpose: Execute response efforts ISO USACE authorities, FEMA, & DoD (NORTHCOM/ARNORTH)

## NWD

Task: Lead Div ISO DoD, FEMA, & USCG in MO, and lead Div ISO NORTHCOM  
Purpose: Execute response efforts ISO USACE authorities, FEMA, and DoD (NORTHCOM)  
Task: SCRPNORTHCOM and JCE Augmentation Cells  
Purpose: Coordinate with DoD (NORTHCOM) on response support efforts

## SAD

Task: Lead Div ISO DoD, FEMA, & USCG in AL, and DS to MVD  
Purpose: Execute response efforts ISO USACE authorities, FEMA, & DoD (NORTHCOM/ARNORTH)

## POD

Task: GS to USACE, as directed by HQUSACE  
Purpose: Response efforts ISO FEMA, USACE authorities and DoD as directed

## TAD

Task: Be prepared to provide FFE equipment  
Purpose: Provide FEST sets as needed

## LRD

Task: Lead Div ISO DoD, FEMA, & USCG in IN, KY, & TN, and the Ohio River  
Purpose: Execute response actions ISO FEMA, USACE authorities & DoD (NORTHCOM/ARNORTH)

## SWD

Task: Lead Div ISO DoD (ARNORTH), FEMA, & USCG in AR  
Purpose: Execute response efforts ISO USACE authorities, FEMA, & DoD (NORTHCOM/ARNORTH)  
Task: SCRPNORTHCOM Augmentation Element  
Purpose: Coordinate DoD (ARNORTH) response support efforts

## NAD

Task: DS to LRD  
Purpose: Response efforts ISO USACE authorities, FEMA, and DoD (NORTHCOM/ARNORTH)

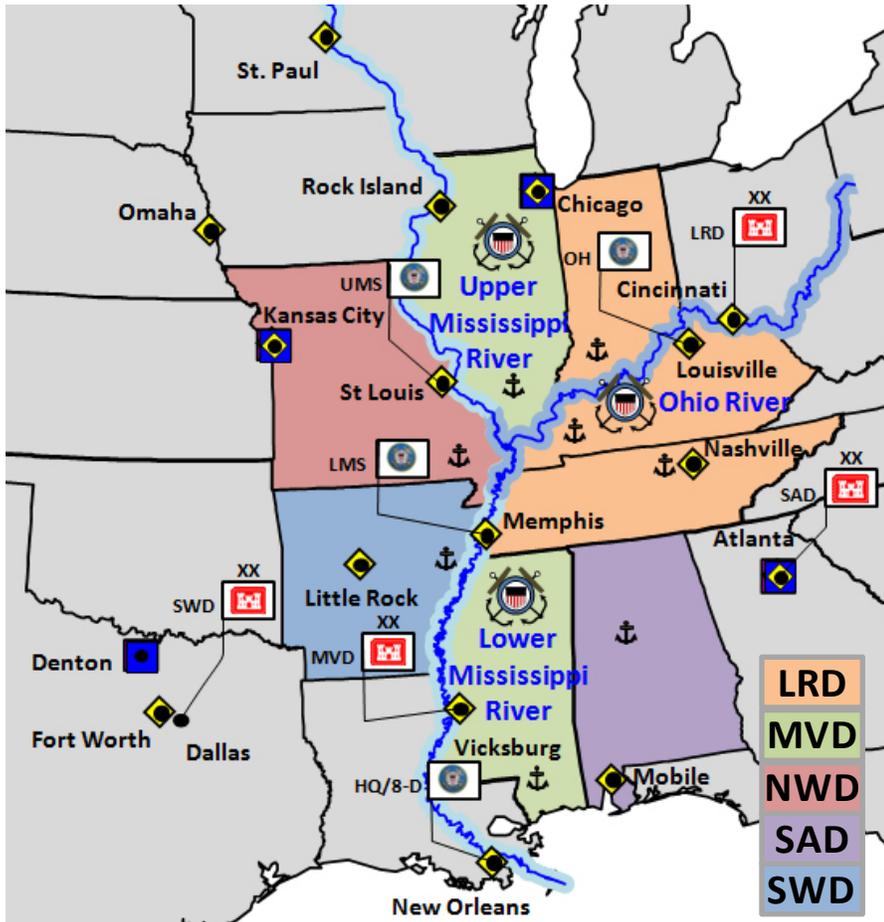
## SPD

Task: GS to USACE, as directed by HQUSACE  
Purpose: Response efforts ISO USACE authorities and FEMA.

## HQUSACE

Task: Deploy DCG CW&EO and stand up the IS-RSF  
Purpose: Provide C2, vision and recommendations for recovery

## Phase 2a – Restoration of Navigation



### Divisions

Provide LNOs to support USCG RRUs / facilitate coordination between RRUs and MTRSUs

- LRD: IN, KY, and TN
- MVD: IL and MS
- NWD: MO
- SAD: AL
- SWD: AR

### Lead Divisions:

- MVD: USCG coordination and USACE efforts along the Upper and Lower Mississippi River
- LRD: USACE efforts along the Ohio River

 USCG Commands (Lower MS, Upper MS, OH River, and HQs, 8th District)

 USCG Marine Transportation System Recovery Unit (MTRSU) (Joint Agency)

 USCG Riverine Recovery Unit (RRU) located at the State Joint Field Office

### NWD

Task: Lead Div ISO USACE and USCG response efforts in MO  
Purpose: Restore USACE civil works and navigation along navigable waterways in MO

### SWD

Task: Lead Div ISO USACE and USCG response efforts in AR  
Purpose: Restore USACE civil works and navigation along navigable waterways in AR

### NAD

Task: Provides DS to LRD  
Purpose: Assists LRD in restoring USACE civil works and navigation along navigable waterways in IN, KY, and TN, and along the Ohio River

### LRD

Task: Lead Div for Navigation along the Ohio River and ISO the USCG in IN, KY, & TN  
Purpose: Restore USACE civil works and navigation along the Ohio River and its tributaries

### SAD

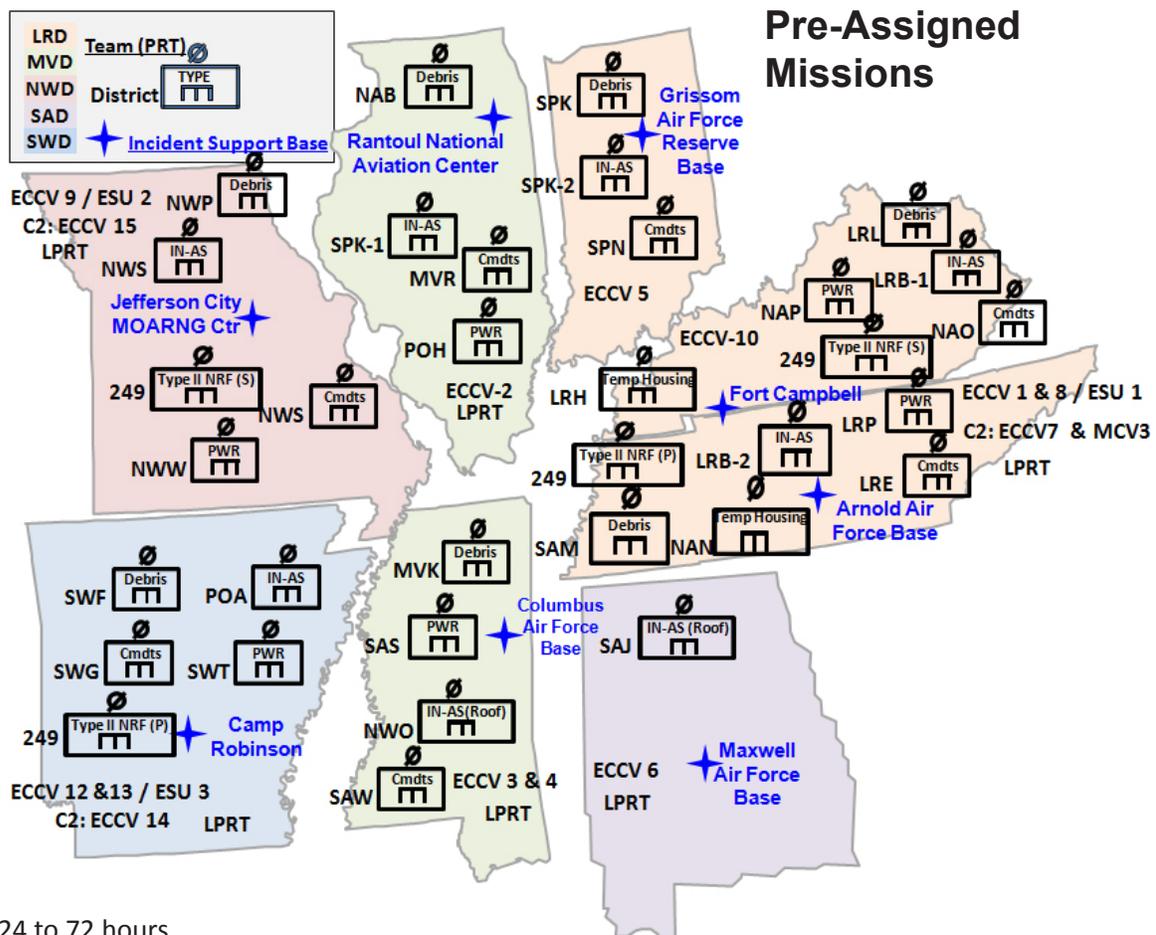
Task: Lead Div ISO USACE and USCG efforts in AL, and provides DS to MVD  
Purpose: Restore USACE civil works and navigation along navigable waterways in AL and assist MVD response and recovery efforts

### MVD

Task: Lead Div ISO USACE and USCG response efforts in IL and MS, and along the Mississippi River  
Purpose: Restore USACE civil works and navigation along the Mississippi River and its tributaries

## Phase 2b - Deployment

## Phase 2c - Employment & Sustained Response



### Key Tasks:

- 2b: first 24 to 72 hours
- 2c: 72 hours to 30 days
- Complete deployment
- Deploy HQUSACE C2 forward
- Engineer reconnaissance and assessments of civil works and critical infrastructure
- Initiate temporary repairs to flood protection infrastructure ISO flood fighting measures
- Execute public works missions under ESF #3 and ISO FEMA and other agencies

### PRT Inactivation Impacts

- TN - LRE Commodities
- AR - No Change
- MO - NWP Debris, NWS Commodities
- KY - NAP Power
- IN - SPN Commodities
- AL - SAJ Roofing/Infrastructure Assessment

### DoD Support to ESF #3

- Reconnaissance
  - Air (UAV)
  - SONAR
- Air Movement
- Logistics Support (DLA)
  - Fuel
  - Pumps
  - Power Generation
- Communications Support
- Route Opening
- Bridging/Ferrying
- Personnel (QA/ATC-20 Qualified Inspectors )

# USACE Response Matrix

	HQ	LFD	IMD	NAD	NWD	POD	SAD	SPD	SWD	TAD	ERDC	HNC
Proponent	ESF 3	Power (ACI)	Debris (ACI) Unwetering	CST	Roofing		Housing Modeling	InfraAssess SIS (US&R)	Commodities		UROCC	
PRTs / Functional Cadre	TLs	Power	Power	Commodities	Power	Power	Power	Power	Power			Housing
	ATLs	CST	Commodities	CST	CST	CST	Commodities	CST	Commodities			
	LGLs	Debris	CST	ODebris	IA	IA	CST	Debris	CST			
	DTOS	IA	Debris (2)	Housing	Roofing	CTOC	Debris	IA	Debris			
	Extern Affairs	Housing	Housing	ECCV7	ECCV11		Housing	Housing	Roofing			
	Logistics	Roofing	Roofing	MCV3			IA	US&R	ECCV9			
	EERTs	ECCV8	ECCV10				ECCV1	ECCV2				
	Real Estate	MCV1	FIM				ECCV2	ECCV3				
	RM						ECCV3	ECCV4				
	SCH						ECCV4	ECCV5				
	IR						ECCV5					
	Contracting						ECCV6					
	GIS						MCV1					
						MCV2						
International Aid Operations	Readiness Oversight	Dam Safety Temp Power	Levee Safety Debris Mgmt	Support Proponent Divisions	Trans p. Systems	Support Proponent Divisions	Support Proponent Divisions	5 USR Struct. SMEs & 5 Water and Wastewater Treatment SMEs	Support Proponent Divisions	Support Proponent Divisions	Hydrologists (3ea)	Hazardous Waste SMEs (5ea)
FFE Teams	EnvST Cadre	BDT		58 <sup>th</sup> FESTA	34 <sup>th</sup> FESTA	62 <sup>nd</sup> FESTA	542 <sup>nd</sup> FESTA		59 <sup>th</sup> FESTA	GED	Tunnel Detect	
				7 <sup>th</sup> FESTA	BDT	POJ FESTA	566 <sup>th</sup> FESTA		273 <sup>rd</sup> FESTA			
				NAU FESTA	CREST	BDT (2)	CREST		CREST			
				CREST			BDT		BDT (3)			
			EDT (2)									
CCMD / ASCC/ Interagency	FEMA			EUCCOM	NORTHCOM	PACOM	SOUTHCOM		USARNORTH	CENTCOM		
	USAID			AFRICOM	JCE	USARPAC	USARSOUTH			USARCENT		
	OASD			USAREUR		USFK						
	S/CRS			USARAF		USFJ						
	USCG					USARJ						
Habitual unit associations		10 <sup>th</sup> ABN DIV	41 <sup>st</sup> TEC	V Corps	1st ID	25 <sup>th</sup> ID	XVIII Corps	NTC	III Corps			
		416 <sup>th</sup> TEC		10 <sup>th</sup> MNT DIV	7 <sup>th</sup> ID	2 <sup>nd</sup> ID	20 <sup>th</sup> ENBDE	I MEF	4 <sup>th</sup> ID			
		18 <sup>th</sup> ENBDE		JMRC	566 <sup>th</sup> ENBDE	2 <sup>nd</sup> ENBDE	82 <sup>nd</sup> ABN DIV		1 <sup>st</sup> CAV DIV			
				I Corps	130 <sup>th</sup> ENBDE	3 <sup>rd</sup> ID			38 <sup>th</sup> ENBDE			
						8 <sup>th</sup> Army	II MEF		1 <sup>st</sup> AR DIV			
						III MEF			JRTC			
FEMA Region	NRCC	V		I, II, III	VI, VIII, X		IV	IX	VI			
SCRIP	ULA /ESF 3 Trn @ISB*	TF Power	USACE FWD Cell - Central	USACE FWD Cell - East	NORTHCOM	JTF-AK	Temp. Housing Integration Cell	USACE FWD Cell - West	ARNORTH			
	* or Impacted MSC	Power Integration	TF Unwetering	JTF-NCR	Joint Coord. Element (JCE) or JTF		Critical Public Facilities Integration	Infrastructure Assessment Integration	Combined Commodities Integration			
			Unwetering Integration		Temp. Roofing Integration			US&R Integration	Dual Status Commander (DSC)			





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