Society of American Military Engineers The Continuing Evolution of All-Hazard Contingency Operations

AIR MOBILITY COMMAND

TRAINING

Ms. Karen Durham-Aguilera, PE, SES Director of Contingency Operations and Homeland Security

Headquarters U.S. Army Corps of Engineers

4 February 2016





US Army Corps of Engineers BUILDING STRONG®

U.S. Army Corps of Engineers

240 Years of Service to the Nation



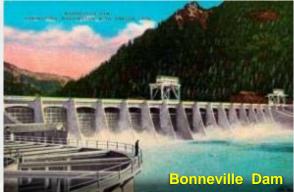








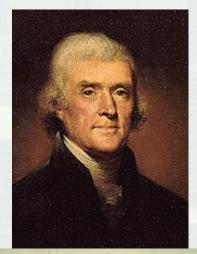






History, US Army Corps of Engineers

- 1802: Modern Corps of Engineers founded; West Point established as first U.S. engineering school
- 1824: During nation's infancy helped build the nation and moving commerce
 - Corps authorized to survey road and canal routes
 - Authorized first Corps work in clearing obstacles on Ohio, Mississippi Rivers and at ports
- 1850: Congress authorizes first Corps studies of potential flooding on Mississippi River
- 1879: Mississippi River Commission established
- **1914:** Panama Canal completed
- 1927: Great Mississippi River Flood
- 1928: Flood Control Act establishes Mississippi River & Tributaries (MR&T) Flood Control project





More U.S. History in Civil Works

- ~1935-65: "Big Dam Era" Corps protection mission
- 1955: USACE flood-fighting and repair of flood control works authorized (Public Law 84-99)
- 1970: Start of environmental movement National Environmental Policy Act requires environmental analysis of all proposed Corps activities
- 1988: Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988 (Stafford Act): provides the legal authority for the federal government to provide assistance to states during declared major disasters and emergencies.
 - Engineers have a role within emergency response!
 - Government-wide coordination on emergency response efforts
 - USACE designated as lead for Emergency Support Function #3 (Public Works & Engineering)
- 1989: Hurricane Hugo
- 1992: Hurricane Andrew



History of Contingency Operations

- 1998: Hurricane Georges: catalyst for Readiness XXI, Planning and Reconstruction Teams (PRT), and the 249th EN BN (Prime Power) took on temporary power assessments.
- 2001: USACE responds to attacks of 9/11 in New York and at the Pentagon and sends Forward Engineering Support Teams (FEST) to Afghanistan
- 2003: USACE responds to Defense Secretary regarding capabilities and stands up the Gulf Region Division
- 2004: USACE stands up the Afghanistan Engineer District
- 2005: Hurricanes Katrina and Rita
- 2009: Provisional Directorate of Contingency Operations (DCO)
- 2010: Army permanent order issued for DCO
- 2011: Greater New Orleans Hurricane & Storm Damage Risk Reduction System provides "100-year flood" level of risk reduction, and historic floods
- 2012: Hurricane Sandy



USACE Support to National Emergencies



Public Law 84-99 (Flood Control & Coastal Emergency Act of 1955)

Prepare Respond Repair

"Flood Fight"



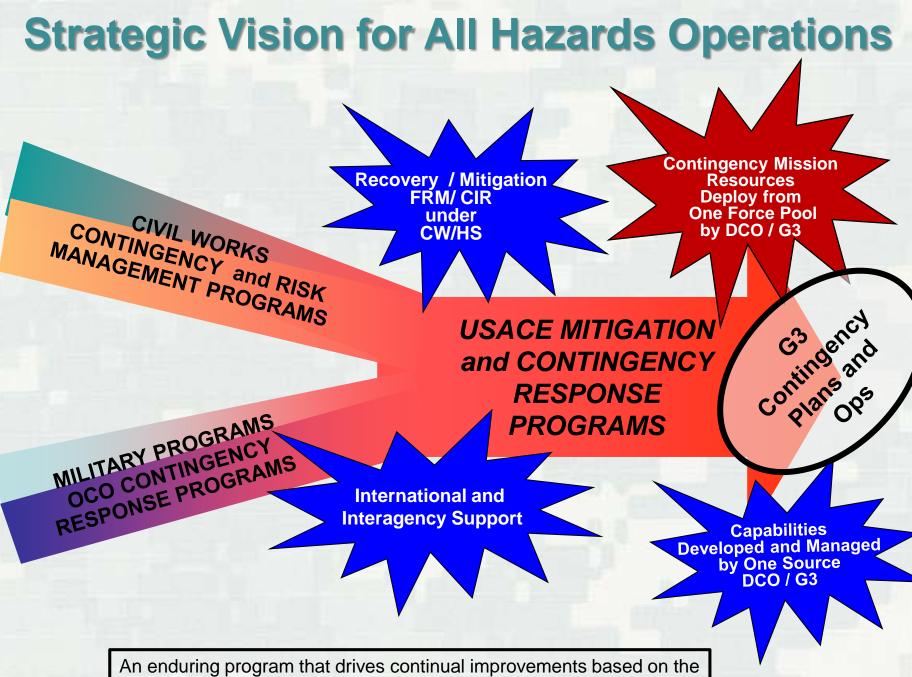
Dredging in Santa Clara

Fargo, ND flood fight

Public Law 93-288 Stafford Act (National Response Framework) Public Works and Engineering assistance to DHS/FEMA -led national response

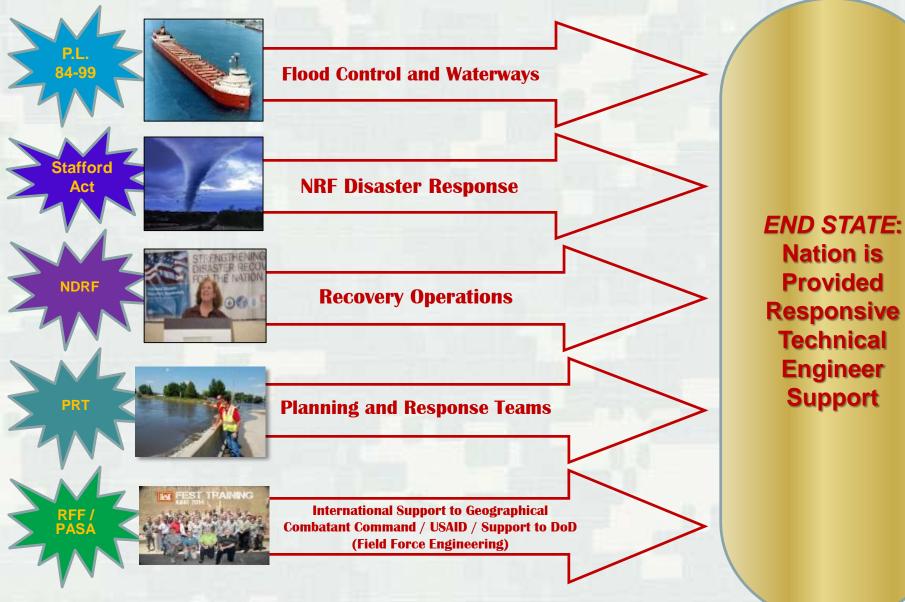
"Natural Disaster / Emergency Response"

Sandy repair: Seabright to Manasquan



ever changing planning and operational environments

All Hazards Lines Of Operation



8

Nation is

Provided

Engineer

Support

USACE Campaign Plan Goals



Support National Security

Transform Civil Works





Reduce Disaster Risks

Prepare for Tomorrow



Presidential Policy Directive (PPD-8)

National Preparedness Goal

National Preparedness System

National Planning Frameworks



Federal Interagency Operational Plans

National Response Framework

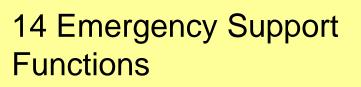
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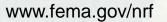


National Response Framework



- Doctrine for Federal support
- Organizes Federal resources
- Roles and responsibilities





Incident

Loca

Response

State Response or Support

Federal

Response or Support

ESF #3 Public Works and Engineering



Temporary Emergency Power



Urban Search and Rescue



Temporary Roofing





Sub-Taskings to Other Agencies



Commodities

Critical Public Facilities and Temporary Housing

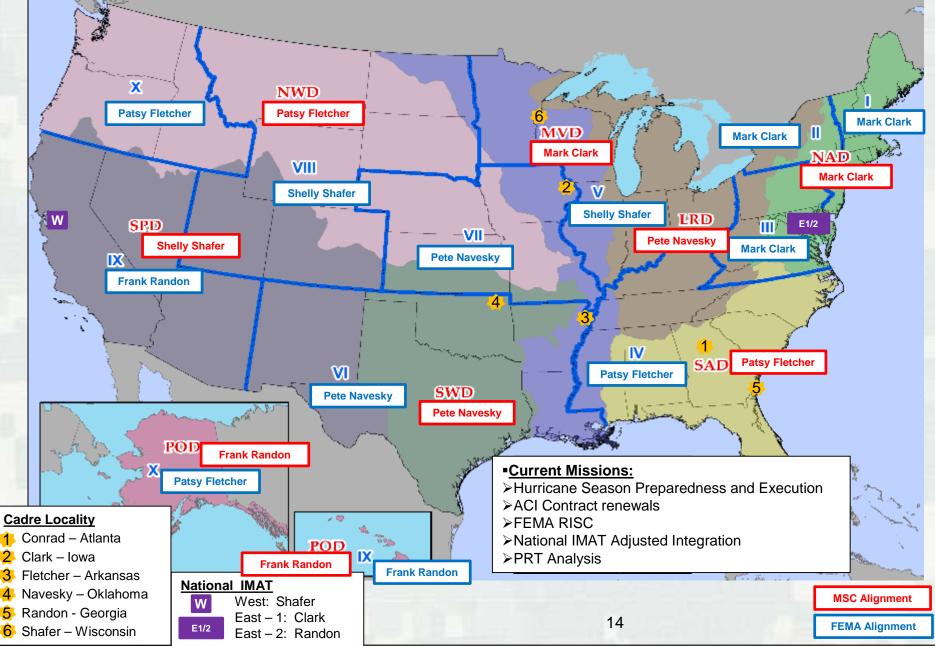


Sub-Tasking to Other Agencies (Under NRF)

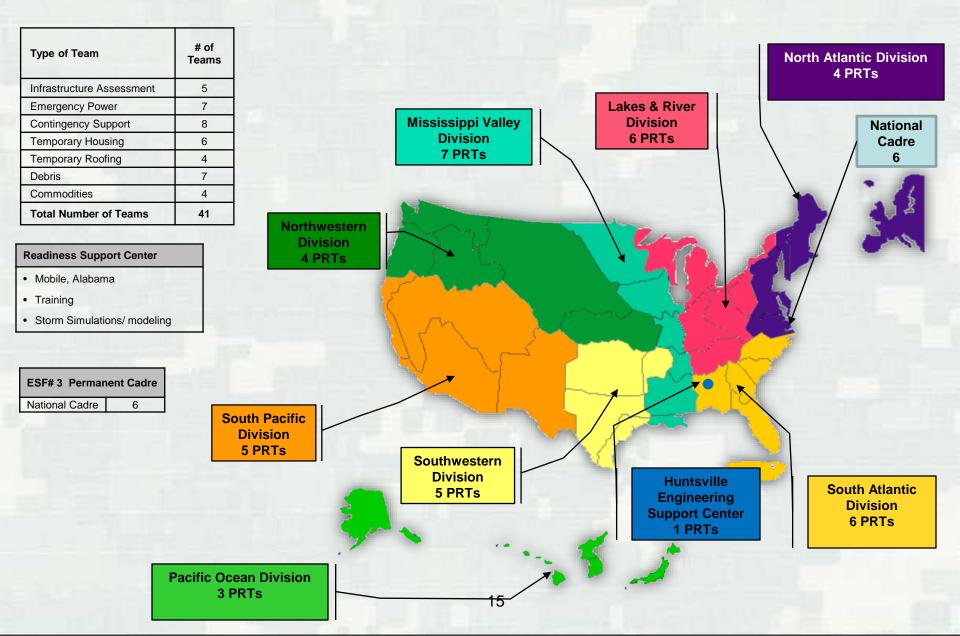
- <u>EPA</u>: Water / Wastewater
 Treatment / Hazardous Debris
- <u>Department of Interior</u>: Temporary Roofing / Debris Management
- <u>Coast Guard</u>: Sunken Vessel Assistance
- <u>Navy Supervisor of Salvage</u>: Obstructions in Waterways / Un-watering



ESF#3 Permanent Cadre Locations and Habitual Associations



Planning & Response Teams



Pre-Awarded Response Contracts

- Immediate response
- Maximum local hiring and subcontracting
- Pricing (known & stable)
- Unrestricted and Small-Business Set-Asides
- Regionally aligned
- Improves performance
- Standardizes contracts





Temporary Power ACI Contracts

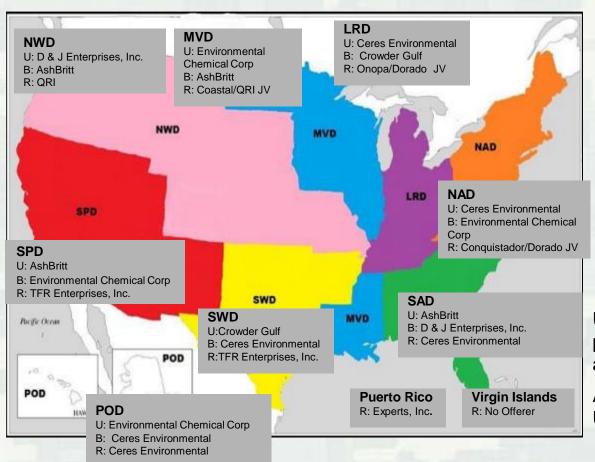


- FEMA Regions I,II, and III Louis Berger
- FEMA Regions IV and V IAP Worldwide Services
- FEMA Regions VI, VII and VII IAP Worldwide Services
- FEMA Regions IX and X Louis Berger
- All contracts are large business with \$50M capacity 1 base year and 4 option years.
- Re-solicitations will occur in 2018





Debris ACI MSC/State Coverage



MVD: MS, IL, MN, WI, LA, IA, ND
LRD: WV, KY, TN, IN, OH, MI
SAD: AL, FL, GA, NC, SC, PR, VI
NAD: CT, MA, ME, NH, RI, VT, NJ, NY, DC, DE, MD, PA, VA
NWD: KS, MO, NE, CO, MT, SD,WY, ID, OR, WA
SWD: AR, OK, TX
SPD: NM, UT, AZ, CA, NV
POD: HI, AK, GUAM, Am. Somoa, Other US Territories within POD

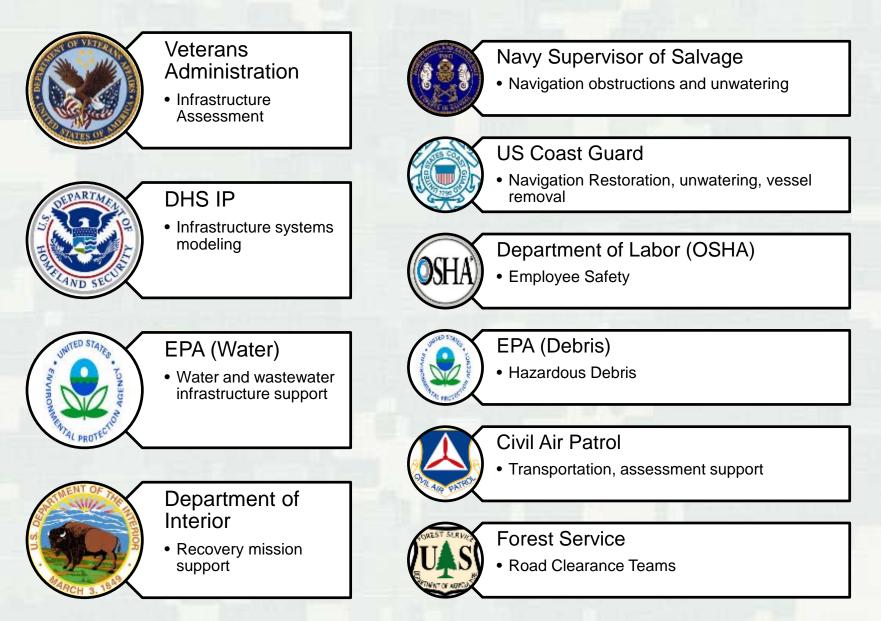
Unrestricted and Restricted ACIs provide ability for Scalable response and utilizes Small business contractors

Areas with no offerer have coverage with Unrestricted contract.

Contract re-solicitations will be in 2019

- U: Unrestricted ACIs \$240M Capacity
- **B: Reach Back Contractor**
- R: Restricted ACIs business) \$580M pool Capacity (100% set aside for small

Leveraging Partners



Leveraging Partners



National Disaster Recovery Framework



National Disaster Recovery Framework

Strengthening Disaster Recovery for the Nation

🛞 FEMA

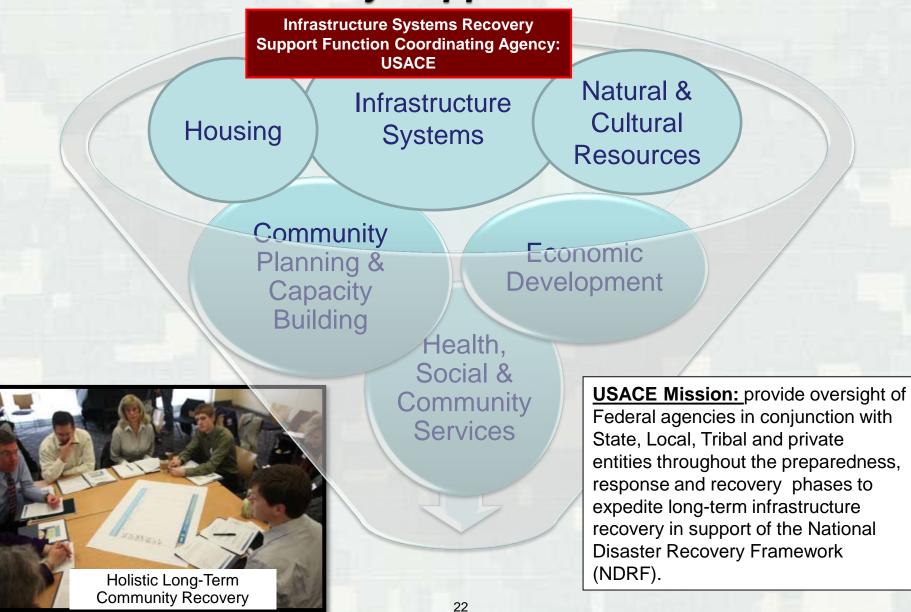
Primary Agencies

- U.S Army Corps of Engineers
- Department of Homeland Security/ Federal Emergency Management Agency and National Protection Programs Directorate
- Department of Energy
- Department of Transportation

Coordinating Agency

U.S Army Corps of Engineers

National Disaster Recovery Framework: Recovery Support Functions



Public Law 84-99 Flood Control and Coastal Emergencies

Prepare: Advance Measures

- Imminent threat / Unusual flooding
- Temporary in nature
- Protects life and property

Respond: Flood Fight

- Save life and property
- Temporary in nature
- Emergency Debris
- Emergency Infrastructure

Recover: Levee Rehabilitation

Levees in Federal Program

Mitigate

- Identify mitigation opportunities
- Intergovernmental TF





An Emergency Levee Protects the City at Second Street during the 2001 flood.

Silver Jackets

"Operationalizing" Inter-Agency Flood Risk Management

- State-Led (Voice of our Customers)
 - States set priorities for coordinated Interagency Federal support
- Interagency Method of Delivery (MOD)
 - Collaboration across agencies / levels of government
 - Universal / Tailorable for all Agencies / Programs
 - Leverage resources: talent, data, funding
- Continuous, not project-specific
- Life-Cycle Risk Management
- Watershed Perspective
 - State teams facilitate regional, state-to-state flood risk management



4 Active Interagency FRM Team (SJ)

Ongoing Effort to Develop Team

As of: March 2015

USACE Has Global Presence







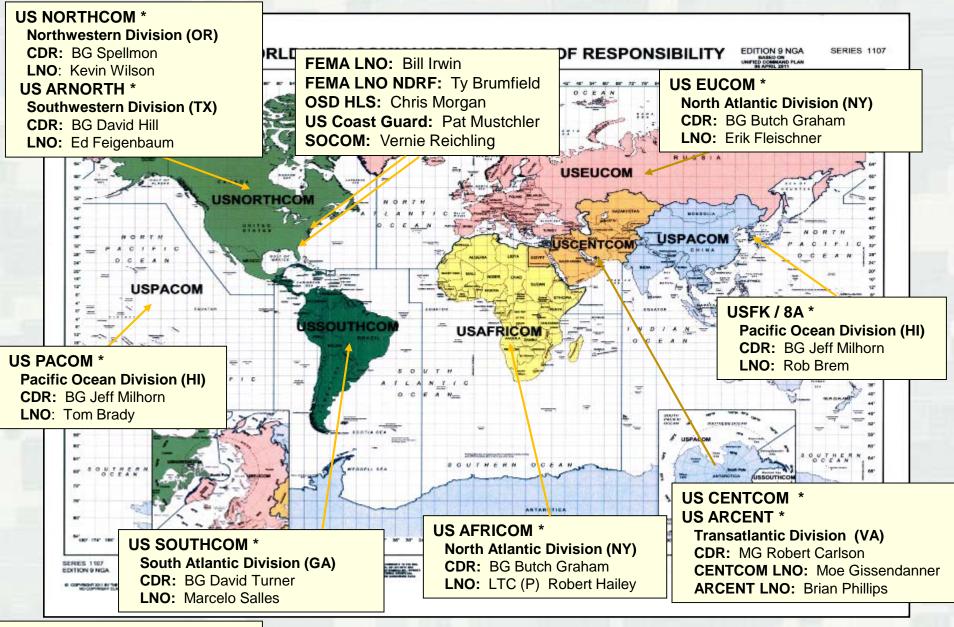








USACE Regional Alignment and Global Engagement – Supporting Combatant Commands and US Agencies



^{*} USACE provides embedded LNO

DoD Support: Expeditionary Engineering (FFE) 2015

Preserves the core integration capabilities of mission command/C2, forward engagement, readiness, and oversight.

- TAD retained as operating division, DS to CENTCOM
- LNOs and military planners retained at MSCs aligned with geographic COCOMs to provide forward planning and readiness oversight.
- HQ aligns with non-geographic COCOMs.
- DCO/G3 retains mission command, training and readiness oversight, and co planning capability.

Integration

Preserves base level of reachback Capability to:

•provide RFI support

•maintain VTC bridges and satellite

•operate REDi database

Reachback

•train FFE teams on equipment

Deployable Teams:

- 8 x FEST-A (Realigned)
- EnvST:: 16 man pool Expeditionary
- 4 x CREST
- Contingency Districts/HQ Aug Cell

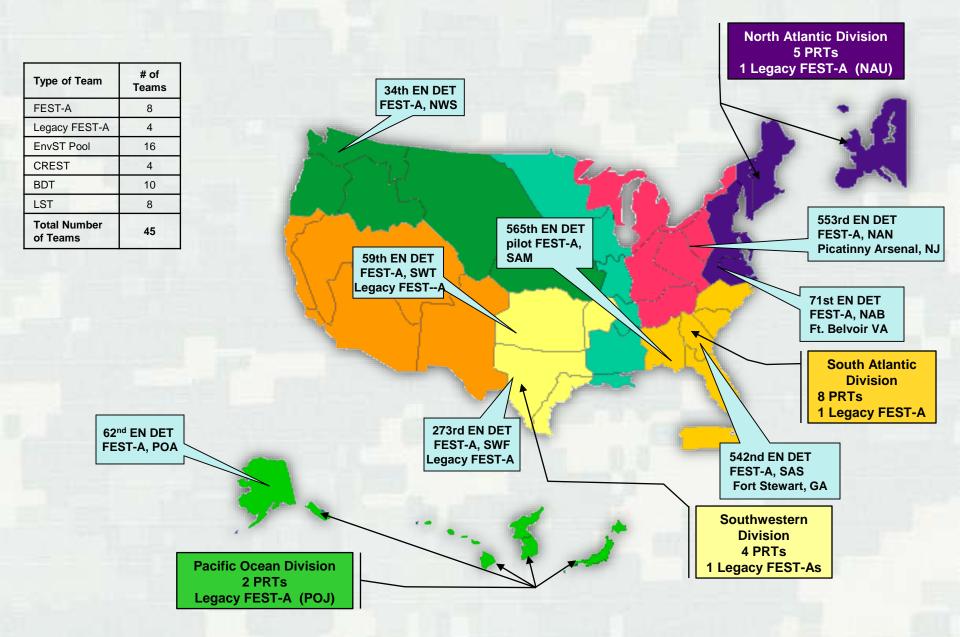
FFE Concept Plan Attributes:

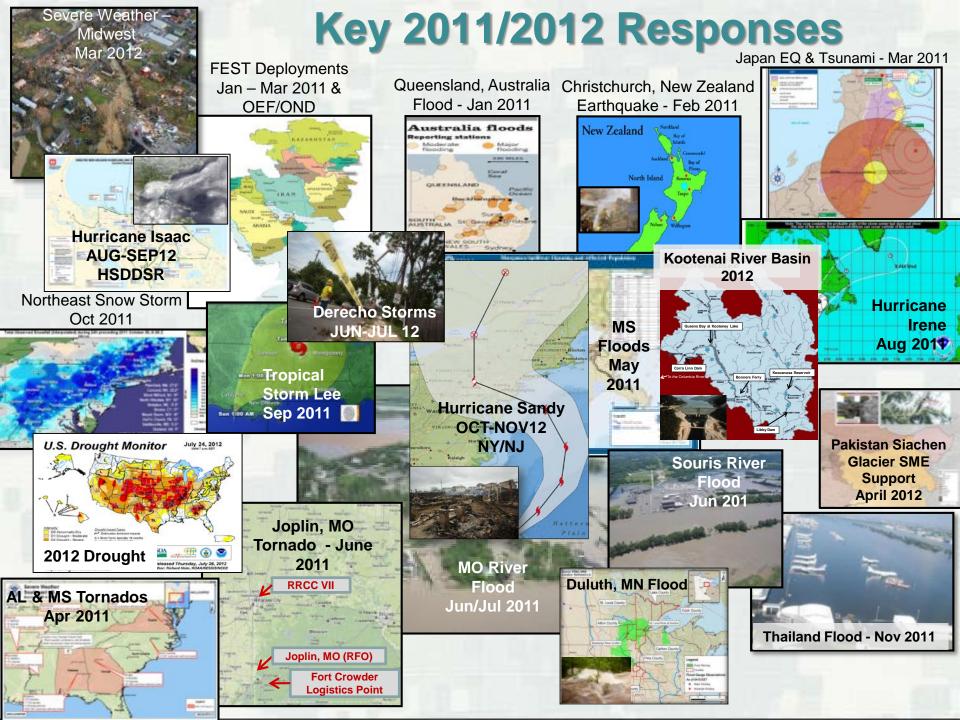
- Provide technical engineering support to deployed forces
- Provide readiness oversight of FEST Teams.
- Embedded planning capability with select COCOM/ASCC
- MSC key role in manning of FEST Teams.
- Base technical engineering reachback capability with support required for significant requirements.

•Resources AFCS Program

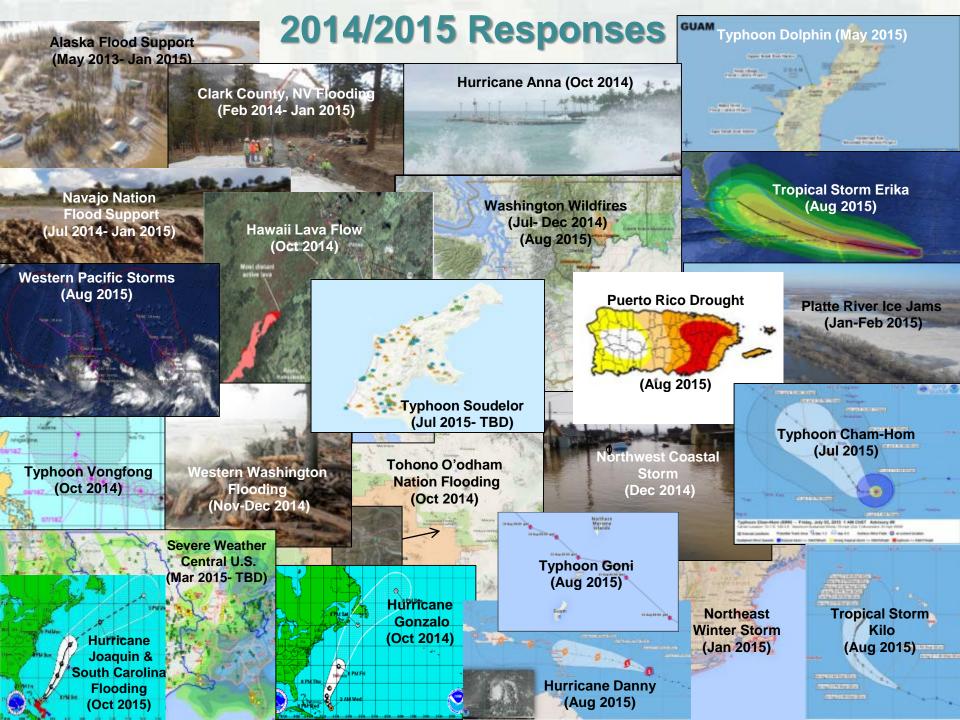


Forward Engineering Support Teams





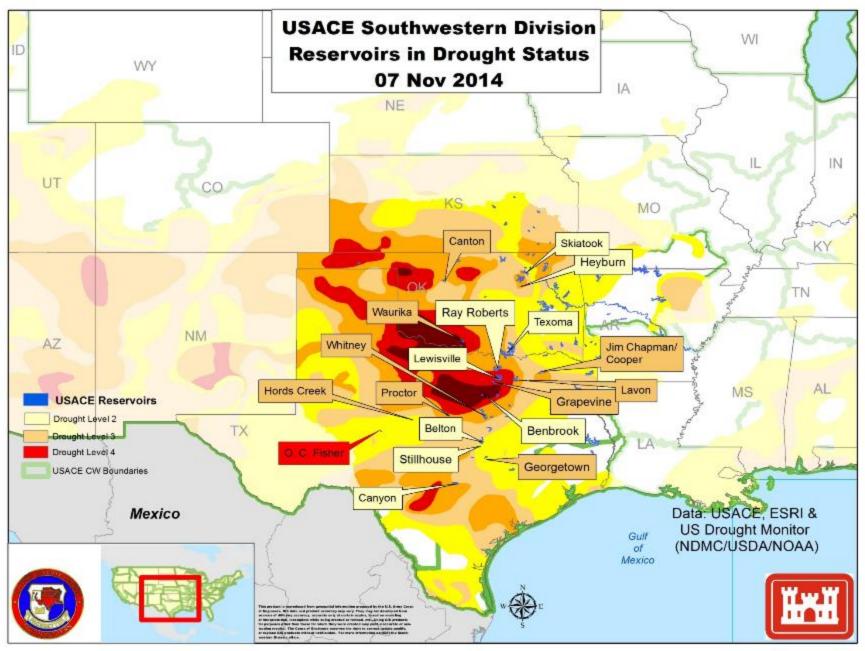




USACE Southwest Division Reservoir Floodfight







Before and After the Rain May 2015











SOUTHWESTERN DIVISION 2015 SPRING FLOOD





Across the Region

- Record rainfall in May bested the wettest month with statewide averages of more than:
 - 14.4 inches in OK,
 - 8.8 inches in TX.
- 51 flood control lakes in flood pool
- 23 flood control lakes in surcharge pool
- More than \$13 billion of damages prevented.





Southeast Flooding October 2015

USACE Dam Safety Engineer Support assessed 652 locally owned dams and re-assessed 75 additional highest concern dams. Excellent use of USACE technical dam expertise in support to the state of South Carolina and communities!





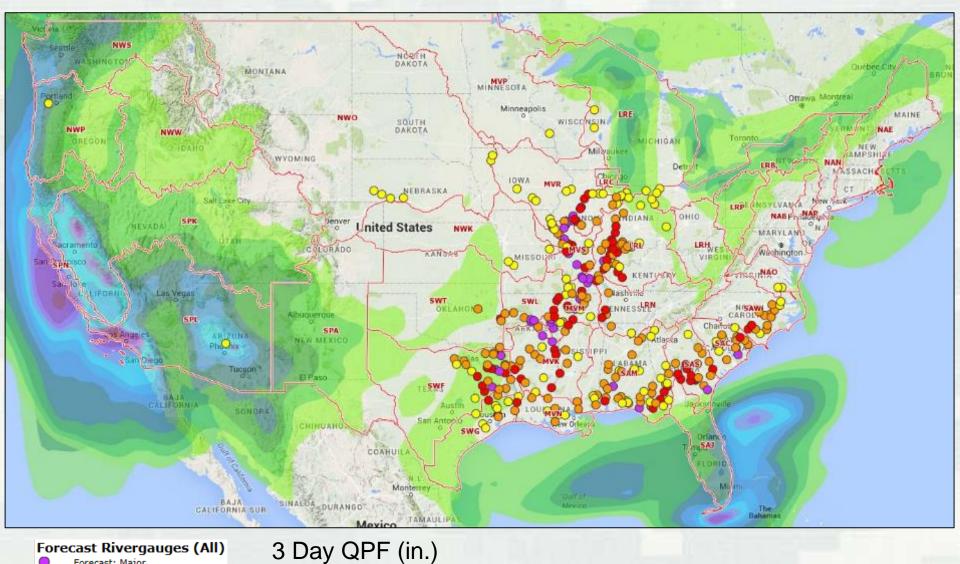
USACE provided coastal engineers to support FEMAs preliminary Damage Assessment Teams for non-federal engineered beaches to capture the damage/erosion from severe storms.

USACE Charleston District coordinated with FAA, FEMA, State of SC, Air Ops Division to conduct six critical

Unmanned Aerial Systems (UAS) flights 0-11 October as a FEMA mission to inspect private dams impacted by flooding in the Columbia area. Missions flown include 4 dams, Andrews Airport and an area hit hardest from the flooding. Imagery collected was utilized to create user interactive, three dimensional data.



National – Forecasted Gauges and Rainfall 02 JAN 2016



LNNGAG

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Forecast Rivergauges (All) Forecast: Major

Forecast: Moderate

Forecast: Minor

Forecast: Action

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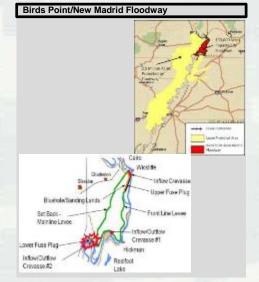


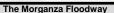
USACE Operations in the Mississippi River Valley

UNCLASS/FOUO

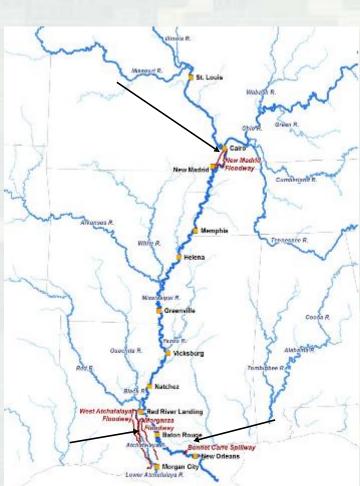


- The Mississippi River Watershed: world's 3rd largest &drains 41% of the U.S.
- USACE operates Flood Risk Management projects, comprised of dams, levees, channel stabilization, tributary improvements and floodways to enable navigation and protect life, property and industry throughout this basin.





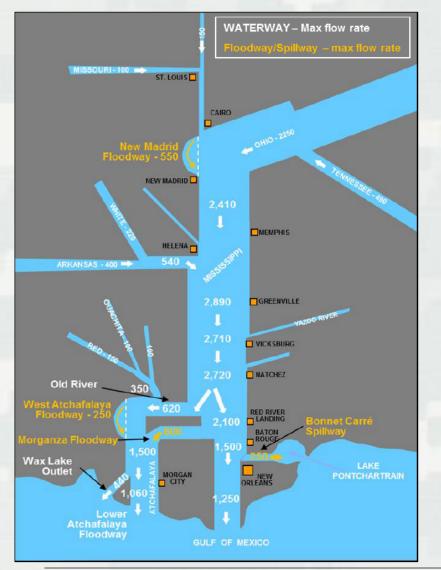




- Most significant: Mississippi River & Tributaries (MR&T) Project - extends from Cape Girardeau, MO, to Venice, LA.
- Constructed cost of \$14 billion
- Prevented over \$612 billion in flood damages
- Protects 35,000 square miles of flood plain, where 4.5 million Americans live, and vital American energy, navigation, rail, and port facilities are located.



Mississippi River and Tributaries (MR&T) Project



- Floodways & Spillways -- constructed to protect people, property and navigable waterways
 - Reduce flood stages by diverting water
 - Are controlled by USACE, coordinated with civil authority
 - Operational decision with MG Wehr (CG, Mississippi Valley Division)
- Decisions based on river levels and flow rates
 - Birds Point-New Madrid Ohio River at Cairo, IL over 60 feet and rising
 - West Atchafalaya Mississippi River at at Simmesport over 58 feet
 - Morganza Mississippi flow is over 1.5M cfs, or over 57 feet at floodway
 - Bonnet Carre Mississippi River over 1.25M cfs at spillway or 17.0 feet at New Orleans or faster than



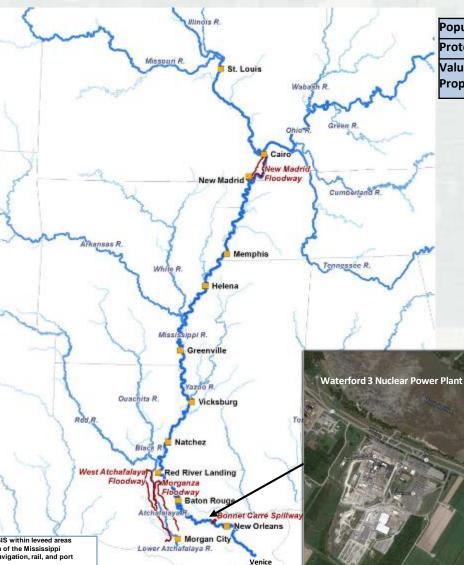


USACE Operations protecting Americans and commerce along the Mississippi River Valley

UNCLASS/FOUO



Critical Infrastructure	Counts
Within Leveed Areas	
Airports	139
Broadcast Comm	247
Chemical Industries	678
Colleges Universities	75
Correctional Facilities	85
Electric Substations	434
Emergency Medical	90
Firestations	342
Firestations_EM	202
Fossil Fuel Power	160
Heliports	80
Hospitals	80
Hydro Power	8
Intermodal Shipping	51
Natural Gas Storage	3
Nuclear Power	1
Petroleum Bulk Stations	45
Police	288
Potable Water	22
Schools	1020
Wastewater Plants	34
Total Critical	4084
Infrastructure	



Population at Risk	4.5 million
Protected square miles	35,000
Value of Protected	\$531 Billion
Property	

USACE Flood Fight Support		
FCCE Funds issued (Mississippi River Support)	\$3,242,700	
Sandbags issued	937,000	
Pumps issued	12	
Poly (Plastic) issued	510 Rolls	
HESCOs issued	1200 feet	
Sandbag Machines issued	2	
Technical Assistance	MO, IL, IN,	
provided to:	OH, TN, LA,	
	MS, MS,	
	TX, AR, OK	

*This analysis was completed using GIS within leveed areas from Cairo South along the main stem of the Mississippi which are vital to American energy, navigation, rail, and port facilities.



USACE Partners w/the Army National Guard during the Mississippi River Flood Fight





WHO: United States Army Corps of Engineers (USACE) & the Army National Guard (ARNG) WHAT: Partnering during the Winter Flood Fight

WHERE: Missouri and Louisiana

WHEN: 6 JAN 2016 - present

WHY: America's Army in support of the American People



KEY LINES OF EFFORT:

- USACE local government liaisons teamed w/the Missouri ARNG to survey impacted communities in and around St Louis in order to assess post-flood debris removal requirements.
- USACE & Louisiana ARNG (LAARNG) Soldiers continue to patrol levees to spot signs of trouble as part of the USACE Vicksburg District flood fight efforts.
- LAARNG Soldiers to fill 9,225 ft of HESCO barriers provided by USACE prior to expected river flooding.
- USACE and LAARNG engaged in infrastructure protection effort of the Atchafalaya basin on the Bayou Chene Project along the Atchafalaya River.

KEY MESSAGES:

- America's Army is employing critical capabilities to protect people and property during the Mississippi River Flood Fight.
- USACE Technical Capabilities are a force multiplier to a fully engaged Army National Guard.



MVK: Michael Dale and Keith Gaskin of the Southeast Arkansas Lake Village Sector inspection team surveys an area of possible seepage to compare it to the river elevation.



MVK: VAO night crew coordination with the Louisiana ARNG.



MVN: Unmanned aerial of the Bonnet Carre' Spillway.



MVK: MAJ Shultz and Gov. John Bel Edwards (LA) meet at the Vidalia Convention Center.

Bayou Chene - Atchafalaya Backwater



USACE Assistance: State/Local Ops

Rock Placement

- Provide 20,000 tons of stone to complete the Bayou Chene closure
- Cooperative Agreement executed: 11 Jan 16
- Contract Award: 12 Jan 16
- Contractor expected to begin placement by 15 Jan 16



Emergency Management December 2016 Flood Fight



Operational Level Scalable Response: USACE Fwd Cell

- Task: Provide a forward presence for the <u>USACE Commanding General (CG).</u>
- Purpose: Enhance coordination with <u>national</u>/regional leaders and supporting or supported organizations.
- METL: 1) Enhance coordination with <u>national</u>/regional leaders and forward elements of federal agencies. 2) Report on progress of operations forward and key requirements. 3) Provide timely and accurate reporting on status of operations forward. 4) Provide immediate response and direction to USACE forward operations.
- Equipment: ECCV (DTOS)

LEVEL I (Basic day) :

Source	Personnel	Rank/ Grade
HQ	TF OIC	MG
HQ	Deputy TF OIC	COL
HQ	ESF #3 Cadre	GS
	Ops Officer/	
HQ	Analyst	04-5
HQ	Ops Analyst	CPT/Aide
HQ	Congressional LNO	GS
HQ	PAO (Public Affairs)	GS
DTOS	C4I Specialist	ECCV-TM
DTOS	C4I Specialist	ECCV-TM

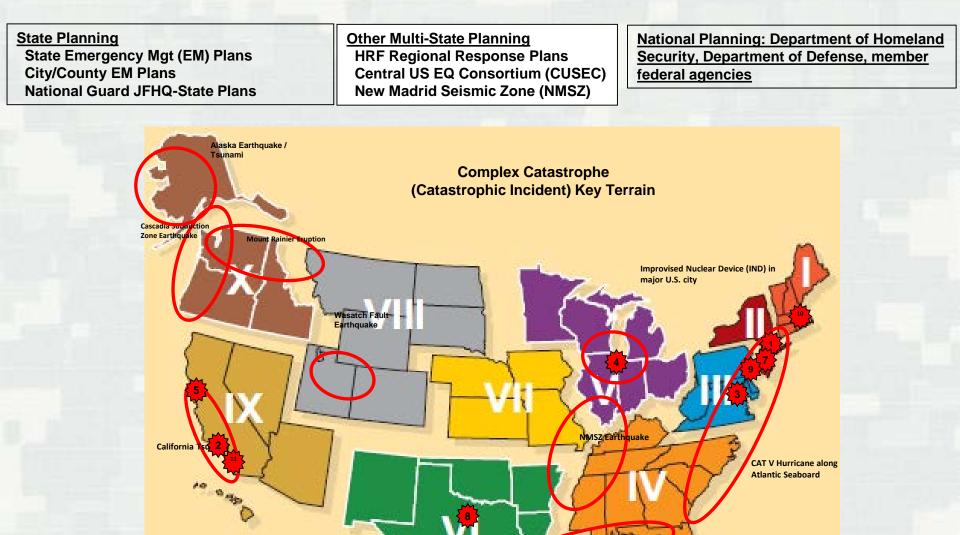
LEVEL II (Limited Night) : Add capacity

Source	Personnel	Rank/ Grade
HQ/MSC	Ops Officer	04-5
AUGMENTEE	Ops/Analyst	03-4

LEVEL III (Extended 24/7 Capability) : Add

LEVEL II (Limited Night) : Source	Personnel	Rank/ Grade
HQ/MSC	Ops Officer	04
HQ/MSC	Ops Analyst	03
HQ	ESF #3 TL/ATL	GS

Planning for Complex Catastrophes



CAT V Hurricane along Gulf

Coast

DHS Tier 1 Urban Area Security Initiative (UASI) Cities (number indicates priority)

Playbook Concept Overview

End State: An initial playbook for each of selected complex catastrophe (catastrophic incident) scenario for the first 7 days of response.

Command and Control

Number, level, and size of operational HQs and command relationships to maintain unity of effort with a large National Guard force under the direction of the Governor(s).

<u>Initial Operating Forces</u> Identifies the initial DoD capabilities anticipated to be needed to save lives, sustain lives, or to rapidly provide critical enabling capabilities based on identified gaps.

Authorities

Identifies the authorities required for Commander, NORTHCOM to expedite the response.

<u>Logistics</u> People, equipment, supplies, staging bases, movement and travel

Critical Infrastructure

Local/State critical infrastructure, National critical infrastructure, and Defense critical infrastructure for protection or rapid response to minimize cascading effects.

Details to be developed with States and FEMA . . . informed by agreed upon assumptions . . . and ending with agreement by FEMA, Governor(s) and DoD

Summary

- **USACE** is **trained and ready** to deploy capabilities to support Contingency Operations both domestically and OCONUS.
- USACE is actively engaged in reducing disaster risks by:
- PREPARING to RESPOND to natural and man-made disaster
- Assisting in short and long term RECOVERY
- Working with federal partners, state and local governments, NGOs, and Tribes in developing *MITIGATION* strategies and solutions
- Improving **RESILIENCE** and decreasing vulnerability to all USACE infrastructure



US Army Corps of Engineers BUILDING STRONG®

BACKGROUND INFO





BUILDING STRONG®

Gee Whiz Facts

- Over last 3 years, over 1700 personnel deployed, over \$71 Million in contingency response efforts, impacted multiple states in the U.S., 41 major disaster declarations, total 88 events to include USACE's own authority
- The FEST-A and FFE Enablers provide trained and ready operating force technical engineering capability to the CCMDs
- Met 27 USACE FEST-A requirements and assisted 3 Reserve FEST Teams by providing FFE enablers, OCO support was \$104 million



CONUS Roofing Contracts

REGION	CONTRACTOR/POC	AMOUNT	BASE YEARS
Texas to Maine	ThomCo Enterprises Inc. – SDVO	\$50M	05 JAN 2011
			3 yr base + 2 opt yrs
Texas to Maine	Enfield Enterprises, Inc. – HUBZone	\$50M	25 MAR 2011
			3 yr base + 2 opt yrs
Texas to Maine	ESA South, Inc. SDVO	\$45M	1 JUN 2014
			2 yr base + 3 opt yrs
Texas to Maine	Artesian Contracting Company, Inc. – HUBZone	\$45M	01 JUNE 2014
			2 yr base +3 opt yrs
Texas to Maine	S&M and Associates, Inc. – SB	\$45M	01 JUNE 2014
			2 yr base + 3 opt yrs
Texas to Maine T. L. Walla	T. L. Wallace Construction Inc. – Unrestricted	\$45M	01 JUNE 2014
			2 yr base + 3 opt yrs
Texas to Maine	Enfield Enterprises, Inc. – HUBZone	\$45M	01 JUNE 2015
			2 yr base + 3 opt yrs
Texas to Maine	Ironclad Services, Inc SDVO	\$45M	01 JUNE 2015
			2 yr base + 3 opt yrs
Texas to Maine	Coleman Construction – EDWO	\$45M	12 JUNE 2015
			2 yr base + 3 opt yrs
Texas to Maine	Barlovento, LLC – Unrestricted	\$45M	01 JUNE 2015
			2 yr base + 3 opt yrs
FEMA	A-Vet Roofing & Construction, LLC - 8(a)	\$10M	1 JUN 2014
REGION IV		1 (F) (F)	2 yr base +3 option y
FEMA	Artesian Contracting Company, Inc. – 8(a)	\$10M	01 JUNE 2014
REGION VI		and the second se	2 yr base +3 option y

Re-solicitation will be in 2019 & 2020

OCONUS Roofing Contracts

REGION	CONTRACTOR/POC	AMOUNT	BASE YEARS
Hawaii	T. L. Wallace Construction Inc. – Unrestricted	25M	01 AUGUST 2014
ndwali		25101	2 yr base + 3 option yrs
Puerto Rico	Ceres Environmental Services, Inc	\$25M	25 JUN 2015
Puerto Rico		ŞZJIVI	2 yr base + 3 option yrs
US Virgin Islands	GEC, LLC	\$25M	15 JUN 2015
		ŞZJIVI	2 yr base + 3 option yrs
Guam / CNMI	Omni Pinnacle, LLC	\$10M	01 APR 2011
		\$10101	3 yr base +2 option yrs

Re-solicitation will be in 2019 & 2020

Temporary Roofing Hotline Contract

REGION	CONTRACTOR/POC	AMOUNT	BASE YEARS
CONUS	ADI Contract Solution, LLC	Varies	1 AUG 2014
			1 yr base + 4 option yrs

