

Region VIII Planning Overview



Association of Continuity Professionals January 17, 2020



Federal Emergency Management Agency

Mission:

Helping people before, during and after disasters.









FEMA Mission: Helping people before, during, and after disasters.

BUILD A
CULTURE OF
PREPAREDNESS





1.1 Incentivize investments that reduce risk, including pre-disaster mitigation, and reduce disaster costs at all levels



1.2 Close the insurance gap



1.3 Help people prepare for disasters



1.4 Better learn from past disasters, improve continuously, and innovate READY THE
NATION FOR
CATASTROPHIC
DISASTERS



 Organize the "BEST" (Build, Empower, Sustain, and Train) scalable and capable incident worldorce



2.2 Enhance intergovernmental coordination through FEMA integration Teams



2.3 Posture FEMA and the whole community to provide life-saving and life-sustaining commodities, equipment, and personnel from all available sources



2.4 Improve continuity and resilient communications capabilities

III.
REDUCE THE
COMPLEXITY
OF FEMA





Streamline the disaster survivor and grantee experience



3.2 Mature the National Disaster Recovery Framework



3.3 Develop innovative systems and business processes that enable FEMA's employees to rapidly and effectively deliver the agency's mission



3.4 Strengthen grants management, increase transparency, and improve data analytics

FEMA Vision:

A prepared and resilient Nation.



FEMA Regions



FEMA Region VIII Profile

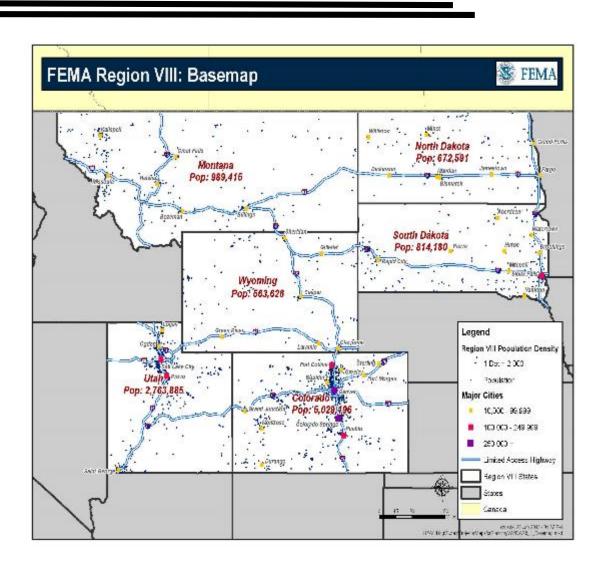
Six States

Population: 12.15 M

Area:

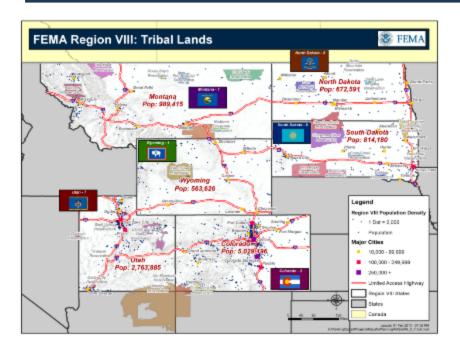
581,801 square miles

Most sparsely populated region





Region VIII Profile - Tribal



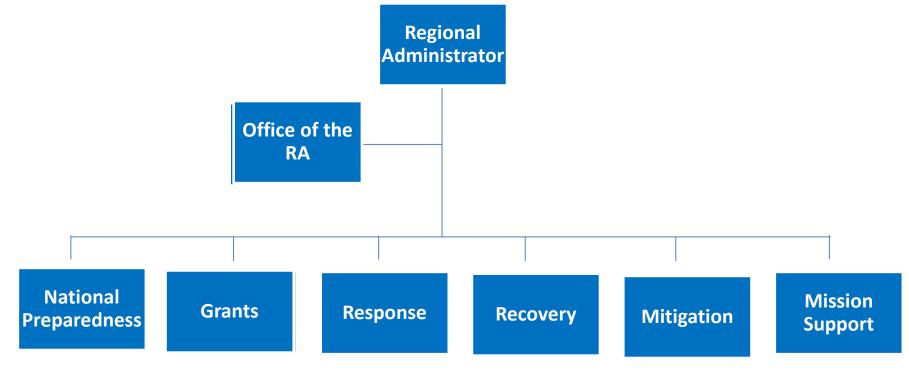
29 Federally recognized Tribes

COLORADO		SOUTH DAKOTA	
Southern Ute	11,259	Cheyenne River Sioux	8,470
Ute Mountain Ute	1,687	Crow Creek Sioux	3,500
MONTANA		Flandreau Santee Sioux	726
Confederated Salish & Kootenai	6,800	Lower Brule Sioux	1,308
Blackfeet Nation	16,500	Oglala Sioux	46,855
Chippewa Cree	3,323	Rosebud Sioux	21,245
Crow	12,000	Sisseton-Whapeton Sioux	12,300
Blackfeet/Nakoda Nation	2,851	Yankton Sioux	11,594
Assiniboine & Sioux	11,786	UTAH	
Northern Cheyenne	10,050	Confederated Tribes of Goshute	673
NORTH DAKOTA		Paiute Indian Tribe of Utah	892
Spirit Lake <u>Dakotah</u> Nation	6,677	Skull Valley Goshute	134
Standing Rock Sioux Tribe	15,568	Ute Tribe of Uintah & Ouray	19,182
Mandan, Hidatsa & <u>Arikara</u>	13,000	Northwest Shoshone Nation	12,300
Turtle Mountain Chippewa	8,331	WYOMING	
		Northern Arapaho Tribe	5,000
		Eastern Shoshone Tribe	2,605

^{*} Information obtained from 2010 Census; numbers reflect projected increases for 2013.



FEMA Region VIII Organization



- Operations Branch
- Logistics Branch
- Incident Support Branch
- Incident Management Assistance Team
- Planning Branch





Response

- Liaisons / FEMA Integration Teams (FIT)
- Incident Management Assistance Team
- Mobile Emergency Response Support
- Urban Search & Rescue





- Regional Response Coordination Center
 - -Emergency Support Functions
 - -Defense Coordinating Element
- National Response Coordination Center

Region VIII Planning Branch

Branch Chief

Operational Planner

Operational Planner

Operational Planner

GIS Coordinator

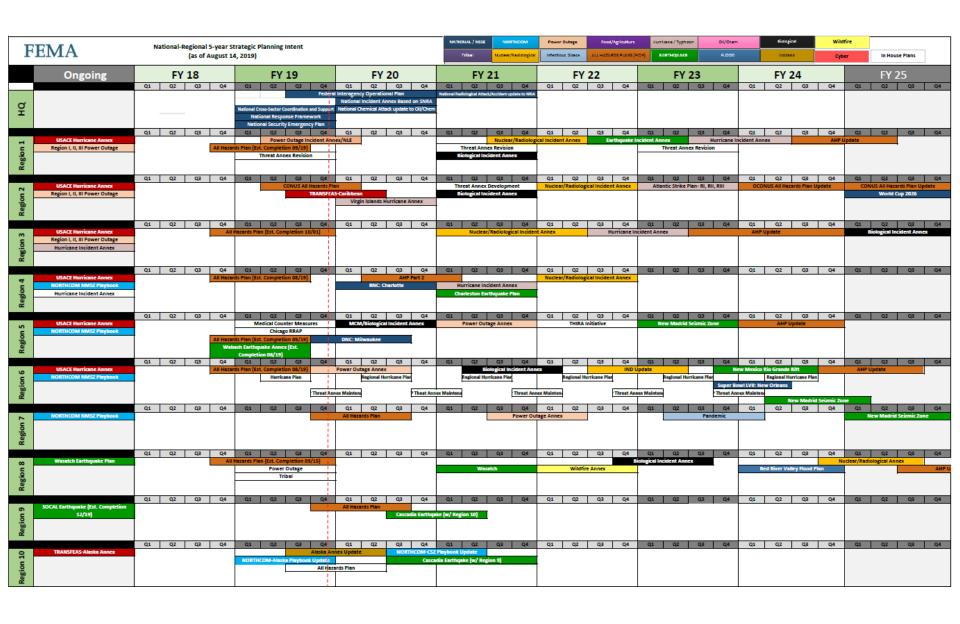
GIS Specialist

GIS Specialist

GIS Specialist



FEMA 5 Year Plan



Factors for Selecting Planning Efforts

- Most probable Regional Threats and Hazards
- Events with high Regional consequences
- "Command Interest" events, i.e. Cyber attack
- State and Tribal input
- Regional Administrator direction





Regional Threats

- ☐ Information sourced from the Region VIII Threat and Hazard Identification and Risk Analysis (THIRA)
 - Historic disaster occurrence
 - Degree of human impact
 - Mitigation modeling



Threats and Hazards of Concern
Natural Hazards
Flood
Winter Storm
Wildfire
Severe Summer Storm
Landslide/Mudslide
Human Pandemic
Drought
Tornado
Earthquake
Avalanche
Animal Disease
Space Weather
Technological
Dam Failure
Hazardous Materials Release
Biological/Chemical Food Contamination
Human-Caused
Armed Assault
Civil Unrest
Chemical/Biological/Radiological/Nuclear (CBRN) Attack
Cyber Infrastructure Attack
Cyber Data Attack

Potential Impacts This Winter and Spring

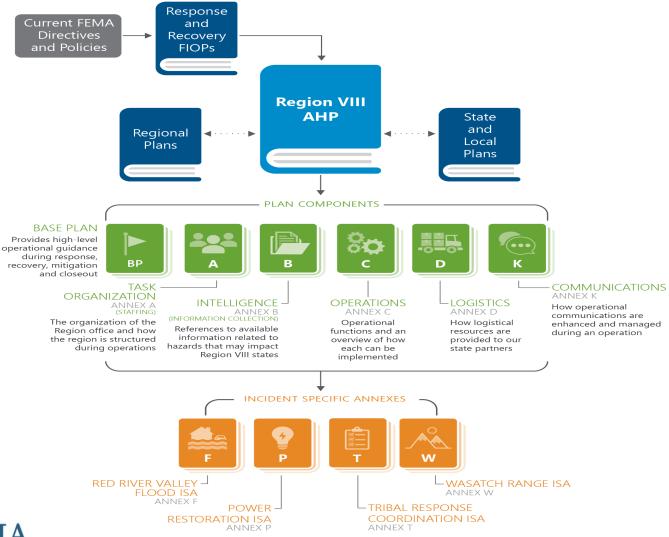
- Region begins monitoring potential impacts in Fall
 - Work with NWS on flood forecasts
 - GIS from review risks, flood history, mitigation measures
 - Work with USACE to analyze dam releases and technical assistance
- Unusually high streamflow, water levels, and abnormally wet soil suggest the following potential impacts for the upcoming winter and spring seasons:
 - Rivers freezing above flood stage
 - Freezing of overland flooding
 - Widespread ice jams, including on some rivers that are not usually affected by ice jams
 - Widespread record flooding this Spring



FEMA Region VIII 5 Year Plan

	On	going		FY	18			FY	19			FY	20			FY	21			FY	22	
			Q1	Q2	Q3	Q4	Qi	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Qi	Q2	Q3	Q4
ИО				Federal Interagency Operational Plan National Radiological Attack/Accident update to NRIA National Cross-Sector Coordination and Support National Response Framework National Security Emergency Plan National Security Emergency Plan National Response Framework																		
			Qi	Q2	Q3	Q4	Qi	Q2	Q3	Q4	Qi	Q2	Q3	Q4	Qi	Q2	Q3	Q4	Qi	Q2	Q3	Q4
00	Wasatch E	arthquake Plan				All	Hazards Pla	ın (Est. Cor	npletion 0:)/15)												
5								Power	Outage							We	satch			Wildfir	e Annex	
<u>.</u> 2								Tr	ibal													
Regio	.11																					
NATIO	INAL / MSSE	NORTHCOM		Power I	Dutage		Food/	gricultu	n	Hurris	one/Typ	hoon		Di/Ore	m		Rio	agical		V	Vildfire	
3	Tribel	Nuclear/Redictory	al	Infection	e Dimos	I	LHAZAR	OS PLAN	S(FOR)	E.0	RTHQUA	CE		F.000			Vá	lcana			Cyber	

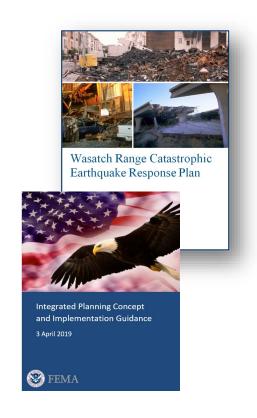
Region VIII Family of Plans





Wasatch 2021 FEMA Planning Integration

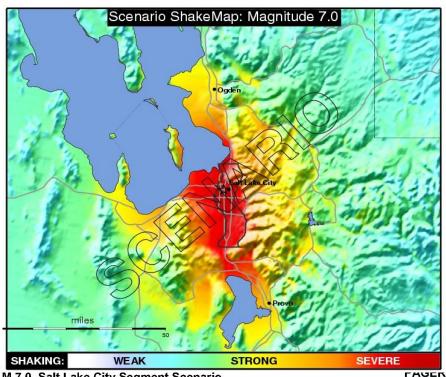








Planning Scenario



M 7.0, Salt Lake City Segment Scenario

Version 1
Created: 5 years, 5 months after earthquake

Origin Time: Mon 2004-05-24 16:51:19 UTC Location: 40.76°N 111.83°W Depth: 15 km

. -

Estimated Population Exposed to Earthquake Shaking

ESTIMATED I EXPOSURE		*	*	13k*	130k*	416k	336k	163k	1,109k	0
ESTIMATED MERCALLI		1	II-III	IV	V	VI	VII	VIII	IX	X+
PERCEIVE	SHAKING	Not felt	Weak	Light	Moderate	Strong	Very Strong	Severe	Violent	Extreme
POTENTIAL	Resistant Structures	none	none	none	V. Light	Light	Moderate	Moderate/Heavy	Heavy	V. Heavy
DAMAGE	Vulnerable Structures	none	none	none	Light	Moderate	Moderate/Heavy	Heavy	V. Heavy	V. Heavy

*Estimated exposure only includes population within the map area.

7.0 M earthquake on Salt Lake Segment of Wasatch Fault in December at 2:00 PM

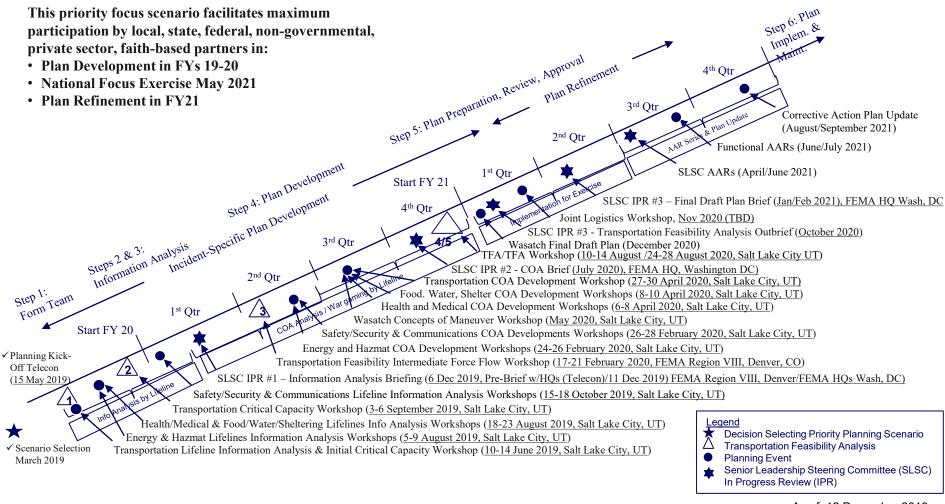
- Affects 80% of the population of Utah
- 3,123 Fatalities (▲621)
- Injured:
 - 11,207 require hospitalization (▲1,791)
 - 30,508 with minor injuries (**△**2,984)
- Displaced Population:
 - 88,912 households displaced (**△**2,580)
 - 54,798 people seek temporary shelter in public shelters (▲937)
- 60,663 buildings damaged beyond repair (A 4,421)
- 331 bridges heavily damaged (▲191)
- 349K households without potable water on day 1
 (▼ 30K); 339K on day 90 (▲52K)
- 248K households without power on day 1 (▼128K); 15K on day 30 (▼1K)
- 30 million tons of debris generated (▲9M); 1.2 million truckloads @ 25 tons/truck (▲369K)
- Economic impact (building/infrastructure): \$52.32B (▲\$19B)

(increase ▲ or decrease ▼ from 2012





Wasatch Range Catastrophic Earthquake Response Planning Timeline



As of: 12 December 2019



Leadership Direction

- 2017/18 Hurricane Seasons provided an opportunities to revisit response and restoration prioritization
- The new NRF prescribes unity of effort through stabilization of community lifelines
 - The rapid stabilization of lifelines is the organizing principle of the doctrine
 - Adds ESF 14, Private Sector Coordination



Community Lifelines





Enforcement/ Security



Fire Services



Search and Rescue



Government Services



Community Safety





Food



Water



Shelter



Agriculture





Medical Care



Patient Movement



Public Health



Fatality Management







Power (Grid)



Fuel





Infrastructure



Warnings, and Messages



911 and Dispatch



Responder Communications



Finance





Highway/Roadway



Mass Transit



Railway



Aviation



Maritime





Facilities



How will lifelines be used?

- Enhance the ability to gain, maintain, and communicate situational awareness for the whole community in responding to disasters
- Analyze impacts to the various lifelines and develop priority focus areas for each operational period during response
- Identify and communicate complex interdependencies to identify major limiting factors hindering stabilization
- National Response Framework updated to reflect use of lifelines in response planning

Lifelines Impact Summary

Lifeline Systems Analysis for Wasatch Fault















CASUALTIES & INJURIES¹

- Fatal (Level 4): 3,123
- Life threatening (L3): 1.800
- Serious (L2): 9,582
- Minor (L1): 30,508 L2-3 require hospitalization Salt Lake County: >90% all casualties & injuries

MEDICAL FACILITIES

- 65% of 46 total facilities expected to be damaged²
- 12 facilities extensively or completely damaged & expected nonoperational²
- ~21% (1,318) beds lost out of 6,269 total beds²
- Typically 80% beds filled³
- Operating on emergency diesel generator power²
- Numerous utility outages
- All Level I Trauma Centers in Salt Lake County are impacted¹
- Nearest operable Level II/III Centers are in Cache, Utah & Weber Counties¹

SHELTERING & FEEDING¹

- 88,912 displaced households
- 54,798 seeking shelter
- 25,000 tourists & 25,000 visitors are expected in Salt Lake County

 Salt Lake County: 94% of displaced / seeking shelter

WATER SERVICE

- 348,520 households are expected to be without water service; 88% in Salt Lake County & 12% Davis¹
- 32 of 48 water and wastewater treatment facilities impacted²
- Restoration times for water treatment facilities within Salt Lake County range from 7 to 90 days²

WASTEWATER²

 32 of 48 water and wastewater treatment facilities impacted

ROAD²

- ~38% of roads & 20% of road bridges will be extensively damaged
- Major transportation routes within the impact region will be unusable
- Transportation across the Jordan River will likely impossible in Salt Lake City and limited to the southwest portion of the mid-Salt Lake Valley area

AIR²

- SLC Airport likely to suffer moderate damage to structures & fuel tanks.
- SLC operations disrupted for weeks to months

RAIL²

 Significant damage to the rail system between Provo & Ogden near Salt Lake City is expected

COMMUNICATIONS²

- >438,000 households will likely be without wireline, cellular & Internet service
- Cellular towers and base stations will begin to fail within 4 to 8 hours from initial power disruption
- 19 wireline wire centers will be inoperable due to damaged facilities/ equipment or damage to fiber optic cables
- Broadcast services, including the statewide Emergency Alert System may be disrupted
- Electric power outages may impact the Communications Sector & slow restoration
- Communication issues will slow response & recovery efforts across all Lifelines

POWER

- Outages expected to impact 1,635,800 people across 10 counties²
- 247,846 households without power on Day 11
- Power restoration would require up to 9 days²
- Cascading effects likely to cripple activity in the area, affecting all other Lifelines efforts²

PETROLEUM²

- Gas stations expected to be inoperable until power restored & tanks repaired
- Fuel will need to be brought in by road or rail
 Pogional refinent
- Regional refinery disruption up to 6 months

NATURAL GAS²

- Widespread service disruptions during repairs
- Disrupted lines increase the possibility of fires

POLICE STATION DAMAGE²

• Complete: 13 of 104 • Extensive: 16 of 104

FIRE STATION DAMAGE²

- Complete: 20 of 208
- Extensive: 27 of 208
- Numerous fires following the earthquake event are expected due to pipeline & electrical grid damage

GOVERNMENT¹

- Complete: 225 of 1,815Extensive: 183 of 1,815
- ~23% of government buildings extensively or completely damaged

DAMS²

 No dam and water control features are expected to experience damage levels reaching the extensive or complete damage states

<u>HAZMAT</u>

- Significant health and environmental impacts are possible via ruptures
- Earthquake direct effects are expected to impact 16 of 22 chemical facilities located in the area
- Two facilities are expected to receive extensive damage
- One of the extensively damaged facilities has 150 tanks totaling 500,000 gallons liquid capacity

SOURCES: ¹FEMA Region 8 Wasatch Hazus Analysis (2018), ²DHS OCIA Analytical Baseline Study for a Salt Lake City Earthquake (2014)

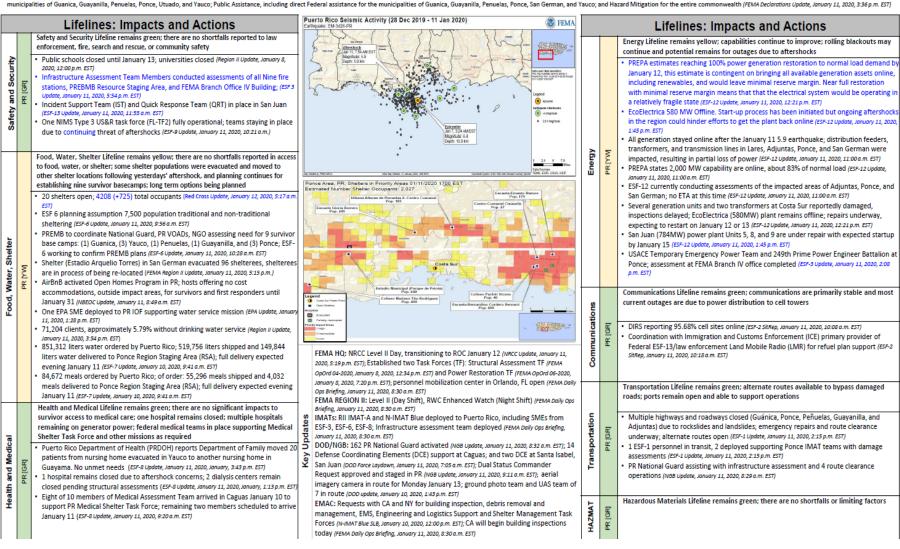




Senior Leadership Brief Puerto Rico Earthquake

January 12, 2020 6:00 a.m. EST

Summary Overview: USGS current forecast indicates there is a 68% probability of a Magnitude 5 earthquake in the next 7 days, as is to be expected as part of the seismic sequence since December 28. This message is being amplified to both survivors and responders. Although there was some degradation to the power distribution in the most impacted area, power generation continues to increase across the territory, including reserve capacity. Requests for assistance have been received from PR for capabilities to support the survivor base camps currently under construction and actions are underway to meet the requests by the expected delivery date. Governor Vazquez has signed the FEMA-State Agreement and submitted her request for a Major Declaration for both Public and Individual Assistance. All Lifeline assessments continue to improve. Declarations: PR Governor declared a state of emergency for all of Puerto Rico on January 7; Emergency Declaration (FEMA-EM-426) approved on January 7 for Category 8 limited to Direct Federal Assistance, under the Public Assistance program at 75% federal funding for all 78 municipalities in Puerto Rico (FEMA Ogs Briefing, January 8, 2020, 8:30 a.m. EST); Governor Vazquez requested a major disaster declaration for Individual Assistance for the



Lifeline Centric Line of Effort

<Plan Release Date (Month Day, Year)>

FEMA RVIII All-Hazards Plan – DRAFT

Appendix C-2-11: Health and Medical – Patient Movement

Tab 11 to Appendix C-2: Health and Medical – Patient Movement

Purpose: Safely move all disaster casualties to appropriate healthcare facilities.



Operational Assessment					
Obj#	Intermediate Objective	Key Indicator(s)	Source(s) of Indicator		
11.1	Assess patient movement requirements for regular EMS and disaster-related patient movement.	•	• ESF 8		
11.2	Determine needs for outside transport assets.	•	• ESF 8		
11.3	Execute patient movement.	All patients requiring transport of evacuation have been transported/evacuated. All patients have been tracked to a destination and are accounted for.	• ESF 8		
11.4	Stop out of area transports and conduct patient return.	 Patients still requiring medical care have a care plan established and/or have re-entered their prior care area. 	• ESF 8		
11.5	Demobilize medical transportation resources.	 All equipment, supplies, and personnel have been demobilized. 	• ESF 8		

Critical Considerations

- Pre-disaster activities develop updated planning factors that highlight gaps.
- · Coordinate with Air Movement Wing on fixed and rotor wing medical transportation.
- Coordinate with SLTT to supplement the MOU/MOAs with the National Ambulance Contract and the potential for joint staging and transportation management.

Lifeline Centric Line of Effort

FEMA RVIII All-Hazards Plan – DRAFT
Appendix C-2-11: Health and (Medical – Patient Movement

Organizational Roles & Responsibilities						
Organization (ESF/RSF/OFA)	Core Capabilities					
EA	Communicate necessary information.					
FEMA	National contracting of ambulances and EMS.					
FEMA Log	Potentially assist with large scale patient movement.					
HHS	Administration and prioritization of patient movement.					
NDMS	Manage other states and hospitals providing care.					
NDMS-DOD	Air traffic and airframe lift capacity.					
NDMS-HHS	Lead and coordinate with state.					
NDMS-VA	Reception and sorting of impacted area.					
NOAA/NWS	Communicate potential weather/water impacts to patient movement.					

	Resources						
Resource ID	Resource/ Team	Dept./ Agency	Capability Summary	# of Teams			
	NOAA/NWS	NOAA/NWS	Onsite or remote weather support				
	National Ambulance Contract	FEMA/HHS					
	Air support and EMS resources	DOD					
	JPAT	ннѕ	Patient tracking (joint patient assessment team)				
	VA FCC	VA					
	SAT		Service Access Team				
	GPMR Center		Global Patient Movement Requirement Center				
	Patient repatriation teams						
	Patient Movement Strike Team						
	Air ambulance		Fixed- and rotary-wing				
	Commercial aircraft		, ,				
	HAvBED system	NDMS	Hospital Available Beds for Emergencies and Disasters				
	Aeromedical resources	NDMS					

PSMA							
PSMA ID	PSMA Title	Туре					
HHS PSMA ESF 8 - 180	Patient Tracking: Joint Patient Assessment Tracking System (JPATS) Team	DFA					
HHS PSMA ESF 8 - 254	NDMS Patient Evacuation Support	DFA					
DOD PSMA ESF 8 - 74	Patient Movement Enablers	DFA					

Lifeline Centric Line of Effort

<Plan Release Date (Month Day, Year)>

FEMA RVIII All-Hazards Plan - DRAFT Appendix C-2-11: Health and Medical – Patient Movement

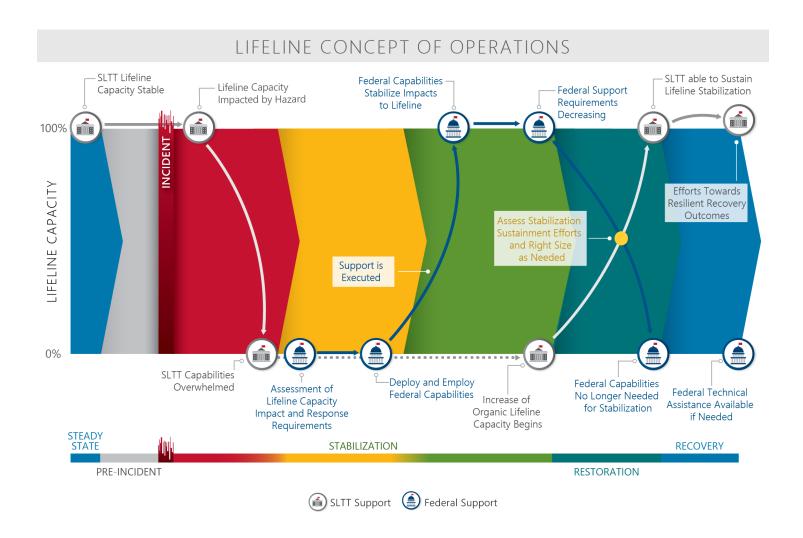
Execution Checklist						
Obj.#	Task	Responsibility				
11.1	Contact SLTT and assess impacts to the patient movement lifeline capability and capacity.	ннѕ				
11.2	In coordination with SLTT, identify gaps and determine the appropriate level of federal support required.	ннѕ				
11.2	Activate National Disaster Medical System with NDMS partners.	ннѕ				
11.3	Identify and establish collection points and reception locations.	ESF 8				
11.3	Identify key potential alternate care facilities to house patients before transport outside of the impacted area.	ESF 8				
11.3	Establish field medical units and alternate care facilities to treat patients while they await transport.	ESF 8				
11.3	Assess and track disposition of patients and availability of beds.	ESF 8				
11.3	Coordinate return of remains of patients who die while in NDMS system.	ESF 8				
11.3	Validate patient number counts and ensure current counts are contained in regional senior-leader briefings.	ннѕ				
11.4	Provide case management services and coordinate return of patients to appropriate locations, as required (SATs).	ннѕ				
11.5	Identify and execute reimbursements, as appropriate.	HHS				
11.5	Deactivate NDMS patient movement system.	HHS				

References

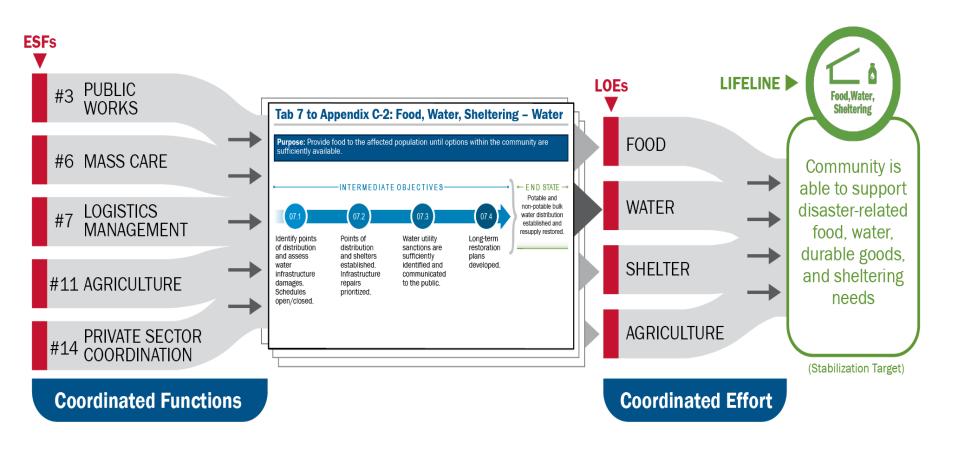
- Execution Checklist found in WebEOC at: [Link]
 Relevant PSMAs located in WebEOC at: [Link]
- National Response Framework (NFR) ESF #8 Public Health and Medical Services Annex (Jan 2008)

27 C-2-Tab-11-3

Lifeline Concept of Operations



Lifeline Concept of Support







Questions?