

FY14 Region VII Threat & Hazard Identification and Risk Assessment (THIRA)

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National Preparedness Goal - Core Capabilities

Terrorism Only

*RAHP focus**



PREVENT	PROTECT	MITIGATE	RESPOND	RECOVER
Planning	Planning	Planning	Planning	Planning
Public Information and Warning	Public Information and Warning	Public Information and Warning	Public Information and Warning	Public Information and Warning
Operational Coordination	Operational Coordination	Operational Coordination	Operational Coordination	Operational Coordination
Intelligence and Information Sharing	Intelligence and Information Sharing	Community Resilience	Infrastructure Systems	Infrastructure Systems
Interdiction and Disruption	Interdiction and Disruption	Long-Term Vulnerability Reduction	Critical Transportation	Economic Recovery
Screening, Search and Detection	Screening, Search and Detection	Risk and Disaster Resilience Assessment	Environmental Response / Health and Safety	Health and Social Services
Forensics and Attribution	Access Control and Identity Verification	Threats and Hazard Identification	Fatality Management Services	Housing
	Physical Protective Measures		Mass Care Services	Natural and Cultural Resources
	Risk Management for Protection Programs and Activities		Mass Search and Rescue Operations	
	Cybersecurity		On-Scene Security and Protection	
	Supply Chain Integrity and Security		Operational Communications	
			Public and Private Services and Resources	
			Public Health and Medical Services	
			Situational Assessment	

- Common to all Mission Areas
- Common to the Prevention & Protection missions only
- Common to the Response & Recovery missions only

**FEMA Region VII Regional All-Hazards Plan*



FEMA Region VII Threats & Hazards of Concern

Natural	Technological	Terrorism (Adversarial)
<i>Earthquake*</i>	<i>Dam Failure*</i>	<i>Improvised Nuclear Device (IND) Attack*</i>
River Flooding*	Chemical Spill or Release*	Improvised Explosive Device (IED) Attack*
<i>Tornado Outbreak</i>	Radiological Release*	Biological Attack (non-food)*
Winter Storm	Transportation System Failure*	Chemical or Biological Food/Food Production Attack*
<i>Foreign Animal Disease Outbreak*</i>	Biological Food Contamination*	Armed Assault*
<i>Influenza Pandemic*</i>		Radiological Dispersal Device (RDD) Attack*
Drought		<i>Cyber Attack (Data and Infrastructure)*</i>
Plant Disease		Chemical Attack (non-food)*
Space Weather*		Aircraft as a Weapon*
Grass/Wildland Fire*		

**Strategic National Risk Assessment (SNRA) Threats & Hazards; SNRA threats & hazards not included - Hurricane, Tsunami*

Bold/Italics: Threats & Hazards Assessed in the current Region VII THIRA

RED = RAHP Threats and Hazards chosen to develop the Regional Composite Scenario

2012 THIRA Comparison


(Natural Hazards chosen for assessment – SNRA, FEMA R7, R7 States & 2 Urban Areas)

Results:

- Good alignment with the Strategic National Risk Assessment (SNRA)
Exceptions: Space Weather & Volcanic Eruption
- Good alignment between R7 and State & Urban Areas
Exceptions: Winter Storm, Flood, Wild Fire

RAHP Hazard*

Correlation:

-  High (5-8)
-  Medium (3-4)
-  Low (1-2)

Natural Hazards	SNRA	Region VII THIRA	R7 States	R7 Urban Areas	Total
Human Pandemic Outbreak	1	1	3	2	7
Foreign Animal Disease Outbreak (FAD)	1	1	3		5
Earthquake*	1	1	2	1	5
Tornado/Windstorm*		1	2	2	5
Severe Winter Storm			1	2	3
Flood	1		1	1	3
Wildfire	1		1		2
Flash Flood			1		1
Severe Weather (lightning/hail)			1		1
Expansive Soils			1		1
Sinkhole			1		1
Landslide			1		1
Drought			1		1
Extreme Heat			1		1
Space Weather	1				1
Volcanic Eruption	1				1

2012 THIRA Comparison

(Technological Hazards chosen for assessment – SNRA, FEMA R7, R7 States & 2 Urban Areas)




Results:

- Fair alignment with the Strategic National Risk Assessment (SNRA)
Exceptions: Radiological Substance Release, Biological Food Contamination
- Poor alignment between R7 and State & Urban Areas.
Reason: Chemical Spill, Transportation Incident & Radiological Release

*RAHP Hazard**

Technological Hazards	SNRA	Region VII THIRA	R7 States	R7 Urban Areas	Total
Chemical Substance Spill/Release	1		3	2	6
Dam/Levee Failure*	1	1	2		4
Transportation Incident			1	1	2
Radiological Substance Release	1		1		2
Power Failure				1	1
Infrastructure Failure			1		1
Biological Food Contamination	1				1

Correlation:

-  High (5-8)
-  Medium (3-4)
-  Low (1-2)

2012 THIRA Comparison

(Threats chosen for assessment – SNRA, FEMA R7, R7 States & 2 Urban Areas)

Results:

- Good alignment with the Strategic National Risk Assessment (SNRA)

Exceptions: Aircraft, Food Contamination, Radiological

- Fair alignment between R7 and State & Urban Areas.

Exceptions: Improvised Explosive Device (IED) & Armed Assault

RAHP Threat*

Correlation:

 High (5-8)

 Medium (3-4)

 Low (1-2)

Terrorism (Adversarial)	SNRA	Region VII THIRA	R7 States	R7 Urban Areas	Total
Cyber Attack (Data)	1	1	3	2	7
Cyber Attack (Infrastructure)	1	1	3	1	6
Explosives Terrorism Attack (IED)	1		1	2	4
Nuclear Terrorism Attack (IND)*	1	1	1	1	4
Armed Assault	1		1	1	3
Biological Terrorism (non-food)	1			2	3
Chemical Terrorism (non-food)	1			1	2
Aircraft as a Weapon	1				1
Chem/Bio Food Contamination	1				1
Radiological Terrorism Attack	1				1

2012 THIRA Threat & Hazard Consequence Ranking

(Region VII, State and Urban Area THIRAs Only)

of times the T/H was chosen by R7/States/Urban Areas as most stressing any core capability across all mission areas

Threats/Hazards	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	35	48	60	89	as a %	
Cyber																																	X	27.05%
Pan Flu																																	X	21.43%
Foreign Animal Disease																															X	17.14%		
Earthquake																													X	12.50%				
Tornado/Windstorm																												X	9.64%					
Improvised Explosive Device																									X	6.99%								
Dam/Levee Failure																					X	6.79%												
Improvised Nuclear Device																		X	5.17%															
Severe Winter Storm												X	3.93%																					
River Flooding											X	3.57%																						
Armed Assault											X	3.04%																						
Extreme Heat									X	2.86%																								
Chemical Spill/HAZMAT							X	2.14%																										
Sinkholes						X	2.14%																											
Infrastructure Failure				X	1.79%																													
Drought			X	1.07%																														
Flash Flood			X	1.07%																														
Bio-terrorism			X	0.91%																														
Transportation Incident		X	0.71%																															
Radiological Incident	X	0.36%																																
Expansive Soils	X	0.36%																																
Chemical Attack	X	0.00%																																
Grass/Wildland Fire	X	0.00%																																
Power Failure	X	0.00%																																
Landslide	X	0.00%																																

- High Outlier (More than 3 times the standard deviation over the mean)
- High (greater than one-half the standard deviation over the adjusted mean)
- Medium (between one-half the standard deviation over and under the adjusted mean)
- Low (less than one-half the standard deviation over the adjusted mean)



Preliminary Region VII Out-year Assessment Priorities

2012 SNRA, R7, State, and Urban Area THIRA Alignment	Most Consequential <i>(based on # of times chosen as most stressing any Core Capability; R7, State, and Urban Area 2012 THIRAs)</i>		
	Low <i>(Chosen 0-4 times)</i>	Medium <i>(Chosen 5-22 times)</i>	High <i>(chosen 23-89 times)</i>
High Correlation (5-8 assessments)	Bio-terrorism	Chemical Spill	Cyber Attack* Pandemic Influenza* Foreign Animal Disease* Earthquake* Tornado/Windstorm*
Medium Correlation (3-4 assessments)		Dam/Levee Failure* Improvised Nuclear Device* Severe Winter Storm River Flood Armed Assault	Improvised Explosive Device
Low Correlation (1-2 assessments)	Drought Flash Flood # Transportation Incident # Radiological Incident Grass/Wildfire Expansive Soils # Chemical Attack Power Failure # Landslide #	Sinkholes# Extreme Heat Infrastructure Failure#	
SNRA Threats & Hazards not chosen for assessment in 2012: Space Weather, Volcanic Eruption, Biological Food Contamination (natural), Aircraft as a Weapon, Chemical/Biological Food Contamination (attack), Radiological Attack., Improvised Explosive Device			

- High Priority
- Medium Priority
- Low Priority

**Assessed in the current in the Region VII THIRA/improve*
Included as cascading events in large scale events already assessed.

Core Capabilities Analysis

CY 12 State Preparedness Report (SPR) Data

Core Capabilities ranked by any R7 State as less than average (< 3)	Mission Area	Worst ranking by a single state	POETE* 4 state average	# times mostly federal chosen to fill the gap
Housing	Recovery	1.00	1.95	3
Cybersecurity	Protection	1.40	1.80	2
Fatalities Management	Response	1.60	2.50	2
Screening, Search & Detection	Prevention/Protection	1.60	3.50	2
Access Control & Identity Verification	Protection	1.60	3.50	1
Operational Communications	Response	2.00	3.55	0
Interdiction & Disruption	Prevention/Protection	2.00	3.10	1
Risk Management for Protection Programs	Protection	2.00	3.15	1
Economic Recovery	Recovery	2.00	3.60	1
Natural & Cultural Resources	Recovery	2.40	2.75	0
Public Health & Medical Services	Response	2.40	3.05	1
Mass Care Services	Response	2.60	3.30	1
Risk & Disaster Resilience Assessment	Mitigation	2.60	3.80	1
Intel & Info Sharing	Prevention/Protection	2.80	3.14	1
Mass Search & Rescue	Response	2.80	3.45	1

* POETE = Planning, Organization, Equipment, Training & Exercise elements not considering mutual aid

FY14 Region VII THIRA (March 2014)

- Align with revised CPG-201 (*THIRA Guidance*)
- Review and alignment with final RAHP planning factors
- Incorporate likelihood factors
- Revise current impacts - more quantifiable
- Add granularity to Capability Targets – National Framework & Federal Interagency Operation Plan (FIOP) Critical Tasks
- Assess 1 additional threat (*IED*)
- Complete Capability Estimation for 13 Core Capabilities
- Continued alignment with States & Urban Area THIRAs - CY13 revisions due 31 December
- Use Unified Reporting Tool for submission



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