

# **THREAT & HAZARD IDENTIFICATION AND RISK ASSESSMENT (THIRA)**

**Clark Regional Emergency Services  
Agency  
Clark County Washington  
2022**



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## Promulgation Statement

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I am pleased to present the 2022 update of the Clark County Threat and Hazard Identification and Risk Assessment (THIRA). This assessment provides information and context to assist participants in coordinating a comprehensive approach to all-hazard emergency management

It supersedes all previous editions and the actions described conform to the Washington State Comprehensive Emergency Management Plan, the Clark County Comprehensive Emergency Management Plan and the National Preparedness Goal. This assessment was developed in cooperation with community partners and agencies in Clark County government and the cities of Battle Ground, Camas, La Center, Ridgefield, Vancouver, Washougal, the Cowlitz Indian Tribe, and the Town of Yacolt.

The signed original of this assessment is on file at CRESA. Distribution to partners will be by digital means.

This assessment is effective from the date of signature of the CRESA Director

  
Dave Fuller, Director CRESA

08/01/2022  
Date

# Introduction

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## *The National Preparedness Goal*

The *National Preparedness Goal, Second Edition* (2015) defines what it means for all communities to be prepared for the threats and hazards that pose the greatest risk to the security of the United States. The National Preparedness Goal (“the Goal”) is:

*A secure and resilient Nation with the capabilities required across the whole community to prevent, protect against, mitigate, respond to, and recover from the threats and hazards that pose the greatest risk.*

The Goal identifies 32 distinct activities, called **core capabilities**, needed to address the greatest risks facing the Nation. The Goal organizes these core capabilities into five categories, called **mission areas**. Some core capabilities apply to more than one mission area. For example, the first three core capabilities—Planning, Public Information and Warning, and Operational Coordination—are **cross-cutting capabilities**, meaning they apply to each of the five mission areas.

The National Preparedness Goal describes the five mission areas as follows:

- **Prevention:** Prevent, avoid, or stop an imminent, threatened, or actual act of terrorism.
- **Protection:** Protect our citizens, residents, visitors, and assets against the greatest threats and hazards in a manner that allows our interests, aspirations, and way of life to thrive.
- **Mitigation:** Reduce the loss of life and property by lessening the impact of future disasters.
- **Response:** Respond quickly to save lives; protect property and the environment; and meet basic human needs in the aftermath of an incident.
- **Recovery:** Recover through a focus on the timely restoration, strengthening, and revitalization of infrastructure, housing, and a sustainable economy, as well as the health, social, cultural, historic, and environmental fabric of communities affected by an incident.

The mission areas and core capabilities organize the community-wide activities and tasks performed before, during, and after disasters into a framework for achieving the goal of a secure and resilient Nation.

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## *Using the THIRA*

The THIRA sets a strategic foundation for putting the National Preparedness Goal into action. Communities complete the THIRA on a multi-year cycle, as it enables them to assess year-over-year trends in changes to their capabilities, while still periodically reviewing the capability targets to keep them relevant.

The THIRA process starts with Identifying and Assessing Risk. **Risk** is the potential for an unwanted outcome resulting from an incident or occurrence, as determined by its likelihood and the associated consequences. In the THIRA, communities identify risks with the potential to most challenge their capabilities and expose areas in which the community is not as capable as it aims to be. These areas, or **capability gaps**, create barriers in a community’s ability to prevent, protect against, mitigate, respond to, and recover from a threat or hazard. Understanding the risks they face will make it easier for communities to determine what level of capability they should plan to build and sustain. Communities can use the information that comes from the THIRA

process to answer five key strategic questions about their preparedness risks and capabilities (see Figure 1).



**Figure 1**

Since 2012, communities have used the THIRA to answer these questions, helping them better understand the risks their communities face. This helps communities make important decisions on how to prevent, protect against, mitigate, respond to, and recover from the threats and hazards that pose the greatest risks.

In addition to the Identifying and Assessing Risk component of the National Preparedness Goal, communities use the THIRA for Estimating Capability Requirements. This involves determining the specific level of capability that best addresses a community's risks. These community-specific capability levels are what communities use to determine their current level of capability, identify their capability gaps, and identify how they can close those gaps.

At the end of the THIRA cycle, communities reassess their risks by completing the THIRA again and the process restarts. The outputs of the THIRA provide communities a foundation to prioritize decisions, close gaps in capability, support continuous improvement processes, and drive the other National Preparedness System components.

## The THIRA Process

### *Introduction to the Three Steps of the THIRA*

The THIRA is a three-step risk assessment completed every three years. It helps communities answer the following questions:

- What threats and hazards can affect our community?
- If they occurred, what impacts would those threats and hazards have on our community?
- Based on those impacts, what capabilities should our community have?

The THIRA helps communities understand their risks and determine the level of capability they need in order to address those risks. The outputs from this process lay the foundation for determining a community's capability gaps during the SPR process.

This section describes the three-step process for developing a THIRA (see Figure 2):



**Figure 2.**

1. **Identify Threats and Hazards of Concern:** Based on a combination of experience, forecasting, subject matter expertise, and other available resources, develop a list of threats and hazards that could affect the community. When deciding what threats and hazards to include in the THIRA, communities consider only those that challenge the community's ability to deliver at least ONE OR MORE core capability to a greater degree than any other threat or hazard; the THIRA is not intended to include less challenging threats and hazards.
2. **Give Threats and Hazards Context:** Describe the threats and hazards identified in Step 1, showing how they may affect the community and create challenges in performing the core capabilities. Identify the impacts a threat or hazard may have on a community.
3. **Establish Capability Targets:** Using the impacts described in Step 2, determine the level of capability that the community plans to achieve over time in order to manage the threats and hazards it faces. Using standardized language, create capability targets for each of the core capabilities based on this desired level of capability by identifying impacts, objectives, and timeframe metrics.

## The THIRA Process- Step 1

### *Threat and Hazard Identification.*

Based on a combination of experience, forecasting, subject-matter expertise, and other available resources, CRESA has developed a list of threats and hazards that could affect Clark County. When deciding what threats and hazards to include in the THIRA, CRESA considered only those that challenge our community's ability to deliver one or more core capability more than any other threat or hazard; the THIRA is not intended to include less challenging threats and hazards. As any one of these events is probable and will have significant impacts on Clark County; this **list is not prioritized based on probability or potential impact.**

#	Category	Type	Event Name	Terrorist Event?
1	Natural	Earthquake	CSZ Rupture Earthquake	No
2	Natural	Extreme Temperatures	Climate Change	No
3	Natural	Flood	Flood	No
4	Natural	Volcanic Eruption	Mt St Helens Eruption	No
5	Natural	Wildfire	Wildfire	No
6	Natural	Winter Storm / Ice Storm	Winter Strom	No
7	Technological	Dam Failure	Dam Failure	No
8	Technological	Hazmat Release - Chemical	Hazmat Spill	No
9	Human Caused	Civil Disturbance	Civil Unrest	No
10	Human Caused	Cyber Attack	Cyber Attack	No



## The THIRA Process- Step 2 Scenarios

### Context and possible impact

The context descriptions and impact estimates of the threats and hazards identified in THIRA Step 1 are used to inform THIRA Step 3 where CRESA, in conjunction with whole community partners, identified the level of capability we would like to achieve. When creating context descriptions and estimating impacts, CRESA considered community-wide sources, such as real-world incidents, subject-matter experts, exercises, response and recovery plans, modeling, or tools. By doing this, CRESA provides communities with key data points that they can use to determine how a threat or hazard may affect their community.

Please note that the most challenging impact may not always be the impact with the largest number. For example, it may be more challenging to provide medical care to a smaller number of individuals affected by a radiological attack (which may include additional consideration like decontamination or personal protective equipment) than a larger number of hurricane survivors.

### Scenario #1 Cascadia Subduction Zone Earthquake

Category **Natural** Type **Earthquake** Terrorism **NO**

#### Clark County Impact Scenario

A magnitude 9.0 earthquake occurs on the Cascadia Subduction Zone at 9:41 a.m. on a weekday, in February, causing up to six minutes of shaking and then causing secondary hazards including landslides, liquefaction, localized fires, collapsed buildings, hazmat spills and debris. Deep sedimentary basins under Vancouver cause amplified shaking leading to the collapse of most buildings over 10 stories tall. Critical infrastructure facilities across the county have been damaged and repair times are not known. Although rural residents are impacted less by the initial incident, power failures are widespread and government systems are nonexistent for weeks.

Bridge collapse makes transportation over the Columbia River impassable. The I-5 bridge has completely collapsed and the I-205 bridge is damaged to the point that only foot traffic is supported. Approximately 50,000 Oregonians and 150,000 Washingtonians are not able to cross the Columbia River to get home. Along I-5, the Lewis River bridges at Paradise Point and Woodland have collapsed effectively cutting off Clark County from the north. In addition the overpasses at exits 1C, 3, 7A and 14 will also collapse.

There is a dire need for medical services as approximately 70% of Clark County's hospital capacity is in Portland.

Over the next month there are thousands of aftershocks including at least five greater than magnitude 7.0 causing additional damage and secondary impacts to infrastructure and hindering response and recovery efforts in addition to the psychosocial impacts on society caused by the reality of constant earthquakes. Neighboring British Columbia, Oregon, and Northern California experience similar impacts.

Throughout the first several weeks civil unrest increases and there is an emergence of radical political groups using the disaster to their benefit, spreading misinformation through cyber-attacks

and using violence to undermine public confidence in the government. In some area's citizen militias declare themselves "in charge" in the absence of functioning government.

Oregon assets and resources usually shared with Clark County are held back and used in Oregon.

### Standardized Impact Estimates

Impact Category	Estimate	Impact Category	Estimate
Affected Healthcare Facilities And Social Service Organizations	9,326	People Requiring Long-Term Housing	24,412
Animals Requiring Shelter, Food, And Water	327,121	People Requiring Medical Care	4,882
Businesses Closed Due To The Incident	4,600	People Requiring Rescue	4,882
Customers (Without Communication Service)	98,583	People Requiring Screening	4,882
Customers (Without Power Service)	98,583	People Requiring Shelter	24,412
Customers (Without Wastewater Service)	98,583	People Requiring Temporary, Non-Congregate Housing	34,176
Customers (Without Water Service)	98,583	People With Access and Functional Needs (AFN) Affected	156,237
Damaged Natural And Cultural Resources And Historic Properties	44	People with AFN (Requiring Screening)	1,562
Exposed Individuals - Hazmat-Related Incidents	750	People With AFN (Requiring Accessible Long-Term Housing)	7,811
Fatalities	122	People With AFN (Requiring Accessible Shelter)	7,811
Hazmat Release Sites	15	People With AFN (Requiring Evacuation)	7,811
Jurisdictions Affected	9	People With AFN (Requiring Food and Water)	26,560
Miles Of Road Affected	2,665	People With AFN (Requiring Temporary, Non-Congregate Housing)	10,936
Partner Organizations Involved In Incident Management	29	People With Limited English Proficiency Affected	30,520
People Affected	508,683	Personnel	7
People Requiring Evacuation	24,412	Priority Intelligence Stakeholder Agencies/Entities	7
People Requiring Food and Water	335,730	Structure Fires	1,895

### Sources Used to Determine Estimates

Estimates determined by Washington State Emergency Management Division



## Scenario # 2 Climate Change (Extreme Temperatures)

Category **Natural** Type **Extreme Temperature** Terrorism **NO**

### Clark County Impact Scenario

It's late July and daytime temperatures have been above 100 degrees for three consecutive days and nighttime temps have been 85 degrees or more creating an extreme heat condition in Southwest Washington.

The lack of significant temperature drop at night has resulted in an increased drain on the electrical grid due to high usage rates around the clock. To protect the system, utility companies have proposed rolling blackouts to mitigate system overload.

An increase in EMS calls occurs as people succumb to heat stress/stroke/exhaustion. On the third day of the heat wave EMS response times triple from the average as EMS crews are stressed to respond to medical calls as well as an increase in other rescue calls related to warm weather, including three river drownings and two fatalities due to children left in a car.

Many local businesses have extended their opening hours to provide cooling centers, but this has led to an increase in theft and vandalism as the extreme temperatures exacerbate existing community tensions.

Homeless support agencies and the area council on the aging are working around the clock to provide support to highly vulnerable communities.

### Standardized Impact Estimates

Impact Category	Estimate	Impact Category	Estimate
Affected Healthcare Facilities And Social Service Organizations	13	People Requiring Long-Term Housing	3,551
Animals Requiring Shelter, Food, And Water	22,119	People Requiring Medical Care	37
Businesses Closed Due To The Incident	250	People Requiring Rescue	37
Customers (Without Communication Service)	1,200	People Requiring Screening	-
Customers (Without Power Service)	15,000	People Requiring Shelter	3,551
Customers (Without Wastewater Service)	1,200	People Requiring Temporary, Non-Congregate Housing	3,551
Customers (Without Water Service)	1,200	People With Access and Functional Needs (AFN) Affected	1,952
Damaged Natural And Cultural Resources And Historic Properties	2	People with Access and Functional Needs (Requiring Screening)	-
Exposed Individuals - Hazmat-Related Incidents	-	People With AFN (Requiring Accessible Long-Term Housing)	97
Fatalities	27	People With AFN (Requiring Accessible Shelter)	97
Hazmat Release Sites	-	People With AFN (Requiring Evacuation)	97
Jurisdictions Affected	8	People With AFN (Requiring Food and Water)	976
Miles Of Road Affected	2,665	People With AFN (Requiring Temporary, Non-Congregate Housing)	97
Partner Organizations Involved In		People With Limited English Proficiency	

Incident Management	10	Affected	7,630
People Affected	508,683	Personnel	-
People Requiring Evacuation	-	Priority Intelligence Stakeholder Agencies/Entities	-
People Requiring Food and Water	5,270	Structure Fires	-
<b>Sources Used to Determine Estimates</b>			
2021 Heat Event After Action Review/Report- Multnomah Co, Clackamas Co, Clark Co. .Annual reports from Clark County Public Health, Clark County Community Services, Clark County Council for the Homeless, Clark County Community Needs Assessment Report, WSDOT LEP Plan			

## Scenario # 3 Flood

Category **Natural** Type

**Flood**

Terrorism **NO**

### Clark County Impact Scenario

Southwest Washington experienced an unusually wet winter and spring with precipitation reaching or exceeding record levels. This has resulted in ground saturation and rivers and streams in the area are running at or near flood levels.

In late May, following several days of heavy rainfall, the Columbia River crests at 24 feet, 8 feet above flood stage. And, inundation reaches the 100-year threshold in several areas across Vancouver, Ridgefield and Unincorporated Clark County.

In Vancouver, hundreds of residents who live south of SR-14 have been asked to evacuate due to water over roadways. SR-14 is closed between I-5 and North Bonneville. A boil water notice has been issued for the City of Vancouver as the wastewater treatment plant has reported flooding in their treatment facility. Bridge lifts on the I-5 bridge have become more frequent due to high water; resulting traffic delays on I-5 are impacting EMS/Fire/LE response. More traffic has been diverted to surface streets causing the same issue.

### Standardized Impact Estimates

Impact Category	Estimate	Impact Category	Estimate
Affected Healthcare Facilities And Social Service Organizations	13	People Requiring Long-Term Housing	250
Animals Requiring Shelter, Food, And Water	750	People Requiring Medical Care	150
Businesses Closed Due To The Incident	50	People Requiring Rescue	75
Customers (Without Communication Service)	1,200	People Requiring Screening	-
Customers (Without Power Service)	-	People Requiring Shelter	2,000
Customers (Without Wastewater Service)	10,000	People Requiring Temporary, Non-Congregate Housing	50
Customers (Without Water Service)	10,000	People With Access and Functional Needs (AFN) Affected	50
Damaged Natural And Cultural Resources And Historic Properties	2	People with Access and Functional Needs (Requiring Screening)	-
Exposed Individuals - Hazmat-Related Incidents	-	People With AFN (Requiring Accessible Long-Term Housing)	200
Fatalities	20	People With AFN (Requiring Accessible Shelter)	200
Hazmat Release Sites	-	People With AFN (Requiring Evacuation)	200
Jurisdictions Affected	5	People With AFN (Requiring Food and Water)	200
Miles Of Road Affected	150	People With AFN (Requiring Temporary, Non-Congregate Housing)	200
Partner Organizations Involved In Incident Management	50	People With Limited English Proficiency Affected	500
People Affected	200,000	Personnel	-
People Requiring Evacuation	2,200	Priority Intelligence Stakeholder Agencies/Entities	-
People Requiring Food and Water	2,200	Structure Fires	-

## Sources Used to Determine Estimates

1996 Flood After Action Review/Report- Clark Co. NWS Flood assessment, Clark County Natural Hazard Mitigation Plan .Annual reports from Clark County Public Health, Clark County Community Services, Clark County Council for the Homeless, Clark County Community Needs Assessment Report, WSDOT LEP Plan

## Scenario # 4 Mt St Helens Eruption

Category **Natural** Type **Volcano** Terrorism **NO**

### Clark County Impact Scenario

9 a.m. - Wednesday, May 25: An earthquake with a magnitude of approximately 6.0 shakes Mount St. Helens and the entire north side of the summit begins to slide down the mountain. A giant landslide of rock and ice, larger than the 1980 slide, follows and is overtaken by an enormous explosion of steam and volcanic gases, which surges southward along the ground at high speed. The lateral blast strips trees from most hill slopes within 8 miles of the volcano and levels nearly all vegetation as far as 15 miles away. Approximately, 12 million trees are felled by the blast. The landslide debris, liquefied by the violent explosion, surges down the mountain at speeds in excess of 100 miles per hour. The avalanche floods Spirit Lake and roars down the valley of the Toutle River for a distance of 15 miles, burying the river to an average depth of 150 feet. The communities of Toutle and the town of Castle Rock are obliterated. Mudflows, pyroclastic flows, and floods add to the destruction, destroying roads, bridges, parks, and thousands more acres of forest. Simultaneous with the avalanche, a vertical eruption of gas and ash form a mushrooming column over the volcano more than 15 miles high. Ash from the eruption falls to southwest of the volcano covering the Portland metro region in up to 6 inches of powdery dust.

### Standardized Impact Estimates

Impact Category	Estimate	Impact Category	Estimate
Affected Healthcare Facilities And Social Service Organizations	10	People Requiring Long-Term Housing	1,700
Animals Requiring Shelter, Food, And Water	22,119	People Requiring Medical Care	50,000
Businesses Closed Due To The Incident	2,300	People Requiring Rescue	2,300
Customers (Without Communication Service)	50,000	People Requiring Screening	-
Customers (Without Power Service)	200,000	People Requiring Shelter	3,200
Customers (Without Wastewater Service)	50,000	People Requiring Temporary, Non-Congregate Housing	3,200
Customers (Without Water Service)	100,000	People With Access and Functional Needs (AFN) Affected	19,520
Damaged Natural And Cultural Resources And Historic Properties	25	People with Access and Functional Needs (Requiring Screening)	-
Exposed Individuals - Hazmat-Related Incidents	-	People With AFN (Requiring Accessible Long-Term Housing)	1,200
Fatalities	100	People With AFN (Requiring Accessible Shelter)	1,200
Hazmat Release Sites	-	People With AFN (Requiring Evacuation)	1,200
Jurisdictions Affected	8	People With AFN (Requiring Food and Water)	1,200
Miles Of Road Affected	2,665	People With AFN (Requiring Temporary, Non-Congregate Housing)	1,200
Partner Organizations Involved In Incident Management	100	People With Limited English Proficiency Affected	62,000
People Affected	508,000	Personnel	-
People Requiring Evacuation	23,000	Priority Intelligence Stakeholder Agencies/Entities	-
People Requiring Food and Water	253,685	Structure Fires	-

## Sources Used to Determine Estimates

AAR from 1980 eruption, projection data from Cascades Volcano Observatory, Annual reports from Clark County Public Health, Clark County Community Services, Clark County Council for the Homeless, Clark County Community Needs Assessment Report, WSDOT LEP Plan



## Scenario # 5 Wildfire

Category **Natural** Type

**Wildfire**

Terrorism **NO**

### Clark County Impact Scenario

On the morning of August 16,, thunderstorms moved across Southwest Washington starting multiple fires including the Wildcat Falls Fire, the Fly Creek Fire, and the S-8054 Fire. All three fires started in rugged multi jurisdiction terrain in northwest Skamania County and northeast Clark County. The fires gradually grew in size, since firefighters opted to use only indirect methods and water drops to fight the fires, due to the dangers of directly fighting the fires in the steep, mountainous terrain. State authorities closed off portions of the national forest where the fires were burning in an attempt to keep the fires boxed in. Fire officials noted the potential for the fires to become active and explosively spread under the right conditions despite their small size at the time.

On September 7 powerful east winds blew across the Pacific Northwest reaching speeds over 50 miles per hour causing the fires to explode in size as they raced westward and the Fly Creek Fire burning down portions of Yacolt, WA. The winds also blew down power lines sparking 13 spot fires, which quickly grew into a large blaze that merged with the Wild Cat Falls Fire within hours. Due to the rapid spread of the fires, and the imminent threat they posed to communities to the west including areas as far west as Battle Ground, mass evacuations were ordered in Clark County. Up to 7300 residents were at Level 3 "go now" with a further 23,786 residents placed at Level 2 "get ready". The evacuation orders were suddenly issued near midnight on Tuesday, September 8, sowing plenty of confusion and chaos in the ensuing evacuations. Evacuation assembly areas were set up at Lewisville Park with semi-supported sheltering (tents, campers, RV) set up in local school parking lots and supported sheltering set up in leased commercial real estate. In total over 13,000 residents were in county supported sheltering between September 7 and November 7.

Early on September 8 the Wildcat Falls Fire and the Fly Creek Fire merged south of Yacolt. The merger created a 313,110 acre complex fire, which was referred to as the Second Yacolt Burn. (The 1902 Yacolt Burn was the largest fire in Washington State history.)

On September 9 the fire quickly moved into and destroyed the unincorporated communities of Amboy and Fargher Lake as it continued its spread. This resulted in the total loss of over 375 structures and the permanent displacement of 1908 individuals. Seventeen fatalities were reported as individuals refused or ignored the September 7 evacuation order.

On September 10 fear somewhat subsided as firefighters made progress on containing both fires with improved weather conditions.

On September 11 the S-8054 Fire merged into the eastern portion of the Second Yacolt Fire increasing the size of the Second Yacolt Fire to 322,573 acres. During the following week, the onshore flow returned causing the Second Yacolt Fire to begin spreading eastward. This spread caused decreased air quality issues in Clark and Skamania Counties as well as counties in northwest Oregon; however, no additional evacuations are required as the spread into the unpopulated areas of Skamania and Clark Counties.

On September 23 the Second Yacolt Fire exceeded 400,000 acres in size in Clark, Cowlitz and Skamania Counties

On November 7 the final semi-supported shelter, operated in cooperation with the Cowlitz Indian Tribe, was closed, as the residents were able to return to their homes.

### Standardized Impact Estimates

Impact Category	Estimate	Impact Category	Estimate
Affected Healthcare Facilities And Social Service Organizations	1,123	People Requiring Long-Term Housing	1,908
Animals Requiring Shelter, Food, And Water	327,121	People Requiring Medical Care	2,354
Businesses Closed Due To The Incident	2,300	People Requiring Rescue	53
Customers (Without Communication Service)	62,000	People Requiring Screening	-
Customers (Without Power Service)	23,000	People Requiring Shelter	13,000
Customers (Without Wastewater Service)	17,000	People Requiring Temporary, Non-Congregate Housing	1,908
Customers (Without Water Service)	17,000	People With Access and Functional Needs (AFN) Affected	58,000
Damaged Natural And Cultural Resources And Historic Properties	17	People with Access and Functional Needs (Requiring Screening)	-
Exposed Individuals - Hazmat-Related Incidents	-	People With AFN (Requiring Accessible Long-Term Housing)	135
Fatalities	52	People With AFN (Requiring Accessible Shelter)	135
Hazmat Release Sites	3	People With AFN (Requiring Evacuation)	25
Jurisdictions Affected	5	People With AFN (Requiring Food and Water)	250
Miles Of Road Affected	1,100	People With AFN (Requiring Temporary, Non-Congregate Housing)	-
Partner Organizations Involved In Incident Management	52	People With Limited English Proficiency Affected	1,200
People Affected	508,683	Personnel	-
People Requiring Evacuation	23,786	Priority Intelligence Stakeholder Agencies/Entities	-
People Requiring Food and Water	13,000	Structure Fires	375
<b>Sources Used to Determine Estimates</b>			
Santiam Fire After Action Report from Clackamas County OR, office of Disaster Management, Annual reports from Clark County Public Health, Clark County Community Services, Clark County Council for the Homeless, Clark County Community Needs Assessment Report, WSDOT LEP Plan			

## Scenario # 6 Winter Storm

Category **Natural** Type **Winter Storm** Terrorism **NO**

### Clark County Impact Scenario

A severe winter storm began on January 30 lasting through February 22. The transition from a cold sub-freezing air mass over Washington and the Pacific Northwest at the start of February to a warmer moist air mass resulted in a continuous sequence of severe winter storm events, which included snow, ice, rain, high winds, flooding, landslides, and mudslides. The National Weather Service placed Eastern Washington in extreme winter weather conditions.

The event has impacted 18 Washington counties. Impact includes temporary residential evacuations for flooding, extensive road damage, road closures and detours, rail line closures, and airline cancellations, as well as extensive damage to homes, businesses, public utilities, electrical power systems, infrastructure, and property.

The effects of this storm have severely disrupted vehicle traffic across Stevens Pass, Snoqualmie Pass, and White Pass closing all three passes at the same time for the first time since 2008. These closures are significantly impacting commercial trucking to and from Eastern and Western Washington and the local ports.

Winter storm warnings have been issued for excessive snow accumulation. The next day a flood warning is issued as well as high-wind warnings. A countywide emergency was enacted to establish emergency load restrictions on vehicular traffic on county roads. This action was taken as the compounding freeze/thaw weather, continued high levels of precipitation, and environmental conditions created unstable road foundations, which led to damaged or destroyed roads. The County had more than 30 short and long-term road closures as well as 97 miles of damaged roadways consisting of road surfaces, subbase, eroded shoulders, damaged culverts, and damaged bridge abutments. Clark County Public Works reports a 15-foot road section of NE Lucia falls Road washed out.

The extensive rain and snowmelt caused six wastewater pipes, which lead into the Columbia River to spill out a mixture of storm runoff and limitedly treated sewage. Water levels threatened two local bridges as well as local city parks flooding. Volunteers and local community members filled sandbags to help save 25 houses and 30 businesses in the community. Sandbags were also deployed around municipal buildings in Camas and Washougal. The snow load on trees brought down trees and adjacent power lines. That, coupled with high winds, damaged power lines in the area with approximately 50% of residents without power for some time during the seven (7) days. Individuals with wells reported the inability to pump water after reserves were depleted. While public water systems were able to provide water based on reserves, supplies were down to roughly two days. The County requested generators through State EOC Logistics as public water systems were quickly reaching depletion and do not have generators to generate pumping equipment. This would have left 25% of the county population without a water supply.

Vegetative debris blocked roadways and hampered emergency access. The County took emergency measures to conduct debris clearing and removal to restore emergency access and routine traffic. Most of the emergency response activities were at a local level due to the extended nature of the event. The flooding, wind impacts, and snow/ice dams continued for several weeks masking the true extent of the response and damage.

### Standardized Impact Estimates

Impact Category	Estimate	Impact Category	Estimate
Affected Healthcare Facilities And Social Service Organizations	13	People Requiring Long-Term Housing	3,551

Animals Requiring Shelter, Food, And Water	22,119	People Requiring Medical Care	37
Businesses Closed Due To The Incident	250	People Requiring Rescue	37
Customers (Without Communication Service)	1,200	People Requiring Screening	-
Customers (Without Power Service)	15,000	People Requiring Shelter	3,551
Customers (Without Wastewater Service)	1,200	People Requiring Temporary, Non-Congregate Housing	3,551
Customers (Without Water Service)	1,200	People With Access and Functional Needs (AFN) Affected	1,952
Damaged Natural And Cultural Resources And Historic Properties	2	People with Access and Functional Needs (Requiring Screening)	-
Exposed Individuals - Hazmat-Related Incidents	-	People With AFN (Requiring Accessible Long-Term Housing)	97
Fatalities	27	People With AFN (Requiring Accessible Shelter)	97
Hazmat Release Sites	-	People With AFN (Requiring Evacuation)	97
Jurisdictions Affected	8	People With AFN (Requiring Food and Water)	976
Miles Of Road Affected	2,665	People With AFN (Requiring Temporary, Non-Congregate Housing)	97
Partner Organizations Involved In Incident Management	10	People With Limited English Proficiency Affected	7,630
People Affected	508,683	Personnel	-
People Requiring Evacuation	-	Priority Intelligence Stakeholder Agencies/Entities	-
People Requiring Food and Water	5,270	Structure Fires	-

#### Sources Used to Determine Estimates

Winter 2021 After Action Review, Washington State Emergency Management Division, Annual reports from Clark County Public Health, Clark County Community Services, Clark County Council for the Homeless, Clark County Community Needs Assessment Report, WSDOT LEP Plan



## Scenario # 7 Dam Failure

Category **Technological** Type **Dam Failure** Terrorism **NO**

### Clark County Impact Scenario

It has been an unusually cold winter and there is a deep snowpack in the Cascade Mountains. In early March, the NWS reports a warming trend over the next few days and an atmospheric river to bring massive amounts of rainfall to the areas.

On March 10, temperatures rise dramatically, and the rain has been falling for days, quickly melting winter snowpack and flooding rivers. Water in the Swift No. 1, Yale and Merwin reservoirs begin to rise to concerning levels. All three reservoirs are now at full pool level, and the Swift, Yale, and Merwin Dams are all spilling massive amounts of water.

On March 12 at 0700, a shallow magnitude 5.1 earthquake occurs near Mount St. Helens approximately 20 miles northeast of the Lewis River projects. PacifiCorp employees working in the area of Swift, Yale, and Merwin Dams all feel the earthquake as well as residents in Woodland, Longview, and in Vancouver. Social media is flooded with messages about the earthquake within minutes.

The earthquake causes liquefaction of the soils at the Swift and Yale Dams. Inspection of the Yale Dam reveals a large dip in the crest of the dam, some cracking, and water seeping from the settled area. As pool levels in the Swift Reservoir rise faster than spill flow, water crests the Swift Dam, causing an even quicker rise of water in the Yale Reservoir and water is observed flowing through the dip in the Yale Dam.

At 1300, the HCC receives a Yale Dam Breach High Level Alarm (measures high flow at Frasier Creek). Twenty minutes after the alarm the Yale Dam suffers a full breach and failure. This discharges about 24,000 cfs from Yale Reservoir over land, into Frasier Creek drainage area, and into the Lewis River. The deluge of upstream water is too much for the Merwin Dam to hold back and Merwin fails.

In Woodland, 11 miles downstream from the Merwin Dam, evacuation has begun. News of the earthquake and dam failures upstream have been circulating on social media for hours; an alert and warning has been activated. Traffic clogs Woodland streets as residents begin to evacuate.

### Standardized Impact Estimates

Impact Category	Estimate	Impact Category	Estimate
Affected Healthcare Facilities And Social Service Organizations	561	People Requiring Long-Term Housing	1,908
Animals Requiring Shelter, Food, And Water	327,121	People Requiring Medical Care	2,354
Businesses Closed Due To The Incident	2,300	People Requiring Rescue	352
Customers (Without Communication Service)	62,000	People Requiring Screening	-
Customers (Without Power Service)	23,000	People Requiring Shelter	13,000
Customers (Without Wastewater Service)	17,000	People Requiring Temporary, Non-Congregate Housing	1,908
Customers (Without Water Service)	17,000	People With Access and Functional Needs (AFN) Affected	27,000
Damaged Natural And Cultural Resources And Historic Properties	17	People with Access and Functional Needs (Requiring Screening)	-

Exposed Individuals - Hazmat-Related Incidents	-	People With AFN (Requiring Accessible Long-Term Housing)	135
Fatalities	137	People With AFN (Requiring Accessible Shelter)	135
Hazmat Release Sites	35	People With AFN (Requiring Evacuation)	25
Jurisdictions Affected	3	People With AFN (Requiring Food and Water)	250
Miles Of Road Affected	3,300	People With AFN (Requiring Temporary, Non-Congregate Housing)	135
Partner Organizations Involved In Incident Management	52	People With Limited English Proficiency Affected	875
People Affected	96,000	Personnel	-
People Requiring Evacuation	23,786	Priority Intelligence Stakeholder Agencies/Entities	-
People Requiring Food and Water	13,000	Structure Fires	-

#### Sources Used to Determine Estimates

PacifiCorp Dam Failure Plan, 2022 Dam Failure TTX-AAR, Annual reports from Clark County Public Health, Clark County Community Services, Clark County Council for the Homeless, Clark County Community Needs Assessment Report, WSDOT LEP Plan



**Scenario # 8 Hazardous Material Spill**Category **Technological** Type **Hazmat** Terrorism **NO****Clark County Impact Scenario**

8:30 a.m. on a Wednesday morning in early June a freight train derailed and rolled down an embankment along the Columbia River at the SR-14/192nd St. exit.

Parts from the front of the train lay on its side in the river and along the steep sloping riverbank. The train consisted of four diesel locomotives, 23 tank cars (pressurized and non-pressurized), 12 hopper cars, and two cryogenic liquid tank cars containing liquid oxygen (LOX). Initial assessment indicates that several of the pressurized tank cars containing chlorine and anhydrous ammonia have ruptured. Two of the LPG tank cars exploded on impact during the derailment causing a fire. The hopper cars containing ammonium nitrate lie on their sides and the contents have spilled onto the banks of the river. The locomotive diesel tanks have ruptured spilling diesel into the river. The cryogenic tank cars appear to be intact; however, several of the non-pressurized tank cars have released an unknown quantity of crude sulfate turpentine into the river.

As fire and police units respond calls begin to come into CRESA reporting strange smells and a gas cloud visible immediately northeast from the leaking rail cars. CRESA informs incident command of one elementary school, three assisted living facilities, and one urgent care clinic that are all within .75 miles of the crash site in the northeast direction. IC asks that a shelter in place message be sent to residents within 1.25 miles of the site.

9:00 a.m. - An approximate area of .25 miles from the derailment has been cordoned off with hazmat crews and rail crews busy containing the spill. An evacuation order for .5 miles has been issued impacting approximately 7340 people. CRESA is establishing an evacuation center and requesting support from State and local resources.

**Standardized Impact Estimates**

Impact Category	Estimate	Impact Category	Estimate
Affected Healthcare Facilities And Social Service Organizations	7	People Requiring Long-Term Housing	-
Animals Requiring Shelter, Food, And Water	150	People Requiring Medical Care	1,835
Businesses Closed Due To The Incident	23	People Requiring Rescue	367
Customers (Without Communication Service)	-	People Requiring Screening	-
Customers (Without Power Service)	-	People Requiring Shelter	5,872
Customers (Without Wastewater Service)	-	People Requiring Temporary, Non-Congregate Housing	1,468
Customers (Without Water Service)	-	People With Access and Functional Needs (AFN) Affected	734
Damaged Natural And Cultural Resources And Historic Properties	-	People with Access and Functional Needs (Requiring Screening)	-
Exposed Individuals - Hazmat-Related Incidents	7,340	People With AFN (Requiring Accessible Long-Term Housing)	-
Fatalities	-	People With AFN (Requiring Accessible Shelter)	587
Hazmat Release Sites	1	People With AFN (Requiring Evacuation)	734
Jurisdictions Affected	2	People With AFN (Requiring Food and Water)	367

Miles Of Road Affected	15	People With AFN (Requiring Temporary, Non-Congregate Housing)	146
Partner Organizations Involved In Incident Management	13	People With Limited English Proficiency Affected	587
People Affected	7,340	Personnel	-
People Requiring Evacuation	7,340	Priority Intelligence Stakeholder Agencies/Entities	-
People Requiring Food and Water	2,446	Structure Fires	-
<b>Sources Used to Determine Estimates</b>			
2016 BNSF Train Derailment AAR, Annual reports from Clark County Public Health, Clark County Community Services, Clark County Council for the Homeless, Clark County Community Needs Assessment Report, WSDOT LEP Plan			



## Scenario # 9 Civil Unrest

Category **Human Caused** Type **Civil Disturbance** Terrorism **NO**

### Clark County Impact Scenario

Recent decisions by the Supreme Court of the United States (SCOTUS) have sparked repeated and volatile public debate around the decisions in the week since their release. Those on both sides of the issues have staged massive protests of upwards of 1,000 people. There have been documented incidents of assault and destruction attributed to both sides. While most of the demonstrations start peacefully, agitators on both sides have been seen to begin their actions as night falls. Law enforcement has been criticized by both sides, being accused of supporting one side over the other and of respecting the rights of one group over the rights of the other. Unseasonably hot temperatures, ongoing economic frustration, and a diminishing sense of community have officials concerned that these demonstrations could turn extremely violent with little provocation.

Thursday, July 14, 0900:

A crowd of over 1700 people has gathered in downtown Vancouver to demonstrate and counter demonstrate about the SCOTUS decision. Although dispersed between the county courthouse, Esther Short Park and the waterfront the protesters and counter protesters quickly merge into one larger group. This group quickly turns violent as different factions within each group begin to fight.

At least 12 businesses were looted or vandalized and a Chevron convenience store gas station was set on fire leading to over 30 arrests. Many windows were broken and several nearby businesses closed on Monday. The people arrested face charges of assault, burglary, and theft. Police used a variety of equipment, including riot gear and helicopters, to disperse the crowd by 0200. Two police officers suffered minor injuries during the events.

According to reports, gunshots were fired in and around Clark College and five people were arrested. Some protesters threw rocks at police officers. The police responded by firing tear gas and beanbag rounds upon those protesting.

Twitter and Facebook postings and tweets are informing people where to protest the next day and what time to start. In addition, a disinformation drive has started on Twitter and Facebook to send law enforcement to wrong locations along with 911 lines being saturated by false reports of fires.

### Standardized Impact Estimates

Impact Category	Estimate	Impact Category	Estimate
Affected Healthcare Facilities And Social Service Organizations	32	People Requiring Long-Term Housing	23
Animals Requiring Shelter, Food, And Water	-	People Requiring Medical Care	1,200
Businesses Closed Due To The Incident	242	People Requiring Rescue	-
Customers (Without Communication Service)	120,000	People Requiring Screening	-
Customers (Without Power Service)	-	People Requiring Shelter	230
Customers (Without Wastewater Service)	-	People Requiring Temporary, Non-Congregate Housing	-
Customers (Without Water Service)	-	People With Access and Functional Needs (AFN) Affected	23
Damaged Natural And Cultural Resources And Historic Properties	3	People with Access and Functional Needs (Requiring Screening)	-

Exposed Individuals - Hazmat-Related Incidents	-	People With AFN (Requiring Accessible Long-Term Housing)	-
Fatalities	-	People With AFN (Requiring Accessible Shelter)	23
Hazmat Release Sites	-	People With AFN (Requiring Evacuation)	-
Jurisdictions Affected	16	People With AFN (Requiring Food and Water)	23
Miles Of Road Affected	35	People With AFN (Requiring Temporary, Non-Congregate Housing)	-
Partner Organizations Involved In Incident Management	32	People With Limited English Proficiency Affected	352
People Affected	242,000	Personnel	-
People Requiring Evacuation	252	Priority Intelligence Stakeholder Agencies/Entities	-
People Requiring Food and Water	252	Structure Fires	5
<b>Sources Used to Determine Estimates</b>			
PBEM 2020 response review, Annual reports from Clark County Public Health, Clark County Community Services, Clark County Council for the Homeless, Clark County Community Needs Assessment Report, WSDOT LEP Plan			

## Scenario # 10 Cyber Attack

Category **Human Caused** Type **Cyber Attack** Terrorism **NO**

### Clark County Impact Scenario

October 1: Employees from the Clark County Treasurer's Office receive an email from Human Resources (HR) about new benefits available during the current open enrollment period. The email instructs the user to sign a document stating they understand these benefits and send it back to HR by close of business to opt into these new programs. Some employees follow the instructions and submit their information while others report the email to Clark County IT as suspicious as the open enrollment period has just started and the short deadline seems unusual.

October 4: The Cybersecurity and Infrastructure Security Agency (CISA) releases an alert regarding phishing campaigns targeting state, local, tribal, and territorial (SLTT) government networks. The phishing emails mention required updates to important HR documents and contain a malicious attachment that automatically installs ransomware. After gaining access to the network, threat actors escalate privileges for administrator rights without victims' action or authorization.

October 5: Clark County IT sends a message stating they have received reports of an email that may be part of a phishing campaign and to immediately report any suspicious emails.

October 7: Clark County IT notices unusual traffic to an external IP address over a HTTP port leaving HR's payroll servers. IT staff begin to investigate the anomaly, but it occurs only for a few minutes and stops so they assume it was a one-time issue that has been resolved.

October 25:

8:00 a.m. - County IT help desk is inundated with reports of employees that are unable to log into their accounts/workstations using their credentials.

8:30 a.m. - A number of employee workstations display a red screen with a 72 hour timer counting down and the message reads: "Clark County has 72 hours to pay us 250 Bitcoins. Pay before the time runs out or your system will be wiped. As an incentive we will remind you every 24 hours of what we can do."

9:00 a.m. - Clark County Treasurer and County IT confirm that due to the ransomware all employee pay systems, tax revenue systems, utility payment systems, and billing systems at Clark County are no longer functioning.

October 26:

8:30 a.m. - Clark County has not paid the ransom. A team from WaTech out of Olympia is on site but unable to get control of Clark County's data.

9:00 a.m. - Both hospitals, CRESA, Clark PUD, Clark Regional Wastewater, and four county fire districts begin reporting Distributed Denial of Service (DDoS) attacks reporting all desktops and Voice over Internet Protocol (VoIP) systems are non-responsive.

October 27:

8:30 a.m. - Clark County has not paid the ransom. A team from CISA is on site but is still unable to get control of Clark County's data or stop the DDoS attacks.

9:00 a.m. - A social media account from someone claiming to be the attacker contains a warning to Clark County stating they are serious about the payment deadline. The post starts trending on social media, but skeptical local users comment that the account is fake. In response the alleged attacker account begins posting employee personally identifiable information (PII) with captions stating that they have more *"for the right price and the longer Clark County waits to pay, the worse it will get."*

October 28:

9:00 a.m. - CISA informs the Clark County manager of Clark County employee PII being advertised for

sale on the dark web. Of particular concern are the home addresses of law enforcement officers and court staff.

As the deadline for the ransom payment has passed all workstations remain locked. Several employees are reporting that not only have they still not received their October 25th direct deposit, but they are also noticing transactions on their personal accounts they have not made.

## Standardized Impact Estimates

Impact Category	Estimate	Impact Category	Estimate
Affected Healthcare Facilities And Social Service Organizations	9,326	People Requiring Long-Term Housing	-
Animals Requiring Shelter, Food, And Water	-	People Requiring Medical Care	-
Businesses Closed Due To The Incident	-	People Requiring Rescue	-
Customers (Without Communication Service)	-	People Requiring Screening	-
Customers (Without Power Service)	-	People Requiring Shelter	-
Customers (Without Wastewater Service)	-	People Requiring Temporary, Non-Congregate Housing	-
Customers (Without Water Service)	-	People With Access and Functional Needs (AFN) Affected	1,562
Damaged Natural And Cultural Resources And Historic Properties	-	People with Access and Functional Needs (Requiring Screening)	-
Exposed Individuals - Hazmat-Related Incidents	-	People With AFN (Requiring Accessible Long-Term Housing)	-
Fatalities	-	People With AFN (Requiring Accessible Shelter)	-
Hazmat Release Sites	-	People With AFN (Requiring Evacuation)	-
Jurisdictions Affected	32	People With AFN (Requiring Food and Water)	-
Miles Of Road Affected	-	People With AFN (Requiring Temporary, Non-Congregate Housing)	-
Partner Organizations Involved In Incident Management	52	People With Limited English Proficiency Affected	30,520
People Affected	508,683	Personnel	-
People Requiring Evacuation	-	Priority Intelligence Stakeholder Agencies/Entities	-
People Requiring Food and Water	-	Structure Fires	-

## Sources Used to Determine Estimates

HSIN information bulletins, CISA awareness training



# The THIRA Process- Step 3

## Core Capability Targets.

CRESA, in cooperation with partners, have establish capability targets which describe the level of capability our community's plan to work toward achieving. These capability targets are not a reflection current capability and may represent a long-term desired capability level. In developing these capability targets, CRESA considered what is required to address the impacts of its threat or hazard scenarios.

Only those core capabilities required by state and federal partners or most likely to be impacted by the threats and hazards identified have been included.

## Core Capabilities

### What are the Core Capabilities

The core capabilities are:

- Distinct critical elements necessary to achieve the National Preparedness Goal.
- Essential for the execution of each mission area:  
Prevention, Protection, Mitigation, Response,  
and Recovery.
- Developed and sustained through the combined efforts of the whole community.

### Prevention Mission Area Core Capabilities

Planning	Conduct a systematic process engaging the whole community as appropriate in the development of executable strategic, operational, and/or community-based approaches to meet defined objectives.
CRESA Target Capability	<b>Within every 5 year(s), update all emergency operations plans that define the roles and responsibilities of 29 partner organizations involved in incident management across 8 jurisdictions affected, and the sequence and scope of tasks needed to prevent, protect, mitigate, respond to, and recover from events.</b>
Public Information and Warning	Deliver coordinated, prompt, reliable, and actionable information to the whole community through the use of clear, consistent, accessible, and culturally and linguistically appropriate methods to effectively relay information regarding any threat or hazard, as well as the actions being taken and the assistance being made available, as appropriate.
CRESA Target Capability	<b>Within 24 hour(s) notice of an incident, deliver reliable and actionable information to 150000 people affected, including 10000 people with access and functional needs (affected) and 9000 people with limited English proficiency affected.</b>
Operational Coordination	Establish and maintain a unified and coordinated operational structure and process that appropriately integrates all critical stakeholders and supports the execution of core capabilities.
CRESA Target Capability	<b>Within 72 hour(s), of a potential or actual incident, establish and maintain a unified and coordinated operational structure and process across 5 jurisdictions affected and with 15 partner organizations involved in incident management. Maintain for 6 month(s).</b>

<b>Forensics and Attribution</b>	Conduct forensic analysis and attribute terrorist acts (including the means and methods of terrorism) to their source, to include forensic analysis as well as attribution for an attack and for the preparation for an attack in an effort to prevent initial or follow-on acts and/or swiftly develop counter-options.
CRESA Target Capability	<b>Within 4 hour(s) of a suspected terrorist attack, conduct outreach to the fusion center and Joint Terrorism Task Force (JTTF) in the community and identify 1 personnel assigned to support follow-up information sharing, intelligence analysis, and/or investigative actions associated with the collection, examination, and analysis of evidence, as well as the identification of perpetrators.</b>
<b>Intelligence and Information Sharing</b>	Provide timely, accurate, and actionable information resulting from the planning, direction, collection, exploitation, processing, analysis, production, dissemination, evaluation, and feedback of available information concerning threats to the United States, its people, property, or interests; the development, proliferation, or use of WMDs; or any other matter bearing on U.S. national or homeland security by Federal, State, local, and other stakeholders. Information sharing is the ability to exchange intelligence, information, data, or knowledge among Federal, State, local, or private sector entities, as appropriate.
CRESA Target Capability	<b>During steady state, and in conjunction with the fusion center and/or Joint Terrorism Task Force (JTTF), every 2 year(s), review ability to effectively execute the intelligence cycle, including the planning, direction, collection, exploitation, processing, analysis, production, dissemination, evaluation, and feedback of available information, and identify the 2 personnel assigned to support execution of the intelligence cycle. Then, within 8 hour(s) of the identification or notification of a credible threat, identify/analyze local context of the threat for the respective area of responsibility, and facilitate the sharing of threat information with 7 priority intelligence stakeholder agencies/entities in accordance with the intelligence cycle, and all dissemination protocols.</b>
<b>Interdiction and Disruption</b>	Delay, divert, intercept, halt, apprehend, or secure threats and/or hazards.
CRESA Target Capability	<b>Within every 8 hour(s) of the identification or notification of a credible threat, conduct outreach to the fusion center and Joint Terrorism Task Force (JTTF) in the community and identify 1 personnel assigned to support follow-up interdiction and disruption activities that may be undertaken against identified suspects and/or contraband.</b>
<b>Screening, Search, and Detection</b>	Identify, discover, or locate threats and/or hazards through active and passive surveillance and search procedures. This may include the use of systematic examinations and assessments, sensor technologies, or physical investigation and intelligence.
CRESA Target Capability	<b>Within 48 hour(s) of notice of a credible threat, conduct screening, search, and detection operations for 100 people requiring screening, including 25 people with access and functional needs (requiring screening).</b>

#### Protection Mission Area Core Capabilities

<b>Planning</b>	Conduct a systematic process engaging the whole community as appropriate in the development of executable strategic, operational, and/or community-based approaches to meet defined objectives.
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CRESA Target Capability	<b>Within every 5 year(s), update all emergency operations plans that define the roles and responsibilities of 29 partner organizations involved in incident management across 8 jurisdictions affected, and the sequence and scope of tasks needed to prevent, protect, mitigate, respond to, and recover from events.</b>
Public Information and Warning	Deliver coordinated, prompt, reliable, and actionable information to the whole community through the use of clear, consistent, accessible, and culturally and linguistically appropriate methods to effectively relay information regarding any threat or hazard, as well as the actions being taken and the assistance being made available, as appropriate.
CRESA Target Capability	<b>Within 24 hour(s) notice of an incident, deliver reliable and actionable information to 150000 people affected, including 10000 people with access and functional needs (affected) and 9000 people with limited English proficiency affected.</b>
Operational Coordination	Establish and maintain a unified and coordinated operational structure and process that appropriately integrates all critical stakeholders and supports the execution of core capabilities.
CRESA Target Capability	<b>Within 72 hour(s), of a potential or actual incident, establish and maintain a unified and coordinated operational structure and process across 5 jurisdictions affected and with 15 partner organizations involved in incident management. Maintain for 6 month(s).</b>
Access Control and Identity Verification	Apply a broad range of physical, technological, and cyber measures to control admittance to critical locations and systems, limiting access to authorized individuals to carry out legitimate activities.
CRESA Target Capability	<b>Within 24 hours of an event, be prepared to accept credentials from 15 partner organizations involved in incident management</b>
Cybersecurity	Protect (and if needed, restore) electronic communications systems, information, and services from damage, unauthorized use and exploitation.
CRESA Target Capability	<b>Every 1 year(s), appropriate authorities review and update cyber incident plans/annexes based on evolving threats covering 36 publicly managed and/or regulated critical infrastructure facilities.</b>
Intelligence and Information Sharing	Provide timely, accurate, and actionable information resulting from the planning, direction, collection, exploitation, processing, analysis, production, dissemination, evaluation, and feedback of available information concerning threats to the United States, its people, property, or interests; the development, proliferation, or use of WMDs; or any other matter bearing on U.S. national or homeland security by Federal, State, local, and other stakeholders. Information sharing is the ability to exchange intelligence, information, data, or knowledge among Federal, State, local, or private sector entities, as appropriate.
CRESA Target Capability	<b>During steady state, and in conjunction with the fusion center and/or Joint Terrorism Task Force (JTTF), every 2 year(s), review ability to effectively execute the intelligence cycle, including the planning, direction, collection, exploitation, processing, analysis, production, dissemination, evaluation, and feedback of available information, and identify the 2 personnel assigned to support execution of the intelligence cycle. Then, within 8 hour(s) of the identification or notification of a credible threat, identify/analyze local context of the threat for the respective area of responsibility, and facilitate the sharing of threat information with 7 priority intelligence stakeholder agencies/entities in accordance with the intelligence cycle, and all dissemination protocols.</b>



<b>Interdiction and Disruption</b>	Delay, divert, intercept, halt, apprehend, or secure threats and/or hazards.
CRESA Target Capability	<b>Within every 8 hour(s) of the identification or notification of a credible threat, conduct outreach to the fusion center and Joint Terrorism Task Force (JTTF) in the community and identify 1 personnel assigned to support follow-up interdiction and disruption activities that may be undertaken against identified suspects and/or contraband.</b>
<b>Physical Protective Measures</b>	Reduce or mitigate risks, including actions targeted at threats, vulnerabilities, and/or consequences, by controlling movement and protecting borders, critical infrastructure, and the homeland.
CRESA Target Capability	<b>Within 24 month(s) of completing a risk and vulnerability assessment, appropriate authorities review and update physical security plans covering 4 publicly managed and/or regulated critical infrastructure facilities to incorporate new information from the assessment.</b>
<b>Risk Management for Protection Programs and Activities</b>	Identify, assess, and prioritize risks to inform Protection activities and investments.
CRESA Target Capability	<b>Every 24 month(s), appropriate authorities conduct a review of relevant physical and cyber threats and hazards, vulnerabilities, and strategies for risk management covering 36 publicly managed and/or regulated critical infrastructure facilities.</b>
<b>Screening, Search, and Detection</b>	Identify, discover, or locate threats and/or hazards through active and passive surveillance and search procedures. This may include the use of systematic examinations and assessments, sensor technologies, or physical investigation and intelligence.
CRESA Target Capability	<b>Within 48 hour(s) of notice of a credible threat, conduct screening, search, and detection operations for 100 people requiring screening, including 25 people with access and functional needs (requiring screening).</b>
<b>Supply Chain Integrity and Security</b>	Strengthen the security and resilience of the supply chain.
CRESA Target Capability	<b>Every 12 month(s), engage 2 partner organizations involved in incident management to promote awareness of threats, dependencies, vulnerabilities, and strategies to support restoration of private sector supply chains.</b>

#### Mitigation Mission Area Core Capabilities

<b>Planning</b>	Conduct a systematic process engaging the whole community as appropriate in the development of executable strategic, operational, and/or community-based approaches to meet defined objectives.
CRESA Target Capability	<b>Within every 5 year(s), update all emergency operations plans that define the roles and responsibilities of 29 partner organizations involved in incident management across 8 jurisdictions affected, and the sequence and scope of tasks needed to prevent, protect, mitigate, respond to, and recover from events.</b>

<b>Public Information and Warning</b>	Deliver coordinated, prompt, reliable, and actionable information to the whole community through the use of clear, consistent, accessible, and culturally and linguistically appropriate methods to effectively relay information regarding any threat or hazard, as well as the actions being taken and the assistance being made available, as appropriate.
CRESA Target Capability	<b>Within 24 hour(s) notice of an incident, deliver reliable and actionable information to 150000 people affected, including 10000 people with access and functional needs (affected) and 9000 people with limited English proficiency affected.</b>
<b>Operational Coordination</b>	Establish and maintain a unified and coordinated operational structure and process that appropriately integrates all critical stakeholders and supports the execution of core capabilities.
CRESA Target Capability	<b>Within 72 hour(s), of a potential or actual incident, establish and maintain a unified and coordinated operational structure and process across 5 jurisdictions affected and with 15 partner organizations involved in incident management. Maintain for 6 month(s).</b>
<b>Community Resilience</b>	Enable the recognition, understanding, communication of, and planning for risk and empower individuals and communities to make informed risk management decisions necessary to adapt to, withstand, and quicker recover from future incidents
CRESA Target Capability	<b>Every 1 year(s), conduct 24 outreach events or activities to increase awareness of locally significant threats and hazards to help the residents be more prepared to prevent, protect against, mitigate, respond to, and recover from those events.</b>
<b>Long-Term Vulnerability Reduction</b>	Build and sustain resilient systems, communities, and critical infrastructure and key resources lifelines so as to reduce their vulnerability to natural, technological, and human-caused incidents by lessening the likelihood, severity, and duration of the adverse consequences related to these incidents.
CRESA Target Capability	<b>Every 5 year(s), 8 jurisdictions review their building codes, and, if necessary, enact or update risk-appropriate, disaster resilient building codes.</b>
<b>Risk and Disaster Resilience Assessment</b>	Assess risk and disaster resilience so that decision makers, responders, and community members can take informed action to reduce their entity's risk and increase their resilience.
CRESA Target Capability	<b>Every 5 year(s), after identifying threats and hazards of concern, model the impacts of 3 threat and hazard scenarios to incorporate into planning efforts.</b>
<b>Threats and Hazard Identification</b>	Identify the threats and hazards that occur in the geographic area; determine the frequency and magnitude; and incorporate this into analysis and planning processes so as to clearly understand the needs of a community or entity.
CRESA Target Capability	<b>Every 5 year(s), engage with 8 jurisdictions and 15 partner organizations involved in incident management to assess the threats and hazards that are realistic and would significantly impact your communities.</b>

#### Response Mission Area Core Capabilities

<b>Planning</b>	Conduct a systematic process engaging the whole community as appropriate in the development of executable strategic, operational, and/or community-based approaches to meet defined objectives.
CRESA Target Capability	<b>Within every 5 year(s), update all emergency operations plans that define the roles and responsibilities of 29 partner organizations involved in incident management across 8 jurisdictions affected, and the sequence and scope of</b>



	tasks needed to prevent, protect, mitigate, respond to, and recover from events.	
Public Information and Warning	Deliver coordinated, prompt, reliable, and actionable information to the whole community through the use of clear, consistent, accessible, and culturally and linguistically appropriate methods to effectively relay information regarding any threat or hazard, as well as the actions being taken and the assistance being made available, as appropriate.	
CRESA Target Capability	<b>Within 24 hour(s) notice of an incident, deliver reliable and actionable information to 150000 people affected, including 10000 people with access and functional needs (affected) and 9000 people with limited English proficiency affected.</b>	
Operational Coordination	Establish and maintain a unified and coordinated operational structure and process that appropriately integrates all critical stakeholders and supports the execution of core capabilities.	
CRESA Target Capability	<b>Within 72 hour(s), of a potential or actual incident, establish and maintain a unified and coordinated operational structure and process across 5 jurisdictions affected and with 15 partner organizations involved in incident management. Maintain for 6 month(s).</b>	
Critical Transportation	Provide transportation (including infrastructure access and accessible transportation services) for response priority objectives, including the evacuation of people and animals, and the delivery of vital response personnel, equipment, and services into the affected areas.	
CRESA Target Capability	<b>Within 180 day(s) of an incident, clear 2665 miles of road affected, to enable access for public, private, and non-profit emergency responders.</b>	
Environmental Response/Health and Safety	Ensure the availability of guidance and resources to address all hazards including hazardous materials, acts of terrorism, and natural disasters in support of the responder operations and the affected communities.	
CRESA Target Capability	<b>Within 24 hour(s) of a hazmat incident, complete decontamination procedures for 600 exposed individuals (hazmat-related incidents).</b>	
Fatality Management Services	Provide fatality management services, including body recovery and victim identification, working with State and local authorities to provide temporary mortuary solutions, sharing information with mass care services for the purpose of reunifying family members and caregivers with missing persons/remains, and providing counseling to the bereaved.	
CRESA Target Capability	<b>Within 90 day(s) of an incident, complete the recovery, identification, and mortuary services, including temporary storage services, for 30 fatalities.</b>	
Infrastructure Systems	Stabilize critical infrastructure functions, minimize health and safety threats, and efficiently restore and revitalize systems and services to support a viable, resilient community.	
CRESA Target Capability	<b>Within 30 day(s) of an incident, restore service to 98583 customers (without communication service).</b>	
Mass Care Services	Provide life-sustaining services to the affected population with a focus on hydration, feeding, and sheltering to those who have the most need, as well as support for reunifying families.	
CRESA Target Capability	<b>Within 6 month(s) of an incident, move 34176 people requiring temporary, non-congregate housing, including 10936 people with access and functional needs (requiring accessible, temporary, non-congregate housing), from congregate care to temporary housing.</b>	
Mass Search and Rescue Operations	Deliver traditional and atypical search and rescue capabilities, including personnel, services, animals, and assets to survivors in need, with the goal of saving the greatest number of endangered lives in the shortest time possible.	
CRESA Target Capability	<b>Within 96 hour(s) of an incident, conduct search and rescue operations for 125 people requiring rescue.</b>	



<b>On-Scene Security and Protection</b>	Ensure a safe and secure environment through law enforcement and related security and protection operations for people and communities located within affected areas and also for all traditional and atypical response personnel engaged in lifesaving and life-sustaining operations.
<b>CRESA Target Capability</b>	<b>Within 120 hour(s) of an incident, provide security and law enforcement services to protect emergency responders and 508863 people affected.</b>
<b>Operational Communications</b>	Ensure the capacity for timely communications in support of security, situational awareness, and operations by any and all means available, among and between affected communities in the impact area and all response forces.
<b>CRESA Target Capability</b>	<b>Within 96 hour(s) of an incident, establish interoperable communications across 8 jurisdictions affected and with 29 partner organizations involved in incident management. Maintain for 6 month(s).</b>
<b>Logistics and Supply Chain Management</b>	Deliver essential commodities, equipment, and services in support of impacted communities and survivors, to include emergency power and fuel support, as well as the coordination of access to community staples. Synchronize logistics capabilities and enable the restoration of impacted supply chains.
<b>CRESA Target Capability</b>	<b>Within 45 day(s) of an incident, identify and mobilize life-sustaining commodities, resources, and services to 24412 people requiring shelter and 7811 people requiring food and water. Maintain distribution system for 6 month(s).</b>
<b>Public Health and Medical Services</b>	Provide lifesaving medical treatment via emergency medical services and related operations and avoid additional disease and injury by providing targeted public health and medical support and products to all people in need within the affected area.
<b>CRESA Target Capability</b>	<b>Within 11 day(s) of an incident, complete triage, begin definitive medical treatment, and transfer to an appropriate facility 4882 people requiring medical care.</b>
<b>Situational Assessment</b>	Provide all decision makers with decision-relevant information regarding the nature and extent of the hazard, any cascading effects, and the status of the response.
<b>CRESA Target Capability</b>	<b>Within 96 hour(s) of an incident, and on a 12 hour(s) cycle thereafter, provide notification to leadership and 29 partner organizations involved in incident management of the current and projected situation. Maintain for 6 month(s).</b>

#### Recovery Mission Area Core Capabilities

<b>Planning</b>	Conduct a systematic process engaging the whole community as appropriate in the development of executable strategic, operational, and/or community-based approaches to meet defined objectives.
<b>CRESA Target Capability</b>	<b>Within every 5 year(s), update all emergency operations plans that define the roles and responsibilities of 29 partner organizations involved in incident management across 8 jurisdictions affected, and the sequence and scope of tasks needed to prevent, protect, mitigate, respond to, and recover from events.</b>
<b>Public Information and Warning</b>	Deliver coordinated, prompt, reliable, and actionable information to the whole community through the use of clear, consistent, accessible, and culturally and linguistically appropriate methods to effectively relay information regarding any threat or hazard, as well as the actions being taken and the assistance being made available, as appropriate.
<b>CRESA Target Capability</b>	<b>Within 24 hour(s) notice of an incident, deliver reliable and actionable information to 150000 people affected, including 10000 people with access and functional needs (affected) and 9000 people with limited English proficiency affected.</b>
<b>Operational Coordination</b>	Establish and maintain a unified and coordinated operational structure and process that appropriately integrates all critical stakeholders and supports the execution of core capabilities.

CRESA Target Capability	<b>Within 72 hour(s), of a potential or actual incident, establish and maintain a unified and coordinated operational structure and process across 5 jurisdictions affected and with 15 partner organizations involved in incident management. Maintain for 6 month(s).</b>
<b>Economic Recovery</b>	Return economic and business activities (including food and agriculture) to a healthy state and develop new business and employment opportunities that result in a sustainable and economically viable community.
CRESA Target Capability	<b>Within 2 year(s) of an incident, reopen 4600 businesses closed due to the incident.</b>
<b>Health and Social Services</b>	Restore and improve health and social services networks to promote the resilience, independence, health (including behavioral health), and well-being of the whole community.
CRESA Target Capability	<b>Within 52 week(s) of an incident, restore functions at 235 affected healthcare facilities and social service organizations.</b>
<b>Housing</b>	Implement housing solutions that effectively support the needs of the whole community and contribute to its sustainability and resilience.
CRESA Target Capability	<b>Within 4 year(s) of an incident, 24412 people requiring long-term housing, including 7811 people with access and functional needs (requiring accessible long-term housing), find and secure long-term housing.</b>
<b>Infrastructure Systems</b>	Stabilize critical infrastructure functions, minimize health and safety threats, and efficiently restore and revitalize systems and services to support a viable, resilient community.
CRESA Target Capability	<b>Within 30 day(s) of an incident, restore service to 98583 customers (without communication service).</b>
<b>Natural and Cultural Resources</b>	Protect natural and cultural resources and historic properties through appropriate planning, mitigation, response, and recovery actions to preserve, conserve, rehabilitate, and restore them consistent with post-disaster community priorities and best practices and in compliance with appropriate environmental and historical preservation laws and executive orders.
CRESA Target Capability	<b>Within 5 year(s) of an incident, restore 44 damaged natural and cultural resources and historic properties registered in the jurisdiction.</b>