

# 2017 Nevada Spring Flood Plan

Nevada Division of Emergency Management Federal Emergency Management Agency Region IX

28 April, 2017









**Nevada Division of Emergency Management** 2478 Fairview Drive Carson City, NV 89701 **FEMA Region IX**Oakland, CA 94607

Dear Emergency Management Partner:

The Nevada Division of Emergency management and the Federal Emergency Management Agency (FEMA) present this 2017 Nevada Spring Flood Plan.

Snowmelt flooding is certain in the spring and into summer of 2017. The severity of snowmelt runoff and flooding depends on weather, especially in May and June. The goal of this plan is to be better prepared for the effects of severe flooding should it occur.

I hope that in becoming familiar with this plan you will agree that we are better prepared to respond to and recover from severe spring flooding resulting from adverse weather and record snowpack. However, the work does not stop here to mitigate this threat and we hope that this plan will inspire and inform ongoing efforts to continue affiliated planning, training, equipping, and exercising.

Caleb S. Cage
Chief and Homeland Security Advisor
Nevada Division of Emergency Management

David Haas
Federal Coordinating Officer
FEMA Region IX

# 1.0 Situation

#### **Purpose**

This plan describes coordinated state and federal actions in response to severe spring flooding in western Nevada during the May, June, and July 2017 period. It describes a concept of operations focused on building response capability within the established organization of the Nevada Unified Coordination Group (UCG) for declared disasters DR 4303 and 4307.

#### **Threat**

A series of winter storms in January and February 2017 caused major flooding in western Nevada. Storms and flooding resulted in soil saturation and standing water. Winter storms also produced record setting snowpack in Nevada and the Eastern Sierra. The Lake Tahoe, Truckee, Carson, and Walker Lake Basins are above or near double normal peak snow water.

Prolonged high water and major flooding once snowmelt begins is certain in the spring and into summer of 2017. The severity of snowmelt runoff and flooding depends on weather, especially in May through July. Weather events that could result in severe or record flooding include:

- Atmospheric River (AR) an AR is a narrow corridor or filament of concentrated moisture in the atmosphere that is capable of creating extreme rainfall and floods. While the chances of a May, June or July AR is low, an AR has the greatest potential for catastrophic flooding
- **Heat waves** prolonged period of excessively hot weather. Prolonged periods of above freezing temperatures at high altitudes would increase snowmelt and flooding.
- **Cutoff lows** closed upper-level lows that are displaced from westerly current, and move independently of that current. Cutoff lows may remain nearly stationary for days producing rain and flooding.

The predictability of severe weather events varies. The amount of warning that can be expected is:

- Heat waves: 5-10 days of warning
- Atmospheric rivers: 5-8 days warning
- River flood forecasts : start **5 days** out
- Spring heavy rains from "cutoff lows": 1-3 days
- Thunderstorms and flash flooding: 1-3 days

The watersheds with the greatest probability of flooding populated areas are the Walker Basin and Carson River Basin.

**Assumptions** - The following assumptions were used to develop this plan:

- 1. Response will be managed by the established UCG (DR 4303, 4307).
- 2. Individual decisions to shelter in place will result in requirements to support isolated individuals with rescue and medical evacuation.

- 3. In the case of dam failure local evacuations will take place with few additional requirements for State and federal resources.
- 4. The incident may be sustained and occur in a series of events.

## 2.0 Mission

The mission of the joint state and federal organization is to save and sustain lives, minimize suffering, protect critical infrastructure, and facilitate recovery following severe flooding in the State of Nevada.

# 3.0 Execution

# **Concept of Operations**

Structured, periodic assessments of the situation, activation of functional teams and resources, and the daily development of a response strategy is the core of the response concept. When assessments indicate an increase in the flood threat, state and federal organizations take action to ensure that response capability is matched to anticipated need.

Initial response actions are organized by phase. The shift from current operations (Phase 1a) to a response oriented organization (Phase 1b) is prompted by watches, warnings or the setting of Significant River Flood Outlook categories. The decision to initiate Phase 1b is informed by an assessment of the flood threat. The Phase 1b criteria is when there is an elevated threat of severe flooding and is intended to be set 5 days prior to the onset of that flooding. Severe flooding is defined as major flooding events or multiple flooding events that will create a need for State support and may create a need for federal support. Phase 1b is associated with the National Weather Service Significant River Flood Outlook category of "Possible". Specifically, conditions indicate that significant flooding could occur in populated areas of Nevada. In Phase 1b, severe flooding is neither certain nor imminent.

This involves developing response capability within the existing Unified Coordination Group (UCG) for DR 4303 and 4307. The response elements of the organization will operate from the State EOC in Carson City, Nevada.

Objectives are focused on desirable outcomes for communities affected by the disaster. Objectives are not listed in priority order.

#### **Objectives:**

- 1. Protect homes, businesses, and critical infrastructure from flood waters
- 2. Provide shelter and mass care
- 3. Provide law enforcement and public safety support
- 4. Provide search and rescue support
- 5. Provide hazardous materials mitigation and cleanup support
- 6. Support public information efforts

### **Phases**

Response and recovery operations are conducted in three phases: Phase 1 (Pre-Incident), Phase 2 (Response), and Phase 3 (Recovery). Operational phases organize activities that include an assessment of the threat of major flooding of and the deployment of teams and resources that accomplish objectives.

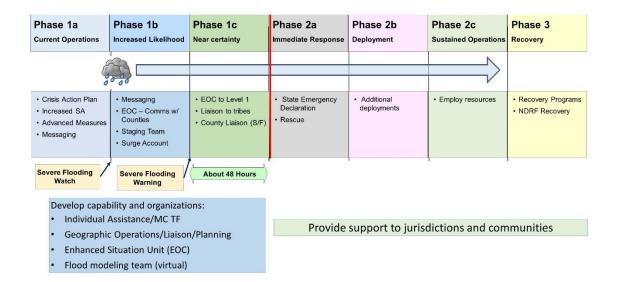


Figure 1: Phases

## Phase 1 (Pre-incident)

Phase 1 includes actions prior to the onset of severe flooding. Phase 1 includes the following subphases:

#### **Phase 1a (Current Operations)**

**Primary Activities**: Phase 1a is the current operational posture of State and federal organization. It includes crisis action planning, daily assessments of the situation, training, and exercises that prepare State and federal organizations for response. Phase 1a ends when a flood watch is set for severe flooding by the National Weather Service and/or the UCG determine that the incident requires the implementation of this plan.

#### Phase 1b (Increased Likelihood)

**Primary Activities**: Phase 1b begins when a flood watch is set for severe flooding by the National Weather Service and/or the UCG determine that the incident requires implementation. Phase 1b is focused on developing State and federal response capability at the State EOC. Phase 1b ends when a major flood warning is issued by the National Weather Service and/or the UCG determine that severe flooding is nearly certain. Tasks include:

- The UCG will initiate a 24 hour planning cycle for the development of an IAP
- Nevada DEM will initiate mutual aid requests to build capability

- NV DEM and FEMA will form task forces including a Mass Care Task Force
- FEMA will deploy federal Individual Assistance/Mass Care personnel, Geographic Operations, NWS and River Forecast Center liaison, ESF 1, 2, 3, 4, 7, 8, 9, 10, 11, 12 and 13.
- FEMA will coordinate with FEMA Logistics Management Directorate (LMD) for the deployment of a federal Staging Area Management Team (72 hours prior to onset)

## Phase 1c (Near Certainty)

**Primary Activities**: Phase 1c begins when a major flood warning is issued by the National Weather Service and/or the UCG determine that severe flooding is nearly certain. Phase 1c includes increased capability to respond to local requests for assistance. Tasks include:

- The State EOC will activate to level 1
- FEMA will establish one or more staging areas in or near the affected area
- NV DEM and FEMA will assess the need to push commodities and common user shelter items from FEMA distribution centers

**End-state of Phase 1**: Local, state, and federal agencies are prepared for severe spring flooding in Nevada and have the capability to respond to a wide range of requests for state and federal assistance.

## Phase 2 (Response)

Phase 2 includes the following subphases:

#### Phase 2a (Immediate Response) (0-24 hours after the onset of severe flooding)

**Primary Activities:** The joint state and federal response organization will respond to requests for assistance and accomplish objectives. Tasks include:

- Task forces develop an assessment of the situation, requirements for support, and a strategy to fulfill requirements.
- Communities receive resource support

**End State:** State and federal operations centers and resources are activated; operational coordination is established; situational assessment activities support response decisions.

#### Phase 2b (Deployment) (24-72 hours)

Primary Activities: The UCG continues response actions. Capabilities are deployed as required.

**End State:** State and federal organization match deployment posture to local requirements. Responders conduct lifesaving and life-sustaining operations.

## Phase 2c (Sustained Response) (72+ hours)

**Primary Activities:** The UCG provides State and federal support to affected communities through joint and collaborative organizations and responders conduct lifesaving and life-sustaining operations.

**End State:** The UCG has attained full operational capacity; capabilities are employed in the impacted area to accomplish objectives; distribution operations support response operations and sheltered in place populations until the private sector recovers. A transition to recovery begins when response consistent with the National Disaster Recovery Framework.

#### Phase 3 (Recovery)

Phase 3 includes Short-term Recovery, Intermediate Recovery, and Long-term Recovery.

# 4.0 Administration, Resources, and Funding

The State of Nevada funds activities under existing accounts. Federal activities are funded under the surge account until a federal disaster declaration is made consistent with the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act).

# 5.0 Oversight, Coordinating Instructions, and Communications

# Response and Recovery Coordination

The State of Nevada, in accordance with Chapter 414 of the Nevada Revised Statutes (NRS), will ensure awareness of, prevention of, preparation for, response to, and recovery from an emergency or disaster in order to provide assistance that saves lives and protects health, safety and property. The Nevada Division of Emergency Management (NDEM) is the state agency responsible for the administration of emergency preparedness, prevention, response, recovery and mitigation consistent with the Nevada State Comprehensive Emergency Management Plan. The Governor may direct any state agency to exercise its authority and utilize its resources accordingly. Response by state departments and agencies providing lifesaving and life protecting activities under this plan takes precedence over other state activities. The State of Nevada will make every effort to comply with Title II of the Americans with Disabilities Act (ADA) and other applicable laws related to emergency and disaster-related programs, services and activities for individuals with disabilities and with access and functional needs.

FEMA provides support to the State of Nevada and coordinates federal support consistent with the National Response Framework and the Stafford Act.

Consistent with FEMA policy memo FP-010-4, FEMA may recommend approval of a state's request for an Emergency Declaration prior to the impact of an incident when there is a threat of destruction that could result in a major disaster.

FEMA issues work orders to Federal agencies directing completion of a specific tasks through Mission Assignments (MAs). The MA process is derived from the authority primarily outlined in Sections 402, 403, 407 and 502 of the Stafford Act, and it provides that the President may direct any Federal department or agency to provide personnel, equipment, and resources to assist state and local disaster relief efforts. Types of MAs include Direct Federal Assistance, Federal Operations Support, and

Technical Assistance. Although rarely exercised, it is important to note that FEMA retains the authority to mission assign agencies on a non-reimbursable basis. MAs may be issued verbally or in response to an action request form (a verbal MA must be followed by an action request form within 24 hours). Most forms of Stafford Act assistance require a state cost share.

National Weather Service (NWS) – The mission of the NWS Hydrologic Services Program is to provide river and flood forecasts and warnings for the protection of lives and property and provide hydrologic forecast information. The Weather Forecast Office and the California-Nevada River Forecast Center are co-located with the State-Federal Flood Operations Center in Sacramento. The National Weather Service office in Reno Nevada provides direct support to this plan.

US Army Corps of Engineers (USACE) – USACE has authority under PL 84-99, Flood Control and Coastal Emergencies (FCCE) (33 U.S.C. 701n) (69 Stat. 186) for emergency management activities. When the disaster exceeds the capabilities of State and local interests, the USACE may provide assistance under Public Law 84-99 to save human life, prevent immediate human suffering, or mitigate residential and critical infrastructure damage. Assistance includes: acquisition of flood fight materials; geotechnical evaluation of levees and other flood operations structures; contracts for emergency flood fight and temporary repairs; clearance of drainage channels or blocked structures; technical assistance for development of plans; and upon request, inspection of non-federal dams and flood control projects. The USACE also has jurisdiction over storage capacity seasonally reserved for flood control on most major reservoirs throughout the State.

PL 84-99 allows the Corps of Engineers to supplement State and local entities in flood fighting urban and other non-agricultural areas under certain conditions (Engineering Regulation 500-1-1 provides specific details). All flood fight efforts require a Project Cooperation Agreement (PCA) signed by the Public Sponsor.

2017 Nevada Spring Flood Plan

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# **Annex A: Task Organization**

#### 1.0 Situation

This annex describes the structure of the joint state/federal organization that will manage response and recovery operations following severe spring flooding in the State of Nevada.

#### 2.0 Mission

The mission of the joint state and federal organization is to save and sustain lives, minimize suffering, protect critical infrastructure, and facilitate recovery following severe flooding in the State of Nevada.

## 3.0 Execution

## Concept of Operations

The joint state/federal organization will be formed consistent with the existing Unified Coordination Group (UCG) for DR 4303 and 4307. The major elements of the joint state/federal organization under the UCG are the Operations Section, Planning Section, Logistics Section, and the Finance/Administration Section.

#### **Operations Section**

The Operations Section of the UCG includes the following branches: Operations Support, Functional Operations, and Geographic Operations. Figure A-1 shows the organization of the Operations Section.

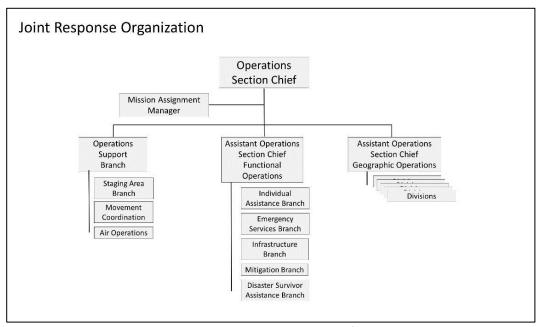


Figure A-1: Operations Section of the UCG

#### **Functional Operations Branch**

Functional Operations includes the Individual Assistance, Emergency Services, Infrastructure, Mitigation and Disaster Survivor Assistance branches, which use ESFs to achieve operational objectives and outcomes.

#### State/Federal Task Force Operations

Joint state/federal task forces are organizations designed to coordinate the actions of EFs and ESFs under the direction of state and federal task force leaders. Task forces are subordinate to the UCG Operations Section and are organized consistent with ICS (Operations, Planning, Logistics, and Finance/Admin sections). Task force activities include an assessment of the situation and the development, approval, and execution of a plan to accomplish the objective. While State agencies and ESFs are the primary means to accomplish objectives, task forces are used in specific situations that require extensive coordination, planning, and collaboration.

#### **Operations Support Branch**

The Operations Support Branch includes the Movement Coordination, Staging Area, and Air Operations branches.

#### **Movement Coordination Branch**

The Movement Coordination Branch is responsible for coordinating the delivery of the State and federal resources necessary to support operational priorities.

#### **Air Operations Branch**

The Air Operations Branch (AOB) is responsible for coordinating air operations support to disaster field operations.

## **Staging Area Branch**

The Staging Area Branch coordinates the activation and operation of federal staging areas that provide support to response operations.

#### **Geographic Operations**

The Geographic Operations organization includes Branch Directors, county liaisons, or Division Supervisors that are staffed by state and federal counterparts.

#### **Planning Section**

The Planning Section is responsible for the collection, evaluation, dissemination, and use of information about the incident as well as the status of state and federal resources. Timely and focused planning in coordination with the Operations Section provides the foundation for effective incident management. The Planning Section documents state and federal support actions, develops crisis plans, and executes the IAP process.

#### **Logistics Section**

The Logistics Section is responsible for the coordination of resource support and logistics management during incident response.

#### **Finance/Administration Section**

The Finance/Administration Section provides financial and administrative services to support incident management activities.

### Key Roles and Responsibilities

#### **State**

#### **Governor of the State of Nevada**

The Governor leads the state response to the incident. The Governor sets priorities for response and recovery in the state and provides direction to the UCG with regard to those priorities.

### **State Coordinating Officer (SCO)**

The SCO is empowered by the Governor to coordinate state disaster assistance. The SCO is the focal point of state coordination within the UCG, ensuring integration of state emergency management functions, resource allocation, and integration of state activities in support of local requirements.

#### The Adjutant General, State of Nevada (TAG)

The TAG coordinates all State Active Duty (SAD) and Title 32 military resources under the direction of the Governor. The TAG is a member of the UCG.

#### **Federal**

#### **President of the United States**

The President leads the federal response effort and ensures that the necessary coordinating structures, leadership, and resources are applied quickly and efficiently.

#### Federal Coordinating Officer (FCO)

The FCO is a senior FEMA official appointed by the President of the United States to coordinate federal support in response to and recovery from major disasters. The FCO ensures integration of federal emergency management functions, resource allocation, and integration of federal activities in support of local, state, and tribal requirements.

#### **Defense Coordinating Officer (DCO)**

The DCO is the DoD single point of contact within the UCG. The DoD is considered a support agency to all ESFs.

# Response Coordination

#### **Nevada State Emergency Operations Center**

During Phase 1b, the focus of State and federal emergency management response will shift to the Nevada State EOC.

# 4.0 Administration, Resources, and Funding

No change from Base Plan.

# 5.0 Oversight, Coordinating Instructions, and Communications

Nevada DEM and FEMA have the authority to initiate or execute this plan jointly under the direction of the Governor of the State of Nevada and the FEMA Region IX Administrator.

# **Annex B: Intelligence**

## 1.0 Situation

A series of winter storms in January and February 2017 caused major flooding in western Nevada. Storms and flooding resulted in soil saturation and standing water. Winter storms also produced record setting snowpack in Nevada and the Eastern Sierra. The Lake Tahoe, Truckee, Carson, and Walker Lake Basins are above or near double normal peak snow water.

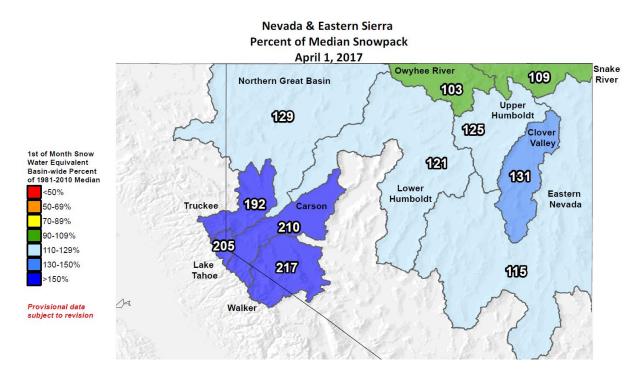


Figure B-1: Nevada and Eastern Sierra Snowpack

Prolonged high water and major flooding once snowmelt begins is certain in the spring and into summer of 2017. The severity of snowmelt runoff and flooding depends on weather, especially in May and June. Weather events that could result in severe or record flooding include:

- Atmospheric River (AR) an AR is a narrow corridor or filament of concentrated moisture in the atmosphere that is capable of creating extreme rainfall and floods. While the chances of a May or June AR is low, an AR has the greatest potential for catastrophic flooding (see Appendix B-2)
- Heat waves prolonged period of excessively hot weather. Prolonged periods of above freezing temperatures at high altitudes would increase snowmelt and flooding.
- Cutoff lows closed upper-level lows that are displaced from westerly current, and move
  independently of that current. Cutoff lows may remain nearly stationary for days producing rain
  and flooding.

Annex B: Intelligence B-1

The predictability of severe weather events varies. The amount of warning that can be expected is:

Heat waves: 5-10 days of warning

Atmospheric rivers : 5-8 days warning

• River flood forecasts : start 5 days out

Spring heavy rains from "cutoff lows": 1-3 days

• Thunderstorms and flash flooding: 1-3 days

The watersheds with the greatest probability of flooding populated areas are the Walker Basin and Carson River Basin. The risks to Nevada river basins are listed in Figure 2. The figure is based on 58 years of weather information and 2017 snowpack levels. The Walker Basin and Imlay Basin are expected to reach major flood levels even in the absence of an exceptional weather event.

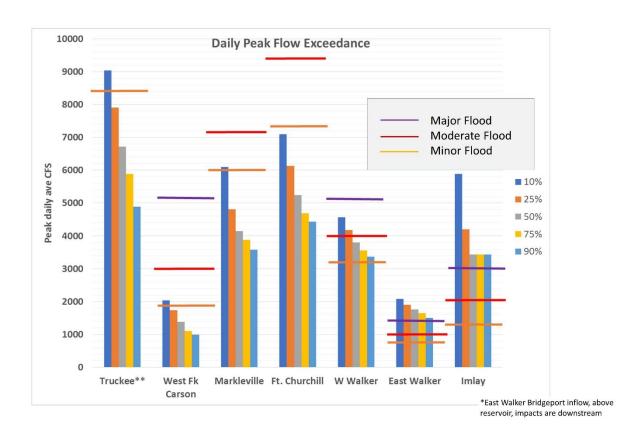


Figure B-2: Daily Peak Flow Excedance

The basins and communities at risk in include:

**Walker Lake Basin** - Walker Basin is the most likely major basin to experience significant and prolonged snowmelt flooding. Geographic features include Smith Valley, and Mason Valley. Communities include: Wellington, Mason, Yerington and Schurz (Walker River Indian Reservation).

B-2 Annex B: Intelligence

**Carson River Basin** - The Carson River Basin extends about 150 miles from eastern California to Pershing County, Nevada. The Carson River Basin includes the following hydrographic areas: Carson Desert, Churchill Valley, Dayton Valley, Eagle Valley, and Carson Valley. Major cities and towns with the Carson River Basin include: Carson City (Nevada's capital), Dayton, Fallon, Gardnerville and Minden.

**Truckee River Watershed** - The 140 mi long Truckee River is the sole outlet of Lake Tahoe and drains 3,120 square miles of land. The Truckee Basin at 227% of median, 194 inches of snow depth and 83.7 inches of water content is at an all-time April 1 record. Communities affected by flooding in this watershed include: Truckee, Reno, Sparks, Wadsworth and Fernley.

**Humboldt River Basin** - The Humboldt River Basin is the largest river basin that is entirely within the State of Nevada covering more than 16,000 square miles. - Communities include: Winnemucca, Battle Mountain, Carlin, Elko and Wells.

**Operational Impact:** The most significant impacts of flooding are:

- Homes and multi-family structures could be rendered uninhabitable by the flooding. While the
  majority of displaced population will shelter with family members or shelter in place, some
  people will seek emergency shelter and require long term sheltering support.
- Floodwaters will impact homes, businesses, and critical infrastructure.
- Floodwaters and moving debris will threaten bridges, highways and roads, impacting transportation and isolating communities. Individuals will become stranded.
- Livestock will be stranded and require rescue.
- Floodwaters may cause hazardous material spills.
- Evacuations may be required if hospitals are isolated from supply chains or staff. The same will occur to nursing homes and long term care facilities.
- Flood waters and standing waters pose risks, including infectious diseases, chemical hazards, and injuries.

# Historical Background

Nevada has experienced several severe floods in modern history, including those listed below.

1997 "New Year's Flood" – Beginning on New Year's Day 1997, unseasonably warm rains from the Pacific Ocean melted a part of the snowpack, causing flooding in the Carson, Truckee, and Walker River Basins, and Lake Tahoe Basin. Floodwaters closed the bridges across the Carson River, including Cradlebaugh on Highway 395, and bridges into the Gardnerville Ranchos, isolating Gardnerville and Minden. Flooding along the Walker River closed Highway 395 south of Douglas County, cutting off that route. The Nevada Appeal reported that the river crested at 8.4 feet above the 10-foot flood stage, with a peak flow of 12.4 million gallons per minute. The towns of Reno, Sparks, Carson City, and Yerington suffered extensive damages.

Annex B: Intelligence B-3

**1983 Record Snowpack** – Prior to 2017 the 1983 historic snowpack was the largest in recorded history in the Sierra Nevada Range. Melting of the snowpack caused flooding, severe mudslides, and road closures. The same effects can be expected for the 2017 snowpack melt.

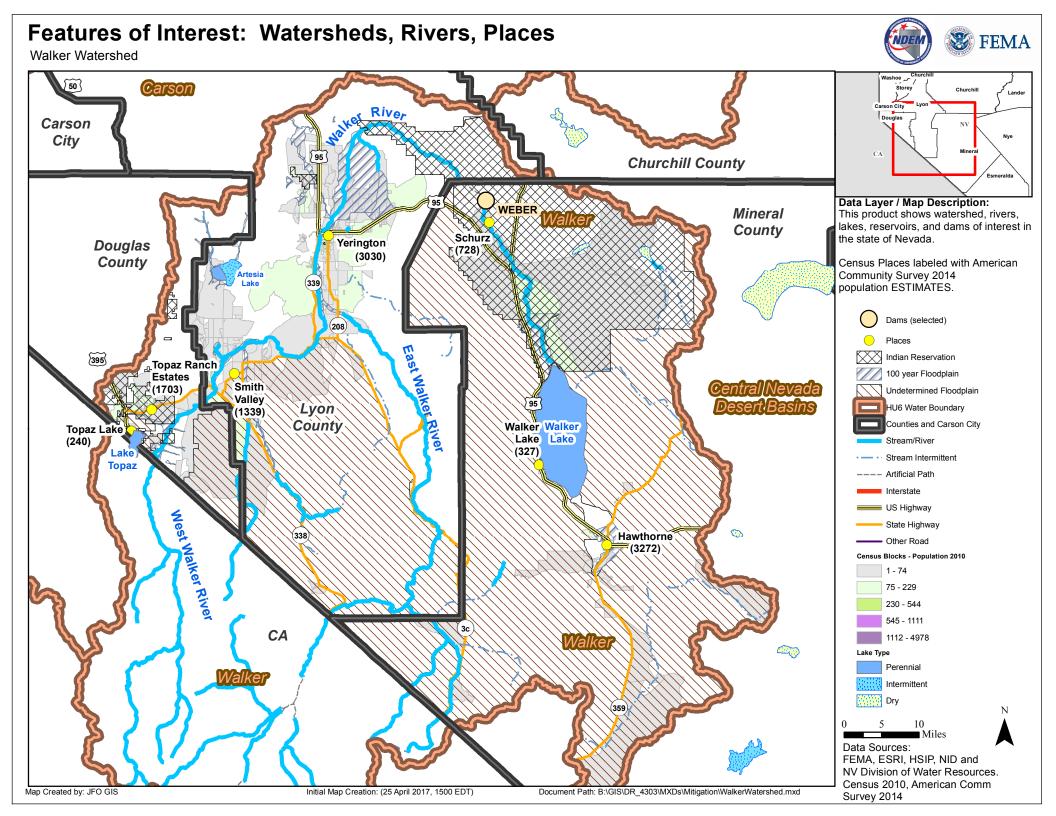
## Population in Carson Basin, Walker Basin and Truckee Basin (210 Census and estimated):

Census 2010	American Community Survey
Census 2010	Estimate 2014
Carson Basin:	Carson Basin:
Fallon Station - 705	Fallon Station - 748
Fallon – 8,606	Fallon – 8,451
Silver Springs -5,296	Silver Springs – 5,605
Stagecoach – 1,874	Stagecoach – 1,581
Dayton – 8,964	Dayton – 8,972
Carson City – 55,274	Carson City – 54,634
Indian Hills – 5,627	Indian Hills – 6,007
Genoa - 939	Genoa – 1,104
Johnson Lane -6,490	Johnson Lane -6,319
Minden – 3,001	Minden – 3,408
East Valley – 1,474	East Valley – 1,478
Fish Springs - 648	Fish Springs - 784
Gardnerville – 5,656	Gardnerville – 5,761
Ruhenstroth – 1,293	Ruhenstroth – 971
Carter Springs - 553	Carter Springs - 511
Gardnerville Ranchos – 11,312	Gardnerville Ranchos – 11,040
Double Spring - 158	Double Spring - 117
Walker Basin:	Walker Basin:
Hawthorne – 3,269	Hawthorne – 3,272
Walker Lake - 275	Walker Lake - 327
Schurz – 658	Schurz – 728
Yerington – 3,048	Yerington – 3,030
Smith Valley – 1,603	Smith Valley – 1,339
Topaz Ranch Estates – 1,501	Topaz Ranch Estates – 1,703
Topaz Lake – 15	Topaz Lake – 240
Truckee Basin:	Truckee Basin:
Sutcliffe - 253	Sutcliffe -257
Nixon – 374	Nixon – 336
Wadsworth – 834	Wadsworth – 927
Sparks – 90,264	Sparks – 92,236
Mogul – 1,290	Mogul – 1,649
Reno – 225,221	Reno – 231,103
Verdi – 1,415	Verdi – 1,509
Washoe Valley – 3,01	Washoe Valley – 3,434

# Annex B Appendix

Appendix B-1: Maps

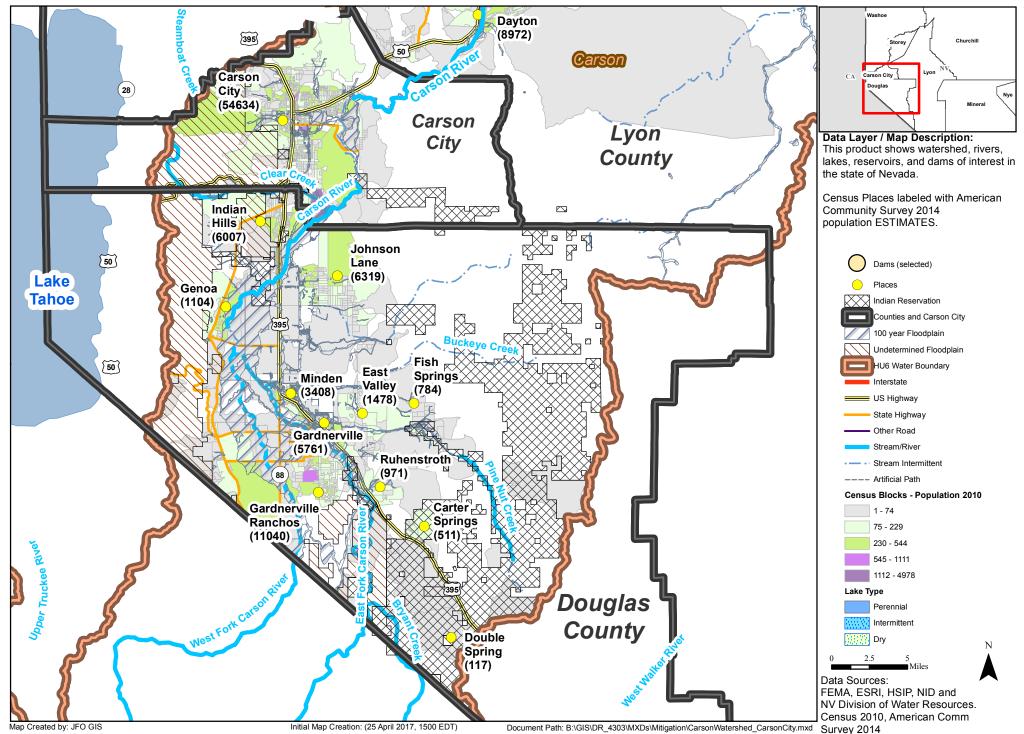
B-4 Annex B: Intelligence



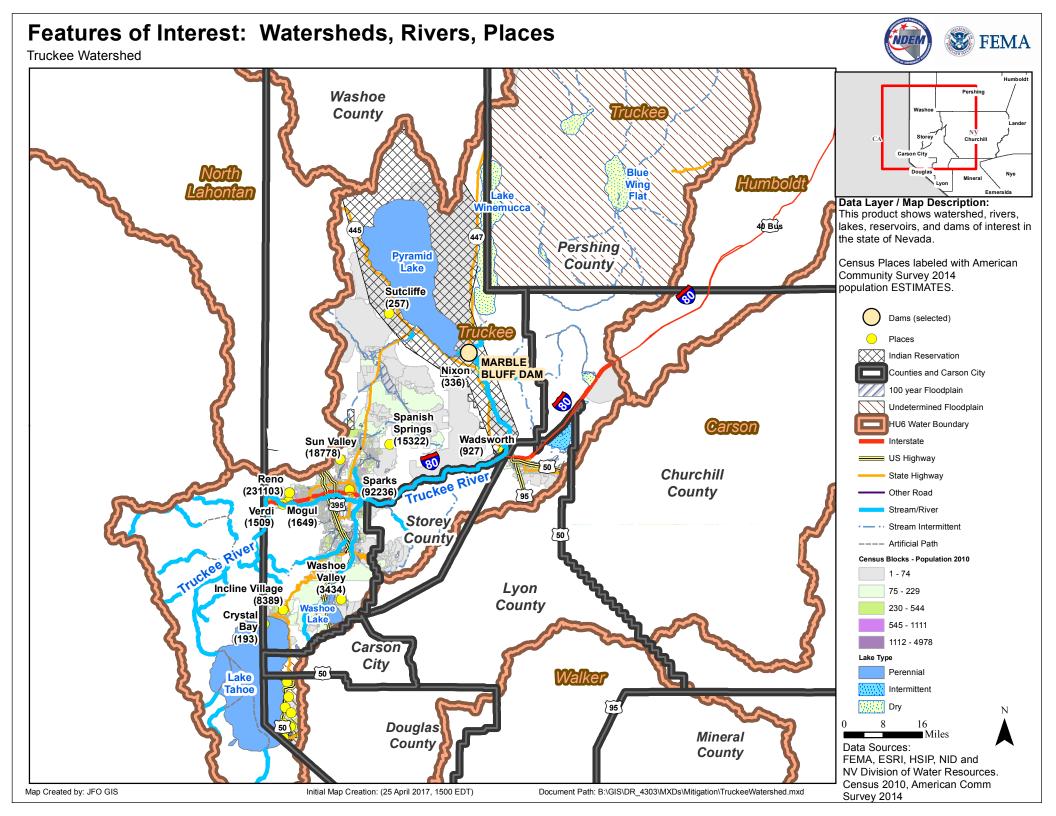
# Features of Interest: Watersheds, Rivers, Places

Carson Watershed - SW View





#### Features of Interest: Watersheds, Rivers, Places 🌠 FEMA Carson Watershed - NE View Humboldt Churchill Carson Data Layer / Map Description: County This product shows watershed, rivers, Washoe lakes, reservoirs, and dams of interest in the state of Nevada. County Census Places labeled with American Community Survey 2014 population ESTIMATES. Dams (selected) Leter Places Stillwater Lake Lyon Indian Reservation Soda & County Counties and Carson City Lake 100 year Floodplain Undetermined Floodplain Storey Fallon (8451) HU6 Water Boundary Fernley County (19184) LAHONTAN **US Highway** Sheckler 50 State Highway Res. Stagecoach Lahontan Res. Other Road Fallon (1581)Station Stream/River 95 Silver Springs (748) (5605) Stream Intermittent Artificial Path Carson son River Census Blocks - Population 2010 75 - 229 Dayton (8972) 230 - 544 545 - 1111 1112 - 4978 Lake Type Perennial Intermittent Walker Data Sources: Mineral Douglas FEMA, ESRI, HSIP, NID and County NV Division of Water Resources. County Census 2010, American Comm Initial Map Creation: (25 April 2017, 1500 EDT) Document Path: B:\GIS\DR\_4303\MXDs\Mitigation\CarsonWatershed\_Fallon.mxd Survey 2014



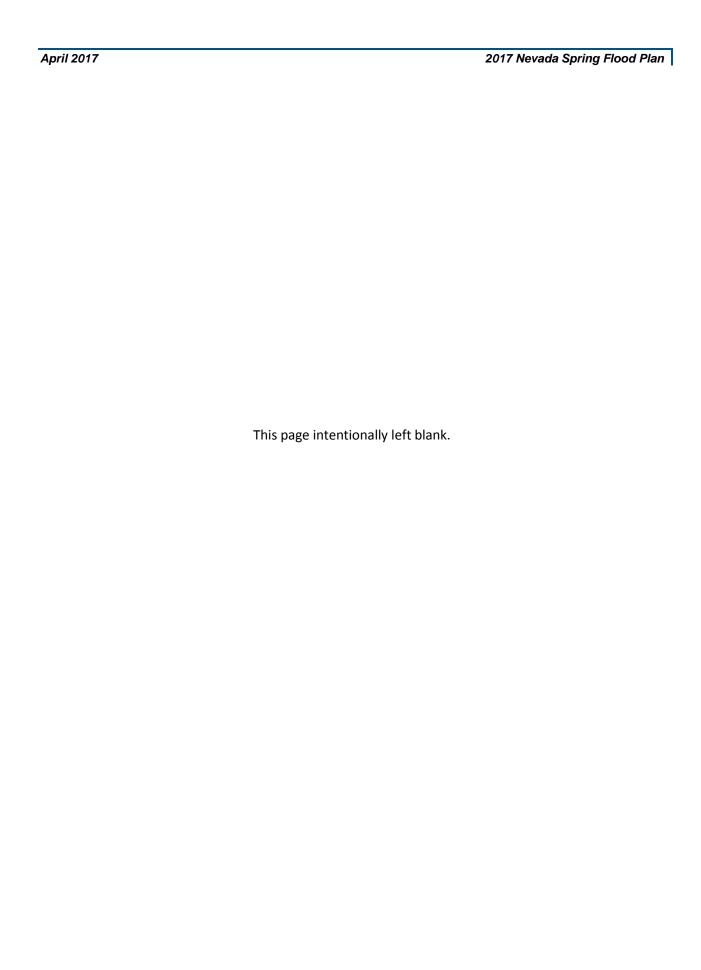
#### Features of Interest: Watersheds, Rivers, Places 🗱 FEMA **Humboldt Watershed** Elko County Paradise Valley Humboldt (147)County Data Layer / Map Description: This product shows watershed, rivers, lakes, reservoirs, and dams of interest in Wells (1269) the state of Nevada. Winnemucca Osino (7736) (754) Census Places labeled with American Golconda Community Survey 2014 population ESTIMATES. Elko (271) (19308)**Battle Grass Valley** Lamoille Carlin (2409) Valmy Mountain<sup>®</sup> (115) Spring Creek Dams (selected) (927) (3253) 🌠 Places Imlay (14012) Indian Reservation (80) Counties and Carson City PATCH Humboldt River **Humboldt River** Crescent Stream/River Truckee Ranch Valley (29) Pershing Stream Intermittent (388) County 100 year Floodplain Lovelock Undetermined Floodplain (2319) HU6 Water Boundary US Highway State Highway Other Road White Pine Census Blocks - Population 2010 Churchill County 1 - 74 County Lander Eureka 75 - 229 County County 230 - 544 Carson Austin 545 - 1111 1112 - 4978 Lake Type Perennial Intermittent Nye County Data Sources: FEMA, ESRI, HSIP, NID and NV Division of Water Resources. Census 2010, American Comm

Document Path: B:\GIS\DR 4303\MXDs\Mitigation\HumboldtWatershed.mxd

Survey 2014

Initial Map Creation: (25 April 2017, 1500 EDT)

Map Created by: JFO GIS



# **Annex C: Operations**

## 1.0 Situation

This annex describes coordinated state and federal actions in response to severe spring flooding in the State of Nevada. It describes a concept of operations focus on messaging and notifications, evacuations, search and rescue, shelter and mass care support, protection of homes, businesses, and critical infrastructure.

#### 2.0 Mission

The mission of the joint state and federal organization is to save and sustain lives, minimize suffering, protect critical infrastructure, and facilitate recovery following severe flooding in the State of Nevada.

#### 3.0 Execution

# **Concept of Operations**

The response concept involves the phased development of response capability within the existing Unified Coordination Group (UCG) for DR 4303 and 4307. Response capability will be developed prior to the onset of major flooding and consist of:

- Assessment An enhanced Situation Unit and a daily decision cycle (IAP)
- Mass Care Individual Assistance and a joint Mass Care Task Force
- State and federal ESF support including search and rescue, transportation, hazardous materials, medical, and infrastructure
- Coordination with affected counties Liaison with counties (Geographic Operations/Liaison/Planning)
- Flood Modeling through a (virtual) team of NWS, USGS, USDA, Natural Resources
   Conservation Service Nevada, and State of Nevada counterparts.

#### **Objectives:**

- 1. Protect homes, businesses, and critical infrastructure from flood waters
- 2. Provide shelter and mass care
- 3. Provide law enforcement and public safety support
- 4. Provide search and rescue support
- 5. Provide hazardous materials mitigation and cleanup support
- 6. Support public information efforts

Annex C: Operations C-1

### **Phases**

Response and recovery operations are conducted in three phases: Phase 1 (Pre-Incident), Phase 2 (Response), and Phase 3 (Recovery). Operational phases organize activities that include an assessment of the threat of major flooding and the deployment of teams and resources that accomplish objectives.

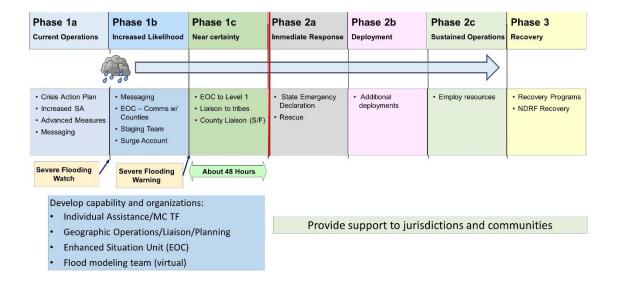


Figure C-1: Phases

#### Phase 1 (Pre-incident)

Phase 1 includes actions prior to the onset of severe flooding. Phase 1 includes the following subphases:

#### **Phase 1a (Current Operations)**

**Primary Activities**: Phase 1a is the current operational posture of State and federal organization. It includes crisis action planning, daily assessments of the situation, training, and exercises that prepare State and federal organizations for response. Phase 1a ends when a flood watch is set for severe flooding by the National Weather Service and/or the UCG determine that the incident requires the implementation of this plan.

#### Phase 1b (Increased Likelihood)

**Primary Activities**: Phase 1b begins when a major flood watch is set by the National Weather Service and/or the UCG determines that the incident requires implementation. Phase 1b is focused on developing State and federal response capability at the State EOC. Phase 1b ends when a major flood warning is issued by the National Weather Service and/or the UCG determine that severe flooding is nearly certain. Tasks include:

- The UCG will initiate a 24 hour planning cycle for the development of an IAP
- Nevada DEM will initiate mutual aid requests to build capability

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- NV DEM and FEMA will form task forces including a Mass Care Task Force
- FEMA will deploy federal Individual Assistance/Mass Care personnel, Geographic Operations, NWS and River Forecast Center liaison, ESF 1, 2, 3, 4, 7, 8, 9, 10, 11, 12 and 13.
- FEMA will coordinate with FEMA LMD for the deployment of a federal Staging Area Management Team (72 hours prior to onset)

### Phase 1c (Near Certainty)

**Primary Activities**: Phase 1c begins when a major flood warning is issued by the National Weather Service and/or the UCG determine that severe flooding is nearly certain. Phase 1c includes increased capability to respond to local requests for assistance. Tasks include:

- The State EOC will activate to level 1
- FEMA will establish one or more staging areas in or near the affected area
- NV DEM and FEMA will assess the need to push commodities and common user shelter items from FEMA distribution centers

**End-state of Phase 1**: Local, state, and federal agencies are prepared for severe spring flooding in eastern Nevada and have the capability to respond to a wide range of requests for state and federal assistance.

## Phase 2 (Response)

Phase 2 includes the following subphases:

## Phase 2a (Immediate Response) (0-24 hours after the onset of severe flooding)

**Primary Activities:** The joint state and federal response organization will respond to requests for assistance and accomplish objectives. Tasks include:

- Task forces develop an assessment of the situation, requirements for support, and a strategy to fulfill requirements.
- Communities receive resource support

**End State:** State and federal operations centers and resources are activated; operational coordination is established; situational assessment activities support response decisions.

#### Phase 2b (Deployment) (24–72 hours)

Primary Activities: The UCG continues response actions. Capabilities are deployed as required.

**End State:** State and federal organizations match deployment posture to local requirements. Responders conduct lifesaving and life-sustaining operations.

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#### Phase 2c (Sustained Response) (72+ hours)

**Primary Activities:** The UCG provides State and federal support to affected communities through joint and collaborative organizations and responders conduct lifesaving and life-sustaining operations.

**End State:** The UCG has attained full operational capacity; capabilities are employed in the impacted area to accomplish objectives; distribution operations support response operations and sheltered in place populations until the private sector recovers. A transition to recovery begins when response consistent with the National Disaster Recovery Framework.

## Phase 3 (Recovery)

Phase 3 includes Short-term Recovery, Intermediate Recovery, and Long-term Recovery.

## **Identified Staging Areas**

Federal staging areas provide a means to temporarily locate resources while awaiting assignment or distribution. The primary Federal Staging Area (FSA) is the Nevada Army National Guard's Regional Training Institute south of the Reno/Stead Airport. Reno/Stead Airport is a large public and military general aviation airport located in the North Valleys area, 10 nautical miles northwest of the central business district of Reno, in Washoe County, Nevada. Alternate federal staging areas include the Minden-Tahoe Airport, NAS Fallon, and Hawthorne Industrial Airport, a county-owned public-use airport.

Table C-1: Identified State and Federal Staging Areas

Federal Staging Areas		
Name	Description	
Nevada Army National Guard Regional Training Institute (Stead Training Facility)	Primary federal staging area south of the Reno/Stead Airport located 10 nautical miles northwest of Reno, in Washoe County, Nevada.	
Minden -Tahoe Airport	Alternate federal staging area - Minden–Tahoe Airport is a general aviation airport serving the Carson Valley in Douglas County Nevada	
NAS Fallon	Alternate federal staging area - Naval Air Station (NAS) Fallon is part of Navy Region Southwest located at 4755 Pasture Rd, Fallon, NV 89406	
Hawthorne Industrial Airport	Alternate federal staging area Hawthorne Industrial Airport is a county-owned public-use airport located one mile north of the central business district of Hawthorne, in Mineral County, Nevada	

#### Ground Transportation of essential supplies to isolated areas

ESF 7 will coordinate distribution of commodities and essential supplies to local staging areas in the affected communities. The NVNG will conduct movement of supplies from local staging areas into areas inaccessible to conventional civilian means of transportation.

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**Commodity Delivery to impacted communities** – Federal staging areas will be prepared to support and conduct transportation operations to State, local and community organizations.

#### **Emergency Fuel**

When State and federal support to fuel operations are required, they will be conducted consistent with the following principles:

- **Proactive posture** Because of the nature of a severe flood, a proactive strategy is required to identify and coordinate resources to establish a fuel supply chain to impacted areas.
- **Hub and spoke distribution** Inundation to the ground transportation system will require that bulk fuel operations support distribution operations in a "hub and spoke" or other arrangement. This eliminates a requirement to leave the incident area to fill trucks, trailers, and other means of distribution.

The state and federal response may be required to establish and manage a fuel supply chain that supports local, state, and federal operations. The supply chain will include temporary bulk storage and distribution to agencies and jurisdictions identified by state and local authorities. Fuel delivery to local, state, federal, and critical private sector segments of the community will be managed by ESF 7 and the Operations Section of the UCG.

Specific requirements include:

- FEMA procurement of emergency fuel through coordination with the Defense Logistics Agency.
- Distribution operations to local, state, and federal jurisdictions and agencies.

While emergency distribution of fuel may be required for a wide range of teams, equipment, vehicles, and facilities, the focus of fuel operations is on sourcing, delivering, staging, and distributing fuel to agencies, jurisdictions, and eligible recipients.

Fuel operations take place under the direction of a joint state/federal Fuel Task Force led by state and federal logistics (ESF 7) elements. The concept of operations for fuel is described in Annex D.

Support to infrastructure will be managed by the Infrastructure Branch, with support from ESF 12, the DHS Protective Security Advisor Infrastructure Liaison, and other infrastructure stakeholders.

# 4.0 Administration, Resources, and Funding

No change from Base Plan.

# 5.0 Oversight, Coordinating Instructions, and Communications

No change from Base Plan.

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# Annex C Appendices

Appendix C-1: Protect homes, businesses, and critical infrastructure from flood waters

Appendix C-2: Provide shelter and mass care

Appendix C-3: Provide law enforcement and public safety support

Appendix C-4: Provide search and rescue support

Appendix C-5: Provide hazardous materials mitigation and cleanup support

Appendix C-6: Support public information efforts

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# Appendix 1 to Annex C: Protect Homes, Businesses, and Critical Infrastructure from Floodwaters

## 1.0 Situation

Sandbagging and other temporary flood barriers were used in Nevada in 2017. The State of Nevada, Washoe County and the North Valleys Incident Command Team prevented the spread of flood waters to protect homes and property in Lemmon Valley. Techniques included sand, sandbags, and technical assistance. Resources included local resources, State and federal technical assistance or direct assistance. A Hesco Barrier, four feet high and filled with sand provided flood protection to areas of Swan Lake.

#### Requirement:

Provide support to local flood protection actions

## 2.0 Mission

The mission of the joint state and federal organization is to save and sustain lives, minimize suffering, protect critical infrastructure, and facilitate recovery following severe flooding in the State of Nevada.

## 3.0 Execution

# **Concept of Operations**

Support to local flood protection actions will include the following tasks:

- Nevada National Guard provides labor support to local emergency protective measures as directed by Nevada DEM
- Nevada Division of Forestry will provide hand crews
- Nevada Department of Transportation will provide heavy equipment and barrier support
- USACE will provide technical assistance as required

The Nevada Division of Forestry will be prepared to allocate NDF (24 person) Hand Crews to sandbagging and manual labor operations at three locations (Fallon, Yerington and the Walker River Tribe).

State agency support to local flood protection actions will be at the direction of Nevada DEM or coordinated through direct support of local jurisdictions. Support will be consistent with the resource requirements described in Table 1C - 1

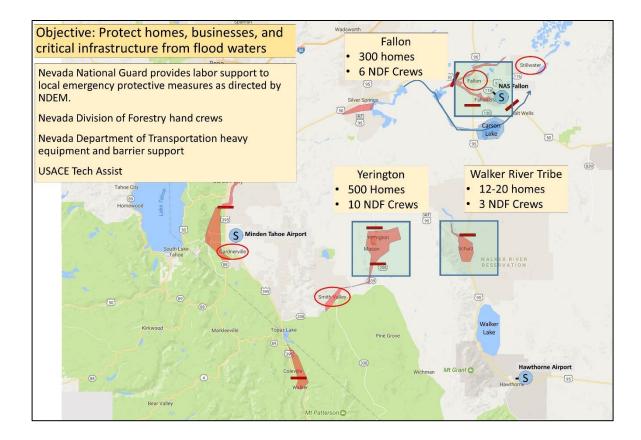


Figure 1C-1: Protect Homes and Infrustructure Diagram

Table 1C - 1 Required Resources				
Resource Name	Quantity	Sourcing (federal, state, local)		
NDF Hand Crews (24 person) Sandbagging and manual labor	TBD	Nevada Division of Forestry (NDF)		
Personnel	TBD	Nevada National Guard		
High water trucks	TBD	Nevada National Guard		
Dump trucks	Up to 6	Nevada National Guard		
Dump trucks	TBD	Nevada Department of Transportation		

Sand vendors (State contracts)	Nevada Department of Transportation
Heavy equipment	Nevada Department of Transportation
Barriers (sand or water filled)	Nevada Department of Transportation
On call contracts	Nevada Department of Transportation
Tech assist (with requirements)	USACE
Direct Assistance (with requirements)	USACE

# 4.0 Administration, Resources, and Funding

No change from Base Plan.

# 5.0 Oversight, Coordinating Instructions, and Communications

No change from Base Plan.

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C-1-4 Appendix C-1

# Appendix 2 to Annex C: Provide Shelter and Mass Care

## 1. Situation

Homes and multi-family structures could be rendered uninhabitable by flood inundation. While the majority of displaced population will shelter with family members or shelter in place, some people will seek emergency shelter. American Red Cross (ARC) support to feeding and sheltering will be required. Long term sheltering support will be needed. Commodities will be needed to support those who shelter in place, when transportation networks are degraded and the supply chain supporting impacted communities are damaged. Isolated communities will require high clearance vehicle delivery of essential supplies. Sheltering will need to support small and large animals. Evacuation support may be required. Prisoner support operations may need support through Nevada Department of Corrections.

Jurisdictions at particular risk are Smith Valley, Mason Valley, Yerington, Schurz, the Yerington Paiute Tribe of the Yerington Colony, and Fallon.

#### Requirement:

- Form a joint state and federal Mass Care Task Force
- Maintain ongoing assessment, identify resource shortfalls
- Support commodity delivery
- Support mutual aid coordination

# 2. Mission

The mission of the joint state and federal organization is to save and sustain lives, minimize suffering, protect critical infrastructure, and facilitate recovery following severe flooding in the State of Nevada.

#### 3. Execution

# **Concept of Operations**

Mass Care, shelter and evacuation support actions will include the following activities:

- The formation of a joint state and federal Mass Care Task Force
- A daily assessment of the resource needs of affected counties, mass care organizations, and organizations supporting evacuation
- The identification of resource shortfalls, the development of a supporting concept, and the resources and services required to provide support to a range of mass care, sheltering and evacuation activities
- Support from the American Red Cross (ARC), and ESF 7
- Actions that support evacuation of public facilities

The ARC is the primary provider of support to mass care and sheltering at the county level. The Mass Care Task Force will augment and supplement mass care operations with commodities and other

support consistent with an ongoing assessment of needs and responding to requests for support. The proactive staging of commodities will be decided in Phase 1c, prior to severe inundation. Specific tasks include:

- ARC will as necessary: coordinate shelter trailers, establish shelters, establish field kitchens (8), establish mobile shower units (8), deploy potable water tanks (5k gal)
- ESF 6 coordinates with voluntary agencies to support local shelters
- FEMA deploys commodities and commonly used shelter items (food, water, cots, blankets) to staging in a federal staging area (primary FSA is Stead Training Facility)
- ESF 8 provides Durable Medical Equipment support

Support to evacuation will include the following tasks:

- NHP provides support to transportation corridor safety
- NVNG provides high wheeled vehicles to assist the evacuation of areas threatened with inundation and already inundated
- NDOC coordinates for alternate incarceration locations for inmates evacuated from county jails.
- NDOC provides busses and security for inmate transfers (NDOC)
- NDOT provides signage to assist the public in finding appropriate routes to evacuate
- The Joint Information Center will provide optimal messaging for evacuation prior to road flooding
- ESF 11 will support food for livestock and relocation of livestock consistent with capability
- GSA (federal) will support requests for additional transportation (buses)

State agency support to mass care and evacuation actions will be at the direction of Nevada DEM. Support will be consistent with the resource requirements described in Table 2C - 1.

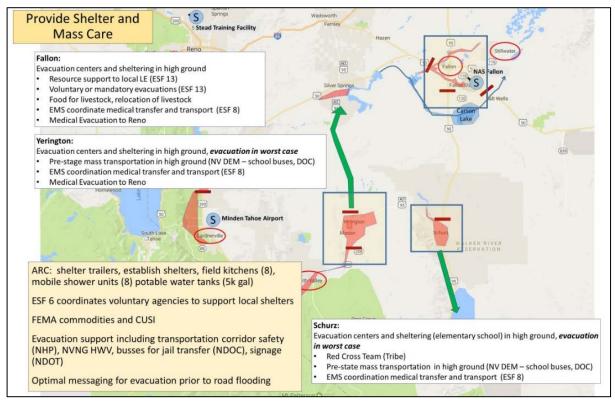


Figure 2C-1: Shelter, Mass Care and Evacuaiton Support Diagram

Required Resources			
Resource Name	Quantity	Sourcing	
Shelter trailers	8	American Red Cross (48 – 72 hrs)	
ARC DC in Sparks (cots, food)		American Red Cross	
Northern NV volunteers	200	American Red Cross	
8 State area volunteers	100	American Red Cross	
Evacuation transportation	TBD	Nevada National Guard	
High Clearance vehicles (36 inches, slow moving water)	TBD	Nevada National Guard / Mutual Aid Fire Departments	
POD Security, health and welfare checks		Nevada National Guard / ESF 13	
Road closure control and alternate routes	II.	ESF 13	

Las Vegas ESF 13	ESF 13 Mutual Aid
Messaging signs, placards	NV DOT
Reduce medical needs at shelters, crisis counseling	ESF 8
Family assistance centers (Recovery – Phase 2)	ESF 6
Support local jurisdiction	Joint Information Center
Commodities and common user shelter items (as requested)	FEMA
Regional Shelters (Silver Springs & Fernley)	With county coordination

# 4. Administration, Resources, and Funding

All shelters must meet physical and programmatic accessibility requirements as defined by the Americans with Disabilities Act. Any facility designated as a shelter must meet or exceed minimum safety requirements required by federal, state, and local regulations.

In collaboration with the Nevada Department of Agriculture, Nevada DEM will address strategies for the sheltering of persons with pets in accordance with Chapter 414 Nevada Revised Statute.

# 5. Oversight, Coordinating Instructions, and Communications

No change from Base Plan.

# Appendix 3 to Annex C: Provide Law Enforcement and Public Safety Support

## 1.0 Situation

Inundated areas, damaged roads and bridges, and evacuation will create a surge in law enforcement and public safety requirements. Local jurisdictions will require support. Security will be required to ensure public safety continues and access control is maintained.

### Requirements:

- Support evacuation and access control
- Coordinate law enforcement mutual aid

## 2.0 Mission

The mission of the joint state and federal organization is to save and sustain lives, minimize suffering, protect critical infrastructure, and facilitate recovery following severe flooding in the State of Nevada.

## 3.0 Execution

# **Concept of Operations**

Support to law enforcement and public safety will include the following tasks:

- The Nevada Department of Public Safety (DPS) will coordinate for supplemental local law enforcement (LE) activities at the county and city level (utilization of NV IMAC for post certified law enforcement officers) (for example: LVMPD, County sheriffs, Fish and Game Officers, State Park Rangers, NHP, BIA, etc.)
- Nevada National Guard provides traffic control points, critical infrastructure security, and access control

Security will be provided as coordinated with local jurisdictions: physical security, access control, security at facilities (PODs, staging).

State agency support to local flood protection actions will be at the direction of Nevada DEM, ESF 13 or coordinated through direct support of local jurisdictions. Support will be consistent with the resource requirements described in Table 3C - 1.

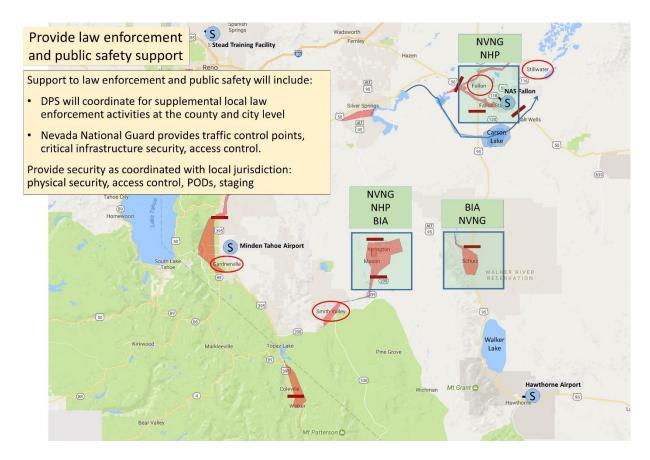


Figure 3C-1: Law Enforcement Public Safety Diagram

Table 3C-1 Required Resources			
Resource Name	Quantity	Sourcing	
Strike team of 5 vehicles, 2 officers	TBD	Various LE agencies (coordinated by ESF 13)	
General Security soldiers with weapons	TBD	Nevada National Guard	
General Security soldiers with weapons (rifles)	TBD	Nevada National Guard	
Strike Team - Buses	TBD	Nevada Department of Corrections	
Strike Team - Buses	TBD	Federal Bureau of Prisons	
State EOC Liaison	1	Federal ESF 13	
ESF 13 Field Support Teams	TBD	Federal ESF 13	
BIA Strike team	1	BIA Officers	

Federal Protective Service (for federal	75	Federal ESF 13
facilities)		

# 4.0 Administration, Resources, and Funding

No change from Base Plan.

# 5.0 Oversight, Coordinating Instructions, and Communications

No change from Base Plan.

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# Appendix 3 to Annex C: Provide Law Enforcement and Public Safety Support

## 1.0 Situation

Inundated areas, damaged roads and bridges, and evacuation will create a surge in law enforcement and public safety requirements. Local jurisdictions will require support. Security will be required to ensure public safety continues and access control is maintained.

### Requirements:

- Support evacuation and access control
- Coordinate law enforcement mutual aid

## 2.0 Mission

The mission of the joint state and federal organization is to save and sustain lives, minimize suffering, protect critical infrastructure, and facilitate recovery following severe flooding in the State of Nevada.

### 3.0 Execution

# **Concept of Operations**

Support to law enforcement and public safety will include the following tasks:

- The Nevada Department of Public Safety (DPS) will coordinate for supplemental local law
  enforcement (LE) activities at the county and city level (utilization of NV Nevada Intrastate
  Mutual Aid Committee (IMAC) for post certified law enforcement officers) (for example:
  LVMPD, County sheriffs, Fish and Game Officers, State Park Rangers, NHP, BIA, etc.)
- Nevada National Guard provides traffic control points, critical infrastructure security, and access control

Security will be provided as coordinated with local jurisdictions: physical security, access control, security at facilities (PODs, staging).

State agency support to local flood protection actions will be at the direction of Nevada DEM, ESF 13 or coordinated through direct support of local jurisdictions. Support will be consistent with the resource requirements described in Table 3C - 1.

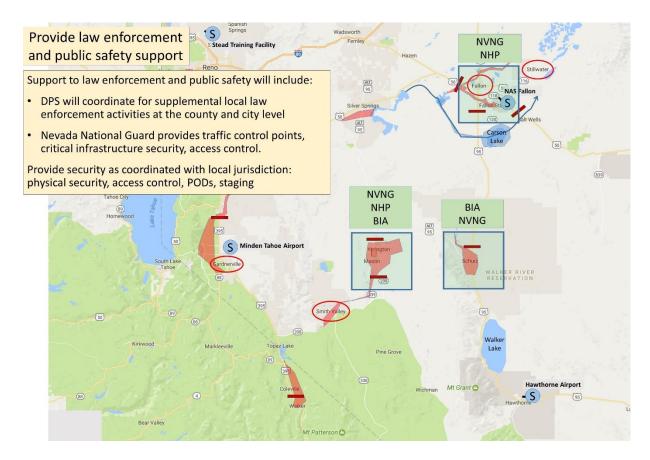


Figure 3C-1: Law Enforcement Public Safety Diagram

Table 3C-1 Required Resources			
Resource Name	Quantity	Sourcing	
Strike team of 5 vehicles, 2 officers	TBD	Various LE agencies (coordinated by ESF 13)	
General Security soldiers with weapons	TBD	Nevada National Guard	
General Security soldiers with weapons (rifles)	TBD	Nevada National Guard	
Strike Team - Buses	TBD	Nevada Department of Corrections	
Strike Team - Buses	TBD	Federal Bureau of Prisons	
State EOC Liaison	1	Federal ESF 13	
ESF 13 Field Support Teams	TBD	Federal ESF 13	
BIA Strike team	1	BIA Officers	

Federal Protective Service (for federal	75	Federal ESF 13
facilities)		

# 4.0 Administration, Resources, and Funding

No change from Base Plan.

# 5.0 Oversight, Coordinating Instructions, and Communications

No change from Base Plan.

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# **Appendix 4 to Annex C: Provide Search and Rescue Support**

## 1.0 Situation

Floodwaters in populated areas will result in stranded and isolated people. There will be requirements for rescue, water rescue, swiftwater rescue, and helicopter search and rescue. Fixed wing air surveillance, imagery and reporting will be required to support search and rescue.

#### Requirements:

Conduct search and rescue, animal rescue

### 2.0 Mission

The mission of the joint state and federal organization is to save and sustain lives, minimize suffering, protect critical infrastructure, and facilitate recovery following severe flooding in the State of Nevada.

# 3.0 Execution

# **Concept of Operations**

Support to search and rescue may require:

- Helicopter support, and fixed wing support and surveillance:
  - o Nevada National Guard
  - Washoe County Sheriff's Aero Squadron (volunteer pilots and owners)
  - Civil Air Patrol, Nevada Wing
  - o Washoe County Sheriff's office RAVEN aircraft
  - NAS Fallon Search and Rescue Helicopter
  - o NDF Helitack aircraft
- High Clearance Vehicles (NVNG)
- Local fire department High Clearance Vehicles (mutual aid) (Brush Trucks)
- Swiftwater rescue:
  - NV TF 1 water rescue and search and rescue coordination capability
  - Washoe County Sheriff's Office has rescue teams (staffed trained and equipped)
- Animal rescue
- Support from Federal ESF 9:
  - o Urban Search and Rescue (US&R) Incident Support Team (IST)

- National Type 1 US&R teams with water rescue capability
- o USCG aircraft and water rescue crews
- o U.S. Fish and Wildlife Service (USFWS) boats and personnel: USFWS boats/airboats (10)

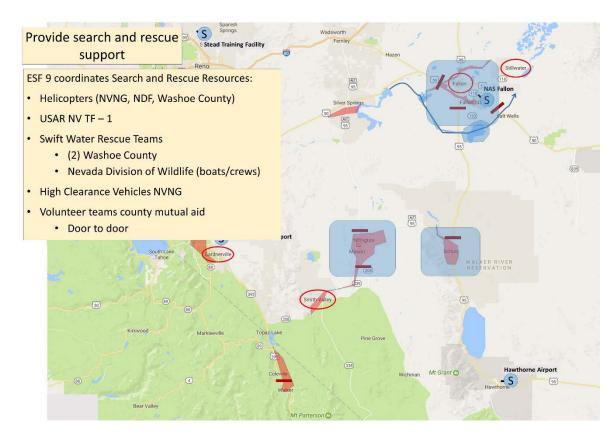


Figure 4C-1: Search and Rescue Support Diagram

Table 4C – 1 Required Resources				
Resource Name	Quantity	Sourcing (federal, state, local)		
UH-60, CH-47, UH-72	TBD	Nevada National Guard		
High Clearance Vehicles (36" slow moving water)	TBD	Nevada National Guard		
High Clearance Vehicles		Mutual aid		
Helicopters		Nevada Division of Forestry (NDF)		
Swift Water Rescue Teams	2 teams	Washoe County		

Volunteer teams		County Mutual Aid
Boats and Crews		Nevada Division of Wildlife
USAR NV TF – 1 (Las Vegas)	1 team	ESF 9
USCG Aircraft and water rescue		USCG
ESF 9 SAR Coordinator		USCG

# 4.0 Administration, Resources, and Funding

No change from Base Plan.

# 5.0 Oversight, Coordinating Instructions, and Communications

No change from Base Plan.

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C-4-4 Appendix 4

# Appendix 5 to Annex C: Hazardous Materials Mitigation and Cleanup Support

## 1.0 Situation

Floodwaters may create hazardous material (HAZMAT) releases as paints, solvents, insecticides and other household chemicals usually stored in basements or garages are washed into floodwaters. Rising floodwaters can uproot petroleum tanks, rupture underground oil or gasoline pipelines, dislodge storage tanks, and liberate chemicals stored at or below ground level. The flood may also interfere with water purification and sewage disposal systems. Flooding in business areas may result in releases of industrial chemicals.

### Requirements:

Hazardous materials mitigation and cleanup support

## 2.0 Mission

The mission of the joint state and federal organization is to save and sustain lives, minimize suffering, protect critical infrastructure, and facilitate recovery following severe flooding in the State of Nevada.

### 3.0 Execution

# **Concept of Operations**

The Nevada Department of Conservation and Natural Resources, Division of Environmental Protection (NDEP) is the lead agency for ESF 10. NDEP is the primary state agency to coordinate state, federal and/or private resources to detect, identify, contain, clean up, dispose of and minimize releases of hazardous substances; and prevent, mitigate or minimize the threat of potential releases.

NDEP provides technical assistance on environmental matters, regulates hazardous waste, coordinates sampling, and makes final decisions on remediation in the State (except for decisions made by the Washoe County District Health Department in that county). The Bureau of Corrective Actions oversees cleanups being conducted on contaminated sites and enforces environmental regulations. The Bureau of Waste Management oversees and inspects facilities that generate, store and dispose of hazardous materials.

Nevada Occupational Safety and Health Enforcement Section (OSHES) OSHES enforces health and safety standards required by the Nevada Occupation Safety and Health Act, and assists employers in identifying and correcting unsafe working conditions. OSHES can evaluate health and safety plans designed to protect employees from exposures to hazardous materials during HAZMAT responses and recovery operations.

Prior to a severe flood in Nevada, local, state, and federal agencies will work to minimize environmental threats to people, property, and the environment. Key tasks prior to flooding include:

- ESF 10 will provide technical assistance in the drafting of messaging for handling and disposal of domestic hazardous waste and propane tank mitigation, and for proper housekeeping of industrial hazardous waste
  - work with EPA, local jurisdictions and hazardous waste contractors to coordinate household hazardous waste drop-off events if possible
  - provide support for community outreach (e.g. working with individual counties to have flyers inserted in utility bills)
  - conduct public meetings in coordination with the primary jurisdictions
  - o facilitate pre-incident mitigation (e.g. tie down) of propane tanks
  - o facilitate pre-incident mitigation (e.g. proper housekeeping) of industrial hazardous waste via communication with known industrial companies in flood-prone areas

When hazardous material (HAZMAT) releases take place, tasks include:

- ESF 10 will request activation of hazardous material contractor resources through NDEM for specific cleanup incidents
- ESF 10 will request activation of hazardous material regional HAZMAT response team (Quad County HAZMAT and TRIAD HAZMAT) resources through NDEM for specific mitigation and cleanup incidents
- Nevada National Guard resources, with PPE support and decontamination:
  - o Activate, deploy and employ the CERFP DECON
  - Detect and characterize HAZMAT releases

After flood waters have receded, environmental efforts will include controlling HAZMAT and ensuring safety guidance is disseminated and implemented for both affected communities and responders.

- Securing the affected area, isolating the hazard, and denying the entry of unauthorized persons into the area (Law Enforcement and Nevada National Guard)
- Providing rapid and effective warning, information, and instructions to threatened populations (NDEP and NDEM Public Information Officers working through the JIC)
- Providing means to access technical resources to stabilize the affected areas (NDEP and NDEM)
- Train and equip emergency response personnel (HAZMAT team members as well as first responders) to efficiently and effectively mitigate hazardous materials incidents (CST and local fire department HAZMAT teams).

The USEPA has ten regional offices throughout the Nation. Nevada is within the boundaries of EPA Region IX. The US EPA is the primary federal agency involved in a hazardous materials emergency response. EPA response efforts are carried out in accordance with the National Contingency Plan (NCP).

#### EPA tasks include:

- Activate ESF 10 at the State EOC to coordinate Environmental Response/Health and Safety activities
- Activate a Federal On-Scene Coordinator (FOSC) to oversee cleanup activities and coordinate
  federal resources and field elements. EPA Region 9 FOSCs are located in San Francisco, Los
  Angeles and Carson City, NV. EPA FOSCs can activate specific resources including: assessment
  and cleanup contractors, National Strike Force USCG Strike Teams, EPA Environmental Response
  Team (ERT), and EPA Consequence Management Advisory Division (CMAD).

#### **USCG**

- Activate and deploy the National Strike Force (NSF) teams to respond to oil and hazardous substance incidents.
- Activate the National Strike Force Coordination Center (NSFCC), which oversees the NSF teams and maintains a national inventory of oil spill response resources.
- Activate and deploy a Public Information Assist Team (PIAT) to provide media relations support for the OSC.

# 4.0 Administration, Resources, and Funding

No change from Base Plan.

# 5.0 Oversight, Coordinating Instructions, and Communications

The Nevada Department of Conservation and Natural Resources, Division of Environmental Protection (NDEP) is the lead State agency for ESF 10. The US EPA is the primary federal agency involved in a hazardous materials emergency response.

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# **Appendix 6 to Annex C: Support Public Information Efforts**

# 1.0 Situation

The 2017 Spring Flood will generate sustained media attention and a high demand for accurate, timely information for the general public, the media, Congressional members, elected officials, other agencies, and tribal communities.

#### Requirements:

- Establish a Joint Information Center
- Mange and facilitate social media releases
- Alert messaging systems

## 2.0 Mission

The mission of the joint state and federal organization is to save and sustain lives, minimize suffering, protect critical infrastructure, and facilitate recovery following severe flooding in the State of Nevada.

## 3.0 Execution

# **Concept of Operations**

During the 2017 Spring Flood, the mission of ESF 15 and the State of Nevada Joint Information System is to provide a structure and system for developing and delivering accurate, coordinated, consistent and timely messages; developing, recommending, and executing public information plans and strategies on behalf of the Office of the Governor and the State Emergency Operations Center; advising the Office of the Governor, the State Emergency Operations Center, and local jurisdictions affected by disasters concerning public affairs issues that could affect a response effort; and controlling rumors and inaccurate information that could undermine public confidence in the emergency response effort.

### **State of Nevada Response**

ESF 15 – Public Information is a component of the State Emergency Operations Center (SEOC) and performs the primary role of coordinating information for the State in support of local jurisdiction incident response. ESF 15 also is responsible to coordinate the efforts of state agencies for gathering and disseminating emergency information to government officials, the general public and the news media to contribute to the health, safety and welfare of the communities of Nevada during an emergency or a disaster.

#### **Federal Response**

In accordance with the National Response Framework (NRF), the federal government coordinates external affairs through Emergency Support Function 15 (ESF 15, External Affairs). DHS is the Coordinating Agency for ESF 15, which integrates the Joint Information Center (JIC); Congressional

Affairs; Intergovernmental Affairs; Planning and Products, and Private Sector components of External Affairs. FEMA is the Primary Agency for ESF 15.

The DHS Assistant Secretary for Public Affairs, in coordination with the National Response Coordination Center (NRCC), will activate ESF 15 and appoint an External Affairs Officer (EAO) to lead ESF 15.

#### **Joint Information Center**

A state JIC is initially activated in the SEOC and serves as the principal source for public information; FEMA will provide an ESF 15 representative to the JIC to provide information on FEMA response efforts and to support the State in joint messaging.

Messages produced by ESF 15 personnel will follow the Joint Information Systems (JIS) model, as outlined in the NRF. Implementation of the JIS ensures coordinated and consistent messaging across multiple jurisdictions and entities.

State and federal Public Information and Warning stakeholders will be critical in providing timely and accurate information to affected audiences that will:

- Inform survivors of actions they can take to protect themselves and their families;
- Provide guidance to survivors on sheltering in place and evacuation operations;
- Inform survivors about available mass care, medical, and other resources;
- Direct survivors away from dangerous areas and away from routes that are essential for response operations; and
- Disseminate family reunification information.

Public Information and Warning capabilities will also be essential for handling media response and managing misinformation and rumor control and will be required for handling requests for tours and briefings from state and nationally elected officials.

# 4.0 Administration, Resources, and Funding

No change from Base Plan.

# 5.0 Oversight, Coordinating Instructions, and Communications

The Nevada DEM (ESF 15) or the JIC is responsible for all media activity related to an emergency as well as the way in which the media informs the public of emergency activities. To that end, the ESF 15 PIO or JIC will be the primary source of information for all media who contact State officials regarding emergency activities.

# **Annex D: Logistics**

## 1.0 Situation

Floodwaters will inundate and damage transportation networks leaving communities and individuals stranded. The delivery of commodities and essential supplies will be required. In addition commodity delivery to evacuation centers, shelters and other sites will be required. This annex describes a process for delivering essential commodities, equipment, and services in support of stranded communities and individuals. This annex includes operational information for:

- Distribution of essential supplies to impacted areas
- Movement coordination
- Fuel delivery and distribution
- Provision of temporary power

### 2.0 Mission

The mission of the joint state and federal organization is to save and sustain lives, minimize suffering, protect critical infrastructure, and facilitate recovery following severe flooding in the State of Nevada.

## 3.0 Execution

Commodity distribution is the delivery of life-sustaining resources to support disaster survivors at shelters, feeding kitchens, and PODs. Commodity distribution supports the Mass Care Services goals of sheltering, hydration, and feeding. It also supports the needs of residents who choose to shelter in place.

Transportation of commodities and essential supplies to communities is conducted by ESF 7. The strategy is executed through surface transportation. Commodities and supplies are moved from private sector, vendors, ARC, Nevada agencies, and FEMA Staging Areas to a local distribution point (location to be determined) near the affected area. NVNG conducts the "last mile" distribution into the flood inundation zone with trucks and high clearance vehicles.

FEMA supports distribution of commodities to organizations, counties or communities from staging areas or directly from vendors. The development of a staging and distribution capability is achieved through the activation, deployment and employment of the following capabilities:

- Staging area management teams
- Facilities (Staging Areas)
- Deployable communications (MERS, MCOV) resources (as required)
- Transportation, distribution, and materiel handling capabilities
- Movement coordination

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FEMA's ESF 7 also provides logistics capability to procure and deliver goods and services to support disaster survivors and communities directly from vendors without the need for staging.

As coordinated by Nevada DEM (ESF 6), the American Red Cross (Red Cross), coordinates feeding operations and bulk distribution in disaster response, in conjunction with local governments. The Red Cross uses internal assets and works with partner agencies under existing MOUs to meet the feeding requirements of the response.

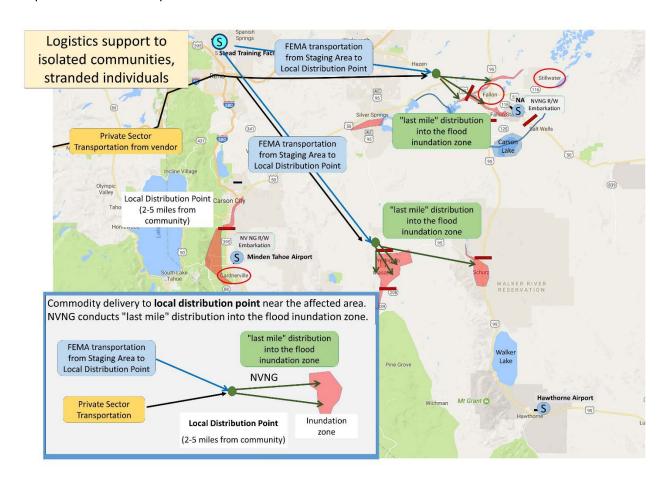


Figure D-1: Distribution to communities

#### **Movement Coordination**

Movement coordination is the scheduling, tracking, brokering, and management of transportation resources for the delivery of commodities, equipment, teams, and personnel that support incident management operations and the establishment of staging capabilities in or near the incident site. Movement coordination supports the transport of deployed resources until they are checked-in for employment at the incident site.

At the national level, the Movement Coordination Center (MCC) coordinates and resolves national-level transportation issues through the national resource movement schedule. At the MCC, the

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Transportation and Movement Coordination Group (TMCG) manages all transportation resources so that they can continually provide maximum support to incident operations.

In the field, ESF 7 conducts movement coordination through the Operations Support Branch of the Operations Section (ESF 7).

# Fuel Delivery Strategy

Fuel production and distribution is likely to be disrupted by the flooding. It is anticipated that local communities could experience insufficient fuel supplies due to route closures or commercial gas stations being inundated with flood waters.

If State and federal fuel operations are required, Nevada DEM and FEMA will initiate the formation of a state/federal Fuel Task Force within the Operations Section. The task force will coordinate fuel delivery and support operations. The task force will organize consistent with NIMS and the principles of Unified Command. The task force will activate, gain situational awareness, determine fuel delivery and support requirements, and develop a strategy for fuel operations. The task force will coordinate the approval of a fuel strategy and the development of task orders required to direct fuel operations. State and federal agencies will participate as members of the task force.

The focus of the fuel operation is on sourcing, transporting, staging, and distributing fuel to state and federal agencies, counties, and eligible recipients. The fuel operation includes fuel delivery and supporting fuel operation activities conducted by local governments, state agencies, and the private sector. The primary means of fuel delivery is though contract support.

### **Fuel Delivery Tasks**

#### **STATE**

#### Nevada DEM

- Initiate formation of the Fuel Task Force, under the direction of the Operations Section of the UCG. Initial State members include Nevada DEM, Nevada Department of Administration (ESF 7), Nevada National Guard, Nevada Department of Transportation, SEOC Logistics Section, Department of Conservation and Natural Resources, and Bureau of Air Pollution Control, and Private Sector Liaisons).
- Activate fuel and supporting contracts.
- Set priorities and objectives for Fuel Task Force.
- As the state lead for the Fuel Task Force, gain situational awareness regarding the impact and requirements of the response and create an initial federal supporting strategy to source, transport, stage, and deliver fuel.
- Facilitate the identification and prioritization of eligible recipients.

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#### **FEDERAL**

The NRCC will activate the IAA contract with the Defense Logistics Agency (DLA) for Emergency Fuel support. The DLA sources fuel from outside of the affected area and arranges transportation to locations identified by the UCG. FEMA's NRCC will execute and support specific fuel requirements, including quantities needed, locations, and delivery details as requested through the UCG.

- FEMA HQ procures emergency fuel through DLA for contract support to fuel operations.
- FEMA activates the Pre-Scripted Mission Assignment (PSMA) for DoD fuel PODs.
- The Operations Section Chief of the UCG forms federal elements of the Fuel Task Force (initial members include FEMA ESF 7, DLA, General Services Administration (GSA), EPA, USACE, DOE, and Private Sector Liaisons).
- FEMA appoints ESF 7 as the federal Fuel Task Force Leader to coordinate with State counterpart and direct federal fuel operations to support the State.
- The Fuel Task Force gains situational awareness regarding the impact and requirements of the response and creates an initial federal supporting strategy to source, transport, stage, and distribute fuel.

#### **FUEL TASK FORCE**

- Conduct operations to source, transport, stage, and distribute fuels.
- Support government agencies, counties, tribes, and private sector fuel and logistics operations
- o Continue to facilitate identification and prioritization of eligible recipients.
- Identify requirements for EMAC support to fuel operations.
- Conduct a planning cycle for the development of a daily functional plan.
- Evaluate requirements for EMAC support of fuel operations.

#### Requirements for DoD (Title 10) Support

- Support fuel distribution operations by truck. Receive fuel from staging and deliver to local, state, and federal jurisdictions and agencies.
- Support aircraft refueling as necessary to support aviation operations at departure airfields (NAS Fallon).
- Establish and operate retail fuel distribution points in support of disaster operations (PSMA 70).

# Temporary Emergency Power Strategy

ESF 3 will deliver temporary emergency power to support public health and medical services, mass care services, critical transportation operations, and logistics operations, in affected areas.

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#### **Temporary Emergency Power Tasks**

#### **STATE**

#### Nevada DEM

Activate ESF 3

#### **FEDERAL**

#### **FEMA**

Activate ESF 3

#### **USACE**

- Mobilize and deploy emergency power USACE Planning and Response Team (PRT) to assess the requirements for temporary emergency power
- Emergency Power PRTs contract for temporary emergency power
- o Mobilize and deploy the 249th Engineer Battalion

# 4.0 Administration, Resources, and Funding

#### FEMA/DLA Interagency Agreement

The formal interagency agreement for logistics support between DLA and FEMA was signed in March 2006. Annex B of the FEMA/DLA Interagency Agreement outlines the fuel support provisions between the two agencies.

In order to provide fuel support during disasters in response to FEMA requirements, DLA Energy personnel establish contract support for FEMA to procure fuel and transport it to sites designated by FEMA officials. As the executive agent for petroleum, oil, and lubricants, DLA Energy provides support through its multi-purpose fuel contingency contract. The DLA Energy Operations Center serves as DLA's crisis management focal point during disasters.

The DLA Energy Operations Center collects data and works with FEMA to develop options for support. FEMA will issue a distribution order to DLA Energy, which is FEMA's authorization to engage DLA Energy in support of FEMA disaster response operations. This distribution order will contain specific fuel requirements, including quantities, locations, and delivery details.

#### **Initial Response Resource (IRR) Packages**

Initial Response Resource (IRR) Packages are a key component of FEMA Logistics Management Directorate capabilities. IRR packages contain water, meals, cots, tarps, blue-roof sheeting, and blankets, and are ready to be deployed to support disaster survivors. IRR packages are pre-loaded on 53-foot tractor-trailers and are staged at FEMA Distribution Centers. Primary Distribution Centers are located in Atlanta; Fort Worth; Cumberland, MD; Frederick, MD; Moffett Field; Puerto Rico; Hawaii; and Guam.

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IRRs may be distributed to as many as 60 forward sites for distribution. IRRs flow through ISBs and FSAs to PODs operated by local and state governments.

Four IRR package have been established to support varying numbers of disaster survivors, as follows:

- A (Alpha): Meals and water for 120,000 people for 1 day (~66 trailers)
- B (Bravo): Meals and water for 60,000 people for 1 day (~45 trailers)
- C (Charlie): Meals and water for 30,000 people for 1 day (~17 trailers)
- D (Delta): Meals and water for 15,000 people for 1 day (~14 trailers)

Table D-1: Initial Response Resource (IRR) Package Descriptions

IRR Package	Alpha	Bravo	Charlie	Delta
Meals (trailer loads)	12	6	3	2
Water (trailer loads)	28	14	7	4
Cots (trailer loads	3	3	3	3
Blankets (trailer loads)	1	1	1	1
Infant and Toddler Kits (trailer loads)	1	1	1	1
DME & CMS Kits (same trailer load)	1	1	1	1
MCOVs	3	2	2	2
Generators (trailer loads)	17	17		
Meals (each)	250,000	125,000	60,000	30,000
Water (liters)	400,000	200,000	90,000	45,000
Cots (each)	2100	2100	2100	2100
Blankets (each)	4500	4500	4500	4500
Infant & Toddler Kits	20	10	5	3
DME & CMS Kits	1 + 1	1 + 1	1 + 1	1 + 1
MCOVs	3	2	2	2
Generators	54	54		

#### **Temporary Housing Units (THUs)**

The Logistics Management Directorate (LMD) is responsible for the receipt, storage, and issuance of temporary housing assets in support of FEMA's housing mission. FEMA is able to provide direct housing assistance in the form of Temporary Housing Units (THUs) to eligible individuals or households following a disaster through the Individual Assistance (IA) program.

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#### **Mobile Communications Office Vehicles (MCOVs)**

The LMD is responsible for storing, maintaining, and deploying MCOVs and operators to support response operations. The MCOV provides a rapidly deployable, self-contained mobile office and communications platform that enables FEMA to establish communications capabilities in the field.

# 5.0 Oversight, Coordinating Instructions, and Communications

Nevada Department of Administration is the primary agency for logistical and resource support to state and local governments in their response to an emergency or disaster (ESF 7). ESF 7 involves the provision of logistical and resource support to state organizations during the immediate response phase of an emergency or disaster. This includes relief supplies, office space, office equipment, office supplies, telecommunications, contracting services, transportation services and personnel required to support immediate response activities.

Federal Logistics and Supply Chain Management Support Organizations:

- Logistics Management Directorate (LMD) At the national level, FEMA's LMD (ESF 7) is responsible for policy, guidance, standards, execution, and governance of logistics support, services, and operations
- ESF 7 At the incident level, ESF 7 resides in the Operations Support Branch of the Operations Section of the UCG
- Defense Logistics Agency (DLA) The DLA is a major supplier of commodities for the support of FEMA disaster response efforts

# Air Operations Branch (AOB)

The Air Operations Branch (AOB) coordinates air operations and reports to the Operations Section of the UCG. The AOB will organize using state and federal counterparts.

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## Annex F: Public Health and Medical

## 1.0 Situation

Severe flooding increases the risk of injury and disease associated with floodwaters, contaminated waters and vectors of disease. Areas of interest include medical surge, vector control (mosquito), patient evacuation, and medical evacuation by aircraft.

#### Requirements:

- Provide public health and medical support
- Mutual Aid technical assistance
- Support Medical Evacuation (MEDEVAC)

## 2.0 Mission

The mission of the joint state and federal organization is to save and sustain lives, minimize suffering, protect critical infrastructure, and facilitate recovery following severe flooding in the State of Nevada.

## 3.0 Execution

Support to public health and medical actions will include the following tasks:

- Nevada ESF 8 responds to local requirements to support medical surge and evacuation
- Nevada ESF 8 supports medical surge/evacuation via EMAC, mutual aid, and intrinsic state resources
  - Ambulance strike teams x 2 (10 total)
  - Medical Evacuation bus from Eureka (20 personnel)
  - National Guard UH-60s or UH 72s pending availability
  - EMAC/mutual aid ambulances
  - Prepositioned Medical Surge Trailers (treat 2,000 ambulatory)
  - SERV NV health care volunteers
  - VA local transportation bus (12 seats) through mutual aid
- Nevada supports medical surge/evacuation with Federal assistance as required:
  - 2 x 50 bed Federal Medical Station (FMS) for medical sheltering
  - 2 x Rapid Deployment Force: staffing for FMS
  - 2 x Medical Strike Teams in FMS
  - HHS emPOWER Data for identification of medical fragile populations

Support to local jurisdiction public health/vector control includes:

- Nevada ESF 8 coordinates vector control measures (mutual aid, private contract, NG)
- Federal support to State for vector control as required:
  - Deploy SME from HHS to assist with prevention and control with entomologist, epidemiologist, etc. as required
  - Deploy Applied Public Health Team to augment local health departments

ESF 8 will support the identification and evacuation of Access and Functional Needs and medically fragile populations in affected areas.

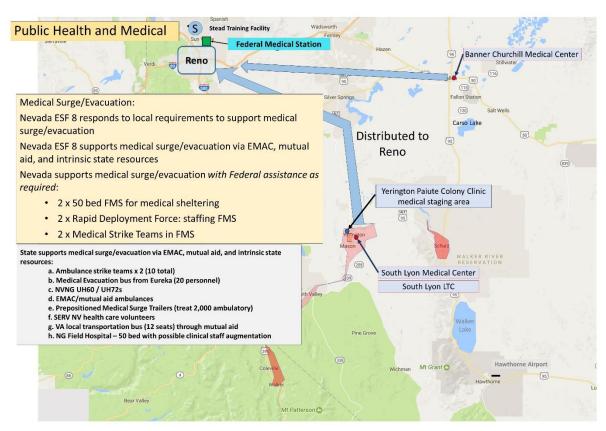


Figure F-1: Public Health and Medical Diagram

Table F-1 Required Resources				
Resource Name	Quantity	Sourcing		
Medical staff (treatment, triage)	30	Nevada National Guard		
Casualty evacuation aircraft	TBD	Nevada National Guard		

Medical evacuation bus (pending availability)	1	Eureka County
Medical Strike Team Ambulance (Las Vegas)	2	Regional Emergency Medical Services Authority (REMSA) Reno
Incident Response Coordination Team (IRCT)	1	HHS ASPR (as required)
50 bed Federal Medical Station	2	HHS ASPR (as required)
Rapid Deployment Force (Public Health) 125 pax per	2	HHS ASPR (as required)
Medical Strike Team (NDMS) 6 personnel	2	HHS ASPR (as required)
	Vector Cor	ntrol
Vector control contract		Nevada ESF 8
Vector Control SME		HHS ASPR

# 4.0 Administration, Resources, and Funding

No change from Base Plan.

# 5.0 Oversight, Coordinating Instructions, and Communications

No change from Base Plan.



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# **Annex X: Execution Checklist**

Appendices include checklists for selected task forces and ESFs. All sections, task forces and ESFs refer to both State and federal counterparts unless otherwise indicated.

2017 Nevada Spring Flood				
Action	Responsible	Date		
Phase 1a (Current Operations)				
Conduct crisis action planning in coordination with local jurisdictions, tribes and partner organizations	NV DEM, NVNG, FEMA			
Conduct a daily assessment of the risk of severe flooding in Nevada	NWS, NV DEM and FEMA (PSC)			
Conduct messaging to support flood preparedness	ESF 15			
Phase 1b (Increased Likelihood) 5 days prior to severe flooding				
Initiate a 24 hour planning cycle for the development of an IAP	NV DEM and FEMA			
Initiate mutual aid requests to build capability	NV DEM and NVNG			
Form task forces including a Mass Care Task Force	NV DEM and FEMA			
Deploy Individual Assistance/Mass Care personnel, Geographic Operations, NWS and River Forecast Center liaison, ESFs 1, 2, 3, 4, 7, 8, 9, 10, 11, 12 and 13	FEMA			
Coordinate with FEMA LMD for the deployment of a federal Staging Area Management Team (72 hours prior to onset of flooding)	FEMA			
Source pre event imagery options	GIS Coordinator, JFO GIMG/GIUL			
Acquire regulatory flood zones data	Mitigation, JFO GIMG/GIUL			
Continue daily assessment of the risk of severe flooding in Nevada and make recommendations for the need to transition to Phase 1c. Coordinate through a (virtual) team of NWS, USGS, USDA, Natural Resources Conservation Service Nevada, and State of Nevada counterparts	Planning Section Chief and NWS			
Report timeline to OSC for arrival of water rescue resources to Nevada (Appendix 4 to Annex C)	ESF 9			

Annex X: Execution X-1

2017 Nevada Spring Flood		
Action	Responsible	Date
Provide technical assistance in the drafting of messaging for handling and disposal of domestic hazardous waste and propane tank mitigation, and for proper housekeeping of industrial hazardous waste	ESF 10	
Work with EPA, local jurisdictions and hazardous waste contractors to coordinate household hazardous waste drop-off events if possible		
Provide support for community outreach (e.g. working with individual counties to have flyers inserted in utility bills)		
Conduct public meetings in coordination with the primary jurisdictions		
Facilitate pre-incident mitigation (e.g. tie down) of propane tanks		
Facilitate pre-incident mitigation (e.g. proper housekeeping) of industrial hazardous waste via communication with known industrial companies in flood-prone areas		
Phase 1c (Near Certainty) 48 hours prior to severe flooding		
Activate the State EOC to Level 1 with State and federal ESFs and JIC	NV DEM	
Establish one or more staging areas in or near the affected area	FEMA	
Assess the need to push commodities and common user shelter items from FEMA distribution centers	Mass Care TF, NV DEM and FEMA	
Deploy staffing to support Functional Operations, Geographic Operations, Operations Support and all Sections.	FEMA	
Establish movement coordination and air operations capability in the Operations Support Branch.	ESF 7	
Report status of local flood protection actions to SCO, FCO:	Operations Section	
<ul> <li>Nevada National Guard labor support to local emergency protective measures as directed by NDEM</li> </ul>		
Nevada Division of Forestry hand crews		
<ul> <li>Nevada Department of Transportation heavy equipment and barrier support</li> </ul>		
USACE technical assistance as required		
The Nevada Division of Forestry will allocate NDF (24 person) Hand Crews to sandbagging and manual labor operations at three locations (Fallon, Yerington and the Walker River Tribe)		
Report actions to support to law enforcement and public safety to the Operations Section Chief (Appendix 3 to Annex C)	ESF 13	
Assess the need for deployable communications (MERS, MCOV) resources to Staging Areas or other field sites.	Operations Section Chief	

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2017 Nevada Spring Flood				
Action	Responsible	Date		
Assess the need for generator contracts, ACI Contract Resources and USACE 249 <sup>th</sup> Prime Power for temporary power installation. Assess the need to deploy generators and report to the Operations Section Chief	ESF 3			
Assess need for State and federal fuel operations and as necessary, initiate the formation of a state/federal Fuel Task Force within the Operations Section.	Operations Section Chief			
Establish a coordination call between FEMA Geospatial Management Office and Remote Sensing Coordinator and other response partners' GIS leads	GIS			
Identify initial Remote Sensing requirements	GIS			
Develop situational awareness products of potentially affected populations and infrastructure	GIS			
Continue messaging to support:	JIC			
household waste, propane tank mitigation	with ESF 10, ESF 6 and ESF 8 support			
<ul> <li>flood preparedness, protective actions (sandbagging)</li> </ul>				
flood safety				
Assess need to activate and deploy the CERFP DECON	NVNG			
Assess need for deployment of rescue/water rescue resources to Nevada and report to Operations Section Chief (Appendix 4 to Annex C)	ESF 9			
Phase 1c Mass Care Support				
Assess the resource needs of affected counties and mass care organizations, identify resource shortfalls, develop a supporting concept and report to the Operations Section Chief.	Mass Care Task Force (daily)			
Coordinate with voluntary agencies for support to local shelters.	ESF 6			
Provide shelter trailers, establish shelters, establish field kitchens (8), establish mobile shower units (8), and deploy potable water tanks (5k gal) as necessary	ARC			
Push commodities and shelter items to Staging Area (as required)	ESF 7			
Phase 1c Evacuation Support (NV DEM Lead)				
NHP provides support to transportation corridor safety	ESF 1			

Annex X: Execution X-3

2017 Nevada Spring Flood		
Action	Responsible	Date
Provide high wheeled vehicles to assist the evacuation of areas threatened with inundation and already inundated.	NVNG	
Provide buses for jail transfer	NDOC	
Provide signage to assist the public in finding appropriate routes to evacuate	NDOT	
Support requests for additional transportation (buses)	GSA	
Provide optimal messaging for evacuation prior to road flooding	Joint Information Center	
Support food for livestock and relocation of livestock consistent with capability	ESF 11	
Phase 1c Public Health and Medical		
Respond to local requirements for support to medical surge and patient evacuation	Nevada ESF 8	
Support medical surge/evacuation via EMAC, mutual aid, and intrinsic state resources	Nevada ESF 8	
Evaluate the need for federal resources (FMS, Rapid Deployment Force, staffing for FMS, Medical Strike Teams)	ESF 8	
Phase 2 (Response)		
Task forces (Mass Care, Fuel) develop an assessment of the situation, requirements for support, a strategy to fulfill requirements, and communicate plans to the Operations Section Chief	All Task Forces	
Support medical evacuation	ESF 8 and NVNG	
Deliver temporary emergency power as required to support public health and medical services, mass care services, critical transportation operations, and logistics operations, in affected areas.	ESF 3	
Conduct rescue, water rescue and search activities, coordinate supporting surveillance, imagery and reporting from aircraft (CAP, NVNG)	ESF 9 and NVNG	
Provide PA support to local, state, and tribal governments and certain private nonprofit entities.	FEMA	
Provide IA support to individuals and households to help meet sustenance, shelter, and medical needs.	FEMA	
Establish DRCs and BRCs in coordination with other federal agencies.	FEMA/SBA	
Evaluate need for support to local jurisdiction public health/vector control, and deploy SME from CDC to assist with prevention and control with entomologist, epidemiologist	ESF 8	

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2017 Nevada Spring Flood				
Action	Responsible	Date		
Phase 2 Mass Care Support				
Coordinate feeding operations and bulk distribution, in conjunction with local governments	Nevada DEM and ARC			
Support distribution of commodities to organizations, counties or communities from staging areas or directly from vendors	FEMA ESF 7			
Distribute commodities and essential supplies to stranded communities using surface transportation	NVNG			
Phase 2 Hazardous Materials Mitigation and Cleanup Support				
Evaluate need to request activation of hazardous material contractor resources through NDEM for specific cleanup incidents  Evaluate need to request activation of hazardous material regional HAZMAT response team (Quad County HAZMAT and TRIAD HAZMAT) resources through NDEM for specific mitigation and cleanup incidents	ESF 10			
Assess the need to activate:  • Federal On-Scene Coordinator (FOSC)  • Assessment and cleanup contractors  • USCG National Strike Force (NSF) teams  • USCG Public Information Assist Team (PIAT)	EPA and USCG			

Annex X: Execution X-5