



KATE BROWN
Governor

March 9, 2017

President Donald J. Trump
United States of America
The White House
Washington, D. C.

Through: Sharon Loper, Acting Regional Administrator
FEMA Region 10
130 228th Street SW
Bothell, WA 98021-9796

Dear Mr. President:

Under the provisions of Section 401 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. §§ 5121-5207 (Stafford Act) as amended, and implemented by 44 CFR § 206.36, I request that you declare a major disaster for the State of Oregon as a result of the winter storm event of January 7 to January 20, 2017. I am specifically requesting Public Assistance (PA) for ten Oregon counties: Baker, Columbia, Curry, Deschutes, Hood River, Josephine, Malheur, Multnomah, Union, and Washington; and the Hazard Mitigation Grant Program (HMGP) statewide.

On February 13, 2017, the Acting Associate Administrator of FEMA's Office of Response and Recovery, Corey D. Gruber, provided an extension of time to make this request until March 12, 2017.

Please also see Enclosure 1 to this letter, OMB No. 1660-0009/FEMA Form 010-0-13, *Request for Presidential Disaster Declaration; Major Disaster or Emergency*.

A complex, long duration weather pattern affected the Pacific Northwest – especially Oregon – during January 7 to 20, 2017. This severe winter storm brought a multitude of weather hazards that affected much of Oregon, including cold arctic air, heavy snow, freezing rain and ice accumulation, heavy rain, riverine and urban flooding, mud and landslides, high winds, large ocean waves and high surf conditions.

All of Oregon experienced below normal temperatures during the first five weeks of 2017 with temperature departures of two to ten degrees Fahrenheit below average for January 1 through February 8, 2017. The prolonged period of cold temperatures compounded the



effects of these weather hazards, which included continual accumulation of snow, increased snow load on buildings, and extremely difficult travel due to snow and ice on roadways. Heavy rainfall in parts of the state also contributed to flooding, erosion, and frequent landslide and mudslide activity.

Overall, temperatures were 25 to 35 degrees Fahrenheit below average across much of Eastern Oregon during the first half of January. Numerous record low temperatures were set during this time.

The heavy snowfall and ice accumulation caused transportation problems, power outages, tree damage, structural damage to facilities, and collapse of buildings. Ice accumulations of one-half to one inch were reported in the eastern part of the Portland metro area. Ice accumulations in the Columbia River Gorge were one and one-half to two inches. The ice caused numerous power outages due to ice accumulation, and ice and snow loads on trees that broke limbs and toppled trees.

Many locations across Eastern Oregon reported snow depths of one to four feet during the incident period. The heavy snow load on buildings caused roofs to collapse on many buildings, especially in Deschutes and Malheur counties, where some of the buildings were schools. There were many locations across Oregon that typically do not receive a lot of snow that did during this event, and places where accumulated snow ordinarily melts fairly quickly between events. That too did not happen in some areas, and the snow piled up. There were also many locations where the chief problem was not so much the amount of snow, but frequent high wind events blowing snow back across roadways and up against buildings.

Of special note was the increase in snow water equivalent (SWE) in Southeast Oregon during the January 7 to 20 timeframe. Special measurements made by the Natural Resource Conservation Service confirmed five to seven inches of SWE in the valleys of Southeastern Oregon, which equates to snow loads on flat surfaces ranging from 26 to 36 pounds per square foot.

Precipitation was 150% to 200% of average across Southeast Oregon and parts of Southwest Oregon during the first five weeks of 2017.

Strong winds occurred during the incident period, especially in the Columbia River Gorge, the Grande Ronde Valley, Rogue Valley, and the Oregon Coast.

Large waves of 18 to 25 feet occurred during January 18 and 19 off the coast of Southwest Oregon. The energy from these large waves and resultant high surf conditions caused damage to the Port of Brookings-Harbor basins and fuel dock due to extensive erosion and sloughing caused by the large waves. In addition this continued deposit of materials has impacted the harbor, creating a navigation hazard. The Port of Brookings-Harbor is a safe harbor and is designated as a Port of Refuge for vessels transiting the west coast of the United States.

Additional information on the storm was provided by the National Weather Service to FEMA Region 10 in an Executive Weather Summary for the time period of January 7 to 20, 2017, prepared by the Warning Coordination Meteorologist for the Portland, Oregon National Weather Service office.

Chronically homeless residents were especially vulnerable, resulting in four deaths in Multnomah County due to hypothermia. Local fire departments transported people to shelters, including shelter staff, and handed out blankets, severe weather gear, and food to the homeless population. A record number of warming centers were opened to expand capacity, with a total of 20 different shelter locations that were utilized including city and county government office buildings that were closed due to the storm. On average the daily population of these warming centers was about 730 residents.

Initially, warming shelters were housing only homeless residents, but then residents with homes were also staying due to ruptured lines or loss of heat. The warming shelters had to become 24-hour shelters as the weather got colder and it became dangerous to move around the urban area.

Other directly impacted populations included more than 80,000 Portland General Electric customers who lost power during the frigid temperatures.

Some local governments reported spending large percentages of their entire annual maintenance budget within the incident period – in a few cases more than 100% of those budgets.

The hazardous conditions created significant issues for accessing local hospitals and clinics. With hospitals already full due to influenza patient admissions, basic critical and operation aspects such as waste disposal, deliveries of linens, food, and medical supplies were unreliable. Wait times in emergency rooms sometimes surpassed nine hours. Relationships with funeral homes were affected by this winter storm, resulting in morgue overflow.

Snow and ice resulted in multiple extended closures of Interstate 84 from Troutdale to near the Idaho border – a distance of about 350 miles – from mid-day on January 17 until the evening of January 20.

For TriMet, which has many transit facilities and services in two of the requested counties, routes were cancelled for safety reasons because the snow/ice levels were too much for vehicles or passengers to safely traverse. All of TriMet's higher elevation bus routes across the district were canceled or put on snow routes requiring people to somehow come down to lower elevations to catch a bus or train if it was available in their area. TriMet's train service is especially sensitive to extreme weather emergencies because of the complexity of the safety critical components and the proximity to unsafe conditions for passengers. Their para-transit service was severely affected as it was reduced to same day life line services only, such as those people who require transport to

obtain daily dialysis or cancer treatments. Other passengers that did not require these types of transports were not able to get to other appointments or critical errands. All of this greatly affected the economy because people could not get to work, and businesses shut down due to lack of customers. TriMet serves over 300,000 people per day.

The voluntary organization response included Team Rubicon, the American Red Cross, the Salvation Army, the Oregon Food Bank (OFB), and 2-1-1 Info.

Team Rubicon provided personnel and equipment in the City of Portland (Multnomah County) from January 12 to January 14, 2017. The 14 team members performed tree, debris, and snow removal at approximately 16 locations around the city during 192 cumulative hours worked.

Seven American Red Cross members worked for approximately 126 hours in preparation and coordination with local emergency managers and others. During January 2017, but unrelated to the winter storm, the American Red Cross also opened a shelter in Portland with a peak population of 69 individuals. There were a total of 399 overnight stays. They served 3292 meals. This event was a Level 1 Operation for the American Red Cross, which also provided casework for nine families in Deschutes Josephine, Multnomah, and Washington counties.

The Salvation Army supported feeding operations to warming shelters in downtown Portland and Gresham (Multnomah County) for lunch and dinner over a three day period. The two warming shelters served a total of approximately 160 homeless individuals, for a total of 480 meals.

The OFB - Metro Services provided "go bag" meals filled with nutritious snacks to two warming shelters in Portland at the request of Multnomah County Emergency Management. They provided 1,800 meals in total over a three day period.

Local governments operated many shelters, but summary statistics from those operations are not available.

2-1-1 Info. fielded phone calls to link people affected by the cold weather with resources. They were coordinating with Multnomah County for warming shelter operations and other resources and with Deschutes County for snow removal volunteer coordination.

Local emergencies were declared by Baker, Crook, Harney, Hood River, and Malheur counties, and the cities of Cascade Locks, Idanha, Portland, and others.

I declared a statewide emergency on January 11, 2017 via Executive Order No. 17-02. I also issued Executive Order No. 17-03 to facilitate the disposal of almost one hundred million pounds of onions lost in storage buildings that collapsed from snow loads.

The following is a summary of damage and impacts in the ten counties included in this request:

- Baker County: There was a great deal of damage due to ice dams and snow loads, and considerable costs associated with emergency snow removal. State correctional facility work crews (inmates) spent several days removing snow and ice accumulations from roofs of public buildings, including schools and day care centers, as the snow load weight created the potential for structural collapses. Fire hydrants were buried, necessitating the removal of snow and ice so they could be accessed.
- Columbia County: Snow and ice caused fallen trees, damaging power lines, and there was considerable freeze and thaw damage to public roads, as well as broken pipes. This county also experienced clogged culverts, mud and landslides, and considerable erosion damage. The landslide in City of Scappoose broke the main water transmission line and almost drained the main reservoir for the city's water. The city has accomplished a temporary repair, but still needs to do permanent repair work that will prevent similar damage in the future.
- Curry County: Wind-driven high surf caused significant damages to the Port of Brookings-Harbor, and the Coos-Curry Electric Cooperative suffered damage to its electric distribution system.
- Deschutes County: Heavy snow and ice caused significant damage to multiple public and private buildings, with heavy snow loads resulting in collapsed buildings (including one school), truss damage, and leaking roofs causing interior damage. There were very large costs associated with emergency snow removal, some of which were due to a weather forecast for heavy rain on snow that did not materialize.
- Hood River County: Heavy snow and ice damage included leaking roofs, ceiling damage, broken pipes and gutters. There was considerable costs to restore power, and for emergency snow plowing. Schools – including the community college – were closed for ten days during the incident period. Two port districts suffered extended closures to their facilities. Particular hardest hit areas include the City of Cascade Locks, which had excessive damages due to woody debris from the significant ice storm event. Residents were endangered by hazardous travel conditions (including being cut off by the Interstate 84 closure) and no power to heat homes. Impacts also included stranded persons who had been traveling through the area. The City of Hood River had over 7,700 persons impacted by streets needing snow and ice removal.
- Josephine County: Heavy rain and melting snow caused large landslides, mudslides, and streambank erosion, causing damage to roads and bridges, and to

two irrigation districts. Roads closed by slides or erosion are greatly restricting emergency vehicle access into several neighborhoods.

- Malheur County: The storm event required a great deal of emergency snow removal, including efforts to protect public buildings. Inmates helped to remove snow and ice accumulations from roofs of public buildings. Collapsed roofs and buildings occurred, nevertheless, due to snow loads. About 1,000 head of cattle were trapped by deep snow, and almost one hundred million pounds of onions were lost in storage buildings that collapsed. The United States Army Corps of Engineers assisted local officials with a prolonged 15 mile long ice jam in the Snake River that was contributing to flooding.
- Multnomah County: Schools were closed for up to ten days. Government offices were also closed periodically during the event due to snow, ice, and cold conditions. Emergency deicing and snow removal occurred in many locations by several government entities. Extreme cold temperatures created dangerous conditions and led to four fatalities. Icy road conditions made for dangerous driving even for emergency vehicles. Having only two 4-wheel drive ambulances in the county resulted in long wait times for emergency calls, and as a result the county requested National Guard Humvees to assist with ambulance transports. The event resulted in many downed or damaged trees, and debris removal. Tree falls in some cases damaged public buildings. At times, a temperature inversion caused heavy runoff, erosion, mud and landslides at higher elevations causing severe road failures.
- Union County: Significant snowfall and extreme winds caused drifting snow creating very hazardous conditions. Many roads were closed due to snow. Significant emergency snow removal occurred.
- Washington County: There was a great deal of debris removal due to hazard trees caused by ice and heavy snow. Significant costs were incurred for emergency snow plowing and deicing for emergency vehicles. Extreme cold resulted in water main break.

Local governments in many parts of the state conducted first response actions that included steps to protect public safety, and local public utility work. Counties and cities implemented emergency plans and activated emergency operations centers. Emergency response actions were performed by medical, police, fire and public works agencies. State and local transportation agencies did everything within their capabilities to provide residents and travelers with safe passage along severely affected roads. Local government agencies worked with voluntary organizations to provide much needed shelter to people displaced from their homes.

A joint Preliminary Damage Assessment (PDA) was conducted for Public Assistance (PA) on February 27 to March 3, 2017 in the following twelve counties: Baker, Columbia, Curry, Deschutes, Hood River, Jefferson, Josephine, Malheur, Multnomah, Union, Wasco, and

Washington. The PA PDA estimates that there is approximately \$17.6 million in eligible damage and costs across the ten counties included in this request.

The following information provides examples of the nature and amount of state and local government resources that have been or will be used to alleviate the conditions of this disaster:

- The *State Emergency Operations Plan* was executed on January 11, 2017, and the State Emergency Coordination Center (State ECC) was activated in order to coordinate support to and communication with local governments and responding state agencies. The State ECC was active off-and-on from January 11 to January 20.
- Many shelters were opened, primarily by local governments.
- Local public works and Oregon Department of Transportation responded using state and local resources in an effort to keep roads clear, open, and safe for the traveling public.
- Inmate work crews were deployed to assist in snow and ice removal at public facilities.
- Local public utility crews worked tirelessly to restore power.
- Hospitals activated their emergency transportation plans for essential doctors, nurses and support staff to treat the record breaking number of influenza patients and community members requiring surgery for injuries sustained from falling on the ice. One hospital reported a 90% increase in surgeries.
- Due to icy conditions on steep roads, the Oregon National Guard provided Humvee vehicles to be used as ambulances in Portland and The Dalles.
- TriMet buses were used to assist with mass sheltering relocation, temporary warming shelters, temporary responder relief areas, and victim relocation from a building fire in downtown Portland.
- Mutual aid assistance was requested and received from the City of Seattle to support the Portland Bureau of Transportation with snow removal.
- To ensure a full assessment of damage, costs, and impacts, the Oregon Military Department, Office of Emergency Management (OEM) reached out to each of Oregon's local emergency management agencies, as well as its nine federally recognized Tribes.
- State and local applicants for Public Assistance funding will be providing the non-federal match required.

Oregon received a Public Assistance and Hazard Mitigation major disaster declaration on January 25, 2017 for a severe storm and flooding that occurred from December 14 to 17, 2016. That declaration was for Josephine and Lane counties. We also received a Public Assistance and

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Hazard Mitigation major disaster declaration on February 17, 2016 for a Pacific Storm that impacted 19 counties (Columbia, Curry, Multnomah, and Washington counties were among those impacted). I issued three Conflagration declarations during 2016, and the state received two Fire Management Assistance Grant Program (FMAGP) declarations during 2016. Cost estimates and percentages for each category of the total eligible Public Assistance are shown in Enclosure B to this letter. In summary, Public Assistance assessed during the PDA across the ten counties comprising this request included the following approximate dollar estimates organized by PA category: A (\$905,400), B (\$9,445,000), C (\$3,118,000), D (\$603,500), E (\$1,200,000), F (\$608,300), and G (\$1,700,000).

Insurance coverage of local government buildings is estimated at over \$12,000,000.

The following counties appear to meet FEMA's intent for the term "extremely high Public Assistance per capita": Curry, Deschutes, Hood River, and Malheur.

Estimated assistance that has been or is likely to be provided by federal agencies other than FEMA are shown in Enclosure C to this letter. Snowfall data for Malheur County is included in Enclosure D.

I appreciate your consideration of this request in support of Oregonians.

Sincerely,

A handwritten signature in black ink, appearing to read "Kate Brown", with a horizontal line extending from the end of the signature.

Governor Kate Brown

Enclosures

1. OMB No. 1660-0009/FEMA Form 010-0-13

A: [This enclosure was not used as part of this request.]

B: Estimated Stafford Act Requirements for Public Assistance

C: Estimated Assistance from Other Federal Agency Programs

D. Snowfall Data