



**BILL LEE**  
GOVERNOR  
STATE OF TENNESSEE

August 22, 2021

The Honorable Joseph R. Biden  
President of the United States  
The White House  
Washington, D. C.

Through:  
Ms. Gracia Szczech  
Regional Administrator  
FEMA Region IV  
3003 Chamblee-Tucker Road  
Atlanta, GA 30341

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 implemented by 44 CFR § 206.36, I request that you declare an expedited major disaster declaration for the State of Tennessee due to catastrophic flash flooding caused by record-setting rainfall in Dickson, Hickman, Houston, and Humphreys counties on August 21, 2021.

Recorded amounts of rainfall in Middle Tennessee varied from 8 to 14 inches; however, there were reports of higher amounts of up to 17.02 inches measured by a Tennessee Valley Authority (TVA) rain gauge. At this observation site, TVA recorded nine inches of rain in three hours with a three-inch per hour rainfall rate. The 17.02 inches of rain measured at McEwen, TN broke the all-time 24-hour rainfall record for the State of Tennessee - which was 13.60 inches in Milan set on September 13, 1982, and shattering daily rainfall records observed during the Historical May 2010 Flood (FEMA-1909-DR-TN). NWS Nashville relied on the Multi Radar Multi Sensor (MRMS) rainfall estimates which showed a swath of 14 inches of rainfall with a few at 17 inches over the hardest hit areas. Some of the rainfall amounts that were observed on August 21, 2021, were 20-25 percent of the total annual rainfall amounts with the bulk falling in an 8 to 12-hour window.

This flash flood disaster left a wide path of destruction resulting in, destroyed homes, businesses underwater, widespread power outages, and significant damage to roads and bridges. First responders performed swift water rescues of citizens trapped in vehicles or residences or swept away by the fast-rising deluge. The American Red Cross, local churches, and the community opened shelters for those seeking safety and worked together to find new facilities when planned facilities were inaccessible due to flooding and flood-related damage. More than 10,000 homes and businesses lost power at the peak of the storms with many areas expected to be without electricity for days or weeks. The City of Waverly reported disruption to their water treatment facilities resulting in a boil water advisory distributed via a Wireless Emergency Alert (WEA). A Reunification Center for flood survivors was opened and the American Red Cross activated the

*Safe and Well* online resource where flood survivors can register and let family and friends know they are safe. Mental health strike teams were deployed to the impacted areas to help survivors and first responders. AT&T, Verizon, the Tennessee National Guard, and the Tennessee Emergency Management Agency (TEMA) worked diligently to move resources to restore disrupted communication systems.

In accordance with T.C.A. 58-2-107(b)(2), TEMA activated the State Emergency Operations Center to a Level 3, in accordance with the Tennessee Emergency Management Plan (TEMP), enacting a State of Emergency.

### **Response and Recovery Actions**

In response to both our residents' and communities' needs, Tennessee state and local governments, volunteer organizations, and electrical cooperatives planned and responded to a degree that saved both life and property. The State of Tennessee's Emergency Operations Center was staffed with TEMA employees and Emergency Services Coordinators (ESCs) from multiple agencies and partner organizations. Congregate shelters were established in impacted counties by county EMAs, the American Red Cross and local churches. The American Red Cross and TEMA coordinated with each county to support mass care needs providing cots, blankets, comfort kits, and other disaster supplies. Sheltering efforts resulted in no less than 202 individuals seeking refuge in at least six shelters. The American Red Cross also supported disaster relief through the distribution of meals, water, cleanup kits, comfort kits, and household disaster emergency supplies. Additionally, the Red Cross supported the reunification center and provided disaster mental health resources.

Multiple State agencies continue to be involved in the response coordination to include: Tennessee Department of Environment and Conservation (TDEC); Tennessee Wildlife Resources Agency (TWRA); Tennessee Department of General Services; Tennessee Department of Human Services (TDHS), Department of Health (TDH); Tennessee Department of Transportation (TDOT); Tennessee Emergency Management Agency (TEMA); and the Tennessee Highway Patrol component of the Department of Safety and Homeland Security.

Several volunteer organizations have also been involved in disaster relief activities and coordination to include the Seventh-day Adventist Church, Team Rubicon, Hope Force, Civil Air Patrol, Tennessee Baptist Disaster Relief, Inspiritus, Crisis Cleanup, Salvation Army, Just Serve, Middle Tennessee Disaster Relief, Samaritan's Purse, United Way, Catholic Charities, LDS Charities, and Lutheran Disaster relief.

While volunteer assistance has been critical toward the recovery for the citizens and businesses in impacted areas, unmet needs remain. Many households have suffered uninsured losses of personal belongings, appliances, furniture, vehicles, and homes. It is expected that recovery will be significantly more difficult for low-income individuals and other vulnerable populations, as well as for businesses impacted by previous disasters, to include COVID-19.

### **Casualties**

As of this correspondence, 16 weather-related fatalities are confirmed by the Tennessee Department of Health as a result of this disaster; all located in Humphreys County. Multiple fatalities have required the Tennessee Bureau of Investigation and Law Enforcement Agencies to work on the identification of remains. More than 30 people are reported as missing in Humphreys County and search and recovery operations are ongoing. Sadly, it is expected that the number of fatalities will increase.



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**Impacts to High Poverty and Vulnerable Communities**

The impacts of this severe weather event hit hardest in areas that encompass some of the most economically disadvantaged areas in the State. Because of fiscal constraints, the State and many of these counties are still recovering from the long-term effects of previous major disaster declarations including: FEMA-4427-DR-TN, FEMA-4471-DR-TN, FEMA-4514-DR-TN (COVID-19), FEMA-4550-DR-TN, and FEMA-4601-DR-TN with the COVID-19 declaration in an ongoing incident period.

All of the impacted counties in the below table have a higher percentage of elderly and disabled than the National average and either meet or exceed the State’s average. The Median Household Income for each county is below the National and State averages.

Counties	Population	% Elderly	% Disabled	Median HH Income	% Below Poverty	% Pre-Disaster UnEmp. *
National	328,239,523	16.50%	8.6%	\$62,843.00	10.50%	3.60%
State (TN)	6,829,174	16.70%	11.0%	\$53,320.00	13.90%	3.60%
Dickson	53,948	16.70%	12.8%	\$53,076.00	10.10%	3.00%
Hickman	25,178	17.90%	15.9%	\$43,596.00	16.30%	3.10%
Houston	8,201	20.80%	12.7%	\$42,711.00	17.80%	4.60%
Humphreys	18,582	20.20%	15.7%	\$45,667.00	13.10%	3.80%

Source: 2019 US Census Bureau; 2019 US Bureau of Labor Statistics

\*Does not account for unemployment due to the current Coronavirus Pandemic

County	SNAP Assistance	Supplemental Security Income	Speaks English Less Than Very Well
Dickson	2,229	19,198	65
Hickman	1,360	8,636	11
Houston	378	2,878	31
Humphreys	712	6,763	53

Sources:

US Census – American Community Survey S2201, 2019: 5-Year Estimate

US Census – American Community Survey B19056, 2019: 5-Year Estimate

US Census – American Community Survey B06007, 2019: 5-Year Estimate

**State Actions**

Local emergency management handled many requests for critical assistance emanating from each city and county, as needed, requesting assistance from the State when their resources were exhausted. In addition, local emergency management agencies provided consistent situational awareness to the SEOC through conference calls, emails, and the State’s situational awareness platform - WebEOC. A summary of actions taken during the State’s response are as follows:

### Tennessee Department of Environment and Conservation (TDEC)

- Tracked power outages and stayed in regular communication with Tennessee Valley Authority (TVA) representatives.
- Monitored river levels as waters rose above minor and moderate flood stage.
- Environmental Divisions assisted counties with debris disposal issues, including inspection and approval of sites for temporary debris storage areas, run off issues, and debris burn approvals. TDEC continues to assist with other waste and potential hazardous materials left behind (drums and tanks).
- Environmental responders and field office staff provided on-scene support and remain in communication with County EMAs to render assistance.

### Department of General Services

- Coordinated with the SEOC for the purchase and rental of equipment, accessories, services and transportation of resources as needed.

### Department of Health

- Provided continuous monitoring of sheltering operations to assess needs for health support. Staff also assisted with fatality and injury confirmations.
- Monitored healthcare facilities for increased in-patient surge due to weather related incidents.
- Coordinated with local nursing homes to ensure staff are able to access the facilities.
- Deployed crisis counseling teams to the impacted area to help survivors and first responders.
- Assisted Three Rivers Community Hospital in Waverly, along with local long-term care facilities with access, resource, and support requests.

### Department of Human Services

- Personnel staffed the SEOC to facilitate communication and resources between Human Services, TEMA, FEMA, American Red Cross, and various other agencies to assist with disaster needs for response and recovery.

### Department of Transportation

- Monitored damages and response to road and railway closures.
- Plan for and cleanup of debris impeding the operations of roadways.

### Tennessee National Guard

- Supported multiple air operations missions across Middle Tennessee.
- Provided soldiers and airmen in high water vehicles to help access areas impacted by flooding
- Providing a location for donations management at the Waverly Armory.

### Tennessee Emergency Management Agency

- Monitored and documented counties with damages.
- Provided response to resource requests for potable water, pumps, signs, and other needs.
- Deployed district coordinators providing response and support to local government needs.
- Facilitated statewide coordination calls to support Regional Offices, county emergency management agencies, VOADs, and to identify and meet resource gaps.

### Department of Safety, Tennessee Highway Patrol

- Troopers assisted multiple local law enforcement agencies with traffic control, water rescue, and other general law enforcement duties in Dickson, Humphreys, and Hickman Counties.
- THP conducted helicopter aquatic rescue team (HART) missions in Humphreys County.



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- Troopers manned the SEOC to coordinate ESF-13 response.

## Department of Education

- Providing support to area school districts affected by the flooding.

## **Local Actions and Impacts**

### Dickson County

Dickson County experienced significant destruction from this event. Local emergency response personnel performed several lifesaving water rescues. Schools may delay due to roadways impacted. Approximately 14 residences suffered major or destroyed damages, with only 50 percent of damage assessment completed. The American Red Cross deployed an Emergency Response Vehicle to distribute food and emergency supplies. Some of the impacted citizens are expected to be uninsured and lack resources for recovery.

### **Cumulative Effect of Recent Declared Disasters in Dickson County:**

- DR-4550-TN – Severe Storms Straight-line Winds, Hail, and Flooding
- DR-4515-TN – COVID-19 Pandemic
- DR-4427-TN – Severe Weather, Flooding, Landslides, and Mudslides

### Hickman County

Hickman County reported 400 customers without electricity. Local emergency response personnel performed several lifesaving water rescues. The school system is closed due to 17 bus routes that are not currently passable. Resources were deployed to close numerous roads made impassable by flooding. An estimated 20 residential structures have suffered major to destroyed damages, with additional damage assessments ongoing. Damage assessment is limited due to road damages and inaccessibility to homes. Hickman county opened at least two shelters with the American Red Cross providing support to one of the shelters.

### **Cumulative Effect of Recent Declared Disasters in Hickman County:**

- DR-4601-TN – Severe Storms, Tornadoes, Winds, and Flooding
- DR-4550-TN – Severe Storms Straight-line Winds, Hail, and Flooding
- DR-4515-TN – COVID-19 Pandemic
- DR-4427-TN – Severe Weather, Flooding, Landslides, and Mudslides

### Houston County

Houston County reported 600 customers without electricity. Approximately 30 residents had to be evacuated due to flood waters. Local emergency response personnel performed several lifesaving swiftwater rescues. Damage assessments have identified five residences and two businesses with minor damage thus far. Assessments are ongoing of homes that were damaged and impacted by flood waters.

### **Cumulative Effect of Recent Declared Disasters in Houston County:**

- DR-4550-TN – Severe Storms, Straight-line Winds, Hail, and Flooding
- DR-4515-TN – COVID-19 Pandemic
- DR-4471-TN – Severe Storm and Straight-line Winds
- DR-4427-TN – Severe Weather, Flooding, Landslides, and Mudslides

### Humphreys County

Humphreys County experienced catastrophic destruction from this event. A substantial number of water rescues were performed. Several roads were destroyed or closed due to rising flood water. In addition to flooding businesses in downtown Waverly, approximately 700 homes were inundated with flood water which has strained availability of resources and made area recovery more difficult. Approximately 300 of the homes are expected to suffer major to destroyed damage, which has affected habitability of the area. The American Red Cross provided sheltering resources and supported reunification efforts. The Tennessee Department of Human Services, Tennessee Department of Health, schools, and law enforcement set up a reunification center at McEwen High School due to the significant concentration of fatalities and missing persons. Additionally, two sites have been established to organize and manage unsolicited donated goods. Approximately 40-50 school buses were impacted by flood waters. In addition, two schools suffered major damage and five other schools suffered moderate to minor damage. Schools will be out of session for the week.

### **Cumulative Effect of Recent Declared Disasters in Humphreys County:**

- DR-4550-TN – Severe Storms, Straight-line Winds, Hail, and Flooding
- DR-4515-TN – COVID-19 Pandemic
- DR-4471-TN – Severe Storm and Straight-line Winds
- DR-4427-TN – Severe Weather, Flooding, Landslides, and Mudslides

### **Financial Exhaustion**

Beginning in August 2020 and extending through May 2021, the State of Tennessee has experienced several significant non-Presidential disaster events, resulting in hundreds of State and local missions in support of ongoing transportation incidents, search and rescue incidents, severe weather, fire, and hazardous material incidents. The following provides a snapshot of a subset of these missions outside the purview of the Stafford Act. The State together with its local governmental entities have managed the missions on their own, further exhausting resources, to such an extent that they have strained and will continue to impact budgets for current and past calendar years.

- On August 28, 2020, Tropical Depression Laura traveled across the state producing severe thunderstorms and tornadoes. These storms produced damaging winds and locally heavy rainfall throughout Tennessee. Laura storm radar curved from West to Middle Tennessee. The National Weather Service (NWS) confirmed two EF 0 tornadoes: one in Putnam County, and one in Warren County. Winds associated with the system caused damage to trees, powerlines, and several homes and other structures.
- On September 13, 2020, widespread flooding occurred in Middle Tennessee. Numerous swift water rescues were conducted throughout Middle Tennessee. Many roads were still flooded causing roadblocks and detours. Numerous creeks and rivers rose due to expected runoff.





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- On December 25, 2020, multiple roadways in the Middle and East regions were affected by winter weather. Wet conditions and dropping temperatures created icy and slick roadways, especially on overpasses and bridges. Multiple counties in East Tennessee saw 2-6 inches of snowfall. Utilities were impacted in Blount, Cocke, Greene, Knox, and Sevier Counties.
- On December 25, 2020, a vehicle-borne improvised explosive device in a recreational vehicle was detonated while between a critically important telecommunications and data building and Nashville's most historic buildings. The large explosion injured three, caused commercial buildings representing some of the most valuable property in Tennessee to collapse, damaged businesses, and caused a regional outage of data, telephone, and public safety services. Nashville Police, Nashville Fire, Nashville Office of Emergency Management, Tennessee Highway Patrol, Tennessee Bureau of Investigation, Tennessee Emergency Management Agency, and other agencies responded. State and local government operations were impacted for several days. Although Direct Federal Assistance was made available through an emergency declaration, no federal grant assistance has been made available for the costs associated with this emergency to date.
- On April 8, 2021, severe weather moved across the State causing numerous tornado and thunderstorm warnings in multiple counties. The National Weather Service confirmed an EF0 tornado which came down in Cumberland County and traveled for almost six miles into Scott County. Several structures were damaged including the elementary school and a nursing home along with a few other buildings. Most of the structures sustained portions of the roof lost, glass broken, and/or siding damage. Numerous trees were reported down across the impacted counties.
- On May 4, 2021, a line of severe thunderstorms moved across the State, bringing with it damaging winds, large hail, flash flooding, straight-line winds, and tornados. Multiple counties were impacted in West Tennessee with down power lines, widespread loss of power, down trees and debris and structural damages. The Tennessee Department of Health reported one known fatality in Weakley County. Six counties in West Tennessee, Benton, Decatur, Henry, Lake, Obion, and Weakley suffered estimated damages totaling \$1,580,555.
- On May 6, 2021, severe weather again moved across the State, having the greatest impact in West Tennessee impacting three Counties – Decatur, Henderson and Madison causing an estimated \$496,456 in damages involving down powerlines, down trees and debris and building structures.

For these disasters and a number of other emergencies and incidents, the State of Tennessee expended well over \$7.5 million in managing response and recovery activities for larger events, refraining from seeking Stafford Act assistance. This figure is a conservative estimate, as most counties and cities do not have the staffing or resources to be able to perform simultaneous cost accounting on continuous response activities. These extraordinary state and local expenditures have reduced our capacity to recover from this current event.

### **Severity and Magnitude**

Given these factors, the severity and magnitude of this disaster is such that effective response is beyond the capabilities of the State and the affected local governments and that supplementary Federal assistance is necessary. As a result, federal assistance under the Stafford Act is necessary to supplement the efforts and available resources of the State, local governments, disaster relief organizations, and compensation by insurance for disaster-related losses. I am specifically requesting a Major Disaster Declaration for Public Assistance Emergency and Permanent Work, Categories A-G, for the following counties: Dickson, Hickman, Houston, and Humphreys. Should we determine that other counties qualify for Public Assistance during this disaster recovery, we would request those counties be appended to the disaster declaration at that time. Additionally, I am requesting Individual Assistance for Dickson, Hickman, Houston, and Humphreys counties, including the Individuals and Households Program, Crisis Counseling, Disaster Unemployment Assistance, Disaster Case Management, Disaster Legal Services, and Small Business Administration Disaster Assistance. I also request the Hazard Mitigation Grant Program statewide. The State of Tennessee has completed a Standard State Mitigation Plan which is effective until October 9, 2023.

I have designated Patrick C. Sheehan as the State Coordinating Officer and Governor's Authorized Representative for this request. He will work with the Federal Emergency Management Agency in assessing and validating damages and may provide further information or justification on my behalf.

Sincerely,



Bill Lee  
Governor

Enclosures:

OMB No. 1660-0009/FEMA Form 010-0-13  
Official Weather Statement