Missouri Severe Storms and Flooding – FEMA-1749-DR

Declared March 19, 2008

On March 19, 2008, Governor Matt Blunt requested an expedited major disaster declaration due to a severe storm system that generated record rainfall, flooding, and flash flooding beginning on March 17, 2008, and continuing. The Governor requested a declaration for Individual Assistance and Public Assistance, including direct Federal assistance, for 70 counties and one independent city and Hazard Mitigation for all jurisdictions. This event was of the severity and magnitude that the need for supplemental Federal assistance was determined to be necessary prior to the completion of joint Federal, State, and local Preliminary Damage Assessments (PDAs). Per 44 C.F.R.§ 206.33(d) and § 206.36(d), the requirement for a joint PDA may be waived for those incidents of such unusual severity and magnitude that formal field damage assessments are not required to establish the need for supplemental Federal assistance under the Stafford Act.[1]

On March 19, 2008, President Bush declared that a major disaster exists in the State of Missouri. This declaration made emergency protective measures, limited to direct Federal assistance under the Public Assistance program requested by the Governor available to State and eligible local governments and certain private nonprofit organizations on a cost-sharing basis in response to the severe storms and flooding in Audrain, Barry, Barton, Boone, Bollinger, Butler, Callaway, Camden, Cape Girardeau, Carter, Cedar, Christian, Cole, Cooper, Crawford, Dade, Dallas, Dent, Douglas, Dunklin, Franklin, Gasconade, Greene, Hickory, Howard, Howell, Iron, Jasper, Jefferson, Laclede, Lawrence, Lincoln, Madison, Maries, McDonald, Miller, Mississippi, Montgomery, Moniteau, Morgan, New Madrid, Newton, Oregon, Osage, Ozark, Pemiscot, Perry, Phelps, Pike, Polk, Pulaski, Reynolds, Ripley, St. Charles, St. Clair, St. Francois, St. Louis, Ste. Genevieve, Shannon, Scott, Stoddard, Stone, Taney, Texas, Vernon, Warren, Washington, Wayne, Webster, and Wright Counties and the Independent City of St. Louis.[2]

Summary of Damage Assessment Information Used in Determining Whether to Declare a Major Disaster

Individual Assistance

- Total Number of Residences Impacted:[3] -

  Destroyed - -
  Major Damage - -
  Minor Damage - -
  Affected - -

- Percentage of insured residences:[4] -
- Percentage of low income households:[5] -
- Percentage of elderly households:[6] -

- Total Individual Assistance cost estimate: N/A

Public Assistance

- Primary Impact: Emergency Protective Measures
- Total Public Assistance cost estimate: N/A

- Statewide per capita impact: [7] -
- Statewide per capita impact indicator: [8] $1.24
- Countywide per capita impact: -
- Countywide per capita impact indicator:[9] $3.11

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[1] The preliminary damage assessment (PDA) process is a mechanism used to determine the impact and magnitude of damage and resulting needs of individuals, businesses, public sector, and community as a whole. Information collected is used by the State as a basis for the Governor's request for a major disaster or emergency declaration, and by the President in determining a response to the Governor's request (44 CFR § 206.33).

[2] When a Governor's request for major disaster assistance under the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended (Stafford Act) is under review, a number of primary factors are considered to determine whether assistance is warranted. These factors are outlined in FEMA's regulations (44 CFR § 206.48). The President has ultimate discretion and decision making authority to declare major disasters and emergencies under the Stafford Act (42 U.S.C. § 5170 and § 5191).

[3] Degree of damage to impacted residences:

- Destroyed – total loss of structure, structure is not economically feasible to repair, or complete failure to major structural components (e.g., collapse of basement walls/foundation, walls or roof);
- Major Damage – substantial failure to structural elements of residence (e.g., walls, floors, foundation), or damage that will take more than 30 days to repair;
- Minor Damage – home is damaged and uninhabitable, but may be made habitable in short period of time with repairs; and
- Affected – some damage to the structure and contents, but still habitable.

[4] By law, Federal disaster assistance cannot duplicate insurance coverage (44 CFR § 206.48(b)(5)).

[5] Special populations, such as low-income, the elderly, or the unemployed may indicate a greater need for assistance (44 CFR § 206.48(b)(3)).

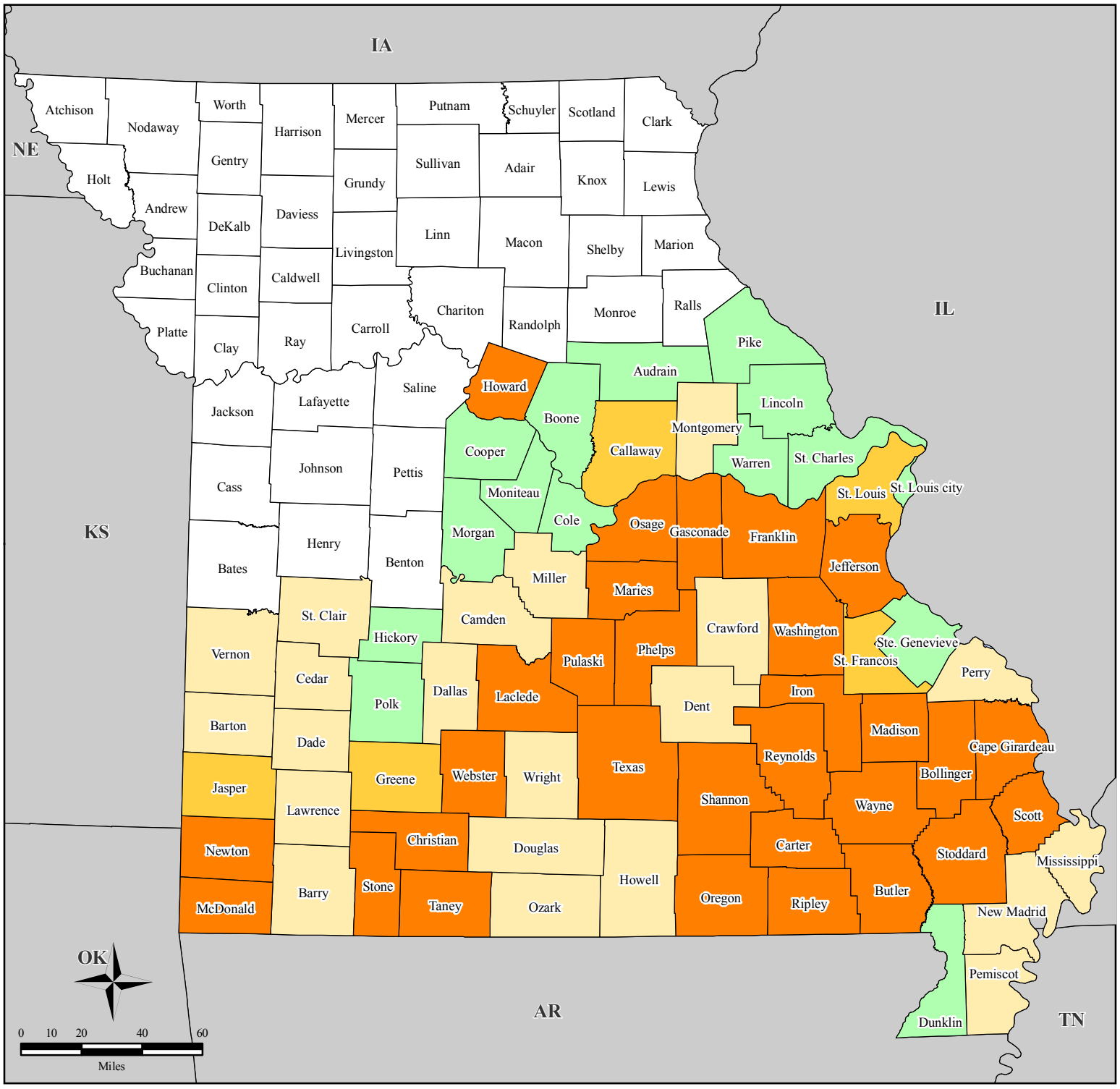
[6] Ibid (44 CFR § 206.48(b)(3)).

[7] Based on State population in the 2000 Census.

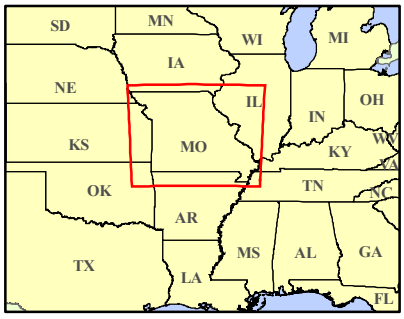
[8] Statewide Per Capita Impact Indicator for FY08, *Federal Register,* October 1, 2007.

[9] Countywide Per Capita Impact Indicator for FY08, *Federal Register,* October 1, 2007.

FEMA-1749-DR, Missouri
Disaster Declaration as of 04/30/2008



Location Map



Legend

Designated Jurisdictions / Counties

- No Designation
- Public Assistance
- Individual Assistance and Public Assistance
- Public Assistance (Category B), limited to direct Federal assistance
- Individual Assistance and Public Assistance (Category B), limited to direct Federal assistance

All jurisdictions are eligible for Hazard Mitigation

FEMA

ITS Mapping & Analysis Center
Washington, DC
04/30/08 -- 01:43 PM EDT

Source: Disaster Federal Registry Notice Amendment No. 5 - 04/30/2008

MapID 71b5e8ee511

2008 Flooding on the Missouri & Northern Arkansas Railroad

On March 19, 2008, The Missouri & Northern Arkansas Railroad (MNA) suffered the first of what would eventually total 10 separate track washouts and $1.9MM in infrastructure damage and cost in Arkansas and Missouri counties that would ultimately be declared Presidential disaster areas.

During the March storms and subsequent flash flooding, the railroad was first shutdown when a large sinkhole occurred under the roadbed in Cotter, AR. That precipitating event, and others, led to an embargo and shutdown of the railroad for 6 days.

During the first shutdown, employees of the MNA-served utility Entergy in Independence, AR were physically trapped within their place of work for 3 days. Food supplies were able to be brought in only by operating a four-wheeled vehicle down the MNA right-of-way.

After the initial floods receded, MNA moved quickly to hire local contractors and purchase local materials to get the railroad back in operation as soon as possible. Working around the clock and at great expense to the company, trains were able to move again in 4 days.

If the railroad had not taken immediate action without regard to the financial burden, Entergy would have run through its coal stockpile and been forced to cease power generation within 30-40 days. Entergy normally takes about 40 coal trains per month to support its operation. During the embargo, over 93,000 tons of coal was not able to be delivered. Other major customers affected by the shutdown included Tyson Foods, Unimin, Future Fuels, Arkansas Lime and Poinsett Rice.

Additionally, it was necessary to develop a close working relationship with the Flood control district as Blue Shoals and the other 2 dams in the area all filled rapidly during the flash floods. Had the spillways been opened on each at the same time, the entire railroad would have been inundated, and Entergy would have likely lost service for an indefinite period. A collaborative plan was developed where openings were rotated to protect the fragile ecosystem.

The storms of April 10 shutdown the railroad for an additional 6 days with damage that was centered in the Batesville, AR area. This damage was also quickly repaired by the railroad under the same conditions.

Finally, the last major shutdown occurred over 8 days when the storm of June 28 created massive washouts in the Reed Springs, MO vicinity, which was also repaired immediately.

In total, the railroad suffered nearly $1.5MM in losses that qualify for reimbursement under the FRA's Railroad Rehabilitation and Repair Grant Program. We intend to make applications for those funds in both Arkansas and Missouri.

The loss of business and extraordinary repair costs caused by these events will likely leave the MNA with an annual operating loss in 2008. In normal years, the MNA invests roughly $3MM annually in its physical plant. Reimbursement of these losses will facilitate continuing these investments in the future.

Attachment 2
Statement of Work
Missouri Department of Transportation
FY 2008 Flood Damage Repair on the
Missouri and Northern Arkansas Railroad

Background

The Consolidated Security, Disaster Assistance, and Continuing Appropriations Act, 2009 (Pub. L. 110-329, September 30, 2008), identifies $20,000,000 in Federal funds for the Secretary of Transportation to award to States on a competitive, case-by-case basis. These funds are available for necessary expenses to make grants to repair and rehabilitate Class II and Class III railroad infrastructure damaged by hurricanes, floods, and other natural disasters in areas for which the President declared a major disaster under Title IV of the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1974.

FRA issued a Notice of Funding Availability and Solicitation of Application for Grants under the Railroad Rehabilitation and Repair Grant Program on November 6, 2008. FRA accepted applications for funding under this grant program from November 16, 2008 to January 16, 2009. On May 27, 2009, the selected applicants were announced. The Missouri Department of Transportation FY 2008 Flood Damage Repair on the Missouri and Northern Arkansas Railroad (Project) was selected to receive $353,600 in Federal funds. The maximum Federal share of project costs under this program is 80 percent. The Missouri Department of Transportation (MO DOT) will ensure that the remaining 20 percent of project costs ($88,400) is provided.

This grant is between FRA and the MO DOT (Grantee). The Grantee will carry out the Project through a subgrant with the Missouri and Northern Arkansas Railroad (MNAR). The Grantee will approve all reimbursements and will keep a copy of the file. The MNAR will have management responsibility for all construction work, pursuant to its subgrant with the Grantee.

Project Overview

Between March 19 and September 14, 2008, severe flooding washed out five sections of track on the MNAR between Nevada and Reed Springs in southwest Missouri. The funds from this grant will pay for restoring the railroad to a condition and service level matching those that existed before flood damage occurred.

Description of Work Elements/Specific Materials that were used

Grant funds will be used for the following work on five sections of the MNAR between Nevada and Reed Springs, Missouri: Purchase and replace ballast, purchase and replace ties, replace the depot. A map of the washout areas is attached.

MP 459.8 (near Reed Spring Tunnel) // 80ft long 80ft deep track washout. Work includes the replacement of a 120ft long 42 inch diameter steel culvert that had to be welded together in place, additionally replaced 100 crossties lost during flooding.

MP 451.5 area; repair 4 track washout locations - 1 location 30ft long by 4ft deep, 1 location 10ft long by 3 feet deep, and 2 locations 5ft long by 2 feet deep.

MP 447.5 - complete loss of ballast shoulder from tie ends down 3 to 4 ft for approx. 120 track feet.

MP 463 - repair track washout 40ft long by 3ft deep.

MP 465 - repair track washout 80ft long by 3ft deep.

MP 447.3 to MP 478.5 replace 300 crossties at various locations that were washed away lost during flooding.

Worked required the lease of 2 front end loaders, 3 trackhos, 2 power light plants, 4 dump trucks, and 2 dozers (additional equipment needed to supplement MNA's). A total of 10,000 tons of ballast, and rip-rap was placed at washout locations using worktrains, dump trucks, and a leased "belt train". In addition to multiple surfacing passed at washout locations, track surfacing and alignment was required at various locations throughout the flood effected zone. There was a combination of contractor and internal labor track restoration workforce of 20 individuals who worked non-stop for just over two weeks on track restoration. This does not include labor associate with worktrains, material delivery, and etc.

Project Budget

The total estimated cost of this Project is $442,000. The FRA grant will contribute no more than the $353,600 or 80 percent of the total cost, whichever is less. Any additional expenses required to complete this Project shall be borne by the Grantee. Although it is anticipated that the Grantee will provide at least $88,400 in the form of in-kind contribution, the Grantee will be solely responsible for ensuring that this contribution is made, ensuring compliance with all Federal Requirements for in-kind grant funding contribution, and providing full documentation of the in-kind contribution to FRA.

FRA Grant	$353,600.00
Grantee Contribution	$ 88,400.00
Total Project Costs:	**$442,000.00**

Budget Items	**Amount**
Administrative	$621.00
Construction labor, supervision, etc	$199,294.00

Equipment	$50,795.00
Materials	$155,996.00
Contingencies	$35,294.00
Total	$442,000.00

Project Implementation and Project Management

The repairs were managed and implemented under MNAR management.