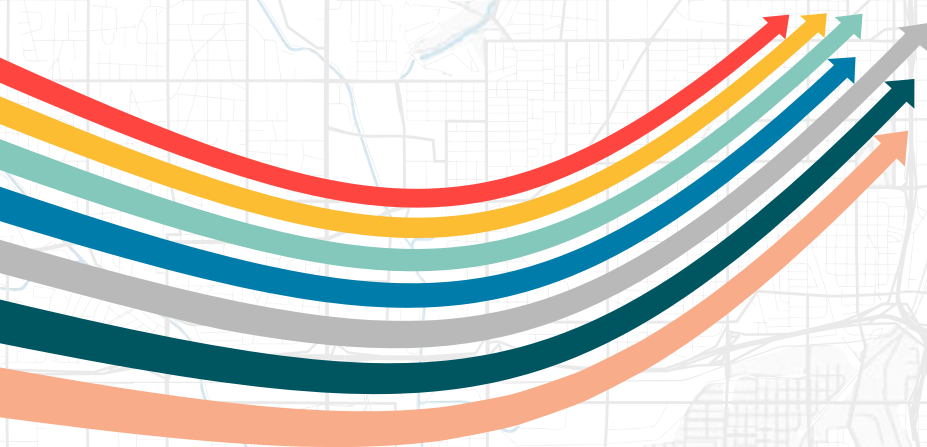


# APPENDIX D

## 2019 FLOOD IMPACTS



# 2019 Flood Impacts

In March 2019, every county in the MAPA region was impacted by flooding. Winter Storm Ullmer dropped up to 18 inches of snowfall in western Nebraska and several inches of snow across eastern Nebraska and western Iowa. A warm front dropped several inches of rain throughout the region just days later. This caused the heavy snowpack to melt and, with the ground frozen, the rain and snowmelt flowed across the land and downstream. As a result, the Missouri and Platte Rivers simultaneously recorded historic flood levels. Each county borders one or both of these rivers. The most impacted areas included agricultural lands, rural communities, and a portion of urban developments in close proximity to either river. The most impacted areas by state and county include:

## Nebraska

Cass County - The eastern portion of the City of Plattsmouth and unincorporated residential areas along the southern bank of the Platte River. Significant damage occurred to the Plattsmouth water and sanitary sewer treatment facilities.

Douglas County - Western portions of the county along the Platte and Elkhorn Rivers including the Cities of Valley and Waterloo, the unincorporated communities of Venice and King Lake, and rural acreages and farms located within the Platte and Elkhorn River floodplains. Flood waters also affected the City of Omaha's sanitary sewer treatment plant.

Sarpy County - The southern neighborhoods in the City of Bellevue, Offutt Air Force Base, the unincorporated community of LaPlatte, and other residential communities along the north bank of the Platte River, and rural acreages and farms located in northwestern portion of the county; flood waters inundated hundreds of homes, displacing nearly 300 households from Bellevue.

Washington County - Southwest part of the City of Arlington and rural acreages and farms located within the Elkhorn River floodplain.

## Iowa

Mills County - Rural acreages and farms located between the Missouri River and Loess Hills, businesses along the I-29 corridor, the City of Pacific Junction, and southern portions of the City of Glenwood. The entire community of Pacific Junction was displaced as the town went under as much as 10 feet of water. Approximately 200 homes in Pacific Junction and surrounding rural areas are scheduled for buyout and demolition.

Pottawattamie County - Rural acreages and farms in the northwestern portion of the county, western neighborhoods in the City of Council Bluffs, and rural communities along the west Nishnabotna River.

The 2019 floods also had a significant impact on the regional transportation network. I-29 south of Council Bluffs was closed for months. Long-distance travelers were rerouted to Des Moines and then south via I-35 instead of traveling through southwest Iowa. Roadside

businesses were devastated by the flooding and, in some instances, have been slow to return. With I-29 impacted and Missouri River bridge access closed on I-680 and U.S. Highways 30 and 34, southwest Iowa commuters had to navigate circuitous routes to reach the Omaha-Council Bluffs metro for work, school, shopping, etc. This demonstrated the vulnerability of the region's bi-state transportation links and how its proximity to the metro can vanish during flood events.

Transportation networks in Nebraska were also impacted by the floods. The eastern movement of traffic was impacted by the closure of the routes crossing the Missouri River previously mentioned. Western traffic was also impacted by numerous routes being underwater or damaged, including West Dodge Road (U.S. Highway 288), West Maple Road (U.S. Highway Hwy 64/275), and U.S. Highway 92 in Douglas County, Highway 30 in Washington County, and Highway 6 in Sarpy County. Many of these highways required significant repairs before reopening.

## Public and Private Property Damage Assistance

The following tables outline FEMA and SBA assistance provided to public entities, residential property owners, and business as a result of the flood. The figures contained in these tables are intended to demonstrate the overall flood recovery needs in the MAPA region.

FEMA Public Assistance - After a Presidential Disaster Declaration is issued, FEMA is authorized to step in and offer grants to state, tribal, territorial, local governments, and certain private nonprofits through its public assistance (PA) program. The federal government provides at least 75 percent of the project cost while the receiving entities provide a match of up to 25 percent. Emergency work (debris removal and emergency protective measures) has to be completed within six months while all other categories have to be completed within 18 months. Numerous entities across the MAPA region received PA. These include the following by county:

**Cass County, Nebraska:** Cass County, Cass County Department of Roads, Cass County SID #1-Waconda, Cedar Creek, Louisville, Plattsmouth, and SID #5-Buccaneer Bay.

**Douglas County, Nebraska:** Douglas County Emergency Management, Douglas County Engineer, Douglas County Housing Authority, Douglas County Sheriff, Douglas County West Community Schools, Omaha-Airport Authority, Omaha-Parks and Recreation, Omaha Fire Department, Omaha Police Department, Omaha Public Works Department, Valley, Valley Suburban Fire District #5, Waterloo, and Waterloo Fire.

**Sarpy County, Nebraska:** Bellevue, Fontenelle Nature Association, Gretna, Papillion, Sarpy County, SID #101 (Hanson Lake II 1 & 2), and SID #97 Hawaiian Lake.

**Washington County, Nebraska:** Arlington, Blair, Fort Calhoun Drainage District, Washington County Agricultural Society, and Washington County Road Department.

**Mills County, Iowa:** Glenwood, Glenwood Community School District, Glenwood Municipal Utilities, Henderson, Miller-Sturgeon Drainage District, Mills County Board of Health, Mills County Building and Zoning, Mills County Conservation, Mills County Secondary Roads, Mills County



Sheriff, Pacific Junction, Pacific Junction Historical Society, Pony Creek #23 Drainage District, Pony Creek Drainage District, and the Watkins Drainage District.

**Pottawattamie County, Iowa:** Avoca, Carson, Council Bluffs, Crescent, Hancock, Honey Creek Drainage District #6, Nobles Lake Drainage District, Oakland, Pigeon Creek Drainage District #2, Pigeon Creek Drainage District #8, Pottawattamie County, Pottawattamie County Conservation, Pony Creek #23 Drainage District, Pottawattamie County Emergency Management Agency, Pottawattamie County Secondary Roads, Sac Drainage District, Underwood, and the Vanman Levee District. See the following table for PA grants by county and category:

Table D1: Total PA Projects in the MAPA Region

Category	Cass	Douglas	Sarpy	Washington	Mills	Pottawattamie
Debris Removal	4	6	8	2	8	8
Protective Measures	17	31	5	5	11	9
Public Buildings	0	5	1	0	5	1
Public Utilities	2	6	1	1	1	7
Recreational or Other	1	3	2	3	4	9
Roads & Bridges	5	7	4	6	7	15
State Management	4	7	3	2	7	7
Water Control Facilities	2	3	2	0	1	9
Totals	35	68	26	19	44	65
Source: FEMA						

FEMA Individual Assistance - After a Presidential Disaster Declaration is issued, FEMA is authorized to step in and offer financial assistance to eligible individuals and households affected by the disaster through its individual assistance (IA) programs. FEMA operates multiple types of IA programs but this appendix will detail FEMA damage verification amounts per county. When assessing damage, FEMA looks at the total cost of repairing structures to livable standards. This is not necessarily aligned with building code standards. See the following tables for IA grants by county for homeowners and renters:

Table D2: Total IA for Homeowners in the MAPA Region

County	Total Inspected	Total Approved	Total IA Approved
Cass	161	107	\$776,242
Douglas	708	408	\$3,466,542
Sarpy	563	455	\$9,465,906
Washington	46	30	\$225,599
Mills	289	267	\$8,239,884
Total	1,959	1,428	\$22,753,084
Source: FEMA			

Table D3: Total IA for Renters in the MAPA Region

County	Total Inspected	Total Approved	Total IA Approved
Cass	21	16	\$68,779
Douglas	230	111	\$340,651
Sarpy	225	186	\$1,413,688

Washington	18	12	\$34,816
Mills	88	77	\$537,645
Pottawattamie	52	38	\$105,380
Total	634	440	\$2,500,959
Source: FEMA			

**SBA Assistance** - The following tables outline Small Business Administration (SBA) disaster loan data for businesses and residential property owners. The SBA measures damage by the amount it will take to restore the structure to code. FEMA measures damage by the amount it will take to restore a business or a home to occupiable conditions.

Table D4: SBA Disaster Loans for Businesses in the MAPA Region

County	Total Verified Loss	Total Loan Amount	Approved Amount Real Estate	Approved Amount Contents	Approved Amount EIDL*
Cass	\$1,363,909	\$1,028,000	\$283,800	\$522,100	\$222,100
Douglas	\$1,858,853	\$1,784,600	\$565,000	\$645,000	\$574,600
Mills	\$3,377,585	\$1,649,900	\$1,396,500	\$101,200	\$152,200
Pottawattamie	\$58,144	\$0.00	\$0.00	\$0.00	\$0.00
Sarpy	\$6,643,120	\$4,011,900	\$2,749,800	\$894,300	\$367,800
Washington	\$146,964	\$79,300	\$56,900	\$22,400	\$0.00
Total	\$13,448,575	\$8,553,700	\$5,052,000	\$2,185,000	\$1,316,700
Source: Small Business Administration					
*- EIDL stands for Economic Injury Disaster Loans. These are provided to businesses suffering a temporary loss of revenue due to the disaster.					

Table D5: SBA Disaster Loans for Homeowners in the MAPA Region

County	Total Verified Loss	Total Loan Amount	Approved Amount Real Estate	Approved Amount Contents
Cass	\$4,314,527	\$2,041,100	\$1,313,000	\$686,800
Douglas	\$12,668,604	\$6,214,900	\$3,979,814	\$3,979,814
Mills	\$31,698,029	\$19,684,200	\$14,869,700	\$4,554,691
Pottawattamie	\$1,568,965	\$1,027,200	\$813,400	\$212,800
Sarpy	\$28,523,904	\$14,936,200	\$9,794,200	\$5,077,220
Washington	\$956,417	\$318,100	\$186,300	\$126,800
Total	\$79,730,446	\$44,221,700	\$30,956,414	\$14,638,125
Source: Small Business Administration				



## Low and Moderate Income Impacts

The 2019 floods affected a wide area but had a substantial impact on low and moderate income (LMI) residents. Affordable communities were inundated by water. These include Pacific Junction, Iowa, the King Lake community near Valley, Nebraska, and manufactured housing parks just outside of Bellevue, Nebraska. Many of these residents have been permanently displaced from their homes and have had to seek housing in Omaha or elsewhere in the region. The following table outlines the LMI figures for some of the most impacted areas in the MAPA region.

Table D6: LMI Impacts in the MAPA Region

Location	County	LMI Population	Total Population	Percentage LMI
City of Pacific Junction	Mills	220	350	62.9%
Platteview Township (excluding Pacific Junction)	Mills	110	425	25.9%
St. Mary's Township	Mills	65	175	37.1%
Lyons Township	Mills	30	190	15.8%
CT 214, BG 1	Pottawattamie	200	495	40.4%
CT 214, BG 3	Pottawattamie	380	1,315	28.9%
CT 318, BG 3	Pottawattamie	225	835	26.9%
CT 102.08, BG 1	Sarpy	790	2,605	30.3%
CT 102.08, BG 2	Sarpy	210	730	28.7%
CT 103.02, BG 1 (Offutt AFB)	Sarpy	295	475	62.1%
CT 104.02, BG 2	Sarpy	180	510	35.3%
CT 104.02, BG 3	Sarpy	1,055	1,480	71.3%
CT 75.04, BG 1	Douglas	480	1,110	43.2%
CT 75.04, BG 2	Douglas	365	890	41.0%
CT 75.04, BG 3	Douglas	505	1,040	48.6%
CT 75.08, BG 1	Douglas	255	1,475	17.3%
CT 75.08, BG 2	Douglas	615	1,410	43.6%
Totals:		5,980	15,510	38.6%
Source: U.S. HUD; Iowa Economic Development Authority				