

**Jackson County Hazard Mitigation Plan
2022 Edition Plan Appendix**



Bright Walls Mural | Downtown Jackson

Potential Hazards Appendix
February 19, 2021, Draft

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Hail | Natural Hazards | Weather Hazards

The following table provides the history of hail storms in the County from 1958 through 2019.

Jackson County Hail Events, 1958-August 2020

	Date	Description	Location
1.	08/03/1958	1400: Hail, 2.00 inch., LAT/LON: 42°17'N / 84°30'W	Sandstone
2.	06/01/1961	1500: Hail, 2.00 inch., LAT/LON: 42°17'N / 84°30'W	Sandstone
3.	05/31/1962	1443: Hail, 0.75 inch., LAT/LON: 42°12'N / 84°24'W	Summit
4.	08/08/1962	1715: Hail, 0.75 inch., LAT/LON: 42°05'N / 84°11'W	Columbia
5.	04/17/1963	1650: Hail, 1.25 inch., LAT/LON: 42°17'N / 84°30'W	Sandstone
6.	08/27/1965	1730: Hail, 0.75 inch., LAT/LON: 42°05'N / 84°41'W	Pulaski
7.	07/04/1977	0430: Hail, 1.00 inch., LAT/LON: 42°16'N / 84°28'W	Blackman
8.	08/02/1980	0300: Hail, 1.25 inch., LAT/LON: 42°12'N / 84°21'W	Napoleon
9.	04/28/1981	1345: Hail, 1.00 inch., LAT/LON: 42°11'N / 84°23'W	Summit
10.	06/09/1985	0130: Hail, 0.75 inch., LAT/LON: 42°14'N / 84°24'W	Jackson
11.	07/09/1985	07/09/1985 2110: Hail, 1.50 inch., LAT/LON: 42°23'N / 84°41'W 2128: Hail, 1.50 inch., LAT/LON: 42°23'N / 84°41'W Springport	Springport
12.	07/25/1988	1810: Hail, 1.75 inch., LAT/LON: 42°15'N / 84°36'W	Parma
13.	03/14/1989	1654: Hail, 1.00 inch., LAT/LON: 42°16'N / 84°28'W	Blackman
14.		1714: Hail, 0.75 inch., LAT/LON: 42°23'N / 84°11'W	Waterloo
15.	05/30/1989	1830: Hail, 0.75 inch., LAT/LON: 42°15'N / 84°26'W	Jackson
16.	05/31/1989	1989 1700: Hail, 0.75 inch., LAT/LON: 42°15'N / 84°36'W	Parma
17.	03/27/1991	1915: Hail, 2.75 inch., LAT/LON: 42°15'N / 84°26'W	Jackson
18.	04/09/1991	1428: Hail, 2.75 inch., LAT/LON: 42°23'N / 84°41'W	Springport
19.	07/04/1992	1830: Hail, 0.75 inch., LAT/LON: 42°19'N / 84°24'W	Blackman
20.	10/08/1992	1940: Hail, 1.75 inch., LAT/LON: 42°14'N / 84°24'W	Jackson
21.	06/13/1994	1621: Hail, 0.75 inch. Although a report was made by trained spotter, the exact location is unavailable.	Unavailable
22.	07/24/1996	11:40 AM: Thunderstorm Wind/hail in Concord. Thunderstorm winds, combined with half inch hail, knocked down numerous tree limbs.	Concord
23.	09/11/1996	02:50 PM: Hail, LAT/LON: 42°14'N / 84°24'W, 0.88 inch. Several reports of dime-sized to nickel-sized hail were received from the city of Jackson.	Jackson
24.	07/08/1997	05:55 PM: Hail, LAT/LON: 42°06'N / 84°33'W, 0.88 inch. Jackson Central Dispatch relayed reports from Hanover Township fire officials of nickel-sized hail.	Hanover
25.	07/14/1997	05:50 PM: Hail 4 Miles South East of Springport, LAT/LON: 42°21'N / 84°38'W, 0.88 inch. Strong to locally severe thunderstorms developed, with isolated reports received of up to nickel-sized hail and winds gusting to 70 mph. Downed trees	Springport

	Date	Description	Location
		and power lines cut power to approximately 48,000 Consumers Energy customers in southwest and south central Lower Michigan. No injuries were reported.	
26.	05/31/1998	05:19 AM: Hail at Hanover, LAT/LON: 42°06'N / 84°33'W, 1.50 inches. Numerous sources indicated that the widespread and severe damages from a fast-moving line of thunderstorms during the early morning hours of Sunday, May 31st, were caused primarily by strong straight-line winds and isolated wet microburst winds. This derecho event produced widespread 60 to 90 mph wind gusts, which caused extensive tree and structural damage and left over 861,000 homes and businesses without electricity across Michigan's Lower Peninsula. Consumers Energy reported that the derecho event was the most destructive weather event in the company's history, leaving over 600,000 of its customers without power (Consumers Energy is the largest utility company in western and mid Lower Michigan). There were 4 storm-related fatalities reported in the state and 146 injuries (mostly minor). Statewide, approximately 250 homes were destroyed, 12,250 homes damaged, 34 businesses destroyed, and 829 businesses damaged. (This was subsequently denoted as federally declared disaster number 1226.) Damage estimates across the above listed counties totaled over \$166 Million.	Hanover
		At 05:47 AM: Hail at Waterloo, LAT/LON: 42°21'N / 84°08'W, 1.00 inch.	Waterloo
27.	06/12/1998	04:25 PM: Hail at Vandercook Lake, LAT/LON: 42°11'N / 84°23'W, 0.88 inch. Several severe thunderstorms included a supercell over southern Barry County, which propagated east-southeast across Calhoun and Jackson Counties. Downed trees and power lines and lightning strikes knocked out power to 22,000 in southern Michigan, (most of whom were in Barry, Calhoun, and Wayne Counties).	Summit
		At 04:40 PM: Thunderstorm Wind/Hail 1 Mile South West of Brooklyn, \$25,000 property damage. Jackson County Emergency Management Coordinator reported trees and power lines down in the vicinity of the Michigan International Speedway, located 1 mile south of Brooklyn in southern Jackson County. Three-quarter inch diameter hail also fell in the same location. No injuries or significant structural damage was reported.	Columbia
28.	06/24/1998	05:04 PM: Jackson County Emergency Management reported a funnel cloud near the intersection of Lansing Ave. and Maple Grove Road in southern Rives Township, approximately 6 miles north of the city of Jackson. Scattered severe thunderstorms were characterized by several large hail reports, including golf-ball sized hail reports received from Jackson County and hail of 2 to 3 inches in diameter associated with a supercell thunderstorm as it tracked east-southeast across southern Ingham and northern Jackson County. This storm resulted in several wind damage and large hail reports, and an F1 tornado touched down in north central Jackson County near Layton Corners. No injuries were reported with the tornadoes, but damage was estimated at half a million dollars across Henrietta and Waterloo Townships in northern Jackson County. Hail was estimated to have reached 2 to 3 inches in diameter in association with this tornadic storm. The most significant damage was reported around the Pleasant Lake area, where several boats were overturned and several homes reported minor to moderate structural damage. Along North Meridian Road from near Layton Corners along the west end of Pleasant Lake, 2 homes reported destroyed garages. Pleasant Lake County Park was closed due to downed trees. The Waterloo State Recreation Area reported hundreds of trees uprooted, which resulted in the closing of some roads and horse trails. 5,800 were without power in the affected areas of Henrietta and Waterloo Townships. Damage was estimated at approximately \$500,000.	Waterloo
		At 05:25 PM: Hail 2 Miles North of Grass Lake, LAT/LON: 42°17'N / 84°13'W, 1.75 inch. Jackson County Emergency Management reported golf ball-sized hail on Morrissey Road in Grass Lake Township, 2 miles north of the city of Grass Lake	Grass Lake

	Date	Description	Location
29.	06/26/1998	01:10 AM: Thunderstorm Wind at Jackson, LAT/LON: 42°14'N / 84°24'W, 52 knots. Scattered reports of wind damage and hail were received across west central, southwest, and south central Lower Michigan, as widespread thunderstorm activity moved across Michigan's Lower Peninsula during the late evening hours of Thursday, June 25th, and early morning hours of Friday, June 26th. No injuries were reported, but an estimated 22,000 people lost power across the southern third of Michigan's Lower Peninsula, due to downed trees and power lines.	Unavailable
30.	05/17/1999	04:00 PM: Hail, 0.75 inch, \$50,000 property damage. 0.75" hail was reported in Parma, LAT/LON: 42°15'N / 84°36'W. There were also a few reports of hail 0.75" - 1.00" in diameter.	Parma
31.	06/09/1999	04:22 AM: Hail, LAT/LON: 42°23'N / 84°27'W, 0.75 inch. Hail was observed in Rives Junction, where dime-sized hail covered the ground.	Rives
32.	09/28/1999	06:28 PM: A thunderstorm became severe, producing pea-sized hail and wind gusts to 60 mph.	Jackson
33.	03/15/2000	07:05 PM: Hail at Spring Arbor, LAT/LON: 42°12'N / 84°33'W, 1.50 inch. One thunderstorm produced hail (1.5" diameter) in Spring Arbor. There were also several reports of very small hail along the Interstate 94 corridor from Kalamazoo to Jackson.	Spring Arbor
34.	07/14/2000	02:08 PM: Hail, LAT/LON: 42°23'N / 84°27'W, 0.88 inch., \$20,000 property damage, \$10,000 crop damage. Thunderstorms produced several reports of large hail during the afternoon hours. 0.88" diameter hail was reported in Rives Junction at 2:08 p.m. Severe thunderstorm warnings were issued. Marble to nickel-sized hail was reported in the Rives Junction and Pleasant Lake areas.	Rives Henrietta
35.	08/02/2000	07:15 PM: Hail, 1.25 inch., LAT/LON: 42°23'N / 84°27'W, \$30,000 property damage, \$10,000 crop damage. Severe thunderstorms developed in the afternoon and evening. Hail of 1.25" was reported in Rives Junction and broke the windshield of a car. Wind damage included a 12-inch diameter tree limb that was blown down at 7:15 p.m. Severe thunderstorm warnings were issued.	Rives
36.	07/29/2001	07:10 PM, Thunderstorm Wind, Parma to Spring Arbor, Begin LAT/LON: 42°15'N / 84°36'W, End LAT/LON: 42°12'N / 84°33'W, 53 Knots, 25,000 property damage. A large severe weather outbreak across southern and central lower Michigan during the late afternoon and evening hours resulted in numerous reports of downed trees and power lines, and a few reports of large hail. A 911 center in Spring Arbor (Jackson county) reported trees down in that area	Unspecified
37.	4/20/2003	03:25 PM, Hail, LAT/LON: 42°14'N / 84°24'W, 1.00 inch., \$10,000 property damage. One and three quarters inch hail was reported by Blackman township police and fire personnel 5 miles north of Jackson.	Blackman
		A report of a large tree down was also received from Spring Arbor, and a one foot diameter pine tree was snapped in half 5 miles southwest of Spring Arbor	Spring Arbor
38.	4/30/2003	10:30 PM, Hail, LAT/LON: 42°14'N / 84°24'W, 1.00 inch., \$10,000 property damage. One inch diameter hail was reported one mile north of Jackson.	Blackman
39.	5/1/2003	2330:, One inch hail in Jackson. (also listed as flooding and hail)	Jackson
40.	5/9/2003	11:10 PM, Hail, LAT/LON: 42°07'N / 84°21'W, 1.00 inch., \$15,000 property damage, \$15,000 crop damage. One inch diameter hail was reported about one mile west of Brooklyn near Clark Lake.	Columbia
41.	5/17/2004	01:15 PM: Hail, 1.75 inch., Rives Junction to Munith, Begin LAT/LON: 42°23'N / 84°27'W, End LAT/LON: 42°23'N / 84°15'W, \$40,000 property damage, \$40,000 crop damage. The broadcast media reported one and three quarters inch diameter hail	Northern Jackson County

	Date	Description	Location
		near I-127 in Rives Junction and a trained spotter reported one and three quarter inch diameter hail in Munith. Severe thunderstorm warning issued for JACKSON	
42.	5/21/2004	08:40 PM, Hail, 2.00 inch., LAT/LON: 42°14'N / 84°24'W, \$30,000 property damage, \$30,000 crop damage. Two inch diameter hail was reported by the public in Jackson.	Jackson
		2:42 PM, Hail, 0.88 inch., LAT/LON: 42°14'N / 84°24'W, \$40,000 property damage. Seven eighths inch diameter hail was reported 5 miles south of Jackson, and several power poles were blown down near Jackson as well.	Liberty
43.	6/9/2004	12:35 PM, Hail, 4.25 inch., LAT/LON: 42°23'N / 84°27'W, \$50,000 property damage, \$50,000 crop damage. Four and one quarters inch diameter hail was reported at the intersection of Berry and US-127 roads. Several reports of smaller hail were also reported in and near Rives Junction.	Rives
44.	6/5/2005	06:00 PM, Thunderstorm Wind, Parma to Springport, Begin LAT/LON: 42°15'N / 84°36'W, End LAT/LON: 42°23'N / 84°41'W, 52 Knots, \$10,000 property damage. A large severe weather outbreak occurred across our area resulting in numerous downed tree limbs and power lines, many reports of large hail and many reports of downed power lines. Several trees were blown down across area roads. There were several reports of three quarters to inch diameter hail and estimated wind gusts to 60 m.p.h	Parma Springport
45.	6/30/2005	09:55 AM, Hail at Brooklyn, LAT/LON: 42°06'N / 84°15'W, 0.88 inch., \$10,000 property damage, \$10,000 crop damage.	Brooklyn
46.	7/25/2005	10:04 PM, Thunderstorm Wind, 53 Knots, LAT/LON: 42°06'N / 84°33'W, \$25,000 property damage. A large severe weather outbreak occurred and produced numerous reports of wind damage, one tornado and one isolated hail report. As a result of severe thunderstorm wind gusts, there were numerous reports of wind damage including downed trees, limbs, and power lines across the area.	Hanover
47.	9/22/2005	04:49 PM, Hail, 1.75 inch., LAT/LON: 42°15'N / 84°13'W, \$15,000 property damage, \$10,000 crop damage. The public reported one and three quarters inch diameter hail in Grass Lake	Grass Lake
48.	4/22/2006	06:31 PM, Hail, LAT/LON: 42°06'N / 84°33'W, 1.00 inch., \$10,000 property damage, \$5,000 crop damage. The public in Hanover reported one inch diameter hail.	Hanover
		7:01 PM, Hail, LAT/LON: 42°10'N / 84°15'W, 1.00 inch., \$10,000 property damage, \$5,000 crop damage. Law enforcement three miles south of Napoleon reported one inch diameter hail.	Napoleon
49.	6/19/2006	11:05 AM, Hail, 0.75 inch., LAT/LON: 42°11'N / 84°38'W, \$5,000 property damage, \$5,000 crop damage. Three quarters inch hail was reported in Concord.	Concord
		12:00 PM, Hail, LAT/LON: 42°06'N / 84°15'W, 1.25 inch., \$20,000 property damage, \$15,000 crop damage. Hail ranging anywhere from one and a quarter to seven eighths inches in diameter was reported in Brooklyn.	Brooklyn
50.	06/28/2006	01:55 PM, Hail, LAT/LON: 42°06'N / 84°24'W, 0.75 inch., \$5,000 property damage, \$5,000 crop damage. A trained spotter reported three quarters inch hail in Liberty.	Liberty
51.	5/15/2007	17:18 PM, Thunderstorm Wind 1 Mile North East of Pleasant Lake, LAT/LON: 42°24'N/84°19'W, 50 Knots, \$10,000 property damage. EVENT NARRATIVE: A combination of six trees and large limbs were blown down on a golf course one mile northeast of Pleasant Lake in Jackson county. EPISODE NARRATIVE: Severe storms produced several reports of large hail and high winds which brought down several trees and branches in Jackson County.	Henrietta

	Date	Description	Location
52.	6/02/2007	18:15 PM, Thunderstorm Wind 3 Miles West North West of Pleasant Lake, LAT/LON: 42°25'N/84°23'W, 52 Knots, \$20,000 property damage. EVENT NARRATIVE: Multiple trees and power lines were blown down along the Jackson County line. EPISODE NARRATIVE: Severe storms affected much of southwestern lower Michigan, resulting in several reports of large and numerous reports of wind damage.	Henrietta
53.	6/27/2007	JACKSON, at 1645, dime-sized hail (between 0.5" and 0.75" in diameter) was reported 5 miles north of Jackson.	Blackman
54.	1/7/2008	21:54 PM, Thunderstorm Wind 2 Miles North, North East of Horton, LAT/LON: 42°10'N / 84°30'W, 52 Knots, \$2,000 property damage. EVENT NARRATIVE: One tree was blown down near the intersection of Reynolds and Horton roads three miles southeast of Spring Arbor. EPISODE NARRATIVE: A rare mid winter severe weather event occurred and resulted in several reports of high winds and large hail. There were few reports of damage associated with the severe weather. A tree was blown down just southeast of Spring Arbor	Spring Arbor
55.	4/11/2008	15:55 PM, Hail 1 Mile North of Parma, LAT/LON: 42°15'N / 84°36'W, 1.00 inch., \$10,000 property damage, \$5,000 crop damage. EVENT NARRATIVE: Hail briefly covered the ground in Parma and there were also several reports of broken windshields. EPISODE NARRATIVE: A round of severe thunderstorms resulted in numerous reports of large hail during the afternoon hours of April the eleventh. Hail briefly covered the ground at several locations and there were several reports of broken windshields from hail in Parma in Jackson County.	Parma
56.	6/6/2008	17:45 PM, Thunderstorm Wind 1 Mile North West of Spring Arbor, LAT/LON: 42°12'N /84°33'W, 52 knots. EVENT NARRATIVE: Law enforcement reported that a couple of trees were blown down. EPISODE NARRATIVE: Severe thunderstorm wind gusts resulted in several reports of significant wind damage. Several reports of large hail were also received.	Spring arbor
57.	7/2/2008	17:35 PM, Hail 1 Mile West of Knollwood Park, LAT/LON: 42°15'N / 84°23'W, 0.88 inch. A severe weather outbreak on July 2 resulted in numerous reports of wind damage and large hail. Another area of large hail stretched from Allegan county east through Ingham county and south into Kalamazoo and Jackson counties. The hail was large enough to damage some crops	Jackson
58.	7/16/2008	20:53 PM, Thunderstorm Wind 1 Mile North West of Rives Junction, LAT/LON: 42°23'N /84°27'W, 52 knots. EVENT NARRATIVE: Law enforcement in Jackson county reported that a couple of trees were blown down. One was blown down on Spring Court and another was blown down near Zion Road and East Berry Road. EPISODE NARRATIVE: Numerous severe thunderstorms across southwest Michigan resulted in wind damage and large hail	Rives
59.	4/25/2009	16:40 PM, Thunderstorm Wind 1 Mile East South East of Pleasant Lake to End Location: 7 Miles North of Waterloo, Begin LAT/LON: 42°24'N / 84°18'W, End LAT/LON: 42°27'N / 84°08'W, 53 knots. EVENT NARRATIVE: Scattered to widely scattered tree damage occurred including occasional uprooted trees along a 9 mile stretch from 2 miles westsouthwest of Pleasant Lake to 2.5 miles southwest of Stockbridge. The damage swath was 4 to 6 miles wide. A measured 53 knot gust with pea sized hail occurred just north of Batteese Lake. The damage crossed into extreme southeast Ingham County at 42.4284 north latitude and 84.2094 west longitude. The damage continued east-northeast to at least the Livingston County line	Henrietta
60.	8/9/2009	19:20 PM, Hail 3 Miles South of Rives Junction, LAT/LON: 42°20'N / 84°27'W, 0.70 inch. EVENT NARRATIVE: No damage reported in association with the hail.	Rives
61.	6/18/2010	1.25 in Hail, 3 Miles West of Concord. EPISODE NARRATIVE: Thunderstorms developed during the late afternoon and evening hours of April 19th in an axis of increasing elevated instability well to the north of a warm front across Indiana and Ohio. The storms produced numerous reports of hail across southern lower Michigan. Most of the hail was sub severe, but there were a	Concord

	Date	Description	Location
		couple of reports of hail reaching an inch to an inch and a quarter in diameter. The thunderstorms were also accompanied by heavy rainfall and frequent lightning. EVENT NARRATIVE: A spotter one mile west northwest of Concord reported one and three quarters inch diameter hail. Several trees and large limbs were blown down in and near Jackson. A 47 mph wind gust was measured at the Jackson airport.	
62.	4/19/2011	1.25 in Hail, 1 Mile West of Woodville. EPISODE NARRATIVE: Thunderstorms developed during the late afternoon and evening hours of April 19th in an axis of increasing elevated instability well to the north of a warm front across Indiana and Ohio. The storms produced numerous reports of hail across southern lower Michigan. Most of the hail was sub severe, but there were a couple of reports of hail reaching an inch to an inch and a quarter in diameter. The thunderstorms were also accompanied by heavy rainfall and frequent lightning. EVENT NARRATIVE: A public reports from the city of Jackson indicated that hail around 0.75 inches in diameter. A report was also received that hail broke a window in a home in the city of Jackson.	Jackson
63.	5/10/2011	0.88 in Hail, 1 Mile North of Spring Arbor. EPISODE NARRATIVE: Hail up to seven eighths of an inch in diameter was reported with an early morning thunderstorm which affected Spring Arbor in Jackson county. The thunderstorm developed well to the northeast of a warm front in an area of enhanced elevated instability. EVENT NARRATIVE: Media reported seven eighths inch diameter hail accompanied an early morning thunderstorm in Spring Arbor. The media also reported mothball (three quarters inch) hail four miles south southwest of Jackson.	Spring Arbor
64.	5/23/2011	0.75 in Hail, 1 Mile South of Napoleon. EPISODE NARRATIVE: A strong late afternoon thunderstorm affected portions of southeastern Jackson county, resulting in three quarters inch diameter hail in Napoleon. EVENT NARRATIVE: A trained spotter in Napoleon reported three quarters inch diameter hail.	Napoleon
65.	8/13/2011	0.75 in Hail, 0 Mile South of Woodville. EPISODE NARRATIVE: Numerous reports of thunderstorms producing hail ranging from three quarters of an inch up to an inch and a quarter were received throughout the day on March 15th. The largest hail reports came from portions of Isabella and Clare counties where one and a quarter inch diameter hail fell. EVENT NARRATIVE: Trained spotters reported three quarters inch diameter hail well to the north of the city of Jackson.	Jackson
66.	3/15/2012	0.75 in Hail, 3 Miles East of Minard. EPISODE NARRATIVE: Numerous reports of thunderstorms producing hail ranging from three quarters of an inch up to an inch and a quarter were received throughout the day on March 15th. The largest hail reports came from portions of Isabella and Clare counties where one and a quarter inch diameter hail fell. EVENT NARRATIVE: Trained spotters reported three quarters inch diameter hail well to the north of the city of Jackson.	Minard
67.	5/3/2012	2.00 in Hail, 1 Mile East of Woodville. EPISODE NARRATIVE: An upper low moving over a warm front that stretched across northern Lower Michigan set the stage for heavy rainfall on May 3rd. Training thunderstorms (storms that move over the same location) produced 5 to 7 inches of rainfall across portions of Mason and Lake counties. The heavy rainfall resulted in roads that were either flooded or washed out. As the day progressed, strong to severe storms developed in the warm humid airmass. Golf ball size hail was reported in Mason and a 10 x 20 foot section of roof was blown off of a commercial building a few miles south of Lansing. EVENT NARRATIVE: A trained spotter reported hail up to two inches in diameter two miles southeast of Jackson with one inch hail in Jackson.	Jackson
68.	9/11/2013	1.00 in Hail, 1 Mile West of Tompkins Center. EPISODE NARRATIVE: Microburst straight line wind damage impacted downtown Albion on September 11th, where maximum winds were estimated at 70 to 80 mph. The worst damage occurred along a path one and three quarters mile long and up to a half a mile wide where numerous trees and power lines were blown down. Albion	Tompkins Center

	Date	Description	Location
		college was shut down for several days due to all the wind damage and lack of power. Isolated damaging wind gusts from severe storms were reported elsewhere during the late afternoon hours of September 11th, and there was also an isolated severe storm that produced one inch diameter hail. EVENT NARRATIVE: The public reported one inch diameter hail near Tompkins Center.	
69.	7/27/2014	1.00 in Hail, 1 Mile West of Tompkins Center. EPISODE NARRATIVE: A cold front triggered development of severe thunderstorms with numerous reports of large hail and wind damage during the afternoon and early evening hours of July 27th. Hail up to two inches in diameter was reported in northern Kalamazoo county. EVENT NARRATIVE: The public reported one inch diameter hail near Waterloo.	Waterloo
70	6/1/2019	1.75 in Hail, 1 Mile Northeast of Parma. EPISODE NARRATIVE: There were numerous reports of large hail as well as a little bit of wind damage in association with severe thunderstorms on June 1st. EVENT NARRATIVE: Hail up to around one and three quarters of an inch in diameter was reported.	Parma

Sources: Michigan Hazard Analysis, the National Climatic Data Center (NCDC) storm events database, reports from the Law Enforcement Information Network (LEIN), and local input from plan participants.

Lightning | Natural Hazards | Weather Hazards

The following table provides the history of lightning in the County from 1994 through 2020.

Jackson County Lightning Events, 1994-August 2020

	Date	Description	Location
1.	6/13/1994	1300: Lightning, 1 injury. A man cleaning out a storm drain during a thunderstorm was struck by lightning and thrown across the road. He was treated at a local hospital for minor injuries.	Unspecified
2.	08/16/1997	02:45 PM: LAT/LON: 42°14'N / 84°24'W. Local utility companies reported approximately 55,000 power outages during the afternoon and evening across far southern Michigan, with most caused by lightning strikes, but some due to downed trees and utility poles (also listed under thunder storm wind).	Jackson
3.	07/21/1998	04:30 PM: LAT/LON: 42°14'N / 84°24'W. Jackson area law enforcement reported numerous trees and power lines downed in Blackman Township and the city of Jackson. The Jackson Citizen Patriot reported that a Jackson woman was trapped when the wind dropped a large branch and live power lines over her car on Sixth Street, just north of W. Morrell. Damage to the car was minor and the woman was not injured. Over 200 power lines were downed by the storm and transformers were damaged by lightning strikes. Approximately 5,000 residents lost power in Jackson County. Damage estimates were not available. (Also reported under thunderstorm wind).	Jackson Blackman Township
	7/18/2015	During the "Faster Horses Festival" at the Michigan International Speedway (Brooklyn, Jackson County), severe weather caused a concert to be evacuated around 8:20pm, with tens of thousands of persons in attendance. The main stage was dismantled after visible lightning appeared in the sky, and weather sirens were sounded. The performance by headline act Brad Paisley was delayed by three hours.	

Sources: Michigan Hazard Analysis, the National Climatic Data Center (NCDC) storm events database, reports from the Law Enforcement Information Network (LEIN), and local input from plan participants.

Ice Storms and Sleet Storms | Natural Hazards | Weather Hazards

The following table provides the history of ice and sleet storms in the County from 1976 through 2020.

Jackson County Ice Storms/Freezing Rain Events, 1976-2020

	Date	Description	Location
	03/02-07/1976	Ice Storm with accompanying high winds and tornadoes struck Jackson and 28 other counties in Central Lower Michigan. The storm, considered to be one of the worst to hit the state, caused over \$56 million in damage and widespread power outages. A Presidential Major Disaster was granted.	
	01/01/1985	Ice Storm affecting Jackson and 12 other counties in Southern Lower Michigan. Up to 1 inch of freezing rain downed tree limbs, trees, and power lines, blocked roads, and caused widespread power outages. More than 430 thousand electric customers were without power for up to 10 days. An estimated \$50 million in public and private damages, 3 deaths, and 8 injuries are attributed to this event. A Governor's Disaster Declaration was issued.	
1.	01/27/1994	Heavy Snow/Freezing Rain. \$5,000,000 property damage statewide. Over the southern third of Lower Michigan, snow mixed with, then changed to, sleet and freezing rain. By late afternoon on the 27th, most of Lower Michigan had freezing rain or sleet. The freezing rain changed to rain by mid afternoon and continued, heavy at times after 7 pm. Overnight on the 27th and into the morning hours of the 28th, occasional rain continued. During the rest of the 28th, the area of freezing rain changed to snow. The snow, heavy at times, continued until around 2300 EST on the 28th. Light snow continued until mid afternoon on the 29th, but little additional accumulations occurred. During the freezing rain, around a quarter inch of ice had accumulated over the southern third of lower Michigan. This resulted in numerous outages. Detroit Edison reported 50,000 people affected by power outages. Consumers Power County reported 2,000 customers without power. Most of the power loss problems were over the southeastern part of Michigan even though this was not the area of heaviest ice accumulation or of the strongest winds. Most of the power loss occurred on Thursday, January 27th, during the ice accumulation phase of the storm. More than 150 schools canceled classes across the state. Across Michigan, there were numerous reports of cars skidding off the road and minor fender-bender type accidents. Also added as snowstorm.	Unspecified location
2.	02/27/1995	0100: Ice Storm. Freezing rain developed late on the 26th, then continued through the morning hours on the 27th. Several hours of sleet preceded the freezing rain in many places. Ice accumulations of one-quarter inch were common by late morning on the 27th. Numerous traffic accidents were reported, and most schools were closed. Despite the heavy icing, only widely scattered power outages occurred, since the storm was accompanied by very little wind.	Unspecified location
3.	03/06/1995	0000: Ice Storm. Freezing rain and sleet occurred during the early morning on the 6th, but the heaviest accumulation of ice occurred early on the 7th, when many areas reported accumulations of one-quarter inch. Most schools were closed for at least one day, and many schools were closed on both the 6th and the 7th. A brief thaw occurred across the far south during the afternoon on the 7th, followed by a sharp temperature drop and a light accumulation of snow, making roads extremely hazardous once again during the evening on the 7th. Scattered power outages occurred, but the outages were	Unspecified location

	Date	Description	Location
		not as widespread as what might have occurred had the storm been accompanied by strong winds. Many traffic accidents were reported.	
4.	12/13/1995	1800: Ice Storm. Snow developed across southeast Michigan late in the afternoon on the 13th, then quickly changed to freezing rain and sleet during the evening. Snow accumulations were generally two inches or less, but 1/4 inch ice accumulations occurred in many places. At least 230 school districts throughout southern Michigan cancelled school on the 14th, as roads became icy and hazardous. Scattered power outages were also reported.	Unspecified location
5.	03/13/1997 - 03/14/1997	01:30 AM: Ice Storm. An Ice Storm lasting slightly more than 12 hours blanketed much of West Central Lower Michigan and all of Southwest Lower Michigan. The worst hit areas included the county of Jackson. Ice accumulations were near 1 inch. Power was out for up to 24 hours in Jackson County (affecting 38,000 customers). Trees and power lines were downed, and automobile accidents occurred continually throughout the storm. Emergency Management and Road Department budgets were heavily affected. Ice Storm affecting the southern third of Michigan. Detroit Edison and Consumers Energy outages affected 514,000 customers, including those in Jackson County. Shelters were also opened in many communities	Unspecified location
6.	01/04/1998	12:00 AM: Freezing Rain. A strong cold front moved in during the early morning hours of Sunday, January 4th. Temperatures behind the cold front fell into the upper 20's and lower 30's, changing light rain to freezing rain. One period of light freezing rain fell from after midnight to around 10:00 AM EST, resulting in light ice accumulations of around one-tenth of an inch. No serious problems were reported, other than icy spots on secondary roads and bridges/overpasses.	Unspecified location
7.	01/12/1998	12:00 PM: Freezing Rain. A brief period of freezing rain on the afternoon of Monday, January 12th, caused major roads and highways to become icy and hazardous across Jackson County. Numerous weather-related accidents were reported, including a several-car pile-up on the South Street bridge over U.S. Highway 127 in Jackson. Bridges and overpasses were most affected by icing.	Unspecified location City of Jackson Summit Township
8.	03/09/1998	07:00 AM: Winter Storm, \$100,000 property damage. Heavy snow and blizzard conditions occurred, as rain changed to freezing rain and sleet in the Jackson area and surrounding communities. This icy mix changed to snow during the mid to late morning hours, but a prolonged period of sleet across Jackson County cut down on the snowfall total in the area. Snowfall was heavy and was reported at rates around and slightly over 1 inch per hour. Occasional white-outs were reported. Snowfall totals of 2 to 5 inches were reported. Schools and businesses were closed by this winter storm, the most intense of the 1997-98 winter season. Saturated ground in Jackson from heavy rainfall Sunday night and early Monday morning weakened an old oak tree, which was blown over by winds gusting to 30 mph just before daybreak. This tree crashed through a home in the city of Jackson and caused an estimated \$100,000 in damage. No injuries were reported from residents inside the home. Also listed as snow.	Unspecified location City of Jackson
9.	03/20/1998	04:00 PM: Winter Storm. A mixture of snow, sleet, and freezing rain fell across much of southwest and south central Lower Michigan. The precipitation started out as a mixture of sleet and freezing rain Friday afternoon, then turned to mostly snow Friday evening. The ice at the onset made travel conditions hazardous for the Friday afternoon rush hour, and several minor weather-related accidents were reported along and south of the Interstate-94 corridor. Snow accumulations ranged from 3 to 4 inches in Jackson County. Also included as snow.	Unspecified location

	Date	Description	Location
10.	02/05/1999	07:00 PM: Freezing Rain. A fast moving storm system produced a mix of light freezing rain, light snow, and sleet across southern lower Michigan during the evening hours. The band of precipitation was narrow, and the precipitation was light, only lasting for 3 to 4 hours. No damage was reported.	Unspecified location
11.	01/30/2002	04:00 AM, Winter Storm. A stationary front set up to the south of lower Michigan, setting the stage for a prolonged overrunning precipitation event for southern lower Michigan on the 30th and 31st. Anywhere from eight to as much as thirteen inches of snow fell across the area, and freezing rain fell in Jackson County as low pressure moved into lower Michigan. Winter Storm warning for JACKSON, snow up to 7" with a quarter inch of ice. Also listed as snow	Unspecified location
12.	1/31/2002	Ice storm warning was issued this day for the following Michigan counties: JACKSON Flash Report for JACKSON County. Road conditions icy and slippery. 25 businesses damaged. Power wires, phones, cable TV lines down due to accumulation of ice and falling trees. Flash Report from JACKSON County, weather related power outages. Winter Storm Warnings for JACKSON Ice Storm Warning for BARRY, CALHOUN, EATON, INGHAM, JACKSON Counties, ice accumulation up to half inch. School Closings in JACKSON	Unspecified location
13.	12/1/2006	JACKSON, at 0600, an ice storm was reported at Jackson, with some trees and wires down. 05:00 AM, Ice Storm , 30,000 property damage. EVENT NARRATIVE: A third of an inch of ice was reported across most of Jackson county. EPISODE NARRATIVE: A strong early winter season low pressure system brought snow and freezing rain to southwestern and west central lower Michigan. The heaviest ice accumulations occurred over southern lower Michigan south of I-96 where many locations reported at least three tenths of an inch of ice.	City of Jackson Unspecified location
14.	12/21/2013	EPISODE NARRATIVE: An Ice Storm affected portions of Southern Lower Michigan from December 21-22. Ice accumulations of one half to three quarters of an inch occurred across much of Barry, Eaton, Clinton, Ingham, and northern Calhoun and Jackson counties. This resulted in a very prolonged power outage that affected hundreds of thousands of residents across Lower Michigan. Many people did not have power restored until 4 to 6 days after the ice storm hit. In addition there was widespread damage in the form of downed trees and tree limbs across the area. A total of 60 million dollars in estimated insured losses occurred across Michigan from this storm with approximately 36 million of this being in SW lower Michigan. A half to three quarters of an inch of ice accumulation occurred across the northern third of Jackson county, causing numerous power outages and downed tree limbs and lines.	

Sources: Michigan Hazard Analysis, the National Climatic Data Center (NCDC) storm events database, reports from the Law Enforcement Information Network (LEIN), and local input from plan participants.

Snowstorms | Natural Hazards | Weather Hazards

The following table presents the history of snowstorms in Jackson County from 1993-2020.

Jackson County Snow Storms, 1993-2020

	Date	Description	Location
1.	01/12/1993	1200: Heavy Snow. Snowfall totals were probably about six inches, with winds gusting up to 30 mph at times, causing considerable drifting snow.	Unspecified location
2.	01/23/1993	0400: Heavy Snow.	Unspecified location
3.	04/11/1993	0700: Heavy Snow.	Unspecified location
4.	04/15/1993	0700: Heavy Snow	Unspecified location
5.	01/27/1994	0000: Heavy Snow/Freezing Rain. \$5,000,000 property damage statewide. Over the southern third of Lower Michigan, snow mixed with, then changed to, sleet and freezing rain. By late afternoon on the 27th, most of Lower Michigan had freezing rain or sleet. The freezing rain changed to rain by mid afternoon and continued, heavy at times after 7 pm. Overnight on the 27th and into the morning hours of the 28th, occasional rain continued. During the rest of the 28th, the area of freezing rain changed to snow. The snow, heavy at times, continued until around 2300 EST on the 28th. Light snow continued until mid afternoon on the 29th, but little additional accumulations occurred. During the freezing rain, around a quarter inch of ice had accumulated over the south ern third of lower Michigan. This resulted in numerous outages. Detroit Edison reported 50,000 people affected by power outages. Consumers Power County reported 2,000 customers without power. Most of the power loss problems were over the southeastern part of Michigan even though this was not the area of heaviest Unspecified location ice accumulation or of the strongest winds. Most of the power loss occurred on Thursday, January 27th, during the ice accumulation phase of the storm. More than 150 schools canceled classes across the state. Across Michigan, there were numerous reports of cars skidding off the road and minor fender-bender type accidents. Also listed as ice storm.	Unspecified location
6.	02/25/1994	1100: Heavy Snow. An intense snow burst caused five to eight inches of snow to fall across most of the southern third of lower Michigan. The heaviest snowfalls, seven to eight inches, fell over a 50-mile wide area across southern lower Michigan, with Jackson on the southern edge of the heaviest snowfall area. Snowfall rates of one to two inches an hour, for a period to two to three hours, were common. Northeast to east winds at 15 to 25 mph with frequent gusts to 35 mph combined with temperatures around 20F resulted in wind chill values of 10 to 20 degrees below zero. The combination of strong winds and heavy snow caused near blizzard conditions for a period of about six hours. Considerable blowing and drifting of the falling snow resulted in near zero visibility and numerous multi-vehicle accidents on Interstate 94. As a result some sections of highway were closed for hours during the storm.	Unspecified location

	Date	Description	Location
7.	12/06/1994	1800: Heavy Snow. Heavy snow fell from the evening on the 6th through the morning of the 7th. Snow amounts of 2 to 4 inches occurred, and some of the precipitation fell as freezing rain. Numerous traffic accidents were reported across the area, along with scattered power outages.	Unspecified location
8.	01/01/1995	0000: Heavy Snow. Numerous traffic accidents were reported across the state.	Unspecified location
9.	01/20/1995	0000: Heavy Snow. Accumulations ranged from 6 to 12 inches. Travel disruptions were not as severe as what would normally be expected with such large snow amounts, since much of the snow fell during the weekend, and the snow fell over a several day period. Still, many serious traffic accidents were reported, along with scattered power outages.	Unspecified location
10.	02/03/1995	1800: Heavy Snow. Accumulations of six to eight inches were widespread, accompanied by strong winds and bitterly cold temperatures. Blowing and drifting snow through the 5th resulted in numerous traffic accidents reported.	Unspecified location
11.	02/11/1995	0000: Heavy Snow. Most areas had from 4 to 10 inches of snow, accompanied by strong winds. The combination of wind and snow created whiteout conditions on many roadways, making travel nearly impossible.	Unspecified location
12.	02/25/1995	1500: Heavy Snow. Accumulations of three to six inches were common. Numerous traffic accidents were reported during the evening of the 25th, when temperatures fell quickly below freezing once the snow began, and caused sudden icing on roadways.	Unspecified location
13.	03/19/1996	08:30 PM: Winter Storm. 4 to 8 inches of snow fell in a band that covered eastern Branch, Hillsdale, Jackson, and southeast Ingham Counties. Winds up to 45 mph caused drifts up to 2 feet, forcing the closing of many roads and schools. Power outages also affected nearly 5,000 customers.	Unspecified location
14.	01/10/1997	02:00 AM: Heavy Snow. A lake-effect snow storm tied up all activities for over 3 days. Some schools closed early on Friday, the 10th, and numerous shift workers were told not to report for 2nd and 3rd shifts. Heavy snow continued through Saturday and tapered off to flurries on Sunday morning. All areas reported new snowfall of 12 inches or more. Secondary roads across all of Central Lower and Southwest Lower Michigan were blocked from Friday night into Saturday, and interstates were also closed for a few hours late Friday into Saturday. Accidents occurred at the rate of 50 to 100 per day from the 10th through the 12th. Some secondary roads remained plugged on Sunday but were open by Monday morning.	Unspecified location
15.	11/11/1997	09:00 PM: Lake Effect Snow. A lake-enhanced snow event began in the late evening on Tuesday, November 11th. In general, 1 to 5 inches of snow fell across western and southern Lower Michigan. The snow-covered and icy roads caught many overnight and early morning motorists by surprise. The snow initially melted on road surfaces overnight, then froze early Wednesday morning as temperatures fell below freezing. This resulted in extremely icy conditions and an unusually high number of minor accidents, which included many slide-offs into ditches.	Unspecified location
16.	11/15/1997	07:00 AM: Snow. Snow accumulations of 3 to 4 inches occurred across Jackson during a 14 hour period.	Unspecified location
17.	12/10/1997	01:00 AM: Winter Storm. Snow first moved in shortly after midnight on Wednesday, December 10th and ended during the early afternoon hours. The heaviest snow fell between 6 and 10 am, when snowfall rates of 1 to 2 inches per hour were common. Snow accumulations totaled 10 to 12 inches in Jackson County. With the heaviest snow	Unspecified location

	Date	Description	Location
		falling during the morning rush hour, numerous accidents were reported. A fatal accident claimed the life of a Spring Arbor man who was killed instantly when his automobile was struck by oncoming traffic, after he lost control when trying to pass a county snow plow on southbound U.S. Highway 127 around 3 pm in Jackson County. Several other injury and property damage accidents were reported throughout the storm. Many area schools along and north of Interstate 94 started classes for the day because snow had not yet started falling at the decision-making time of 4-5:30 am, even though Winter Storm Warnings had been posted the night before. However, snow became heavy at the onset, catching many school bus drivers off-guard. Many schools which had opened for the day sent students home early. The weight of the wet snow caused power outages, with up to 18,000 customers without power at the height of the storm due to arcing wires and downed branches. Flight delays and cancellations were common at airports across southern Michigan and local bus service was suspended for several hours of the day in Jackson.	
18.	01/22/1998	07:00 PM: Winter Storm. A winter storm spread a large swath of moderate to occasionally heavy snow across most of western, central, and southern portions of Michigan's Lower Peninsula from Thursday evening through mid-morning Friday, January 22nd-23rd. Snow accumulations ranged from 3 to 6.5 inches, with 6-inch or greater amounts concentrated in Jackson County. Most major highways and roads became snow-covered during the storm and travel conditions were hazardous from late Thursday evening through the Friday morning rush hour. Numerous weather-related minor accidents were reported across the region. Many local school districts were closed because of road conditions on Friday, January 23rd. Snowfall reports included 5.5 inches in Jackson.	Unspecified location
19.	03/09/1998	07:00 AM: Winter Storm, \$100,000 property damage. Heavy snow and blizzard conditions occurred, as rain changed to freezing rain and sleet in the Jackson area and surrounding communities. This icy mix changed to snow during the mid to late morning hours, but a prolonged period of sleet across Jackson County cut down on the snowfall total in the area. Snowfall was heavy and was reported at rates around and slightly over 1 inch per hour. Occasional white-outs were reported. Snowfall totals of 2 to 5 inches were reported. Schools and businesses were closed by this winter storm, the most intense of the 1997-98 winter season. Saturated ground in Jackson from heavy rainfall Sunday night and early Monday morning weakened an old oak tree, which was blown over by winds gusting to 30 mph just before daybreak. This tree crashed through a home in the city of Jackson and caused an estimated \$100,000 in damage. No injuries were reported from residents inside the home. Also listed as snow.	Unspecified location City of Jackson
20.	03/20/1998	04:00 PM: Winter Storm. A mixture of snow, sleet, and freezing rain fell across much of southwest and south central Lower Michigan. The precipitation started out as a mixture of sleet and freezing rain Friday afternoon, then turned to mostly snow Friday evening. The ice at the onset made travel conditions hazardous for the Friday afternoon rush hour, and several minor weather-related accidents were reported along and south of the Interstate-94 corridor. Snow accumulations ranged from 3 to 4 inches in Jackson County. Also included as snow.	Unspecified location
21.	12/21/1998	01:00 PM: Lake Effect Snow. Snowfall totals ranged from 1 inch to several inches, but as is typically the case, the first snow of the season contributed to a dramatic increase in the reported number of traffic accidents. Most of the accidents were minor.	Unspecified location

	Date	Description	Location
22.	01/02/1999	07:00 AM: Blizzard. Wind gusts of 45 to 60 mph were common across all of southern lower Michigan through the afternoon hours, causing blowing and drifting snow and whiteout conditions at times. By the late evening hours of the 2nd, 6 to 12 inches of snow had already fallen across all of southwest and west central lower Michigan.	Unspecified location
23.	01/04/1999	12:00 AM: Snow. Snow showers continued from the previous day throughout a new day, accompanied by continued blowing and drifting of snow. Overall, this winter storm ended up being one of the strongest to affect western lower Michigan in 2 decades, and came to be known as the "Blizzard of '99". All of southern lower Michigan was affected by blizzard conditions at times on January 2nd. Snow began in the morning and continued through the afternoon, making travel difficult to impossible. By the evening hours of the 2nd, 6 to 12 inches of snow had already fallen across southwest and west central lower Michigan, with both Van Buren and Kalamazoo counties reporting up to a foot of new snow by 10 pm. The snow continued through the 3rd and 4th, and even lingered into the early morning hours of the 5th before finally tapering to flurries. Travel through the period ranged from difficult to impossible, due to all the blowing and drifting of snow, and occasional whiteout conditions. Some snow drifts measured to 5 to 6 feet in open rural areas. Roads became impassable and many highways and rural roads were closed through the 4th. There were several car accidents through the period. Most schools were closed, some for over a week in rural areas. Most colleges and universities, as well as quite a few area businesses, were closed on the 4th and 5th as well. Final snow storm total snowfalls for the 2nd through the 5th included 16 inches in the city of Jackson.	Unspecified location City of Jackson
24.	01/11/1999	04:00 AM: Snow. 2 to 4 inches of snow fell across Jackson county.	Unspecified location
25.	03/04/1999	10:00 PM: Snow. 8 inches across Jackson County.	Unspecified location
26.	03/08/1999	10:00 PM: Snow. 5 to 6 inches across Jackson County.	Unspecified location
27.	12/11/2000 – 12/30/2000	06:00 AM: Winter Storm. A significant winter storm affected southern lower Michigan with very heavy snow and strong winds. Anywhere from 6 to as much as 15 inches of snow fell across the area. Strong winds caused blowing and drifting snow. The combination of the heavy snow and winds that gusted to 40 m.p.h. created blizzard conditions at times, causing virtually every school and many businesses to close for a day. In fact many area schools, particularly in outlying and rural areas, were closed for several days and even a week in some instances. Numerous accidents were reported in blowing and drifting snow. Many counties reported upwards of 100 accidents occurring between 7 a.m. on the 11th and 7 a.m. on the 12th. Snowstorm affecting 39 counties in central and southern Lower Michigan. A series of snowstorms caused a host of public health and safety concerns and problems across the region including Jackson County for the next several weeks. A Presidential Emergency Declaration was granted.	Unspecified location
28.	12/13/2000	02:00 PM: Heavy Snow. Jackson saw 5-6 inches of snowfall.	Unspecified location
29.	01/30/2002	04:00 AM, Winter Storm. A stationary front set up to the south of lower Michigan, setting the stage for a prolonged overrunning precipitation event for southern lower Michigan on the 30th and 31st. Anywhere from eight to as much as thirteen inches of snow fell across the area, and freezing rain fell in Jackson County as low pressure moved into	Unspecified location

	Date	Description	Location
		lower Michigan. Winter Storm warning for JACKSON, snow up to 7" with a quarter inch of ice. Also listed as freezing rain.	
30.	2/1/2002	School Closings in JACKSON 1149, Winter storm warning was issued for JACKSON	Unspecified location
31.	2/25 to 2/26/2002	Winter storm warnings were issued for JACKSON	Unspecified location
32.	2/25/2002	07:00 PM, Winter Storm. Moderate to heavy snow developed across much of southern lower Michigan on the 25th and continued on the 27th. There were two phases to the snowfall. During the first phase of this event, the heaviest snow fell across Ingham and Jackson counties, where six to eight inches of snow fell during the late evening hours of the 25th into the morning hours of the 26th. The second phase of this event occurred during the late evening hours of the 26th through the 27th as lake effect snow bands set up across west central lower Michigan.	Unspecified location
33.	12/24/2002	09:00 PM, Heavy Snow. A winter storm caused snow to begin to fall along the I-94 corridor of southern lower Michigan at around 9 p.m. on Christmas Eve. It spread north to near I-96 by midnight. The maximum snowfall report of 9 inches was received from Jackson (Jackson County).	Unspecified location
34.	3/4/2003	06:00 PM, Heavy Snow. Low pressure moved from the panhandle of Texas northeast to Nebraska and eventually to near Toledo Ohio, producing heavy snow across central and southern lower Michigan. Most of the area between I-96 and I-94 generally received anywhere from 6 to 7 inches of snow in less than 12 hours. Winter storm warnings were issued for JACKSON	Unspecified location
35.	3/5/2003	Winter storm warning was issued for JACKSON	Unspecified location
36.	4/6/2003	Winter storm warning issued for JACKSON	Unspecified location
37.	4/7/2003	04:00 AM, Heavy Snow. A late season snow event produced an isolated report of heavy snow in Jackson where seven inches of snow fell.	Unspecified location
38.	1/27/2004	07:00 AM, Winter Storm. A low pressure system developed over the gulf coast states and moved northeast to southern Lake Huron, bringing a combination of moderate to heavy snow and strong gusty winds that caused blowing and drifting of snow across the area. The snow developed around sunrise on the 27th across extreme southwest lower Michigan and expanded northeast to cover most of central and southern lower Michigan by 10 a.m. This was the heaviest general snowfall across our area for the 2003-2004 winter season. A general six to ten inch snowfall occurred across the area.	Unspecified location
39.	11/24/2004	12:00 PM, Winter Storm A potent winter storm brought heavy snow and wind across southern and south central lower Michigan on November the 24th on the day before Thanksgiving. Low pressure developed over eastern Texas late on the 23rd and intensified rapidly as it moved northeast to western Ohio on Wednesday evening. Precipitation began as rain along the I-94 corridor but changed to snow by around noon. Snow become moderate to heavy during the early to mid afternoon hours, when snowfall rates of two to three inches an hour were reported at times.	Unspecified location

	Date	Description	Location
		Moderate to heavy snow continued into the early evening hours before gradually diminishing overnight. Reports of six to nine inches of snow were received from Kent, Allegan, Calhoun, Jackson, Clinton and Eaton counties	
40.	12/22/2004	09:00 PM, Heavy Snow. Heavy snow was reported in Jackson County, where up to 7 inches of snow fell in Brooklyn in southern Jackson County. The remainder of Jackson county received an average of 5 to 6 inches of snow.	Unspecified location Brooklyn
41.	1/4/2005	07:00 PM, Heavy Snow. An initial burst of snow occurred during the late evening hours of the 4 th into the early morning hours of the 5th. The main low pressure system moved northeast from Texas and brought the most substantial snow during the daytime hours of the 5th. Six to nine inches of snow fell in less than 24 hours across much of the rest of the area.	Unspecified location
42.	1/21/2005	11:00 PM, Heavy Snow. A potent Alberta clipper system in combination with a strong upper air system produced heavy snow across central and southern lower Michigan. 10 to 12 inches of snow was reported across most of the area across central and southern lower Michigan from Interstate 96 south.	Unspecified location
43.	12/8/2005	04:00 PM, Heavy Snow. A synoptic snow event resulted in total snow accumulations of six to eight inches across much of southern lower Michigan.	Unspecified location
44.	2/13/2007	02:00 AM, Heavy Snow. EVENT NARRATIVE: Six inches of snow fell in about a 9 hour period in Jackson County by late in the day on Tuesday February 13th. EPISODE NARRATIVE: A low pressure system moved northeast along a stationary front well south of our region and this produced a band of snow which clipped southern lower Michigan. Six inches of snow fell in about a 9 hour period in Jackson County by late in the day on Tuesday February 13th.	Unspecified location
45.	12/31/2007	22:30 PM, Winter Storm. EVENT NARRATIVE: This heavy snow event continued into the early morning hours on New Year's Day. EPISODE NARRATIVE: Heavy snow moved into southern lower Michigan during the early evening hours of New Year's Eve, impacting New Year's travel plans by creating very hazardous travel conditions in heavy snow and snow covered roads. Many locations across southern Michigan reported total snowfall of 7 to 10 inches, with as much as 11.5 inches reported three miles south southeast of Jackson.	Unspecified location Napoleon Township
46.	2/1/2008	02:00 AM, Winter Storm. EPISODE NARRATIVE: A low pressure system tracked northeast between Toledo and Cleveland and brought significant snowfall to most of southern lower Michigan on the first of February. The heaviest snow occurred between midnight and daybreak before gradually diminishing during the mid to late morning hours. Snow continued to taper off to flurries in the afternoon before ending. Approximately five to seven inches of snow fell south of a line from Muskegon to Clare	Unspecified location
47.	3/21/2008	13:20 PM, Winter Storm. EPISODE NARRATIVE: A low pressure system brought heavy snow to much of southwestern lower Michigan from the 21st through the 22nd. Snow began during the morning hours of the 21st and continued into the early morning hours of the 22nd before gradually diminishing. The heaviest snow fell during the afternoon and early evening hours of the 21st, when snowfall rates of two inches per hour were reported at some locations. Eight to fourteen inches of snow fell south of a line from Holland to Jackson.	Unspecified location
48.	12/19/2008	04:00 AM, Winter Storm. EVENT NARRATIVE: A total of eight to twelve inches of snow was reported. EPISODE NARRATIVE: An area of low pressure moved from Kansas City, Missouri to north of Pittsburgh, Pennsylvania. Snow spread into southwest lower Michigan out ahead of the low, starting in South Haven at around 2:00 a.m. on the	Unspecified location Summit Township

	Date	Description	Location
		nineteenth. Heavy Snow occurred across most of the area between 5:00 a.m. and 1:00 pm, with snowfall rates reaching 1 to 2 inches per hour at times. Thundersnow was even reported at locations across southern lower Michigan, evidence to the instability in place with this system. Some sleet and freezing rain mixed in along the Interstate 94 corridor. A maximum of snow was found across south central lower Michigan from Bellevue in Eaton county southeast to Vandercook Lake in Jackson county.	
49.	1/9/2009	12:00 PM, Winter Storm. EVENT NARRATIVE: Four to eight inches of snow fell. EPISODE NARRATIVE: Six to twelve inches of snow fell south of the I-96 corridor over south and southwest Michigan on the ninth and tenth. The snow began during the morning of the ninth and continued through the early evening hours. The mainly light snow combined with fog to produce visibilities between one quarter and one half of a mile along the I-94 corridor. Many locations saw a break in the falling snow during the late evening hours of the ninth, before a second period of heavier snow began during the early morning hours of the tenth. Snow fell throughout the day on the tenth before tapering to flurries in the evening.	Unspecified location
50.	4/5/2009	22:30 PM, Winter Storm. EVENT NARRATIVE: Six to seven and a half inches of snow was reported across Jackson county, resulting in downed trees, branches and power lines, 34 property damage accidents and two accidents with injuries. Scattered power outages were also reported. EPISODE NARRATIVE: A spring snowstorm brought 4 to 8 inches of heavy wet snow to the south and southeast part of the county warning area on the evening of April 5th through the morning of April 6th. The snowfall resulted in numerous traffic accidents with at least one known fatality. The wet snow also brought down some trees and numerous tree limbs resulting in sporadic power outages that affected between 25,000 and 50,000 persons during the storm. Rain spread into the region between 5:00 and 8:00 pm and then changed to snow between 10:00 and 11:00 pm. Accumulating snow fell with temperatures near freezing through Monday morning. Temperatures rose just above freezing Monday morning with the snow ending from west to east by midday.	Unspecified location Southeast Jackson County
51.	2/9/2010	05:00 AM, Heavy Snow. A low pressure system formed over the Tennessee Valley region and moved to the north northeast to just east of Toledo Ohio, bringing heavy snow to southern lower Michigan. The snow fell from the morning hours of February 9th through the mid morning hours of February 10th. The snow was heaviest during the late afternoon and evening hours of the 9th. Most of the area south of a line from Muskegon to St. John's had between 6 and 10 inches of snow. The storm coincided with Michigan's winter 'Count Day' used to determine base funding for local public school systems. Many school systems closed due to the snowstorm. Several significant accidents occurred on the regions primary arteries. I-94 was closed for several times due to jackknifed trucks.	Unspecified location
52.	2/21/2010	21:00 PM, Heavy Snow. Four to eight inches of snow fell south of a Muskegon to St. John's line over southwest lower Michigan during the morning hours of Monday, February 22nd. The highest amounts fell over Eaton, Ingham, Calhoun, and Jackson counties. The highest observed snow accumulation rates, between 0.5 and 1.0 inch per hour, occurred during the morning commute on the 22nd.	Unspecified location
53.	2/1/2011	A major winter storm brought 10 to 15 inches of snow and blizzard conditions to much of southwest lower Michigan the during the late evening of Tuesday, February 1st into the morning hours of Wednesday, February 2nd. Wind gusts in excess of 40 mph combined with heavy snow to produce whiteout conditions and snowdrifts of 3 to 5 feet.	Jackson

	Date	Description	Location
		Thunder accompanied the snow in some areas with snowfall rates exceeding two inches per hour. Many businesses, schools, and some government offices were closed on Wednesday. Most main roads were plowed by midday Wednesday but some side streets were not cleared until Thursday. The storm is considered a 1 in 10 year event for south west Michigan. The storm also brought blizzard conditions to parts of Kansas, Missouri, Iowa, Illinois, Wisconsin, New York, Vermont, New Hampshire, and Maine. Winter storm conditions began during the late afternoon hours Tuesday, February 1st and continued into the early morning hours on Wednesday. Five to ten inches of snow fell across the county. Winds gusts up to 45 mph accompanied one inch per hour snowfall rates. Snow drifts of 1 to 2 feet occurred in open areas.	
54.	2/20/2011	A storm brought heavy wet snow from Holland to Lansing and points north during the afternoon and evening hours of Sunday, February 20th. South of those areas up to three quarters of an inch of freezing rain. There were numerous accidents including a sixty car pile-up on Route 131 near Big Rapids. More than one-hundred thousand people lost power along the Interstate 94 corridor where the freezing rain was the most severe. The storm responsible for the snow and ice was located over eastern South Dakota Sunday morning. The storm center then tracked east moving along the Michigan and Indiana border Sunday night before redeveloping off the Mid-Atlantic Coast on Monday. Ice accumulations of one-tenth to one-quarter of an inch occurred over the county. The ice was preceded by 3 to 6 inches of a snow-sleet mixture. Approximately ten thousand people lost power during the storm.	Jackson
55.	11/29/2011	A significant early season winter storm brought heavy wet snow and windy conditions to south central lower Michigan. A swath of 8 to 10 inches of snow fell from Marshall northeast to Lansing and St. John's, with the highest total of 10 inches reported in St. John's. There was a sharp gradient to the snow, with Battle Creek receiving around 5 inches of snow, and Kalamazoo and Hastings receiving only 3 inches. In fact just a little further northwest in Grand Rapids there was no snow at all. The combination of the heavy wet snow with high liquid content and strong winds and falling temperatures caused quite a few trees, tree limbs and power lines to come down near to east of a line from Battle Creek to Lansing and St. John's. Approximately 30,000 people were left without power in south central Michigan. There were numerous accidents. A gas station awning in Haslett collapsed under the weight of the snow. The public reported seven inches of snow in Rives Junction. A trained spotter reported 5.2 inches of snow in Jackson and that many tree limbs had come down.	Jackson
56.	1/4/2014	Arctic low pressure dropped southeast from Canada during the night of the fourth into the 5th. This system combined with a southern Plains system that also moved in on the 5th to bring as much as 15 to 17 inches of snow to portions of southern lower Michigan, with numerous reports of over a foot of snow. This resulted in numerous accidents and school closures. More than one foot of snow with wind chills between thirty and forty below zero.	Jackson
57.	3/12/2014	A low pressure system moved northeast across the Ohio Valley region, bringing around seven to nine inches of snow to much of south central and southeastern lower Michigan, mostly during the early to mid morning hours of March 12th. This resulted in slick roads and several traffic accidents across the area. T rained weather spotters reported six inches of snow in Jackson.	Jackson

	Date	Description	Location
58.	2/1/2015	<p>A low pressure system strengthened as it tracked east to near Indianapolis during the evening of February 1st, spreading a large swath of moderate to heavy snow into southern Michigan. Snowfall totals reached as high as 12 to 15 inches in the Kalamazoo and Battle Creek areas and along the I-94 corridor. A little further north around 8 to 10 inches of snow fell in Grand Rapids and along the I-96 corridor. The system also brought strong winds which caused a considerable amount of blowing and drifting snow during the afternoon through the late evening hours of February 1.</p> <p>Grand Rapids and Lansing both set daily snowfall records on February 1st. winds increased on the afternoon and evening of February 1st, gusting to 30 to 35 mph across Lower Michigan. The wind was a significant factor in creating blowing snow, very low visibilities, and deep drifts. Arctic air wrapped in behind the storm system and skies cleared during the early morning hours of February 2nd, resulting in low temperatures in the single digits with wind chills down to 10 to 15 degrees below zero. Twelve to eighteen inches of snow fell across Jackson county, and the combination of heavy snow and blowing and drifting snow resulted in very hazardous travel conditions.</p>	
59.	2/24/2016	<p>A major winter storm moved into Lower Michigan on February 24 producing heavy wet snow. This snow continued into the morning hours of February 25 before ending. Total accumulations for many locations ranged from 6 to 14. This caused some strain on trees with the wet snow weighing down branches, causing some scattered power outages across the region. Also, many schools and even state government offices were closed during this storm. Interstates were in better shape compared to some state highways and other secondary roads, which in many cases were snow packed and treacherous. Eleven inches of snow was reported in Jackson and a foot of snow fell in Rives Junction. The heavy wet snow resulted in scattered power outages.</p>	
60.	3/1/2016	<p>A winter storm strengthened as it tracked east northeastward just south of Lower Michigan on March 1. A swath of 8-12 inches of snow, with localized amounts over a foot, fell from southwest lower Michigan into the thumb region. The winter storm featured two main rounds of heavier snow, separated by a 2-3 hour period of light freezing rain and sleet mainly south of Interstate 96. The freezing rain was enough to coat vehicles in a thin layer of ice. No significant power outages were noted. The freezing rain and sleet occurred from late morning into early afternoon as the low pressure center tracked closest to Michigan. A thin layer of warm air well above the ground was able to melt snowflakes, but surface temperatures in the lower 20s resulted in freezing rain and sleet rather than just plain rain. The atmosphere sufficiently cooled by mid afternoon and changed the precipitation back to all snow. A significant burst of heavy snow during the afternoon hours brought traffic to a crawl. This resulted in hundreds of school closings on March 1st and 2nd. Seven to eight inches of snow was reported across Jackson county. Travel conditions became very hazardous on March 1st into March 2nd due to the heavy snow.</p>	
61.	12/11/2016	<p>A low pressure system brought widespread snowfall to much of southern lower Michigan with numerous reports of 9 to 10 inches of snow. This caused numerous traffic accidents and travel delays. Around 8 to 10 inches of snow fell across Jackson County.</p>	Jackson
62.	2/9/2018	<p>A low pressure system brought significant snowfall on February 9th to far southern lower Michigan, where up to around 8 to 10 inches of snow was reported from near Keeler and Paw Paw east to near Jackson along the I-94 corridor. Trained spotters reported that 8 to 9 inches of snow fell across portions of Jackson county.</p>	Jackson

	Date	Description	Location
63.	4/14/2018	<p>A significant late season winter storm brought a mix of high winds, heavy rain, sleet and freezing rain. The highest wind gusts occurred on the 14th and heavy sleet and freezing rain developed during the early morning hours of the 15th through the early to mid afternoon hours of the 15th.</p> <p>Numerous accidents and slide-offs were reported across the region, including on I-94 during the early afternoon hours of the 15th. Michigan State Police requested weather conditions for an investigation into a serious head on accident on M-21 that shut the road down in both directions. Medical support from AeroMed was requested from Grand Rapids but denied due to hazardous weather conditions. Road conditions were poor in the morning into the afternoon with sleet-packed roads and ice coated roads where freezing rain was prevalent.</p> <p>Total ice accumulations ranged from around a tenth of an inch to about half an inch. Total sleet accumulations reached 1 to 2 inches in some areas. Numerous flights were either delayed or cancelled. A total of 450,000 customers were impacted by power outages across Michigan, with 110,000 Consumers Energy Customers being impacted. Power was restored to the majority of Consumers Power customers by the evening hours of the 15th. A quarter to four tenths of an inch of freezing rain was reported. The combination of freezing rain and strong winds caused power outages.</p>	
64.	1/28/2019 – 2/2/2019	<p>A series of heavy snowfall events began this week-long event. On Monday, January 28, much of the state faced the start of a blizzard, with snowfall ranging up to over a foot in depth as sustained winds began (with gusts up to 40 mph) and were soon accompanied by a dangerous drop in temperatures. An extremely large number of schools throughout the state were closed as a result of the snowfall, and then remained closed for most of the week as the combination of sustained subzero temperatures and strong winds produced dangerously low wind-chill values throughout the state. Wind-chill values below -30 degrees Fahrenheit were common throughout Michigan for multiple days, and often dipped below -40. In addition to numerous local states of emergency, non-essential State Government offices were closed for more than half a day on Monday, and for the entire day on Wednesday and Thursday. Governor Gretchen Whitmer's State of Emergency declaration took effect on January 29, anticipating the dangerous impacts of the deep freeze that had been forecast by the National Weather Service. At least three deaths were attributed to weather exposure, and special shelters and over a hundred warming centers were activated at many locations around the state. Additional hospitalizations took place, not just as a direct result of the cold, but also to treat for carbon monoxide exposures resulting from makeshift efforts to heat residents' homes. Hundreds of local and county government offices were closed for at least one or two days during the week, as well. (It should be noted that Jackson County chose to remain open.) Driving conditions were treacherous and slow. Visibility was often a problem, with white-out conditions resulting from the blizzard. On Wednesday, January 30, at 10:33am, a fire occurred at an important Consumer's Energy facility in Armada Township (Macomb County), and when the impacts of this fire were calculated to eventually lead toward natural gas shortages, the head of that major utility, followed by the Governor, appealed to both residential and industrial customers to voluntarily reduce their use of natural gas. By voluntarily reducing thermostat levels to the recommended 65 degrees or below, until the end of the day on January 31, and temporarily scaling back production activities at certain facilities, this collective effort succeeded in preventing the complete interruption of gas delivery that otherwise was expected to occur. The problem did not involve a supply of natural gas, but only the constraints that the fire had caused in the ability to deliver that gas</p>	countywide

	Date	Description	Location
		throughout the state's network. Temporary power failures occurred in some locations, affecting thousands of residents and businesses but fortunately not lasting very long. Other midwestern states also authorized state emergency and disaster declarations during this event. By Friday, February 1, temperatures went back above zero, and Michigan's State of Emergency expired on February 2, 2019.	
65.	11/11/2019	An early season snowstorm and lake effect snow event impacted the western Great Lakes from November 11th to Tuesday November 12th. Snow totals measured in feet in the lake effect snow belts. Some locations picked up 12 to 18 inches of snow in just 12 hours! Record breaking cold temperatures followed on Tuesday enabling wind chills to drop into the single digits. While such snow totals and cold temperatures are not uncommon in Michigan during the winter months, experiencing such conditions in early November is unusual. Nine to ten inches of snow fell across much of Jackson County. Nine inches of snow was reported in Napoleon with 8 inches in Jackson.	Jackson

Sources: Michigan Hazard Analysis, the National Climatic Data Center (NCDC) storm events database, reports from the Law Enforcement Information Network (LEIN), and local input from plan participants.

Severe Wind Events | Natural Hazards | Weather Hazards

The following table presents the history of severe wind events in Jackson County from 1956-2020.

Jackson County Severe/Strong/High Wind Events, 1956-2020

	Date	Description	Location
1.	05/11/1956	1845: Thunderstorm Wind, LAT/LON: 42°17'N / 84°17'W	Leoni
2.	05/30/1956	1435: Thunderstorm Wind, LAT/LON: 42°17'N / 84°30'W	Blackman
3.	05/14/1957	2215: Thunderstorm Wind, 50 Knots, LAT/LON: 42°17'N / 84°30'W	Blackman
4.	08/03/1958	1400: Thunderstorm Wind, LAT/LON: 42°17'N / 84°30'W	Blackman
5.	08/26/1959	1925: Thunderstorm Wind, LAT/LON: 42°23'N / 84°41'W	Springport
6.	07/22/1960	1600: Thunderstorm Wind, LAT/LON: 42°17'N / 84°30'W.	Blackman
7.	06/01/1961	1329: Thunderstorm Wind, 50 Knots, LAT/LON: 42°17'N / 84°30'W.	Blackman
8.	09/30/1961	1920: Thunderstorm Wind, 70 Knots, LAT/LON: 42°17'N / 84°30'W	Blackman
9.	08/08/1962	1715: Thunderstorm Wind, LAT/LON: 42°05'N / 84°11'W.	Norvell
10.	11/12/1965	2000: Thunderstorm Wind, 50 Knots, LAT/LON: 42°17'N / 84°24'W.	Jackson
11.	04/02/1967	1556: Thunderstorm Wind, LAT/LON: 42°17'N / 84°24'W.	Jackson
12.	06/16/1967	1700: Thunderstorm Wind, 50 Knots, LAT/LON: 42°17'N / 84°30'W.	Blackman
13.	10/24/1967	2030: Thunderstorm Wind, LAT/LON: 42°17'N / 84°30'W.	Blackman
14.	08/16/1968	1915: Thunderstorm Wind, LAT/LON: 42°17'N / 84°30'W.	Blackman
15.	04/27/1969	1930: Thunderstorm Wind, LAT/LON: 42°17'N / 84°11'W.	Grass Lake
16.	09/06/1969	1400: Thunderstorm Wind, LAT/LON: 42°05'N / 84°35'W	Hanover

	Date	Description	Location
17.	07/02/1970	2020: Thunderstorm Wind, 50 Knots, LAT/LON: 42°17'N / 84°30'W.	Blackman
18.	04/12/1971	0900: Thunderstorm Wind, LAT/LON: 42°12'N / 84°41'W	Concord
19.	04/12/1971	0930: Thunderstorm Wind, LAT/LON: 42°12'N / 84°11'W.	Norvell
20.	05/19/1971	1355: Thunderstorm Wind, LAT/LON: 42°17'N / 84°30'W.	Blackman
21.	06/12/1973	1200: Thunderstorm Wind, LAT/LON: 42°06'N / 84°18'W.	Columbia
22.	08/09/1973	1100: Thunderstorm Wind, 50 Knots, LAT/LON: 42°16'N / 84°28'W.	Blackman
23.	05/25/1975	1515: Thunderstorm Wind, LAT/LON: 42°11'N / 84°38'W.	Concord
24.	08/21/1975	1400: Thunderstorm Wind, LAT/LON: 42°23'N / 84°27'W.	Rives
25.	05/05/1976	1830: Thunderstorm Wind, LAT/LON: 42°14'N / 84°24'W.	Jackson
26.	05/17/1977	1750: Thunderstorm Wind, 65 Knots, LAT/LON: 42°16'N / 84°28'W.	Blackman
27.	05/20/1978	1222: Thunderstorm Wind, LAT/LON: 42°24'N / 84°36'W.	Sandstone
28.	05/13/1980	1455: Thunderstorm Wind, LAT/LON: 42°14'N / 84°24'W	Jackson
29.	06/01/1980	2020: Thunderstorm Wind, 52 Knots, LAT/LON: 42°14'N / 84°24'W.	Jackson
30.	07/16/1980	0607: Thunderstorm Wind, 55 Knots, LAT/LON: 42°16'N / 84°28'W.	Blackman
31.	07/20/1980	2205: Thunderstorm Wind, 52 Knots, LAT/LON: 42°10'N / 84°15'W.	Napoleon
32.	04/04/1981	0400: Thunderstorm Wind, LAT/LON: 42°14'N / 84°24'W.	Jackson
33.	06/20/1982	1930: Thunderstorm Wind, LAT/LON: 42°14'N / 84°29'W.	Spring Arbor
34.	06/27/1983	1445: Thunderstorm Wind, LAT/LON: 42°14'N / 84°29'W.	Spring Arbor
35.	07/01/1983	1130: Thunderstorm Wind, LAT/LON: 42°14'N / 84°29'W.	Spring Arbor
36.	07/17/1983	1020: Thunderstorm Wind, LAT/LON: 42°14'N / 84°29'W.	Spring Arbor
37.	07/21/1983	1430: Thunderstorm Wind, LAT/LON: 42°14'N / 84°29'W.	Spring Arbor
38.	07/21/1983	1624: Thunderstorm Wind, LAT/LON: 42°14'N / 84°29'W.	Spring Arbor
39.	07/29/1983	1615: Thunderstorm Wind, LAT/LON: 42°14'N / 84°29'W.	Spring Arbor
40.	07/29/1983	1715: Thunderstorm Wind, LAT/LON: 42°14'N / 84°29'W.	Spring Arbor
41.	07/29/1983	1735: Thunderstorm Wind, LAT/LON: 42°09'N / 84°29'W.	Hanover
42.	07/29/1983	1815: Thunderstorm Wind, LAT/LON: 42°14'N / 84°29'W.	Spring Arbor
43.	05/18/1984	1830: Thunderstorm Wind, LAT/LON: 42°14'N / 84°29'W.	Spring Arbor
44.	09/25/1984	1637: Thunderstorm Wind, LAT/LON: 42°05'N / 84°16'W.	Columbia
45.	06/09/1985	0130: Thunderstorm Wind, 52 Knots, LAT/LON: 42°14'N / 84°24'W.	Jackson
46.	07/05/1985	0130: Thunderstorm Wind, LAT/LON: 42°09'N / 84°29'W.	Hanover
47.	07/09/1985	2135: Thunderstorm Wind, LAT/LON: 42°14'N / 84°29'W.	Hanover
48.	09/08/1985	1600: Thunderstorm Wind, LAT/LON: 42°14'N / 84°29'W.	Hanover
49.	04/28/1986	1300: Thunderstorm Wind, LAT/LON: 42°15'N / 84°13'W	Grass Lake Village
50.	05/17/1986	1945: Thunderstorm Wind, 52 Knots, LAT/LON: 42°14'N / 84°24'W.	Jackson
51.	07/25/1986	1520: Thunderstorm Wind, LAT/LON: 42°15'N / 84°26'W.	Jackson

	Date	Description	Location
52.	09/26/1986	1630: Thunderstorm Wind, LAT/LON: 42°06'N / 84°15'W.	Brooklyn
53.	05/30/1987	1805: Thunderstorm Wind, LAT/LON: 42°15'N / 84°26'W.	Jackson
54.	05/30/1987	1847: Thunderstorm Wind, 50 Knots, LAT/LON: 42°14'N / 84°24'W.	Jackson
55.	06/29/1987	1615: Thunderstorm Wind, LAT/LON: 42°15'N / 84°26'W.	Jackson
56.	07/20/1987	1805: Thunderstorm Wind, 52 Knots, 1 injury, LAT/LON: 42°15'N / 84°26'W.	Jackson
57.	08/05/1988	1435: Thunderstorm Wind, LAT/LON: 42°15'N / 84°26'W.	Jackson
58.	09/19/1988	2000: Thunderstorm Wind, LAT/LON: 42°15'N / 84°26'W.	Jackson
59.	05/30/1989	1729: Thunderstorm Wind, LAT/LON: 42°15'N / 84°26'W.	Jackson
60.	09/07/1990	0100: Thunderstorm Wind, LAT/LON: 42°15'N / 84°26'W.	Jackson
61.	06/14/1991	1550: Thunderstorm Wind, 52 Knots, 1 injury, LAT/LON: 42°15'N / 84°25'W	Jackson
62.	06/15/1991	1600: Thunderstorm Wind, LAT/LON: 42°12'N / 84°33'W.	Spring Arbor
63.	07/07/1991	1805: Thunderstorm Wind, 62 Knots, LAT/LON: 42°12'N / 84°33'W.	Spring Arbor
64.	07/07/1991	1820: Thunderstorm Wind, LAT/LON: 42°15'N / 84°26'W.	Jackson
65.	06/17/1992	1805: Thunderstorm Wind, 56 Knots, LAT/LON: 42°12'N / 84°29'W.	Summit
66.	06/17/1992	1838: Thunderstorm Wind, 52 Knots, LAT/LON: 42°14'N / 84°24'W.	Jackson
67.	06/18/1992	1345: Thunderstorm Wind, 52 knots, LAT/LON: 42°10'N / 84°15'W.	Napoleon
68.	06/28/1994	1900: Thunderstorm Winds, \$1,000 property damage. In addition to a tree falling on a house, additional tree and power line damage was reported.	Unspecified
69.	07/06/1994	2115: Thunderstorm Winds, 13 Miles North East of Jackson. Numerous trees were reported down.	Waterloo
70.	11/18/1994	1200: High Winds, 62 knots, \$1,000,000 property damage. High winds affected much of Michigan. Gusts of 40 to 50 mph were widespread throughout the state	Unspecified
71.	07/04/1995	1535: Thunderstorm Winds, 52 Knots, \$1,000 property damage. Trees and power lines were blown down in the city of Jackson. Over 3,000 customers lost electric power around the county.	Jackson Jackson County
72.	07/05/1995	1610: Thunderstorm Winds, 52 Knots, \$1,000 property damage. In the City of Jackson, large tree damage and damage to mobile homes was reported by a spotter.	Jackson
73.	07/16/1995	1630: Thunderstorm Winds, 52 Knots, \$2,000 property damage. Trees and power lines were blown down in the city of Jackson. Several cars were damaged at a dealership, after one was flipped over by being pulled by the footings of a 20-foot promotional balloon that was caught in the wind and torn from its anchors.	Jackson
74.	08/15/1995	1600: Thunderstorm Winds, 52 knots. 60 MPH wind and tree damage was reported in Grass Lake by amateur radio operators.	Grass Lake
75.	07/23/1996	07:30 PM: Thunderstorm Wind at Jackson, 42°14'N / 84°24'W, 50 knots. Thunderstorm winds knocked down trees in the northern part of the city of Jackson.	Jackson
76.	07/24/1996	11:25 AM: Thunderstorm Wind, Location: 8 Miles North of Jackson, LAT/LON: 42°21'N / 84°24'W, 50 knots. Thunderstorm winds blew trees down onto M-106 north of Jackson.	Rives

JCHMP Appendix A | Potential Hazards

	Date	Description	Location
77.	07/24/1996	11:40 AM: Thunderstorm Wind/hail in Concord. Thunderstorm winds, combined with half inch hail, knocked down numerous tree limbs. (also listed in hail)	Concord
78.	07/24/1996	11:55 AM: Thunderstorm Wind at Clark Lake, LAT/LON: 42°08'N / 84°21'W, 50 knots. Thunderstorm winds knocked down tree limbs.	Columbia
79.	08/07/1996	09:00 PM: Thunderstorm Wind at Springport, LAT/LON: 42°23'N / 84°41'W, \$5,000 property damage. Power lines and several large trees were downed by the wind.	Springport
80.	08/20/1996	01:15 PM: Thunderstorm Wind at Springport, LAT/LON: 42°23'N / 84°41'W, \$5,000 property damage. Numerous trees and limbs were blown down.	Springport
81.	09/11/1996	02:25 PM: Thunderstorm Wind, \$3,000 property damage, LAT/LON: 42°15'N / 84°36'W. Several large trees were blocking roads in and around Parma.	Parma
82.	04/06/1997	04:00 PM: High Winds, \$5,000,000 property damage statewide. Sustained wind speeds of 35 to 45 mph, along with frequent wind gusts of 50 to 70 mph, were common through midnight on April 6. Winds continued to gust to gale force through 5 PM EDT on April 7. Widespread wind damage was reported across the area, but no serious injuries were reported from the storm. The winds downed trees and power lines and resulted in roof damage to area homes and businesses. Between 180,000 and 200,000 Consumers Energy customers lost power across the state on Sunday evening. Nearly 70,000 customers were still without power Monday morning at 5 AM EDT.	Unspecified
83.	07/08/1997	05:55 PM: Thunderstorm Winds, LAT/LON: 42°06'N / 84°33'W, \$5,000 property damage. Jackson Central Dispatch reported trees uprooted along Fowler Road in Hanover Township. Local fire officials estimated thunderstorm wind gusts up to 50 mph.	Hanover
84.	07/14/1997	05:50 PM: Hail 4 Miles South East of Springport, LAT/LON: 42°21'N / 84°38'W, 0.88 inch. Strong to locally severe thunderstorms developed, with isolated reports received of up to nickel-sized hail and winds gusting to 70 mph. Downed trees and power lines cut power to approximately 48,000 Consumers Energy customers in southwest and south central Lower Michigan. No injuries were reported. Also listed under hail	Springport
85.	07/14/1997	05:50 PM: Thunderstorm Wind 4 Miles South East of Springport, LAT/LON: 42°21'N / 84°38'W, 61 Knots, \$10,000 property damage. Jackson County officials reported a 70 mph wind gust and nickel-sized hail 4 miles southeast of Springport in Springport and Parma Townships. Numerous trees and power lines were knocked down in the mostly rural area. Also listed under hail	Springport
86.	07/14/1997	05:59 PM: Thunderstorm Wind, LAT/LON: 42°23'N / 84°28'W, 52 Knots, \$5,000 property damage. Jackson County officials reported a 60 mph wind gust in Rives Junction in Rives Township in north central Jackson County, as well as downed trees.	Rives
87.	08/16/1997	02:45 PM: Thunderstorm Wind, LAT/LON: 42°14'N / 84°24'W, 52 knots. Jackson County Central Dispatch relayed a report of a 60 mph wind gust in the city of Jackson. Thunderstorms produced heavy rainfall amounts of 2 to 5 inches, along with isolated reports of wind damage from 60 mph thunderstorm wind gusts. Local utility companies reported approximately 55,000 power outages during the afternoon and evening across far southern Michigan, with most caused by lightning strikes, but some due to downed trees and utility poles (also listed under lightning).	Jackson

	Date	Description	Location
88.	08/16/1997	06:45 AM: Thunderstorm Wind, LAT/LON: 42°06'N / 84°33'W, \$5,000 property damage. Downed trees were reported in Hanover	Hanover
89.	09/19/1997	04:10 PM: Thunderstorm Wind, LAT/LON: 42°15'N / 84°36'W, \$10,000 property damage. Jackson County Central Dispatch reported trees and power lines down in Parma Township, as a line of severe thunderstorms moved across southwest and south central Lower Michigan, producing wind gusts to 70 mph and small hail. Trees and power lines were downed in a line from Allegan County east-southeast through Jackson County. Around 10,000 customers in this swath lost power, nearly half of which occurred in Jackson County.	Parma
		At 04:20 PM: Thunderstorm Wind, LAT/LON: 42°14'N / 84°24'W, \$25,000 property damage. Jackson County Central Dispatch reported trees, power lines, and traffic lights were downed in and around the city of Jackson. A large tree limb fell across a van parked at the corner of N. Wisner and Norfolk Streets. A Consumers Energy spokesman reported that 5,000 customers had lost power across Jackson County because of the severe thunderstorms. Water was also knocked out briefly at the Jackson Water Department, which resulted in customers not having water or having reduced water pressure until backup systems could kick in.	Jackson
		At 04:25 PM: Thunderstorm Wind, LAT/LON: 42°15'N / 84°16'W, \$5,000 property damage. Jackson County Central Dispatch reported trees and power lines were downed in Leoni Township. Thunderstorm Wind, LAT/LON: 42°23'N / 84°15'W, \$15,000 property damage. The Jackson County Sheriff's Department reported that trees and power lines were downed in Munith. One tree fell on the roof of a home and another across a vehicle in the area.	Leoni
		At 04:30 PM: Thunderstorm Wind, LAT/LON: 42°15'N / 84°13'W, \$5,000 property damage. Jackson County Central Dispatch reported that trees and power lines were down across Grass Lake Township.	Waterloo Grass Lake
		At 04:35 PM: Thunderstorm Wind at Brooklyn, LAT/LON: 42°06'N / 84°15'W, \$15,000 property damage. A barn under construction on Cement City Highway near Hayes Road was severely damaged.	Brooklyn Cement City
91.	09/29/1997	12:00 PM: High Wind, 42 knots. Southwest, then west winds gusted between 40 and 50 mph through much of Monday afternoon and night. Gusts reached 46 mph at Jackson County Airport Monday evening. The winds caused some trees and power lines to come down, which resulted in 35,000 power outages across the region. Felled trees blocked a few isolated roads across the area for a brief time including Woodbridge and Union Streets in Jackson. No injuries were reported. Damage estimates were not available for the event.	Blackman Jackson
92.	03/28/1998	11:00 AM: Thunderstorm Wind from 5 Miles East of Brooklyn to 5 Miles East South East of Brooklyn, Begin LAT/LON: 42°06'N / 84°09'W, End LAT/LON: 42°06'N / 84°09'W, \$5,000 property damage. Jackson County Central Dispatch reported that trees and power lines were downed in Norvell Township near the intersection of Michigan Highway 124 and Well wood Road, approximately 5 miles east of Brooklyn. A large branch from a downed tree broke the front window of a home on Wellwood Road. No injuries were reported.	Norvell
93.	05/31/1998	05:19 AM: Hail at Hanover, LAT/LON: 42°06'N / 84°33'W, 1.50 inches. Numerous sources indicated that the widespread and severe damages from a fast-moving line of thunder storms during the early morning hours of Sunday, May 31st, were caused primarily by strong straight-line winds and isolated wet microburst winds. This derecho event produced widespread 60 to 90 mph wind gusts, which caused extensive tree and structural damage and left over 861,000 homes and businesses without electricity across Michigan's Lower Peninsula. Consumers Energy reported	Hanover

	Date	Description	Location
		that the derecho event was the most destructive weather event in the company's history, leaving over 600,000 of its customers without power (Consumers Energy is the largest utility company in western and mid Lower Michigan). There were 4 storm-related fatalities reported in the state and 146 injuries (mostly minor). Statewide, approximately 250 homes were destroyed, 12,250 homes damaged, 34 businesses destroyed, and 829 businesses damaged. (This was subsequently denoted as federally-declared disaster number 1226.) Damage estimates across the above listed counties totaled over \$166 Million. Also listed under hail and thunderstorms.	
94.	06/24/1998	This storm resulted in several wind damage and large hail reports, and an F1 tornado touched down in north central Jackson County near Layton Corners. No injuries were reported with the tornadoes, but damage was estimated at half a million dollars across Henrietta and Waterloo Townships in northern Jackson County. At 5:05 PM: Thunderstorm Wind at Rives Junction, LAT/LON: 42°23'N / 84°27'W, \$5,000 property damage. Jackson County Central Dispatch reported trees and power lines downed in the village of Rives Junction and scattered reports across Rives Township. The Waterloo State Recreation Area reported hundreds of trees uprooted, which resulted in the closing of some roads and horse trails. 5,800 were without power in the affected areas of Henrietta and Waterloo Townships. Damage was estimated at approximately \$500,000. At 05:25 PM: Hail 2 Miles North of Grass Lake, LAT/LON: 42°17'N / 84°13'W, 1.75 inch. Jackson County Emergency Management reported golf ball-sized hail on Morrissey Road in Grass Lake Township, 2 miles north of the city of Grass Lake. Also listed under hail	Henrietta Waterloo Rives
95.	06/26/1998	01:10 AM: Thunderstorm Wind at Jackson, LAT/LON: 42°14'N / 84°24'W, 52 knots. Scattered reports of wind damage and hail were received across west central, southwest, and south central Lower Michigan, as widespread thunderstorm activity moved across Michigan's Lower Peninsula during the late evening hours of Thursday, June 25th, and early morning hours of Friday, June 26th. No injuries were reported, but an estimated 22,000 people lost power across the southern third of Michigan's Lower Peninsula, due to downed trees and power lines. At 01:20 AM: Thunderstorm Wind at Sandstone, LAT/LON: 42°15'N / 84°31'W, 52 knots. Jackson County Emergency Management reported wind gusts to 60 mph in Sandstone Township along with scattered reports of trees and power lines having been felled. At 12:58 AM, Thunderstorm Wind at Parma, LAT/LON: 42°15'N / 84°36'W, 52 knots. Jackson County Emergency Management reported wind gusts to 60 mph in Parma Township along with scattered reports of trees and power lines having been felled. Also listed under hail.	Jackson
		At 01:20 AM: Thunderstorm Wind at Sandstone, LAT/LON: 42°15'N / 84°31'W, 52 knots. Jackson County Emergency Management reported wind gusts to 60 mph in Sandstone Township along with scattered reports of trees and power lines having been felled.	Sandstone
		At 12:58 AM, Thunderstorm Wind at Parma, LAT/LON: 42°15'N / 84°36'W, 52 knots. Jackson County Emergency Management reported wind gusts to 60 mph in Parma Township along with scattered reports of trees and power lines having been felled. Also listed under hail.	Parma
96.	07/21/1998	04:30 PM: Thunderstorm Wind, LAT/LON: 42°14'N / 84°24'W. Jackson area law enforcement reported numerous trees and power lines downed in Blackman Township and the city of Jackson. The Jackson Citizen Patriot reported that a Jackson woman was trapped when the wind dropped a large branch and live power lines over her car on Sixth Street, just north of W. Morrell. Damage to the car was minor and the woman was not injured. Over 200 power lines were downed by the storm and transformers were damaged by lightning strikes. Approximately 5,000 residents lost power	Blackman Jackson

	Date	Description	Location
		in Jackson County. Damage estimates were not available. Wind gusts of 60 to 80 mph occurred across portions of the county. No injuries were reported, but power outages across southwest and south central Lower Michigan peaked at approximately 110,000.	
97.		At 06:30 AM, Thunderstorm Wind at Jackson, LAT/LON: 42°14'N / 84°24'W. The Jackson Citizen Patriot newspaper reported tree limbs and power lines down across the County. According to the Patriot, the Jackson County Road Commission reported tree limbs down on Pulaski, Lansing, Sargent, and County Farm Roads, with most of the damage north of the city of Jackson in the northern part of county. Approximately 1,500 homes lost power in the Jackson Area, including a section of N. West Avenue in the city (also listed under lightning).	Jackson County
98.	09/07/1998	02:50 AM: Thunderstorm Wind at Napoleon, LAT/LON: 42°10'N / 84°15'W, 60 knots. Large trees were down near Napoleon at 0250 and 0315, and near Brooklyn at 0310.	Napoleon
99.	11/10/1998	10:00 AM: High Wind, 87 Knots, 1 death. Winds exceeded 50 mph across the entire county, with gusts exceeding 60 mph. Over 167,000 Michigan homes were without power, and clean-up efforts were extensive.	Jackson County
100.	12/06/1998	03:10 PM: Thunderstorm Wind at Spring Arbor, LAT/LON: 42°12'N / 84°33'W, \$2,000 property damage. A weather spotter reported 2 large trees down in Spring Arbor.	Spring Arbor
101.	12/06/1998	03:15 PM: Thunderstorm Wind, LAT/LON: 42°14'N / 84°24'W, \$5,000 property damage. The Jackson County Sheriff's Department reported 5 trees down in the city of Jackson.	Jackson
102.	05/17/1999	04:00 PM: Numerous trees and power lines were also brought down in the Napoleon and Clark Lake areas. A large severe weather outbreak featured numerous reports of wind gusts of 60 to 70 miles per hour that downed many trees and power lines. There were also a few reports of hail 0.75" - 1.00" in diameter. Also listed under hail	Parma
103.	07/23/1999	01:38 PM: Thunderstorm Wind, LAT/LON: 42°22'N / 84°32'W, 53 Knots, \$10,000 property damage. Several trees were downed in Tompkins, during numerous rounds of strong to severe thunderstorms. Many of the thunderstorms produced gusty winds of 50 to 60 mph. At 11:10 PM: Thunderstorm Wind at Jackson, LAT/LON: 42°14'N / 84°24'W, \$1,000 property damage. A large tree was downed on Comdon Road.	Tompkins Jackson
104.	07/24/1999	10:28 PM: Thunderstorm Wind, LAT/LON: 42°14'N / 84°24'W, \$10,000 property damage. Trees and a few power lines were down in Jackson. Scattered strong to severe thunderstorms developed during the afternoon and continued through the evening.	Jackson
105.	07/31/1999	01:05 PM: Thunderstorm Winds, Pleasant Lake to Grass Lake, Begin LAT/LON: 42°24'N / 84°20'W, End LAT/LON: 42°15'N / 84°13'W, 53 Knots, \$10,000 property damage. Several large trees were downed near Pleasant Lake and Grass Lake.	Henrietta Grass Lake
106.	09/28/1999	06:28 PM: Thunderstorm Wind, LAT/LON: 42°15'N / 84°26'W, 53 Knots, \$10,000 property damage. Thunderstorm winds knocked down several trees, and one car drove into a tree that had fallen onto a road. The thunderstorm became severe, producing pea-sized hail and wind gusts to 60 mph. also listed under hail	Jackson
107.	05/09/2000	06:50 PM: Thunderstorm Wind at Parma, LAT/LON: 42°15'N / 84°36'W, 53 Knots, \$50,000 property damage. Severe thunderstorms resulted in several trees being blown down in Parma. Severe thunderstorm warnings were issued.	Parma

	Date	Description	Location
108.	06/21/2000	12:30 AM: Thunderstorm Wind, LAT/LON: 42°14'N / 84°24'W, 53 Knots, \$10,000 property damage. An isolated severe thunderstorm produced wind gusts estimated near 60 mph, blowing down several trees in Jackson during the early morning hours.	Jackson
109.	07/28/2000	03:04 PM: Thunderstorm Wind, LAT/LON: 42°15'N / 84°36'W, 53 Knots, \$10,000 property damage. A tree was downed at the intersection of Erie and Little roads (1 mile southwest of Parma) at 3:04 p.m. Severe thunderstorm warnings were issued.	Parma
110.	06/19/2001	08:30 PM, Thunderstorm Wind, LAT/LON: 42°10'N / 84°15'W, 53 Knots, \$25,000 property damage. A severe thunderstorm produced numerous reports of wind damage across Jackson county during the evening hours of the 19th. Trees were blown down in Napoleon township, and numerous trees and power lines were also blown down in the city of Jackson. Trees were also blown down in Leoni township. All of the reports of trees blown down came from Jackson county area law enforcement.	Jackson County Napoleon
		08:43 PM, Thunderstorm Wind, Jackson to Leoni, Begin LAT/LON: 42°14'N / 84°24'W, End LAT/LON: 42°15'N / 84°16'W, 53 Knots, \$75,000 property damage. A severe thunderstorm produced numerous reports of wind damage across Jackson county during the evening hours of the 19th. Trees were blown down in Napoleon township, and numerous trees and power lines were also blown down in the city of Jackson. Trees were also blown down in Leoni township. All of the reports of trees blown down came from Jackson county area law enforcement.	Jackson Leoni
111.	07/29/2001	07:10 PM, Thunderstorm Wind, Parma to Spring Arbor, Begin LAT/LON: 42°15'N / 84°36'W, End LAT/LON: 42°12'N / 84°33'W, 53 Knots, 25,000 property damage. A large severe weather outbreak across southern and central lower Michigan during the late afternoon and evening hours resulted in numerous reports of downed trees and power lines, and a few reports of large hail. A 911 center in Spring Arbor (Jackson county) reported trees down in that area. Also recorded as hail	Parma Spring Arbor
112.	08/28/2001	12:28 AM, Thunderstorm Wind, LAT/LON: 42°12'N / 84°33'W, 53 Knots, 20,000 property damage. An isolated severe thunderstorm blew down numerous trees in Spring Arbor. Several trees fell on power lines, causing scattered power outages.	Spring Arbor
113.	09/07/2001	07:05 PM, Thunderstorm Wind, LAT/LON: 42°06'N / 84°24'W, 53 Knots, \$10,000 in property damage. In Liberty, in Jackson county, several trees were also blown down.	Liberty
114.	10/24/2001	06:05 PM, Thunderstorm Wind, LAT/LON: 42°15'N / 84°26'W, 53 Knots, 5,000 property damage. A major severe weather episode occurred across southern lower Michigan, highlighted by three supercell thunderstorms that caused extensive damage. It moved northeast between 50 and 55 m.p.h. across northwest Jackson. The storm blew down several trees and power lines but did not cause extensive damage in Jackson County.	Jackson
115.	03/09/2002	12:54 PM, High Wind, 62 Knots, 485,000 property damage. A very strong area of low pressure produced numerous reports of wind gusts over 60 m.p.h. across southern lower Michigan, with sustained winds of 30 to 40 m.p.h. High wind damage across the area ranged from downed trees and power lines to property damage.	Unspecified
116.	7/22/2002	05:40 PM, Thunderstorm Wind, LAT/LON: 42°07'N / 84°21'W, 53 Knots, 5,000 property damage. Numerous eight to ten inch diameter tree limbs were blown down and several fell down on and blocked roads in the Clark Lake area.	Columbia

	Date	Description	Location
117.	7/26/2002	08:24 AM, Thunderstorm Wind, LAT/LON: 42°14'N / 84°24'W, 53 Knots, 20,000 property damage. An isolated severe thunderstorm during the morning in Jackson produced several high wind gusts, causing several large trees and limbs to be blown down. One large tree was blown down on a home on the west side of Jackson, and another report of a tree blown down onto a home in Jackson was received as well. Another large tree limb was blown down and blocked a road. Storm report for JACKSON County. Wind damage and large trees blown down on a home in the west side of Jackson reported by law enforcement. Large limb knocked down by gusty winds blocking a road reported by law enforcement.	Jackson
118.	8/4/2002	04:05 PM, Thunderstorm Wind, LAT/LON: 42°07'N / 84°38'W, 53 Knots, \$2,000 property damage. A tree was blown down in Pulaski by a severe thunderstorm wind gust, as reported by area law enforcement.	Pulaski
119.	8/4/2002	04:30 PM, Thunderstorm Wind, LAT/LON: 42°10'N / 84°15'W, 53 Knots, \$2,000 property damage. Spotters two miles west of Napoleon reported that a thunderstorm wind gust blew down one tree.	Napoleon
120.	9/10/2002	04:16 PM, Thunderstorm Wind, Parma to Jackson, Begin LAT/LON: 42°15'N / 84°36'W, End LAT/LON: 42°14'N / 84°24'W, 53 Knots, \$20,000 property damage. Several trees were blown down in Parma and also in Jackson by thunderstorm wind gusts, as reported by local law enforcement.	Parma Jackson
121.	10/04/2002	04:25 PM, Thunderstorm Wind, LAT/LON: 42°14'N / 84°24'W, 53 Knots, \$15,000 property damage. Several power lines and trees were blown down in Jackson and also about five miles south of Jackson.	Jackson Liberty
122.	3/28/2003	432 PM, Thunderstorm Wind, Jackson to Brooklyn, Begin LAT/LON: 42°14'N / 84°24'W, End LAT/LON: 42°06'N / 84°15'W, 52 Knots, \$25,000 property damage. Numerous trees were blown down across Jackson county, and two large trees were uprooted two miles west of Brooklyn.	Brooklyn Columbia Jackson
123.	4/20/2003	Storm report: JACKSON County has wind damage and trees and limbs down and some are one foot in diameter. NWS reported a number of trees and road signs downed as it passed through JACKSON County.	Unspecified location
124.	6/28/2003	04:38 PM, Thunderstorm Wind, Pulaski to Jackson, LAT/LON: 42°07'N / 84°38'W, End LAT/LON: 42°14'N / 84°24'W, 53 Knots, \$15,000 property damage. Several trees were blown down in Pulaski, Spring Arbor, and Jackson.	Pulaski Spring Arbor Jackson
		05:05 PM, Thunderstorm Wind, LAT/LON: 42°10'N / 84°15'W, 53 Knots, \$5,000 property damage. Severe thunderstorm wind gusts blew down several trees in Napoleon.	Napoleon
125.	7/8/2003	01:00 PM, Thunderstorm Wind, Brooklyn, LAT/LON: 42°06'N / 84°15'W, 53 Knots, \$15,000 property damage. Several trees were blown down and some fell across and blocked roads in Norvell township.	Brooklyn Norvell
		12:30 PM, Thunderstorm Wind, LAT/LON: 42°07'N / 84°38'W, 53 Knots, \$15,000 property damage. Numerous trees were blown down across Pulaski and Concord townships	Pulaski Concord
126.	7/21/2003	01:50 AM, Thunderstorm Wind, 53 Knots, LAT/LON: 42°14'N / 84°24'W, \$30,000 property damage. Law enforcement in Jackson reported that several trees and power lines were blown down.	Jackson
127.	8/1/2003	01:38 PM, Thunderstorm Wind, 67 Knots, \$20,000 property damage. A 77- m.p.h. wind gust was recorded in the city of Jackson.	Jackson
128.	8/2/2003	Storm report: 77 mph wind gusts in JACKSON County.	Unspecified

	Date	Description	Location
129.	11/12/2003-11/13/2003	High wind warnings issued for JACKSON	Jackson
130.	3/5/2004	High wind warning for JACKSON1121, High wind warning issued for JACKSON – West winds of 40 mph or greater, or gusts of 58 mph or stronger are likely.1530, High wind warning issued for JACKSON. West winds 25-35 mph with gusts to 60 mph.	Jackson
131.	5/9/2004	06:30 PM: Thunderstorm Wind, Spring Arbor to Hanover, Begin LAT/LON: 42°12'N / 84°33'W, End LAT/LON: 42°06'N / 84°33'W, 53 Knots, 20,000 property damage, 5,000 crop damage. One tree was blown down in Spring Arbor, Brooklyn and Hanover.	Spring Arbor Hanover Brooklyn
132.	6/14/2004	01:40 PM, Thunderstorm Wind, Jackson to Brooklyn, Begin LAT/LON: 42°14'N / 84°24'W, End LAT/LON: 42°06'N / 84°15'W, 53 Knots, \$10,000 property damage. The general public reported a couple of trees were blown down one mile east of Brooklyn and two miles south of Jackson.	Jackson Brooklyn
133.	7/6/2004	10:45 PM, Thunderstorm Wind, LAT/LON: 42°11'N / 84°38'W, 53 Knots, \$5,000 property damage. A storm chaser in Jackson County reported that several trees were blown down along M-60 one mile east of Concord.	Concord
134.	10/30/2004	11:00 AM, High Wind, 59 Knots, \$1,200,000 property damage. Law enforcement from all the counties in our area reported scattered downed trees and power lines due to gusty winds. Wind gusts of around 58 to 60 m.p.h. were estimated across our area based on all the reports. The wind knocked out power to about 100,000 people statewide.	Unspecified
135.	5/13/2005	04:25 PM, Thunderstorm Wind, LAT/LON: 42°12'N / 84°33'W, 53 Knots, \$5,000 property damage. A severe thunderstorm produced an estimated wind gust to 60 m.p.h. in Spring Arbor which blew down numerous trees.	Spring Arbor
136.	6/5/2005	06:00 PM, Thunderstorm Wind, Parma to Springport, Begin LAT/LON: 42°15'N / 84°36'W, End LAT/LON: 42°23'N / 84°41'W, 52 Knots, \$10,000 property damage. A large severe weather outbreak occurred across our area resulting in numerous downed tree limbs and power lines, many reports of large hail and many reports of downed power lines. Several trees were blown down across area roads. There were several reports of three quarters to inch diameter hail and estimated wind gusts to 60 m.p.h. also listed as hail	Parma Springport
137.	6/30/2005	07:35 PM, Thunderstorm Wind at Parma, End LAT/LON: 42°15'N / 84°36'W, 52 Knots, \$10,000 property damage	Parma
138.	6/30/2005	09:20 AM, Thunderstorm Wind, Parma to Jackson, Begin LAT/LON: 42°15'N / 84°36'W, End LAT/LON: 42°14'N / 84°24'W, 52 Knots, \$10,000 property damage. Twelve trees were blown down in and near Parma.	Parma Jackson
139.	7/4/2005	05:15 PM, Thunderstorm Wind at Brooklyn, LAT/LON: 42°06'N / 84°15'W, 53 Knots, \$10,000 property damage. Three trees greater than one foot in diameter were uprooted in Brooklyn.	Brooklyn
140.	7/25/2005	10:04 PM, Thunderstorm Wind, 53 Knots, LAT/LON: 42°06'N / 84°33'W, \$25,000 property damage. A large severe weather outbreak occurred and produced numerous reports of wind damage, one tornado and one isolated hail report. As a result of severe thunderstorm wind gusts, there were numerous reports of wind damage including downed trees, limbs, and power lines across the area. Also listed as hail	Hanover
141.	5/30/2006	02:08 PM: Thunderstorm Wind, LAT/LON: 42°07'N / 84°38'W, 52 Knots, \$10,000 property damage, \$5,000 crop damage. The public reported numerous trees blown down one mile north of Pulaski in Jackson County.	Pulaski
142.	06/21/2006	04:10 PM, Thunderstorm Wind, LAT/LON: 42°11'N / 84°38'W, 52 Knots, \$10,000 property damage. Law enforcement in Jackson reported several trees were blown down one mile south of Concord.	Concord

	Date	Description	Location
143.	06/21/2006	05:30 PM, Thunderstorm Wind, Pulaski to Hanover, Begin LAT/LON: 42°07'N / 84°38'W, End LAT/LON: 42°06'N / 84°33'W, 52 Knots, \$20,000 property damage. Several trees were blown down in Pulaski and near Hanover.	Pulaski Hanover
144.	06/21/2006	08:54 PM, Thunderstorm Wind, LAT/LON: 42°15'N / 84°36'W, 52 Knots, \$15,000 property damage. Several trees were blown down two miles east of Parma.	Parma
145.	07/17/2006	10:00 PM: Thunderstorm Wind, LAT/LON: 42°14'N / 84°24'W, 53 Knots, \$25,000 property damage, \$5,000 crop damage. Numerous trees were blown down across the city of Jackson.	Jackson
146.	5/15/2007	17:18 PM, Thunderstorm Wind 1 Mile North East of Pleasant Lake, LAT/LON: 42°24'N/84°19'W, 50 Knots, \$10,000 property damage. EVENT NARRATIVE: A combination of six trees and large limbs were blown down on a golf course one mile northeast of Pleasant Lake in Jackson county. EPISODE NARRATIVE: Severe storms produced several reports of large hail and high winds which brought down several trees and branches in Jackson County. Also listed under hail	Henrietta
147.	6/02/2007	18:15 PM, Thunderstorm Wind 3 Miles West North West of Pleasant Lake, LAT/LON: 42°25'N/84°23'W, 52 Knots, \$20,000 property damage. EVENT NARRATIVE: Multiple trees and power lines were blown down along the Jackson County line. EPISODE NARRATIVE: Severe storms affected much of southwestern lower Michigan, resulting in several reports of large and numerous reports of wind damage. Also listed under hail JACKSON, at 1915, a thunderstorm wind gust of 60 mph was reported 3 miles southeast of Leslie, with multiple trees and limbs down along the Ingham/Jackson county line.	Henrietta
148	06/07/2007	11:10 AM, Strong Wind, 43 Knots, \$15,000 property damage. EVENT NARRATIVE: Non convective thunderstorm wind gusts brought down several trees and power lines. EPISODE NARRATIVE: High Winds not related to thunderstorms brought down several trees and power lines and also caused damage to some area buildings.	Unspecified
149.	08/7/2007	Severe Thunderstorm Warnings issued for JACKSON JACKSON, at 1919, thunderstorm wind damage was reported by county dispatch, with mature healthy large tree branches blown down near Pulaski and Howard. 18:19 PM, Thunderstorm Wind 1 Mile West of Pulaski, LAT/LON: 42°07'N / 84°38'W, 50 Knots, \$5,000 property damage. EVENT NARRATIVE: County dispatch reported that mature healthy large tree branches were blown down near the intersection of Pulaski and Howard. EPISODE NARRATIVE: An isolated severe thunderstorms brought down large tree limbs and branches in Jackson county.	Pulaski
150.	8/23/2007	18:25 PM, Thunderstorm Wind 1 Mile North of Jackson, LAT/LON: 42°14'N / 84°24'W, 50 Knots, \$100,000 property damage. EVENT NARRATIVE: Numerous trees were blown down throughout the county. EPISODE NARRATIVE: A large severe weather event unfolded on August 23rd and resulted in numerous reports of wind damage.	Blackman
151.	8/29/2007	16:28 PM, Thunderstorm Wind 1 Mile West of Springport to 2 Miles North, North West of Woodlawn Orchards, Begin LAT/LON: 42°22'N / 84°42'W, End LAT/LON: 42°16'N / 84°21'W, 50 Knots, \$15,000 property damage. EVENT NARRATIVE: Several trees were blown down in Springport. A couple of trees were also blown down near Jackson. EPISODE NARRATIVE: Severe thunderstorms produced widespread wind damage with numerous reports of downed trees and power lines across far southern lower Michigan.	Springport
		16:48 PM, Thunderstorm Wind 1 Mile West of Springport, LAT/LON: 42°22'N / 84°42'W, 50 Knots, \$3,000 property damage. EVENT NARRATIVE: Two trees were blown down in Springport. EPISODE NARRATIVE: Severe thunderstorms	Jackson

	Date	Description	Location
		produced widespread wind damage with numerous reports of downed trees and power lines across far southern lower Michigan.	
152.	10/18/2007	21:04 PM, Thunderstorm Wind 1 Mile East of Springport, LAT/LON: 42°22'N / 84°39'W, 52 Knots, \$5,000 property damage. EVENT NARRATIVE: A few trees were blown down by wind gusts estimated at 60 mph. EPISODE NARRATIVE: A late season severe weather outbreak occurred on October 18th.	Springport
		23:02 PM, Thunderstorm Wind 2 Miles East of Rives Junction, LAT/LON: 42°22'N / 84°25'W, 52 Knots, 5,000 property damage. EVENT NARRATIVE: Several trees were blown down by wind gusts estimated at 60 mph. EPISODE NARRATIVE: A late season severe weather outbreak occurred on October 18th.	Rives
		23:08 PM, Thunderstorm Wind 1 Mile North West of Tompkins Center, LAT/LON: 42°22'N / 84°32'W, 52 Knots, \$5,000 property damage. EVENT NARRATIVE: Several trees were blown down by wind gusts estimated at 60 mph. EPISODE NARRATIVE: A late season severe weather outbreak occurred on October 18th.	Tompkins
153.	12/23/2007	06:30 AM, Thunderstorm Wind 1 Mile North of Jackson, LAT/LON: 42°14'N / 84°24'W, 52 knots. EVENT NARRATIVE: A trained spotter reported a 52 knot wind gust in Jackson. EPISODE NARRATIVE: A narrow line of rain with embedded thunderstorms just ahead of an arctic cold front produced high wind gusts ranging from 50 to 78 mph. This resulted in widespread power outages and reports of wind damage across central and southern lower Michigan.	Blackman Jackson
154.	1/7/2008	21:54 PM, Thunderstorm Wind 2 Miles North, North East of Horton, LAT/LON: 42°10'N / 84°30'W, 52 Knots, \$2,000 property damage. EVENT NARRATIVE: One tree was blown down near the intersection of Reynolds and Horton roads three miles southeast of Spring Arbor. EPISODE NARRATIVE: A rare mid winter severe weather event occurred and resulted in several reports of high winds and large hail. There were few reports of damage associated with the severe weather. A tree was blown down just southeast of Spring Arbor. Also listed under hail	Hanover Spring Arbor
155.	6/6/2008	17:45 PM, Thunderstorm Wind 1 Mile North West of Spring Arbor, LAT/LON: 42°12'N / 84°33'W, 52 knots. EVENT NARRATIVE: Law enforcement reported that a couple of trees were blown down. EPISODE NARRATIVE: Severe thunderstorm wind gusts resulted in several reports of significant wind damage. Several reports of large hail were also received. Also listed under hail	Spring Arbor
156.	6/8/2008	15:34 PM, Thunderstorm Wind 1 Mile West of Pleasant Lake, LAT/LON: 42°24'N / 84°21'W, 70 knots. EVENT NARRATIVE: A trained spotter reported an estimated wind gust to 80 mph between Rives and Pleasant Lake.	Henrietta Rives
		15:40 PM, Thunderstorm Wind 1 Mile South of Leoni, LAT/LON: 42°14'N / 84°16'W, 52 knots. EVENT NARRATIVE: The public reported that trees were blown down and that a tree and some debris were lifted up into the air.	Leoni
		15:48 PM, Thunderstorm Wind, LAT/LON: 42°10'N / 84°15'W, 52 knots. EVENT NARRATIVE: Several trees were blown down around Napoleon.	Napoleon
157.	6/26/2008	14:39 PM, Thunderstorm Wind 5 Miles North West of Concord, LAT/LON: 42°13'N / 84°42'W, 52 knots. EVENT NARRATIVE: One tree was blown down. EPISODE NARRATIVE: A round of severe thunderstorms resulted in several reports of strong to severe thunderstorm wind gusts which downed several trees.	Concord
		14:39 PM, Thunderstorm Wind 4 Miles South, South East of Devereaux, LAT/LON: 42°16'N / 84°40'W, 52 knots.	Parma
		14:39 PM, Thunderstorm Wind 1 Mile South West of South Jackson, LAT/LON: 42°09'N / 84°24'W, 52 knots.	Spring Arbor

	Date	Description	Location
		14:40 PM, Thunderstorm Wind 1 Mile North West of Minard, LAT/LON: 42°20'N / 84°33'W, 52 knots.	Spring Arbor
		14:40 PM, Thunderstorm Wind 2 Miles South West of South Jackson, LAT/LON: 42°09'N / 84°25'W, 52 knots.	Spring Arbor
		14:46 PM, Thunderstorm Wind 2 Miles South East of Tompkins Center, LAT/LON: 42°21'N / 84°30'W, 52 knots.	Tompkins
		18:04 PM, Thunderstorm Wind 1 Mile North of Brooklyn, LAT/LON: 42°06'N / 84°15'W, 52 knots. EVENT NARRATIVE: A trained spotter in Brooklyn reported that the entire village was without power due to blown down power lines.	Columbia
158.	7/16/2008	20:53 PM, Thunderstorm Wind 1 Mile North West of Rives Junction, LAT/LON: 42°23'N / 84°27'W, 52 knots. EVENT NARRATIVE: Law enforcement in Jackson county reported that a couple of trees were blown down. One was blown down on Spring Court and another was blown down near Zion Road and East Berry Road. EPISODE NARRATIVE: Numerous severe thunderstorms across southwest Michigan resulted in wind damage and large hail. Also listed under hail	Rives
159.	12/28/2008	04:00 AM, High Wind, 52 knots. EVENT NARRATIVE: Wind gusts up to 60 mph brought down several trees and power lines. EPISODE NARRATIVE: A strong low pressure system produced very windy conditions across southwestern lower Michigan on December the 28th. The highest wind gusts occurred mainly before sunrise, however very gusty conditions persisted well into the afternoon. Hundreds of thousands of people across the state lost power at least temporarily due to high winds.	Unspecified
160.	4/25/2009	12:04 PM, Thunderstorm Wind, 53 knots. EVENT NARRATIVE: A wind gust of 61 mph was measured by the ASOS at the Jackson County Airport. An NWS storm survey team did not find any damage beyond a few small branches down in areas adjacent to the airport or in the city of Jackson itself. Severe storms developed ahead of a cold front that swept across Michigan during the afternoon and evening hours.	Blackman Waterloo
		16:30 PM, Thunderstorm Wind 1 Mile West of Munith, LAT/LON: 42°22'N / 84°16'W, 50 knots. EVENT NARRATIVE: Roughly a 1 by 2 mile area of widely scattered tree damage was observed about two miles west-northwest of Tompkins.	Tompkins
		16:30 PM, Thunderstorm Wind 1 Mile North West of Parma to 3 Miles South, South West of Munith, LAT/LON: 42°15'N / 84°36'W, End LAT/LON: 42°20'N / 84°16'W, 50 knots. EVENT NARRATIVE: Widely scattered tree damage was observed from about one mile west of Parma to 18 miles east-northeast of Parma. The swath was 2 to 3 miles wide. Other than tree damage a highway billboard was blown down on Interstate-94 just outside of Parma. Several eyewitnesses were interviewed to confirm that damage was from second storm.	Parma
		16:40 PM, Thunderstorm Wind 1 Mile East South East of Pleasant Lake to End Location: 7 Miles North of Waterloo, Begin LAT/LON: 42°24'N / 84°18'W, End LAT/LON: 42°27'N / 84°08'W, 53 knots. EVENT NARRATIVE: Scattered to widely scattered tree damage occurred including occasional uprooted trees along a 9 mile stretch from 2 miles west southwest of Pleasant Lake to 2.5 miles southwest of Stockbridge. The damage swath was 4 to 6 miles wide. A measured 53 knot gust with pea sized hail occurred just north of Batteese Lake. The damage crossed into extreme southeast Ingham County at 42.4284 north latitude and 84.2094 west longitude. The damage continued east-northeast to at least the Livingston County line. Also listed under hail	Henrietta
161.	8/9/2009	19:09 PM, Thunderstorm Wind, 5 Miles North, North West of Jackson Airport to 5 Miles North East of Jackson Airport, Begin LAT/LON: 42°20'N / 84°30'W, End LAT/LON: 42°19'N / 84°24'W, 55 knots. EVENT NARRATIVE: A roof section was	Blackman Henrietta

	Date	Description	Location
		partially peeled off of Kidder Middle School. Approximately three dozen trees were blown down. EPISODE NARRATIVE: Severe thunderstorms developed across west central lower Michigan ahead of a cold front during the late afternoon hours of August 9th. An area of thunderstorms developed south and east of Grand Rapids and produced wind damage in eastern Ingham county along Interstate-96 near Webberville and in central Jackson county. A severe storm just northwest of Jackson a few miles from the Interstate 94 and U.S. - 127 interchange produced 70 mph wind gusts that peeled part of the roof off of Kidder Middle School as well as damaging as many as 100 trees. The storm produced damaging wind gusts over a 5 mile long and up to 1.75 mile wide path.	
162.	6/23/2010	Law enforcement from Jackson county reported that several trees were blown down by a severe thunderstorm during the mid evening hours of June 23rd. Jackson County central dispatch reported that several trees were blown down across portions of the county. Very heavy rainfall also caused some street flooding in Napoleon and Vandercook Lake.	South Jackson
163.	7/15/2010	Portions of southwestern lower Michigan were affected by strong to severe thunderstorms during the afternoon and early evening hours of July 15th. A few isolated storms began to develop between 1 and 2 pm in a line from near Grand Rapids to Big Rapids. These storms expanded into a more solid line of storms as it reached a Clare to Ionia county line. The storms were responsible for injuries to four teens that were struck by lightning near Vestaburg in Montcalm county. The storms increased in intensity as they reached Gratiot county, and produced some wind damage in the form of trees and powerlines down in the vicinity of Alma. Trained spotters reported that tree limbs and power lines were blown down four miles south southwest of Leslie. Power lines were also blown down across Kennedy road in Henrietta township.	Rives Junction
164.	7/29/2011	Severe thunderstorms developed during the late night hours producing wind gusts of over 60 mph across portions of Van Buren, Kalamazoo, Calhoun and Jackson counties. Broadcast media reported that aluminum siding was torn off of a house by estimated 50 to 60 mph wind gusts.	Woodville
165.	8/24/2011	Severe thunderstorms developed during the early to mid evening hours across portions of Kalamazoo, Calhoun and Jackson counties resulting in scattered downed trees and power lines from estimated wind gusts to 60 mph. Law enforcement from Jackson county reported several downed trees and power lines from Tompkins to Rives Junction and Henrietta.	River Junction
166.	9/3/2011	A line of severe thunderstorms struck from Muskegon to Newaygo and Isabella counties on the morning of September 3rd. A National Weather Service storm survey found a 40 mile path of intermittent downburst wind damage, with winds estimated to be from 40 to 70 mph. Several trees were downed at around 8:35 a.m. in the southern part of the town of Newaygo. Scattered tree damage continued to Croton Dam. After a brief break, damage resumed near Morley in southern Mecosta County and continued to Remus in eastern Mecosta County where scattered trees and large limbs were downed. The most concentrated area of damage occurred in western Isabella County just northeast of Millbrook, where peak winds were estimated at 70 mph around 9:55 a.m. A tree fell on a house and roofs were damaged on an outbuilding and a trailer home. Strong to severe thunderstorms struck Calhoun and Jackson Counties in the early evening. One inch diameter hail fell near Leroy in Calhoun County and several trees were downed along the path of the storms. Several large tree limbs were blown down near Brooklyn and Horton in southern Jackson County.	Horton

	Date	Description	Location
167.	7/5/2012	Severe thunderstorms during the early morning hours of July 5th resulted in numerous reports of damaging wind gusts. Several trees were blown down across portions of Jackson County.	Tompkins Center
168.	7/6/2012	Isolated severe storms produced isolated damaging wind gusts across portions of Ingham and Jackson counties. Law enforcement reported about twenty trees blown down and a few power outages.	Bentley Corners
169.	7/27/2013	Damaging wind gusts occurred due to an isolated severe thunderstorm that impacted portions of Jackson county. A couple of trees were blown down by an isolated severe thunderstorm.	Napoleon
170.	9/11/2013	Microburst straight line wind damage impacted downtown Albion on September 11th, where maximum winds were estimated at 70 to 80 mph. The worst damage occurred along a path one and three quarters mile long and up to a half a mile wide where numerous trees and power lines were blown down. Albion college was shut down for several days due to all the wind damage and lack of power. Isolated damaging wind gusts from severe storms were reported elsewhere during the late afternoon hours of September 11th, and there was also an isolated severe storm that produced one inch diameter hail. Isolated trees and limbs were blown down in southern Jackson county.	Pleasant Lake
171.	11/17/2013	A very strong low pressure system continued to intensify as it moved northeast across the Great Lakes region November 17th and 18th. The system brought a round of severe thunderstorms during the afternoon hours of Sunday the 17th, followed by very strong winds in the 60 to 80 mph range Sunday evening and Sunday night. Some of the strongest winds occurred between 8 pm and midnight on the 17th. South Haven had a peak wind gust of 77 mph and a 63 mph gust was recorded at Grand Rapids. This caused hundreds of thousands of power outages across lower Michigan as numerous trees, limbs and power lines were blown down. In some of the more rural areas, power was not restored for four to five days after the storm. Wind gusts of 60 to 70 mph across Jackson county resulted in thousands of power outages.	Jackson
172.	4/16/2012	A strong low pressure system moved across the northern Great Lakes region on April 16th, resulting in numerous wind gusts in the 45 to 55 mph range across lower Michigan. A woman was killed when a tree fell on the van she was driving in two miles northeast of Bloomingdale in Van Buren county. A carnival ride was blown down in Jackson. A peak wind gust of 55 mph was measured at the Kalamazoo International Airport and also two miles south of Holland. A trained spotter estimated peak winds to around 45 mph in Jackson that brought down a carnival ride at Jackson Westwood Mall. No injuries were reported.	Jackson
173	7/27/2014	A cold front triggered development of severe thunderstorms with numerous reports of large hail and wind damage during the afternoon and early evening hours of July 27th. Hail up to two inches in diameter was reported in northern Kalamazoo county. Numerous trees were blown down in Rives and Parma townships.	Rives Junction
174.	6/22/2015	A NWS storm survey confirmed that an EF-1 tornado struck Portland in Ionia county between 1:30 pm and 1:36 pm. It had peak winds of 110 mph with a path length a little over 4 miles. The path width was 50 to 100 yards. Three churches incurred heavy damage and dozens of trees were uprooted and snapped. There were 5 minor injuries and no fatalities. Multiple homes had significant roof damage and a baseball field was heavily damaged. It was estimated that the tornado caused 3.2 million dollars in damage. Severe thunderstorms also produced several reports of damaging wind gusts. Several trees and power lines were blown down in and near Jackson.	Concord

	Date	Description	Location
175.	8/14/2015	There were several reports of large hail of around an inch to an inch and a quarter in diameter on August 14th. Isolated wind damage also occurred across portions of Kalamazoo and Jackson counties, where several trees were blown down. Jackson county dispatch reported that several trees were blown down across portions of the county.	Woodville
176.	7/12/2016	Scattered severe storms developed during the late afternoon and evening hours of July 12th, resulting in wind damage that included numerous downed tree branches and several blown down trees in Kentwood and East Grand Rapids. Severe thunderstorm winds brought down numerous trees and limbs, some of which fell on homes, cars and power lines.	Jackson Airport, Reynolds Field
177.	11/18/2016	An isolated severe thunderstorm produced wind gusts of up to 80 mph in Jackson, resulting in downed trees and limbs and numerous power outages. At one point close to 8,000 people lost power in Jackson during the evening hours of November 18th. An isolated severe thunderstorm produced wind gusts up to 80 mph in Jackson. A 69 knot measured wind gust was reported at the Jackson airport. This resulted in numerous downed trees and limbs and power lines.	Jackson Airport, Reynolds Field
178.	3/8/2017	Widespread non thunderstorm wind gusts of 60 to 70 mph caused hundreds of thousands of people to lose power on March 8th. At one point slightly over one million people were without power in Michigan. The winds caused numerous trees and tree limbs to fall and downed thousands of power lines. The winds also caused damage to many homes and numerous homes incurred significant roof damage. Two people were killed in central lower Michigan in Clare county near the Osceola and Clare county line when a large tree fell on their vehicle while they were driving on M-115 in Freeman township. A peak wind gust of 62 mph was measured at the Jackson county Reynolds field airport in Jackson. Peak wind gusts in the 60 to 70 mph range resulted in numerous downed trees and limbs and power lines and widespread power outages.	Jackson
179.	5/2/2018	Isolated severe thunderstorms produced several reports of large hail of up to one and three quarters inches in diameter and isolated damaging wind gusts. An estimated wind gust to 60 mph was reported by the public just west of Jackson.	Sandstone
180.	8/6/2018	Isolated severe thunderstorm wind gusts brought down several trees and power lines across portions of Calhoun and Jackson counties. The Jackson county 911 call center reported that 3 trees were blown down in Spring Arbor and 1 was blown down in Concord.	Spring Arbor
181.	2/24/2019	A high wind event occurred with wind gusts reaching the 55 to 65 mph range that resulted in the loss of power to around a million people on the 24th into the 25th. In Kent County alone over 280,000 people lost power. Over a hundred thousand people lost power across Kalamazoo County. Downed tree limbs and power lines and widespread power outages occurred due to wind gusts of up to around 60 mph.	Jackson
182.	6/1/2019	There were numerous reports of large hail as well as a little bit of wind damage in association with severe thunderstorms on June 1st. Law enforcement reported that several trees and power lines were blown down in the Pleasant Lake area.	Henrietta
183.	7/29/2019	Isolated severe storms produced sporadic wind damage in the form of a few downed trees and power lines. Several trees and power lines were blown down.	Greenbrier
184.	6/10/2020	Severe storms moved across southern Lake Michigan and into west central and southwest lower Michigan during the late morning hours of June 10th. There were numerous reports of peak wind gusts in the 65 to 75 mph range that	

	Date	Description	Location
		brought down trees, tree limbs, power lines and caused numerous power outages. A peak wind gust to 62 mph was reported at Jackson Reynolds field. There were several reports of power outages and downed trees.	Jackson Airport, Reynolds Field

Sources: Michigan Hazard Analysis, the National Climatic Data Center (NCDC) storm events database, reports from the Law Enforcement Information Network (LEIN), and local input from plan participants.

Tornadoes | Natural Hazards | Weather Hazards

The following table provides a history of tornadoes in Jackson County from 1954-2020.

Jackson County Tornado Events, 1954-2020

	Date	Description	Location
1.	06/19/1954	1600: Tornado, LAT/LON: 42°12'N / 84°21'W, F0, \$3,000 property damage.	Napoleon
2.	08/06/1955	1700: Tornado, Begin LAT/LON: 42°06'N / 84°20'W, End LAT/LON: 42°09'N / 84°11'W, Length: 7.90 Miles, Width: 300 Yards, F2, \$3,000 property damage.	Columbia Norvell
3.	06/15/1960	1730: Tornado, Begin LAT/LON: 42°15'N / 84°20'W, End LAT/LON: 42°15'N / 84°13'W, Length: 5.60 Miles, Width: 33 Yards, Magnitude: F2, \$25,000 property damage.	Leoni Grass Lake
4.	07/04/1969	2310: Tornado, LAT/LON: 42°18'N / 84°20'W, Length: 0.30 Mile, Width: 27 Yards, Magnitude: F1, Injuries: 11, Property Damage: \$25,000.	Leoni
5.	05/30/1972	1025: Tornado, LAT/LON: 42°15'N / 84°16'W, Length: 1.10 Miles, Width: 17 Yards, Magnitude: F1, \$2,500 property damage.	Grass Lake
6.	04/03/1974	1900: Tornado, Begin LAT/LON: 42°05'N / 84°24'W, End LAT/LON: 42°07'N / 84°22'W, Length: 1.30 Miles, Width: 440 Yards, Magnitude: F2, Property Damage: \$25,000.	Columbia
7.	03/12/1976	1645: Tornado, LAT/LON: 42°04'N / 84°30'W, End LAT/LON: 42°05'N / 84°28'W, Magnitude: F2, Property Damage: \$250,000.	Hanover, Liberty
8.	03/12/1976	1650: Tornado, LAT/LON: 42°11'N / 84°15'W, Length: 2.00 Miles, Width: 90 Yards, Magnitude: F2, Property Damage: \$250,000.	Napoleon
9.	05/20/1978	1215: Tornado, LAT/LON: 42°22'N / 84°31'W, Length: 0.70 Mile, Width: 70 Yards, Magnitude: F0, Property Damage: \$300.	Tompkins
10.	07/28/1979	1800: Tornado, LAT/LON: 42°22'N / 84°20'W, Length: 0.20 Mile, Width: 17 Yards, Magnitude: F0	Henrietta
11.	05/30/1980	2125: Tornado, LAT/LON: 42°13'N / 84°36'W, Length: 1.90 Miles, Width: 17 Yards, Magnitude: F0, Property Damage: \$ 2,500.	Spring Arbor
12.	06/15/1982	1457: Tornado, Begin LAT/LON: 42°21'N / 84°22'W, End LAT/LON: 42°24'N / 84°08'W, Length: 10.00 Miles, Width: 500 Yards, Magnitude: F3, Fatalities: 1, Injuries: 1, Property Damage: \$ 2,500,000.	Henrietta Waterloo
13.	06/02/1990	1930: Tornado, LAT/LON: 42°06'N / 84°33'W, Length: 0.50 Mile, Width: 20 Yards, Magnitude: F1, Property Damage: \$ 25,000.	Hanover

	Date	Description	Location
14.	06/14/1991	1555: Tornado, LAT/LON: 42°25'N / 84°22'W, Length: 1.00 Mile, Width: 30 Yards, Magnitude: F1, Injuries: 1, Property Damage: \$25,000.	Henrietta
15.	06/24/1998	05:04 PM: Funnel Cloud 6 Miles North of Jackson. Jackson County Emergency Management reported a funnel cloud near the intersection of Lansing Ave. and Maple Grove Road in southern Rives Township, approximately 6 miles north of the city of Jackson. Scattered severe thunderstorms were characterized by several large hail reports, including golf-ball sized hail reports received from Jackson County and hail of 2 to 3 inches in diameter associated with a supercell thunderstorm as it tracked east-southeast across southern Ingham and northern Jackson County. This supercell thunderstorm developed over eastern Barry County and tracked across Eaton County, southwest Ingham County, and northern Jackson County. This storm resulted in several wind damage and large hail reports, and an F1 tornado touched down in north central Jackson County near Layton Corners. No injuries were reported with the tornadoes, but damage was estimated at half a million dollars across Henrietta and Waterloo Townships in northern Jackson County. At 5:05 PM: Thunderstorm Wind at Rives Junction, LAT/LON: 42°23'N / 84°27'W, \$5,000 property damage. Jackson County Central Dispatch reported trees and power lines downed in the village of Rives Junction and scattered reports across Rives Township. At 05:06 PM: Tornado from 3 Miles East of Rives Junction to Waterloo, Begin LAT/LON: 42°23'N / 84°23'W, End LAT/LON: 42°21'N / 84°08'W, Length: 11.30 Miles, Width: 50 Yards, Magnitude: F1, \$500,000 property damage. The Jackson County Emergency Management Coordinator confirmed that a weak tornado had touched down just west of Layton Corners, in rural eastern Rives Township, and traveled east-southeast to near Waterloo, along the Washtenaw County line. The tornado was not on the ground for the entire 11.3 mile path, but due to the heavily wooded rural areas it traversed, exact path lengths could not be determined. Path width was narrow, estimated to be 50 yards at most. No injuries or deaths were associated with this F1 tornado. Damage consisted of downed trees and power lines, roof damage to approximately 12 homes, minor structural damage (broken windows, damaged siding, damaged vehicles and aluminum campers—mainly caused by large hail), fallen trees, and overturned boats on Pleasant Lake in Henrietta Township. Hail was estimated to have reached 2 to 3 inches in diameter in association with this tornadic storm. The most significant damage was reported around the Pleasant Lake area, where several boats were overturned and several homes reported minor to moderate structural damage. Along North Meridian Road from near Layton Corners along the west end of Pleasant Lake, 2 homes reported destroyed garages. Pleasant Lake County Park was closed due to downed trees. The Waterloo State Recreation Area reported hundreds of trees uprooted, which resulted in the closing of some roads and horse trails. 5,800 were without power in the affected areas of Henrietta and Waterloo Townships. Damage was estimated at approximately \$500,000. At 05:25 PM: Hail 2 Miles North of Grass Lake, LAT/LON: 42°17'N / 84°13'W, 1.75 inch. Jackson County Emergency Management reported golf ball-sized hail on Morrissey Road in Grass Lake Township, 2 miles north of the city of Grass Lake. Also listed under hail	Rives Henrietta Waterloo
16.	3/31/2006	06:05 PM, Tornado near Leoni, LAT/LON: 42°15'N / 84°16'W, Length: 7.00 Miles, Width: 65 Yards, Magnitude: F1, \$200,000 property damage, \$50,000 crop damage. The tornado began near Napoleon Road just north of Center Lake and moved northeast. Two small barns collapsed and a patio addition was blown away near the intersection of Page and Noon roads. Minor roof damage occurred at a house on Michigan avenue and a dozen large spruce trees	Leoni

	Date	Description	Location
		were uprooted. The total damage path was 7 miles long and 200 feet wide and this F1 tornado was on the ground for approximately ten minutes. No injuries or fatalities occurred.	
17.	10/18/2007 10/19/2007	Tornado warnings issued for JACKSON.	Unspecified
18.	9/1/2018	Severe thunderstorms developed across central, southern, and southwestern Lower Michigan during the late afternoon and evening of September 1st, 2018. Four tornadoes occurred. Most of the damage was confined to trees and associated structural damage due to falling trees. Some of the storms were well-photographed and had a visible structure resembling supercell thunderstorms, including rotating rain-free updraft bases, wall clouds, and brief funnel clouds. The tornado mostly had damage indicating 65 mph winds but reached 80 mph at its strongest point halfway through its life. It began at the western Jackson City limits north of the Cascades Golf Course and continued north-northeast to cross Washington Avenue. The tornado then weakened near the railroad tracks near Hibbard Avenue. Many trees or limbs were snapped and several trees were uprooted.	Woodville

Sources: *Michigan Hazard Analysis, the National Climatic Data Center (NCDC) storm events database, reports from the Law Enforcement Information Network (LEIN), and local input from plan participants.*

Extreme Temperatures | Natural Hazards | Weather Hazards

The following table provides a history of extreme temperatures in Jackson County from 1954-2020.

Jackson County Extreme Temperature Events, 1995-2019

	Date	Description
1.	12/09/1995	Cold Wave, 3 deaths statewide. Low temperatures ranged from three above zero at Detroit to one on the 10th. On the 9th, winds averaging 20 to 25 mph combined with afternoon temperatures in the single digits to produce wind chills of 30 to 35 below zero.
2.	8/1/2001	Heat Advisory for JACKSON, index at 105 degrees
	1/28/2019 – 2/2/2019	A series of heavy snowfall events began this week-long event. On Monday, January 28, much of the state faced the start of a blizzard, with snowfall ranging up to over a foot in depth as sustained winds began (with gusts up to 40 mph) and were soon accompanied by a dangerous drop in temperatures. An extremely large number of schools throughout the state were closed as a result of the snowfall, and then remained closed for most of the week as the combination of sustained subzero temperatures and strong winds produced dangerously low wind-chill values throughout the state. Wind-chill values below -30 degrees Fahrenheit were common throughout Michigan for multiple days, and often dipped below -40. In addition to numerous local states of emergency, non-essential State Government offices were closed for more than half a day on Monday, and for the entire day on Wednesday and Thursday. Governor Gretchen Whitmer's State of Emergency declaration took effect on January 29, anticipating the dangerous impacts of the deep freeze that had been forecast by the National Weather Service. At least three deaths were attributed to weather exposure, and special shelters and over a hundred warming centers were activated at many locations around the state. Additional hospitalizations took place, not just as a direct result of the cold, but also to treat for carbon monoxide exposures resulting from makeshift efforts to heat residents' homes. Hundreds of local and county government offices were closed for at least one or two days during the week, as well. (It should be noted that Jackson County chose to remain open.) Driving

	Date	Description
		conditions were treacherous and slow. Visibility was often a problem, with white-out conditions resulting from the blizzard. On Wednesday, January 30, at 10:33am, a fire occurred at an important Consumer's Energy facility in Armada Township (Macomb County), and when the impacts of this fire were calculated to eventually lead toward natural gas shortages, the head of that major utility, followed by the Governor, appealed to both residential and industrial customers to voluntarily reduce their use of natural gas. By voluntarily reducing thermostat levels to the recommended 65 degrees or below, until the end of the day on January 31, and temporarily scaling back production activities at certain facilities, this collective effort succeeded in preventing the complete interruption of gas delivery that otherwise was expected to occur. The problem did not involve a supply of natural gas, but only the constraints that the fire had caused in the ability to deliver that gas throughout the state's network. Temporary power failures occurred in some locations, affecting thousands of residents and businesses but fortunately not lasting very long. Other midwestern states also authorized state emergency and disaster declarations during this event. By Friday, February 1, temperatures went back above zero, and Michigan's State of Emergency expired on February 2, 2019.

Sources: Michigan Hazard Analysis, the National Climatic Data Center (NCDC) storm events database, reports from the Law Enforcement Information Network (LEIN), and local input from plan participants.

Flooding | Natural Hazards | Hydrological Hazards

The following table provides a history of flooding in Jackson County from 1995-2020.

Jackson County Flood Events, 1995-2020

	Date	Description	Location
1.	8/2/1995	1630: Flood/flash Flood, \$2,000 property damage. 3.17 inches of rain fell over downtown Jackson in less than an hour, causing sewage overflow into the Grand River. A newly installed stone retaining wall at the New Tribes Bible Institute partially collapsed when loose soil became saturated and gave way. Low-lying streets were flooded throughout the city.	Jackson
2.	8/17/1995	1130: Flood/flash Flood, \$20,000 property damage. More than two inches of rain fell over the city of Jackson following similar amounts from the previous day, giving two-day totals near six inches at some locations. The flash flooding that resulted left water two to three feet deep at many intersections and parking lots, with water entering many cars and buildings, including the Y Center downtown where a gymnasium and other recreation rooms were flooded.	Jackson
3.	3/9/1998	08:00 AM: Flood. Minor flooding occurred along the Grand River in Jackson during the morning of March 9th. During the previous 24 hours, heavy rains of around an inch and a half had occurred in the Jackson area, resulting in significant runoff from the urban area and rapid rises in river levels. Jackson is located near the headwaters of the Grand River and the heavy rains caused the river to respond quickly and crest just above flood stage at 13.3 feet. The river was only at or above flood stage for 2 hours. Minor flooding occurred, but no property damage was reported.	Jackson
4.	06/16/1998	06:00 PM: Flash Flood at Munith. Jackson County local law enforcement reported the flooding of several intersections along Michigan Highway 106 across northeastern Jackson County, in and around the Munith area. NWS Doppler Radar estimated two to three inch per hour rainfall, with storm totals in excess of five inches during a two-hour period over this area. No injuries or significant damages were reported.	Henrietta Township Munith
5.	05/18/2000	07:00 AM: Flood.. Flood warnings were therefore issued in Jackson County on May 18th and 19th.	Jackson County

	Date	Description	Location
6.	05/26/2000	06:30 PM: Flood, \$450,000 property damage. Several severe thunderstorms produced flooding in multiple areas, and also caused the wall of a bowling alley to collapse (no injuries or fatalities). Law enforcement in the City of Jackson reported that part of a roof and a wall of a bowling alley collapsed at 6:30 pm. Further investigation into this event revealed that debris from the damaged building was found about 400 yards away near an airport runway. However, the damage did not appear to be caused by a tornado. The dome shape of the roof implies that water loading on the roof did not cause the collapse, although there were reports of flooding in the area. The most likely cause of the damage was deemed to be a “gustnado” or microburst. At 7:15 p.m., a trained spotter reported that Interstate 94 near the City of Jackson was flooded. (NOTE: Faults in the NCDC online data base caused this information to also appear under an entry for 8/26/2000 as well as 5/26. In this plan, information for 8/26 was taken from the Law Enforcement Information Network instead of NCDC.)	Jackson, Blackman Township
7.	2/9/01- 2/18/01	Rain, snowmelt, and flooding JACKSON, Flood warnings issued. 2/10/2001 JACKSON, at 1220, Flash report sent reporting flash flooding along the Grand River (measured at 12.2') in the county.	Jackson, Jackson County
8.	2/26/2001	JACKSON, Flash Flooding in Jackson	Jackson
9.	10/16/2001	Flood Warning for the Grand River at Jackson (JACKSON), maximum, stage forecast at 13.3ft, flood stage is 13ft NWS in Grand Rapids issued a flood warning for the Grand River at Jackson in JACKSON County. The river was expected to go above flood stage of 13.0 feet that afternoon. The latest stage was 12.5 feet at 1200 on Tuesday. Flood stage is 13.0 feet. Minor flooding is forecasted. The river will go above flood stage this evening and is expected to fall back below flood stage this evening. At 13.0 feet expect minor flooding of low-lying areas.	Jackson
10.	7/28/2002	Flood warning for Grand River at Jackson in JACKSON County. NWS in Grand Rapids has issued a flood warning for Grand River at Jackson. Moderate flooding is expected. Two to three inches of rain fell at Jackson in less than 2 hours. Moderate flooding with a stage of 14 feet measured. Flood stage is 13 feet.	Jackson
11.	8/23/2002	05:30 PM, Flood at Jackson, \$50,000 property damage, \$5,000 crop damage. More than two inches of rain also fell in a short time in Jackson, causing an underpass to be flooded on Jackson Street north of Glick Highway, where several cars got stuck in up to three feet of standing water. Flash flood warning for JACKSON County: NWS indicated rainfall in the city of Jackson of almost two inches has resulted in widespread flooding. Flood warning for Grand River at Jackson in JACKSON County. The latest stage was 11.7 feet. Flood stage is 13 feet, which is 0.6 feet above flood stage. The river was forecast to rise above the flood stage of 13.0 feet this evening. The river is forecast to fall below the flood stage of 13.0 feet early Saturday morning. This crest compares to a previous crest of 13.5 feet on March 30, 1982. Local storm report for JACKSON County: Flash floods and several roads and I-94 had water over them. Several manhole covers were lifted off.	Jackson
12.	8/24/2002	Hydrologic statement: The Grand River at Jackson. Flood stage is 13.0 feet. Forecast stage is 9.3.	Jackson
13.	3/23/2003	Hydrologic statement: For the Grand River at Jackson in JACKSON County, the latest stage was 10.1 feet. Flood stage is 13.0 feet. No flooding is forecast. The maximum stage forecast is 10.1 feet.	Jackson
14.	5/1/2003	Flood warning: The Grand River at Jackson in JACKSON County. The latest stage was 13.0 feet.	Jackson

	Date	Description	Location
		The river is expected to rise to 13.8 feet and then recede slowly.	
15.	5/21/2004	11:32 PM, Flood, \$2,500,000 property damage, \$4,600,000 crop damage. The biggest and longest duration flooding event in the past ten to twenty years occurred across southwestern and south central lower Michigan from May 20th through the third of June. Flooding in mid May resulted in very high river levels and the ground was saturated on the 20th. Numerous thunderstorm complexes and areas of heavy rainfall developed repeatedly in the vicinity of a quasi stationary frontal boundary draped across southern lower Michigan. The heaviest rain fell on Saturday, May 22nd, when over two inches of rain fell over most of the area. Total rainfall over the Grand River basin from May 20th through June 3rd varied from four to as much as seven inches. The Grand Rapids office of the National Weather Service issued a Hazardous Weather Outlook as early as Wednesday morning, May 19th, to mention the threat of flooding. A hydrologic outlook was issued on May 20th to further address the potential for widespread flooding. A flood watch was issued for the entire area on Friday, May 21st. Flood warnings were issued for the southern half of our area at 12:10 a.m. EDT Saturday May 22nd, and for all of our area at 4:10 a.m. EDT Sunday May 23rd through 12 a.m. EDT May 24th. The following is a summary of peak river crests from across our Hydrological Service Area (HSA): Here are some daily flooding headlines from the period from May 22nd through June 4th: May 22nd: The Woodward Elementary School in Jackson county was flooded and damage there was estimated at \$200,000. June 4th: Governor Granholm issued a disaster declaration for 24 counties in Michigan. That list included Jackson County. President George Bush supported the governor's declaration for 19 of the 24 counties and federal disaster relief was made available to Jackson County. It was the wettest May on record in Lansing and Muskegon and the third wettest May on record in Grand Rapids. 9.29" of rain fell in Grand Rapids for the month, which is 5.94" above normal. 10.44" of rain fell in Lansing, which 7.73 inches above normal there. 9.59" of rain fell in Muskegon, which is 6.64 inches above normal. When it was all said and done with, approximately 500 homes were flooded, three dams were damaged, two schools were flooded, one state university building had flooding problems, and a zoo was flooded and closed for four days. The monetary estimate of flood damages incurred is in the millions of dollars. However, there was no loss of life due to all of the flooding.	Jackson County
16.	7/28/2011	Several rounds of heavy rain and thunderstorms moved across southwest lower Michigan from July 27 to July 29, flooding roadways and intersections across areas near to mainly south of Interstate 96. The most significant impacts from flash flooding occurred in and near the Lansing area. Radar estimated that 6 to 10 inches of rain fell from July 27 to 29 near and southwest of Lansing. Six to eight inches of rain fell across far northern Jackson county from the late evening hours of July 27 through the early morning hours of July 29. This caused flash flooding and several road closures and washouts across that area.	Springport
17.	4/23/2013	Record flooding occurred during the month of April and record crests occurred on the lower portions of the Grand River at Ionia, Lowell, Ada, Comstock Park, and Grand Rapids, Michigan. Due to the severity of the flooding, Michigan's Governor Rick Snyder declared a state of disaster for 19 counties and two cities. The two cities declared in the disaster were Grand Rapids and Ionia. The counties included in the disaster declaration included Barry, Gratiot, Ionia, Kent, Mecosta, Muskegon, Newaygo, Osceola and Ottawa. Hundreds of homes were flooded, over 300 roads closed, and preliminary flood damage estimates were in excess of 32 million dollars. On a positive note, no lives were lost during this record flooding.	Springport

	Date	Description	Location
		<p>Parts of West Michigan experienced flooding rainfall from the afternoon of April 17th through the day on April 18th. Most areas saw between 2 to 4 inches of rainfall. Some local areas near Holland and Grand Rapids saw around 5 inches of rainfall. All of this rainfall fell on top of already fully saturated soil from big rains that came during early to mid April. The flooding in many areas lingered through the weekend of April 20th and 21st into the following week. In downtown Grand Rapids flooding problems did not reach their peak until April 22nd, when the Grand River in Grand Rapids crested at 21.85 feet, causing significant flooding damage to numerous businesses and homes near the river.</p> <p>Record stages were set at 5 River Forecast Points:</p> <p>The Grand River at Ionia, Michigan, set a new crest stage record of 24.69 feet; the old record was 24.30 feet set back in 1948. This also set a flow/discharge record at 25,100 cubic feet per second (cfs).</p> <p>The Grand River at Lowell, Michigan, set a new crest stage record of 19.02 feet; the old record was 19.00 feet set back in 1948.</p> <p>The Grand River at Ada, Michigan, set a new crest stage record of 22.94 feet; the old record was 21.60 feet set back in 1986.</p> <p>The Grand River at Grand Rapids, Michigan, set a new crest stage record of 21.85 feet; the old record was 19.64 feet set back in 1985. However, this was only the fifth highest flow/discharge at 35,100 cfs.</p> <p>The Grand River at Comstock Park, Michigan, set a new crest stage record of 17.80 feet; the old record was 17.75 feet set back in 1948. Heavy rainfall caused significant flooding on rivers and streams across Jackson county.</p>	

Sources: *Michigan Hazard Analysis, the National Climatic Data Center (NCDC) storm events database, reports from the Law Enforcement Information Network (LEIN), and input from plan participants.*

Drought | Natural Hazards | Hydrological Hazards

The following table provides a history of flooding in Jackson County from 1913-2020.

Jackson County Droughts 1913-2020

	Date	Description	Location
1.	1913 - 1914	A 10-month drought took place in the south central portion of the state, effecting Jackson County.	Barry, Branch, Calhoun, Clinton, Eaton, Hillsdale, Ingham, Ionia, Jackson, Shiawassee, and St. Joseph Counties
2.	1922-1923	A 10-month drought took place in the south central portion of the state, effecting Jackson County.	Barry, Branch, Calhoun, Clinton, Eaton, Hillsdale, Ingham, Ionia, Jackson,

	Date	Description	Location
			Shiawassee, and St. Joseph Counties
3.	1930-1931	A 18-month drought took place in the south central portion of the state, effecting Jackson County.	
4.	1934-1935	A 13-month drought took place in the south central portion of the state, effecting Jackson County.	Barry, Branch, Calhoun, Clinton, Eaton, Hillsdale, Ingham, Ionia, Jackson, Shiawassee, and St. Joseph Counties
5.	1962-1963	A 31-month drought took place in the south central portion of the state, effecting Jackson County.	Barry, Branch, Calhoun, Clinton, Eaton, Hillsdale, Ingham, Ionia, Jackson, Shiawassee, and St. Joseph Counties
6.	1976-1977	A 8-month drought took place in the south central portion of the state, effecting Jackson County.	Barry, Branch, Calhoun, Clinton, Eaton, Hillsdale, Ingham, Ionia, Jackson, Shiawassee, and St. Joseph Counties
7.	2002-2003	A 8-month drought took place in the south central portion of the state, effecting Jackson County.	Barry, Branch, Calhoun, Clinton, Eaton, Hillsdale, Ingham, Ionia, Jackson, Shiawassee, and St. Joseph Counties
8.	4/22/2007	Red flag warnings issued for JACKSON	Jackson County
9.	4/29/2007	Red flag warnings issued for JACKSON	Jackson County

	Date	Description	Location
10.	8/1/2007 8/3/2007	Drought conditions persist across portions of southwest and west-central lower Michigan, with numerous locations receiving less than 2 inches of rainfall during the entire month of July. Precipitation deficits were increasing over the course of the summer months. Drought category 1 (D1: moderate drought) status affected JACKSON County and all points southwest of this line. It involves damage to vegetation and a high fire risk, with streams, reservoirs, and wells running low. 8/2/2007 drought category, precipitation deficits (inches below normal) since April 1. (Normal is 12.90" for Jackson County.) JACKSON: D1, -3.14" at Brooklyn. The Grand River at Jackson was low, its 8.55' being 63% of normal. On 8/3/2007, Red Flag Warnings were issued (just for the day) for JACKSON	Jackson County
11.	8/17/2007	Red flag warnings had been issued for JACKSON. A proclamation is issued by the Michigan DNR prohibiting the use of fire on forest lands and adjacent lands in JACKSON. This prohibits (except under specified conditions) the building of campfires, smoking, and the burning of materials within these counties.	Jackson County

Sources: Michigan Hazard Analysis, the National Climatic Data Center (NCDC) storm events database, reports from the Law Enforcement Information Network (LEIN), and input from plan participants.

