PRECIPITATION SUMMARY FOR 1995

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State Climatology Office
1996

Wisconsin precipitation in 1995 was 33.0 inches. This amount represents 104 percent of the normal rain and snow, compared to 98 percent of normal precipitation in 1994. Although the state as a whole experienced near-normal conditions, precipitation varied significantly from month to month and, to a lesser extent, between regions. Precipitation measurements were collected at more than 200 National Weather Service and other stations around the state (fig. 1). These stations are divided geographically into nine climatological divisions (fig. 1).

Only the east-central climatological division in Wisconsin received below-normal rainfall in 1995. Table 1 compares 1995 to 1994 precipitation for each climate division; figure 2 shows the distribution of precipitation across Wisconsin for the year. Although the east-central division was below normal, its annual total of 28.9 inches was still 95 percent of normal. Generally, a division is not considered to have a dry year unless less than 85 percent of normal rainfall is received.

The driest stations in Wisconsin in 1995 were for the most part located in the east-central region of the state; they included Plymouth (24.88 in.), Two Rivers (25.12 in.), Sheboygan (25.71 in.), Kewaunee (26.31 in.), and Brillion (26.94 in.). Ashland, in northwestern Wisconsin, also received a low annual precipitation amount of 26.48 inches. However, because the observer at Ashland does not collect daily rainfall amounts on weekends, but measures a cumulative weekend total on Mondays, some rainfall may have been lost to evaporation.

In contrast, the wettest stations in 1995 were not confined to a single climatological division. The wettest stations included Portage (41.32 in.), Grantsburg (41.30 in.), Amery (40.48 in.), Couderay (39.88 in.), Babcock (39.91 in.), Rock

Table 1. Comparison of precipitation amounts for Wisconsin climatological divisions for 1995 and 1994. "Normal" is the 30-year average from 1961–90. Divisions are shown in figure 1.

	Total 1995 (in.)	Departure from normal	Total 1994 (in.)	Departure from normal
Division				
Northwest	34.4	+3.0	30.6	-0.8
North Central	33.7	+1.8	30.2	-1.7
Northeast	31.9	+0.6	29.9	-1.4
West Central	32.6	+0.4	34.3	+2.1
Central	32.9	+0.9	31.8	-0.2
East Central	28.9	-1.6	27.8	-2.7
Southwest	32.4	+0.2	33.6	+1.4
South Central	35.1	+2.5	31.8	-0.8
Southeast	33.1	+0.5	28.9	-3.7
State	33.0	+1.2	31.1	-0.7

Springs (39.17 in.) and Rosholt (39.15 in.). More than 40 percent of Rosholt's 1995 precipitation fell in a single month; during the month of August, the station received 16.45 inches. This is within an inch of the state's official one-month record precipitation of 17.41 inches, which was measured at Hayward in August 1941. Twenty-eight other Wisconsin stations reported monthly rainfalls of more than 10 inches in August 1995.

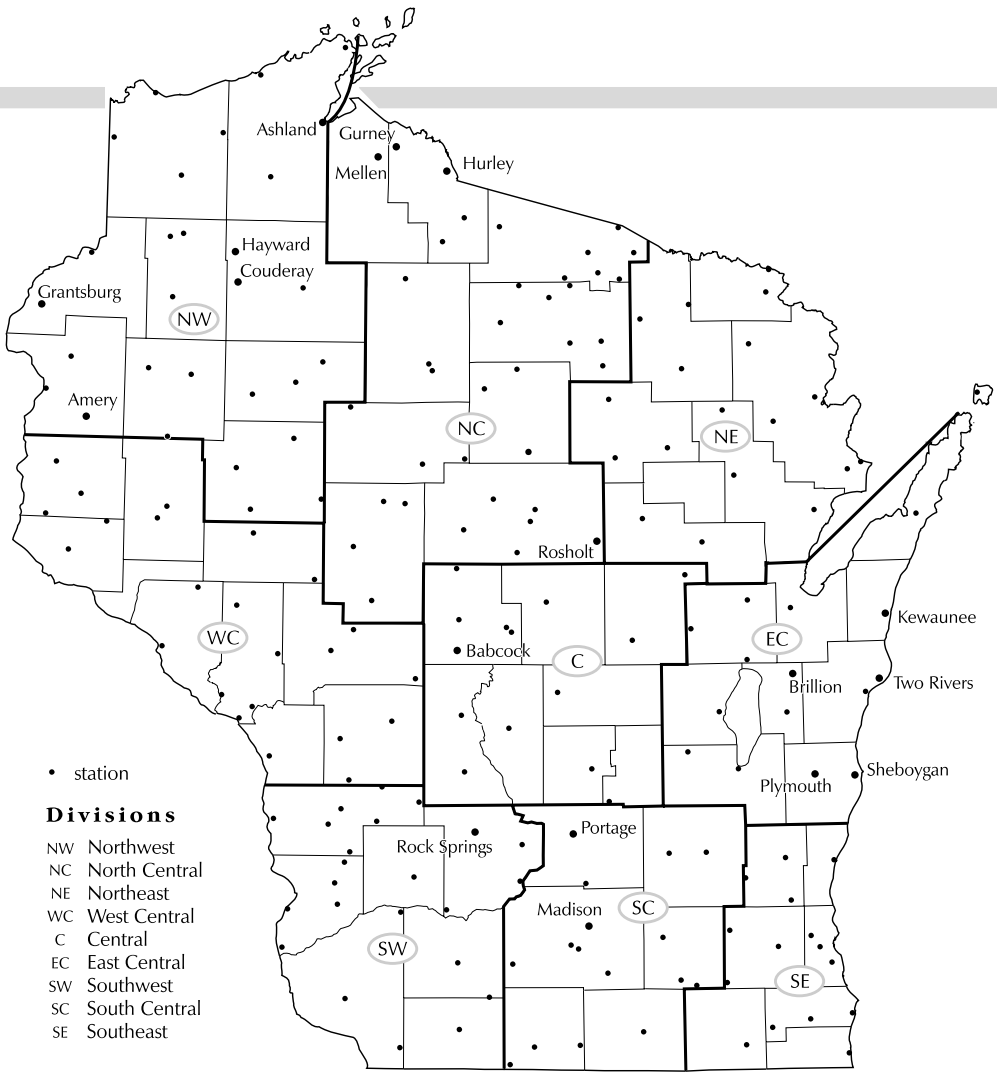

Figure 1. *Station locations and climatological divisions (adapted from* Climatological Data, Wisconsin, *National Oceanic and Atmospheric Administration, National Climatic Data Center). Only stations that are discussed in text are named on this map.*

The monthly fluctuation of precipitation across the state is shown in table 2. The table shows that the driest months were February, June, and September; Madison received only 0.06 inches of precipitation in February, a new record for the station. The dryness in June was exacerbated by high temperatures, which led to considerable stress on crops across the state, but especially in the southeast and east-central regions, where rainfall was lowest (*Wisconsin Crop Weather,* June 30, 1995).

The wettest months for the state were August and October. In fact, October received 200 percent of its normal rainfall statewide; this ranks the month as the third wettest October on record after 1900 (6.00 in.) and 1911 (5.65 in.). August also was the third wettest August ever, after 1980 (7.92 in.) and 1924 (7.45 in.). High precipitation amounts in August can be attributed in large part to a heavy rain event that inundated central Wisconsin on August 8–14. A map of rainfall totals from this storm (fig. 4) shows a broad band of rainfall totaling more than 4 inches stretching across central Wisconsin and extending southward into southeast Wisconsin; several isolated centers where more than 6 inches of

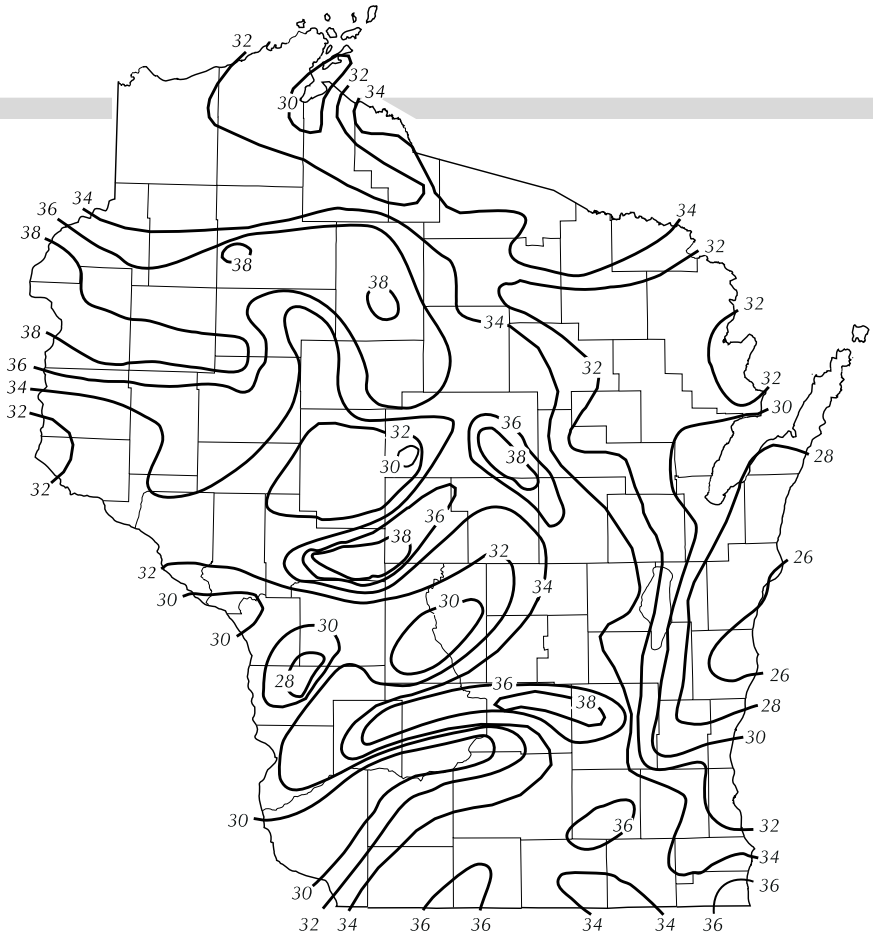

Figure 2. *Total precipitation, in inches, 1995.*

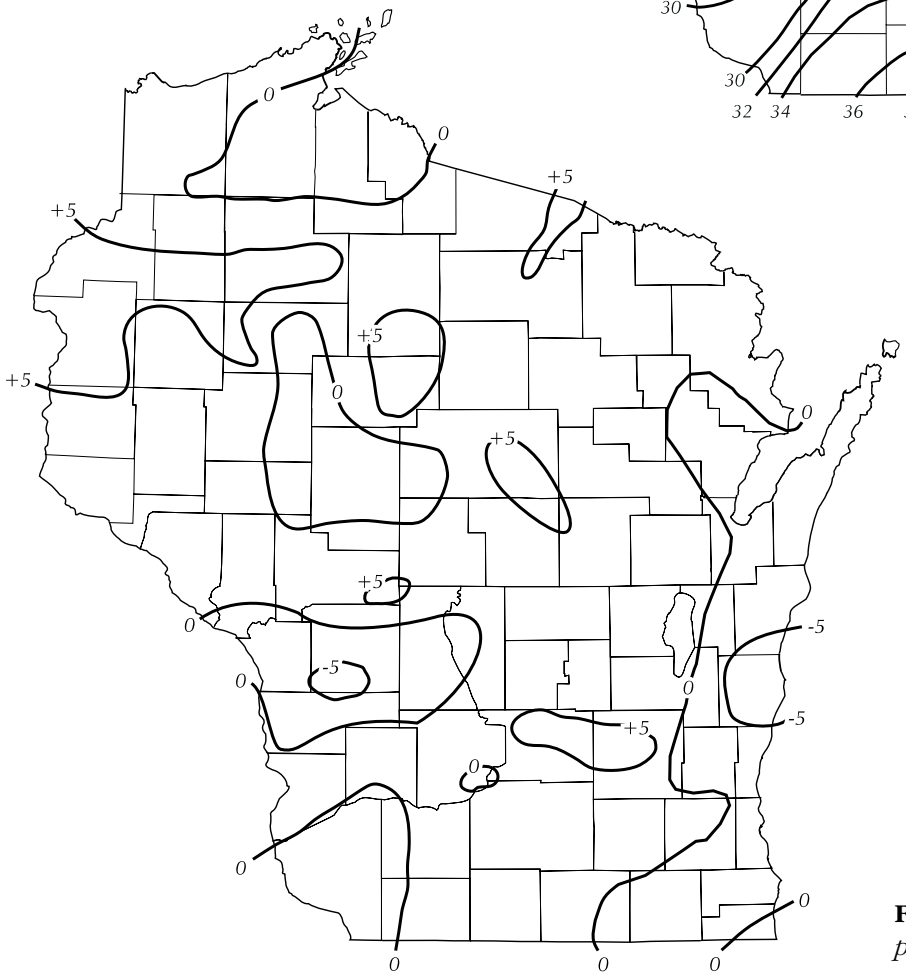

Figure 3. *Departure from normal precipitation, in inches, 1995.*

Table 2. Precipitation in 1995, averaged by climatological division

Monthly totals, 1995 (in inches)

Division*	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Northwest	0.50	0.57	2.18	2.59	3.36	2.63	4.60	7.85	2.39	5.15	1.30	1.26
North Central	0.56	0.58	1.63	2.11	3.66	1.98	3.91	7.85	2.74	5.58	1.78	1.32
Northeast	0.64	0.41	1.89	2.69	3.52	1.96	2.37	7.08	2.38	5.37	2.12	1.47
West Central	0.46	0.24	2.91	2.70	3.47	2.78	3.39	7.77	2.03	4.62	1.39	0.82
Central	0.65	0.25	2.53	2.90	3.87	1.74	2.42	8.84	1.90	4.96	2.11	0.71
East Central	1.11	0.35	2.03	2.54	2.78	1.65	1.73	6.23	1.72	5.03	2.61	1.13
Southwest	0.81	0.05	2.85	4.70	4.38	2.94	4.21	3.91	1.52	3.96	2.58	0.53
South Central	1.64	0.06	2.11	4.11	4.60	1.96	4.22	5.62	1.89	5.26	2.90	0.70
Southeast	2.07	0.10	1.77	4.41	3.22	1.29	2.99	7.85	1.19	4.42	3.13	0.66
Statewide average, 1995	0.79	0.35	2.20	2.98	3.65	2.20	3.48	7.13	2.12	5.01	2.03	1.03
Normal, 1961–90	1.09	0.95	1.97	2.72	3.39	3.83	3.75	4.06	4.01	2.51	2.03	1.48
Departure from normal	-0.29	-0.60	0.23	0.26	0.26	-1.63	-0.27	3.08	-1.89	2.50	0.00	-0.45
Percentage of normal	73	37	112	110	108	57	93	176	53	199	100	70

Statistics, 1995

Total	Norm	Depart	Pct
34.38	31.34	3.04	110
33.70	31.91	1.79	106
31.90	31.26	0.64	102
32.58	32.24	0.34	101
32.88	31.96	0.92	103
28.91	30.52	-1.61	95
32.44	32.20	0.24	101
35.07	32.56	2.51	108
33.10	32.57	0.53	102
32.97	31.79	1.18	104
31.79			
1.18			
104			

Cumulative statistics

Total	0.79	1.14	3.34	6.32	9.97	12.17	15.65	22.78	24.90	29.91	31.94	32.97
Departure	-0.29	-0.89	-0.66	-0.40	-0.14	-1.77	-2.04	1.03	-0.86	1.64	1.63	1.18
Percentage of normal	73	56	84	94	99	87	88	105	97	106	105	104

*See figure 1.

Division averages are based on arithmetic averages of available station precipitation measurements. These data are collected from National Weather Service offices, cooperative observers, and other participating agencies. Some values may differ from those in *Climatological Data, Wisconsin* (published by the National Oceanic and Atmospheric Administration, National Climatic Data Center). Stateside precipitation is calculated using an area-weighted average of climatological division values.

Precipitation totals for individual stations can be obtained from the State Climatology Office, 1225 West Dayton Street, Madison, Wisconsin 53706-1695, telephone 608/263.2374, FAX 608/262.5964; INTERNET stclim@macc.wisc.edu. Please consult the State Climatology Office before using the data for legal or regulatory purposes.

rain fell can also be seen. The rainfall measured by the Rosholt observer was 10.85 inches during this period.

One notable precipitation event also occurred in September. Wisconsin received its earliest snowfall ever in northern Wisconsin on September 21–22, when Hurley, Gurney, and Mellen received several inches of lake-effect snowfall overnight, causing traffic accidents and power outages throughout Ashland County (*Weather and Climate Impacts,* September 1995). However, the overall coolness of the month contributed to the low monthly precipitation totals mentioned earlier.

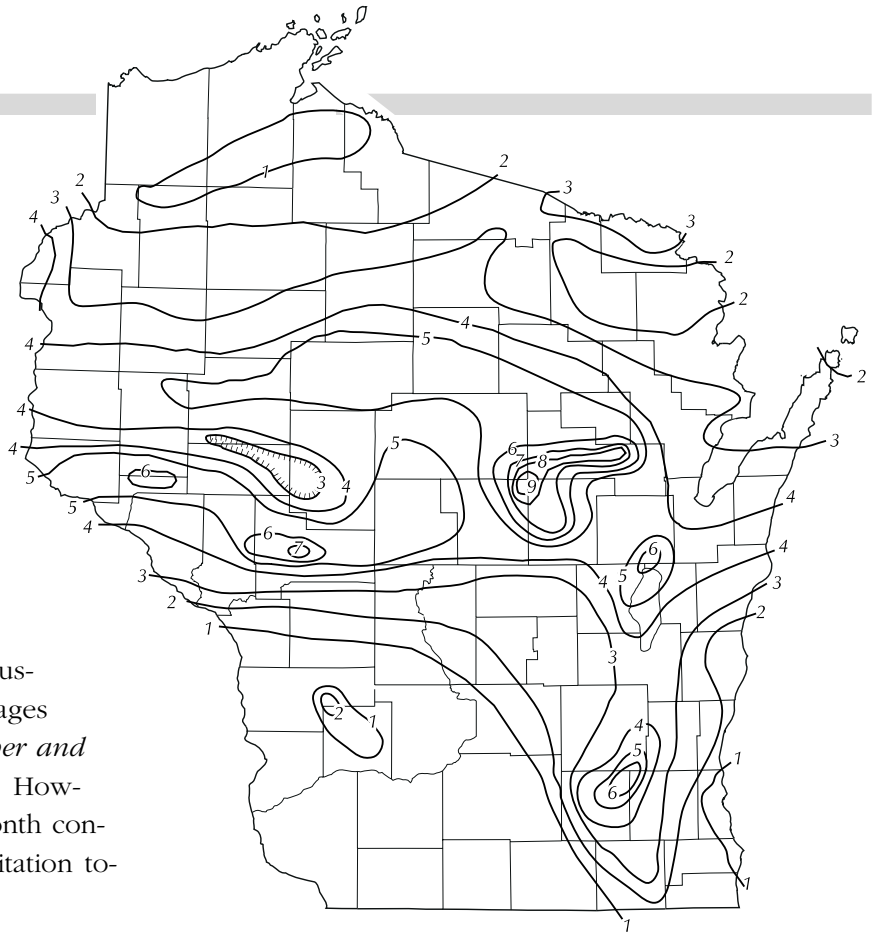

Figure 4. *Accumulated precipitation, in inches, 8 AM August 8 to 8 AM August 15, 1995.*

At the end of 1995, soil moisture across the state was plentiful, as reported by gravediggers. Most observers noted that the soil was wet through the measured 5-foot soil profile (*Wisconsin Crop Weather,* January 2, 1996). ■

References

Wisconsin Crop Weather, June 30, 1995: Wisconsin Agricultural Statistics Service, Madison, Wisconsin, vol. 18, no. 22, 2 p.

Wisconsin Crop Weather, January 2, 1996: Wisconsin Agricultural Statistics Service, Madison, Wisconsin, vol. 19, no. 1, 2 p.

Weather and Climate Impacts in the Midwest, September 1995: Midwestern Climate Center, Champaign, Illinois, vol. V, no. 10, 6 p.

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