

PART #1 - DROUGHTS FROM THE 1970S TO PRESENT.

HERE IS A LOOK AT SOME OF THE MORE SIGNIFICANT DROUGHTS ACROSS NORTH CENTRAL AND NORTHEAST WISCONSIN SINCE 1900. SOME CAUTION SHOULD BE USED WHEN LOOKING AT PRECIPITATION DEPARTURES FROM NORMAL DURING THESE PERIODS. IN SOME CASES...THERE WERE SPORADIC LOCALLY HEAVY RAIN AMOUNTS DURING A PARTICULAR MONTH THAT WAS VERY LOCALIZED. A GOOD EXAMPLE OF THIS WOULD BE SUMMER TIME THUNDERSTORMS THAT CAN BRING LOCALLY HEAVY RAINS. THESE ISOLATED LOCALLY HEAVY RAIN EVENTS CAN OBSCURE THE MAGNITUDE OF THE DROUGHT AT THAT LOCATION COMPARED TO SURROUNDING SITES.

IN THIS STUDY...THE DEPARTURES FROM NORMAL WERE CALCULATED USING THE 1971-2000 NORMALS SINCE MANY SITES HAVE DIFFERENT STARTING DATES AND MAY NOT HAVE HAD A LONG PERIOD OF RECORD AT THE TIME OF THE DROUGHT. ALSO...AS YOU GO FURTHER BACK IN TIME...THERE WERE FEWER LOCATIONS THAT HAD A COMPLETE PRECIPITATION DATA SET DURING THE PERIOD. ONLY SITES THAT HAD A COMPLETE DATA SET WERE USED IN THIS STUDY.

FOR YOUR INFORMATION...RICE RESERVOIR IS NEAR TOMAHAWK AND LAC VIEUX DESERT IS IN VILAS COUNTY. LOCATIONS WERE RANKED BY THE TOTAL PRECIPITATION DEFICIT.

DROUGHT 2003-2010

LOCATION	2003-2010 PCPN TOTAL	NORMAL (INCHES)	DEFICIT (INCHES)	PERCENT OF NORMAL
REST LAKE	178.44	237.86	-59.42	75
RICE RESERVOIR	184.06	239.98	-55.92	77
STRATFORD	179.36	233.67	-54.31	77
RHINELANDER	185.28	232.75	-47.47	80
WAUSAU	204.24	243.81	-39.57	84
MINOCQUA DAM	197.24	234.29	-37.05	84
ANTIGO	188.02	223.32	-35.30	84
MERRILL	203.94	236.63	-32.69	86
MARSHFIELD	209.53	241.88	-32.35	87
MARINETTE	208.48	238.33	-29.84	87
WAUPACA	219.68	246.71	-27.03	89
LAC VIEUX DESERT	222.30	247.08	-24.78	90
WISCONSIN RAPIDS	214.31	237.50	-23.19	90
WAUSAUKEE	207.39	227.00	-19.61	91
EAGLE RIVER	196.92	216.16	-19.24	91
CLINTONVILLE	216.74	234.76	-18.02	92
SHAWANO	213.54	230.78	-17.24	92
KEWAUNEE	205.03	222.25	-17.22	92
PHELPS	207.86	225.08	-17.22	92
STEVENS POINT	228.47	235.45	-13.30	94
LAONA	219.98	232.22	-12.24	95
WASHINGTON ISLAND	201.22	208.78	- 7.56	96
HANCOCK	224.51	231.57	- 7.06	97
OCONTO	226.56	233.09	- 6.53	97
OSHKOSH	225.19	231.44	- 6.25	97
CHILTON	225.49	230.94	- 5.45	98
PESHTIGO	222.41	226.16	- 3.75	98
STURGEON BAY	228.47	231.32	- 2.85	99
TWO RIVERS	223.63	223.26	+ 0.37	100

GREEN BAY	216.79	213.92	+ 2.87	101
MANITOWOC	229.12	224.08	+ 5.04	102
NEW LONDON	231.70	226.15	+ 5.55	102
BRILLION	221.64	213.87	+ 7.77	104
APPLETON	233.57	221.34	+12.23	105

DROUGHT 1987-1989

BELOW NORMAL PRECIPITATION WAS FIRST OBSERVED IN JANUARY 1987. PERSISTENT BELOW NORMAL MONTHLY PRECIPITATION TOTALS WERE OBSERVED THROUGHOUT THE PERIOD. AT MOST LOCATIONS...1989 RECORDED THE GREATEST DEPARTURE FROM THE YEARLY PRECIPITATION NORMALS.

THE DISSIPATION OF THE DROUGHT VARIED GREATLY ACROSS THE REGION. ACROSS CENTRAL INTO NORTHEAST WISCONSIN...INCLUDING STEVENS POINT TO WAUPACA TO MARINETTE AND LOCATIONS TO THE SOUTH AND EAST THE DROUGHT WAS SLOWER TO DISSIPATE AS THE PRECIPITATION WAS AT OR SLIGHTLY ABOVE NORMAL IN THE EARLY 1990S. THE DROUGHT WAS QUICKER TO DISSIPATE ACROSS PORTIONS OF NORTH CENTRAL WISCONSIN WHERE PRECIPITATION AMOUNTS WERE WELL ABOVE NORMAL IN MANY LOCATIONS DURING 1990 AND 1991. RHINELANDER RECORDED BACK TO BACK YEARS OF 40 INCHES OF PRECIPITATION...WHILE WAUSAU WAS JUST SHY OF 40 INCHES BOTH YEARS.

LOCATION	1987-1989 PCPN TOTAL	NORMAL (INCHES)	DEFICIT (INCHES)	PERCENT OF NORMAL
RHINELANDER	62.39	95.70	-33.31	65
STRATFORD	69.18	96.12	-26.94	72
RICE RESERVOIR	72.08	98.61	-26.53	73
MARSHFIELD	73.05	99.18	-26.13	74
MERRILL	71.57	97.23	-25.66	74
SHAWANO	69.20	94.44	-25.24	73
PHELPS	68.90	92.61	-23.71	74
CLINTONVILLE	73.23	96.12	-22.89	76
LAONA	73.67	95.13	-21.46	77
WAUSAU	78.78	100.08	-21.30	79
CHILTON	73.34	94.50	-21.16	78
EAGLE RIVER	67.84	88.77	-20.93	76
MANITOWOC	70.70	91.47	-20.77	77
GREEN BAY	67.59	87.57	-19.98	77
TWO RIVERS	72.96	90.96	-18.00	80
HANCOCK	76.87	94.86	-17.99	81
APPLETON	72.52	90.48	-17.96	80
LAC VIEUX DESERT	84.02	101.49	-17.47	83
GOODMAN	74.96	92.13	-17.17	81
OSHKOSH	77.92	94.71	-16.79	82
WISCONSIN RAPIDS	80.86	97.26	-16.40	83
KEWAUNEE	74.84	90.90	-16.06	82
BRILLION	72.70	87.63	-14.93	83
WAUPACA	86.38	100.83	-14.45	86
MINOCQUA DAM	82.09	96.30	-14.21	85
STEVENS POINT	82.32	96.39	-14.07	85
WASHINGTON ISLAND	74.60	85.62	-11.02	87
STURGEON BAY	83.79	94.59	-10.80	89

DROUGHT 1974-1976

PRECIPITATION DURING 1974 AVERAGED A FEW INCHES BELOW NORMAL WHILE 1975 PRECIPITATION TOTALS WERE AT OR SLIGHTLY ABOVE NORMAL ACROSS THE REGION. THE MOST SEVERE PORTION OF THE DROUGHT OCCURRED IN 1976...ESPECIALLY FROM AUGUST TO DECEMBER. NOVEMBER OF 1976 WAS EXTREMELY DRY WITH MOST LOCATIONS REPORTING UNDER A QUARTER OF INCH OF PRECIPITATION DURING THE MONTH. THERE WERE EVEN A FEW LOCATIONS THAT ONLY REPORTED A TRACE OF PRECIPITATION DURING THE MONTH. MANY LOCATIONS REPORTED THEIR DRIEST NOVEMBER ON RECORD.

1976 ENDED UP AS THE DRIEST YEAR ON RECORD WITH 20.33 INCHES AT APPLETON...21.43 INCHES AT WAUSAU AND 21.61 INCHES AT STEVENS POINT. GREEN BAY ENDED THE YEAR AS THE SECOND DRIEST YEAR ON RECORD WITH 17.85 INCHES. THE DROUGHT WAS ALLEVIATED BY ABOVE NORMAL PRECIPITATION DURING THE LATE 1970S AND EARLY 1980S.

LOCATION	1974-1976 PCPN TOTAL	NORMAL (INCHES)	DEFICIT (INCHES)	PERCENT OF NORMAL
MINOCQUA DAM	71.62	96.30	-24.68	74
WAUPACA	79.09	100.83	-21.74	78
WAUSAU	78.52	100.08	-21.56	78
HANCOCK	73.74	94.86	-21.12	78
GOODMAN	71.45	92.13	-20.68	78
LAC VIEUX DESERT	80.95	101.49	-20.54	80
STEVENS POINT	75.85	96.39	-20.54	79
RHINELANDER	76.27	95.70	-19.43	80
STRATFORD	77.98	96.12	-18.14	81
EAGLE RIVER	71.20	88.77	-17.57	80
BRILLION	71.75	87.63	-15.88	82
OCONTO	79.56	95.10	-15.54	84
CLINTONVILLE	81.12	96.12	-15.00	84
RICE RESERVOIR	83.72	98.61	-14.89	85
MARSHFIELD	84.94	99.18	-14.24	86
OSHKOSH	80.96	94.71	-13.75	85
KEWAUNEE	77.17	90.90	-13.73	85
MARINETTE	83.75	97.20	-13.45	86
STURGEON BAY	81.84	94.59	-12.75	87
LAONA	84.22	95.13	-10.91	89
CHILTON	83.78	94.50	-10.72	89
PHELPS	82.33	92.61	-10.28	89
APPLETON	80.89	90.48	- 9.59	89
CRIVITZ HIGH FALLS	81.37	89.49	- 8.12	91
REST LAKE	92.97	97.92	- 4.95	95
NEW LONDON	90.29	92.16	- 1.87	98
ANTIGO	85.24	91.89	- 6.65	93
MANITOWOC	84.90	91.47	- 6.57	93
GREEN BAY	81.65	87.57	- 5.92	93
TWO RIVERS	85.22	90.96	- 5.74	94
WASHINGTON ISLAND	80.19	85.62	- 5.43	94