

PART #2 - DROUGHTS FROM THE 1940S TO THE 1960S.

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 1962-1964

BELOW NORMAL PRECIPITATION WAS OBSERVED DURING JANUARY OF 1962. PERSISTENT BELOW NORMAL MONTHLY PRECIPITATION TOTALS WERE OBSERVED DURING THE REMAINDER OF THE PERIOD. THE PEAK OF THE DROUGHT OCCURRED IN 1963 WHEN YEARLY PRECIPITATION TOTALS RANGED FROM 7 TO 12 INCHES BELOW NORMAL. PRECIPITATION THEN RETURNED CLOSER TO NORMAL DURING 1964. THE DROUGHT WAS ALLEVIATED FAIRLY QUICKLY ACROSS PORTIONS OF CENTRAL AND NORTHEAST WISCONSIN DURING 1965. VERY HEAVY RAINFALL TOTALS WERE REPORTED DURING SEPTEMBER WITH AMOUNTS IN THE 8 TO 12 INCH RANGE. THE VERY HEAVY RAINS MISSED FAR NORTHERN WISCONSIN... THEREFORE IMPROVEMENT IN DROUGHT CONDITIONS TOOK A LITTLE BIT LONGER. PRECIPITATION WAS AT OR ABOVE NORMAL FROM 1966 TO 1972 TO HELP ALLEVIATE THE DROUGHT IN THAT PORTION OF THE STATE.

LOOKING AT THE LATER 1960S...THERE WAS A SMALL AREA OF DRY CONDITIONS FROM 1966 TO 1971 IN THE GREEN BAY...TWO RIVERS AND MANITOWOC AREAS.

LOCATION	1962-1964 PCPN TOTAL	NORMAL (INCHES)	DEFICIT (INCHES)	PERCENT OF NORMAL
RHINELANDER	73.50	95.70	-22.20	77
MINOCQUA DAM	78.56	96.30	-17.74	81
TWO RIVERS	73.43	90.96	-17.53	81
MANITOWOC	74.45	91.47	-17.02	81
HANCOCK	78.96	94.86	-15.90	83
RICE RESERVOIR	82.84	98.61	-15.77	84
OSHKOSH	79.98	94.71	-14.73	84
WAUSAU	85.44	100.08	-14.64	85
STURGEON BAY	80.05	94.59	-14.54	85
BRILLION	73.15	87.63	-14.48	83
CLINTONVILLE	81.91	96.12	-14.21	86

WAUPACA	87.30	100.83	-13.53	86
CHILTON	81.67	94.50	-12.83	86
NEW LONDON	79.74	92.46	-12.72	86
GREEN BAY	75.51	87.57	-12.06	86
REST LAKE	85.97	97.92	-11.95	88
STEVENS POINT	84.60	96.39	-11.79	88
WISCONSIN RAPIDS	85.55	97.26	-11.71	88
ANTIGO	80.50	91.89	-11.39	88
LAONA	84.20	95.13	-10.93	89
LAC VIEUX DESERT	90.70	101.49	-10.79	89
CRIVITZ HIGH FALLS	78.74	89.49	-10.75	88
APPLETON	82.57	90.48	- 7.91	91
MARINETTE	90.07	97.20	- 7.13	93
SHAWANO	87.52	94.44	- 6.92	93
STRATFORD	89.55	96.12	- 6.57	93
PHELPS	86.51	92.61	- 6.10	93
MARSHFIELD	93.92	99.18	- 5.26	95
GOODMAN	88.98	92.13	- 3.15	97
EAGLE RIVER	86.44	88.77	- 2.33	97

DROUGHT 1952-1958

DURING THIS DROUGHT...THERE WAS PERSISTENT BELOW NORMAL PRECIPITATION EACH YEAR. THE WINTERS DURING THIS PERIOD WERE ESPECIALLY DRY WITH WELL BELOW NORMAL SNOWFALL AT MOST LOCATIONS IN MOST YEARS. THE RATE OF RECOVERY FROM THIS DROUGHT VARIED AS PRECIPITATION VARIED GREATLY FROM NEAR NORMAL TO AS MUCH AS 10 INCHES ABOVE NORMAL FROM 1959 TO 1961.

LOCATION	1952-1958 PCPN TOTAL	NORMAL (INCHES)	DEFICIT (INCHES)	PERCENT OF NORMAL
OCONTO	221.90	177.53	-47.79	78
OSHKOSH	177.53	220.99	-43.46	80
WAUPACA	191.82	235.27	-43.45	82
STURGEON BAY	181.54	220.71	-39.17	82
MARINETTE	187.98	226.80	-38.82	83
KEWAUNEE	173.14	212.10	-38.96	82
HANCOCK	184.86	221.34	-36.48	84
MERRILL	192.66	226.87	-34.21	85
TWO RIVERS	178.48	212.24	-33.76	84
WISCONSIN RAPIDS	196.28	226.94	-30.66	86
WAUSAUKEE	203.12	233.52	-30.40	87
WAUSAU	186.40	216.79	-30.39	86
RHINELANDER	193.28	223.30	-30.02	86
GREEN BAY	174.46	204.33	-29.87	85
MANITOWOC	184.77	213.43	-28.66	87
STEVENS POINT	197.08	224.91	-27.83	87
SHAWANO	192.91	220.36	-27.45	88
MARSHFIELD	205.94	231.42	-25.48	89
CRIVITZ HIGH FALLS	184.58	208.81	-24.23	88
CHILTON	196.33	220.50	-24.17	89
NEW LONDON	191.86	215.74	-23.88	89
RICE RESERVOIR	206.47	230.09	-23.62	90
WASHINGTON ISLAND	176.98	199.78	-22.80	89
ANTIGO	201.00	214.41	-13.41	94
APPLETON	198.93	211.12	-12.19	94

LAC VIEUX DESERT	227.68	236.81	- 9.13	96
MINOCQUA DAM	215.23	224.70	- 9.47	96
EAGLE RIVER	220.42	207.13	+13.29	106

DROUGHT 1943-1948

THE FIRST SIGNS OF DROUGHT CONDITIONS WERE NOTED IN NOVEMBER AND DECEMBER OF 1942. PERSISTENT BELOW NORMAL PRECIPITATION WAS NOTED BETWEEN 1943 AND 1948 WITH THE GREATEST DEFICITS ACROSS NORTH CENTRAL AND PORTIONS OF NORTHEAST WISCONSIN.

THIS DROUGHT PERIOD HAD ONE INTERESTING TREND THAT THE OTHER DROUGHTS DID NOT HAVE. FROM 1943 TO 1948...THERE WERE LOCALIZED HEAVY RAINS EVENTS IN DIFFERENT SECTIONS OF NORTH CENTRAL AND NORTHEAST WISCONSIN FROM MONTH TO MONTH DURING THE SUMMER MONTHS AND OVER EACH YEAR DURING THE DROUGHT PERIOD. AFTER CLOSER ANALYSIS...THESE HEAVY RAINS WERE VERY LOCALIZED AND SHIFTED FROM MONTH TO MONTH AND LOCATION TO LOCATION EACH YEAR...THEREFORE ONE PARTICULAR LOCATION DID NOT SEE A PROLONGED PERIOD OF WET WEATHER DURING THIS PERIOD OF DROUGHT. DROUGHT CONDITIONS SLOWLY IMPROVED AS PRECIPITATION TOTALS WERE AT OR SLIGHTLY ABOVE NORMAL FROM 1949 TO 1951 AT MOST LOCATIONS.

LOCATION	1943-1948 PCPN TOTAL	NORMAL (INCHES)	DEFICIT (INCHES)	PERCENT OF NORMAL
WAUPACA	172.67	201.66	-28.99	86
SHAWANO	162.95	188.88	-25.93	86
KEWAUNEE	155.98	181.80	-25.82	86
STURGEON BAY	163.85	189.18	-25.33	87
MERRILL	170.32	194.46	-24.14	88
OSHKOSH	166.39	189.42	-23.03	88
OCONTO	168.24	190.20	-21.96	88
MINOCQUA DAM	171.71	192.60	-20.89	89
RHINELANDER	170.85	191.40	-20.55	89
MARINETTE	175.02	194.40	-19.38	90
HANCOCK	171.12	189.72	-18.60	90
MANITOWOC	164.96	182.94	-17.98	90
MARSHFIELD	181.33	198.36	-17.03	91
WISCONSIN RAPIDS	179.53	194.52	-14.99	92
BRILLION	160.87	175.26	-14.39	92
GREEN BAY	161.01	175.14	-14.13	92
PHELPS	173.81	185.22	-11.41	94
WAUSAU	191.66	200.16	- 8.50	96
ANTIGO	176.14	183.78	- 7.64	96
APPLETON	175.38	180.96	- 5.58	97
NEW LONDON	179.49	184.92	- 5.43	97