

FIRE ENVIRONMENT FORECAST

FORECAST NUMBER: 44

TYPE OF FIRE: Initial Attack

FIRE NAME: MNICS Statewide Forecast

OPERATIONAL PERIOD: 06/17 – 06/20

DATE ISSUED: 06/17

TIME ISSUED: 0900

UNIT: MN-MNCC

SIGNED: Travis Verdegan

Typed/printed: Travis Verdegan

INPUTS

WEATHER SUMMARY:

We've remained in an active precip pattern since the last forecast with heavy precip coming to most of the Arrowhead over the last 24 hours

Cloud cover and precip should clear up for today and part of tomorrow then come back into the picture through the rest of the week.

Temps should top out primarily in the 70s with a few 80s possible.

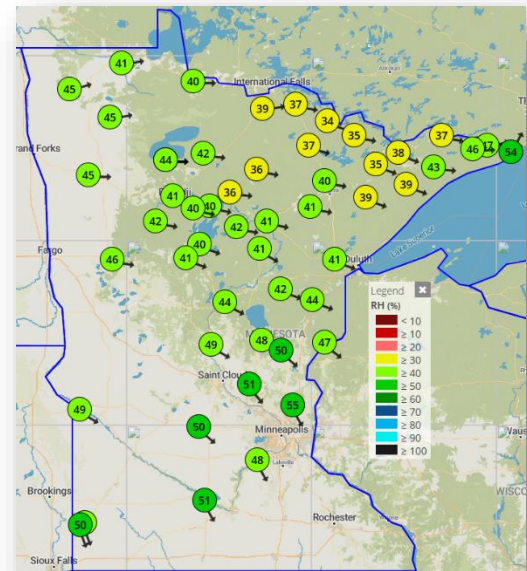
Winds should stick in the 6 – 11 mph range and switch from westerly to northerly to easterly over the next few days.

RH minimums are forecast at their driest in the 30s and 40s with a significant portion of the state staying even more elevated than that.

This wetter pattern looks to remain through at least the beginning of next week.

Hot-Dry-Windy Index – Below Normal

Figure 1 - Forecasted 1600 RH 06/18/25



OUTPUTS

FIRE ENVIRONMENT

GENERAL:

Once again predicted fire behavior remains the same as it has been in previous forecasts with decreasing availability in fuels and fire weather expected to keep fire numbers low.

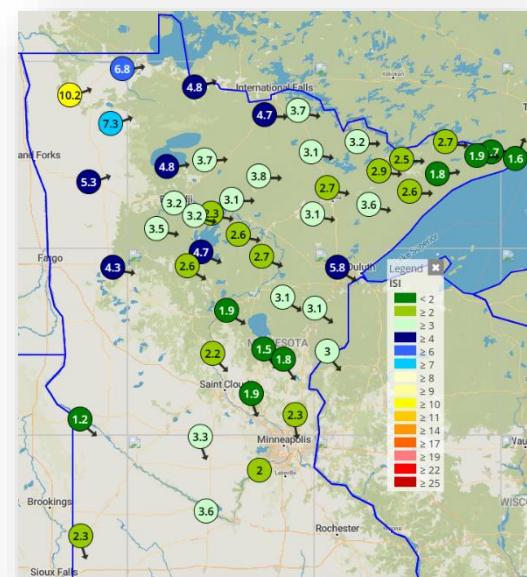
Our greatest threat for challenging fires is likely in large marshy grass systems with a significant component of dead fuel remaining in them. Getting a fire started in these systems may be the most limiting factor to them now.

As always please reach out early for any decision support needs and thanks to all who have contributed to the cause.

Fine Dead Fuel Moisture: 7% Unshaded – 10% Shaded

Prob. of Ignition: 50% Unshaded – 30% Shaded

Figure 2 - Forecasted Daily ISI 06/18/25



SPECIFIC FIRE BEHAVIOR:

MN FFMC:87 BUI:50 WS:7 Effective ISI:4.9	Flame Length	Rate of Spread (ft/min ≈ ch/hr)	Fire Type	60 Minute Spread Size (acres)
Grass (55% cured – 3 tons/acre)	3 – 4	<5	Surface	<1
Lowland Grass (75% cured – 5 tons/acre)	8 – 9	15 – 17	Surface	6
Young Jack Pine & Boreal Spruce (100% FMC)	9 – 10	14 – 16	Torching	5
Pine Pltn. & Mat. JP	3 – 4	<5	Surface	<1
Mixdwood Green (25% Fir) & Red & White Pine Timber	4 – 5	<5	Surface	1
Hardwood/Aspen	2 – 3	<5	Surface	<1

Outlook:

Positive signs of decreasing long term fire potential are growing and there is still a significant amount of time forecast in this cooler wetter pattern to add to this improvement. It's still too early to say that we aren't at increased risk for significant fire potential for the second half of the summer, but we are improving.

CPC 6 – 10 and 8 – 14 day outlooks indicate switch from better chances for warmer and wetter than normal to cooler and wetter than normal in the longer outlook.

The latest drought monitor shows the state being pulled in two different directions with the north showing degradation and the south showing improvement.

Figure 3 - Weekly
Summary Forecast for
Northwestern MN Issued
by NWS Grand Forks

Goodridge, MN Weekly Summary	Tue Jun 17	Wed Jun 18	Thu Jun 19	Fri Jun 20	Sat Jun 21	Sun Jun 22	Mon Jun 23	Tue Jun 24
Max Temp, °F	78	81	74	76	81	79	66	69
Min Temp, °F	59	53	56	57	60	64	55	49
Max RH, %	96	96	100	97	95	92	85	91
Min RH, %	45	38	49	54	51	52	50	42
Max Dewpoint, °F	60	57	58	60	63	63	53	47
Min Dewpoint, °F	54	52	54	55	58	55	47	45
Max Wind, mph	14	12	9	12	15	20	15	10
Min Wind, mph	3	3	7	8	8	13	10	8
Max Wind Gust, time/dir.	3 PM ↗ 1 PM ↗ 1 PM ↗ 3 PM ↘ 3 PM ↘ 3 PM ↘ 12 AM ↘ 1 PM ↘							
Max Wind Gust, mph	22	18	16	20	24	29	24	17
Min Wind Gust, mph	6	7	12	14	14	21	15	14
Max Cloud Cover, %	64	57	73	84	73	62	89	53
Min Cloud Cover, %	15	9	18	51	12	33	36	32
Max Prob. of Precip., %	8	64	64	44	28	26	34	16

Figure 4 – Weekly
Summary Forecast for
Northeastern MN Issued
by the NWS Duluth

Nett Lake, MN Weekly Summary	Tue Jun 17	Wed Jun 18	Thu Jun 19	Fri Jun 20	Sat Jun 21	Sun Jun 22	Mon Jun 23	Tue Jun 24
Max Temp, °F	78	80	70	73	82	84	72	71
Min Temp, °F	58	51	55	51	56	62	56	50
Max RH, %	100	100	98	100	96	97	87	93
Min RH, %	47	35	59	57	47	49	51	39
Max Dewpoint, °F	60	56	57	58	62	63	60	50
Min Dewpoint, °F	55	50	53	50	55	60	50	45
Max Wind, mph	9	6	6	8	8	12	10	7
Min Wind, mph	3	2	2	3	2	6	5	3
Max Wind Gust, time/dir.	8 AM ↗ 6 PM ↗ 1 PM ↘ 1 PM ↘ 4 PM ↘ 3 PM ↘ 12 AM ↘ 2 PM ↘							
Max Wind Gust, mph	16	12	14	16	17	23	18	15
Min Wind Gust, mph	5	3	8	10	9	16	13	10
Max Cloud Cover, %	74	49	65	78	76	73	68	53
Min Cloud Cover, %	14	16	31	42	15	32	49	34
Max Prob. of Precip., %	23	32	60	49	46	33	46	26

Figure 5 – Weekly
Summary Forecast for
Southern MN Issued by
NWS Chanhassen

St. Martin, MN Weekly Summary	Tue Jun 17	Wed Jun 18	Thu Jun 19	Fri Jun 20	Sat Jun 21	Sun Jun 22	Mon Jun 23	Tue Jun 24
Max Temp, °F	77	76	79	80	83	86	72	67
Min Temp, °F	61	58	60	61	65	70	61	56
Max RH, %	97	96	88	95	95	90	86	91
Min RH, %	58	52	55	67	66	61	68	67
Max Dewpoint, °F	61	60	62	69	72	71	63	56
Min Dewpoint, °F	60	57	55	59	64	65	57	53
Max Wind, mph	6	7	9	12	12	16	12	8
Min Wind, mph	2	2	5	6	6	10	6	6
Max Wind Gust, time/dir.	1 PM ↗ 1 PM ↗ 2 PM ↗ 3 PM ↗ 3 PM ↗ 12 PM ↗ 12 AM ↗ 1 PM ↗							
Max Wind Gust, mph	12	14	17	20	21	24	20	15
Min Wind Gust, mph	5	5	8	10	13	20	12	10
Max Cloud Cover, %	71	60	39	76	62	40	68	64
Min Cloud Cover, %	48	13	10	44	10	15	47	41
Max Prob. of Precip., %	8	4	33	58	58	21	55	43

References

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