

# FIRE ENVIRONMENT FORECAST

**FORECAST NUMBER:** 27

**TYPE OF FIRE:** Initial Attack

**FIRE NAME:** MNICS Statewide Forecast

**OPERATIONAL PERIOD:** 04/25

**DATE ISSUED:** 04/25

**TIME ISSUED:** 0900

**UNIT:** MN-MNCC

**SIGNED:** Travis Verdegan

**Typed/printed:** Travis Verdegan

## INPUTS

### WEATHER SUMMARY:

No rain was observed in the RAWS network rain gauges over the last 24 hours.

Skies are expected to remain mostly sunny through the heat of the day today as recent forecasts have pushed the timing for coming precip till later this evening.

Temps today should get up into the 60s over most of the state and some areas may touch 70 or more.

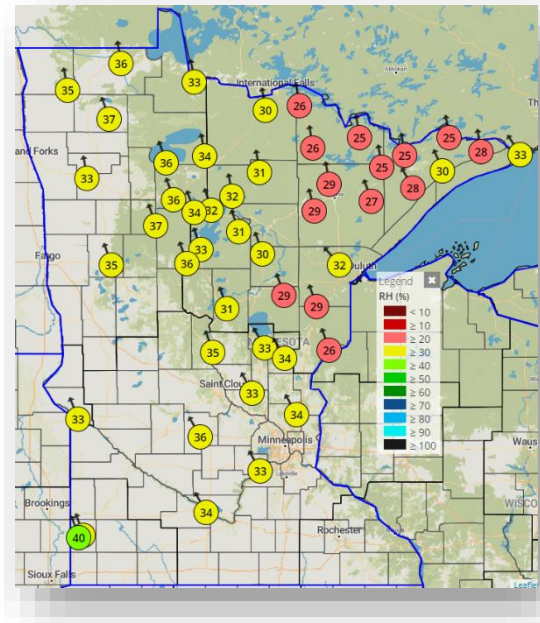
Winds from the south pick up in speed with peak sustained values in the 13 – 18 mph range over most of the state with stronger winds along the western border.

RH minimums are forecast into the 20s and 30s across the state today. Low overnight recovery may accelerate the dropping trend in RH.

A strong system looks to make its way into the state tomorrow although the NE may not be impacted till later in the day.

**Hot-Dry-Windy Index** – Near Normal to Above Normal

Figure 1 - Forecasted 1700 RH 04/25/24.



## OUTPUTS

### FIRE ENVIROMENT

#### GENERAL:

Fire activity continues to be on the rise and today should be no exception to that trend. Strong winds in the forecast have fire behavior predictions reaching way up there and it is highly likely that fires will challenge ground based IA resources today.

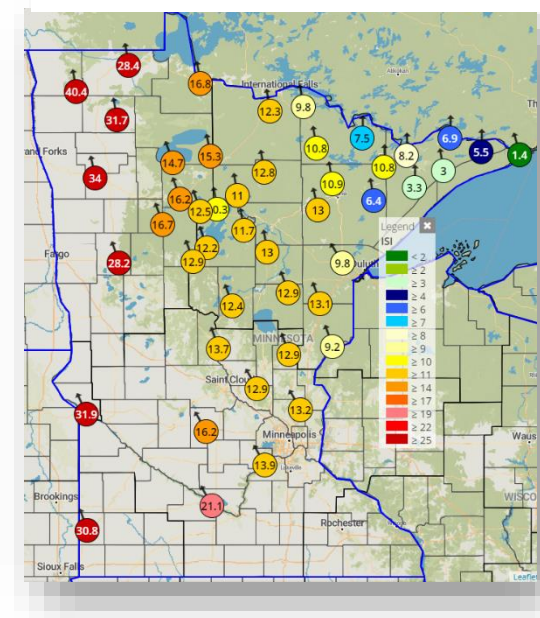
Crown fire behavior is showing up in the model and with conifer foliar moisture content trends dipping below critical thresholds for increased flammability, chances are as high as they've been all year for that to occur if fires find the right fuels.

Please report any observed fire behavior either supporting or challenging todays fire behavior predictions to help dial in fire behavior potential.

**Fine Dead Fuel Moisture:** 5% Unshaded – 8% Shaded

**Prob. of Ignition:** 60% Unshaded – 40% Shaded

Figure 2 - Forecasted Daily ISI 04/25/24.



## SPECIFIC FIRE BEHAVIOR:

MN FFMC:90 BUI:35 WS:15 Effective ISI: 14.5	Flame Length	Rate of Spread (ft/min ≈ ch/hr)	Fire Type	60 Minute Spread Size (acres)
Grass (100% cured – 3 tons/acre)	18 – 19	155 – 160	surface	301
Lowland Grass (100% cured – 5 tons/acre)	22 – 23	155 – 160	surface	301
Young Jack Pine & Boreal Spruce (100% FMC)	19 – 20	55 – 60	<b>Crowning</b>	67
Pine Pltn. & Mat. JP	9 – 10	30 – 35	surface	17
Mixdwood (25% Fir) &	9 – 10	20 – 25	surface	11
Red & White Pine Timber				
Hardwood/Aspen	5 – 6	11 – 13	surface	3

## Outlook:

With multiple days of precip in the forecast its likely we will see a reset of fire potential across the whole state. Amounts are favored to be higher over the southern half of the state so we may end up with conditions conducive for continued build up over the north if we hit a drier pattern on the backside of this system.

CPC 6 – 10 and 8 – 14 day out looks are showing greater chances for above normal temps and above normal precip although a shift in the pattern may be starting to present itself in the outlooks.

The latest release of the drought monitor saw some slight improvement in the abnormally dry category however other categories held in place further delineating the difference across the state

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

Goodridge, MN Weekly Summary		Thu Apr 25	Fri Apr 26	Sat Apr 27	Sun Apr 28	Mon Apr 29	Tue Apr 30	Wed May 1	Thu May 2
Max Temp, °F		69	57	49	48	48	64	66	65
Min Temp, °F		41	44	41	34	36	36	42	43
Max RH, %		67	100	100	89	92	96	76	76
Min RH, %		34	51	71	58	65	45	33	40
Max Dewpoint, °F		41	44	44	35	38	43	38	40
Min Dewpoint, °F		31	38	35	31	34	35	35	36
Max Wind, mph		26	23	25	21	13	16	15	16
Min Wind, mph		14	13	13	14	8	8	10	10
Max Wind Gust, time/dir.		4 PM ↗	12 AM ↗	12 PM ↗	12 AM ↗	12 AM ↗	4 PM ↗	1 PM ↗	4 PM ↗
Max Wind Gust, mph		36	33	36	32	21	24	23	25
Min Wind Gust, mph		21	18	20	22	13	13	15	16
Max Cloud Cover, %		66	96	95	85	84	44	27	46
Min Cloud Cover, %		2	48	74	66	45	24	14	28
Max Prob. of Precip., %		5	97	92	63	63	27	27	14

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

Nett Lake, MN Weekly Summary		Thu Apr 25	Fri Apr 26	Sat Apr 27	Sun Apr 28	Mon Apr 29	Tue Apr 30	Wed May 1	Thu May 2
Max Temp, °F		65	54	48	47	47	63	65	65
Min Temp, °F		35	40	39	34	35	35	41	41
Max RH, %		60	79	93	85	96	92	79	79
Min RH, %		23	43	74	56	60	41	31	30
Max Dewpoint, °F		33	40	43	34	35	41	39	36
Min Dewpoint, °F		23	28	35	29	33	33	34	33
Max Wind, mph		13	15	13	18	15	14	14	14
Min Wind, mph		5	8	7	15	8	8	8	8
Max Wind Gust, time/dir.		6 PM ↗	11 AM ↗	9 PM ↗	3 PM ↗	12 AM ↗	2 PM ↗	11 AM ↗	2 PM ↗
Max Wind Gust, mph		23	28	23	28	23	21	22	21
Min Wind Gust, mph		13	15	12	21	12	12	14	13
Max Cloud Cover, %		33	96	96	86	84	65	38	37
Min Cloud Cover, %		0	19	81	75	68	34	21	17
Max Prob. of Precip., %		6	95	98	76	76	32	32	17

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

Albany, MN Weekly Summary		Thu Apr 25	Fri Apr 26	Sat Apr 27	Sun Apr 28	Mon Apr 29	Tue Apr 30	Wed May 1	Thu May 2
Max Temp, °F		67	53	56	47	50	68	68	68
Min Temp, °F		45	45	48	41	40	41	47	49
Max RH, %		53	91	97	87	92	91	75	74
Min RH, %		36	48	69	73	63	48	39	43
Max Dewpoint, °F		40	48	50	41	39	47	43	45
Min Dewpoint, °F		29	34	42	38	37	38	40	40
Max Wind, mph		18	21	15	22	14	14	14	16
Min Wind, mph		8	15	12	14	9	8	9	10
Max Wind Gust, time/dir.		3 PM ↗	2 PM ↗	7 PM ↗	7 AM ↗	3 PM ↗	3 PM ↗	1 PM ↗	6 PM ↗
Max Wind Gust, mph		26	33	22	32	22	20	20	25
Min Wind Gust, mph		16	22	17	21	14	13	15	15
Max Cloud Cover, %		58	95	95	90	87	42	27	47
Min Cloud Cover, %		33	64	79	86	47	14	14	28
Max Prob. of Precip., %		5	99	99	78	74	28	28	25

## References

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