



April 22nd Weather Briefing

April 22, 2022
9:27 AM

Presenter : Ed Holicky Meteorologist in Charge



National Oceanic and
Atmospheric Administration
U.S. Department of Commerce

National Weather Service
Goodland, Kansas



Hazardous Weather Expected Today

April 22, 2022
9:27 AM

A multitude of weather threats today!

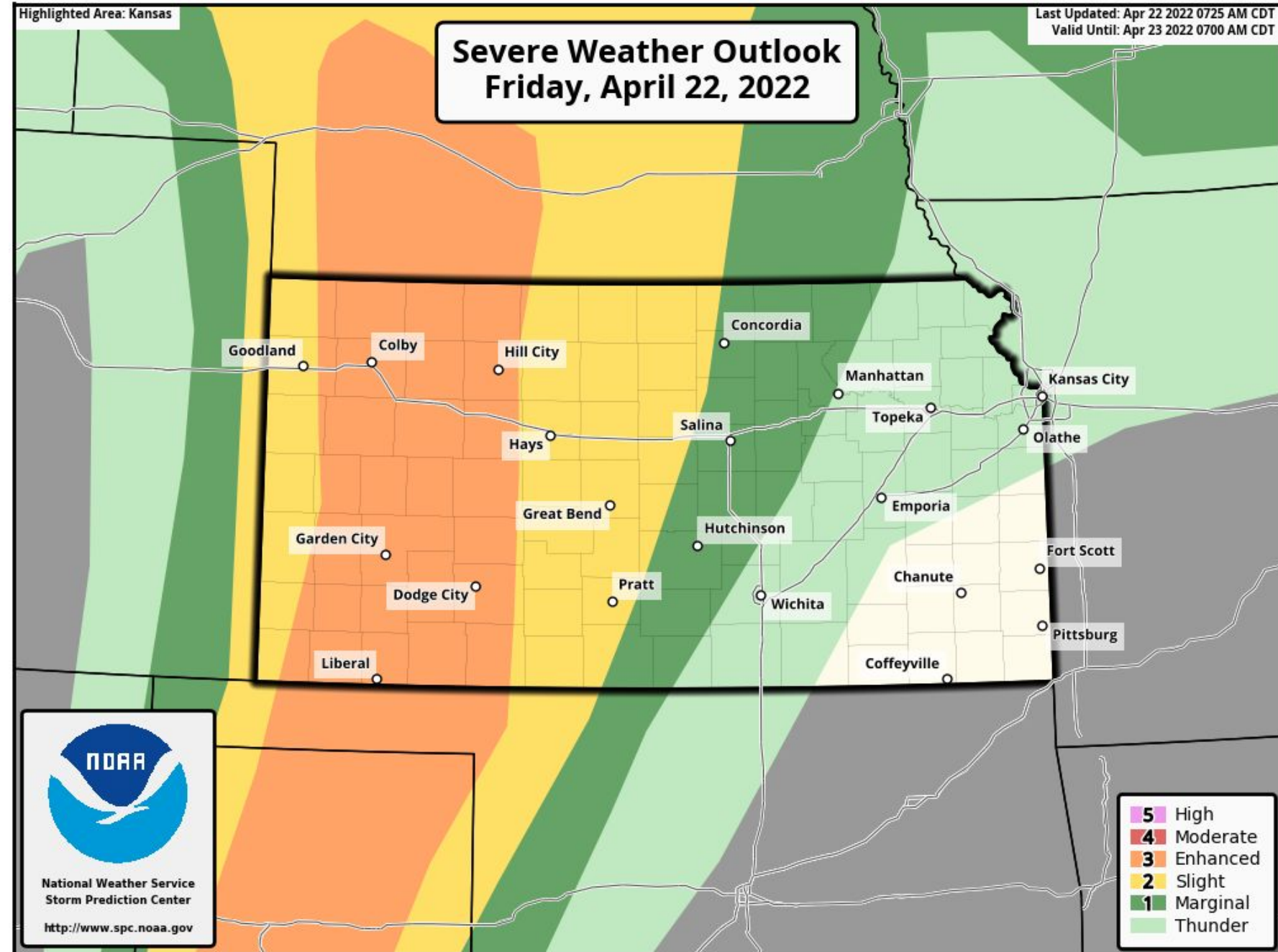
Key Messages

- Stay weather aware today and tonight! Conditions will change rapidly.
- Potentially catastrophic fire weather conditions today.
- Enhanced Risk of severe weather
- High Winds are expected
- Travel will become hazardous today

NEW

Important Updates

- Expanded Red Flag Warning for entire forecast area.
- Highlighting potentially catastrophic fire weather conditions today.





Potentially Catastrophic Fire Danger

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Strong winds, dry fuels, blowing dust may create a worst case scenario

Warning Details



Valid 11 AM MDT to 8 PM MDT
Very windy, critical fuels and dry thunderstorms expected.



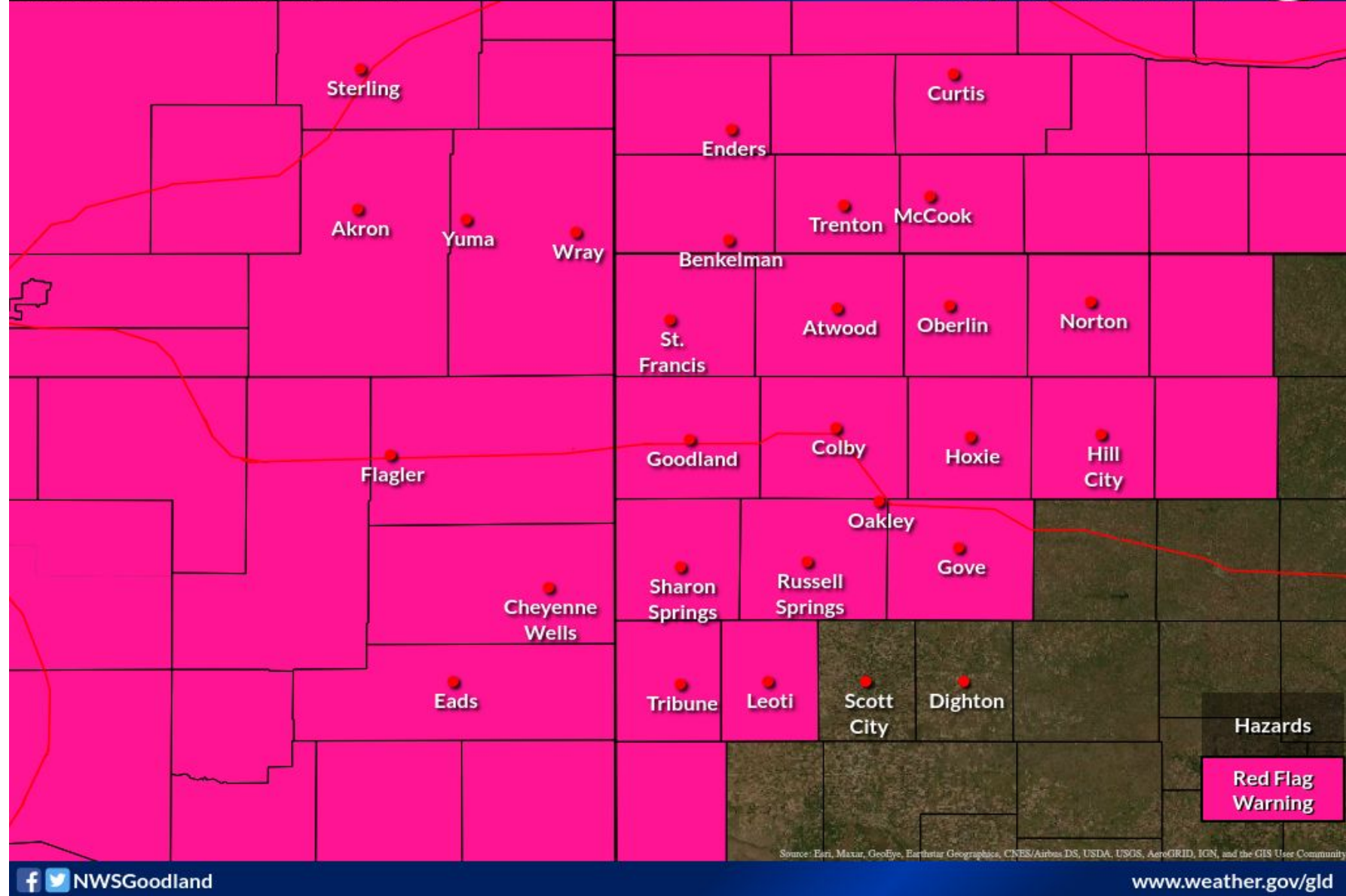
Combination of winds gusting over 60 mph, poor visibility in blowing dust and potential fire starts from dry lightning. Could create **catastrophic** fire danger.

Active Red Flag Warnings

As of 5:57 AM MDT, Friday April 22nd

Weather Forecast Office
Goodland, KS

Issued Apr 22, 2022 5:57 AM MDT



Quick Forecast

- Winds gusting in excess of 65 will be widespread by 3 PM MDT.
- Dry thunderstorms (little precipitation) possible between 3 and 6 PM MDT.
- Cold front will shift winds to west after 10 PM MDT



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High Winds Expected Today

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Damaging winds will become widespread in afternoon

Warning Details



In effect from 11 AM MDT to Midnight tonight.



Winds will increase to the 25 to 35 mph range in the late morning, with wind gusts in excess of 65 mph becoming widespread around 3 PM MDT

Other Details

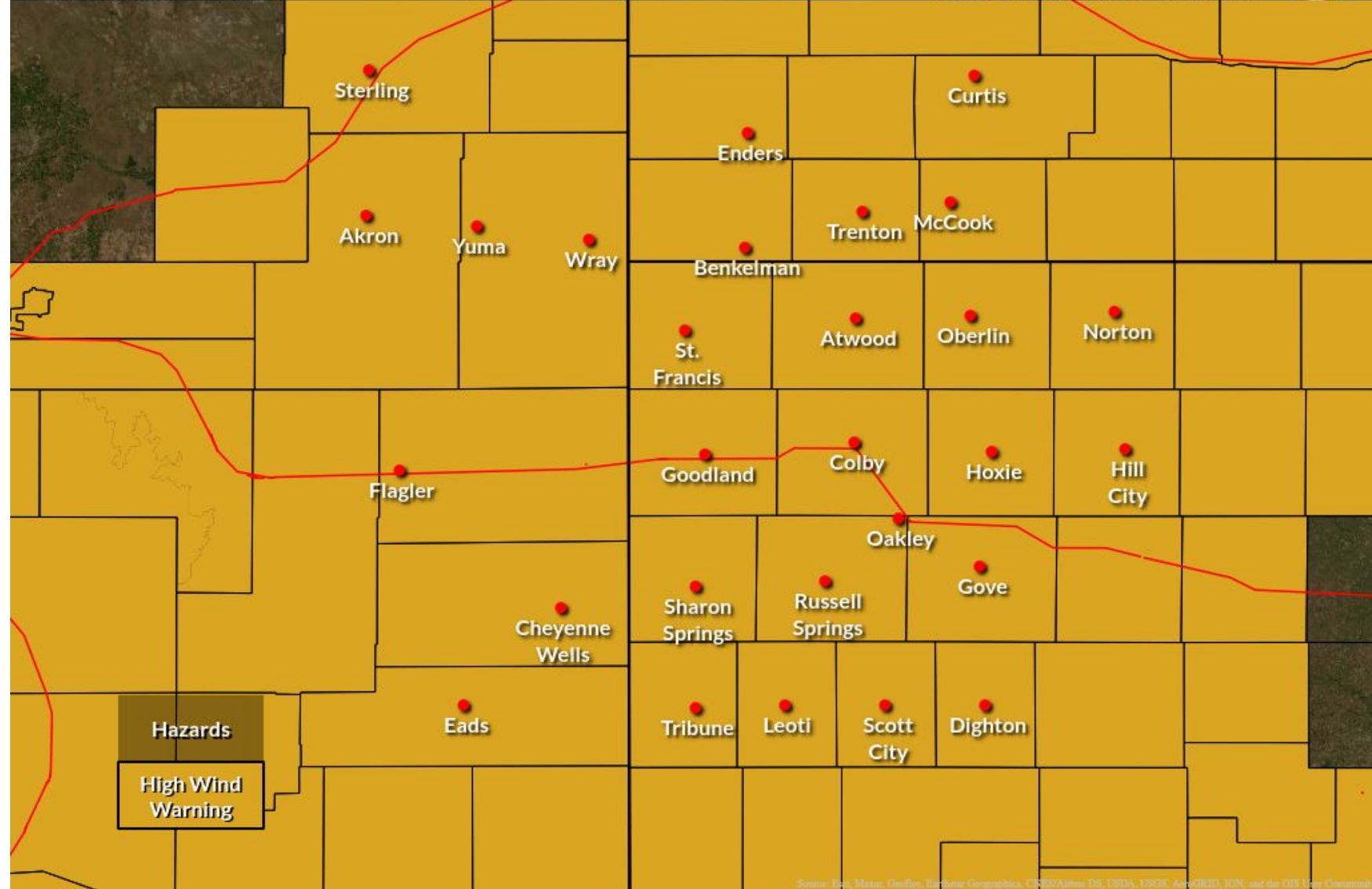
- Plumes of blowing dust will develop around noon becoming more widespread as winds increase,
- Combination of strong winds and blowing dust **WILL** make travel hazardous this afternoon and evening.

Active High Wind Warnings

Valid Today, April 22nd

Weather Forecast Office
Goodland, KS

Issued Apr 22, 2022 5:25 AM MDT



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When Will Winds Come Up?

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Blowing dust likely when wind gusts start to exceed 45 mph (red shading)

Maximum Wind Gust Forecast

	4/22 Fri																4/23 Sat				Maximum	
	7am MDT	8am MDT	9am MDT	10am MDT	11am MDT	12pm MDT	1pm MDT	2pm MDT	3pm MDT	4pm MDT	5pm MDT	6pm MDT	7pm MDT	8pm MDT	9pm MDT	10pm MDT	11pm MDT	12am MDT	1am MDT	2am MDT		3am MDT
Burlington	13	18	21	32	51	55	61	63	66	67	63	62	58	54	52	45	41	39	33	31	31	67
Colby	18	23	23	30	43	45	52	53	56	58	59	56	56	60	58	59	58	53	40	32	28	60
Goodland	21	26	26	35	47	53	58	60	61	62	62	62	56	55	56	53	47	43	37	32	29	62
Leoti	23	30	29	37	51	51	58	60	61	61	61	63	61	60	58	59	58	53	44	36	33	63
McCook	7	13	16	26	41	45	51	55	56	58	58	59	56	55	54	58	60	59	47	38	32	60
Norton	17	22	25	33	45	45	49	52	53	54	52	52	52	53	54	55	56	58	54	48	39	58
Oakley	30	35	35	38	45	46	52	52	54	56	60	59	59	59	60	58	58	56	45	32	28	60
Oberlin	21	25	28	35	45	46	51	54	55	56	59	62	56	55	58	60	62	60	49	40	30	62
Wray	9	14	18	29	41	45	51	53	53	55	55	58	54	51	47	41	36	35	28	22	20	58
Yuma	7	9	14	28	48	49	55	56	56	59	58	59	53	46	40	36	35	31	30	26	25	59

* Table values in mph

**Created: 7 am MDT Fri 4/22/2022

***Values are maximums over the period beginning at the time shown.



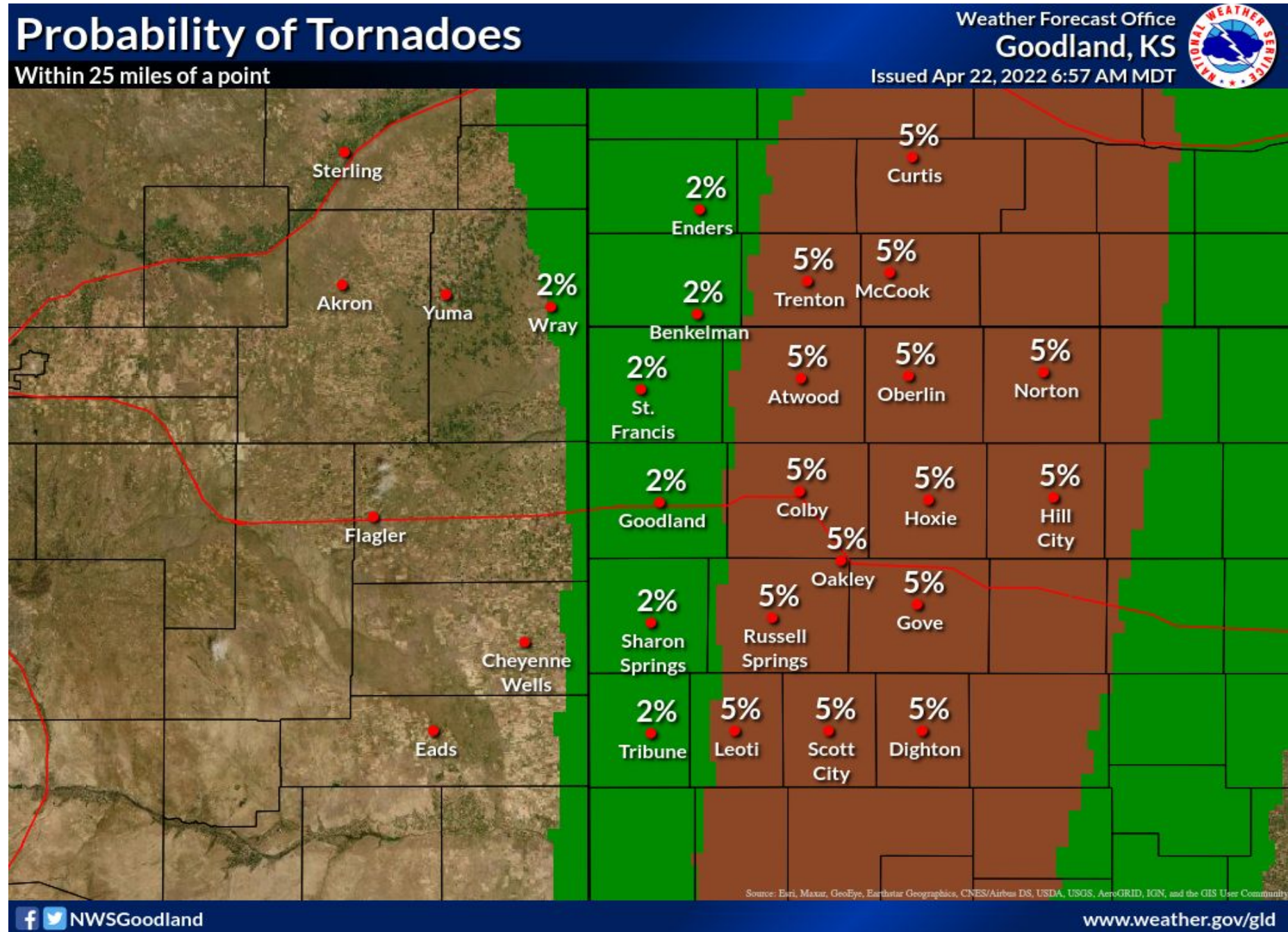


Severe Weather Threats

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Threats

- Widespread wind gusts \geq 75 mph
- Hail up to tennis ball size
- Storms will rapidly intensify around sunset
- Tornadoes
 - ◆ Mainly between 6 PM and 11 PM MDT.





Severe Weather Threats (continued)

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Probability of Severe Thunderstorm Winds

Weather Forecast Office
Goodland, KS



Probability of Severe Thunderstorm Winds

Weather Forecast Office
Goodland, KS

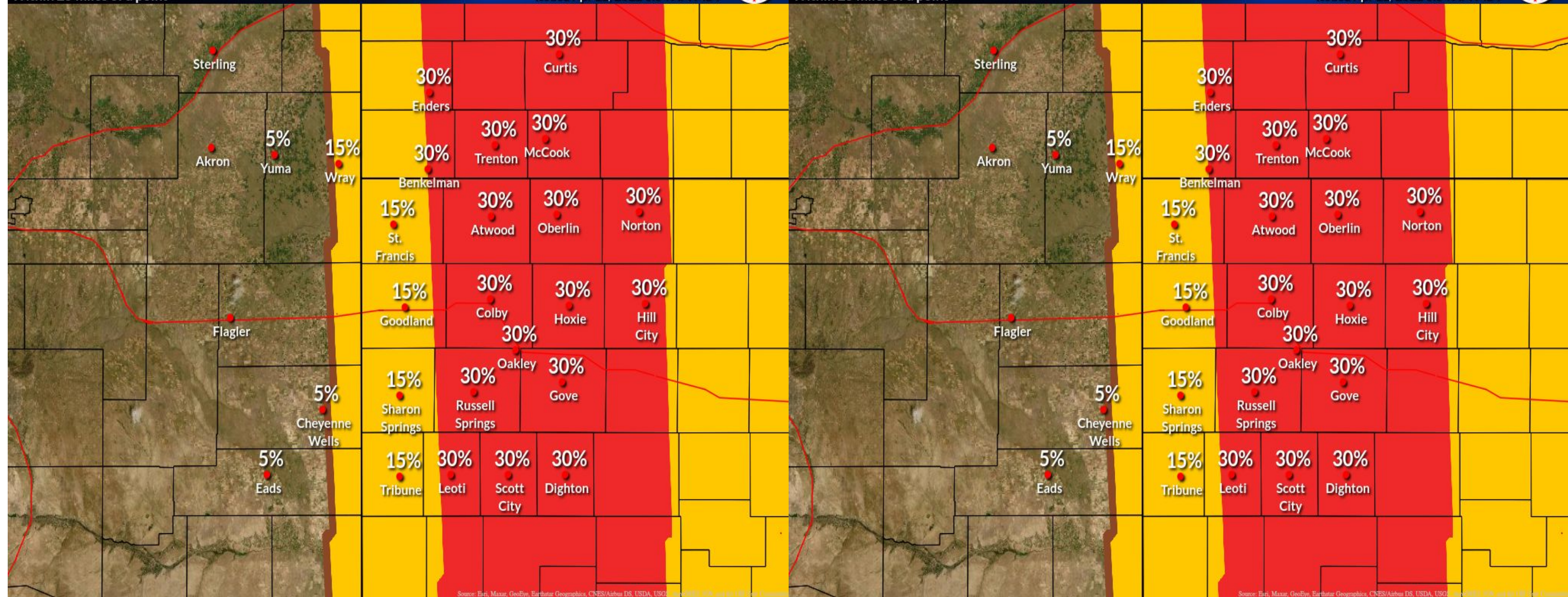


Within 25 miles of a point

Issued Apr 22, 2022 6:54 AM MDT

Within 25 miles of a point

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Precipitation Timing

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Note this is chance of rain/thunderstorms. Not probability of severe thunderstorms!

Probability of Precipitation Forecast

	4/22 Fri																4/23 Sat												
	7am MDT	8am MDT	9am MDT	10am MDT	11am MDT	12pm MDT	1pm MDT	2pm MDT	3pm MDT	4pm MDT	5pm MDT	6pm MDT	7pm MDT	8pm MDT	9pm MDT	10pm MDT	11pm MDT	12am MDT	1am MDT	2am MDT	3am MDT	4am MDT	5am MDT	6am MDT	7am MDT	8am MDT	9am MDT	10am MDT	11am MDT
Burlington							1	2	4	7	11	21	12	11	9	21	15	12	17	16	15	14	13	12	10	9	7	5	4
Colby							1	2	3	7	10	29	20	12	11	31	44	56	35	22	17	13	8	7	6	6	5	4	3
Goodland								2	3	6	7	33	21	15	11	41	43	15	15	16	14	12	10	9	8	7	6	4	3
Leoti						1	2	3	4	8	12	27	14	12	11	35	43	42	25	23	16	9	2	2	2	2	2	2	2
McCook	0	0	0	0	0	0	0	2	3	6	9	12	34	17	16	17	41	69	64	34	27	21	14	12	10	9	7	5	4
Norton								2	3	6	10	20	15	11	11	12	15	50	76	75	53	31	9	7	6	5	5	4	3
Oakley						1	1	3	4	7	15	23	18	15	13	17	40	52	47	25	18	12	5	4	4	4	3	3	2
Oberlin							1	2	3	7	13	17	20	10	12	13	36	65	76	38	29	20	10	9	7	6	6	4	3
Wray	0	0	0	0	0	0	0	2	3	6	6	10	9	9	11	19	19	19	23	26	25	25	24	21	17	14	12	8	5
Yuma	0	0	0	0	0	0	0	1	2	5	7	8	10	9	9	14	13	18	27	29	28	27	27	22	18	16	13	9	6

* Table values in %

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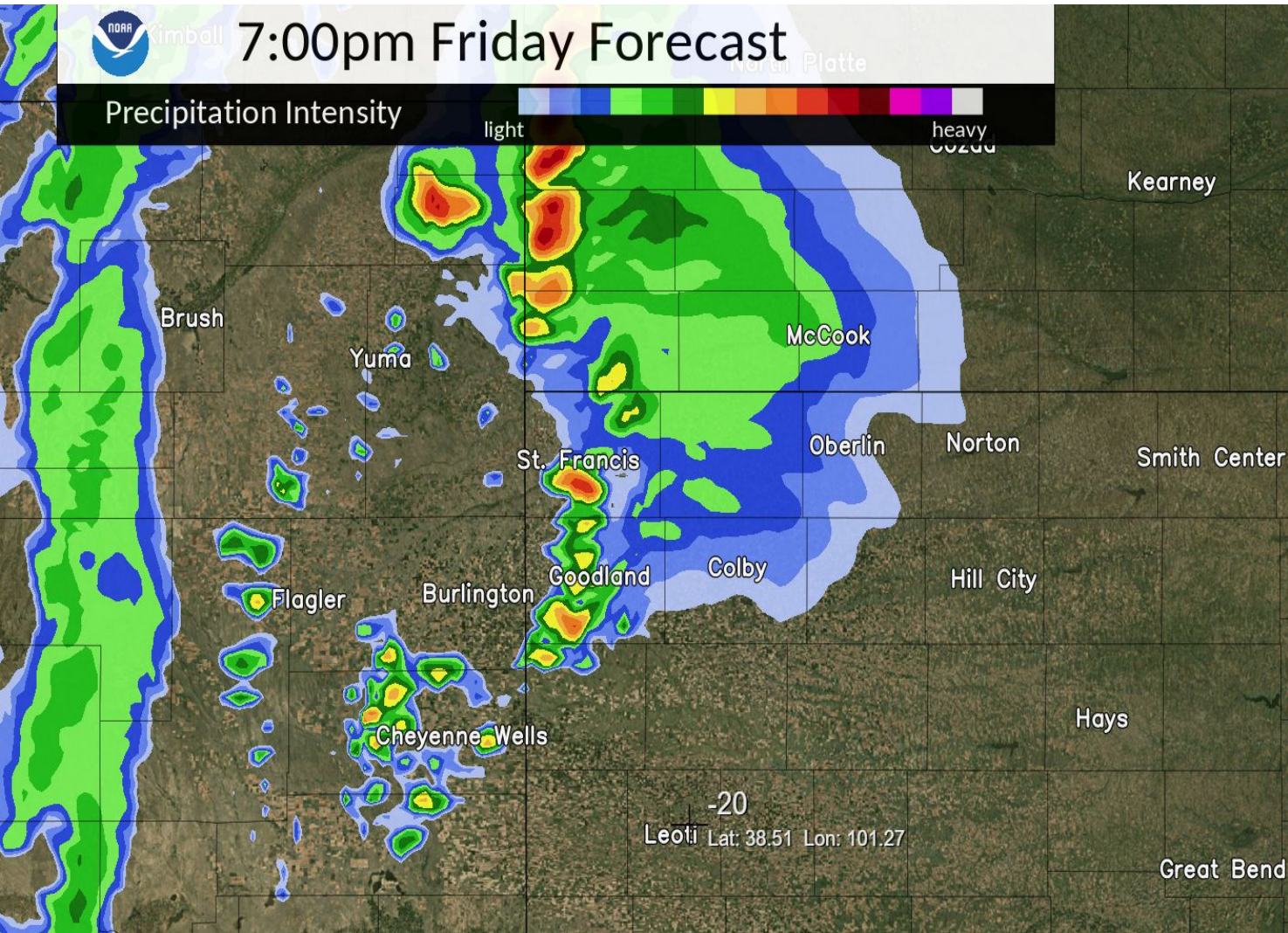




Possible Storm Development

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Storms will start somewhat isolated, form into a line overnight



Please note these simulations vary greatly run to run and between models. This is provided to show how we expect storms to evolve!



Potential Travel Impacts and Timing

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- About This Graphic -

This graphic represents our latest thinking of when travel impacts will be highest due to :

- High Winds
- Blowing Dust
- Severe Weather

	Fri 9 AM-12 PM	Fri 12 PM-3 PM	Fri 3 PM-6 PM	Fri 6 PM-9 PM	Fri 9 PM-12 AM	Sat 12 AM-3 AM
Goodland	Yellow	Orange	Red	Red	Orange	Green
Tribune	Yellow	Red	Red	Red	Orange	Green
McCook	Green	Yellow	Orange	Red	Red	Yellow
Oakley	Yellow	Orange	Orange	Red	Red	Yellow
Hill City	Green	Yellow	Orange	Red	Red	Yellow

Impact Level	Little/None	Limited	Elevated	Significant	Extreme
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Impactful Weather Day Likely

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Hazards: Widespread damaging wind gusts, blowing dust an extremely critical fire weather conditions. Severe thunderstorms, especially in the evening capable of producing wind gusts in excess of 75 mph, tennis ball size hail and a tornado or two



Areas Impacted: Fire weather, strong winds and dust: Entire area. Severe thunderstorms: Mainly along and east of the KS/Colorado state line



Impacts: Travel will become increasingly hazardous through the afternoon into the evening. Poor air quality likely in the afternoon and early evening. Severe thunderstorms will be capable of damaging property and injuring unprotected people.



Certainty & Considerations: Overall confidence is high, although confidence in pinpointing thunderstorm threat lower. Confidence is high that travel will be impacted across the area today and fire control will be extremely difficult if not impossible.

