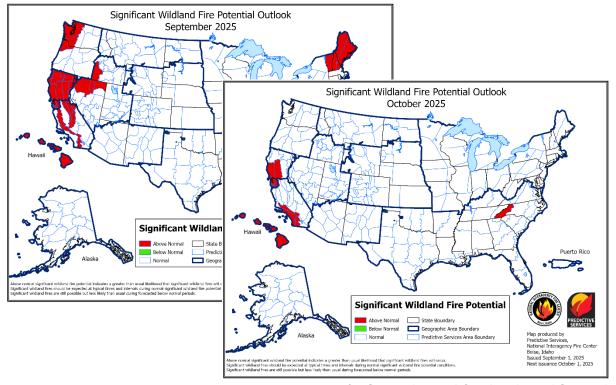
September 2025 - Wildland Fire Outlook

September 4, 2025



National Significant Wildland Fire Potential Outlook for September and October, issued September 1, 2025.

SUMMARY

The Teton Interagency Dispatch area continued to experience warmer temperatures than normal in August. The past 30 days saw significant variation in accumulated moisture from monsoon-influenced thunderstorms, with area RAWS recording from 0.32" to 1" or rain for an area average of 0.63". Associated lightning resulted in 12 fire ignitions in August, with two fires – the Dollar Lake and Willow Creek – growing larger than 1000 acres and being managed with Type 3 teams.

For the fall, regional and national outlooks for the TIDC area call for a higher likelihood of warmer than normal temperatures, particularly in the latter part of September and into October. High-pressure ridges are expected to alternate with tropical moisture flows from tropical storms and from Northwest lows into mid-September, with mid-to late-fall projected to be drier and warmer than normal.

- Fire danger is Very High for Bridger-Teton National Forest / Grand Teton National Park, based on indices, fuel moisture and fire activity. At this time in the 2024 fire season we were in High fire danger; in 2023 we were in Moderate; and in 2022 we were transitioning from Moderate to High fire danger.
- Current active fires are seeing moderating fire behavior, though areas with remaining heat are continuing
 to burn as fuels recover from late August precipitation and humidity, which moderated ERCs. All three
 Fire Danger Rating Area zones are in Critical burning conditions, as is much of the Great Basin.
- Normal fire potential for September, likely to continue into October, per the Great Basin Coordination Center's monthly outlook: https://gacc.nifc.gov/gbcc/predictive/docs/monthly.pdf.
- Current information on fire conditions, indices and fire activity is at www.tetonfires.com.

FUELS & CLIMATE OUTLOOK

1. Temperature

WARMER AUGUST. Western Wyoming was 1-3 deg F above normal in August. This contributed to the curing process, adding to fuel availability for ignition and spread.

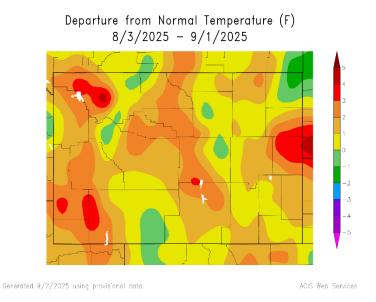


Figure 1a. Departure from Normal Temperature, Wyoming, prior 30 days through September 1, 2025. https://hprcc.unl.edu/products/maps/acis/hprcc/wy/30dTDeptHPRCC-WY.png.

2. Precipitation

ACTIVE, VARIABLE THUNDERSTORMS: Area precipitation analyses indicate an overall drier-than-normal summer in the prior <u>90-day period</u> (Figure 2a), which shows western Wyoming receiving from 25-95% of normal. This trend changed with August precipitation; the prior <u>30-day period of percent normal precipitation</u> (Figure 2b) reflects various impacts of intermittent monsoon moisture flow, with some areas receiving above normal and some below normal precipitation.

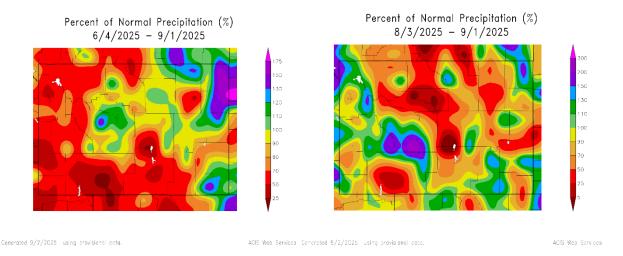
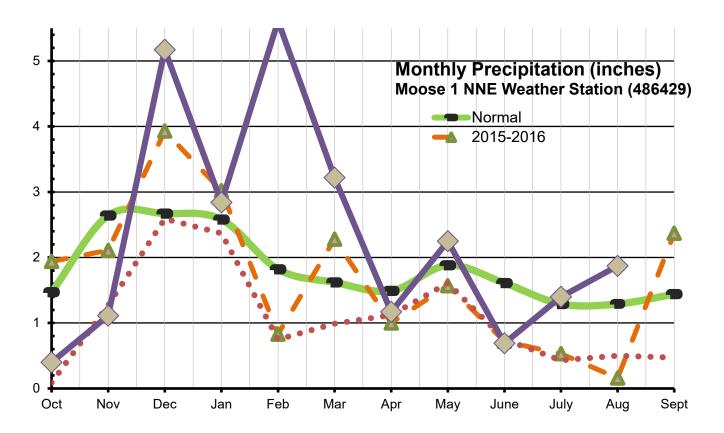


Figure 2a (left) and 2b (right). Wyoming, Percent of Normal Precipitation, past 90 and 30 days.

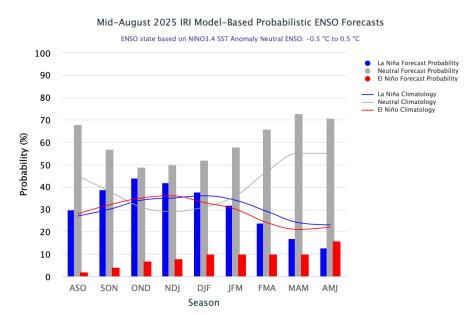
PRECIPITATION TRACKING at the Moose 1 NNE WY Climate Reference Weather Station serves as a representative site for lower elevations in Grand Teton National Park and BTNF North Zone. The station recorded 126% of 30-year normal for water year-to-date, compared to 96% for last year at this time and 89% for 2016, a prior active fire year. Four of the past 11 months recorded below-normal precipitation. After a drier than

normal early summer, August received 146% of normal precipitation (see Supporting Information for data). Note the variability in this summer's rainfall: this weather station received ½ inch of rain on three separate days in August, while the nearby Grand Teton RAWS station, three miles north, received half the rain in the same month.



3. El Niño/ La Niña (ENSO-Southern Oscillation)

The mid-month ENSO Forecast (IRI – International Research Institute for Climate and Society | Quick Look (columbia.edu) tracks El Niño (warm) and La Niña (cool) events in the tropical Pacific. Neutral conditions are forecast through the fall, with the probability increasing for La Niña (cool) conditions this winter.



4. Drought Monitor

PERSISTENT DROUGHT: Western Wyoming is in Severe to Extreme Drought conditions. Weather outlooks for fall indicate persistent drought, warmer than normal temperatures through November, and a likely probability for wetter than normal conditions in mid-September transitioning to equal to drier chances in late September into November. These outlooks may support burning conditions extending later into fall, though shorter days and cooler nights may limit the effect of overnight holdover fires.

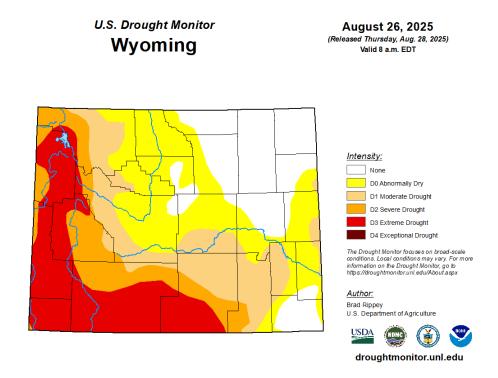


Figure 4a. U.S. Drought Monitor - Wyoming - August 26, 2025. Wyoming | U.S. Drought Monitor (unl.edu)

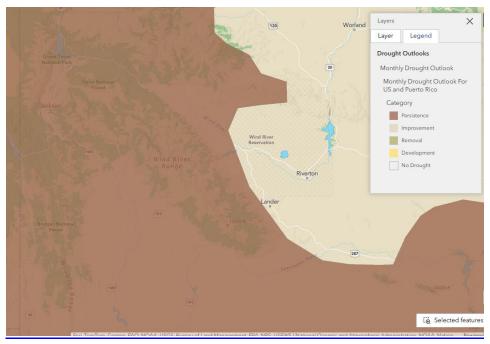
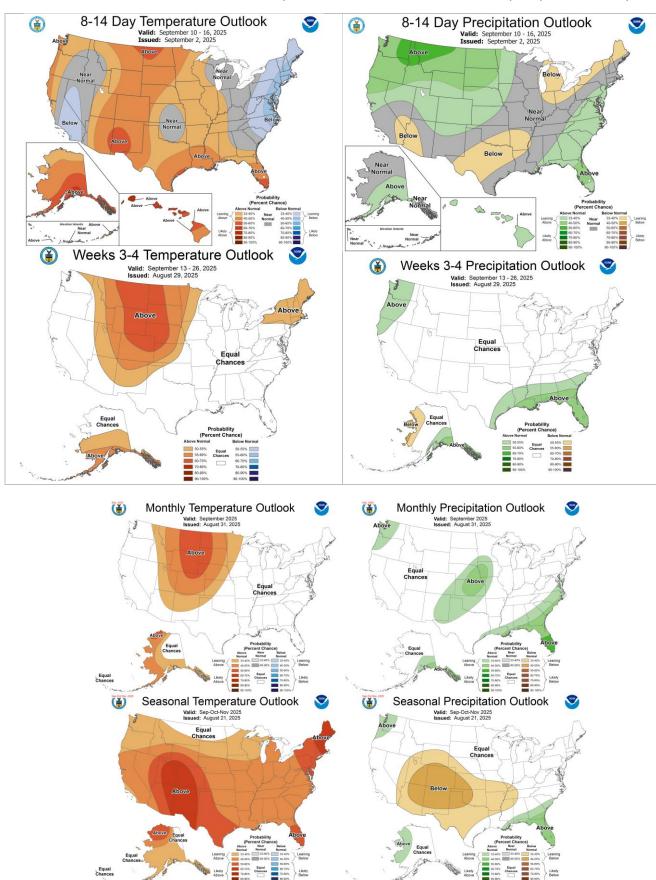


Figure 4b. Seasonal Drought Outlook (TIDC area): Drought Outlook Interactive Experience

5. Temperature and Precipitation Outlooks

WARMER, DRIER: Outlooks for warmer temperatures and from wetter to normal precipitation for September.



6. Fuel Moisture

DRY FUELS: Seasonal drying trends in sampled fuel moistures support maintaining all TIDC zone in Critical fuels status for September 1, which offers guidance to the National Weather Service for Red Flag forecasts.

For September 1, Grand Teton NP sagebrush fuels categories are tracking near the 90th percentile of dryness. At conifer sites, all fuels are at or below 90th percentile. Note that this period's fuel samples for were collected prior to the late August precipitation. Five of the eight Critical Fuel Moisture Trends have reached Critical Burning Conditions and two are in Transition to Critical.

In the Bridger-Teton NFs West Zone, two of five criteria are critical at Hams #1 site and four of five are critical at Hams #2.

See "Supporting Information" for graphs of fuel moisture trends in Grand Teton National Park compared to a 30-year sampling average. Additional information from other zones will be shared when compiled.

Critical Fuel Moisture	Tren	ds							
Grand Teton National Park (2025)								
	1-Jun	15-Jun	1-	Jul	15-	Jul	1-Aug	15-Aug	1-Sep
1000 Hour - in Conifer	46	29	9 14		9		11	8	9
1 Hour	7	9	7	7.5	6		6	6	6
Live Herb - in Conifer	110	151	1	71	112		131	96	90
Live Woody - Conifer	95	99	104		106		108	103	104
LH - Grasses in Sagebrush	177	146		96		75		44	33
Live Woody - Sagebrush	143	157	1	.41	102		87	74	67
ERC (Teton FDRA)	9	25.9	;	39	42		44	52	24
Adjective Fire Danger	Low	Low	Н	ligh	Very	High	Very High	Very High	Very High
Based on Fuel Moisture Sampling	Low to Moderate Burning Conditions		Transition to Condit		_		Critical Burning Conditions (driest 90th percentile)		
1000 Hour – in Conifer	>14%		12	to		14	<12%		
1 Hour	>6%		5	to		6	<5%		
Live Herb – in Conifer	>118%		90	to		118	<90%		
Live Woody - Conifer	>118%		110	te)	118	<1	10%	
Live Herb – Grasses (in Sage)		0%	40	te			<40%		
Live Woody - Sagebrush	>9	2%	80	te	o 92		<80%		
ERC (Y)	<4	1%	41	te	D	48	>4	8%	

Critical Fuel Moisture Trends

West Zone: Bridger-Teton National Forest (2025) - Fire Weather Zone 414

Hams #1 (WY414)	1-Jun	15-Jun	1-Jul	15-Jul	1-Aug	15-Aug	1-Sep
1000 Hour - in Conifer	22	15	10	9	6	7	12
Live Woody - Subalpine	66	83	100	100	80	80	80
Live Woody - Lodgepole	87	100	100	100	100	100	116
Live Woody - Sagebrush	216	225	225	150	116	100	116
ERC (Wyoming FDRA)	30	33.1	41.3	45.2	51.1	52.3	34
Adjective Fire Danger	Low	Low	High	High	Very High	Very High	Very High
Hams #2 (WY414)	1-Jun	15-Jun	High 1-Jul	High 15-Jul	, ,	Very High 15-Aug	Very High 1-Sep
					, ,	, ,	
Hams #2 (WY414)	1-Jun	15-Jun	1-Jul	15-Jul	1-Aug	15-Aug	1-Sep
Hams #2 (WY414) 1000 Hour - in Conifer	1-Jun 22	15-Jun 14	1-Jul 16	15-Jul 12	1-Aug	15-Aug 8	1-Sep 10
Hams #2 (WY414) 1000 Hour - in Conifer Live Woody - Subalpine	1-Jun 22 100	15-Jun 14 100	1-Jul 16 100	15-Jul 12 100	1-Aug 8 100	15-Aug 8 75	1-Sep 10 75

GEOGRAPHIC AREA OUTLOOKS

Teton Interagency Dispatch is in the Great Basin Geographic Area and adjacent to Rocky Mountain and Northern Rockies geographic areas, which converge in the Greater Yellowstone Area (GYA) and share fire trends. Outlooks forecast normal fire activity in the Teton Interagency Dispatch area for September with transition to above normal activity in September. *Excerpts of National and Regional Outlooks*.

National – Great Basin area excerpts

From <u>National Wildland Significant Fire Potential Outlook (September 1, 2025)</u>: Warm and dry conditions are expected in early September and may continue throughout the month over the southern half of the region. However, occasional atmospheric moisture will still move across the region, providing some increase in relative humidity as well as showers and thunderstorms. Precipitation may occasionally move across northern areas at times to lower fire potential as September progresses. Given the moisture that moved across the region in late August, a period of prolonged adverse conditions will be required for heavier fuels to revert to critically dry levels. Accordingly, most areas have normal significant fire potential forecast for September

Great Basin Outlook

From the <u>Seasonal Outlook for September-December 2025</u> from the Great Basin Coordination Center notes that ...

PAST WEATHER: Temperatures overall in August were above normal in most areas, except parts of southwest Idaho and central Nevada. However, precipitation significantly increased in late August with the late arrival of monsoon moisture to well above normal for western and northern areas. The water year precipitation is still largely below normal due to the drier winter. Drought conditions have slowly expanded in both southern and northern areas, converging on the eastern 2/3 of the Great Basin, with most areas in moderate to severe drought, with increasing pockets of "Extreme" drought appearing over the eastern 2/3 of the region.

FIRE POTENTIAL AND OUTLOOK: Late August rains decreased fire behavior on all large incidents and IA dramatically decreased. Despite August moisture, drier and warmer weather to start September is drying out fuels and they are still receptive to ignitions. ERCs dropped significantly to below the 50th percentile across the Great Basin by the end of the month, however grasses and brush will still dry enough to be receptive to fires. Periods of showers and thunderstorms are expected through mid-September which will bring periods of increased and decreased fire potential, but overall areas of above normal precipitation. Thus, Above Normal Large Fire Potential will continue into September for western/northwest/northern Nevada into southwest Idaho for the grass and brush. Long range models indicate the potential of more showers and thunderstorms possibly beyond mid-month, therefore there may be more 'above normal' precipitation in parts of the Great Basin than the CPC outlook indicates

CURRENT FIRE ACTIVITY - Teton Interagency Dispatch

https://gacc.nifc.gov/gbcc/dispatch/wy-tdc/home/predictive-services/intelligence

To date, 120 abandoned non-escape campfires have been reported, compared to 71 last year. Attended campfires during fire restrictions total 23.

Year-to-Date Fire Activity for Dispatch Center response zones, September 1, 2025. 2025 TIDC Fire Statistics.

Teton Interagency Fire Management Area Totals	Human Fires	Human Acres	Natural Fires	Natural Acres	RX Fires	RX Acres	Abandoned Non- escape Campfires
	22	12	26	21938.42	7	1228	120

Supporting Information

Compiled by Tim Sherwin and Ron Steffens with support of district fuels specialists. For questions and to share additional info, contact your local fuels specialists or Ron Steffens, Fire Analyst, Grand Teton National Park. 307-739-3675.

ron steffens@nps.gov.

Selected Sources

- Precipitation tracking: https://water.weather.gov/precip/
- Snowpack precipitation tracking focused on <u>Wyoming Snotel sites</u>
- Climate Prediction Center, Three-Month Outlooks: https://www.cpc.ncep.noaa.gov/products/predictions/90day/
- Drought.gov Portal / Fire: https://www.drought.gov/drought/data-maps-tools/fire
- Drought.gov Portal / Wyoming: https://www.drought.gov/states/wyoming
- Intermountain West Climate Dashboard: https://www.colorado.edu/climate/dashboard.html
- Regional outlooks from "National Wildland Significant Fire Potential Outlook" (first of each month during fire season, NIFC Predictive Services): https://www.nifc.gov/nicc/predictive/outlooks/monthly_seasonal_outlook.pdf.
- Great Basin Area Predictive Services/Outlooks: https://gacc.nifc.gov/gbcc/outlooks.php.
- Rocky Mountain Area Predictive Services/Outlooks: https://gacc.nifc.gov/rmcc/outlooks1.php.
- Teton Interagency Dispatch: www.tetonfires.com / https://gacc.nifc.gov/gbcc/dispatch/wy-tdc/home/.
- National Weather Service <u>Fire Weather (Riverton, WY)</u>.

Precipitation Tracking – Moose Climate Station

Monthly Precipitation		Feb	Mar	Apr	May	June	July	Aug	YTD total	Prior 3 months
(inches)	1987-88	0.75	0.99	1.12	1.61	0.75	0.43	0.5	12.47	1.68
	2015-16	0.83	2.28	1	1.57	0.72	0.53	0.16	18.09	1.41
	2023-24	4.06	4.36	0.76	1.72	0.59	0.15	1.26	19.48	2
	Normal	1.88	2.58	1.82	1.62	1.61	1.29	1.29	20.36	4.19
	2024-25	5.61	3.22	1.17	2.25	0.69	1.4	1.87	25.73	3.96
20	1987-88	41%	61%	75%	86%	47%	33%	39%	61%	40%
	2015-16	46%	141%	67%	84%	45%	41%	12%	89%	34%
	2023-24	223%	269%	51%	91%	37%	12%	98%	96%	48%
	2024-25	308%	199%	79%	120%	43%	109%	145%	126%	95%

Fuel Moisture Analysis – Grand Teton National Park

The tracking of five fuel moisture types in Grand Teton National Park is compared to a 30-year sampling average. For the September 1 sampling period, sagebrush and conifer fuel categories are tracking at or below the 90th percentile of dryness. Note that these samples were collected just prior to precipitation in the area in late August.

