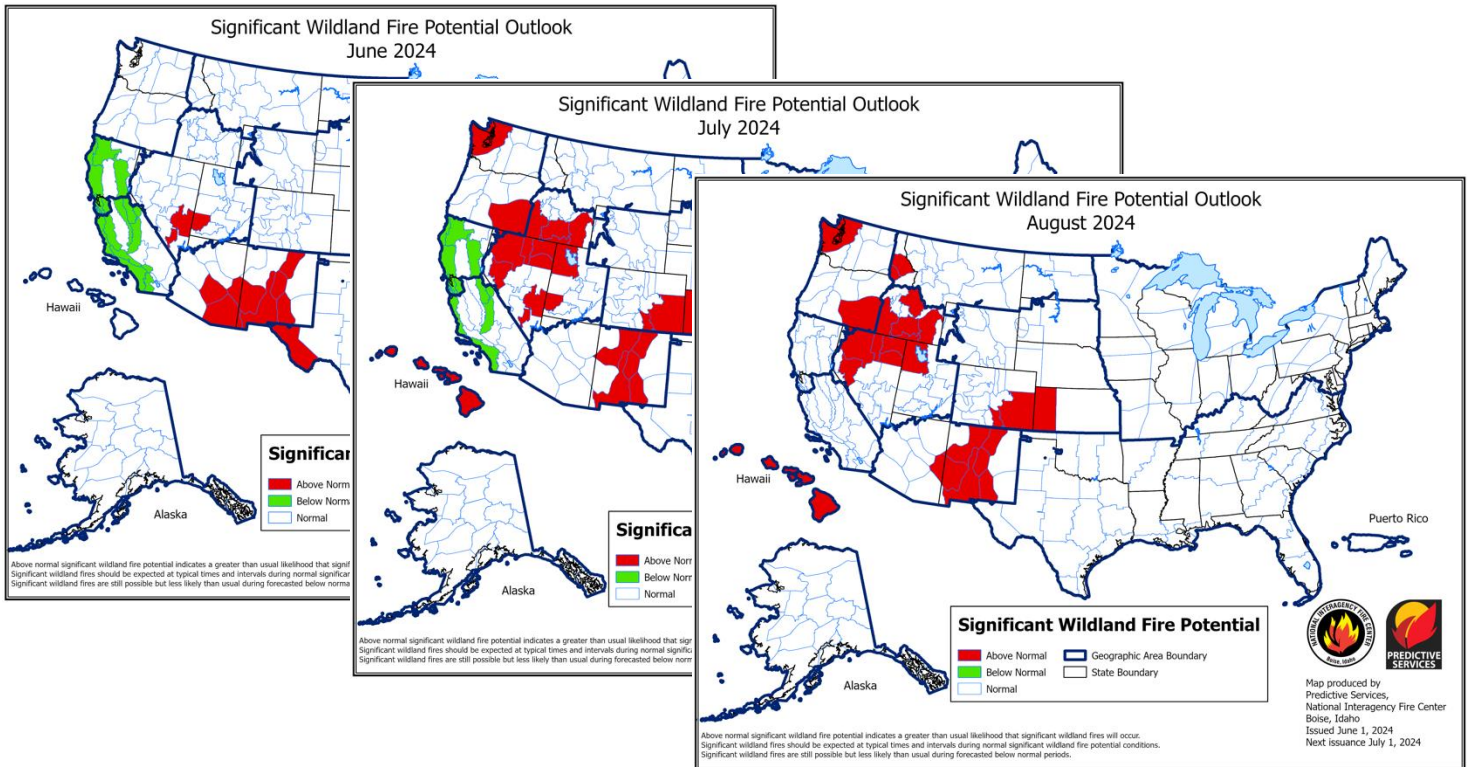


TETON INTERAGENCY FIRE 2024 WILDLAND FIRE OUTLOOK

June 4, 2024



[National Significant Wildland Fire Potential Outlook](#) for June, July and August, issued June 1, 2024.

SUMMARY

The Teton Interagency Dispatch area experienced a warmer than normal winter with variable moisture patterns. Summer outlooks incorporate the predicted transition from El Niño to La Niña conditions. National and regional outlooks for the TIDC area call for warmer and drier weather conditions, particularly in August and September.

The [Seasonal Outlook for June-September 2024](#) from the Great Basin Coordination Center expects the TIDC area to experience **Normal fire potential for June through September**.

For daily GBCC Fire Potential Briefings and related outlooks, see <https://gacc.nifc.gov/gbcc/outlooks.php>.

Potential fire activity for the Great Basin GACC is projected to be predominantly normal for June, with an above-normal outlooks for areas of the central and northern GACC for July through September, and southern sections of the GACC with above-normal outlooks for June and July.

During an average fire season, based on a 20-year fire history from 2001-2020), Bridger-Teton National Forest will average 52 unplanned fires (32 natural starts and 20 human-caused fires per year) for an average of 16,522 acres per year. Grand Teton National Park will average 10 unplanned fires (six natural starts and four human-caused fires per year) for an average of 1332 acres per year.

The Teton Interagency Wildland Fire Outlook is updated monthly during fire season. Current information on fire conditions, fire indices and activity can be found at www.tetonfires.com, with local, regional and national outlooks at <https://gacc.nifc.gov/gbcc/dispatch/wy-tdc/home/predictive-services/outlooks>.

FUEL MOISTURE

Initial sampling and monitoring of fuel moistures in Bridger-Teton National Forest and Grand Teton National Park show green-up occurring at a typical rate, with live fuels mostly nearing full green-up. Where long-term trends are available, live and dead fuels are slightly drier than average for June 1, except for normal 1000-hour dead fuels (heavy, downed logs).

Bridger-Teton NF (from prescribed burn and/or representative sites, for week of June 1, 2024)

East Zone	LW Sagebrush	195 %	LW Lodgepole	28 %
			LW Subalpine Fir	77 %
			1000 HR	19 %

West Zone	LW Sagebrush	135 %	LW Conifer	85 %
			LW Fir	136 %
			1000 HR	23 %

North Zone	LW Sagebrush	183 %	LW Douglas Fir	80 %
			1000 HR	19 %

Grand-Teton NP – Representative Sites (for week of June 1, 2024)

Sagebrush Sites	<i>30-year AVG</i>	2024	Conifer Sites	<i>30-year AVG</i>	2024
LH Grass	187%	166%	LH Grass	211%	155%
LW Sagebrush	154%	119%	LW Conifer (Douglas Fir & Lodgepole)	101%	81%
			1000 HR	28%	27%

CLIMATE

(1) Area Snowpack

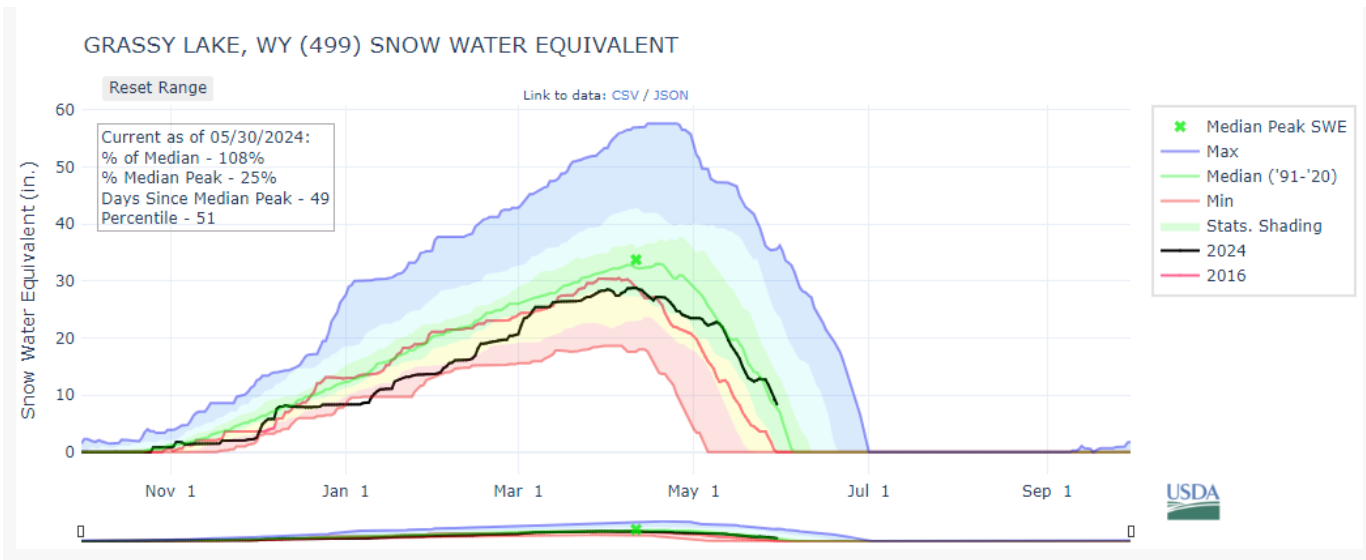
For area watersheds, most SNOTEL sites have melted by late May/early June, so basin-wide averages for snow water equivalent (SWE) may not be valid due to the limited number of data sources with snowpack.

Total Precipitation Water for the water year-to-date (Water YTD, beginning October 2023) is trending normal, with some variation of slightly below and above normal conditions for area watersheds.

Table 1: Percent of 30-Year Average Snow Water Content and Precipitation by Basin. * = Analysis may not be valid measure of conditions. Wyoming Snow Precipitation Update (uwyo.edu) . 06/02/2024.		
	Snow Water Content	Total Precipitation (Water YTD)
Snake River	109 % *	96 %
Upper Green River	111 % *	94 %
Yellowstone	89 %	94 %
Wind River	138 % *	104 %
Upper Bear River	367 % *	107 %

REPRESENTATIVE SNOTEL SITES. *Figures 1 a-c (below). SNOTEL Water Year to Date, Snow Water Equivalent for Grassy Lake (North Zone BTNF/Grand Teton NP), Elkhart Park Guard Station (East Zone), and Snider Basin (West Zone). Generally, these representative sites exhibited normal to slightly below-normal moisture (in total precipitation and snow water equivalent), with a normal or slightly early rate for snowmelt. The sites generally showed drier than average conditions in late April and May.*

The top Snow Water Equivalent graph for each site includes a comparison season of 2015-2016 (in red), which may reflect the expected transition from El Niño to neutral to La Niña conditions.



Station (499) WATERYEAR=2024 (Daily) NRCS National Water and Climate Center - Provisional Data - subject to revision
 Thu May 30 08:41:35 GMT-08:00 2024

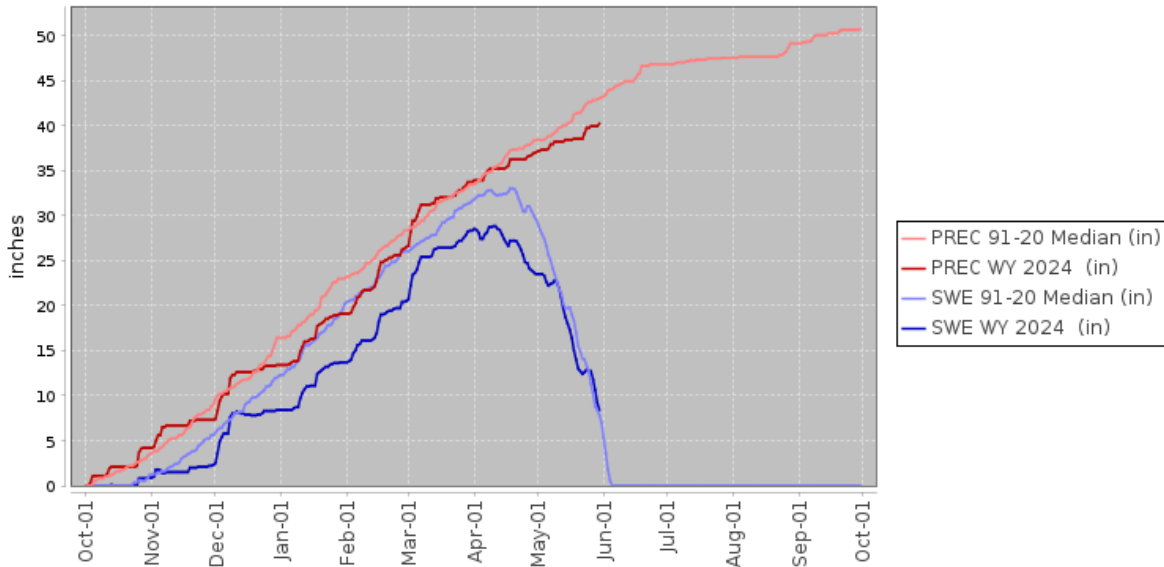
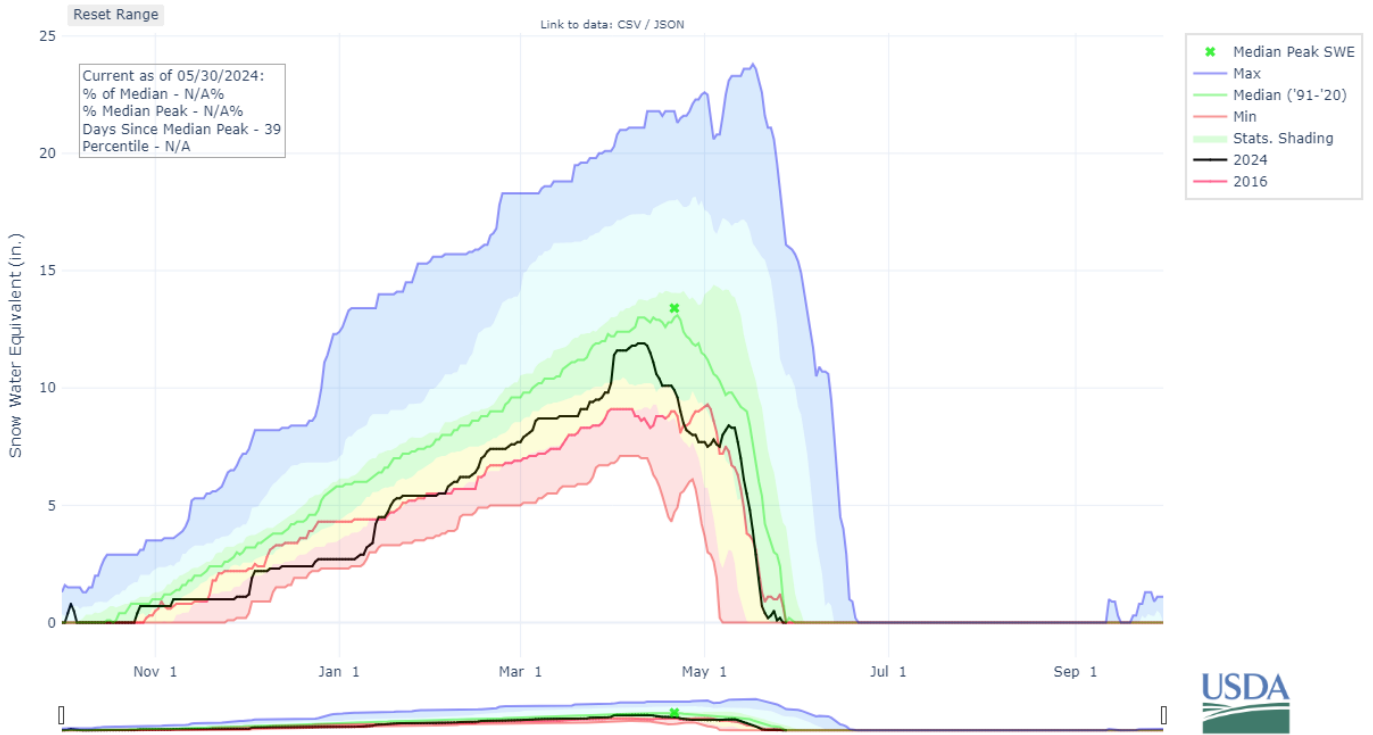


Figure 1a: [NRCS Grassy Lake Snotel](#) with season statistics (above), and [Grassy Lake Snotel \(Teton Zone\), 499](#) (below) with YTD precipitation and snow water equivalent (SWE).

ELKHART PARK G.S., WY (468) SNOW WATER EQUIVALENT



Station (468) WATERYEAR=2024 (Daily) NRCS National Water and Climate Center - Provisional Data - subject to revision
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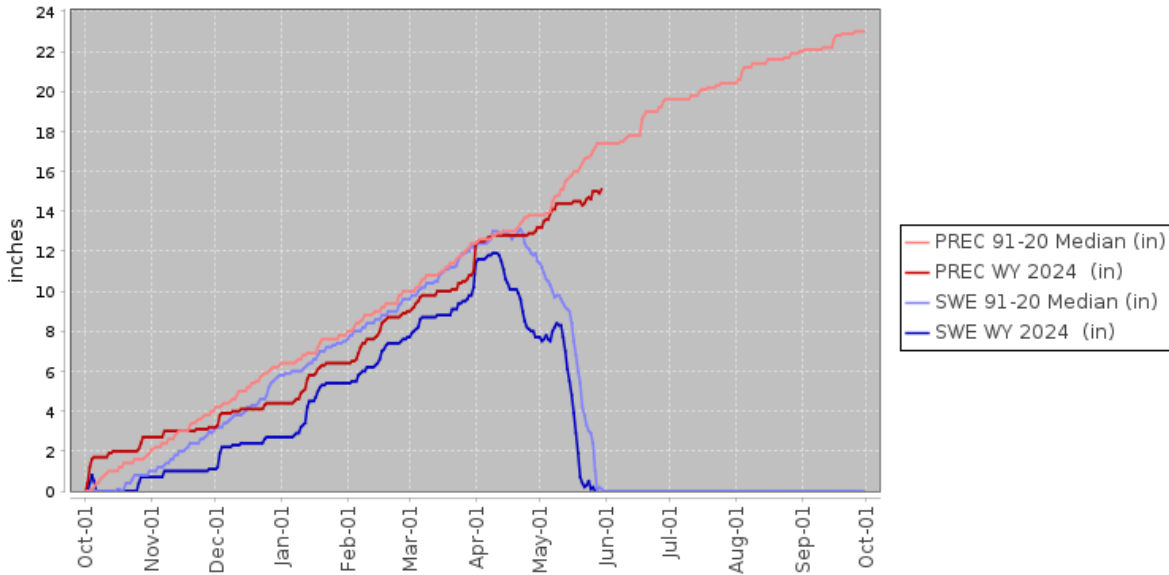
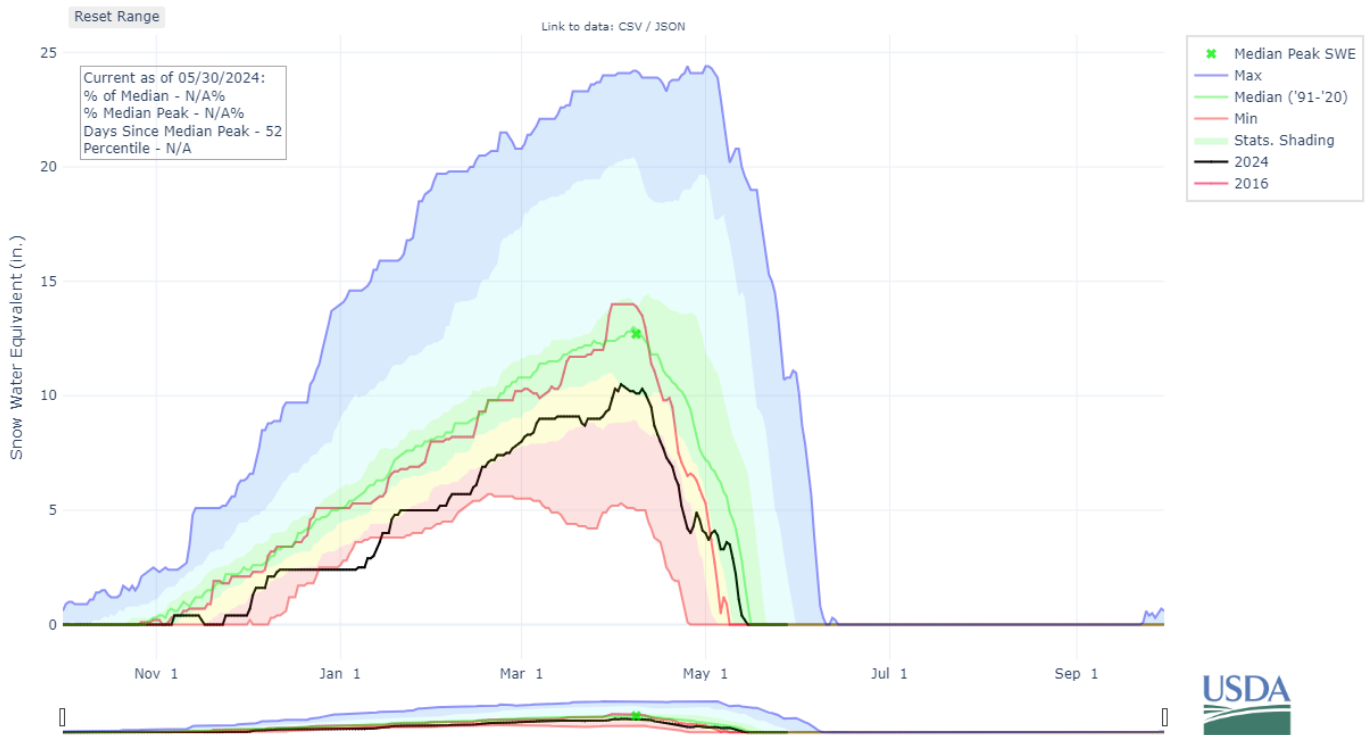


Figure 1b: [NRCS Elkhart Snotel](#) with season statistics (above), and [Elkhart Snotel \(Wind River Zone\), 468](#) (below) with YTD precipitation and snow water equivalent (SWE).

SNIDER BASIN, WY (765) SNOW WATER EQUIVALENT



Station (765) WATERYEAR=2024 (Daily) NRCS National Water and Climate Center - Provisional Data - subject to revision
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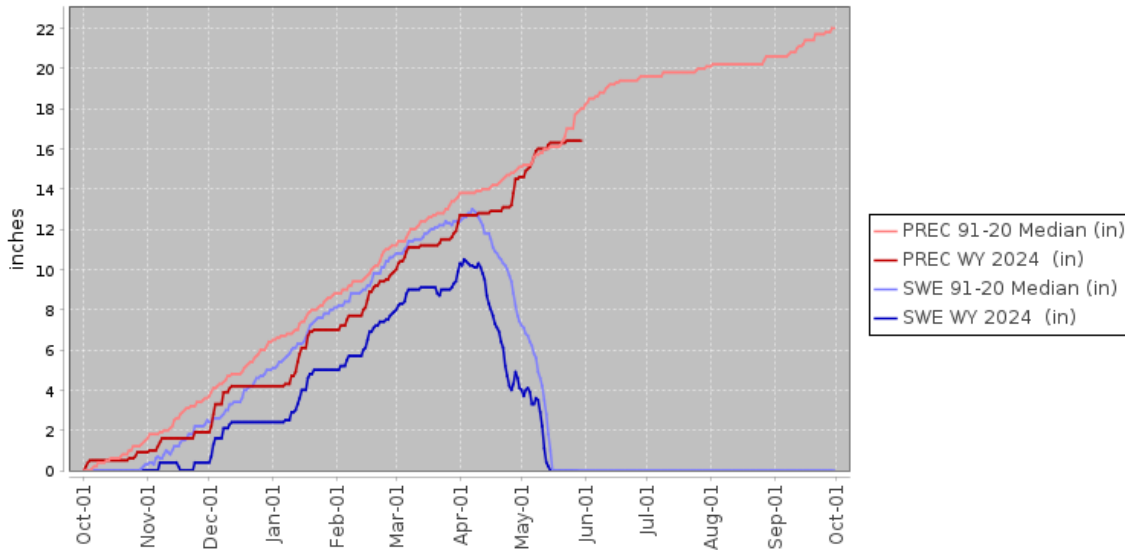
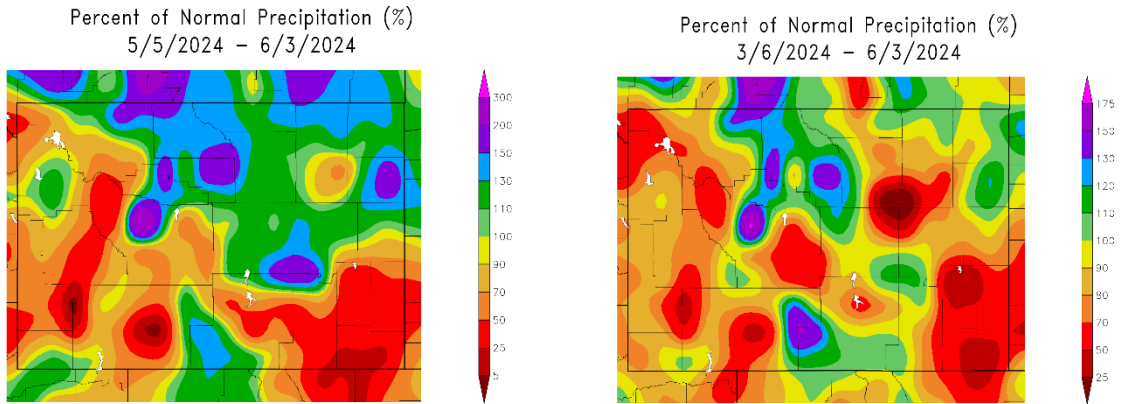


Figure 1c: [NRCS Snider Basin Snotel](#) with season statistics (above), and [Snider Basin Snotel \(Wyoming Range Zone\), 765](#) (below) with YTD precipitation and snow water equivalent (SWE).

(2) Precipitation Monitoring

The Wyoming precipitation map for the prior month reflects drier than normal precipitation, offset with areas of late May precipitation, which has come with isolated thunderstorms (30-day, Figure 2a). The 90-day total shows wetter conditions to southwest and a drier-than-normal 90-day total (Figure 2b). Both periods illustrate a general moisture transect, wetter to the far east and southwest of the state and normal to below-normal elsewhere.



Generated 6/4/2024 at HPRCC using provisional data. NOAA Regional Climate Centers. Generated 6/4/2024 at HPRCC using provisional data. NOAA Regional Climate Centers

Figure 2a (left). Wyoming, Percent of Normal Precipitation for the past 30 days.

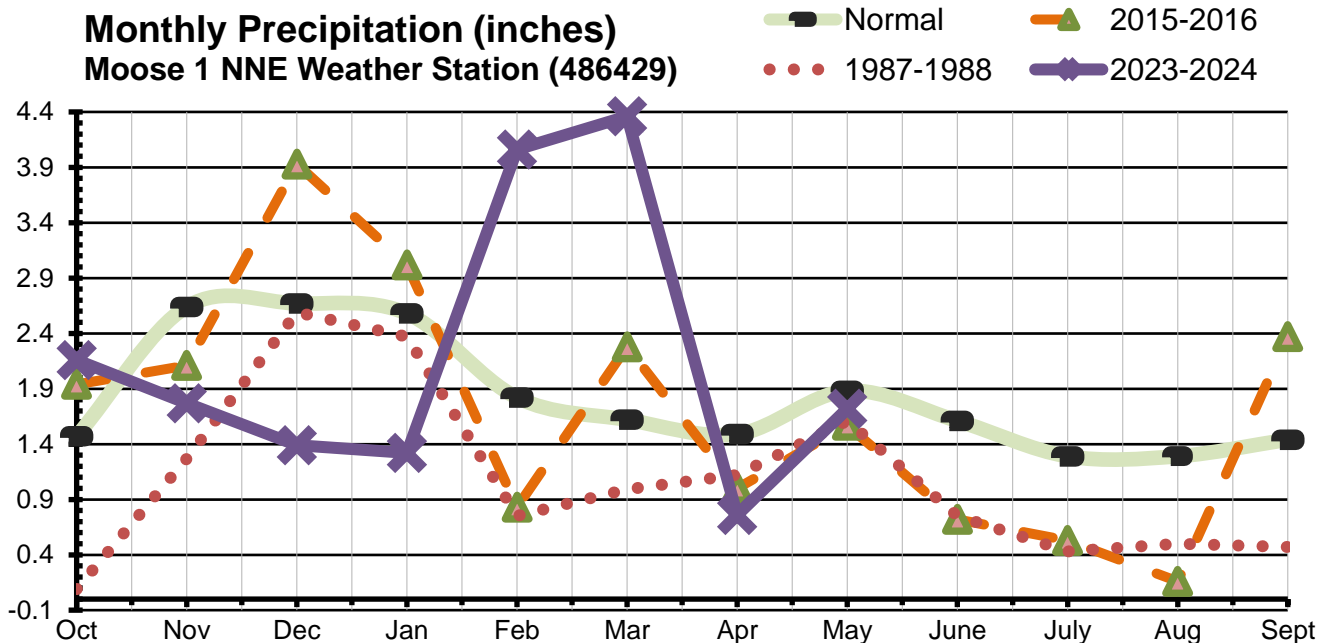
<https://hprcc.unl.edu/products/maps/acis/subrgn/WY/30dPNormWY.png>. Moisture patterns were generally below normal, with a north-central area of TIDC with above normal precipitation, reflecting recent storms.

Figure 2b (right). Percent of Normal Precipitation for the past 90 days was also below-normal for late-winter precipitation in most of the TIDC area, though some sites (such as Moose, WY, see below) received above average snow-water-equivalent moisture.

<https://hprcc.unl.edu/products/maps/acis/subrgn/WY/90dPNormWY.png>.

Precipitation tracking at the [Moose 1 NNE WY Climate Weather Station](#) -- the automated Climate Reference Station, part of the national Applied Climate Information System -- is representative for lower elevation sites in Grand Teton National Park and some North Zone sites. The station recorded 86% of normal for water year-to-date, with three months receiving above-normal precipitation and five below normal. The wetter months occurred in October and mid-winter (February-March).

Table 2 - Graph / Table: Precipitation at Moose Weather Station (Grand Teton National Park).

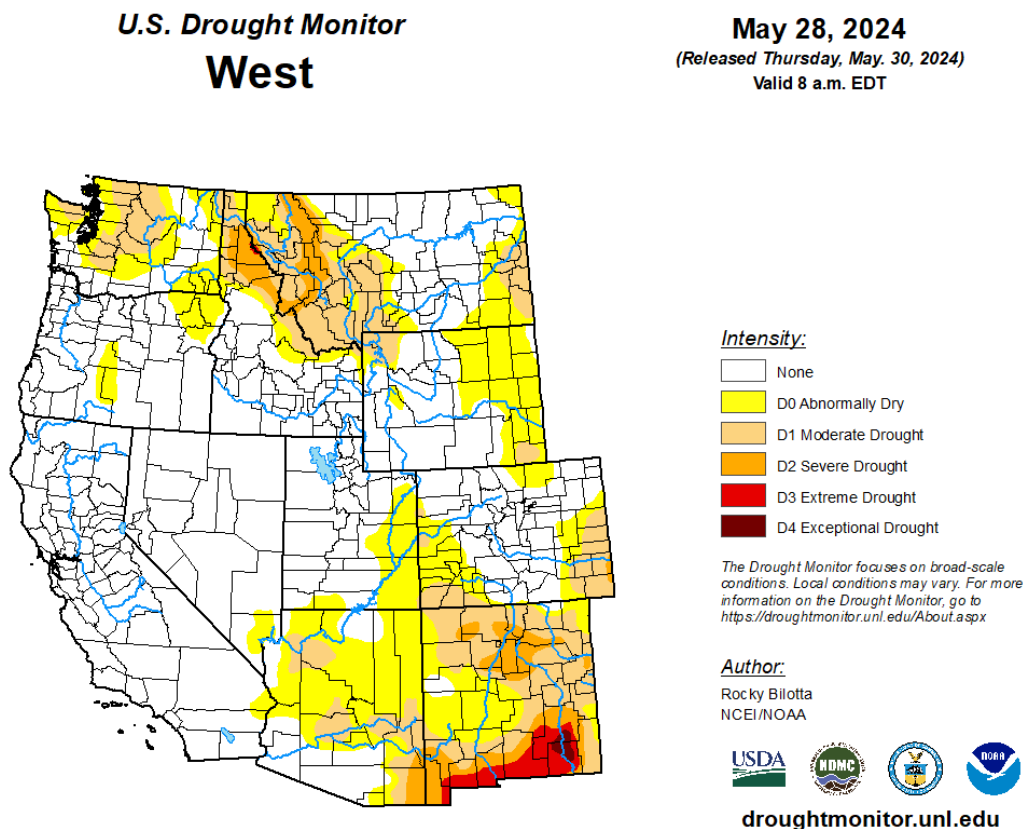


Monthly Precipitation (inches)		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	YTD total
	1987-88	0.09	1.27	2.59	2.37	0.75	0.99	1.12	1.61	10.79
	1999-00	0.08	0.67	2.03	2.27	5.04	1.03	0.4	1.38	12.9
	2015-16	1.94	2.11	3.93	3.02	0.83	2.28	1	1.57	16.68
	2021-22	1.91	1.33	3.52	3.09	0.45	1.17	3.1	2.49	17.06
	2022-23	0.66	3.57	3.26	3.2	2.29	2.37	1.18	1.61	18.14
	<i>Normal</i>	2.58	1.82	1.62	1.49	1.88	2.58	1.82	1.62	16.17
	2023-24	2.16	1.77	1.39	1.32	4.06	4.36	0.76	1.72	17.54
% Normal	1987-88	6%	48%	97%	92%	41%	61%	75%	86%	67%
	1999-00	5%	25%	76%	88%	277%	64%	27%	73%	80%
	2015-16	132%	80%	147%	117%	46%	141%	67%	84%	103%
	2021-22	130%	50%	132%	120%	25%	72%	208%	132%	106%
	2022-23	45%	135%	122%	124%	126%	146%	79%	86%	112%
	2023-24	147%	67%	52%	51%	223%	269%	51%	91%	86%

(3) Drought Monitor

The U.S. Drought Monitor map for the West indicates a decrease of overall drought conditions from 47.4% last year in late May to 39.7% this year in any of the four drought categories. Wyoming's drought saw a similar reduction, from 54.2% of the state in a drought category last year compared to 41.5% this year for late May, with drought primarily in eastern and northwestern Wyoming.

Figure 3a. U.S. Drought Monitor – West.



<https://droughtmonitor.unl.edu/CurrentMap/StateDroughtMonitor.aspx?West>

**U.S. Drought Monitor
Wyoming**

May 28, 2024
(Released Thursday, May. 30, 2024)
Valid 8 a.m. EDT

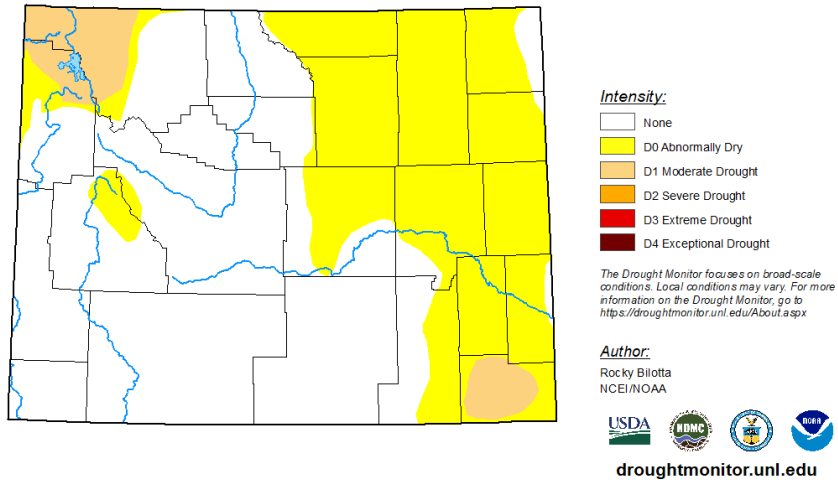


Figure 3b. U.S. Drought Monitor – Wyoming.
<https://droughtmonitor.unl.edu/CurrentMap/StateDroughtMonitor.aspx?WY>.

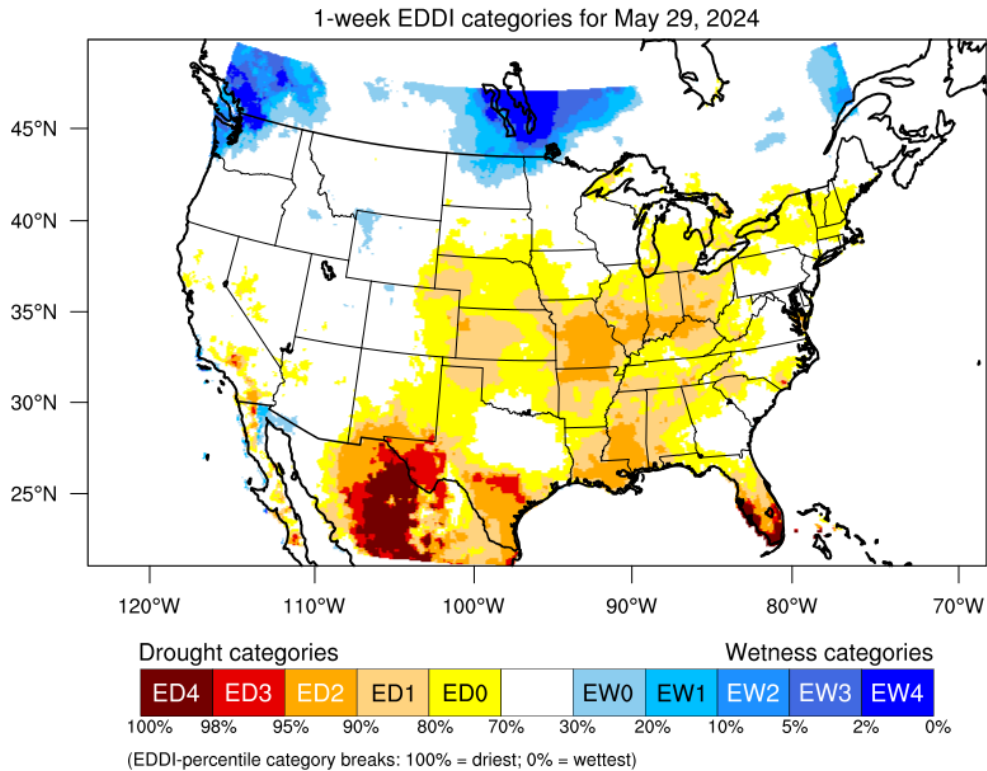
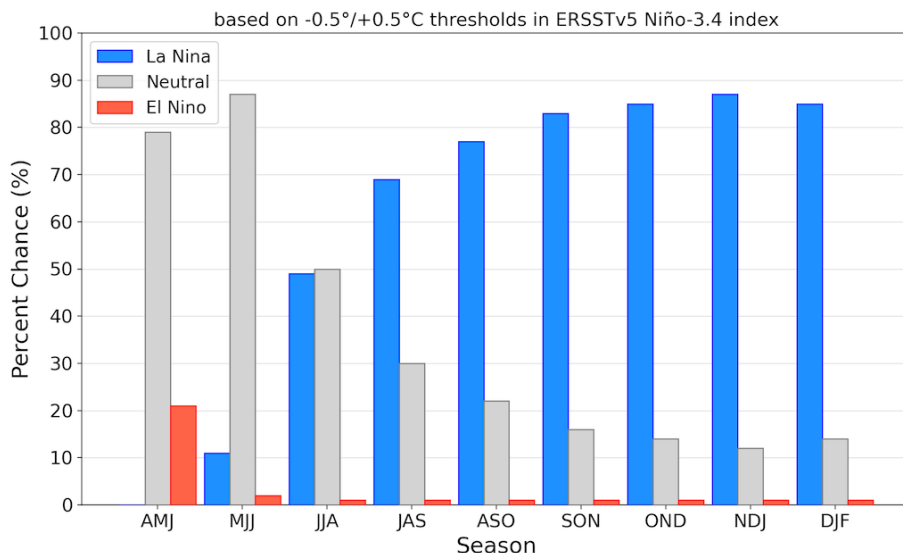


Figure 3d. Evaporative Demand Drought Index. The EDDI can reflect recent moisture trends and may forecast drought transitions. The most recent 1-week EDDI indicates that normal conditions with limited areas in northwest Wyoming in low wetness category.

(4) El Niño / La Niña / ENSO – Southern Oscillation

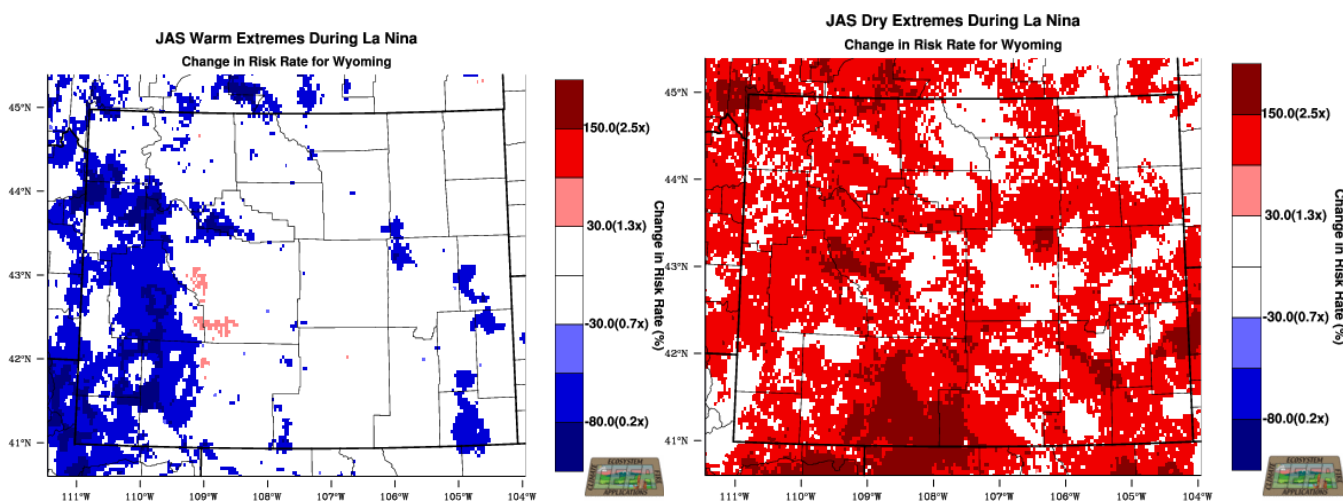
The mid-month ENSO Forecasts from [IRI – International Research Institute for Climate and Society](https://www.iri.columbia.edu/) tracks *El Niño* (warm) and *La Niña* (cool) events in the tropical Pacific. This summer, the strong *El Niño* conditions of the past year are forecast to transition to *La Niña* conditions.

Official NOAA CPC ENSO Probabilities (issued May 2024)



Synopsis: As of mid-May 2024, waning El Niño conditions persist in the central-eastern equatorial Pacific (between 160E to 160W), with important oceanic and atmospheric indicators aligning with ENSO-neutral conditions. All models in the IRI ENSO prediction plume forecast ENSO-neutral for May-Jul 2024, which then persists during boreal summer seasons of Jun-Aug, and Jul-Sep 2024. La Niña becomes the most probable category in Aug-Oct 2024 through Jan-Mar 2025.

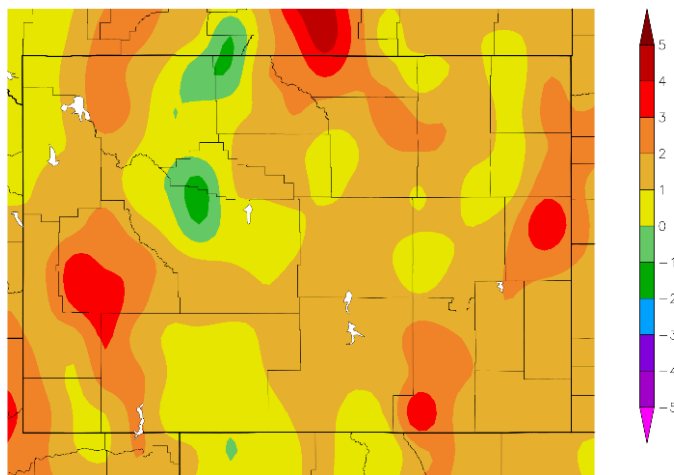
The Desert Research Institute has developed a climate-based analysis that provides down-sampled [ENSO Climate Risk Maps](#). If La Niña conditions develop for the July-August-September period, the DRI analyses indicate reduced risk of warm extremes and increased risk of dry extremes in the TIDC area, though risks are variable within the down-sampled area. Prior fire seasons in which a similar ENSO transition occurred have been noted for an extended fire season and more acres burned.



(5) Long-term Temperature and Precipitation Trends and Outlook

The TIDC area was warmer overall from fall into early summer. (Figure 5a).

Departure from Normal Temperature (F)
10/1/2023 – 5/29/2024



Generated 5/30/2024 at HPRCC using provisional data.

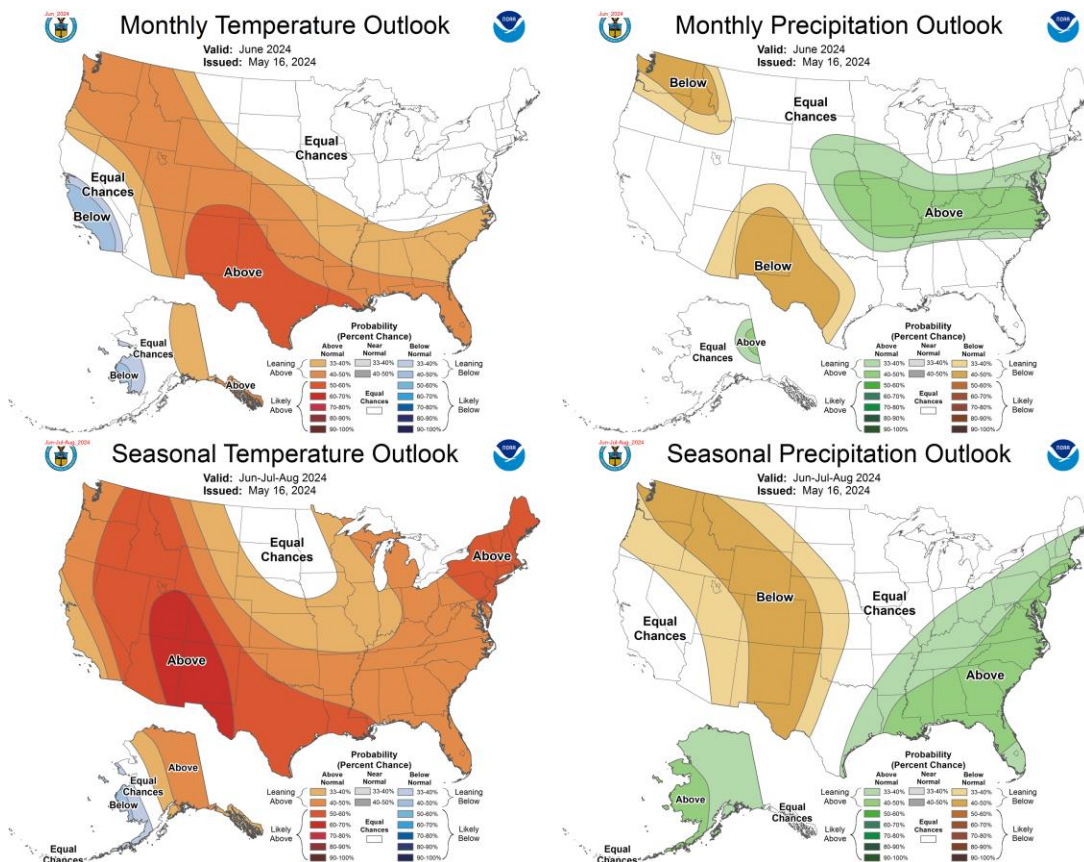
NOAA Regional Climate Centers

Figure 5a (above). Departure from Normal Temperature, Wyoming, for October 1, 2023 to May 30, 2024 (Water Year-to-Date), notes the warmer winter than normal winter in the TIDC area.

<https://hprcc.unl.edu/products/maps/acs/hprcc/wy/WaterTDepthHPRCC-WY.png>

Figure 5b (below): 30-day and 90-day Outlooks for Temperature / Precipitation (June and June-August).

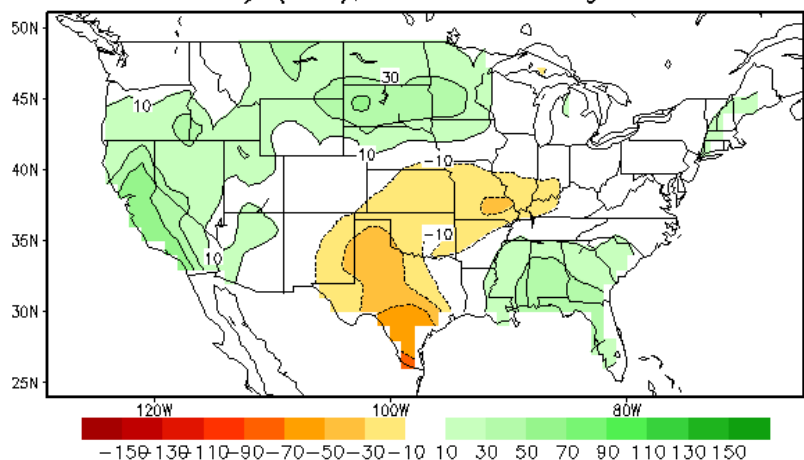
https://www.cpc.ncep.noaa.gov/products/predictions/multi_season/13_seasonal_outlooks/color/page2.qif



The 30- and 90-day temperature and precipitation outlooks (Figure 5b, above) indicate a probability for a warmer June and June-August. The precipitation outlook shows moisture probability likely to be normal for June with below-normal for June-July-August. This trend is supported by soil moisture outlooks (figure 5c), with an outlook for normal soil moisture in much of Wyoming by the end of August.

A warmer/drier summer has been observed in prior transition years from El Nino to La Nina conditions. This may support a normal start of wildfire activity. Winter moisture may support an increase in fine fuels such as grasses and forbs, and these and other fuels may become more available, with more active fire residency and growth, as we move into warmer/drier conditions in mid- to late-summer.

Lagged Averaged Soil Moisture Outlook for End of JUN2024
units: anomaly (mm), SM data ending at 20240603



Lagged Averaged Soil Moisture Outlook for End of AUG2024
units:anomaly (mm), SM data ending at 20240603

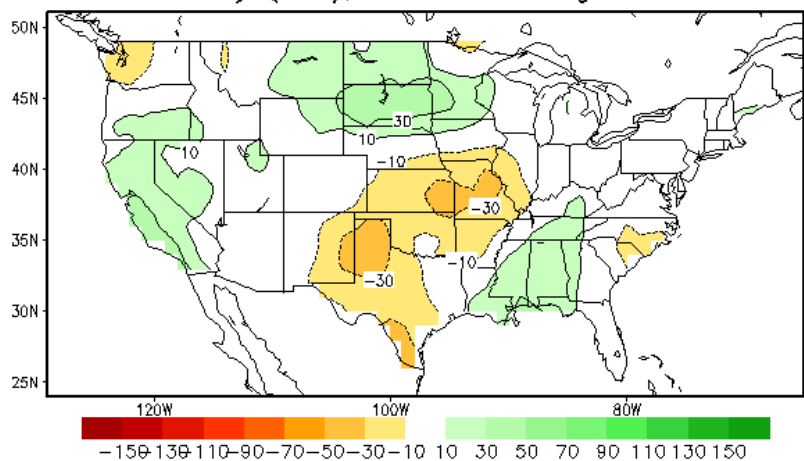


Figure 5c: Soil Moisture Outlook for end of June and August 2024.

https://www.cpc.ncep.noaa.gov/products/Soilmst_Monitoring/US/Outlook/CAS/SM.shtml

NATIONAL AND GEOGRAPHIC AREA OUTLOOKS

The Teton Dispatch Center is in the Great Basin Geographic Area. Fire seasons in our zone also track with similar conditions in adjacent areas within the Rocky Mountain and Northern Rockies geographic areas, which converge within the Greater Yellowstone Area (GYA) and share fire activity trends.

The season outlooks excerpted below support normal fire activity in the Teton Interagency Dispatch area, with normal potential for adjacent areas. Within the Great Basin Geographic Area, normal fire activity is expected except for above-normal fire potential for July and August in western Idaho and northern Nevada. The Southwest monsoon, which can affect western Wyoming summer precipitation and thunderstorm activity, may be delayed and weaker than average this summer.

Excerpts from the [National Wildland Significant Fire Potential Outlook](#) (June 1, 2024, NICC Predictive Services)

National – Fire Activity Outlook

Fire activity gradually increased across the western geographic areas in the US in May, while fire activity continued at low levels in the Southern Area, primarily in Florida and Texas. The National Preparedness Level was increased to two (on a scale of 1-5) on May 21. The Southwest observed the most significant increase in activity during May, with their Preparedness Level increasing to three May 24, while the Southern Area remains at Preparedness Level two. While most fires that emerged were of short-duration, two large fires in the Southwest, the Blue 2 and Indios Fires, continue to be active and have been burning for more than ten days. Year-to-date annual acres burned for the US is well above the 10-year average at 183% of normal, primarily due to late February's fire outbreak in the panhandles of Texas and Oklahoma that burned over a million acres, but the national year-to-date tally of wildfires remains below average, near 75%.

Weather and Climate Outlooks

El Niño has weakened in the equatorial Pacific Ocean, with a return to neutral El Niño-Southern Oscillation (ENSO) conditions. Sea surface temperature (SST) anomalies in the central equatorial Pacific are slightly above average, while cooler than average SST anomalies are found off the South American Coast. A rapid transition to La Niña continued to be forecast over the summer, with the Climate Prediction Center forecasting a 69% chance of La Niña developing in the July through September period. The spring predictability barrier is still an issue, although less so than last month. Other climate oscillations like the Pacific Decadal Oscillation and Quasi-Biennial Oscillation will also influence weather and climate during the outlook period, but the transition from La Niña conditions will be the main driver.

Great Basin

Due to lack of drought in higher elevations and near to above normal snowpack, fuel moisture in the timber should remain elevated until later in the summer, which would be normal. The only exception will be central Idaho, where the snowpack was below normal most of the season. These areas are expected to see increased fire potential by late July or August.

Long range weather forecasts are still showing periodic storms through early June in central Idaho, which will delay curing. Warmer and drier weather is expected to materialize across Idaho later in June, and curing of fuels should accelerate through late June and July. With cooling and troughs still possible along the West Coast, this will increase the likelihood of windy periods for the Great Basin heading into the summer. This will also increase the potential for dry lightning with upper-level features embedded in the southwest flow moving across the Great Basin and limited monsoon moisture. Most of the fire potential concerns will be in the lower elevations, however the higher elevations of central Idaho may be a concern later this summer with the below normal snowpack followed by warmer and drier weather forecast later in the season. Therefore, east-central Idaho was increased to above normal fire potential for August and September. This threat could be expanded as this period nears, but confidence is still moderate at this time.

Excerpts of Great Basin Coordination Center - [Seasonal Outlook for June-September 2024](#)

Fire danger is low in the Great Basin, with live fuel moisture high. Prescribed burning is winding down across the Great Basin. Hot and dry weather along with winds will likely dominate in June and should accelerate the curing of the fine fuels and shrubs. Drier weather is forecast through the monsoon season across much of the Great Basin, which should allow fire potential to peak in July and August, with above normal potential possibly lingering into September. Due to the forecast hot June, drier than normal monsoon and pockets of continuous fine fuel growth in parts of the south, above normal fire potential is expected over parts of southern Nevada into southwest Utah.

CURRENT FIRE ACTIVITY: Teton Interagency Dispatch Center

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

Early season wildland fire activity is typically limited to a period after snowmelt and prior to green-up. The early fire season saw minimal fire activity, limited to one human-ignited fire (from a downed power line). In spring 2024, four prescribed fires treated 260 acres.

Table 3: Year-to-Date (to May 31, 2024) Fire Activity (Unplanned and Planned Ignitions).

TETON INTERAGENCY FIRE MANAGEMENT AREA TOTALS	Human Fires	Human Acres	Natural Fires	Natural Acres	RX Fires	RX Acres	Abandoned Campfires
	1	3	0	0	4	260	8

Selected Sources

- Precipitation Tracking: <https://water.weather.gov/precip/>
- Precipitation Tracking focused on [Snotel sites, Wyoming](#) (beta site)
- 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 Significant Wildland Fire Potential Outlook \(nifc.gov\)](#)” (first of each month during fire season, NIFC Predictive Services).
- 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/>.

* * *

For further information, contact Teton Interagency Fire

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