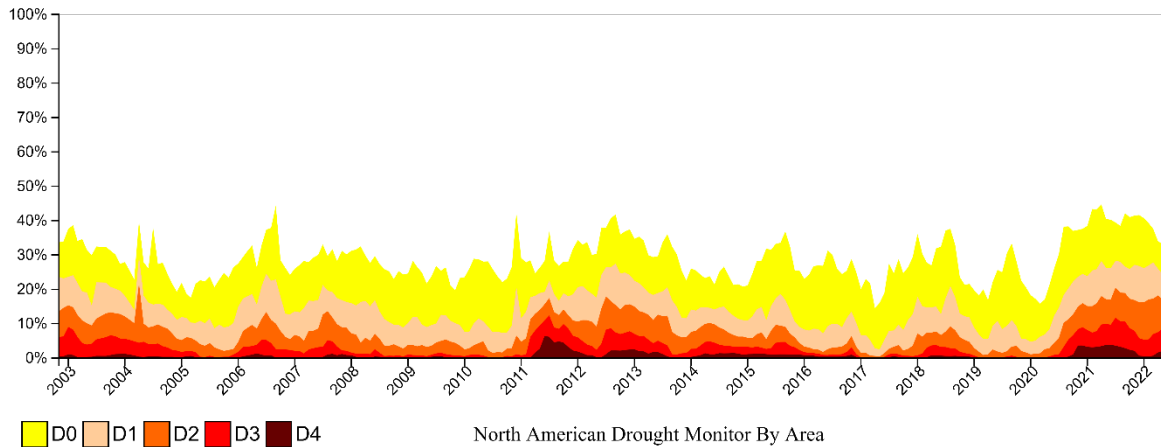
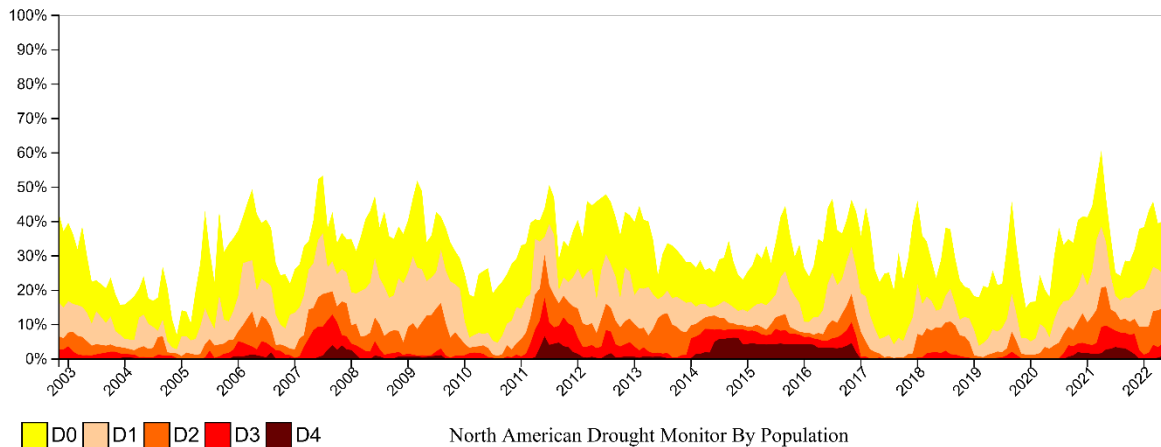


North American Drought Monitor – May 2022

At the end of May 2022, moderate to exceptional drought (D1-D4) affected 24.4% of the area and 24.9% of the population of North America. The percent area value was 1.6% less than the value for the end of April 2022. The percent population value was 1.2% less than the value for the end of April. At the end of May, 51.8% of the Columbia River Basin, 89.6% of the Rio Grande/Bravo River Basin, and 59.1% of the Great Plains were in moderate to exceptional drought, and 7.6% of the Great Lakes Basin was abnormally dry (D0). The North American Great Plains extends across the United States and into adjacent parts of northeast Mexico and the southern Prairies of Canada. The percent area value for the Rio Grande/Bravo River and Great Lakes basins increased compared to the end of April. The percent area values for the Columbia River basin and Great Plains decreased compared to the end of April.



Percent area of North America in drought, November 2002-May 2022.



Percent of the population of North America in drought, November 2002-May 2022.

CANADA:

National Overview

During May, well above-normal precipitation continued throughout Coastal and central British Columbia, the eastern Prairies, northwestern Ontario as well as southern portions of both the Yukon and the Northwest Territories. Overland flooding and excess moisture conditions also continued in southern Manitoba and northwestern Ontario. Wet conditions throughout the eastern Prairies alleviated all moisture concerns that had developed from the 2021 drought. The driest area of the country continued to be southern Alberta and southwestern Saskatchewan, where Extreme Drought (D3) expanded throughout substantial portions of the region. Short and long-term precipitation deficits resulted in significant impacts including water supply issues, low stream flow, poor vegetative production and poor germination of agricultural crops. Remaining areas of the country experienced minimal impacts from drought or excess moisture this month.

At the end of the month, ten percent of the country was classified as Abnormally Dry (D0) or in Moderate to Extreme Drought (D1 to D3), including thirty-two percent of the country's agricultural landscape. There was no Exceptional Drought (D4) reported this month.

Pacific Region (BC)

The southern Interior of B.C. remained dry while coastal and central areas of the province as well as the Peace region received significant monthly precipitation. Vancouver Island and the Lower Mainland received Moderately High to Very High precipitation this month, while the Peace Region received Very High to Exceptionally High moisture. Much of this moisture was significant enough to stave off any development of drought or Abnormally Dry (D0) conditions. In addition to this moisture, May temperatures were slightly cooler than normal across much of the province, barring a pocket west of Kamloops that reported temperatures more than 5 degrees above normal.

The Okanagan region in the southern Interior continued to miss significant precipitation events. This dry trend extended from the spring, where 60 to 85 percent of normal moisture fell. Areas across the Rockies also reported low spring moisture; only 40 to 60 percent of normal precipitation in the last 3 months. In addition to this short-term dryness, longer-term impacts persisted throughout the Interior. Pasture and hay quality remained a concern with limited hay available; this led to some producers to worry about further culling their herd. Given both short and longer-term moisture deficits, Moderate Drought (D1) remained across the Okanagan. However, due to the cooler temperatures and minimal deficits, there was no degradation of conditions.

At the end of the month, ten percent of the Pacific Region was considered Abnormally Dry (D0) or in Moderate Drought (D1), including thirty-five percent of the region's agricultural landscape.

Prairie Region (AB, SK, MB)

Both extremely wet and dry conditions persisted into May across the Prairie Region: the eastern Prairies and the Peace region in northwestern Alberta continued to receive well above-normal precipitation, while southwestern portions of the region received very limited precipitation this month. Temperatures remained slightly cooler than normal, lessening the potential evapotranspiration across the region.

Significant impacts emerged throughout the southwestern Prairies due to the severe lack of moisture. Exceptional dryness developed around Lethbridge this month, while 3-month precipitation was reported as Exceptionally Dry around nearly all of southwestern Alberta, stretching from Cardston to Banff. This roughly translated to less than 40 percent of normal moisture since March, while surrounding areas received between 40 to 60 percent of normal moisture in the same time frame. Longer-term moisture deficits also persisted in this same area, as much of southern Alberta only received 40 to 60 percent of normal precipitation in the last year. Short to very short surface soil moisture conditions were reported across southern Alberta leading to several impacts including limited available surface water or runoff leading to pumping water and pasture delays, dugouts drying up and streamflows reported at very low levels this spring. There were also reports of crops not getting planted at all given the lack of moisture. As a result of the significant moisture shortage and concerning impacts felt across the area, Extreme Drought (D3) was expanded across southern Alberta, further west and south towards the Rockies and the U.S. border. A pocket of D3 was also added around Canmore and Banff and another D3 pocket expanded from Airdrie towards Red Deer. This area will be monitored for potential development of Exceptional Drought (D4) in the coming months, especially if dry conditions persist.

Much of southwestern Saskatchewan continued to report drought conditions, but mostly due to longer-term impacts; short-term precipitation appeared to improve conditions slightly this month. Rural Municipalities in the extreme southwestern corner of the province reported devastated pastures as well as concerns for further cattle reductions due to a lack of available feed. However, remaining areas of southwestern Saskatchewan received near- to slightly above-normal moisture this month, which helped to improve drought conditions slightly. Extreme Drought (D3) was removed at Swift Current and Severe Drought (D2) was also reduced. Nonetheless, these areas remain vulnerable to hay land and pasture condition degradation due to long-term moisture deficits – without significant moisture in the next two weeks, these areas could be under severe stress.

Northern Saskatchewan recorded a fairly dry May with both Key Lake and La Ronge coming in with stats in the top 10 driest recorded. A pocket of Abnormally Dry (D0) conditions was added to this region given the shorter-term moisture deficits. However, despite this and an increased fire risk, longer-term moisture conditions remained adequate due to above-normal precipitation from the previous winter season.

Eastern parts of the Prairies experienced significant moisture in the last few months, including the month of May. Much of southern Manitoba felt the brunt of this moisture, but southeastern Saskatchewan was significantly impacted this month as well. Nearly the entire eastern half of the Prairies received Extremely High to Exceptionally High precipitation in

the last three months – roughly 150 to more than 200 percent of normal moisture since March, especially across southern Manitoba. However, this moisture shifted slightly more into eastern Saskatchewan, where much of the heavier precipitation fell this month. Some areas along the border between Saskatchewan and Manitoba received between 65 to 85 mm more precipitation than normal this month, and greater than 85 mm above normal in parts of southern Manitoba. Yorkton, Saskatchewan reported its wettest May ever while Estevan, Saskatchewan had its 6th wettest May on record. As a result of this considerable moisture, there were reports of cattle showing signs of feet ailments from standing in deep mud, as well as limited or no access to fields for seeding. Additional impacts include soil erosion from the rapid, heavy run-off, overflowing dugouts and sloughs as well as challenges to harvesting wild hay if wet conditions persist.

At the end of the month, nineteen percent of the Prairie Region was classified as Abnormally Dry (D0) or in Moderate to Extreme Drought (D1 to D3), including forty-four percent of the region's agricultural landscape.

Central Canada (ON, QC)

Conditions across Central Canada in May remained variable, but with little concern for drought development. Northern areas of the region reported more moisture this month while southern Ontario received slightly less than normal moisture. Southern Quebec received near- to above-normal moisture in May. Much of southcentral Canada also experienced a significant wind and storm event this month, leading to infrastructure damage but limited impacts reported to agriculture. Nearly the entire region also experienced temperatures above normal this month, upwards of 2 to 3 degrees above normal across southern Quebec and central Ontario.

Although long-term moisture is not an issue in southern Ontario, pockets of shorter-term moisture deficits emerged, specifically around Toronto and northward towards Bracebridge. These areas reported Moderately Low precipitation in the last 3 months, equating to roughly 60 to 85 percent of normal moisture; this led to the emergence of two Abnormally Dry (D0) pockets in the area. Extreme southern Ontario was omitted from any drought or Abnormally Dry (D0) designation due to reports of optimal to surplus moisture.

Most other portions of the Central region reported near- to above-normal moisture this month: northwestern Ontario as well as much of Quebec reported 115 to more than 200 percent of normal precipitation. Streamflow was also reported at Well Above Normal to Record High levels in northwestern Ontario after several months of significant rain fell.

At the end of the month, only one percent of the Central Region was classified as Abnormally Dry (D0), including seven percent of the region's agricultural landscape. There was no drought reported in the region this month.

Atlantic Canada (NS, NL, NB, PEI)

After months of significant moisture across Atlantic Canada, southern New Brunswick and much of Nova Scotia reported Moderately Low to Very Low precipitation this month. Many

of these areas received less than 40 percent of the average May precipitation, approximately 35 mm instead of the usual 95 mm. This moisture deficit also carried into the 60-day precipitation amounts, but less so in the 90-day products. As such, a pocket of Abnormally Dry (D0) conditions emerged around the Minas Basin, north of Halifax, Nova Scotia.

Precipitation across remaining areas of the region reported as near- to slightly above- or below-normal this month. Portions of northern New Brunswick recorded 115 to 150 percent of normal moisture throughout May, while parts of Newfoundland received between 40 to 85 percent of normal precipitation. No drought or Abnormally Dry (D0) pockets were placed in these areas this month, but parts of Newfoundland will be monitored if dry conditions persist.

At the end of the month, only one percent of the Atlantic Region was classified as Abnormally Dry (D0), including seven percent of the region's agricultural landscape. There was no drought reported in the region this month.

Northern Canada (YK, NWT)

Abnormally Dry (D0) conditions expanded throughout much of the Northwest Territories and northern parts of the Yukon Territory, while southern areas continued to receive adequate precipitation. Moderately Low to Very Low precipitation amounts were reported in the last two to three months around Great Bear Lake and towards Fort Good Hope, NWT. Old Crow, Yukon also reported only 26 percent of normal moisture this month. As such, Abnormally Dry (D0) areas in both the Northwest Territories and the Yukon were expanded to reflect these moisture deficits.

Southern portions of the region remained drought-free as stations reported Moderately High to Exceptionally High precipitation in May.

Fourteen percent of the Northern Region was classified as Abnormally Dry (D0).

UNITED STATES:

National Overview

The upper-level circulation during May 2022 was very active with several shortwave troughs and closed lows moving through a strong westerly jet stream flow. The troughs frequently lingered over the western contiguous U.S. (CONUS), especially the Pacific Northwest, before moving eastward. This resulted in an anomalous long-wave trough pattern in the monthly mean flow over the northwestern CONUS and southwestern Canada, which was associated with cooler-than-normal monthly temperatures over the northwestern quarter of the CONUS. The short-wave troughs and closed lows moved across the eastern U.S. throughout the month, but they moved through a long-wave ridge over the eastern CONUS which was evident in the monthly upper-level circulation pattern. Warmer-than-normal monthly temperatures over the eastern CONUS were associated with the ridging. At times the eastern ridge extended westward into the southern Plains, while at other times during the

month a ridge over the Southwest extended eastward into the southern Plains. The result was a period of unusually warm temperatures over New Mexico and especially Texas. Both Abilene and San Angelo, Texas, reported a record number of days in May 2022 with the maximum temperature 100 degrees F (37.8 degrees C) or higher. The migrating troughs and closed lows and their associated surface lows and fronts brought above-normal precipitation to parts of the Pacific Northwest, northern Rockies, and northern Plains to Upper Mississippi Valley. They also tapped Gulf of Mexico moisture to spread above-normal precipitation over parts of the central Plains, Gulf of Mexico Coast, Ohio Valley, and Appalachians to Mid-Atlantic coast. Precipitation in the east was enhanced when an upper-level low over the Atlantic Ocean retrograded and moved westward over the southeastern CONUS at mid-month. The effects of a continuing La Niña and upper-level ridging kept the Southwest to southern Plains drier than normal for the month with widespread record dryness. The eastern ridge helped keep the Northeast and parts of the Southeast to Mid-Mississippi Valley drier than normal, while drier-than-normal weather dominated much of the western High Plains and parts of the Great Lakes.

According to statistics from the NOAA National Centers for Environmental Information, the average temperature for the CONUS during May was 61.9 degrees F (16.6 C), 1.7 F (0.9 C) above the 20th century average and ranking 22nd warmest in the 128-year period of record. The May precipitation total for the CONUS was 3.17 inches (80.5 mm), 0.26 inch (6.6 mm) above average and ranking 39th wettest. Statewide precipitation ranks for May included 5th driest May for Arizona and 12th driest May for New Mexico. Persistent dryness for the last several months gave California the driest January-May; Arizona, Nevada, and Utah the 3rd driest January-May; New Mexico the 7th driest January-May; Texas the 8th driest January-May; and Colorado the 13th driest January-May.

With above-normal precipitation during May falling over many drought areas, drought or abnormal dryness contracted or was reduced in intensity in parts of the Pacific Northwest, northern Rockies, Great Plains, Mississippi Valley, Gulf of Mexico coast, northern New England, Mid-Atlantic states, and Southeast, as well as Hawaii. Those areas missing this month's beneficial rains saw expansion or intensification of drought or abnormal dryness and included the Southwest to parts of the southern and central Plains, plus other parts of the Tennessee and Ohio valleys, the coastal Carolinas, and southern New England, as well as Puerto Rico and Alaska. Drought contraction exceeded expansion with the U.S. Drought Monitor (USDM)-based national moderate-to-exceptional drought footprint across the CONUS decreasing from 53.8 percent at the end of April to 49.3 percent at the end of May (from 45.0 percent to 41.4 percent for the 50 States and Puerto Rico). But the most intense categories of drought (extreme to exceptional) increased in area from 18.5 percent to 20.1 percent for the CONUS (from 15.5 percent to 16.8 percent for the 50 States and Puerto Rico). According to USDM statistics, 40 percent or more of the CONUS has been in moderate drought or worse for the last 89 weeks. This is a record in the 22-year USDM history. The previous record was 68 consecutive weeks (June 19, 2012 to October 1, 2013).

Drought impacts included low streamflow, low groundwater, and dry soils, especially in the West, Great Plains, and Atlantic coast. Many reservoir levels were low and falling in the West, with some at record low levels. Large wildfires burned throughout the month in the Southwest and southern Plains, and developed at times in parts of the East, Far West, central

Plains, Great Lakes, and Gulf of Mexico coast. The drought ravaged vegetation in the most severely-impacted areas, with 40% of the nation's winter wheat crop and 46% of the nation's pasture and rangeland in poor to very poor condition at the end of May, based on U.S. Department of Agriculture statistics.

Northeast: In the Northeast, moderate drought continued in northern Maine and developed in southern New England, with the regional drought area increasing from 1.4 percent at the end of April to 2.7 percent at the end of May. A few Massachusetts communities implemented or enhanced water restrictions due to dry conditions. There were several brushfires in New England including a fire in New Hampshire's White Mountains that took a week to contain and consumed 250 acres.

Southeast: In the Southeast, drought conditions improved for parts of Virginia and Florida but intensified for parts of South Carolina and Georgia in May. By the end of the month, only pockets of abnormally dry conditions (D0) remained in Virginia. Drought conditions stayed the same throughout the month in North Carolina, with a pocket of severe drought (D2) along the eastern North Carolina coast ringed by moderate drought (D1) and abnormally dry conditions (D0). Moderate drought (D1) and abnormally dry (D0) conditions stretch from eastern South Carolina down into southern Georgia, with an embedded pocket of severe drought (D2) developing by the end of the month. In southern Florida, drought conditions improved with a pocket of moderate drought (D1) and abnormally dry conditions (D0). The total moderate to severe drought area in the Southeast shrank from 16.1 percent at the end of April to 10.3 percent at the end of May, but the severe drought area increased from 2.6 percent to 3.1 percent.

South: May 2022 was the fourth warmest May ever observed across the Southern region, although drought conditions generally improved across the region. As with the nation as a whole, the regional area in drought dropped below 50%. Severe drought coverage declined from 46% to 40%, extreme drought declined from 32% to 25%, and exceptional drought declined from 11% to 9%, despite peaking at 16% on May 17. Arkansas and Mississippi were free of drought, and Tennessee had drought appear for just one week. Louisiana showed slight improvement to 45% drought coverage and Texas showed slight improvement to 78% drought coverage. The largest change was in Oklahoma, where drought coverage decreased from 65% of the state to 43% of the state and extreme drought declined from 39% to 17%. Primary impacts continue to be agricultural (farming and ranching), but water supply impacts will intensify over the summer if drought persists.

Midwest: May precipitation was above normal for the Midwest. Based on preliminary data, Minnesota had the 7th wettest May and the 5th wettest spring since 1895. Ohio had the 15th wettest May since 1895. Regionwide there were 355 daily high precipitation records broken or tied for the month. In western Iowa, moderate to severe drought continues to linger while the drought area in the Midwest continues to shrink — from 1.5 percent at the end of April to 0.8 percent at the end of May.

High Plains: Across the region, drought conditions improved in May as a result of beneficial precipitation. The High Plains region observed a 14 percent decrease in severe to exceptional (D2-D4) drought, there was also a 10 percent increase in areas that are not in any drought or

abnormally dry conditions. After back-to-back months of well above-normal precipitation, North Dakota was now drought-free. At the end of May, only 12 percent of the state was in abnormally dry (D0) conditions. Conditions in South Dakota and Wyoming also improved significantly, with extreme drought (D3) and D2 reduced by 30 and 36 percent, respectively. While eastern Kansas was nearly free of drought, the western part of the state observed a 12 percent increase in D3 and D4 conditions. Colorado also recorded an 11 percent increase in D3-D4 conditions. Elsewhere in the region, other improvements and degradation were observed.

West: Moderate (D1) to severe (D2) drought extended across the West and into the adjacent Great Plains, with a large area of extreme (D3) and exceptional (D4) drought. May precipitation was above normal across much of the Pacific Northwest but below normal across the southern half of the West and in parts of Montana, with large parts of the Southwest (from southern California to New Mexico) experiencing a record dry May. In spite of the May precipitation, much of the West continued to be drier than normal at longer time scales. The percent area of the West experiencing moderate to exceptional drought, according to USDM statistics, decreased from 91.3 percent at the end of April to 86.8 percent at the end of May with 38 percent of the West in extreme (D3) or exceptional (D4) drought. Reductions in drought severity and spatial extent were found in Oregon, Washington, Idaho, and southern Montana due in part to the cool and wet conditions during May. Most of the Southwest was already in drought at the start of May and the spatial extent of the area covered by any drought did not change; however, drought severity increased in California, Nevada, Utah, Arizona, and New Mexico.

Alaska, Hawaii, and Puerto Rico: May was drier than normal across most of Alaska. The dryness was especially severe in the southwest and south coastal areas, with parts of the Aleutians having the driest May on record. Moderate drought (D1) was introduced into Southcentral Alaska (in the Cook Inlet region) for the first time since August, 2021, while abnormal dryness expanded in southern portions of the state, as seen on the May 31st USDM map. The moderate drought area was about 1 percent of the state, but the area of abnormal dryness expanded to about 16 percent of Alaska. Meanwhile in Hawaii, May was wetter than normal across parts of the Hawaiian Islands, especially the Big Island, and drier than normal across other parts. Monthly streamflow was mostly near normal except for some below-normal streams on Oahu. Vegetation was stressed on parts of all of the main islands, but especially on Molokai, Maui, and the Big Island (based on satellite analyses of stressed vegetation, drought risk, and VHI). Drought or abnormal dryness expanded on Molokai and Maui but contracted on the other islands. The overall drought footprint shrank from 47.1 percent of Hawaii last month to 40.4 percent on the May 31st USDM map. In Puerto Rico, May was drier than normal. On May 18th, a heat advisory was issued for parts of Puerto Rico, which was only the third time one was issued since 2006. Puerto Rico saw moderate drought increase from 3.4 percent at the end of April to 17.9 percent at the end of May.

MEXICO:

National Overview

The month of May marks the beginning of the tropical cyclone season in the Pacific basin, as well as the rainy season onset from central to southern Mexico. Cold front season ends in May, and the country begins to be affected by cyclones and tropical waves, which will provide precipitation during the following months. The May 2022 precipitation pattern showed above-average conditions in southern and the Yucatan Peninsula, as well as in some specific regions of the northeast. In contrast, the rest of the country was dominated by drier than normal conditions, mainly along the Gulf of Mexico coast.

A large part of May was influenced by high pressure systems at mid-levels, which promoted a clear and warm weather; however, during the second half of the month, the passage of a cold front and their interaction with a low pressure left precipitation in the northeast and central region. Towards the end of the month, Hurricane Agatha (category 2) brought heavy rains in southern areas of the country and its remnants reached the Yucatan Peninsula.

In Oaxaca, surpluses throughout the month reached values greater than 80 mm and, in some cases, greater than 160 mm. On the coast of the Gulf of Mexico, monthly rainfall deficits were around 40 mm and were the most intense reported; in the rest of the country, deficits were less than 10 mm. Nationally, precipitation in May 2022 was 30.3 mm, 24.3% below average, making it the 16th driest May on record.

The national mean temperature was 25.7 °C, which is 1.6 °C above May's average, placing it as the warmest May on record. Warm conditions dominated much of the country, mainly in the north where monthly temperatures were more than 2.0 °C above average.

According to the National Forestry Commission (CONAFOR), during May 2022, around 1,380 fires were reported, which have affected approximately 182,747 hectares. As of June 2, 5,586 forest fires have been reported, which have affected more than 400,000 hectares.

As of May 31, 2022, the area affected by moderate to exceptional drought (D1 to D4) was 56.17% at the national level, which represents an increase of 0.98% with respect to the end of last April. During the month of May, the northeastern region had moderate to extreme drought, and the northern region presented a decrease in abnormally dry conditions.

Northwest or North Pacific (Baja California, Baja California Sur, Sonora, Sinaloa and Nayarit): In the northwest region, rainfall was similar to normal, with drier conditions only in eastern Sonora and Nayarit. It was the driest May recorded in Baja California and Sonora.

Most of Baja California recorded above-average temperatures; in contrast, the rest of the states in the region had near normal conditions. According to records, Baja California and Baja California Sur placed May 2022 among the top 15 warmest May on record, ranking eighth and twelfth, respectively.

These conditions together caused an increase of 17.3% in the category of extreme drought (D3), a category that has not been recorded in the region since August 2021. The Northwest region had a percentage of area affected by moderate to extreme drought (D1 to D3) of 92.7%, the highest value of all regions.

Northern (Chihuahua, Coahuila, Durango, Zacatecas and San Luis Potosí): Dry conditions dominated in all states, only in some local areas of Coahuila experienced precipitation surplus of around 10 mm. In contrast, the most intense precipitation deficits were concentrated in San Luis Potosí, where deficits reached values greater than 40 mm. Of the states that make up the region, Chihuahua, San Luis Potosí and Zacatecas placed May 2022 among the top 10 driest May on record, ranking 6th, 1st and 8th, respectively.

Above-average temperatures were concentrated in this region, with temperature anomalies reaching values greater than 2.0 °C above average in Chihuahua, Coahuila, Durango, Zacatecas and San Luis Potosi. Therefore, all the states that make up the region ranked May 2022 as the first or second warmest May on record. It was the warmest May for Coahuila, Durango and Zacatecas and the second warmest for Chihuahua and San Luis Potosi.

The northern region recorded a 6.8% increase in moderate to extreme drought (D1-D3), and the exceptional drought (D4) was eliminated. At the end of May 2022, the northern region recorded moderate to extreme drought (D1 to D3) in 79% of its area. The second highest value of all regions.

Northeast (Nuevo Leon and Tamaulipas): The northeast was dominated mainly by drier than normal conditions, where precipitation deficits reached magnitudes greater than 40 mm. Only some regions in northern Tamaulipas showed precipitation surpluses. For both states, May 2022 ranked among the 15 driest on record, 13th driest May for Nuevo León and the 14th for Tamaulipas.

Like most of the country, the northeastern region had mostly warmer than normal conditions, with average temperatures more than 2.0 °C above normal. Both states recorded their warmest May on record. Despite the drier and warmer conditions, northern areas of the northeast region showed a decrease in extreme to exceptional drought (D3 - D4) in 10.4% of its area, however, there was an increase of 8.5% in the moderate to severe drought (D1 to D2). The northeast has a total of 47.2% of area affected by moderate to severe drought.

The area had a water supply crisis because the main water sources are at their lowest levels (El Cuchillo and Cerro Prieto Reservoirs). The most affected is the Monterrey Metropolitan Area (ZMM), where various restrictions on domestic water use have been applied since the emergency declaration in early February. No change in these conditions is expected until the onset of the rainy season in the region.

Central West (Aguascalientes, Jalisco, Guanajuato, Colima and Michoacán): In the West-Central region, above-average rainfall was recorded in specific areas of Jalisco and Aguascalientes. However, drier than normal conditions were recorded in most of the region, with precipitation deficits of at least 20 mm, and in the case of Michoacán and Guanajuato

of 40 mm. As a result, both states ranked among the top ten driest May. It was the tenth driest May for Michoacán and the fifth driest for Guanajuato.

In terms of temperature, most states were warmer than normal, with temperature anomalies of at least 1.0 °C above average. The anomalously warm conditions meant that, for Aguascalientes, Guanajuato, Jalisco and Michoacan, reached their second, sixth, fourth and eighth warmest May, respectively.

The lack of precipitation, as well as warmer than normal conditions, caused the central-western region to see an increase of 0.1% in the moderate drought (D1), as well as an increase of 9.3% in abnormally dry conditions (D0); however, it also presented a decrease of 4.3% in the severe drought category (D2). Compared to the previous month, the region had a 4.2% decrease in the area affected by moderate to severe drought (D1 to D2), with a total area of 48.9% affected by drought in these categories (D1 to D2).

Central-South (Querétaro, Hidalgo, State of Mexico, Tlaxcala, Puebla, Morelos and Mexico City): Dry conditions prevailed in central-south, with deficits of at least 40 mm. Consequently, of the seven states of the region, five were among the top 10 driest May. It was the ninth driest May in Mexico City, third for Hidalgo and Puebla, second for Queretaro and tenth driest for Tlaxcala.

Following the trend of other regions, this region observed warmer than normal conditions, with anomalies of about 1.0 °C above average for the entire region. These conditions allowed the states of this region to remain within the top 10 warmest May. The warmest May was recorded for Mexico City and Morelos, second for Puebla, fourth for Hidalgo and Queretaro, fifth for Tlaxcala and ninth for the State of Mexico.

The combination of heat and dry conditions caused moderate drought (D1) to increase by 4.1%, and an increase of 20.7% in abnormally dry conditions (D0), the largest increase in this category of all regions. However, the region also showed a 0.9% decrease in severe drought (D2). Overall, the region showed an increase of 3.2% in the area affected by moderate to severe drought (D1 to D2), compared to the previous month.

Gulf of Mexico (Veracruz and Tabasco): Drier than normal conditions prevailed in the northern portion of the state of Veracruz, where anomalies were at least 40 mm below average. However, in southern Veracruz and Tabasco there was a combination of dry and wet conditions.

In terms of temperature, warmer-than-average conditions occurred in northern Veracruz, and near-normal conditions dominated in southern Veracruz and Tabasco. However, despite not recorded intense temperature anomalies, Tabasco recorded its second warmest May on record.

Despite the lack of precipitation, the accumulations recorded during the month allowed the Gulf of Mexico region to have a 3.0% decrease in the moderate to severe drought categories (D1 to D2) mainly in the southern tip. However, it also presented an increase of 7.4% in the

abnormally dry category (D0). As of May 31, 2022, the region recorded moderate to severe drought (D1 to D2) in 22.1% of its area, a decrease of 3.0% from the previous month.

South Pacific (Guerrero, Oaxaca and Chiapas): Of the entire country, the Southern Pacific received the highest amount of precipitation for the month. Only western Oaxaca and some specific regions of Guerrero and Chiapas showed drier than normal conditions, with deficits of between 20 to 40 mm. In contrast, Oaxaca and Chiapas had above-average rainfall, with surpluses of more than 80 mm, and in the extreme south of Oaxaca, surpluses of more than 200 mm were reached. Hurricane Agatha, which reached category 2 on the Saffir-Simpson scale, made landfall on May 30 on the coast of Oaxaca as a category 1 and produced rainfall in excess of 400 mm from May 27 to 31. Moisture reached most of the Isthmus of Tehuantepec and therefore almost all the drought and dry conditions in the area were eliminated. This was beneficial for agriculture and water supply in the region, however, it also left several human losses and damage to infrastructure.

In terms of temperatures, Guerrero had the warmest conditions, although Oaxaca and Chiapas also had warm temperatures in some areas. Guerrero recorded its tenth warmest May. The South Pacific region showed a decrease in all drought categories. It decreased by 5.8% in the moderate to severe drought categories (D1 to D2), as well as a decrease of 9.0% in the abnormally dry category (D0). The region only recorded moderate to severe drought (D1 to D2) in 1.9% of its area, while abnormally dry conditions extended to only 22.1%.

Yucatan Peninsula (Campeche, Quintana Roo and Yucatan): Wetter than normal conditions prevailed in Yucatan Peninsula, with exceedances greater than 50 mm. Only some specific areas of Yucatan and Quintana Roo had drier than normal conditions. The wetter-than-normal conditions in Campeche resulted in its eighth wettest May on record.

In addition, temperatures were slightly warmer than normal, with anomalies 0.5 °C warmer than average in most of the region. Although the anomalies were not as intense compared to the rest of the country, Quintana Roo ranked May 2022 as the eighth warmest May on record. The persistent precipitation in the region allowed it to remain drought-free for the third consecutive month.