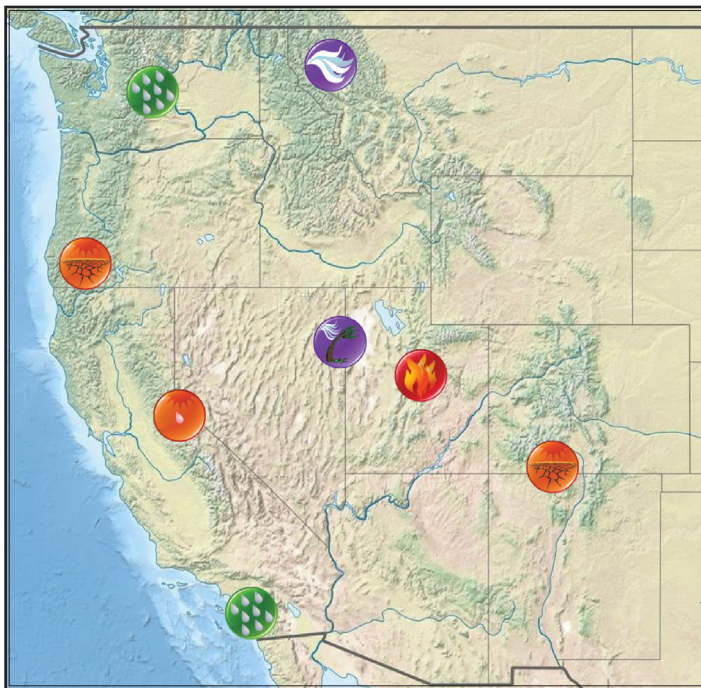










Significant Events for Mar-Apr-May 2020

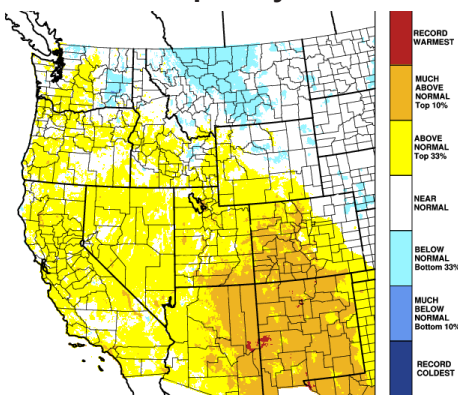
Mar-Apr-May Highlights



-  Strong winds during a March storm left over 3,300 people without power in northwestern MT.
-  WA reported its 16th wettest May on record. Spokane had its 7th wettest May since 1881.
-  Extreme drought has returned to southwestern OR, northeastern CA, southern CO, and northern NM.
-  An April cutoff low brought record precipitation and landslides to southern CA.
-  Following widespread below-normal winter and spring precipitation and dry soils, drought has worsened throughout the west, with 73% of the western U.S. now in drought conditions.
-  UT began the fire season with 237 different wildfires across the state.
-  Statewide, CA snowpack on April 1 was 53% of normal following a dry winter and spring.
-  Highway 80 near the UT-NV border was closed due to strong winds in mid-May.

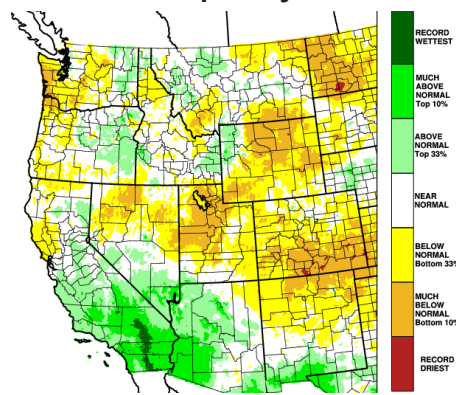
Regional Overview for Mar-Apr-May 2020

Mean Temperature Percentile
Mar-Apr-May 2020



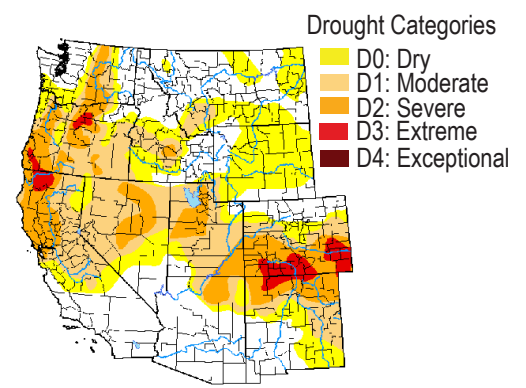
Temperatures were above average during spring 2020 throughout much of the West. Well-above average temperatures occurred in western CO, eastern AZ, and throughout NM. Near normal conditions occurred in eastern WA, northern ID, western WY and MT. Central MT experienced below average temperatures. Above-normal temperatures occurred in May in all states aside from Montana.

Precipitation Percentile
Mar-Apr-May 2020



Widespread drier-than-normal conditions occurred in spring though some regions experienced wetter than normal months. March was wet in southern ID and across the southern tier of the west. An April storm brought heavy precipitation to the Pacific Southwest. Precipitation in the Pacific Northwest was above normal in May but dry in other regions.

US Drought Monitor
June 2 2020



Heading into June, 73% of the western U.S. is in drought. Compared to the start of the water year (Oct 1), this is more than a two-fold increase in drought area. Above-average temperatures, below-average precipitation, greater-than-normal evaporative demand, low soil moisture, and rapid snowmelt favored the worsening of drought conditions in many regions.

Regional Impacts for Mar-Apr-May 2020

Drought, Flooding and Water Resources

Runoff forecasts for many rivers throughout the west indicate below-average water volumes or earlier-than-normal peak flows.

Below-normal snowpack and warm, dry conditions in many western states is expected to lead to an active fire season that will begin earlier than usual.

Colorado River inflow for water year 2020 is expected to be 60% of average, despite 90% of average precipitation in the Upper Colorado Basin.

Reservoir storage is approximately 50% of capacity in Lakes Powell and Mead. Reservoir storage varies from 50-100% throughout WA, OR, CA, ID, WY, and NM.

Agriculture and Wildlife

Extreme drought in the Klamath Basin (southern OR/northern CA) may result in a total loss of crop for many farmers, with significant impacts expected particularly on small and family-run farms.

Dry conditions in much of CO, AZ, and NM are causing rangeland and pasture conditions to deteriorate.

Most fruit crops are looking good in OR, WA, and CA, with the exception of smaller-than-normal apricot and cherry crops in WA due to cold weather.

Rapid Colorado Snowmelt

Snowpack throughout Colorado was near- or above-average in the middle of April. However, during a two-week period spanning late April and early May, half of this snowpack melted. Observed melt rates during early May were more



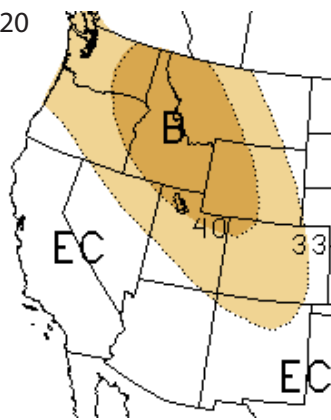
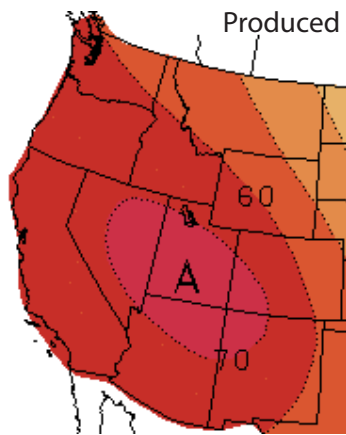
characteristic of early summer rather than spring. The rapid melt was favored by anomalously warm temperatures and below average precipitation. In SW Colorado, melt rates were enhanced by the darkening effect of dust previously deposited and buried earlier in the year. This dust typically originates from southwestern deserts. As the snow melts, the dust emerges and accumulates at the snow surface. This decreases snow albedo, which makes the snow absorb more solar radiation and further accelerates snowmelt. The rapid snowpack loss is causing earlier-than-normal peaks in runoff and will contribute to extremely low streamflows this coming summer and fall.

Regional Outlook for Jul-Aug-Sep 2020

Western Region Partners

CPC Temperature Outlook

CPC Precipitation Outlook



A = Above normal B = Below normal EC = Equal chances. Numbers indicate percent chance of temperatures in warmest/coolest one-third and precipitation in wettest/driest one-third.

The CPC outlook for late summer indicates above normal temperatures are highly likely for the entirety of the western U.S. Models project above-normal geopotential heights, which are indicative of the establishment of a stronger-than-normal ridge over the West. This is consistent with the location of the greatest chances of above-normal temperatures over Utah. Below-normal summer precipitation is forecast across the Pacific Northwest and Intermountain West. This may in part be due to the poleward deflection of transient midlatitude disturbances in response to ridge-induced blocking. No clear signal exists for the strength of this year's core monsoon season.

- Western Regional Climate Center
wrc.dri.edu
- National Integrated Drought Information System (NIDIS) - drought.gov
- Western Governors' Association
westgov.org
- Western States Water Council
westgov.org/wswc
- NOAA/ESRL Physical Sciences Division
esrl.noaa.gov/psd
- NOAA Climate Prediction Center
www.cpc.ncep.noaa.gov
- National Centers for Envir. Info. (NCEI)**
www.ncdc.noaa.gov
- USDA/NRCS National Water and Climate Center - www.wcc.nrcs.usda.gov
- National Interagency Fire Center
www.nifc.gov
- Western Water Assessment
wwa.colorado.edu
- Climate Assessment for the Southwest
climas.arizona.edu
- California Nevada Applications Program
cnap.ucsd.edu
- Climate Impacts Research Consortium
pnwclimate.org/resources
- NWS Western Region Forecast Offices
www.wrh.noaa.gov/