2009 Rocky Mountain Area Fire Season Outlook

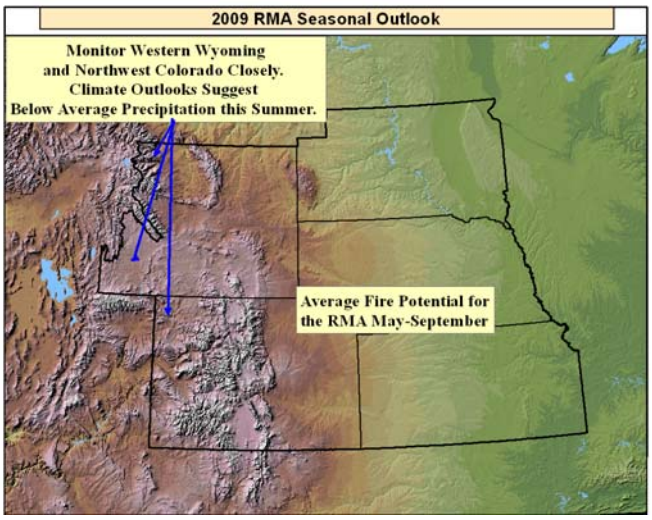
Issued: Friday, April 24, 2009

PRODUCT INTENT & DESCRIPTION

Fire season potential is predicted for the period May – September, in terms of the "Potential" for significant fire events that may require mobilization of additional resources from outside the area in which they originate.

SUMMARY

Recent precipitation events (late March-mid April) have significantly decreased but not eliminated fire potential for eastern Colorado, Kansas and Nebraska. The 2009 winter and early spring grass fire season resulted in 179 fires for 52,847 acres, compared to 269 fires for 60,350 acres in 2008. Fire potential will continue to decrease across the plains during the next 6 weeks as expected precipitation events and green-up occurs.

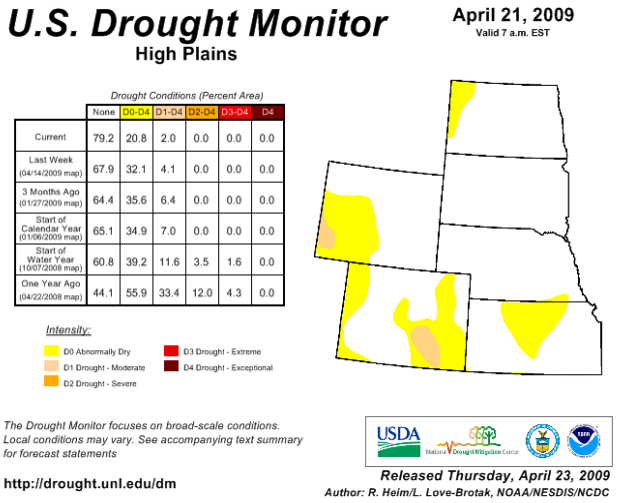


Otherwise, average fire potential is forecast for the Rocky Mountain Area (RMA) for the period May-September. Average fire potential means that the region will likely experience short durations of fuel and fire weather conditions that support large fire activity, and not extended periods of fuel and fire weather conditions that result in multiple large fires for several weeks. The 10 year fire averages for the RMA includes 11,001 fires for 553,955 acres. Additionally, the RMA has averaged 62 large fires (100 acres in heavy fuels, 300 acres in grass) for 230,065 acres in the last 10 years. The following prediction factors were used for this outlook:

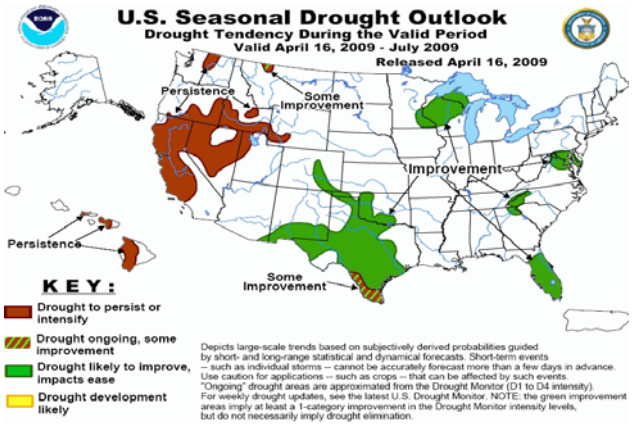
- Drought conditions have significantly improved across much of the Rocky Mountain Area in the last year. Some record wetness has been recorded across portions of Wyoming and South Dakota during the last year.
- Average to above average winter snowpack in the higher elevations and early spring precipitation is expected inhibit an earlier than normal start to fire season, but could increase fuel loading later in the summer.
- Abundant fine fuel loading is present across much of the RMA, along with a moderate to high concentration of bug mortality in lodgepole across Colorado and southern Wyoming, and an increase of infestation of Spruce Fur across portions of northern Wyoming and the Black Hills of South Dakota.
- Long range climate forecasts suggest below average precipitation for northwest Colorado and western Wyoming the remainder of spring through the summer months.
- Above average temperatures are forecast for much of the Rocky Mountain Area through summer 2009.
- Tropical sea-surface temperatures are forecast to weaken from the current La-Nina state and become neutral over the next few months. However, La Nina like patterns may continue into late spring and early summer.
- The southwest monsoon is forecast to start on time. Outlooks also suggest above average precipitation associated with southwest monsoon over portions of the southwest this summer.

Bottom-line: Recent precipitation in April has significantly slowed down the winter and early spring fire activity that was taking place January through March along the Colorado Front Range, and across the plains of eastern Colorado, Nebraska and Kansas. Green-up of fine fuels as a result of April precipitation, will alleviate above normal fire potential concerns through May. Significant fine fuel loading and bug mortality across the RMA will support large fire growth during hot and dry periods that typically occur during the late spring and summer months. Overall, average fire potential is forecast for the Rocky Mountain Area for the period May-September. Average fire potential means that the region will likely experience short durations of fuel and fire weather conditions that support period's large fire activity, and not extended periods of fuel and fire weather conditions that result in multiple large fires for several weeks. **Western Wyoming and northwest Colorado (below 8000 feet) are areas to monitor closely, with climate outlooks suggesting drier than average conditions for this part of the RMA the remainder of spring and summer. Similar to 2008, these areas could pose the greatest risk for large fires later this summer (July-August).**

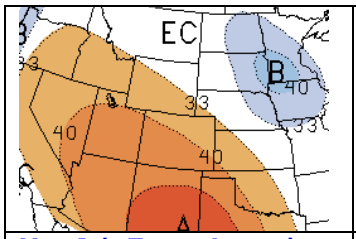
SUPPORTING INPUT DATA



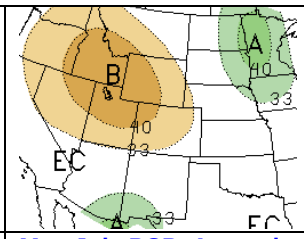
Most recent (April 21, 2009) RMA Drought Monitor image shows portions of the RMA in a drought category of "Abnormally Dry", with the more significant drought areas in the "Moderate" classification over southwest Wyoming and southeast Colorado. Long term drought acts to increase dead fuel loadings, deplete fuel moisture values in dead fuels (especially heavier fuels), and can also lead to unusually low fuel moisture values in live fuels. Drought conditions in the RMA have lessened from what they were a year ago.



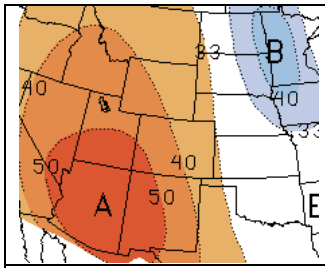
Drought Forecast from the Climate Prediction Center-April 16, 2009. Current drought conditions across southwest Wyoming are expected to persist or intensify on the whole through July. Drought improvement is anticipated in southeast Colorado.



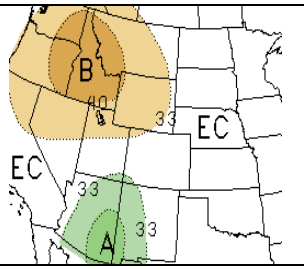
May-July Temp. Anomaly



May-July PCP. Anomaly



June-Aug Temp. Anomaly



June-Aug PCP. Anomaly

CPC 2009 May-August Temperature and Precipitation Outlooks. Temperature outlooks from the Climate Prediction Center are highly weighted towards long-term trends, but nonetheless indicate warmer than average initially for May-July centered over Colorado and extending into southwest Wyoming, with expansion northward into the remainder of of Wyoming during the summer months. Precipitation anomalies suggest a trend of drier than average centered in western Wyoming and northwest Colorado for May-July, with the dry areas forecast to retreat northward for June-Aug as above average moisture approaches southwest Colorado (associated with the southwest monsoon).

Predictive Services Group
Rocky Mountain Area Coordination Center