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PNSWSH

Service Change Notice 19-58 Updated
National Weather Service Headquarters Silver Spring MD
835 AM EDT Tue Sep 10 2019

TO: Subscribers:
 -NOAA Weather Wire Service
 -Emergency Managers Weather Information Network
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FROM: Michelle Hawkins, Chief
 Severe, Fire, Public & Winter Weather Services Branch

SUBJECT: Updated: Changes to the Boundaries of Fire Weather Forecast
 Zones in Northeastern Wyoming and Western South
 Dakota Effective October 10, 2019

Updated to change effective date to on or about October 10, 2019, and to
change Critical Weather Day to October 15, 2019

On Thursday, October 10, 2019, at 100 PM Central Daylight
Time or 1800 Coordinated Universal Time (UTC), the NWS Forecast
Office in Rapid City, SD, (UNR) will modify fire weather zone
boundaries across northeastern Wyoming and western South Dakota.

If October 10, 2019, is declared as a Critical Weather Day,
this implementation will be postponed to Thursday, October 15, 2019.

These changes have been extensively coordinated with the Great
Plains Interagency Dispatch Center Operations Committee and
Board of Directors and other local, state, federal and tribal partners.

New zone numbers are required with this change. The current fire
weather forecast zone numbers in northeastern Wyoming are:
WYZ259, WYZ297, WYZ298, and WYZ299.

The current zone numbers in western South Dakota are:
SDZ260, SDZ261, SDZ262, SDZ263, SDZ264, SDZ265 and SDZ266

The new fire weather forecast zone numbers in northeastern
Wyoming are:

WYZ314, WYZ315, WYZ316, WYZ317, and WYZ318

The new fire weather zone forecast numbers in western SD are:
SDZ319, SDZ320, SDZ321, SDZ322, SDZ323, SDZ324, SDZ325, SDZ326,
SDZ327 (also covers part of far northeastern WY), SDZ328,
SDZ329, SDZ330, SDZ331, SDZ332, SDZ333, SDZ334 and SDZ335.

The specific details are explained below.

WYZ314 (Northern Campbell) and WYZ315 (Southern Campbell) remain
the same but have new zone numbers (formerly WYZ297 and WYZ259).

WYZ316 (Crook County Plains) and WYZ317 (Weston County Plains) are split in half at the Crook and Weston County line (formerly WYZ298). The climatology suggests that there are significant differences in relative humidity and wind speeds between these two new zones. Also, the far northeastern part of Crook County is split off from the Crook County Plains (see SDZ327 below for details).

WYZ318 (Wyoming Black Hills) remains the same but has a new zone number (formerly WYZ299).

SDZ319 (Northern Black Hills) excludes the northern foothills (formerly part of SDZ260) and includes parts of former SDZ262 (Southern Black Hills). This change is driven by the precipitation climatology to focus on the area that receives the greatest rainfall.

SDZ320 (Central Black Hills) excludes the eastern foothills and Southern Black Hills (both formerly part of SDZ262). This change is driven by the temperature and precipitation climatology, which differs from both the northern and southern Black Hills, as well as the eastern foothills.

SDZ321 (Southern Black Hills) excludes the central Black Hills and southern/eastern foothills (formerly part of SDZ262). This change is driven by the temperature and precipitation climatology, which differs from the rest of the Black Hills and surrounding foothills.

SDZ322 (Fall River County Area) excludes the Southern Black Hills and the plains of eastern Fall River and southern Oglala Lakota Counties (formerly part of zones SDZ262 and SDZ263). This change is driven by the warmer and drier climatology of the far southwestern South Dakota plains.

SDZ323 (Northern Foot Hills) is a subset of the Northern Black Hills (formerly SDZ260). The temperature and precipitation in this zone are notably different from the Northern Black Hills.

SDZ324 (Eastern Foot Hills) is a subset of the Northern and Southern Black Hills (formerly in zones SDZ260 and SDZ262). The temperature and precipitation are notably different in this zone from the Northern and Southern Black Hills.

SDZ325 (Custer County Plains) is a subset of the Southern Black Hills and Badlands Area (formerly in zones SDZ262 and SDZ264). The Custer County Plains have a notably different temperature, wind, and precipitation pattern than these former two zones.

SDZ326 (Pine Ridge Area) is a subset of the Southwestern South Dakota zone (formerly SDZ263). The elevated/forested area of the Pine Ridge results in a different wind flow, temperature and precipitation pattern when compared to the far southwestern part

of South Dakota.

SDZ327 (Butte County Area) is a subset of the large Northwestern South Dakota zone (formerly SDZ261) and also includes far northeastern Wyoming, including Colony (formerly part of WYZ298). This change is a result of the temperature, precipitation and wind climatology for the area, which is notably different from places to the east.

SDZ328 (Perkins County) is a subset of the large Northwestern South Dakota zone (formerly SDZ261). This change is a result of the temperature, precipitation and wind climatology for the area, which is notably different from places to the south and west.

SDZ329 (West Central Plains) is a subset of the large Northwestern South Dakota zone (formerly SDZ261). This change is a result of the temperature, precipitation, and wind climatology for the area, which is notably different from places to the northwest and north.

SDZ330 (Ziebach County) is a subset of the Central South Dakota zone (formerly SDZ266). This change is related to the downslope and upslope flow differences to the north and south of the Cheyenne River.

SDZ331 (Haakon County Area) is a subset of the Central South Dakota, Badlands Area, and South Central South Dakota zones (formerly SDZ266, SDZ264, and SDZ265, respectively). There are notable differences in the climatology between this new zone and the former zones.

SDZ332 (Badlands Area) closely resembles the previous Badlands Area (formerly SDZ264) but has been refined to better represent the actual Badlands boundary as well as the terrain.

SDZ333 (Bennett County Area) is a subset of South Central South Dakota (formerly SDZ265). The temperature and precipitation climatology supports a break in this zone.

SDZ334 (Mellette and Todd Counties) is a subset of South Central South Dakota (formerly SDZ265). The temperature and precipitation climatology supports a break in this zone.

SDZ335 (Tripp County) is a subset of South Central South Dakota (formerly SDZ265). The temperature and precipitation climatology supports a break in this zone, especially is it becomes notably more moist toward the east.

Table 1: Current fire weather zones and corresponding Universal Geographic Codes (UGC) for WFO Rapid City, SD

UGC: Current Fire Weather Zone Name

WYZ259: Southern Campbell

WYZ297: Northern Campbell
WYZ298: Crook and Weston County Plains
WYZ299: Wyoming Black Hills
SDZ260: Northern Black Hills
SDZ261: Northwestern South Dakota
SDZ262: Southern Black Hills
SDZ263: Southwestern South Dakota
SDZ264: Badlands Area
SDZ265: South Central South Dakota
SDZ266: Central South Dakota

Table 2: Fire weather zones and corresponding UGC for which WFO Rapid City, SD, will issue forecasts and warnings effective September 10, 2019

UGC: New Fire Weather Zone Name

WYZ314: Northern Campbell
WYZ315: Southern Campbell
WYZ316: Crook County Plains
WYZ317: Weston County Plains
WYZ318: Wyoming Black Hills
SDZ319: Northern Black Hills
SDZ320: Central Black Hills
SDZ321: Southern Black Hills
SDZ322: Fall River County Area
SDZ323: Northern Foot Hills
SDZ324: Eastern Foot Hills
SDZ325: Custer County Plains
SDZ326: Pine Ridge Area
SDZ327: Butte County Area
SDZ328: Perkins County
SDZ329: West Central Plains
SDZ330: Ziebach County
SDZ331: Haakon County Area
SDZ332: Badlands Area
SDZ333: Bennett County Area
SDZ334: Mellette and Todd Counties
SDZ335: Tripp County

Full, graphical descriptions of the old and new fire weather forecast zones are online at:

<http://www.weather.gov/unr/2019firezonechange>

Table 3: NWS watch, warning, and forecast products affected by these changes

WMO Heading: AWIPS ID: WFO Rapid City Products
WWUS83 KUNR: RFWUNR: Fire Weather Watch
WWUS83 KUNR: RFWUNR: Red Flag Warning
FNUS53 KUNR: FWFUNR: Fire Weather Planning Forecast

NWS partners and users will need to make necessary changes to their communications systems to accommodate these fire weather

forecast zone changes.

A shapefile of the new fire weather forecast zones for WFO UNR is online at:

<https://www.weather.gov/gis/FireZones>

For more information, please contact:

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National Service Change Notices are online at:

<https://www.weather.gov/notification/>

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