National Weather Service Midland/Odessa, Texas
Announces Forecast Zone Changes for Southwest Texas and Southeast New Mexico

Across southwest Texas and southeast New Mexico, terrain makes a very significant contribution to the variance of weather conditions on any given day. Elevation has a significant impact on temperatures (generally decreasing with height), winds (often increasing significantly with height) and moisture (which may increase or decrease significantly with elevation). Additionally, when wind blows upslope, fog and precipitation may be produced or enhanced.

As part of a continuing effort to bring the best weather and forecast information to the residents of this area, the NWS Midland/Odessa Forecast Office proposes to change the structure of our public zones to better reflect the unique influences of the terrain, specifically elevation, on our weather. This involves dividing zones in such a way to accurately reflect both higher elevations (Guadalupe Mountains, Delaware Mountains, Davis Mountains, Chinati Mountains and the Chisos Basin) as well as the lower elevations, where temperatures are often much warmer, along the Rio Grande River. The existing zone configuration is shown in ***Figure 1***.

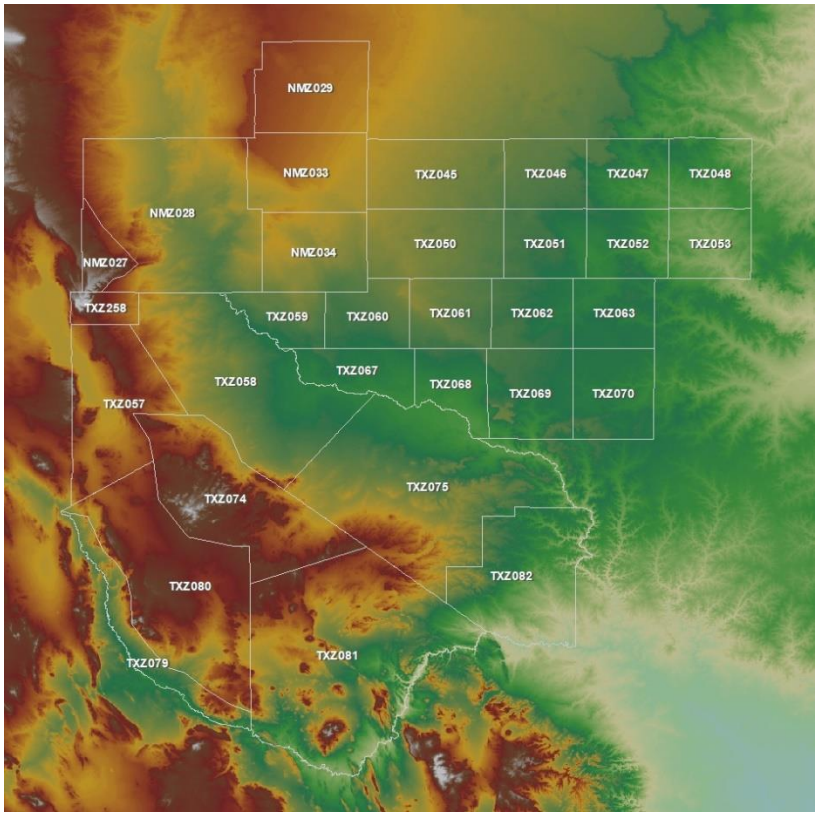

Figure 1: Current public zone configuration prior to March 5, 2019, depicting course alignment of zones with terrain in southwest Texas and southeast New Mexico.

These changes to our public zones will allow us to create zone-based forecast products that more accurately reflect expected conditions and will allow better consistency between point forecasts and forecast weather hazards. For instance, it is currently possible for a Winter Storm Warning intended to cover the higher elevations of zone TXZ058 to be misconstrued to include the city of Pecos, where only rain may be forecast due to its lower elevation. Many other similar situations are possible across our forecast area. Though this inconsistency cannot be completely eliminated across all zones at all times, we believe that the proposed public zone changes will greatly decrease these occurrences, resulting in better service to the public and our partners.

The proposed public zone changes will become effective on March 5, 2019.

The affected current zones are highlighted in ***Figure 2***. The proposed new zones are shown in ***Figure 3***.

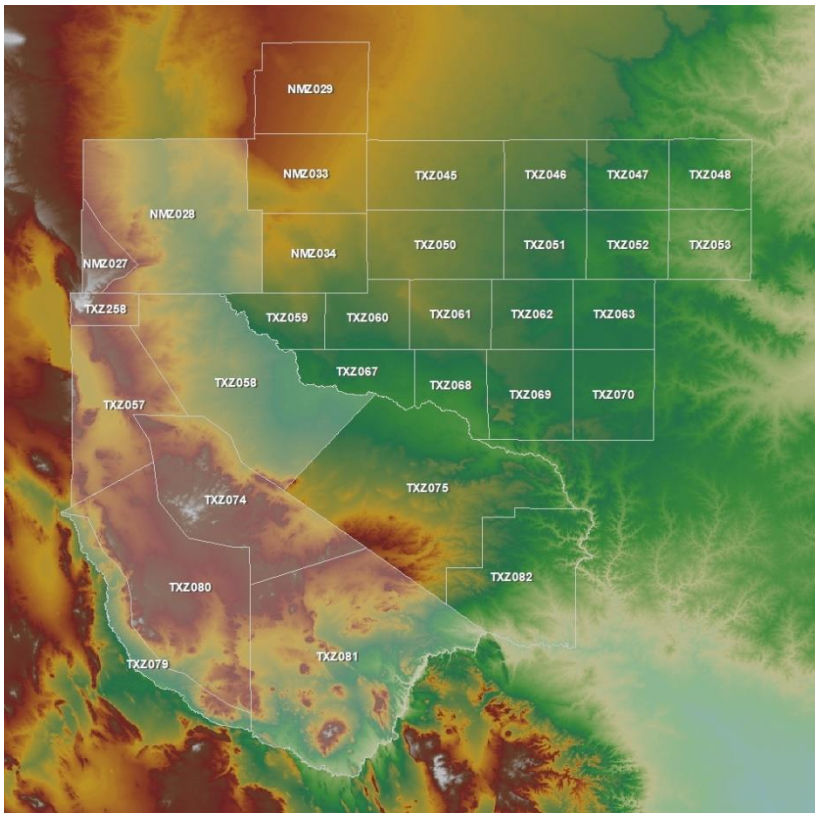

Figure 2: Public zone configuration prior to March 5, 2019. Zones to be redefined are highlighted.

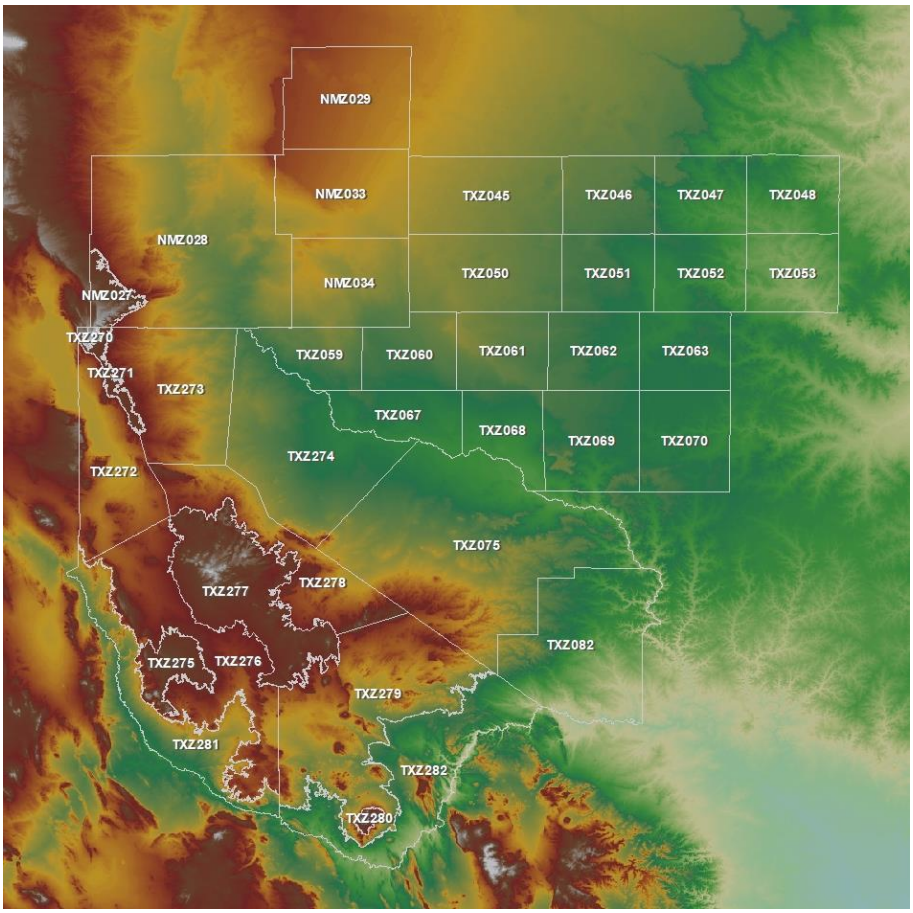

Figure 3: Proposed new public zone configuration to become effective March 5, 2019. Note the alignment of new zones to elevation.

NMZ027	Guadalupe Mountains of Eddy County > 5,000 ft
NMZ028	Eddy County Plains < 5,000 ft
TXZ270	Guadalupe Mountains Above 7000 Feet
TXZ271	Guadalupe and Delaware Mountains > 5,000 ft
TXZ272	Van Horn and Highway 54 Corridor > 3,000 ft and < 5,000 ft
TXZ273	Eastern Culberson County < 5,000 ft
TXZ274	Reeves County Plains
TXZ275	Chinati Mountains > 5,000 ft
TXZ276	Marfa Plateau > 4,000 ft and < 4,800 ft (Davis) and < 5,000 ft (Chinati)
TXZ277	Davis Mountains > 4,800 ft
TXZ278	Davis Mountains Foothills < 4,800 ft
TXZ279	Central Brewster County > 3,000 ft and < 4,800 (Davis) and < 4,500 (Chisos)
TXZ280	Chisos Basin > 4,500 ft
TXZ281	Presidio Valley <4,000 ft
TXZ282	Lower Brewster County < 3,000 ft

Table 1: Proposed public zone numbers, names and elevation designations to become effective March 5, 2019.