## National Weather Service Brownsville/Rio Grande Valley, Texas Announces Forecast Zone Changes for Hidalgo and Kenedy Counties

## KENEDY COUNTY

Why: At the turn of the century, the National Weather Service (NWS) in Brownsville changed public and fire weather zones along the Cameron and Willacy County coast to improve the communication of weather forecasts and weather hazards along and near the Gulf of Mexico coast. The zones were split into Inland and Coastal Cameron and Willacy County, to better focus communication of weather hazards that would often affect only the barrier island and Laguna Madre communities but not communities farther inland. Most important of these hazards are seawater flooding from storm surge and abnormally high tides, rip currents/high surf, and sea fog. More routine forecast differences include winter and spring temperatures and winds; coastal temperatures can be more than 10°F cooler by day and 5°F by night, and winds can be 15 to 20 mph less, than 10 to 15 miles inland. These differences impact fire weather situations as well. Kenedy County, due to its very low population and less public use of the Laguna Madre shoreline and Padre Island National Seashore, was determined to not have a similar need. With the recent development of Storm Surge Watch/Warning hazards that are depicted graphically based on life-threatening inundation of 3 feet or greater in all coastal locations, as well as prior reasoning for the more populated and visited Cameron and Willacy County coastlines, NWS Brownsville/Rio Grande Valley, in close coordination with local officials, has elected to create a coastal zone for Kenedy County.

**Where:** From the Padre Island National Seashore (a barrier island) west 10 to 15 miles inland, an extension from the current coastal to inland zone break in Willacy County and continuing between 5 and 10 miles west of the shoreline of Laguna Madre

## HIDALGO COUNTY

Why: The rapidly growing population of southern Hidalgo County, an increase in agricultural activity throughout the county, combined with differences in winter (freezes and precipitation) and summer (apparent temperature) hazards and impacts on people, crops, and livestock between the more rural and generally higher elevation of northern Hidalgo County compared with the more urban and lower elevation of southern Hidalgo County, make it an ideal candidate to break into two separate forecast zones. For example, during cold and dry conditions, subfreezing temperatures are more likely in northern Hidalgo County than southern Hidalgo County, and the rare occurrence of wintry precipitation will have more impact (ice accretion and snow/sleet accumulation) in northern Hidalgo County. Lower springtime humidity in northern Hidalgo County may also contribute to a heightened threat for wildfire spread. During very hot conditions, southern Hidalgo County's combination of lower elevation and proximity to the Rio Grande have been found to favor higher relative humidity and increasing the threat for dangerous heat-related conditions from higher apparent temperature – and for a much larger population at risk.

**Where:** Northern Hidalgo County is defined as locations north of Farm-to-Market Road 490; Southern Hidalgo County is defined as locations along and south of Farm-to-Market Road 490.

## FOR BOTH LOCATIONS

When: The zone implementation will occur on May 1, 2018

Are Zone Reconfigurations Normal? YES! At the turn of the century this office reconfigured Cameron and Willacy County, and many other offices along the U.S. Gulf of Mexico coast are doing the same prior to the 2018 Atlantic Hurricane Season to better account for storm surge. Other local NWS offices across the country have done similar coastal zone configurations, as well as inland configurations to better communicate threats from heat, cold, fire weather, and winter weather. One example of this, from the NWS Baltimore/Washington Office, is available here.

**More Details:** Below are two maps that show the current configuration and the new configuration.



