

2019 Spring Flood Outlook

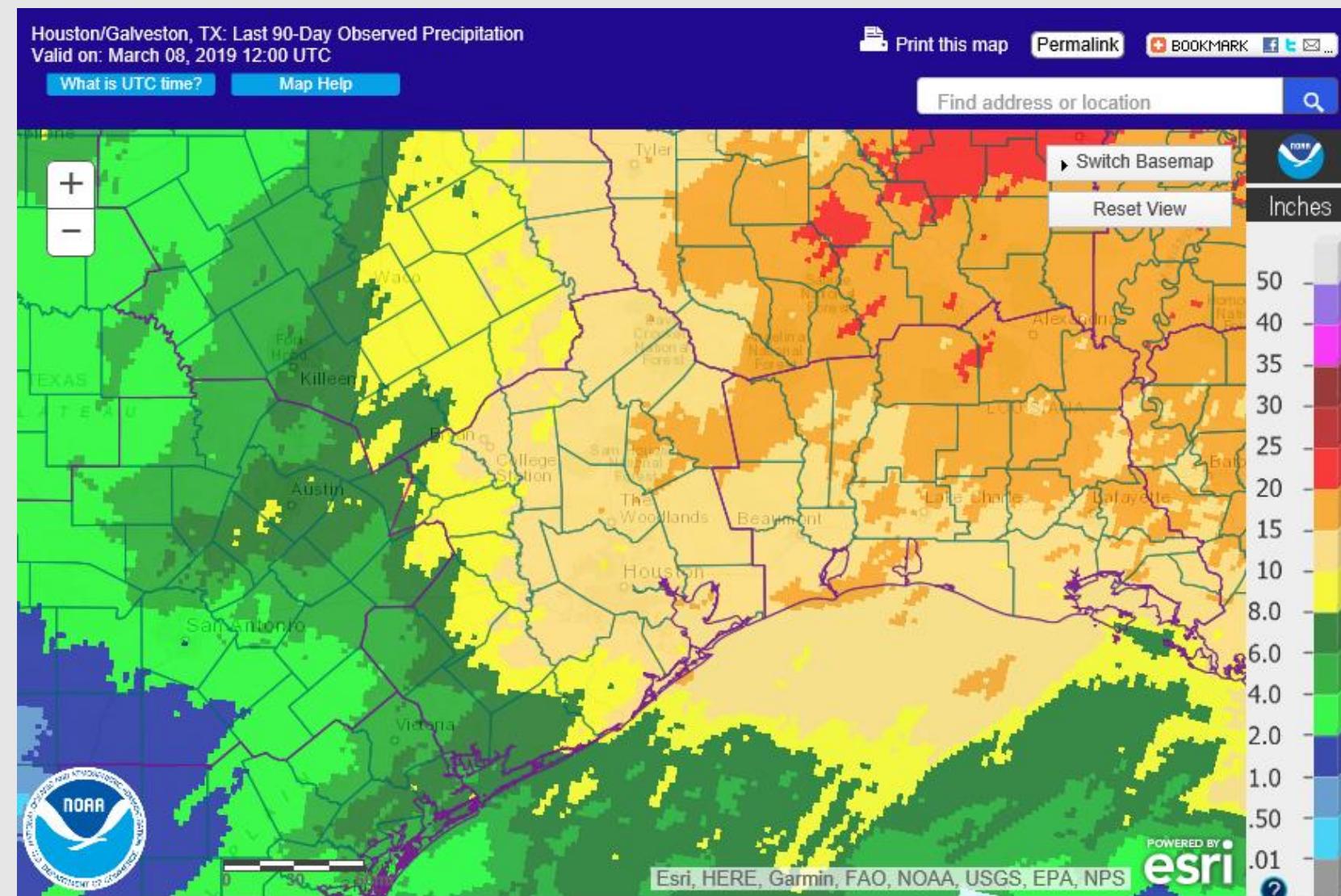
Produced by Katie Landry-Guyton

...Summary...

The Spring Flood Potential for Southeast Texas is above normal for the Trinity, San Jacinto, Brazos, San Bernard, and Colorado River Basins, and near normal for the Lavaca/Navidad River Basin. This outlook is based on antecedent rainfall, current streamflows and water supply storage, soil moisture conditions, and long-term climate outlooks over the next three months.

90-Day Observed Precipitation

Over the past 90 days, most of southeast Texas has seen anywhere from 8 to 20 inches of rain, resulting in near normal to above normal precipitation during this time period. The only exception was in our southwestern counties where below normal precipitation totals, ranging from 4 to 8 inches, occurred over the past three months.

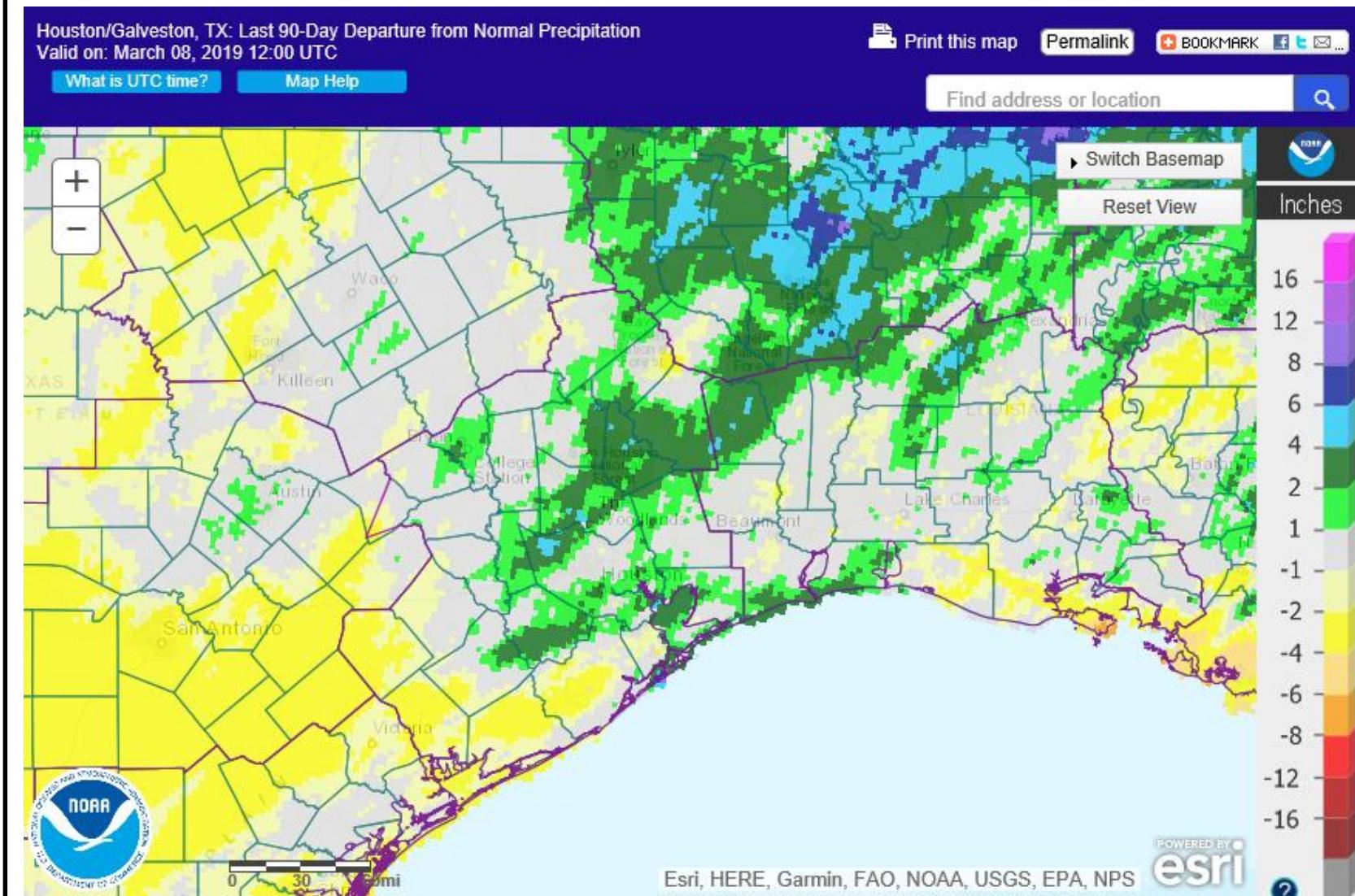


90-Day Departure from Normal Precipitation

A swath of above normal precipitation extends from Waller County, northeast to Polk County, with isolated higher amounts of 4 to 6 inches above normal precipitation being observed.

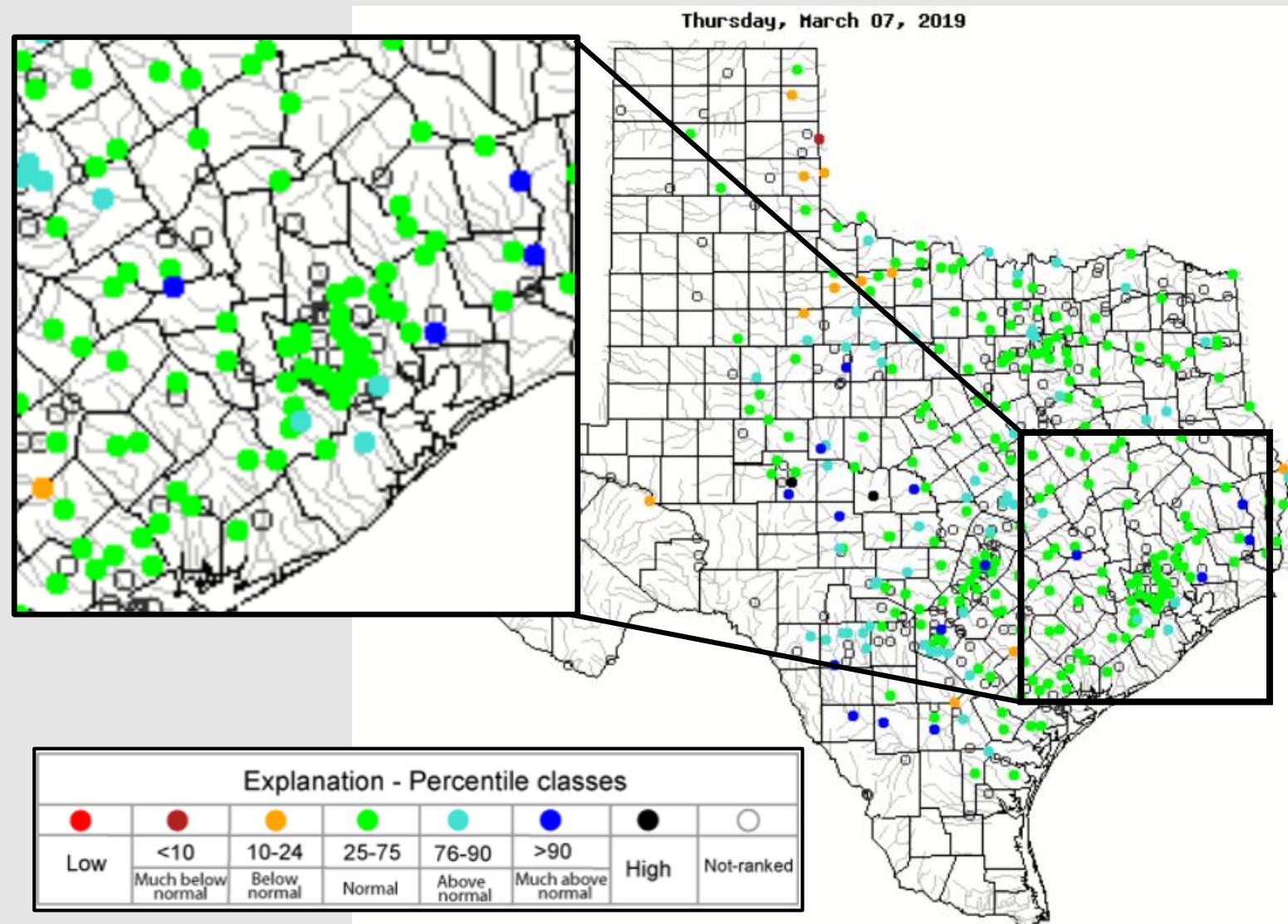
Additional pockets of above normal precipitation, ranging from 2 to 4 inches above normal, have been noted over Brazos and Fort Bend counties.

Meanwhile, Jackson, Lavaca, Matagorda and Wharton counties rainfall was approximately 50-90% of their normal precipitation over the last three months.



Monthly Average Streamflows

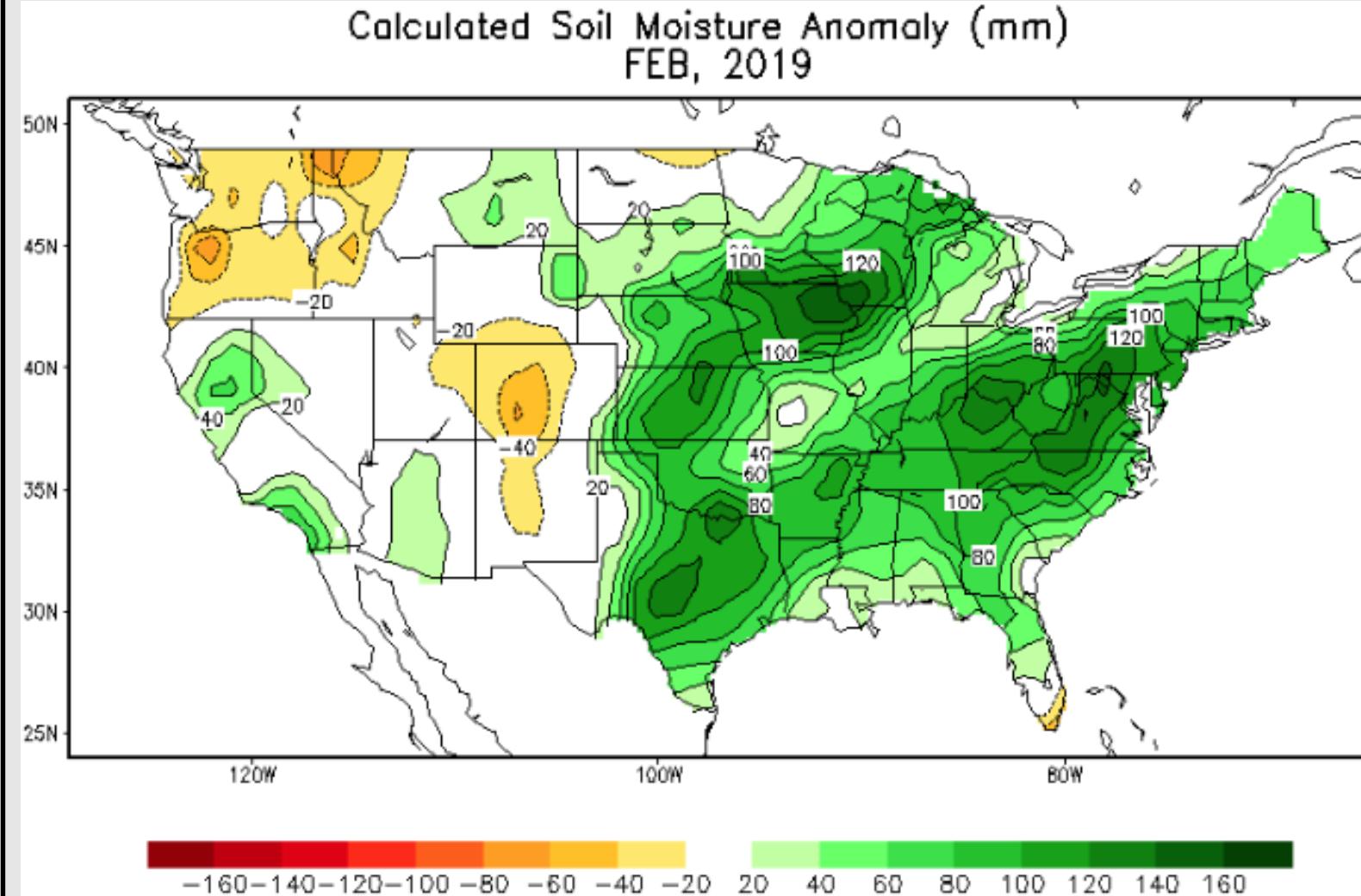
Average daily streamflows for the past 28 days have been running near normal for southeast Texas. There are a few creeks and bayous that are reporting above normal to much above normal; however, the mainstem rivers have maintained normal streamflow conditions.



Soil Moisture

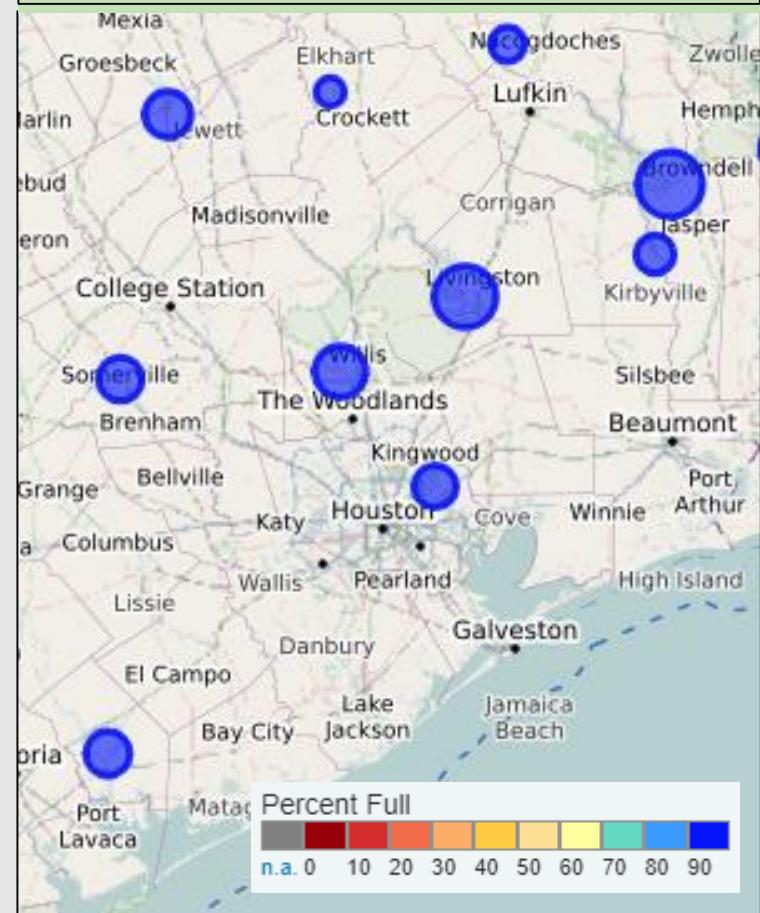
Ample rainfall during the winter season has kept southeast Texas rather moist, with above normal soil moisture content, noted by the positive soil moisture anomalies (pictured right). In addition, the below ground relative soil moisture values between 0 to 200 cm are ranging between 50 to 70% saturation, meaning we've been pretty wet.

Southeast Texas has also remained clear of any drought conditions besides an isolated area in our far western fringes encompassing the Lavaca/Navidad River Basin, where abnormally dry conditions developed in early February.



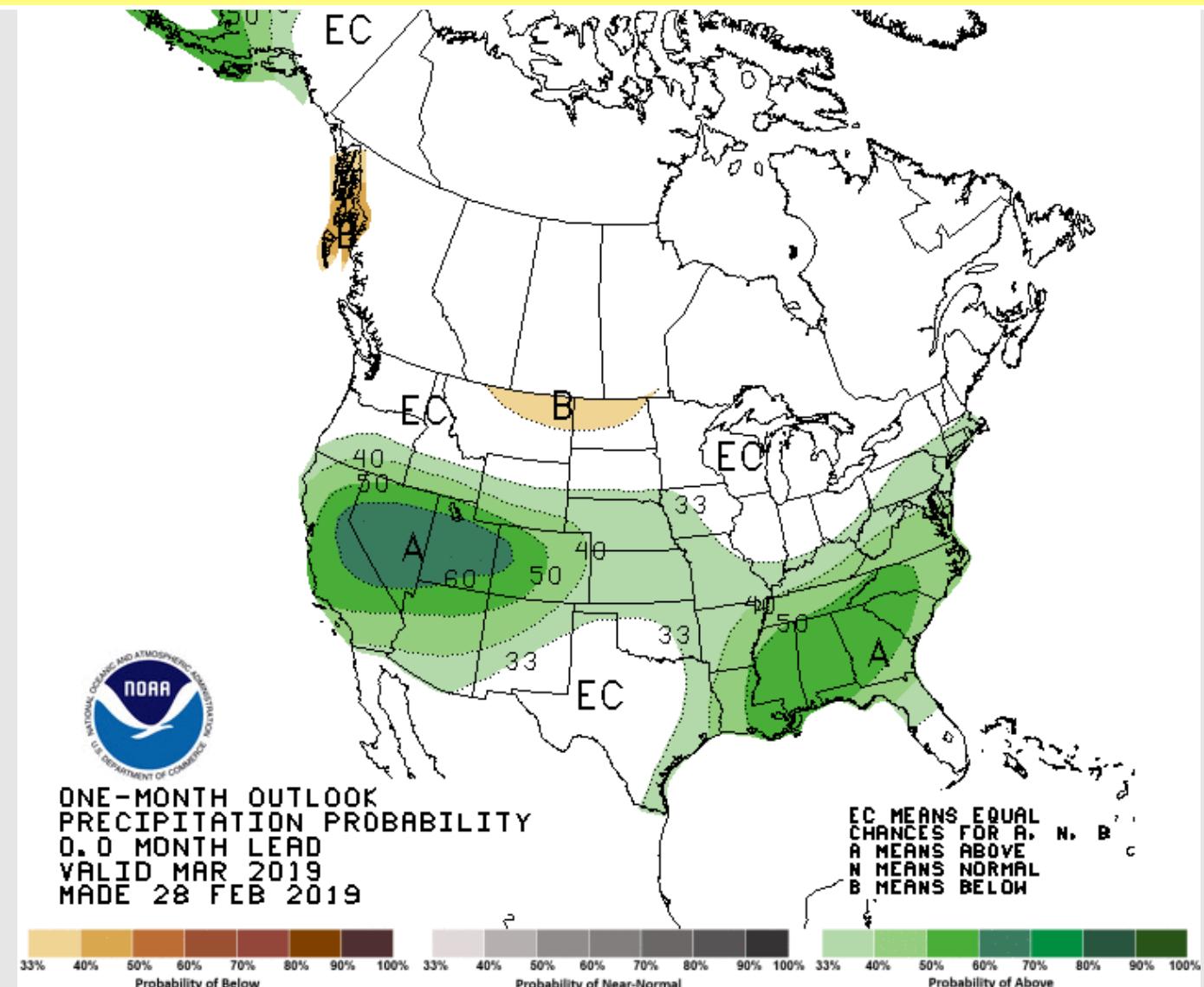
Reservoir Status

Texas Reservoirs



30-Day Precipitation Outlook

Weak El Niño conditions have developed and are expected to continue through spring 2019. El Niño typically means we will see near normal temperatures and above normal precipitation, hence the monthly precipitation outlook for March shows a greater chance (33-40%) for above normal precipitation across southeast Texas.

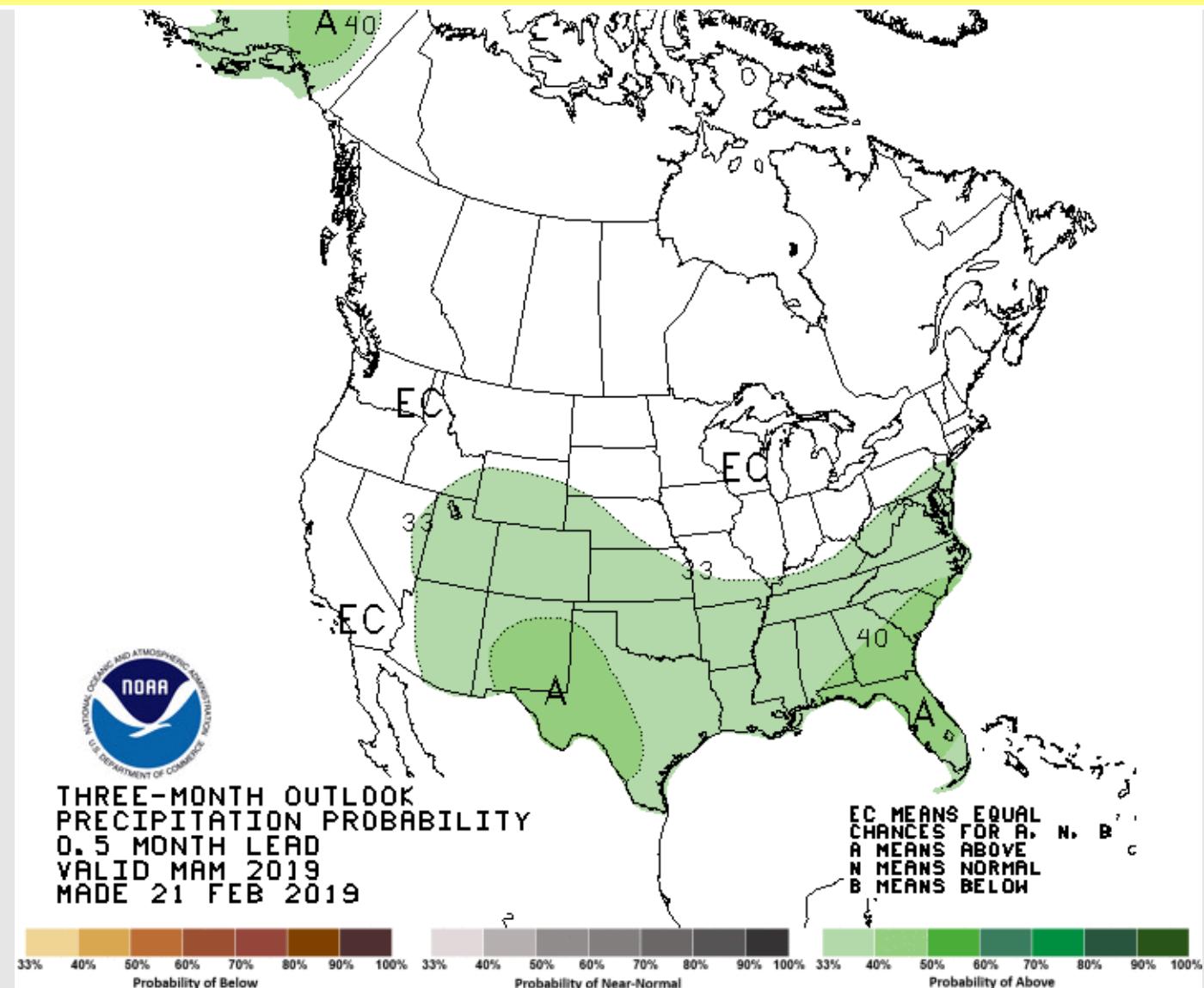


90-Day Precipitation Outlook

Based on recent analysis, current conditions are very similar to those experienced in 2015 and 2016.

El Niño will continue to play a role in the weather over the next few months, hence the higher probabilities (33-40%) for above normal precipitation across the south over the next three months.

The Seasonal Drought Outlook issued by CPC also keeps SE TX drought free through the end of May. Beyond this spring, the outlook for El Niño is more uncertain.

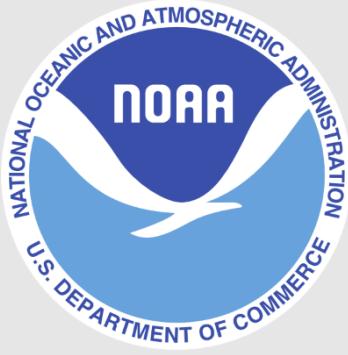


Summary

Considering the pre-existing conditions and the rainfall expected for the next 90 days, the NWS anticipates an above normal chance of flooding this spring along the Trinity, San Jacinto, Brazos, Colorado, and San Bernard River Basins, and a near normal chance of flooding along the Lavaca/Navidad River Basin.

Resources:

- *Precipitation Analysis:* water.weather.gov/precip
- *Streamflow Conditions:* waterwatch.usgs.gov
- *Reservoir Summaries:* waterdatafortexas.org/reservoirs/statewide
- *US Drought Monitor and Outlook:* droughtmonitor.unl.edu
- *Climate Graphics (Including ENSO Conditions, Precipitation Outlooks, and Soil Moisture):* cpc.ncep.noaa.gov



Questions?

Contact

Katie Landry-Guyton

Senior Service Hydrologist

NWS Houston/Galveston

Katie.landry@noaa.gov

281-337-5074 ext 228