CWMS Forecast: 9/13/2018

With the current tropical disturbance and chance of TS Isaac entering the Gulf next week, this forecast was run to provide more clarity on the timing of the reservoirs being emptied. Based on this forecast, both reservoirs are expected to be empty early next week.

Addicks and Barker watersheds have each received about 2 inches of rainfall in the past week. The dams were closed on Sunday afternoon due to heavy rain downstream in Buffalo Bayou and releases began on Tuesday morning. With continued threat of rainfall, releases have remained low – both reservoirs are currently releasing ~300 cfs, for a total combine release of ~600 cfs. Both reservoir pools, however, remain insignificant.

This forecast is based on 7-day QPF, which includes less than 2 inches of rain over the next 7 days. It is assumed that rainfall intensity in the region will remain low and minor releases can continue.

The Corps Water Management System (CWMS) modeling suite is run when precipitation is anticipated to help plan reservoir operations. This CWMS forecast was created by USACE on September 13, 2018 using the best data available at the time. It may or may not accurately reflect existing or future conditions. Updated reservoir forecasts will be provided if NOAA substantially changes its precipitation forecast.

Forecast Summary for 7-Day QPF				
	Addicks		**Barker**	
Peak (past)	80.58	13 Sep 2018, 07:00	81.35	11 Sep 2018, 10:30
EW, Stage 2 Res. Level	97.46	Not forecasted	93.6	Not forecasted
EW, Stage 1 Res. Level	87	Not forecasted	85	Not forecasted
Empty	70	17 Sep 2018	73.1	18 Sep 2018

Forecast Information:

- Forecast Start Time: 9/13/2018 07:00
- Lookback Period: 7 days
- Forecast End Time: 7/21/2018
- Data Sources ○ NexRad ○ Gridded QPF
- Starting reservoir elevations ○ Addicks 80.58 ft (NAVD88)   ○ Barker: 80.11 ft (NAVD88)
- Predicted reservoir flows shown on Pages 3 & 4
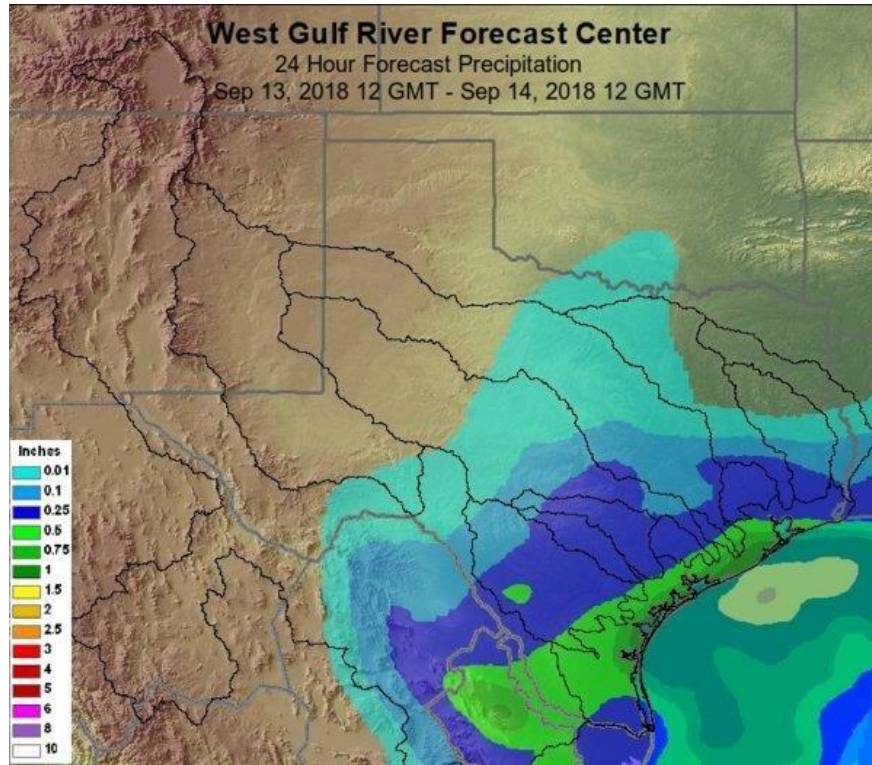- Predicted discharges available on request
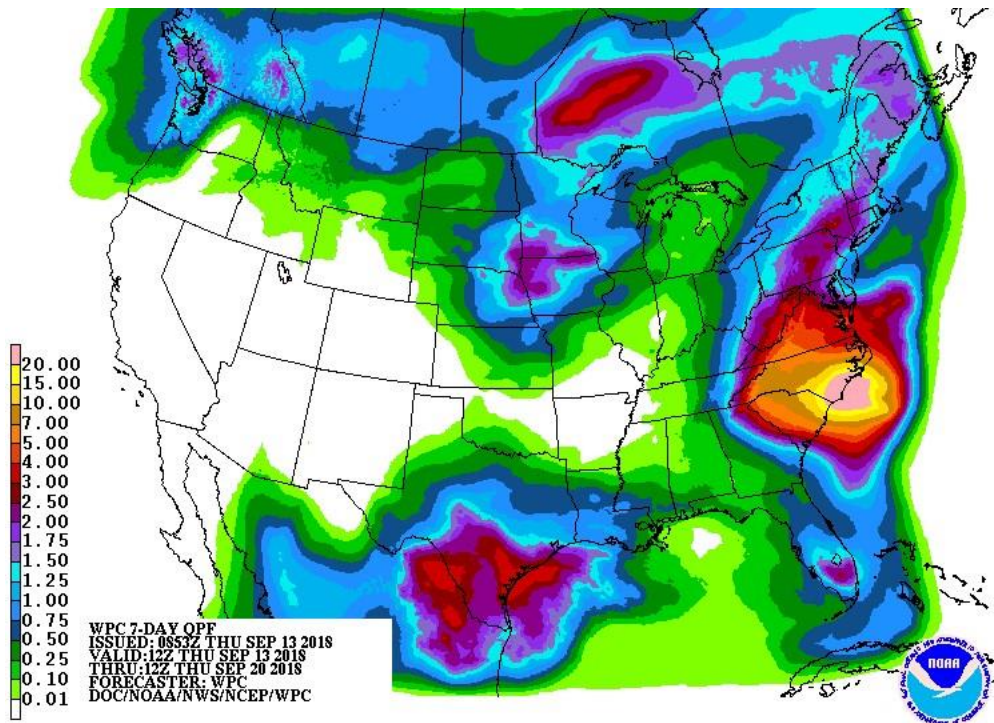
Figure 1. WGRFC 24-hour QPF

Figure 2. NCEP 7-day QPF

Addicks Reservoir Forecast

Barker Reservoir Forecast

Legend (top chart):
- Time of Simulation
- Bottom of Reservoir
- Pool Elevation
- EW: Stage 1
- Reservoir Storage

Legend (bottom chart):
- Reservoir InFlow
- Reservoir OutFlow
- Observed Flow
- Time of Simulation