

Above: Increase in combined flow at six gaging points along the Rio Grande between Presidio and Amistad International Reservoir, July 12th and July 25th, 2013.

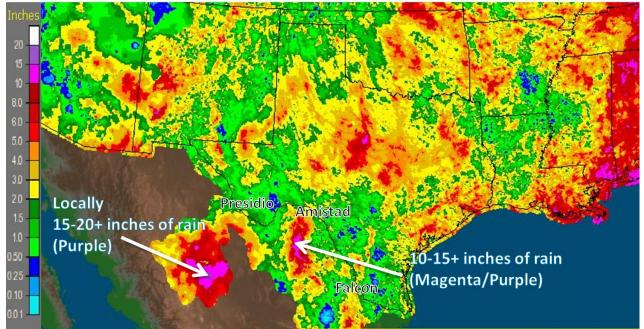
Mary Mary Quite Contrary, How Does Your River Flow? Quite Quickly After Heavy Rains Fall Across the Rio Conchos, July 17-21 2013

The period of <u>clouds</u>, <u>scattered thunderstorms and somewhat below average temperatures</u> that affected the Lower Rio Grande Valley for the second and third weeks of July 2013 ultimately produced torrents across the Rio Conchos Basin (bottom left) south of the Texas Trans-Pecos region, and the upper reaches of the Sierra Madre Oriental, south of the Big Bend region. The more local heavy rainfall that fell across tributaries which feed the Rio Grande between Amistad International Reservoir and Falcon International Reservoir may have helped stop the slow drop of lake levels at Falcon through the week of July 21-26, 2013</u>. More notably, the



et up by an upper level disturbance briefly ture on southeast winds high into the atmosphere, filled up several reservoirs in Chihuahua State. A good deal of water was released, or spilled over, into the Rio Conchos downstream of Reservoirs Luis L. Leon and F. I. Madero beginning around July 20th and continuing at various amounts through the week of July 21-27.

> The chart above shows the general "surge" of water downriver after the torrential rainfall – which was estimated to be 10 to more than 20 inches over much of the Rio Conchos (next page). A trickle of water at 2 AM CDT July 12th increased to a more turbulent rush during the week of July 21st across the purple shaded region.



Above: Measured and Estimated Rainfall for the month of July 2013 through the 24^{th} . Much of the rain in the Rio Conchos (leftmost area) fell between the 17^{th} and 21^{st} ; much of the rain that fell in tributaries that feed the Rio Grande between Amistad and Falcon (rightmost) fell on the 15^{th} and 16^{th} .

What's Next?

By July 24th, a notable increase in the Texas share of water was evident at <u>Amistad International Reservoir</u>. Between the 18th and 25th of July, the level had increased nearly 1 percent – from 37.2 to 38.1. The increase may seem insignificant, but *any* increase in the heart of summer and during a year where record low conservation levels occurred is a ray of hope for stabilizing – at least temporarily – the water supply situation for downstream agricultural and municipal users.

Additional water was expected to flow into Amistad Reservoir through the end of July, and probably a little bit into August, despite "La Canícula" (the hot and dry high pressure ridge common in late July and early August). When the rise flattens, decisions will be made between the <u>International Boundary and Water Commission</u> and the Comisión Internacional de Límites y Aguas (Mexico) on whether any of the additional stored water will be released to temporarily increase levels downstream at Falcon.

Stay tuned.

Drought Still Dominates

Even if additional water arrives downstream, the Severe to Exceptional Drought across the Rio Grande Valley will continue, and likely worsen, heading into August. Should August and especially September end up hot and dry in the Valley and much of the Rio Grande Basin from the Rio Conchos to points east, water supply issues will worsen once again.

Water conservation and management remains critical to life and livelihood across the Valley.