

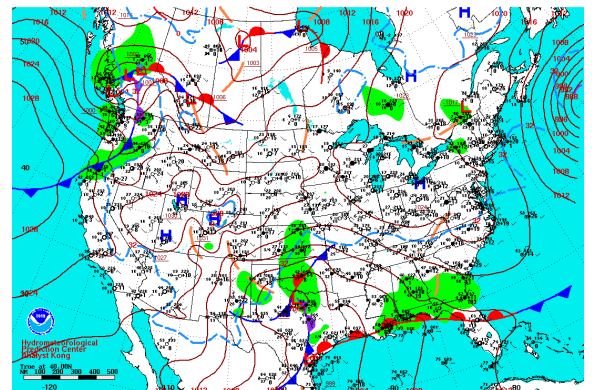
Chapstick City...Dusty Trails

Strong Winds, Low Humidity Cause Isolated Power Outages

“Flash” Drought Piles on to Make it Seem Like the 1950s Again

A warm, largely rain-free February closed with bone-dry weather, adding insult to injury of the already Extreme to Exceptional Drought conditions across the region, and making folks wonder if conditions could get even worse for the Rio Grande Valley and Deep South Texas. On Monday, February 25th, a “bowling ball” blizzard-producing cyclone (below, right) across the Texas Panhandle swept very strong, gusty northwest winds from the West Texas plains into South Texas and into the Valley.

Difficult driving conditions across exposed or elevated highways, the assortment of blown objects such as empty trash cans and loose lightweight lawn items were common. In Edinburg, power was knocked out in a portion of town when a falling tree clipped power lines; Edinburg North High School was forced to evacuate when a small fire began in an air conditioning unit¹. Another tree blew down in Pharr; each event occurred during the afternoon when gusts around 45 mph became more frequent.



¹Credit: KRGV-TV Channel 5 News.

Dust in the Wind

Folks from northern Hidalgo County through the South Texas brush country may have thought they were in a 1930s or 1950s time warp; lofted dust and dirt by the strong northwest winds dropped visibility to 3 to 5 miles in many areas, and locally below 1 mile where dirt and dust were more prevalent, including McCook in northwest Hidalgo County and Ben Bolt in northern Jim Wells County. The dirt and dust gradually spread across the Valley, and air quality worsened rapidly to “Unhealthy for Sensitive Groups” by late afternoon. The high value was solely due to Particulate Matter-10 (PM-10), defined as “coarse particulates from sources such as windblown dust from the desert or agricultural fields.” Hourly values of the PM-10 began the day at a paltry 20.5 micrograms per meter, but increased to more than 30 times that amount by 4 PM (716.3 micrograms per meter)! (Texas Commission on Environmental Quality). The index peaked just under the level for “Unhealthy” (143) before improving quickly overnight as winds laid down and the dust, literally, settled.

Reporting for February 25, 2013																
		February		25		2013		Select a Different Date								
Return to Main AQI Report																
Monitoring Sites in the McAllen-Edinburg-Mission Metro Area	Air Quality	Critical Pollutant	Air Quality Index Rating													
			Ozone				Carbon Monoxide		Sulfur Dioxide		Nitrogen Dioxide		PM-10 (Std Cond)		PM-2.5 (Lcl Acpt)	
			1-Hour		8-Hour		8-Hour		1-Hour		1-Hour		24-Hour		24-Hour	
			AQI	ppb	AQI	ppb	AQI	ppm	AQI	ppb	AQI	ppb	AQI	µg/m ³ (25° C)	AQI	µg/m ³ LC
Hidalgo County	Unhealthy for sensitive groups	PM-10	*	41	32	38							120	194.1	87	29.4
Mission C43/AP143	Unhealthy for sensitive groups	PM-10	*	41	32	38							120	194.1	87	29.4
PM-10 is measured at standard pressure and temperature conditions.																
PM-2.5 Acceptable is measured at local pressure and temperature conditions.																
* There is no AQI associated with hourly ozone averages less than 0.125 ppm (125 ppb).																

Hourly Air Quality Index and values of the primary culprits (particulate matter) just after 3 PM on Monday, February 25th. The index would rise to 143 a little after 5 pm before decreasing overnight. To monitor Air Quality across Texas, surf to

http://www.tceq.state.tx.us/cgi-bin/compliance/monops/aqi_rpt.pl

But Wait, There Was More

The winds may have subsided, but the dry air locked in for another day; afternoon humidity on February 26th fell to below 10 percent mainly west of Highway 281 during the afternoon. A reinforcing dry front brought stiff north winds and a **third day in a row** of humidity below 10 percent during the afternoon of February 27th. Meanwhile, reservoir levels began to fall more rapidly at Falcon International Reservoir as upstream flows from Amistad were temporarily reduced. Were we looking at the start of the well-advertised [warm, dry spring of 2013](#)? Time would tell.