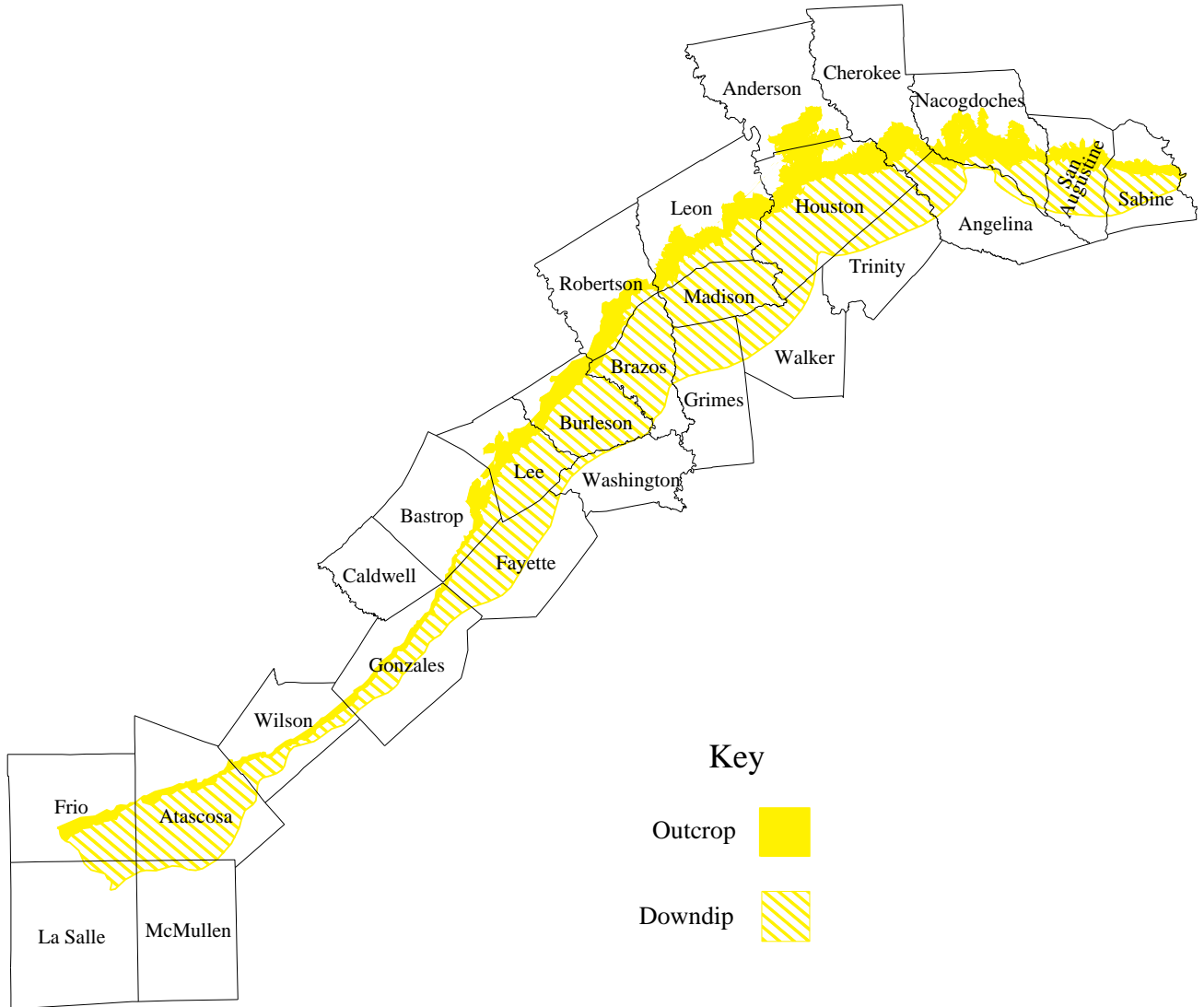


Sparta



Sparta Aquifer

The Sparta aquifer extends in a narrow band from the Frio River in South Texas northeastward to the Louisiana border in Sabine County. The Sparta provides water for domestic and livestock supplies throughout its extent, and water for municipal, industrial, and irrigation purposes in much of the region. Yields of individual wells are generally less than 100 gal/min, although most high-capacity wells average 400 gal/min to 500 gal/min. A few wells produce as much as 1,200 gal/min.

The Sparta Formation, part of the Claiborne Group deposited during the Tertiary, consists of sand and interbedded clay with massive sand beds in the basal section. These beds dip gently to the south and southeast toward the Gulf Coast and reach a total thickness of up to 300 feet.

Water of excellent quality is commonly found within the outcrop and for a few miles downdip, but it deteriorates with depth in the downdip direction. Locally, water within the aquifer may contain iron concentrations in excess of drinking water standards.

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