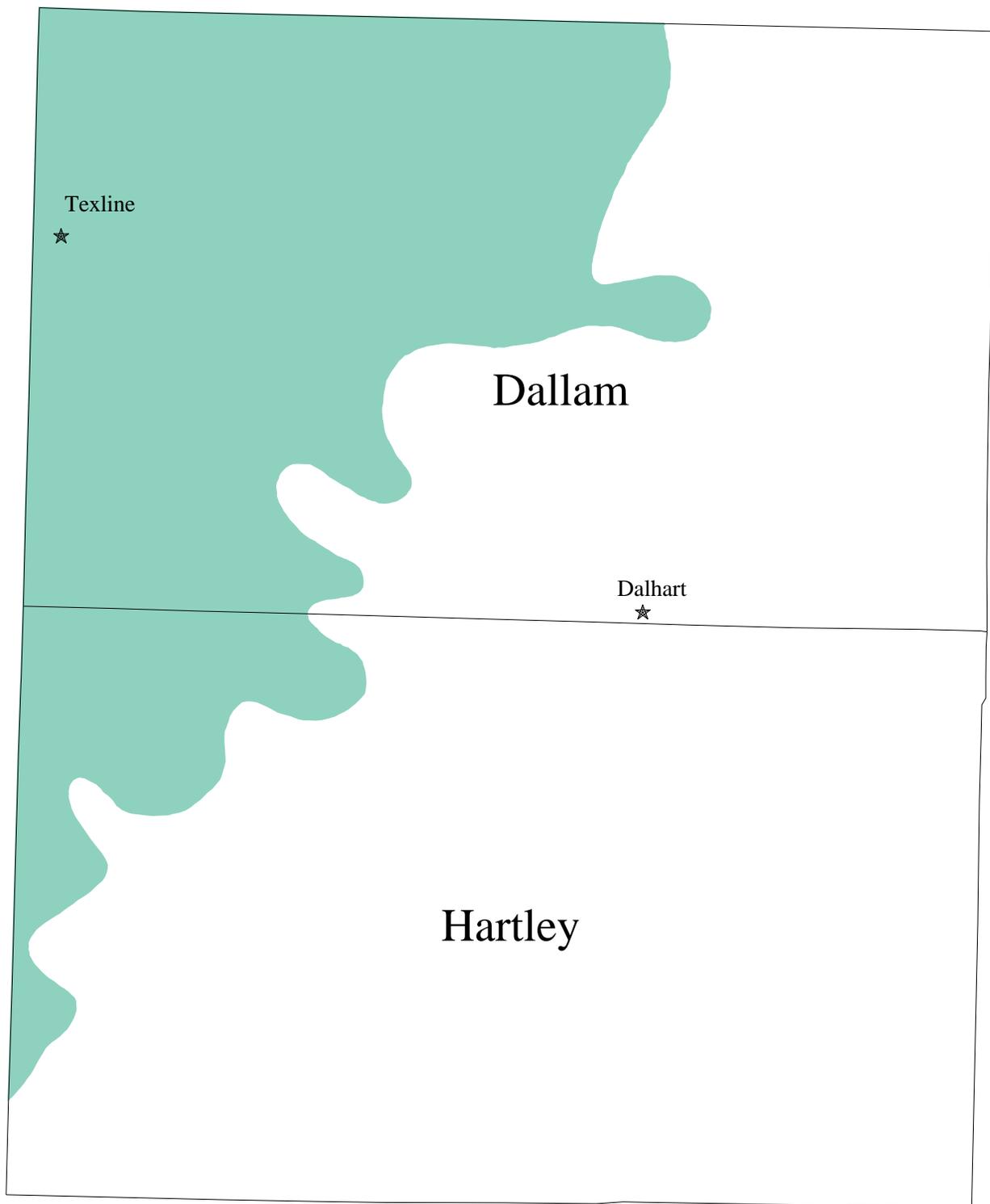


# Rita Blanca



## **Rita Blanca Aquifer**

The Rita Blanca aquifer underlies the Ogallala Formation in western Dallam and Hartley counties in the northwest corner of the Texas Panhandle and is a small part of a large aquifer that extends into Oklahoma, Colorado, and New Mexico. Irrigation accounts for most of the ground-water use from this aquifer, with Texline being the only community that uses the aquifer for municipal water supply.

Ground water occurs in coarse-grained Cretaceous age sands and gravels of the Lytle and Dakota formations. Ground water also occurs in the Exeter Sandstone and the Morrison Formation of Jurassic age. Highest yields of 600 gal/min to 800 gal/min are obtained from wells completed in the Lytle and Dakota sandstones.

Water quality in the aquifer is usually fresh, but very hard. Some formations, however, produce water that is slightly saline, which is unsuitable for irrigating most crops grown in the region. Water-level declines have developed in excess of 50 feet in some irrigated areas. As a result, many springs in the northern part of Dallam County have disappeared that once contributed to the constant flow in creeks.

### **References**

- Christian, P., 1989, Evaluation of ground-water resources in Dallam County, Texas: TWDB Rept. 315, 27 p.  
Knowles, T., Nordstrom, P., and Klemm, W.B., 1984, Evaluating the ground-water resources of the High Plains of Texas: TDWR Rept. 288, 4 vols.