

Marathon Aquifer

The Marathon aquifer occurs entirely within north-central Brewster County. Ground water is used primarily for municipal water supply by the city of Marathon and for domestic and livestock purposes. Water from the aquifer is typically of good quality but hard, with dissolved solids usually ranging from 500 mg/l to 1,000 mg/l.

The Marathon aquifer is contained within the Gaptank, Dimple, Tesnus, Caballos, Maraviallas, Fort Pena, and Marathon Limestone formations; of these, the Marathon Limestone Formation is the most productive unit. These Early Paleozoic (Pennsylvanian through Ordovician) formations occur in a region of complex folding and faulting within the Marathon Uplift.

Water in the Marathon aquifer occurs in numerous crevices, joints, and cavities, and extends to depths ranging from 350 feet to about 900 feet. The depth of most wells is less than 250 feet, and well yields range from less than 10 gal/min to more than 300 gal/min. Many of the shallow wells in the region actually produce water from alluvial deposits that cover portions of the rock formations.

References

DeCook, K.J., 1961, A reconnaissance of the ground-water resources of the Marathon area, Brewster County, Texas: TBWE Bull. 6111, 51 p.