INTRODUCTION

The northern High Plains of Colorado, an area of about 5,000 mi² in the western part of the state (Figure 1), is underlain by the Northern Great Plains Aquifer System. This aquifer is recharged in the northwestern part of the state by infiltrating precipitation falling on the Rocky Mountains and, to a lesser extent, in the eastern part of the state by infiltrating precipitation falling on the Front Range. Groundwater emerging in the eastern part of the High Plains is the result of water moving from areas of recharge in the west and southwest.

The High Plains of Colorado are underlain by a bedrock of Cretaceous limestone, dolomite, and sandstone that unconformably overlies a sequence of Tertiary and Quaternary sediments. The bedrock is characterized by a number of karstic features, including caves, sinkholes, and solutional valleys.

Altitude and Configuration of the Water Table

The altitude of the water table ranges from about 2,000 ft in the eastern part of the High Plains to about 6,000 ft in the western part. The water table is generally shallower in the eastern part of the High Plains because of the higher recharge rates in that area.

Altitude and Configuration of the Water Table

The water table is generally shallower in the eastern part of the High Plains because of the higher recharge rates in that area. The water table is generally deeper in the western part of the High Plains because of the lower recharge rates in that area.

Conclusion

The northern High Plains of Colorado are underlain by the Northern Great Plains Aquifer System. The water table is generally shallower in the eastern part of the High Plains because of the higher recharge rates in that area. The water table is generally deeper in the western part of the High Plains because of the lower recharge rates in that area.