

EXPLANATION

Bedrock outcrop

Depth to water table, in feet below land surface

Less than 20

20 to 40

40 to 60

Limit of well-defined, 20-foot-interval water-table contours

Depth to the Water Table

The map of the depth to the water table (fig. 9) was calculated by using the geographic information system to subtract the water-table altitude coverage from the smoothed land-surface altitude coverage. The resulting coverage of the depth to the water table was plotted only for the area having well-defined, 20-foot-interval water-table contours. Beyond this area, the shallow aquifers may be thin, discontinuous, or transient, and the water table may be in the bedrock during much of the year. If shallow aquifers are present in this area, the water table generally will be near the top of the bedrock, and the depth to water will be similar to the thickness of the unconsolidated sediments (fig. 3). Depth to the water table generally is less than 20 feet along the principal stream valleys such as the Cache La Poudre and South Platte Rivers. However, depths exceed 40 feet in parts of Greeley and in the area north of the Cache La Poudre River north of Greeley. Depth to water in the aquifers north of the Cache La Poudre valley ranges from zero to 40 feet but commonly is about 20 feet.

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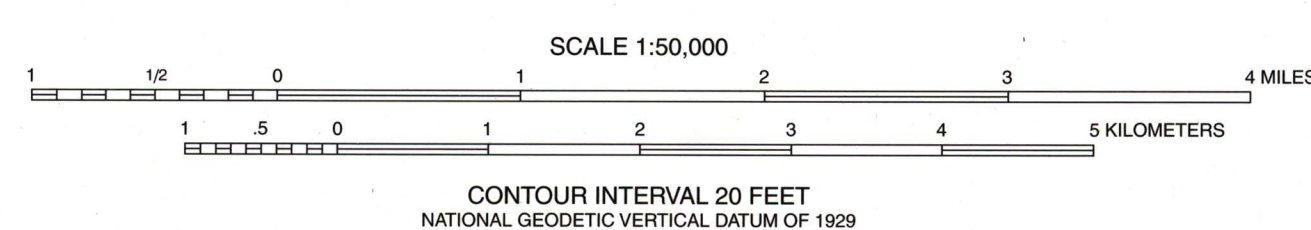
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CONVERSION FACTORS AND VERTICAL DATUM

Multiply	By	To obtain
foot	0.3048	meter
mile	1.609	kilometer
square mile	2.59	square kilometer

Sea level: In this report, "sea level" refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929)—a geoid datum derived from a general adjustment of the first-order level nets of both the United States and Canada, formerly called "Mean Sea Level."

FIGURE 9—Depth to the water table in the shallow aquifers.



GEOHYDROLOGY OF THE SHALLOW AQUIFERS IN THE GREELEY-NUNN AREA, COLORADO

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