

EXPLANATION

Bedrock outcrop

Saturated thickness, in feet

- Less than 20
- 20 to 40
- 40 to 60
- 60 to 80
- 80 to 100

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

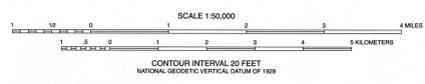
Saturated Thickness of the Aquifers

The map of the saturated thickness of the aquifers (fig. 8) was computed by the geographic information system as the difference between the maps of the altitude of the water table (a first-order map) and the altitude of the bedrock surface (a second-order map). Because the saturated thickness map is a third-order map and was calculated as the difference between two interpretive maps, it is generalized and shows the trends in saturated thickness but not local variations in thickness. Saturated thickness is not shown in the upland areas beyond the area of well-defined 20-foot-interval water-table contours in figure 7 because the shallow aquifers in these areas tend to be thin, discontinuous, and transient. Saturated thickness is considered to be zero where the water table is in bedrock.

Saturated thickness ranges from about 10 to 50 feet in the valley of the Cache La Poudre River; however, in most of the valley, thickness is about 20 feet. The principal area of greater saturated thickness is located along the north margin of the valley to the east of Fort Collins. This area appears to be the result of the southeastward extension of the deep paleovalley between Black Hollow Junction and Wellington. Saturated thickness in the Big and Little Thompson River valleys is about 20 feet. Saturated thickness generally is 40 to 80 feet in the large paleovalley extending from Black Hollow Junction through Wellington. Thickness is about 20 feet in the other small paleovalleys. Outside the principal valleys and paleovalleys, saturated thickness generally is less than 20 feet and may be zero in some areas or at some times of the year.

FIGURE 8—Saturated thickness of the shallow aquifers.

Base from U.S. Geological Survey
1:50,000 Larimer and Weld Counties



GEOHYDROLOGY OF THE SHALLOW AQUIFERS IN THE FORT COLLINS-LOVELAND AREA, COLORADO

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