

**EXPLANATION**

Bedrock outcrop

Saturated thickness, in feet

- Less than 20
- 20 to 40
- 40 to 60
- 60 to 80
- 80 to 100
- 100 to 120

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

**Saturated Thickness of the Aquifers**

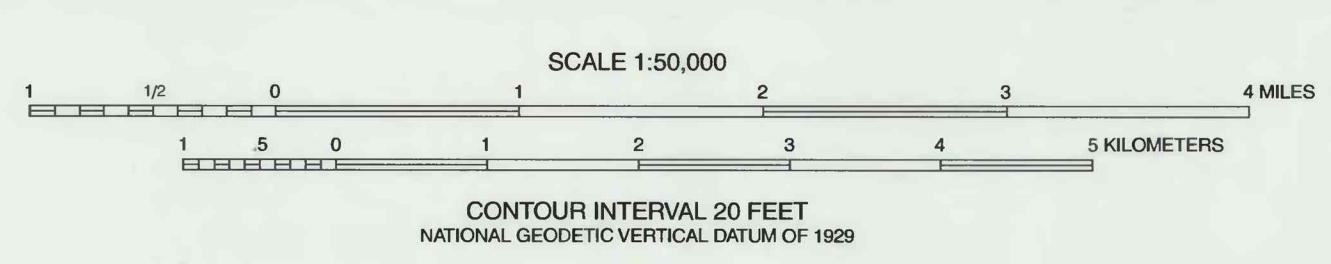
The map of the saturated thickness of the aquifers (fig. 8) was computed by the geographic information system as the difference between the maps of the altitude of the water table (a first-order map) and the altitude of the bedrock surface (a second-order map). Because the saturated thickness map is 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 4 because the shallow aquifers in these areas tend to be thin, discontinuous, and transient. Saturated thickness is taken to be zero where the water table is in bedrock.

Saturated thickness ranges from 20 to 40 feet in most of the valley of the South Platte River; however, thickness generally is 60 to 100 feet along the southeast margin of the valley between Gilcrest and La Salle. Tributary valleys to the west of the South Platte valley generally have saturated thickness of about 20 feet, and Box Elder Creek valley generally ranges from 20 to 40 feet of saturated thickness.

The paleovalley in Beebe Draw contains 40 to as much as 100 feet of saturated thickness and contains some of the most consistently thick sediments in the demonstration area. 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 Adams and Weld Counties



**GEOHYDROLOGY OF THE SHALLOW AQUIFERS IN THE FORT LUPTON–GILCREST AREA, COLORADO**

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 2000