

Saturated Thickness—What is it?

For an unconfined aquifer like the Ogallala, the saturated thickness is the distance from the water table surface to the base of the aquifer. It is calculated using water level measurements and well logs. These data form the upper and lower surfaces, respectively.

Understanding saturated thickness is crucial for landowners who produce groundwater. It is this thickness which supplies water to wells. As water levels decline, so does the saturated thickness.

The **approximate** acreages for varying levels of saturated thickness for 2005 are included below:

Saturated Thickness	Acres
Less than 20 ft.	67,808
20 ft.	179,805
40 ft.	159,750
60 ft.	118,720
80 ft.	32,994
100 ft.	7,876
120 ft.	5,482
140 ft.	3,437
160 ft.	760

From this data, it is evident that the greatest number of acres in the District occur where the saturated thickness is about 20 ft. A saturated thickness of 40 ft. covers the next highest number of acres.