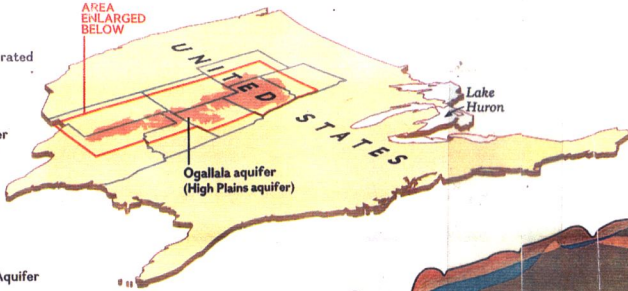
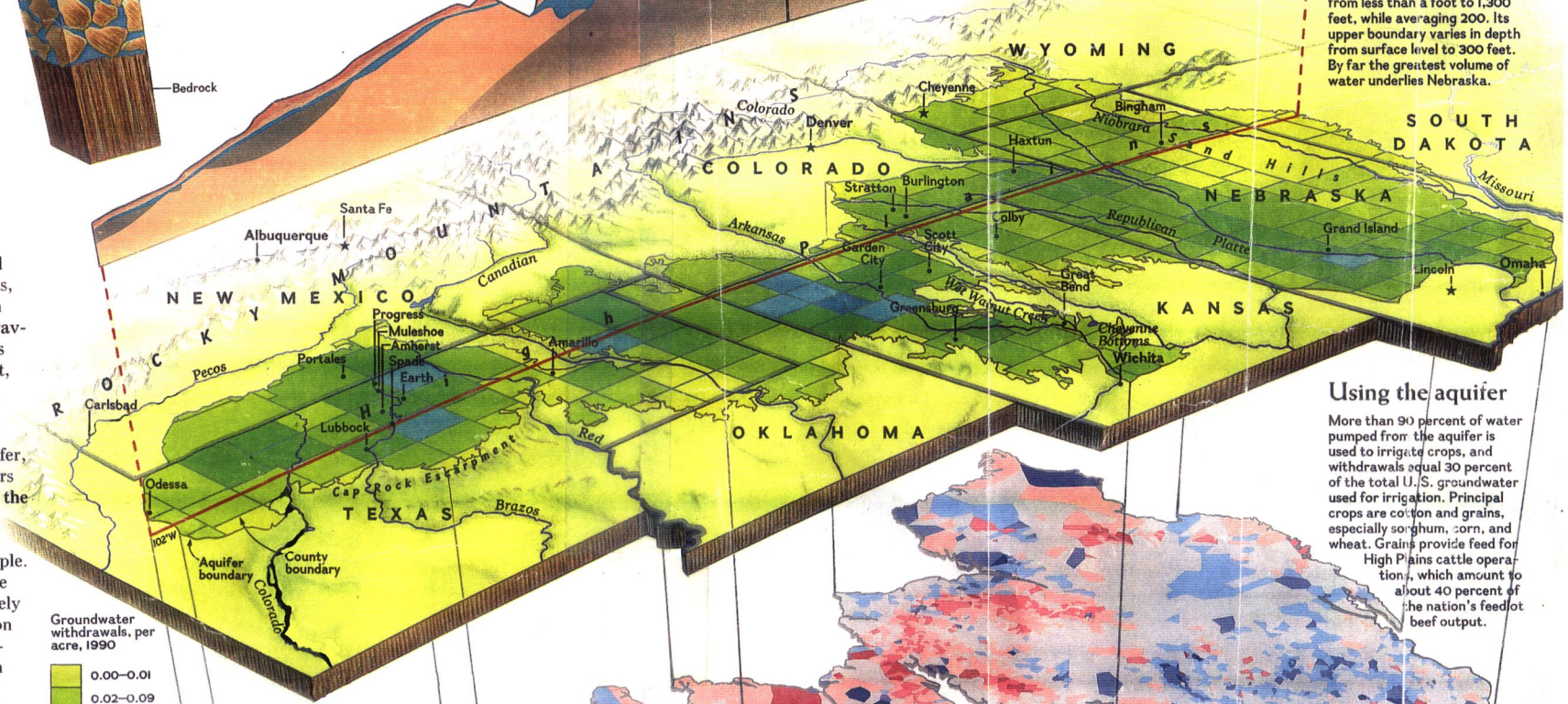


AREA ENLARGED BELOW



Ogallala cross section

The aquifer ranges in thickness from less than a foot to 1,300 feet, while averaging 200. Its upper boundary varies in depth from surface level to 300 feet. By far the greatest volume of water underlies Nebraska.



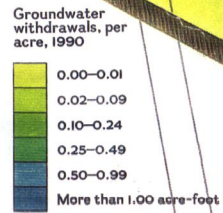
Using the aquifer

More than 90 percent of water pumped from the aquifer is used to irrigate crops, and withdrawals equal 30 percent of the total U.S. groundwater used for irrigation. Principal crops are cotton and grains, especially sorghum, corn, and wheat. Grains provide feed for High Plains cattle operations, which amount to about 40 percent of the nation's feedlot beef output.

Changing groundwater levels

From the 1940s to 1980 the aquifer's average water level declined nearly ten feet, with declines exceeding 100 feet in some parts of Texas. During the 1980s the level declined only an additional foot—a result of increased rain and snow, water management, and new technologies. Still, serious depletion continued in parts of Kansas and Texas.

eroded mountains, stream beds, and the melting of glaciers, to fill the aquifer. In other parts of the High Plains, the aquifer is used for irrigation. In some well-run practices, the aquifer is used in several ways to maintain rain



Scale varies in this perspective. NGS CARTOGRAPHIC DIVISION SOURCE: U.S. GEOLOGICAL SURVEY PAINTING BY SUSAN SANFORD

