

Nitrogen, Sulfate, Chloride, and Manganese in Ground Water in the Alluvial Deposits of the South Platte River Valley near Greeley, Weld County, Colorado

Neville G. Gaggiani¹

Ground water is used extensively for agriculture along the South Platte River in the study area, which is about 10 miles east of Greeley and about 50 miles northeast of Denver, Colorado. Significant changes in the reuse of water may result from use and reuse of water from the stream-aquifer system for irrigated crops, extensive use of crops and poultry farms. To help water users and managers better understand the effects of land use on ground-water resources, this report presents data on nitrite plus nitrate, sulfate, chloride, and manganese concentrations, which are good indicators of the water quality, and a brief description of the geology and hydrology of the study area.

¹U.S. Geological Survey, Bldg. 2-85, Rocky Mountain Arsenal, Box 15, Commerce City, CO 80022-1748 (gaggiani@usgs.gov)