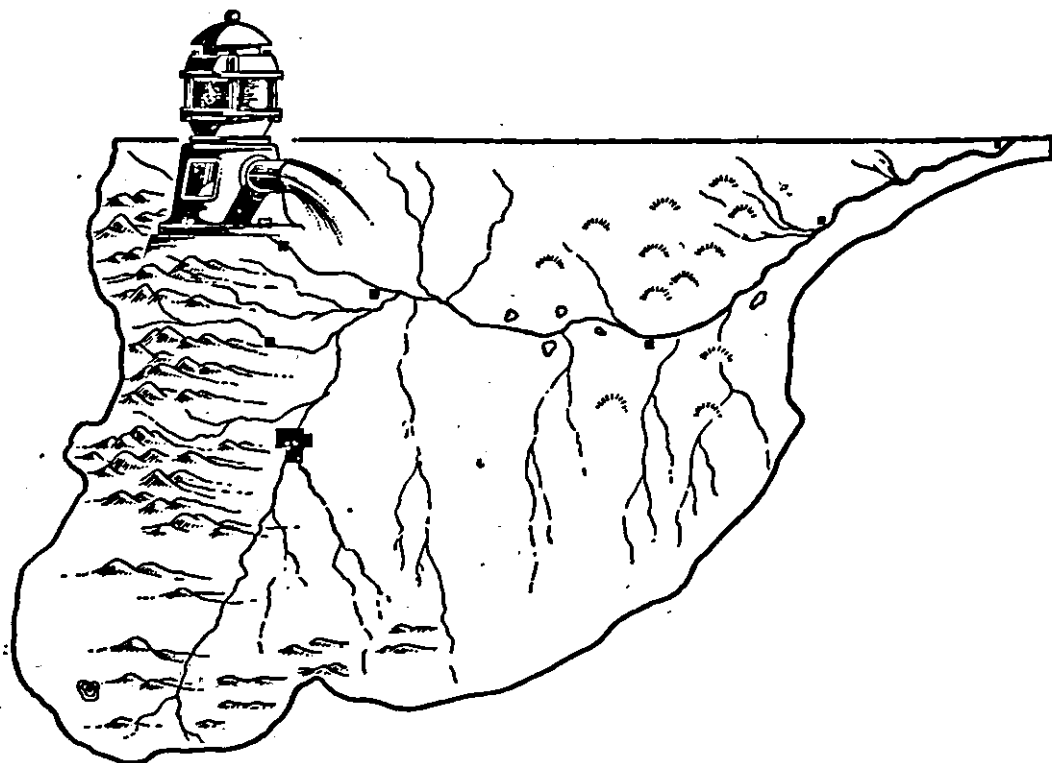


Use of Ground Water for  
Irrigation in the South Platte  
Valley of Colorado.

# USE OF GROUND WATER FOR IRRIGATION in the SOUTH PLATTE VALLEY OF COLORADO

W. E. CODE



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# Use of Ground Water for Irrigation In the South Platte Valley of Colorado<sup>1</sup>

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**A**GRICULTURE has imposed increasing demands upon ground water as surface irrigation water supplies dwindled during recent drought periods and as new land has been brought into intensive production where ground water could be developed. A lowering of the water table has occurred in varying degrees because of the increased demand and deficient stream flow in many places. In some places this lowering has been rather serious and has been attended by a necessary change in equipment, an increase in cost of power, and a decrease in well capacity and pump efficiency. Also, many stock and domestic wells have had to be deepened.

### Extent and Importance of Ground-Water Use

Of the 3,220,000 acres under irrigation in Colorado, 1,113,000 acres, or about one-third of the total, are in the South Platte Valley.

<sup>1</sup>The work on which this report is based was done in cooperation with the Division of Irrigation, Soil Conservation Service, U. S. D. A. Acknowledgement is due to Carl Rohwer of that agency for his help in planning the work; to the various power utilities which generously made available their records on annual consumption of electric current, which were vital in the determination of the amount of water pumped; and to the Colorado Water Conservation Board, which prepared the survey map of the area from data obtained by the Experiment Station and provided as assistants R. E. Kennedy in the field season of 1940 and W. E. Judd in the field season of 1941.

<sup>2</sup>Associate irrigation engineer, Colorado Agricultural Experiment Station.