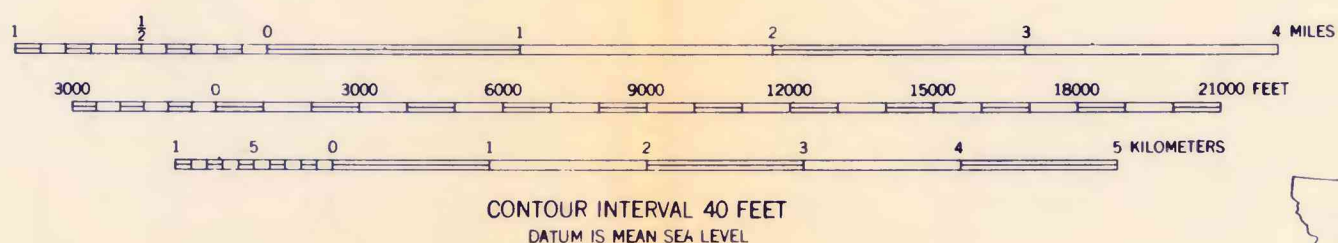


EXPLANATION

- Well
- 6 — Approximate line of equal depth to water table, September 1976. Interval is 6 feet. Datum is land surface. Depth to water table was mapped using water-level measurements from existing shallow test holes and selected domestic wells and from field reconnaissance of topography
- Area where most wells are completed in bedrock. Water levels measured in these wells generally differ from water levels measured in shallower wells completed in the valley-fill deposits of the Helena valley. Because of the lack of shallow wells and because of the wide range of hydrologic conditions within the bedrock area, definition of the water table generally is not feasible
- Approximate area inundated by June 1975 flood. (The 1975 flood was an approximate 100-year flood.) Flooding along Prickly Pear and Tennille Creeks and northward to the middle of secs. 31 and 32, T.11 N., R.3 W., was mapped from aerial photos. Flooding along Silver Creek was mapped by field reconnaissance. Some isolated areas of flooding are not shown
- — — — — Main irrigation canal
- + — — — — Open drainage ditch

Base from U.S. Geological Survey
East Helena 1:62,500, 1950



Depth to water by K. R. Wilke and C. C. Behan. Flood mapping by M. V. Johnson. Bedrock contact compiled from published geologic maps, water-well drillers' logs, and unpublished geologic maps by R. G. Schmidt



MAP SHOWING DEPTH TO WATER TABLE, SEPTEMBER 1976, AND AREA INUNDATED BY THE JUNE 1975 FLOOD,
HELENA VALLEY, LEWIS AND CLARK COUNTY, MONTANA

BY K. R. WILKE AND M. V. JOHNSON
1978