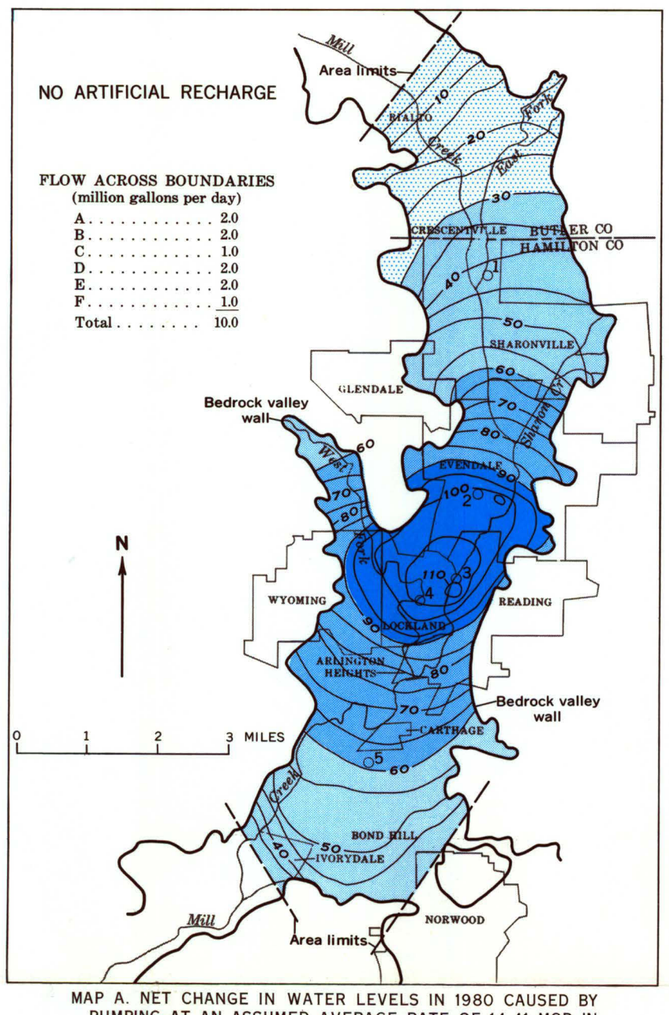
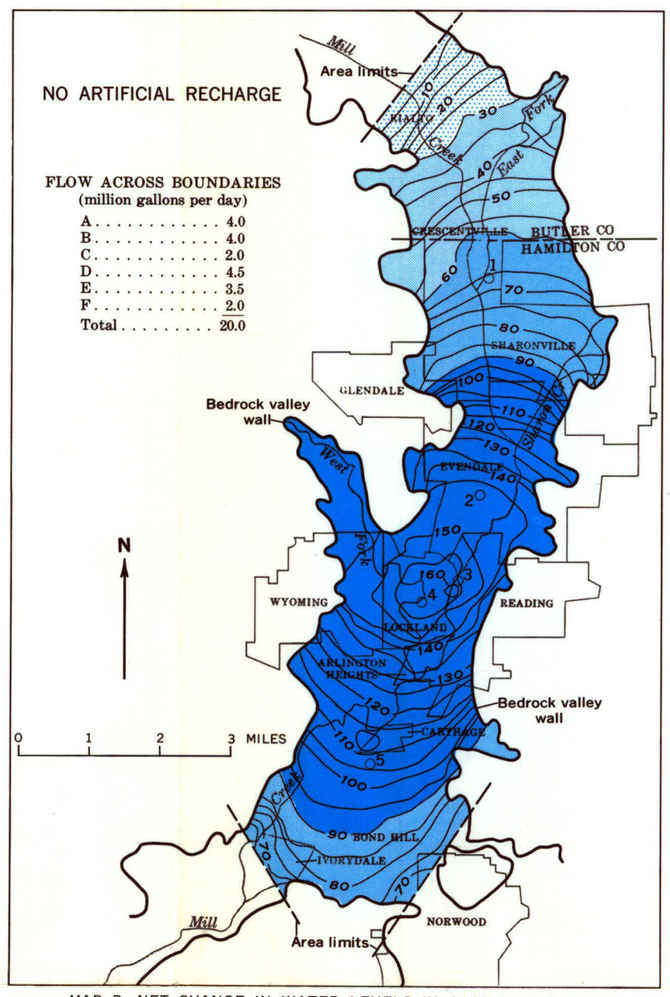
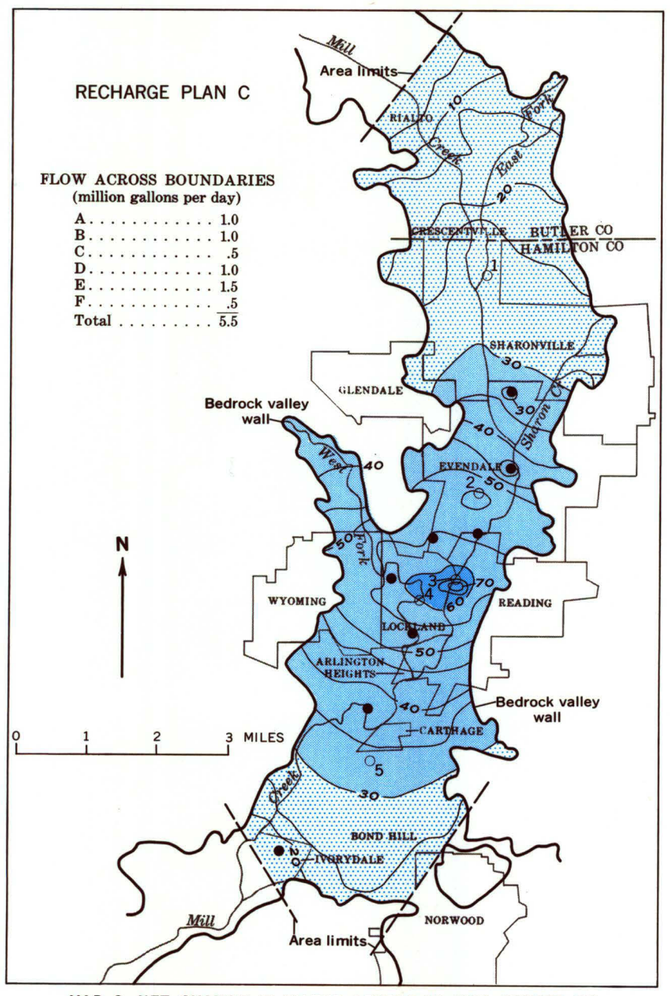


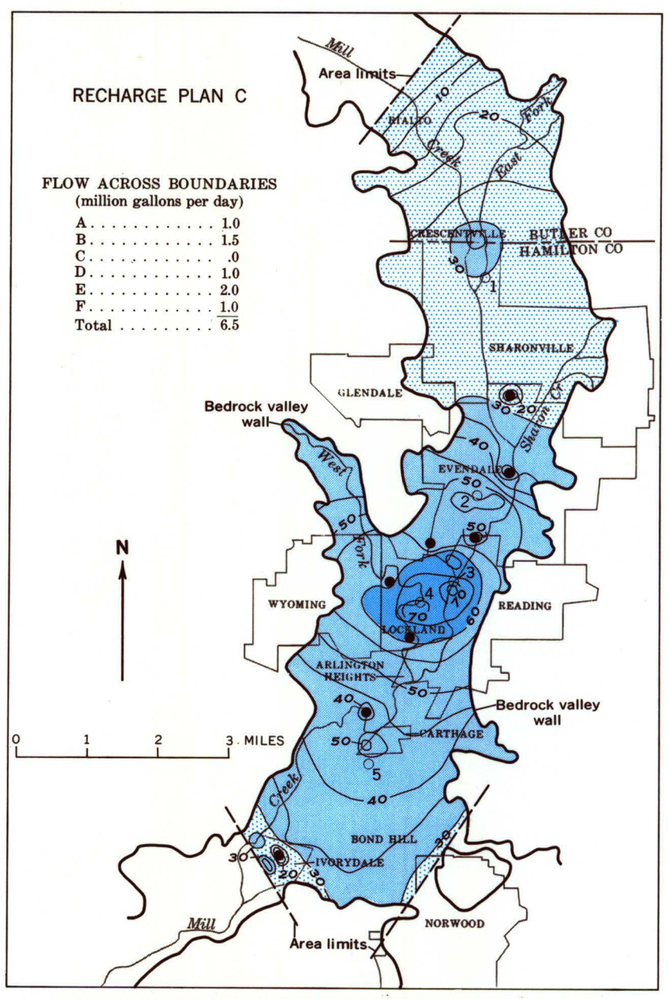

MAP A. NET CHANGE IN WATER LEVELS IN 1980 CAUSED BY PUMPING AT AN ASSUMED AVERAGE RATE OF 14.41 MGD IN THE PERIOD 1965–79




MAP B. NET CHANGE IN WATER LEVELS IN 2000 CAUSED BY PUMPING AT AN ASSUMED AVERAGE RATE OF 24.55 MGD IN THE PERIOD 1980–99




MAP C. NET CHANGE IN WATER LEVELS IN 1980 CAUSED BY PUMPING AT AN ASSUMED AVERAGE RATE OF 14.41 MGD AND INJECTION OF 8 MGD NEAR THE CENTER OF HEAVIEST PUMPING IN THE PERIOD 1965–79




MAP D. NET CHANGE IN WATER LEVELS IN 2000 CAUSED BY PUMPING AT AN ASSUMED AVERAGE RATE OF 24.55 MGD AND INJECTION OF 16 MGD NEAR THE CENTER OF HEAVIEST PUMPING IN THE PERIOD 1980–99

## EXPLANATION

### MAPS

0–30

30–60

60–90

90 or more

Decline in water level, in feet

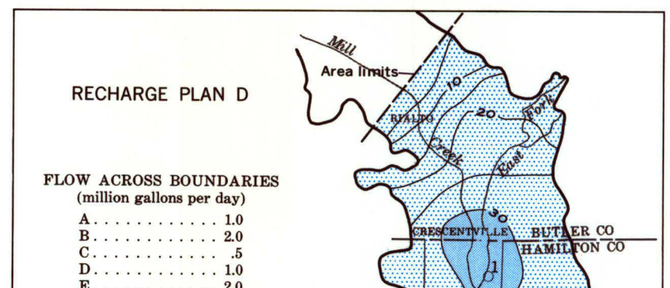
—80— Line of equal water-level decline
*Interval 5 feet*

● Simulated injection well

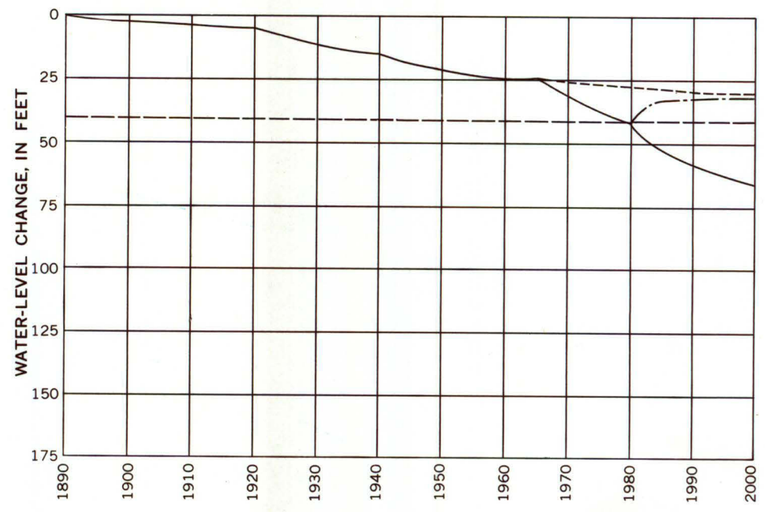
○3 Oscillogram location and number

All water-level changes represent differences between levels in 1890 (figure 4) and levels in the indicated year

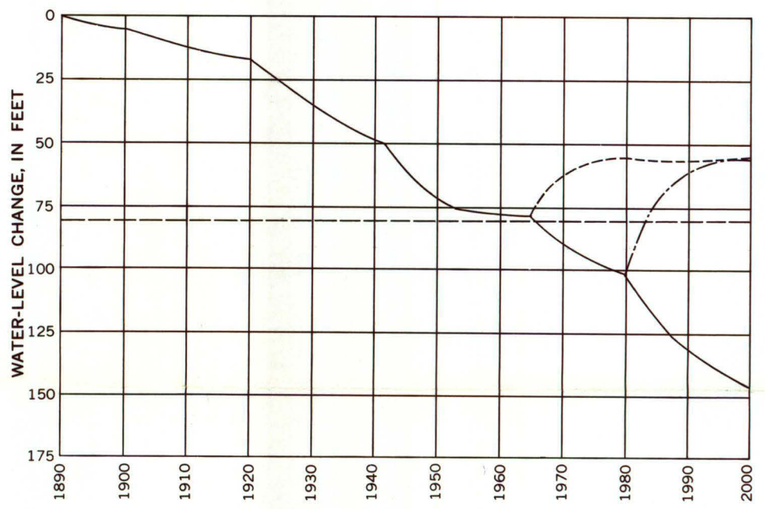
Recharge and discharge boundaries shown in figure 11



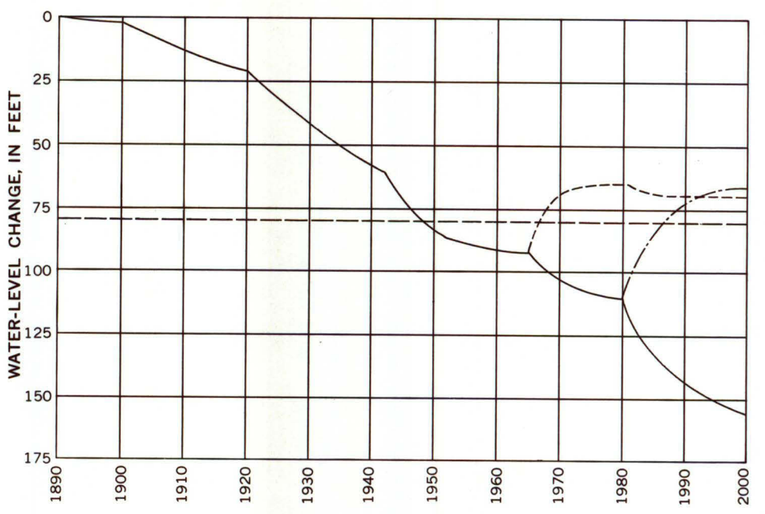

MAP E. NET CHANGE IN WATER LEVELS IN 2000 CAUSED BY PUMPING AT AN ASSUMED AVERAGE RATE OF 24.55 MGD AND INJECTION OF 16 MGD NEAR THE CENTER OF HEAVIEST PUMPING IN THE PERIOD 1980–99



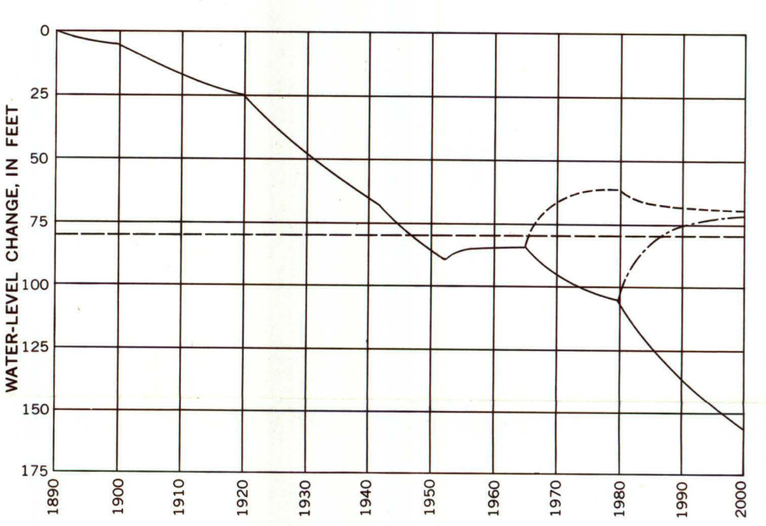

OSCILLOGRAM 1 SHOWING CHANGE IN WATER LEVEL NEAR CRESCENTVILLE



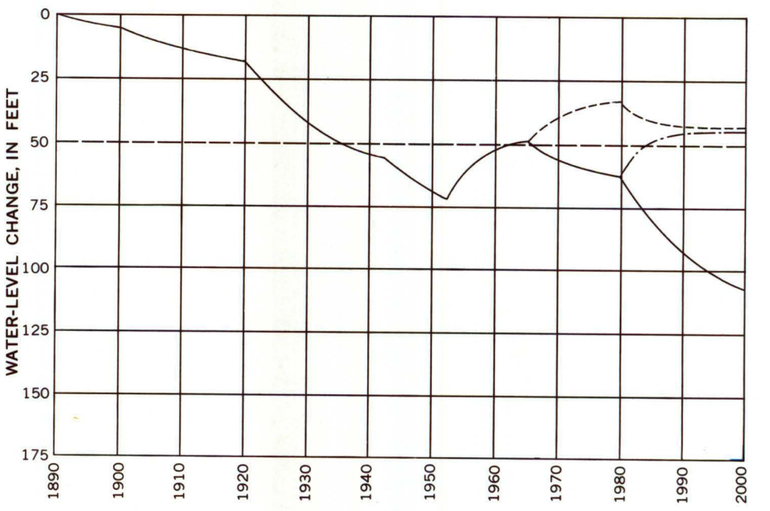

OSCILLOGRAM 2 SHOWING CHANGE IN WATER LEVEL NEAR EVENDALE




OSCILLOGRAM 3 SHOWING CHANGE IN WATER LEVEL NEAR READING




OSCILLOGRAM 4 SHOWING CHANGE IN WATER LEVEL NEAR LOCKLAND




OSCILLOGRAM 5 SHOWING CHANGE IN WATER LEVEL NEAR CARTHAGE

## EXPLANATION

### OSCILLOGRAMS

Net change in water level assuming no artificial recharge

Net change in water level resulting from recharge plan C

Net change in water level resulting from recharge plan D

Arbitrary limit of water-level change

# MAPS BASED ON ELECTRIC ANALOG MODEL SIMULATION SHOWING THE NET PROJECTED CHANGE IN WATER LEVELS RESULTING FROM PUMPING PLAN 3 AND RECHARGE PLANS C AND D IN MILL CREEK VALLEY, BUTLER AND HAMILTON COUNTIES, OHIO

389-674 O - 70 (In pocket) No. 4