

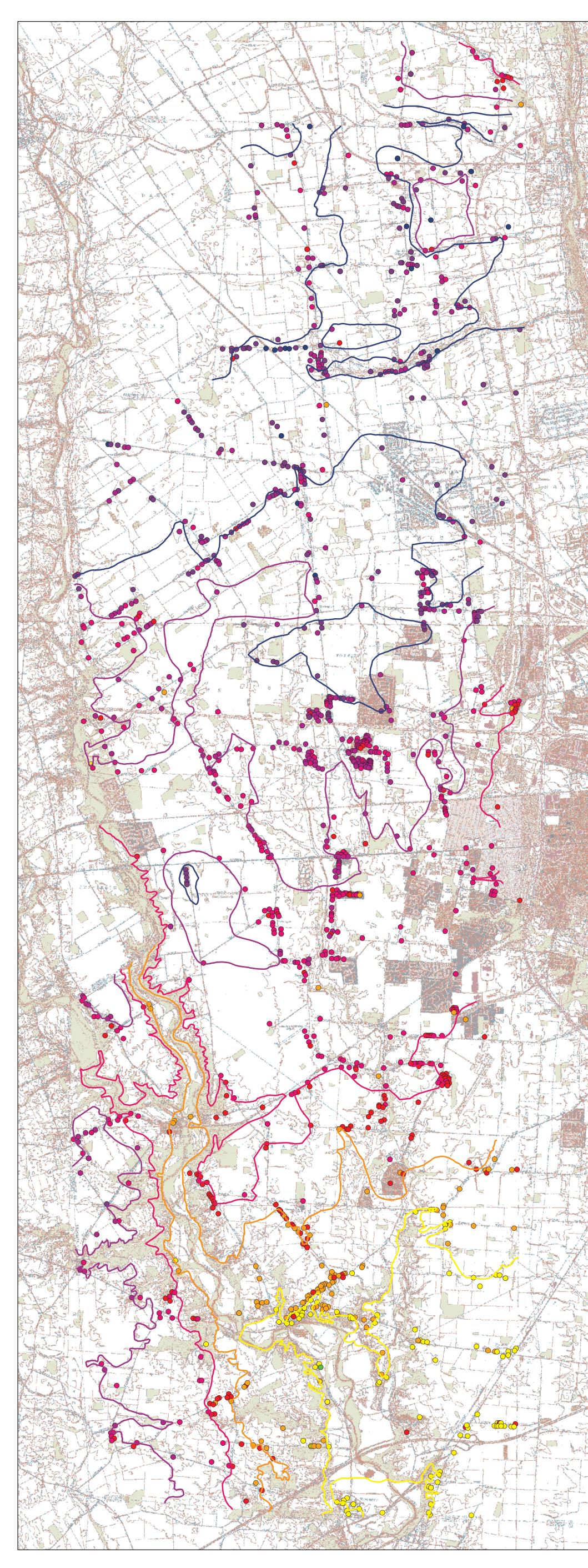
By Paul N. Spahr, A. Wayne Jones, Kelly A. Barrett, Michael P. Angle, and James M. Raab June, 2006

> Data points from the ODNR, Division of Water, water-well log record database were used to create potentiometric-surface maps for both sand and gravel and bedrock aquifers in the vicinity of Big Darby Creek, in southwestern Franklin County. A raster difference map was created from the GIS shapefiles of the two potentiometric-surface maps to help better analyze relative ground water movement between the aquifer systems. On the Difference Map, negative values (blues) show areas where water can move downward from the sand & gravel aquifers to the bedrock. Positive values (reds) show areas where the bedrock aquifer has a net upward movement.

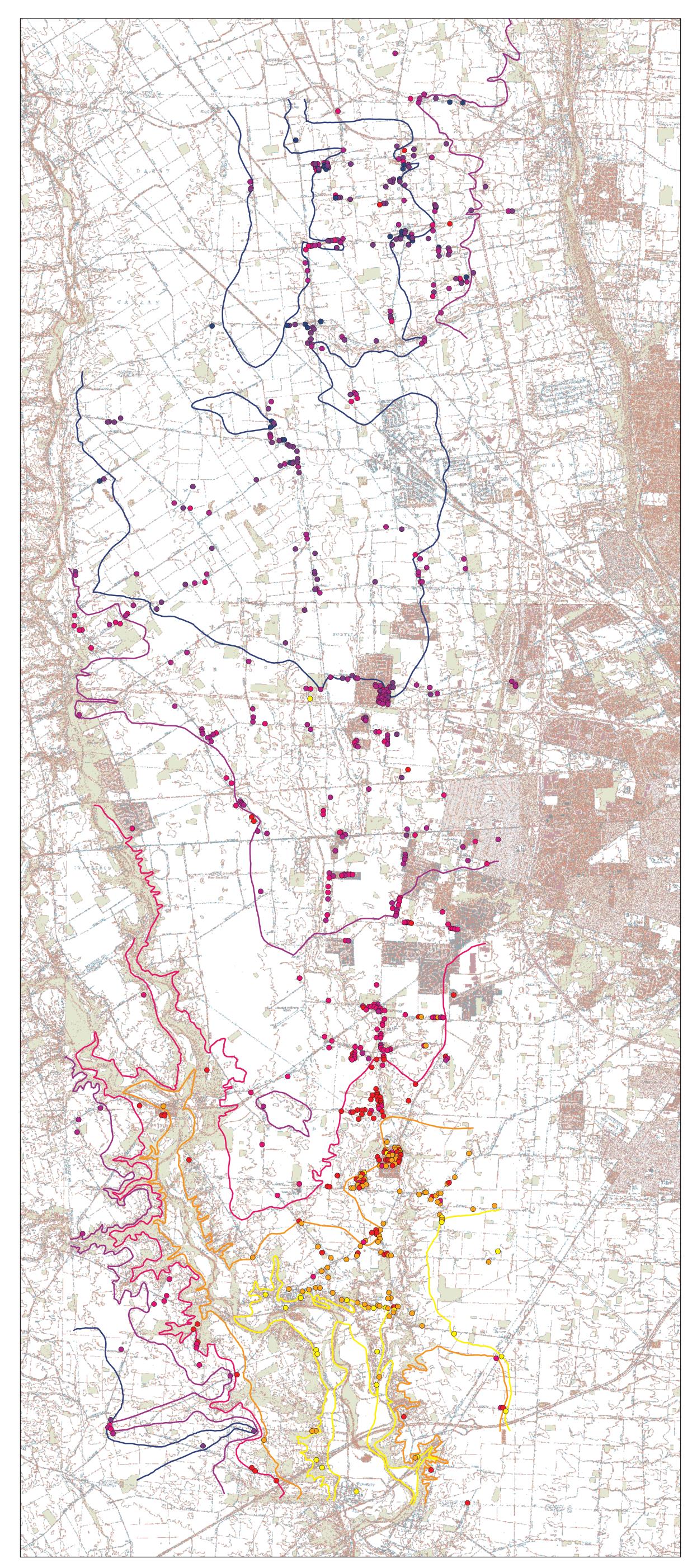
| Bedrock and Sand & Gravel Aquifer | S |
|---|---|
| Potentiometric Surface Elevation | |
| — 750 - 800 | |
| — 801 - 825 | |
| — 826 - 850 | |
| — 851 - 875 | |
| — 876 - 925 | |
| Wells and Water Elevation | |
| • 729 - 750 ft | |
| • 751 - 775 ft | |
| • 776 - 800 ft | |
| • 801 - 825 ft | |
| • 826 - 850 ft | |
| • 851 - 875 ft | |
| • 876 - 900 ft | |
| • 901 - 925 ft | |
| • 926 - 950 ft | |
| Difference Bedrock -Sand & Gravel | |
| -7570 ft | |
| -69.960 ft | |
| -59.950 ft | |
| -49.940 ft | |
| -39.930 ft | |
| -29.920 ft | |
| -19.910 ft | |
| -9.9 - 0 ft | |
| 0.1 - 10 ft | |
| 10.1 - 20 ft | |
| 20.1 - 30 ft | |
| 30.1 - 40 ft | |
| 40.1 - 45 ft | |



Potentiometric-Surface of the Bedrock Aquifer



Potentiometric-Surface of the Sand & Gravel Aquifers



Difference of the Bedrock and Sand & Gravel Potentiometric-Surface Maps

