

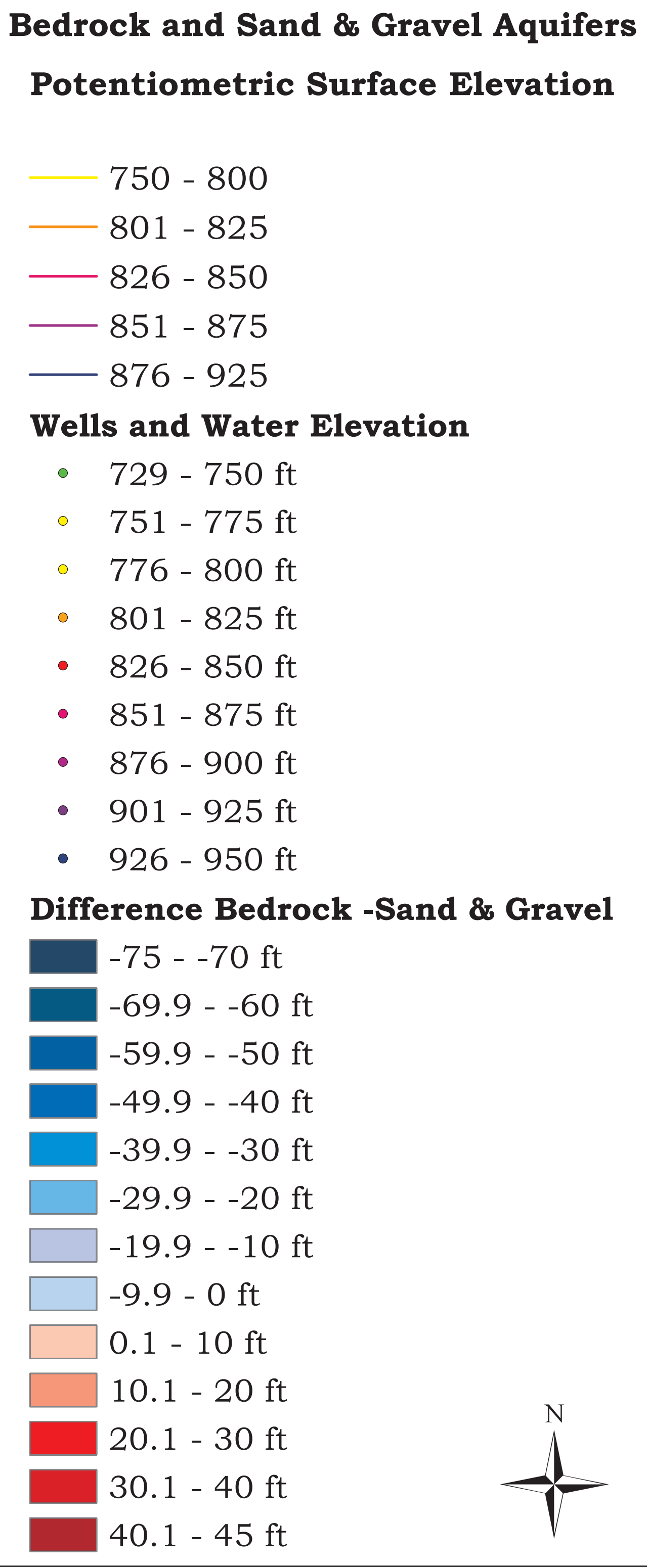


# Using GIS to Create and Analyze Potentiometric-Surface Maps

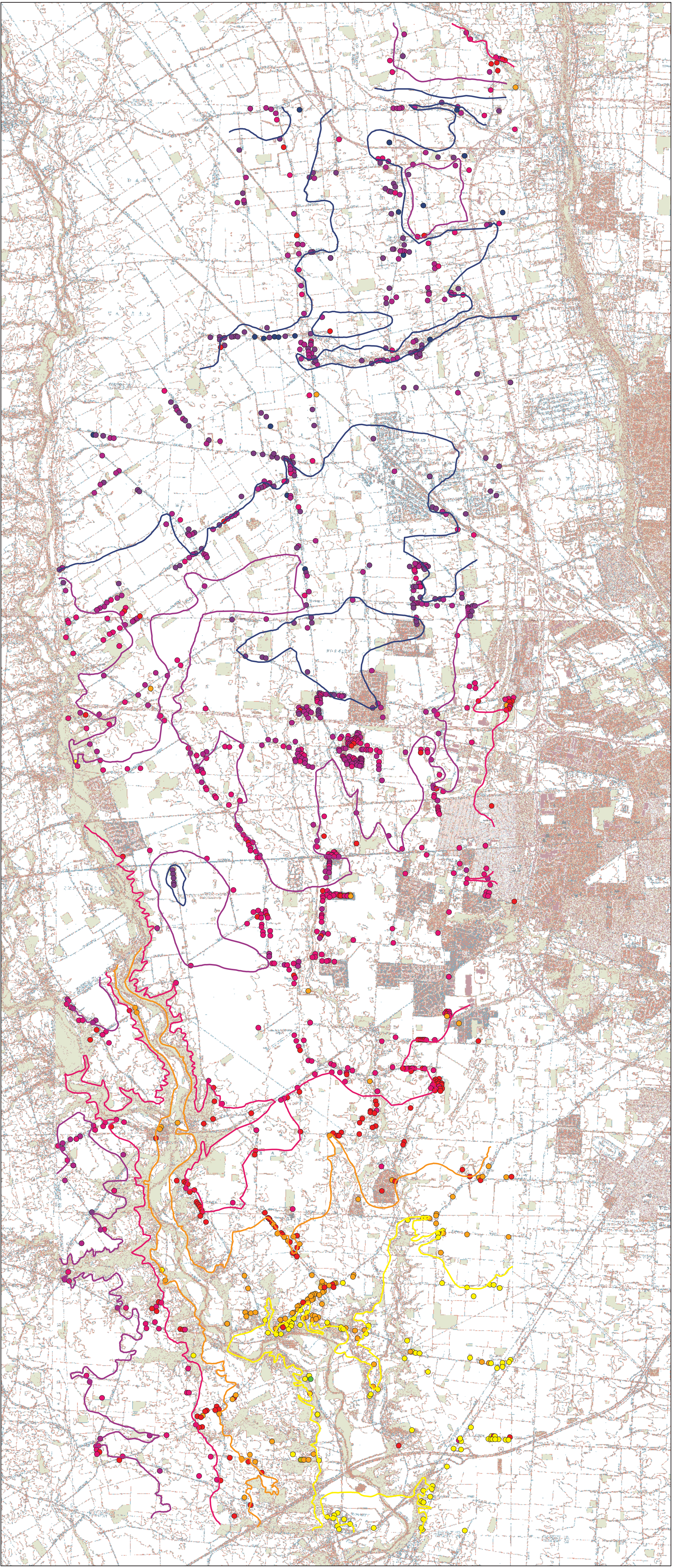


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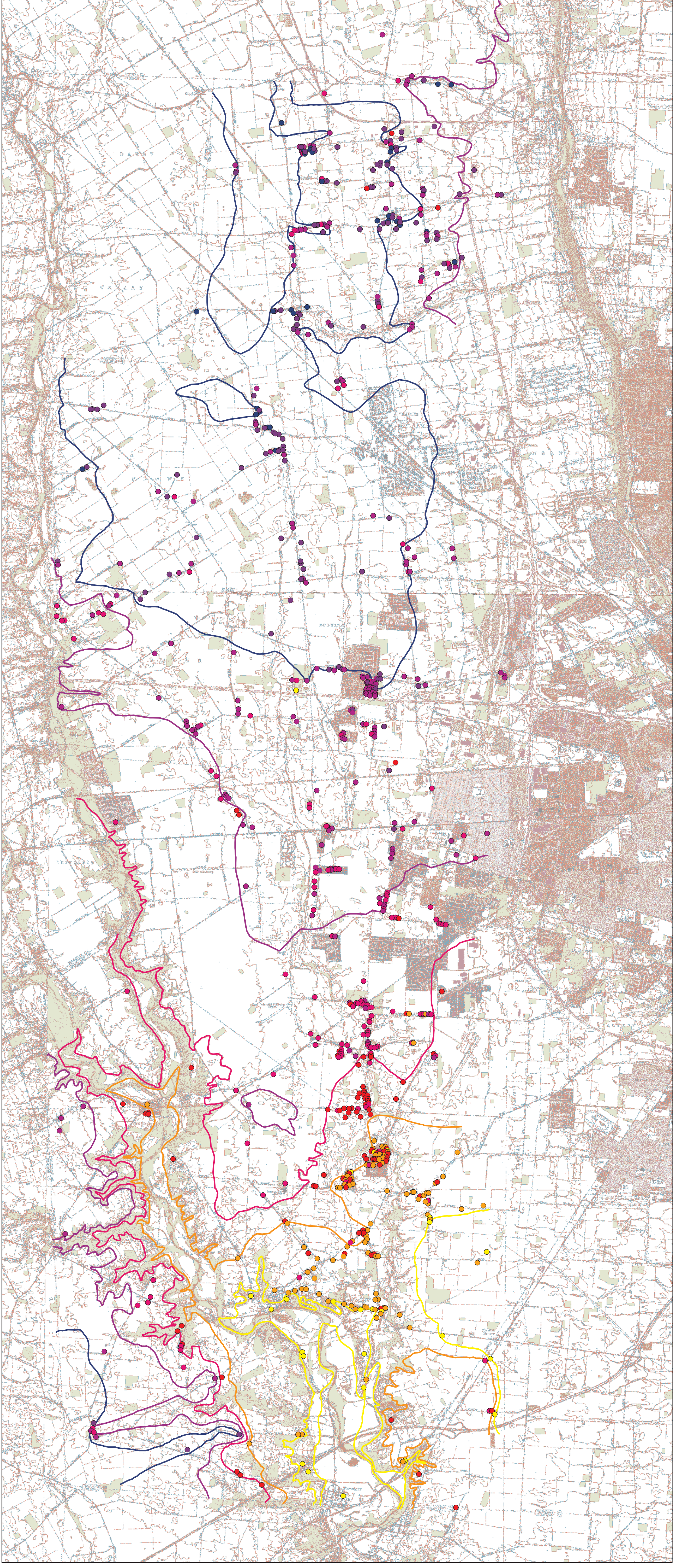
Data points from the ODNR, Division of Water, water-well log record database were used to create potentiometric-surface maps for both sand and gravel and bedrock aquifers in the vicinity of Big Darby Creek, in southwestern Franklin County. A raster difference map was created from the GIS shapefiles of 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.



## Potentiometric-Surface of the Bedrock Aquifer



## Potentiometric-Surface of the Sand & Gravel Aquifers



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

