

## Water-Table Elevation

By Roberta Adams  
2016

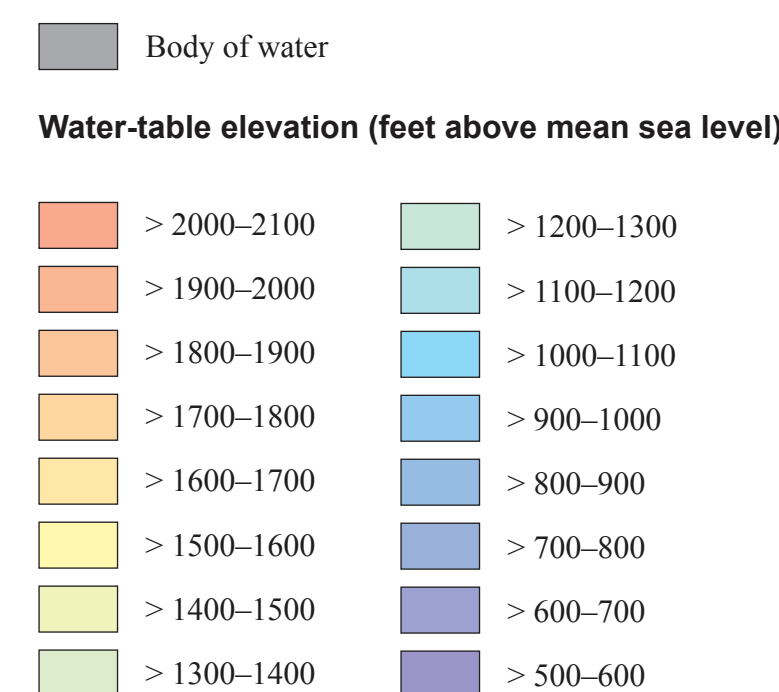
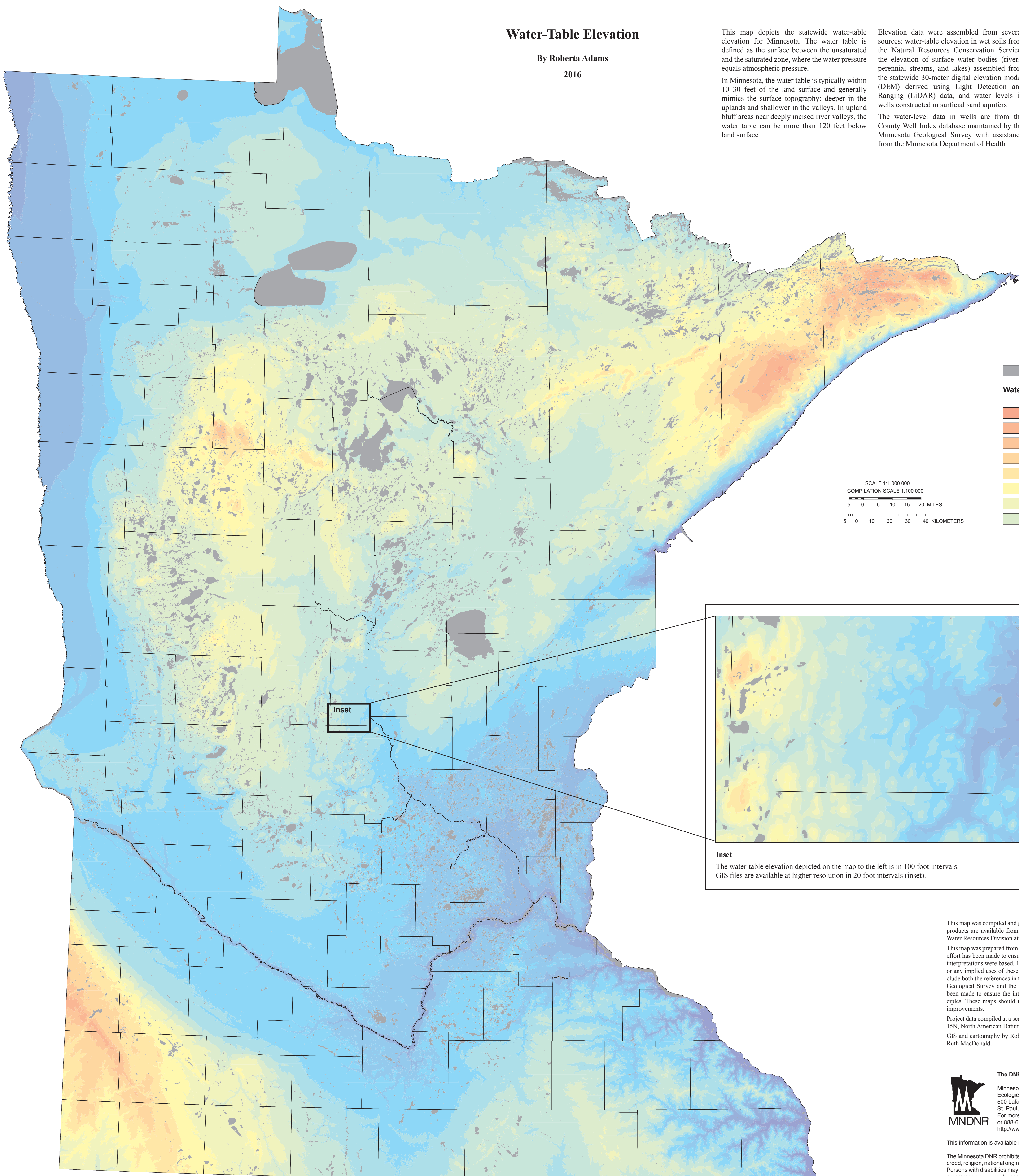
This map depicts the statewide water-table elevation for Minnesota. The water table is defined as the surface between the unsaturated and the saturated zone, where the water pressure equals atmospheric pressure.

In Minnesota, the water table is typically within 10–30 feet of the land surface and generally mimics the surface topography: deeper in the uplands and shallower in the valleys. In upland bluff areas near deeply incised river valleys, the water table can be more than 120 feet below land surface.

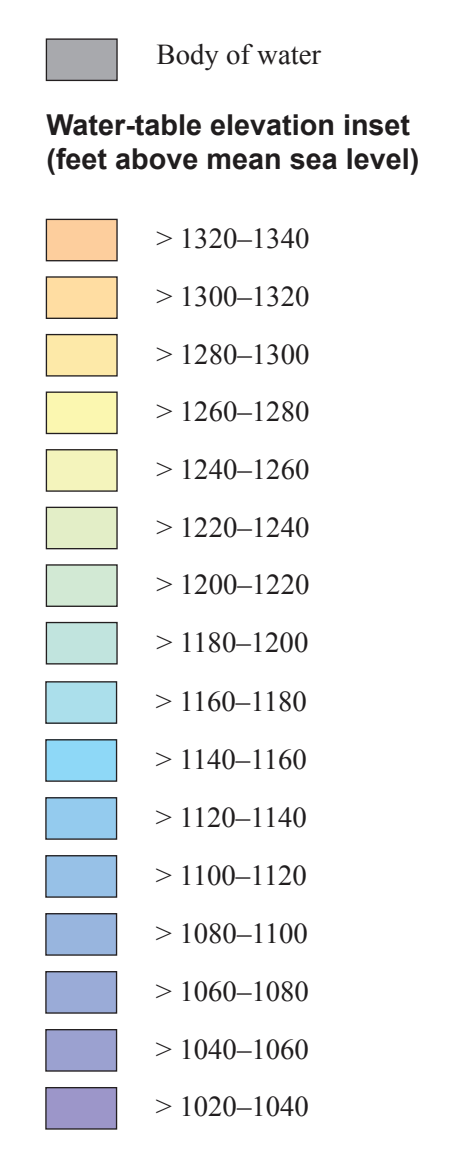
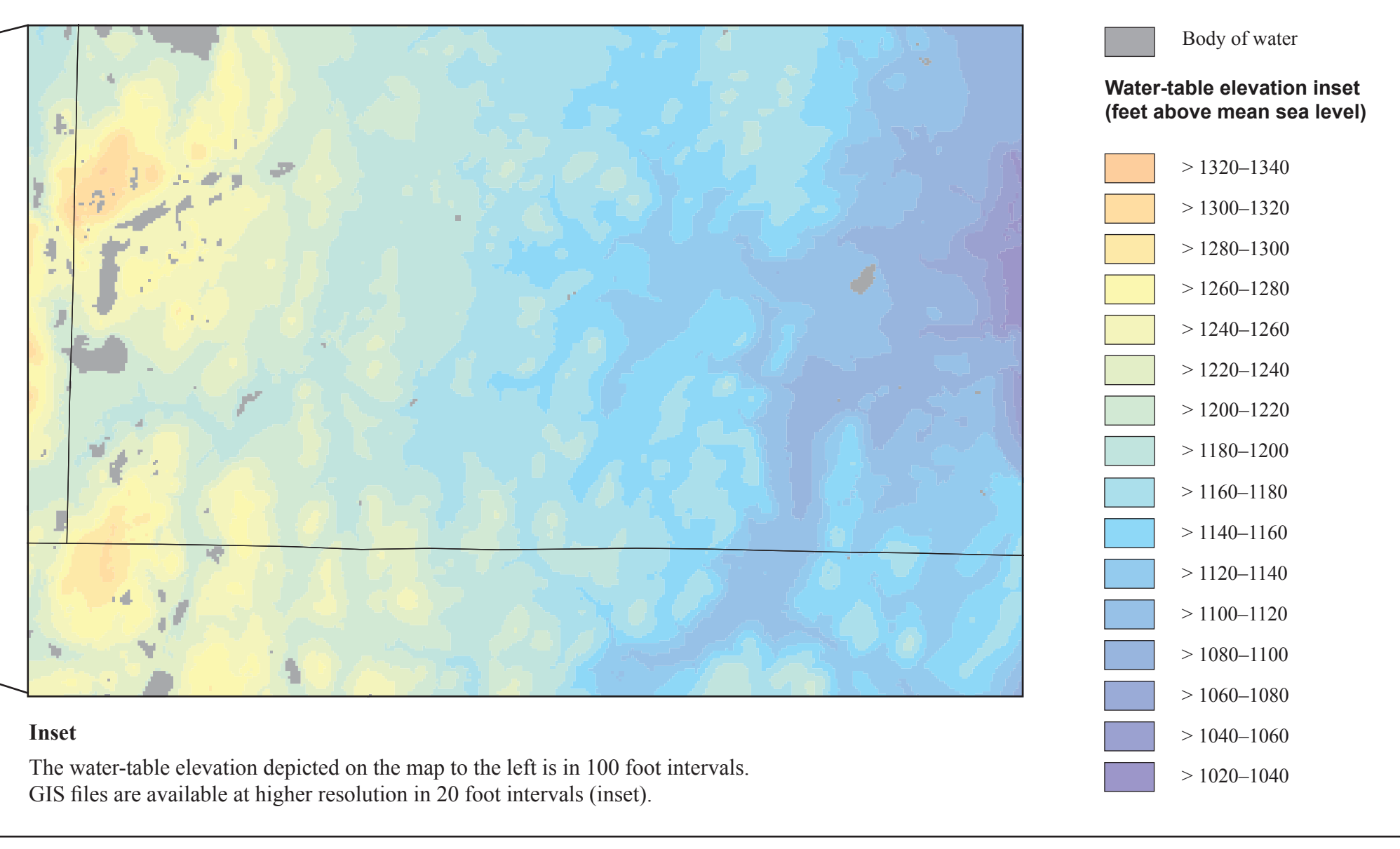
Elevation data were assembled from several sources: water-table elevation in wet soils from the Natural Resources Conservation Service, the elevation of surface water bodies (rivers, perennial streams, and lakes) assembled from the statewide 30-meter digital elevation model (DEM) derived using Light Detection and Ranging (LiDAR) data, and water levels in wells constructed in surficial sand aquifers.

The water-level data in wells are from the County Well Index database maintained by the Minnesota Geological Survey with assistance from the Minnesota Department of Health.

Refer to report HG-03: Water-Table Elevation and Depth to Water Table. [http://www.dnr.state.mn.us/waters/programs/gw\\_section/mapping/platsum/mha\\_wte.html](http://www.dnr.state.mn.us/waters/programs/gw_section/mapping/platsum/mha_wte.html)



**Inset**



**Inset**  
The water-table elevation depicted on the map to the left is in 100 foot intervals. GIS files are available at higher resolution in 20 foot intervals (inset).

This map was compiled and generated in a geographic information system (GIS). Digital data products are available from the Department of Natural Resources (DNR), Ecological and Water Resources Division at <http://www.mndnr.gov/waters>.

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Project data compiled at a scale of 1:100,000. Universal Transverse Mercator projection, zone 15N, North American Datum of 1983. North American Vertical Datum of 1988.

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