Doesn't Wisconsin already have enough geologic maps?

No, not even close…

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AWRA
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2018

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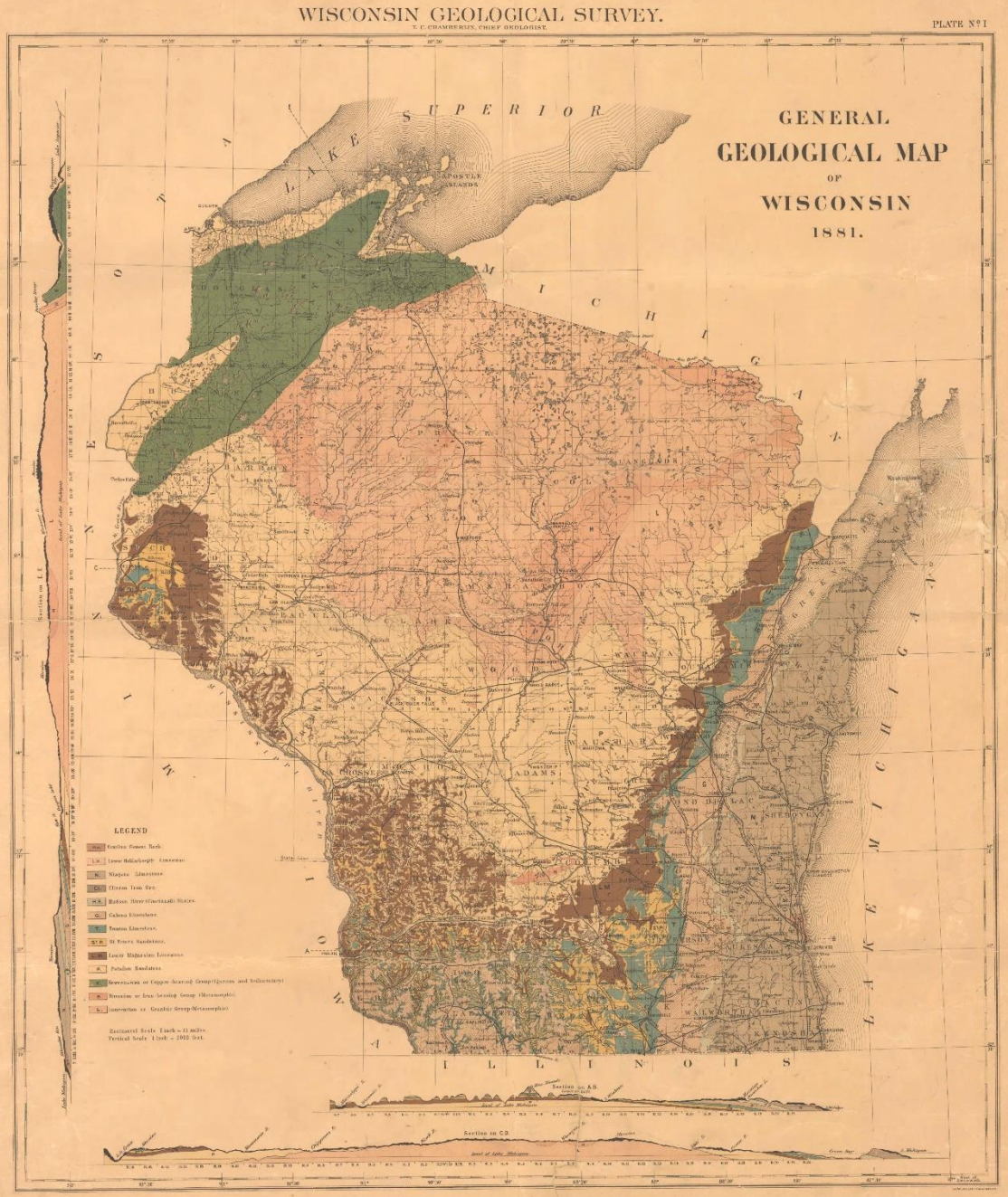


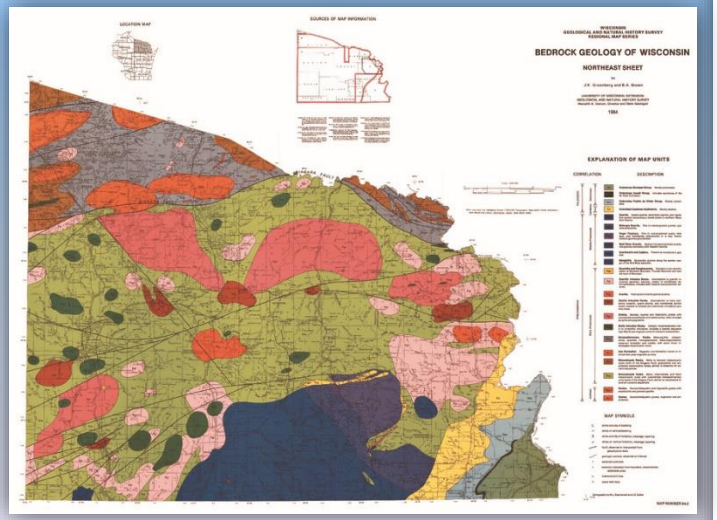
Geologic maps are:

- The basic building blocks of groundwater and surface water studies
- Essential for appropriate design and building of infrastructure (roads, foundations, pipelines, etc.)
- Essential for understanding the locations and occurrence of mineral resources
- The foundation of land-use planning
- And much more…

Qu

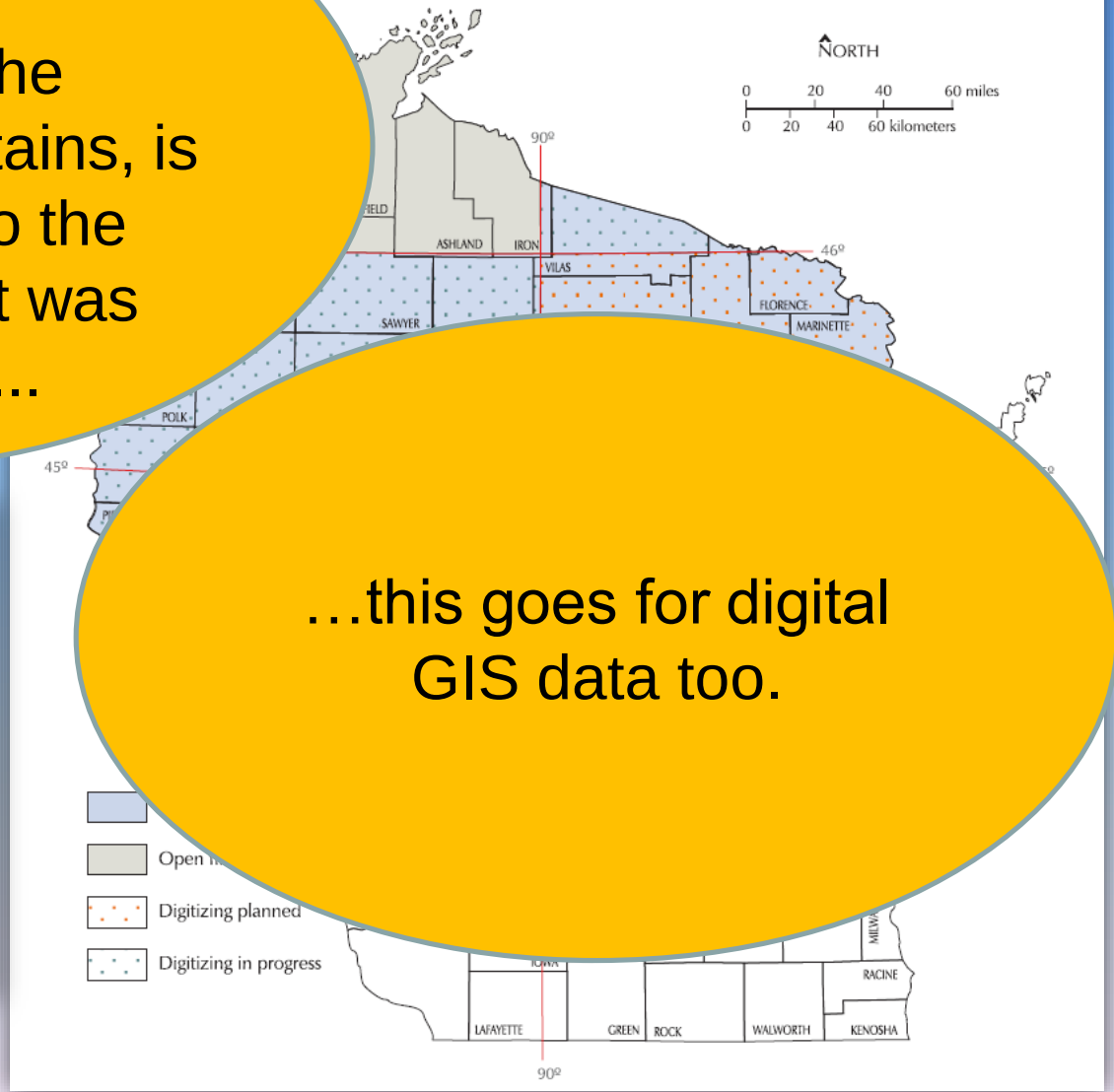
The scale issue…

A map, and the information it contains, is only accurate to the scale at which it was constructed...



Status of Regional Bedrock Geologic Mapping in Wisconsin at 1:250,000 scale

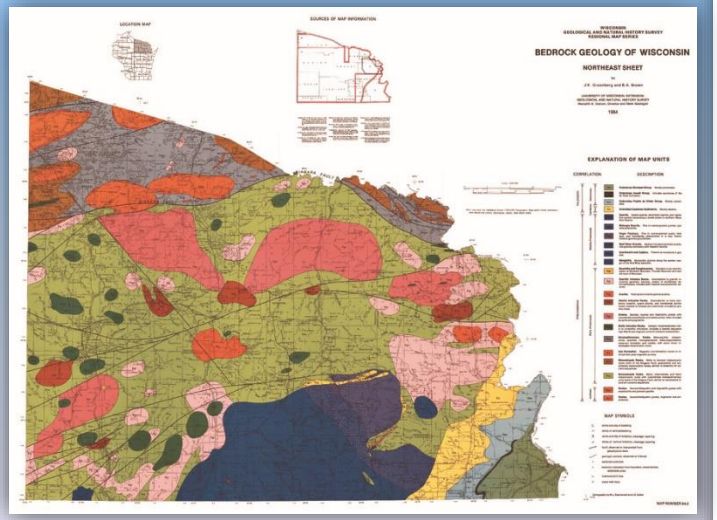
Geological and Natural History Survey

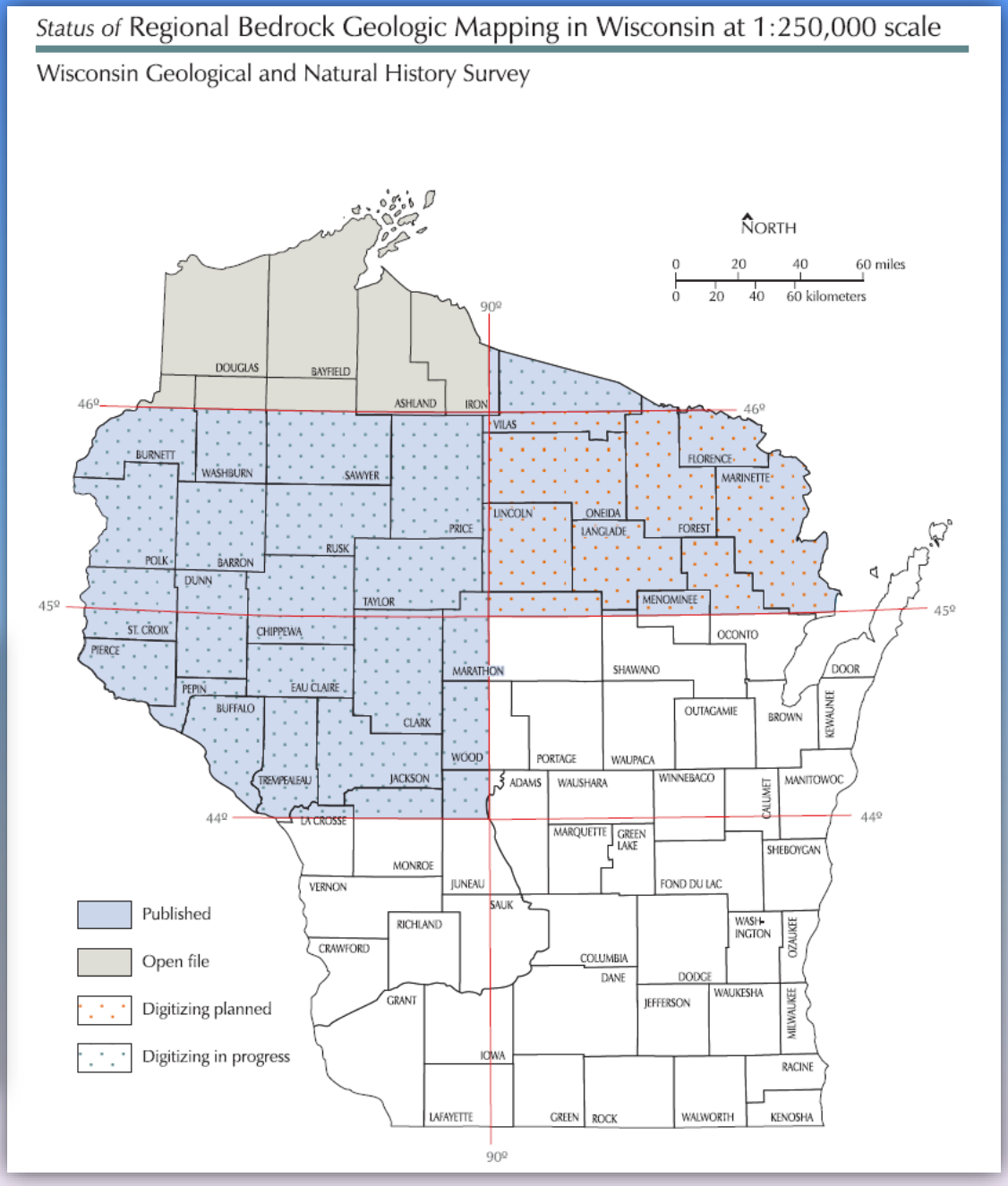


…this goes for digital GIS data too.

Quarter-million sheets

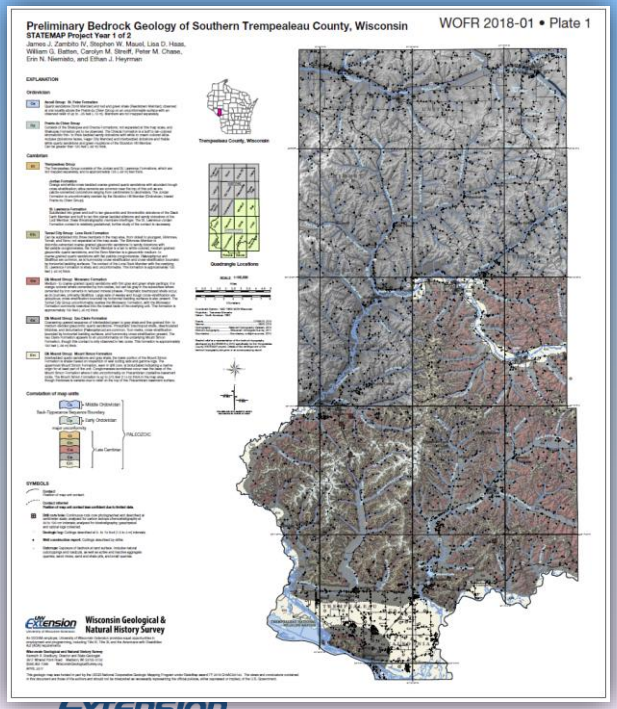
- Regional overview
- Limited detail
- Generalized
- Cover about half of Wisconsin (bedrock)

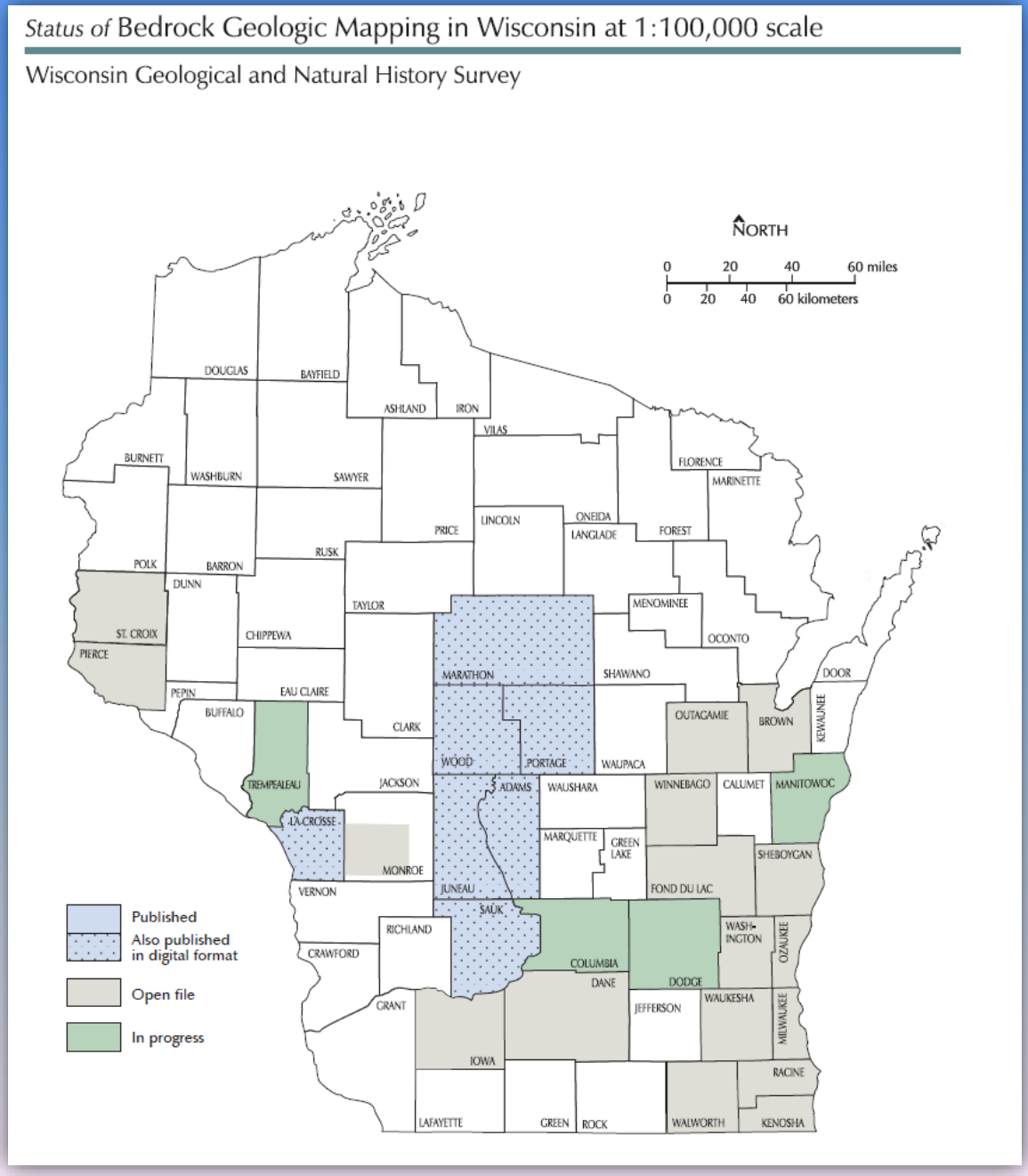




Bedrock 1:100,000 scale (county-scale)

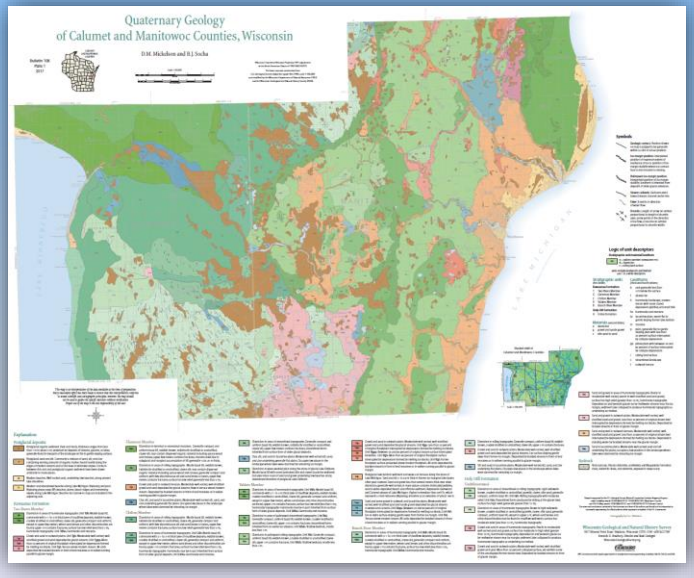
- County-scale
- Useful for county and local planning
- Generalized
- 44 of 72 counties *lack* maps

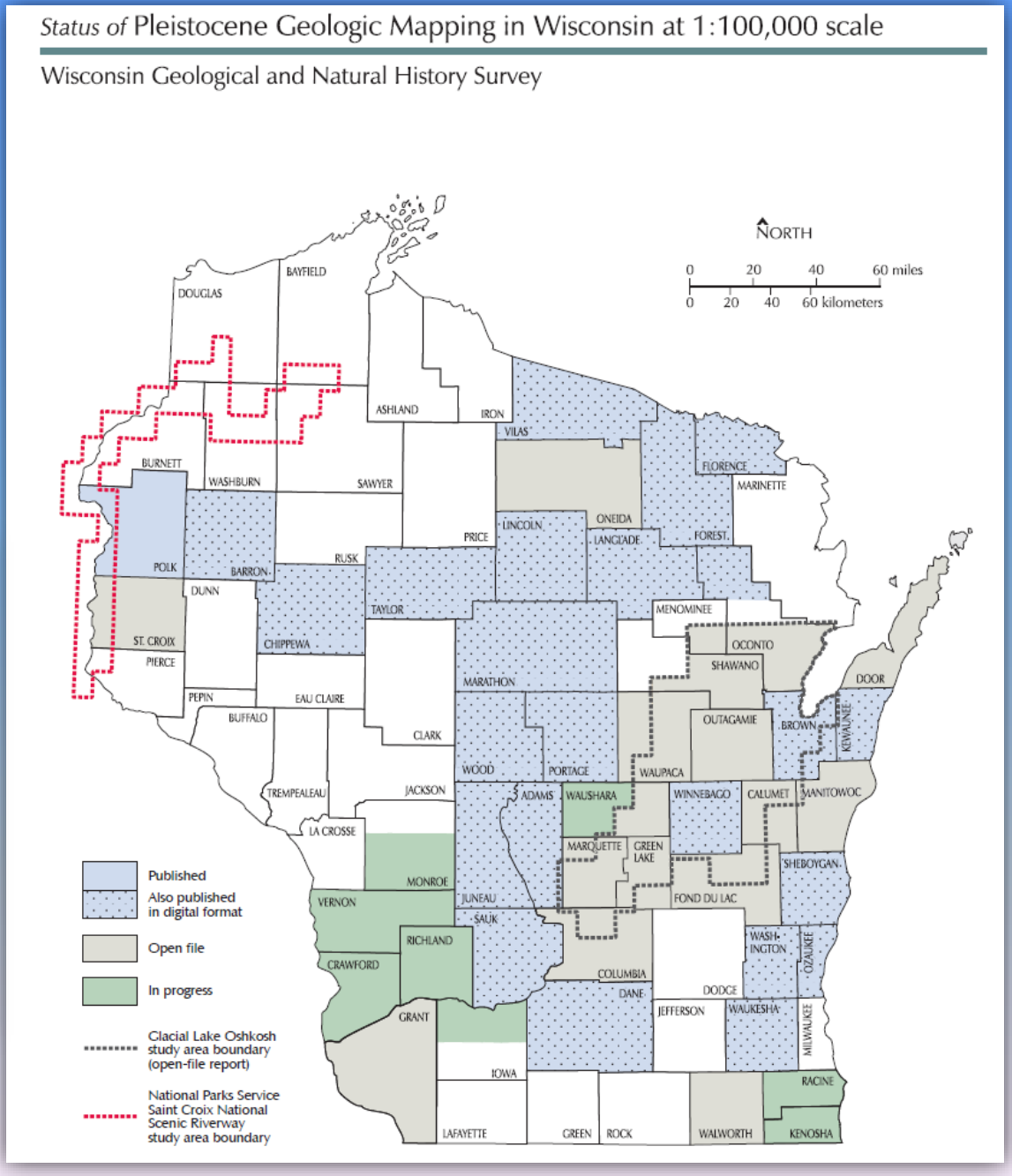




Pleistocene 1:100,000 scale (county-scale)

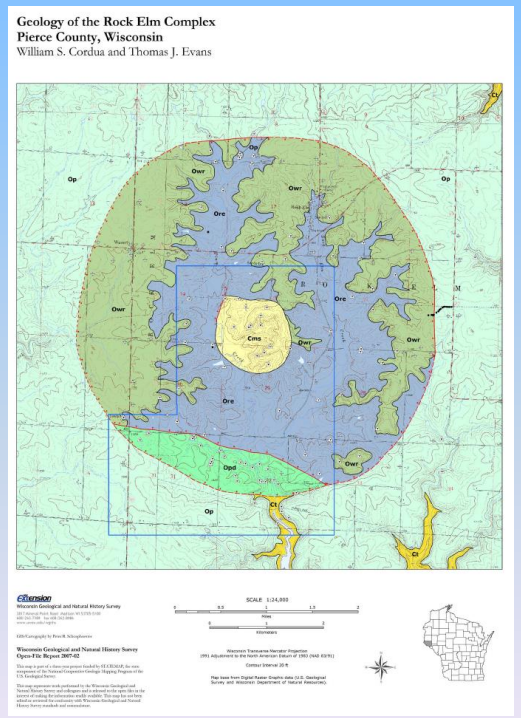
- County-scale
- Useful for county and local planning
- Generalized
- 30 of 72 counties *lack* maps

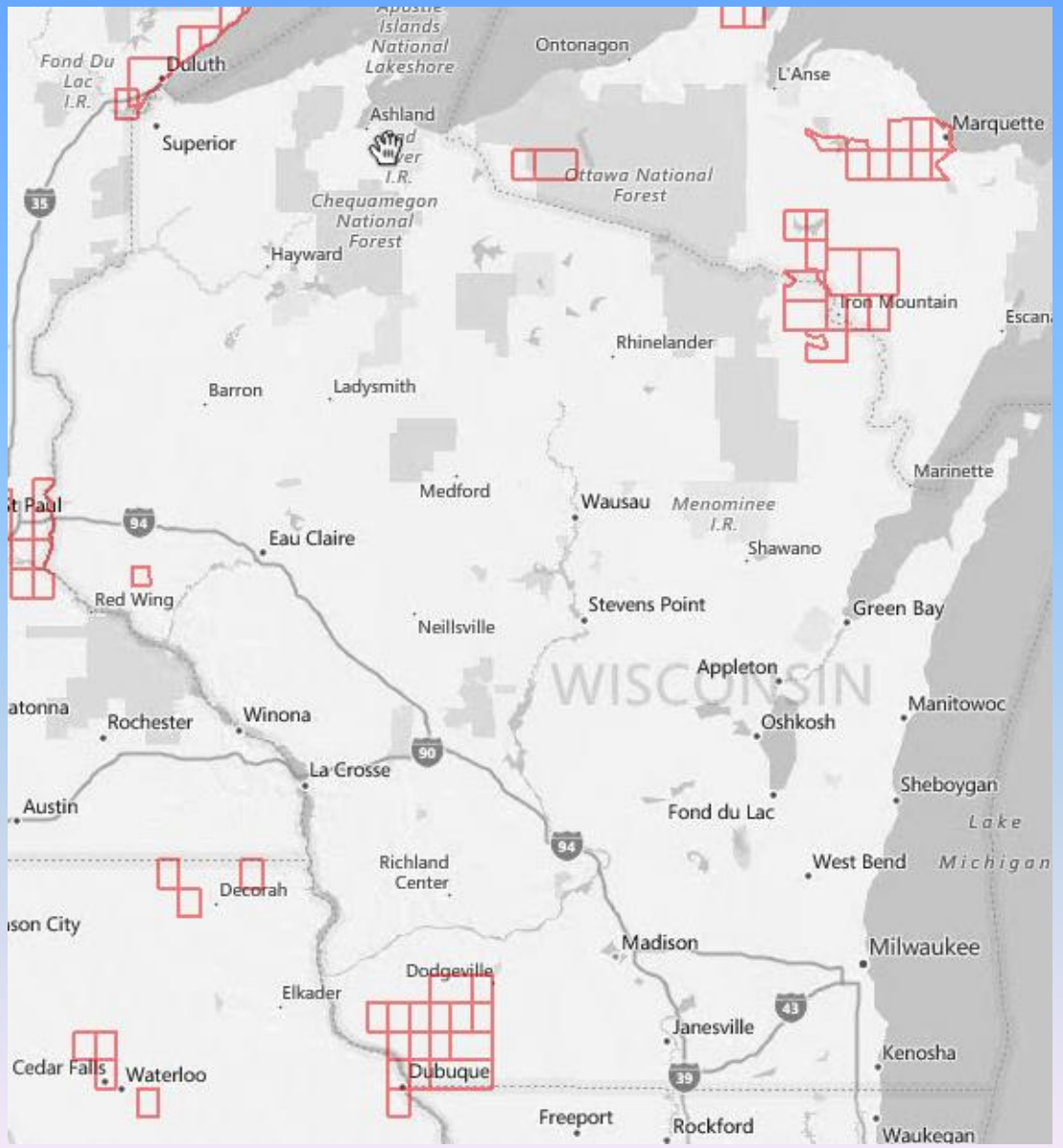




Bedrock
1:24,000 scale (quad-scale)

- 7.5’ quad scale
- Most useful for detailed studies
- Highest detail
- Almost none available for Wisconsin


Geology of the Rock Elm Complex
Pierce County, Wisconsin
William S. Cordua and Thomas J. Evans



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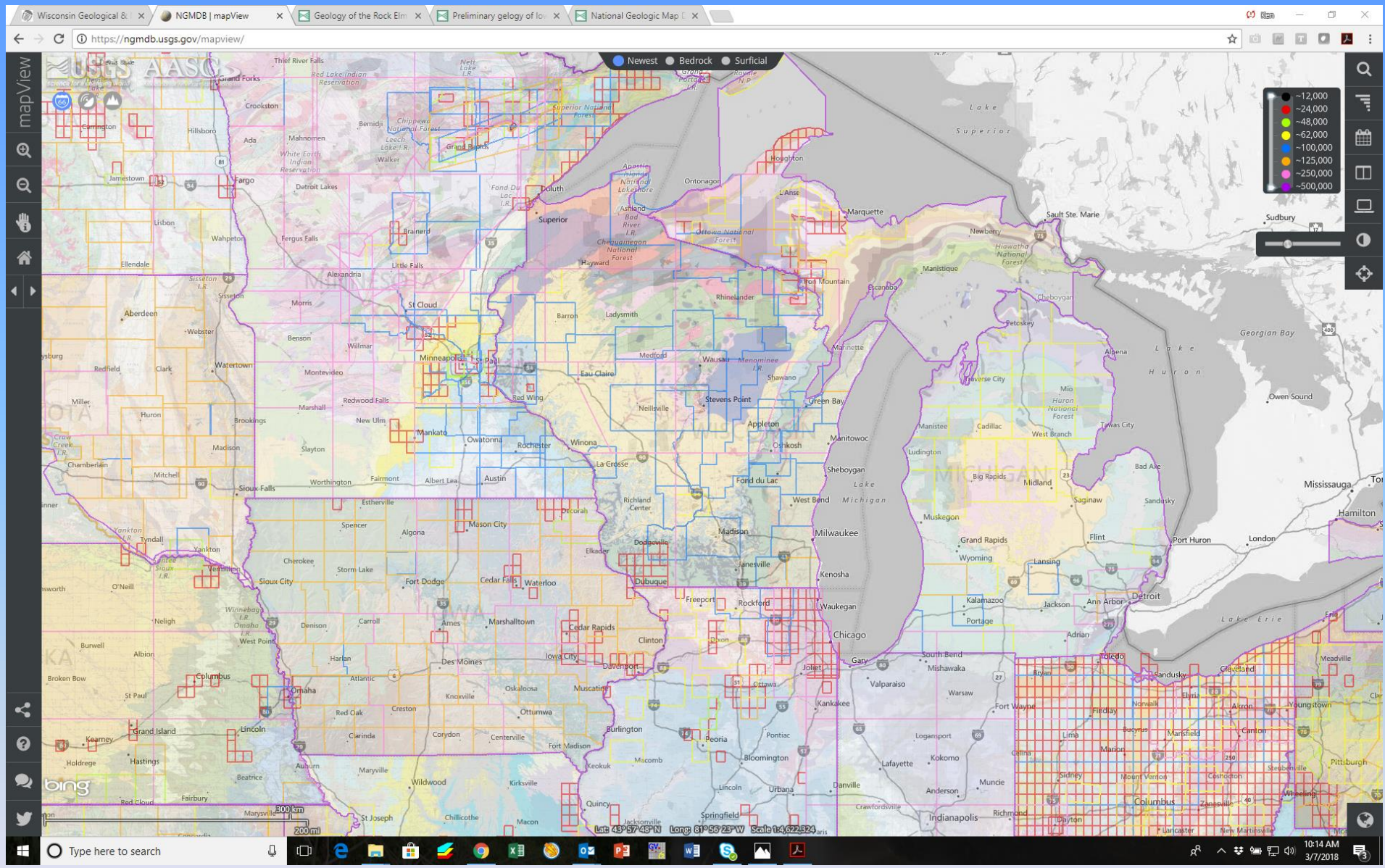

The national map: https://ngmdb.usgs.gov/mapview/

Geology is the fundamental basis of all water resources projects, yet support for new geologic mapping has declined in Wisconsin.

- The WGNHS is the only state agency involved in new geologic mapping;
- Our state budget for geologic mapping is on the order of $200,000 per year (often matched by Federal funds);
- For comparison, Minnesota invested over $2 million in geologic mapping in 2016 (10X as much)

How can you help us?

- Advocate for geologic mapping.
- Help us guide our programs
  - Where in Wisconsin should we be mapping?
  - Where would you like to see new maps made?
  - What map scales are most useful to you?

Visit the WGNHS booth at the poster session, and put a post-it on the state map to indicate where, and why, you'd like to have new geologic maps!