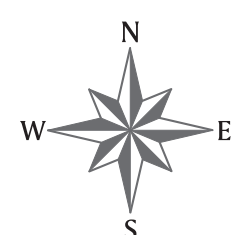


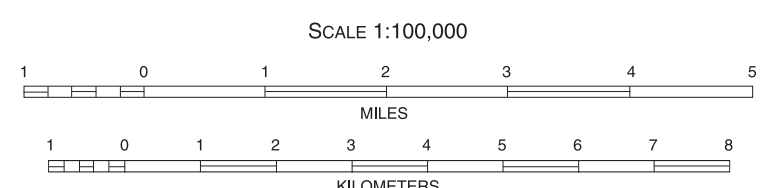
Preliminary
Quaternary geologic map
of the northern Fox River Lowland,
Wisconsin

T.S. Hooyer and W.N. Mode

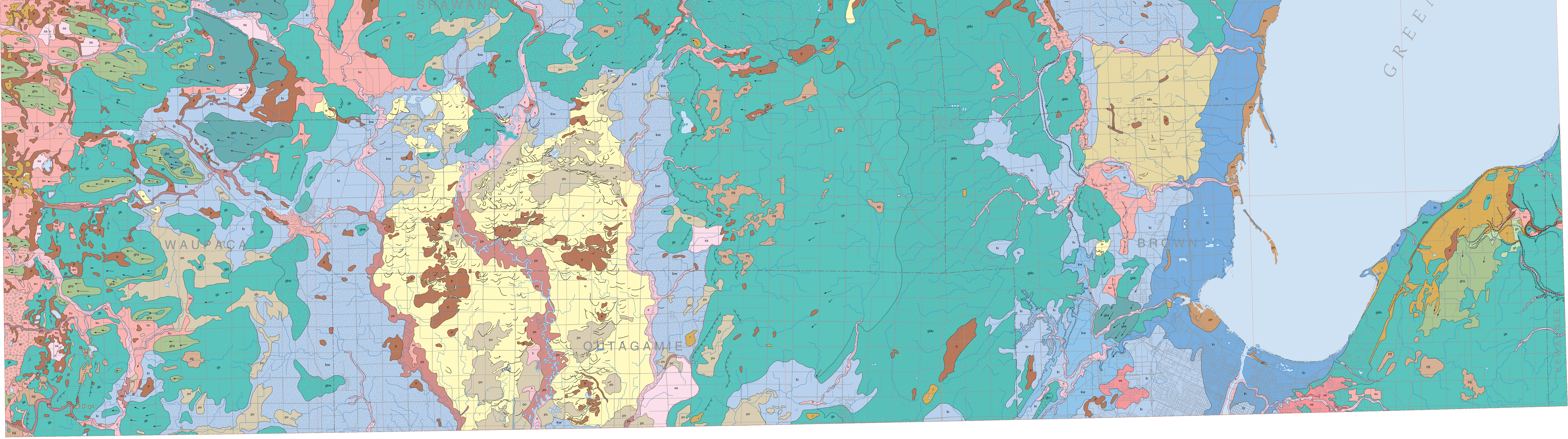
August 2007



Compilation of mapping completed in 2005-2007.



Wisconsin Transverse Mercator Projection
1991 adjustment to the North American Datum of 1983 (NAD 83/91)
The base map was constructed from U.S. Geological Survey digital line graph files (1990, scale 1:100,000) and modified by the Wisconsin Department of Natural Resources (1992) and the Wisconsin Geological and Natural History Survey (2005).



EXPLANATION

- Windblown sand.** Unit **w**: between 2 and 7 m thick, dunes generally no more than 5 m high; most sand deposited immediately following deglaciation. Unit **wlc**: overlies lake sediment.
- Lake sediment.** Commonly consists of sand, silt and clay. Unit **lo**: sediment deposited in glacial Lake Oshkosh usually at elevations below 800 ft above sea level; consists largely of silt and clay where deposited in deeper water grading to sand near the shoreline; typically between 1 m and tens of meters thick; sediment deposited near the shoreline may include windblown sediment, washed hillslope sediment, and patches of peat that could not be separately mapped. Unit **loe**: similar to **lo**, but eroded; gullied topography resulting from erosion in postglacial time probably as a result of drop in base level of glacial Lake Oshkosh to the various lake phases in the Michigan basin. Unit **low**: glacial Lake Oshkosh sediment covered with thin patches of windblown sand generally less than 2 m thick. Unit **locw**: similar to **lo**, but usually collapsed and overlying thick meltwater-stream sediment; covered with thin patches of windblown sand. Unit **lws**: similar to **lo**, but sediment deposited in glacial Lake Nipissing usually at elevations below 610 ft above sea level. Unit **lwn**: glacial Lake Nipissing sediment covered with thin patches of windblown sand generally less than 2 m thick.
- Peat.** Sediment of low, typically wet areas consisting of peat and muck. Unit **pe**: peat occupying low-lying, flat to low-relief surfaces; thickness varies, but typically between 1 and 3 m thick. Unit **peo**: peat over lake sediment of glacial Lake Oshkosh; usually only in areas that are less than 800 ft above sea level. Unit **pen**: peat over lake sediment of glacial Lake Nipissing; usually only in areas that are less than 600 ft above sea level. Unit **peg**: peat overlying the sandy till of the Horicon Member of the Holy Hill Formation or clayey and silty till of the Keweenaw Formation. Unit **pes**: peat overlying postglacial or meltwater-stream sediment consisting of silty and sandy sediment with occasional channel sand and silt.
- Postglacial stream sediment.** Commonly consists of silty and sandy sediment with occasional channel sand and silt; typically between 1 and 15 m thick; deposited in floodplains adjacent to postglacial streams; most of this sediment was probably deposited during the last part of the Holocene.

- Meltwater-stream sediment.** Sand and gravel deposited directly by streams originating from the margin of the Green Bay Lobe; commonly between 1 m and several tens of meters thick. Unit **sa**: meltwater-stream sediment deposited in an alluvial fan or delta immediately adjacent to a moraine or ice-contact face. Unit **sa**: meltwater-stream sediment deposited in proglacial river channels or in tunnel channels beneath the margin of the Green Bay Lobe. Unit **se**: eroded meltwater-stream sediment; gullied topography resulting from erosion in postglacial time. Unit **se**: collapsed meltwater-stream sediment deposited in alluvial fans, deltas, and proglacial river channels. Unit **sew**: meltwater-stream sediment covered with thin patches of windblown sand and silt; generally less than 2 m thick.
- Till.** Red, clayey silt with some gravel deposited by readvances of the Green Bay Lobe; generally at least 3 m thick; part of the Kirby Lake and Glenmore Members of the Keweenaw Formation. Unit **gk**: low relief, nondescript glacial topography; generally draped over pre-existing topography; till in places less than 3 m thick. Unit **gkw**: similar to **gk**, but covered with thin patches of windblown sand less than 2 m thick. Unit **gklo**: similar to **gk**, but covered with thin patches of glacial Lake Oshkosh sediment generally less than 2 m thick. Unit **gks**: rolling topography that was subglacially molded; contains streamlined landforms including drumlins and flutes; many of these landforms are probably composed of other sediment including gravel, sand, and silt. Unit **gkc**: till, collapsed; overlying thick meltwater-stream sediment.
- Till.** Brown to reddish-brown, gravelly, clayey, silty sand deposited by the Green Bay Lobe; generally at least 3 m thick; part of the Horicon Member of the Holy Hill Formation; includes many small to large inclusions of windblown sediment, hillslope sediment, and glacial lake sediment that could not be separately mapped. In many areas, the modern surface reflects the pre-Late Wisconsin landscape. Unit **gh**: generally has rolling topography in areas lacking drumlins. Unit **ghs**: rolling topography that was subglacially molded; contains streamlined landforms, including drumlins and flutes; many of these landforms are composed of stratified sand and gravel rather than Horicon till.
- Bedrock.** Dolomite, sandstone, quartzite, or granite; glacially scoured areas of bedrock near the ground surface covered by less than a 1 m thick layer of glacial sediment.

SYMBOLS

- Contact, within 100 m of true position more than half the time
- Sand dune indicating wind direction
- Esker
- Moraine ridge
- Ice-contact face
- Ice-marginal position
- Stream cutbank
- Meltwater channel
- Drumlin crest
- Escarpsments or other steep slopes
- Beach ridge

This map represents work performed by the Wisconsin Geological and Natural History Survey and is released to the open files in the interest of making the information readily available. This map has not been edited or reviewed for conformity with Wisconsin Geological and Natural History Survey standards and nomenclature.

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