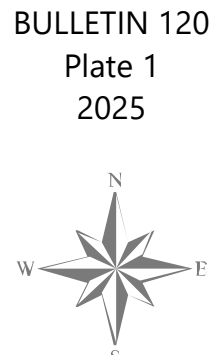


Geology of the Baraboo Hills,
Sauk and Columbia Counties, Wisconsin

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Cartography by Nick Rompa

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Explanation

Detailed unit descriptions can be found in the report that accompanies this plate.

HOLOCENE

Artificial fill

Artificial, human-made deposits of quartzite fragments from aggregate mining.

Peat

Organic-rich sediment and muck.

HOLOCENE TO PLEISTOCENE

Alluvium

Qam Mud, silt, and fine-grained sand. Modern overbank stream sediments. **Qa** Mud, silt, and sand with local cobbles and gravel. Mostly premodern overbank stream deposits, but includes premodern colluvial deposits. **Qat** Mud, silt, and sand terrace deposits. **Qs** Sand, pebble, cobble, and boulder deposits formed from incision into **Qad**. **Qad** Pebble, cobble, and boulder conglomeratic sediment formed during the draining of glacial Lake Wisconsin.

Quaternary undivided

Cross section only. Undivided Quaternary sediment.

PLEISTOCENE

Meltwater stream sediment

Gravel and sand deposited by glacial meltwater streams. **Qs** Found adjacent to the Johnstown moraine. **Qsc** Found east of the Johnstown moraine. The unit is characterized by hummocky topography.

Windblown sediment

Windblown sand deposited in both sheets and dunes.

Lake sediment

Clay, silt, and sand of offshore glacial lake sediment.

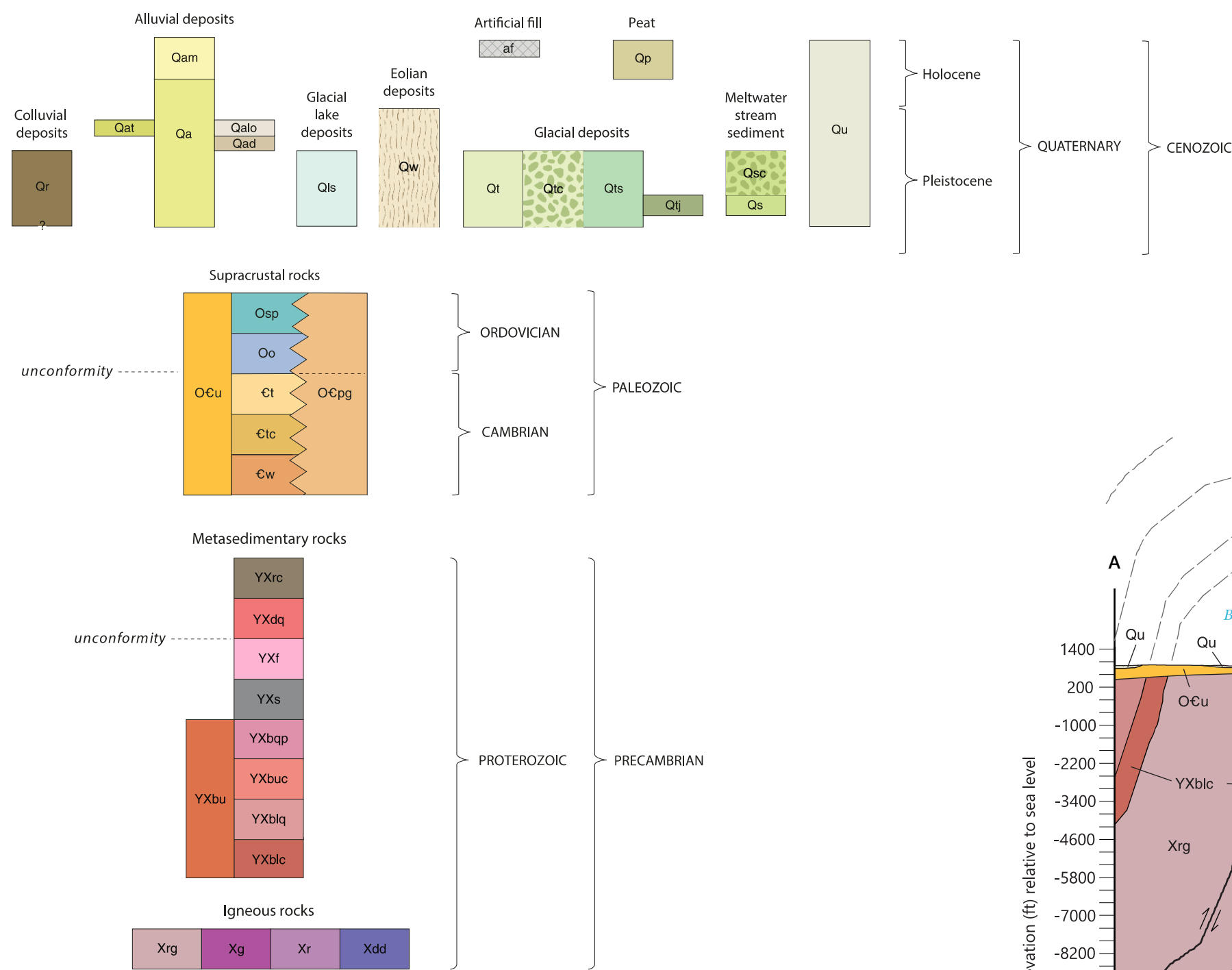
Glacial sediment

Qt Till where the topography is controlled by underlying bedrock. **Qtc** Till with abundant ice collapse features. **Qts** Mixture of till and glacial lake sediment. **Qqj** Till of the Johnstown moraine.

Rock glacier

Linear trains of quartzite talus located beneath quartzite ledges.

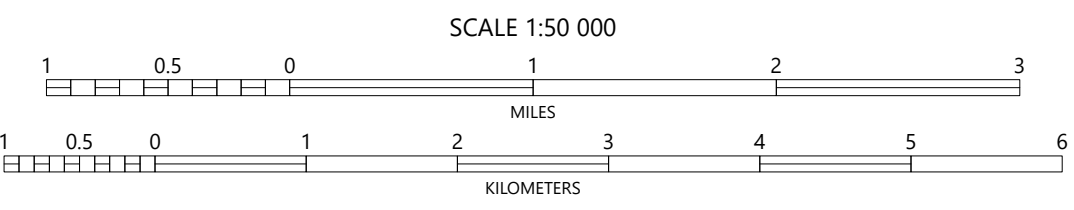
Correlation of Map Units



Baraboo Quartzite	Baraboo Sandstone	Baraboo Gneiss	Baraboo Schist	Baraboo Amphibolite	Baraboo Metagabbro	Baraboo Metadiorite	Baraboo Metagranite	Baraboo Metabasalt	Baraboo Metapelite
Qam	Qa	Qat	Qs	Qsc	Qad	Qtc	Qts	Qqj	Qqj

Quadrangles covered by the mapped area

Mapped and compiled by Esther K. Stewart, Eric D. Stewart, and William A. Fitzpatrick, 2015–2024.
Geodatabase by Nick Rompa
Report and GIS data that accompany this map can be found at: <https://doi.org/10.54915/jkg8792>



Wisconsin Transverse Mercator Projection, 1991 adjustment to the North American Datum of 1983 (NAD 83/91). EPSG 3071

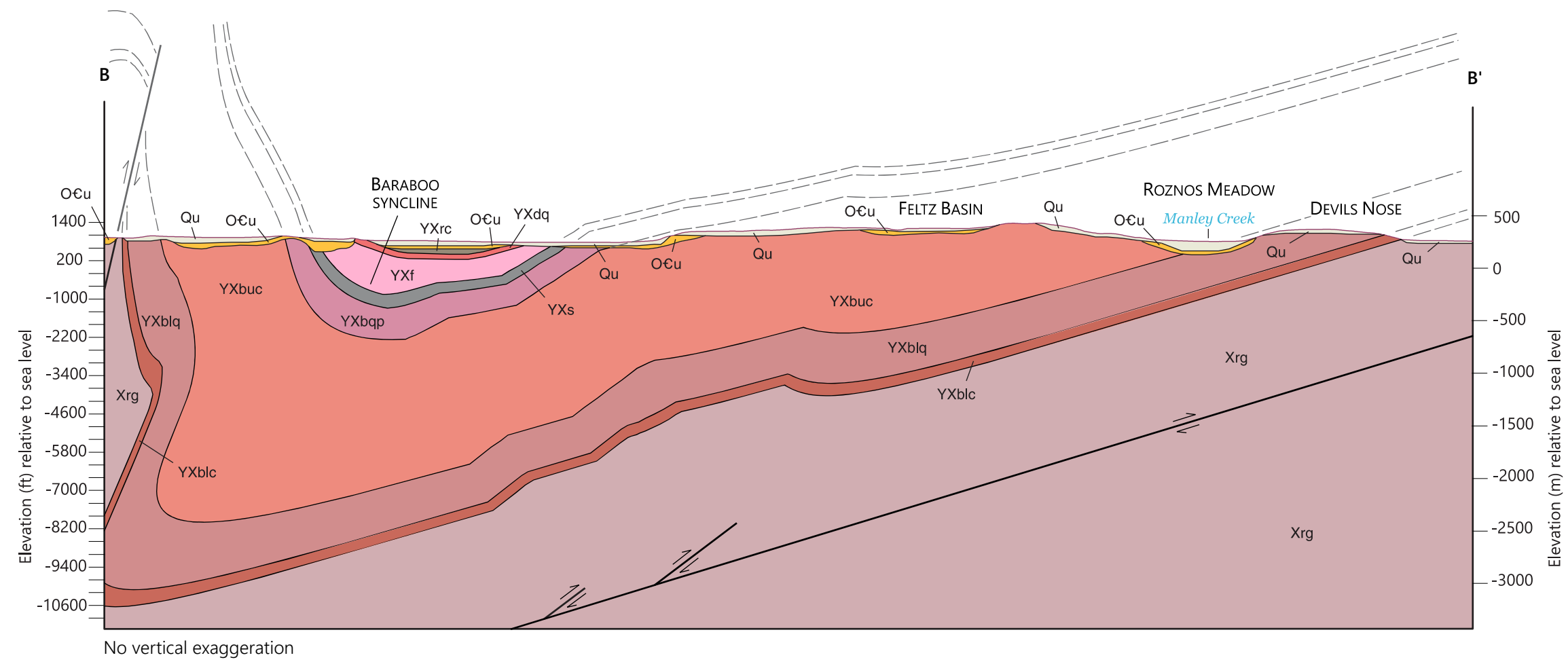
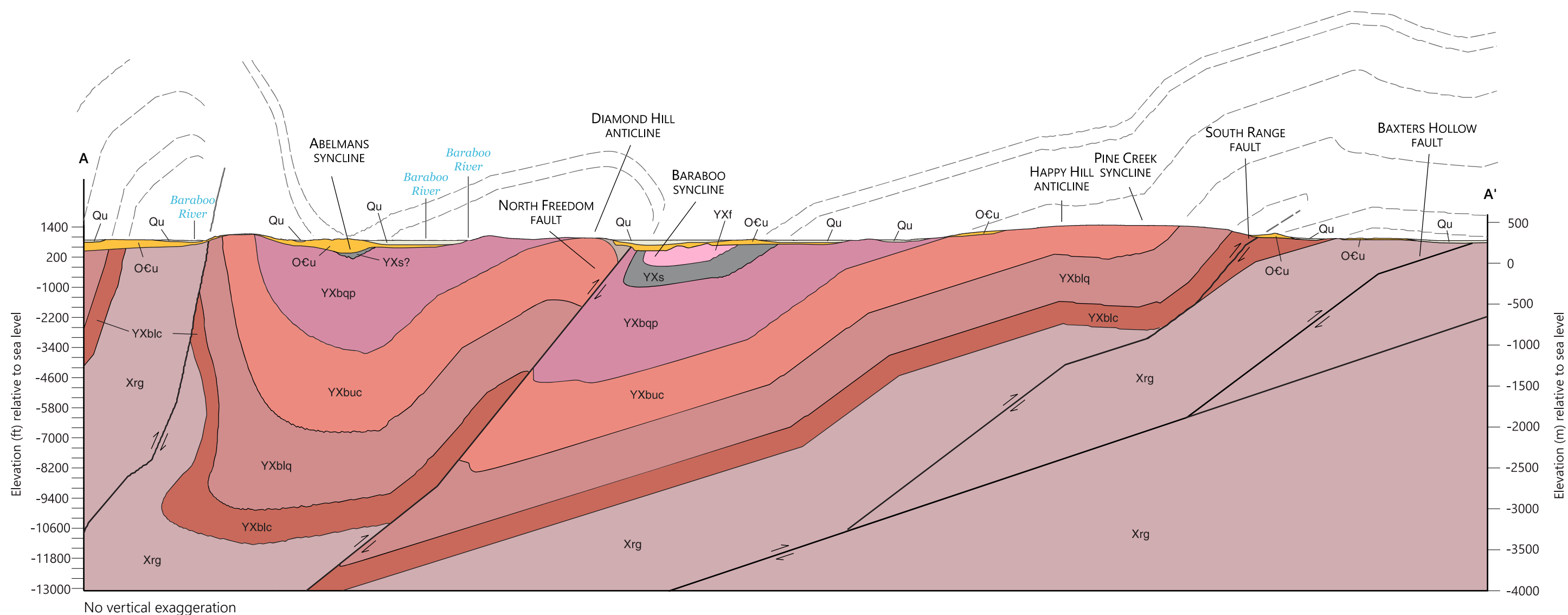
County boundaries: Wisconsin Department of Natural Resources, 2011. Major lakes and streams: adapted from the National Hydrography Dataset, 2022. Terrain shading from WGNHNS 2025 and the National Elevation Dataset 2017.

Symbols

- Geologic log
- Core
- Outcrop
- Inclined bedding—showing strike and dip
- Cleavage/metamorphic foliation—showing strike and dip
- Overturned bedding—showing strike and dip of overturned bedding
- Mineral stretching lineation—showing trend and plunge

- Flow banding—showing strike and dip
- Overturned flow banding—showing strike and dip
- Contact—dashed where uncertain
- Great Unconformity—dashed where approximate
- Drumlin—length of arrow is proportional to length of axis; arrow shows direction of ice flow
- Drumlinized hill—length of arrow is proportional to length of axis; arrow shows direction of ice flow

- Moraine crest—V symbol points in direction of ice flow
- Wave-cut scarp (Ordovician)—hatchures point downslope
- Anticline—dashed where approximate, dotted where concealed; arrow shows plunge direction if present
- Syncline—dashed where approximate, dotted where concealed; arrow shows plunge direction if present
- Thrust fault—dashed where approximate, dotted where concealed; teeth on upthrown block
- Normal fault—dashed where approximate, dotted where concealed; decoration on downthrown block



Explanation (continued)

Detailed unit descriptions can be found in the report that accompanies this plate.

ORDOVICIAN

St. Peter Formation

White, tan, to orange, fine- to medium-grained sandstone with minor coarse-grained sandstone.

Oneota Formation

Tan, crystalline dolomite and dolomite-cemented sandstone.

ORDOVICIAN TO CAMBRIAN

Parfreys Glen Formation

Pink, tan, to brown fine- to medium-grained quartz arenite with interbedded pebble, cobble, and boulder conglomerate.

Ordovician to Cambrian undivided

Cross section only. Undivided Ordovician to Cambrian sandstone and dolomite.

CAMBRIAN

Trempealeau Group

Upper tan, gray, or white, fine- to coarse-grained sandstone of the Jordan Formation. Lower white to tan, fine- to very fine-grained sandstone and siltstone of the St. Lawrence Formation.

Tunnel City Group

Tan, white, to light brown fine- to medium-grained sandstone with local trace glauconite.

Woneoc Formation

White, tan, to brown fine- to medium-grained sandstone.

MESOPROTEROZOIC TO PALEOPROTEROZOIC

Rowley Creek Slate

Cross section only. Tan or gray slate.

Dake Quartzite

Purple to gray, fine- to coarse-grained quartzite with interbedded pebble conglomerate.

Freedom Formation

Cross section only. Upper gray to white dolomite and lower red, white, or brown iron formation, slate and iron-rich dolomite.

Seeley Slate

Cross section only. Black to gray slate.

Baraboo Quartzite

YXbuq Upper quartzite and phyllite member, composed of light purple to pink fine- to medium-grained quartzite with lesser gray phyllite and sandy phyllite. **YXbuq** Upper conglomerate and quartzite member composed of light purple to pink, fine- to medium-grained quartzite with pebbly beds up to 20 cm thick. Phyllite beds are locally present. **YXbuq** Lower quartzite member composed of light purple, pink, to red fine- to medium-grained quartzite with minor interbedded argillaceous quartzite and phyllite near the base. **YXbuq** Lower conglomerate and quartzite member composed of light purple to pink pebble conglomerate and fine- to coarse-grained quartzite. **YXbu** Undivided Baraboo Quartzite. The unit may include quartzite, phyllite, and conglomerate.

PALEOPROTEROZOIC

Baxters Hollow Granite

Pink, fine-grained granite.

Rhyolite

Gray to maroon crystal tuff to volcanic breccia.

Denzer diorite

Black and white medium-grained diorite.

Granite, rhyolite, and diorite undivided

Cross section only. Undivided granite, rhyolite, and diorite.

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