Preliminary Quaternary Geologic Map of St. Croix County, Wisconsin

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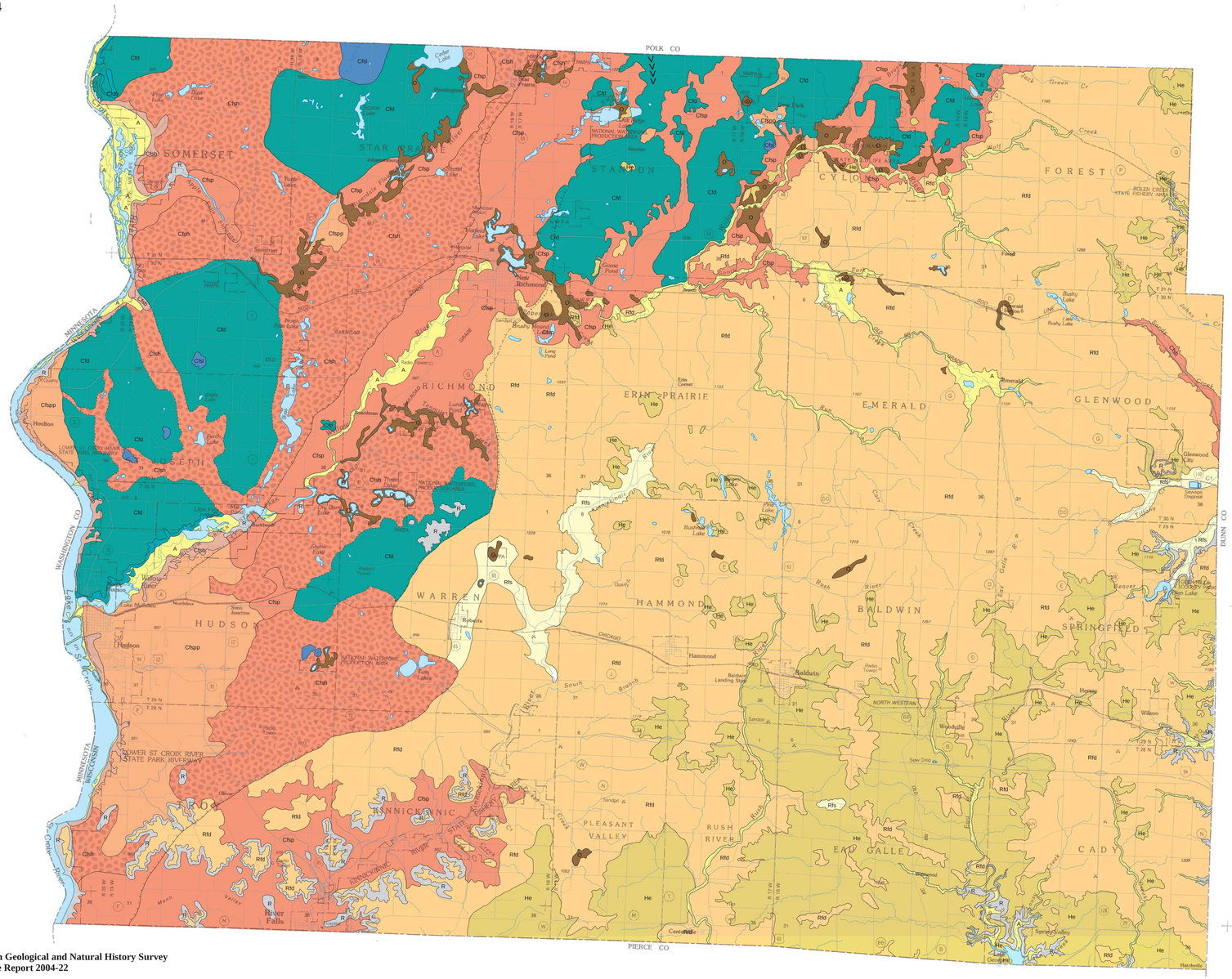
2004



EXPLANATION

Postglacial organic sediment Peat and muck generally found in low areas of the landscape, near lakes, rivers and other depressions; underlain by deposits of streams, glaciers, or lakes.

Rock Bedrock or very shallow (generally less than 1.5 meters) bedrock, commonly exposed on steep slopes.

Postglacial sand and silt Commonly a mixture of sand, silt and clay with various amounts of organic matter; found mostly along edges of modern streams and rivers as flood plain and low fluvial terraces; boundaries between this unit and postglacial organic sediment have been drawn arbitrarily in many places.

COPPER FALLS FORMATION

Copper Falls diamicton Reddish-brown, unsorted or poorly sorted, non-stratified, slightly-cohesive, variable in grain-size distribution, lacks significant amounts of silt and clay; commonly contains areas of bedded sand and gravel; interpreted as melt-out and flow till, often overlain by less than one meter of loess, commonly displays high relief hummocky topography in some areas, dominant lithologies are red-brown sandstones and mafic rocks derived from the Lake Superior basin. Unit **Cfdb**: steep hill slopes in areas of deeply dissected drainage.

Copper Falls sand and gravel in outwash deposits Sorted and bedded deposits of sand and gravel; often overlain by less than one meter of loess; dominant lithologies are red-brown sandstones and mafic rocks derived from the Lake Superior basin, includes river terraces of Pleistocene age. **Cfsp**: less than 20 percent of original stream bed interrupted by depressions formed by melting ice blocks, (kettles). Unit **Cfspp**: more than 20 but less than 50 percent collapsed surface. Unit **Cfsh**: more than 50 percent collapsed surface. Unit **Cfsb**: steep hill slopes in areas of deeply dissected drainage.

Copper Falls silt and sand Found in glacial lake deposits; most is in former ice walled lake plains.

RIVER FALLS FORMATION

River Falls diamicton Reddish-brown, unsorted or poorly sorted, non-stratified, slightly-cohesive, variable in grain-size distribution, lacks significant amount of silt and clay; commonly contains areas of bedded sand and gravel; often overlain by less than one meter of loess, same appearance and grain-size distribution as Copper Falls Formation but lacks glacial landforms and hummocky topography, has a generally rolling surface topography with few kettles, deposits of variable thickness on hill tops, local shallow bedrock exists.

River Falls sand and gravel in outwash deposits Sorted and bedded deposits of sand and gravel; often overlain by less than one meter of loess; dominant lithologies are red-brown sandstones and mafic rocks derived from the Lake Superior basin.

PIERCE FORMATION

Hersey diamicton Gray-dark gray clayey, compact, cohesive, interpreted as basal till or as colluvium in valleys, massive and structure-less, commonly contains limestone and organic matter, may be locally overlain by varved lake sediments of the Kinnickinic Member.

SYMBOLS

Geologic contact. Dashed where uncertain; solid where position shown on map is judged to be generally within 0.1 km of actual position; dashed where the position shown may be more than 0.1 km from actual position.

Ice-margin position. Interpreted position of maximum extent of readvance of ice or position of ice margin stabililty where ice-contact face or end moraine is missing.

Indefinite ice-margin position. Interpreted position of ice margin must exist, but is obscured by erosion or buried by more recent deposits.

Esker

SCALE 1:100,000

0 1 2 3 4 5

MILES

0 1 2 3 4 5

KILOMETERS

Wisconsin Geological and Natural History Survey
Open-File Report 2004-22

This map is part of an ongoing project funded by STATEMAP, the state component of the National Cooperative Geologic Mapping Program of the U.S. Geological Survey.

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.

Wisconsin Transverse Mercator Projection
1991 Adjustment to the North American Datum of 1983 (NAD 83/91)

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