North Dakota Geological Survey
24K: Vslv - sg

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Surface Geology

Veseleyville Quadrangle, North Dakota

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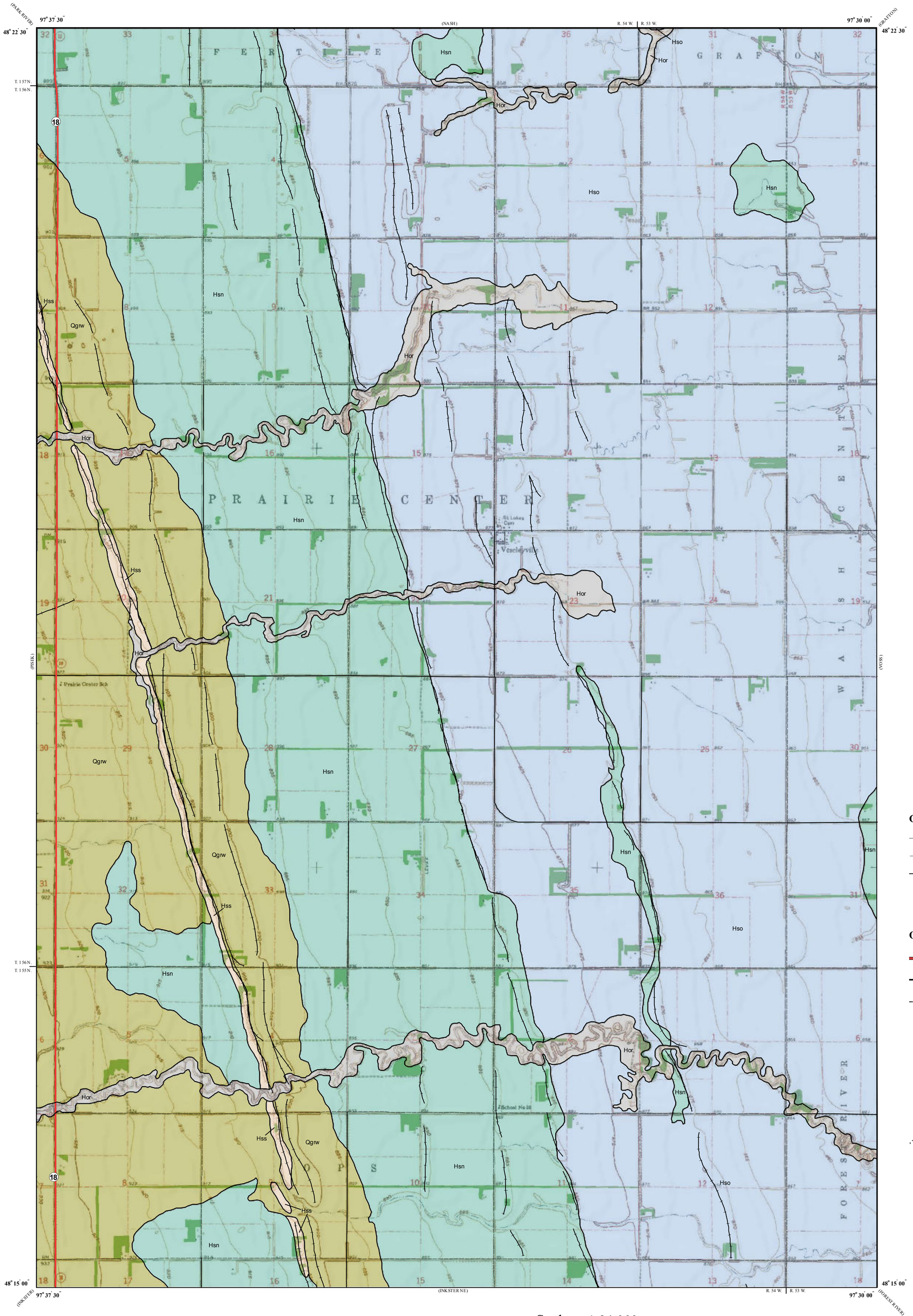


QUATERNARY

HOLOCENE

OAHE FORMATION

Sand, silt, clay, gravel, and organic debris; all postglacial sediment deposited on the landscape; includes river sediment, windblown sediment, lake sediment, and slopewash.

Hor **Alluvium And Overbank Sediment**

Sand, silt, clay and disseminated organic debris; obscurely bedded; dark colored; in many places associated with sand and gravel of older river-channel sediment; commonly more than three feet (1 meter) thick.

SHERACK FORMATION

Clay, silty clay, silt, and sand; thinly laminated; clayey in the central part of the lake plain and silty toward the margins; light gray where unoxidized and yellowish gray to olive-brown where oxidized; wood fragments common at the base; offshore, nearshore, shoreline and deltaic sediment deposited south of ice that occupied the Red River lowland during the Emerson Phase of Glacial Lake Agassiz. Only the offshore, nearshore, and shoreline units occur in the map area.

Hso **Offshore Lake Sediment**

Laminated clay, clayey silt, silty clay, silt, and sand; clayey in the central part of the Red River Valley and siltier towards the margins; laminations are generally only a few millimeters thick but some of the silty beds are locally several centimeters thick; bedding deformed in places into folds a few feet high and several feet across; light gray when unoxidized and yellowish gray to olive brown when oxidized; wood fragments common in the lower few feet of the formation; as much as 100 feet (33 meters) thick.

Hsn **Nearshore Sediment**

Moderately to well sorted; flat bedded to cross-bedded; light gray when unoxidized and yellowish gray to olive brown when oxidized; as much as 15 feet (5 meters) thick; deposited in shallow water.

Hss **Shoreline Sediment**

Silt, sand, and gravel; moderately to well-sorted; plane-bedded; to cross-bedded; as much as 18 feet (6 meters) thick; deposited along the shoreline of Lake Agassiz, commonly on eroded till; gravel occurs in beach ridges that are flanked by low-relief, lakeward-sloping areas of silt, sand, and wave-eroded till; beach ridges, spits, and offshore sand bars are shown as line symbols.

PLEISTOCENE

COLEHARBOR GROUP

The Coleharbor Group includes all sediments in North Dakota associated with deposition by Pleistocene glaciers.

GOOSE RIVER FORMATION (UNDIFFERENTIATED)

Sediment deposited by a glacier as a result of a readvance from the northwest (Riding Mountain provenance) of the generally retreating Late Wisconsinan ice sheet into the Red River lowland.

Qgrw **Clay-loam, pebbly**

Unsorted; unbedded; as much as 80 feet (24 meters) thick; flat to gently undulating surface, very bouldery in places; a thin veneer of shoreline, nearshore, or offshore sediment is commonly present; glacial sediment eroded (washed) by lake waves.

Geologic Symbols

Known contact between two geologic units

Approximate contact between two geologic units

Beach ridges, spits and offshore bars

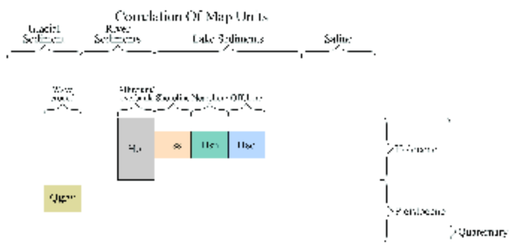
Established from aerial photographs; line indicates the crest of the ridge; interpreted as beach ridges or offshore bars deposited along the margin of Lake Agassiz; discernible on topographic maps and on the ground.

Other Features

State Highway

Paved Road

Unpaved Road



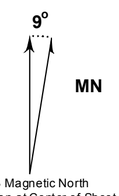
Scale 1:24,000

0 0.5 1

Miles

Lambert Conformal Conic Projection Standard Parallels 48° 15' 00" and 48° 22' 30"
1927 North American Datum NGVD 1929
USGS 7.5 Minute Topographic Map Contour Interval 5 Feet

Veseleyville Quadrangle, North Dakota



1963 Magnetic North
Declination at Center of Sheet

Cartographic Compilation: E.L. Kadrmas & S.S Kranich