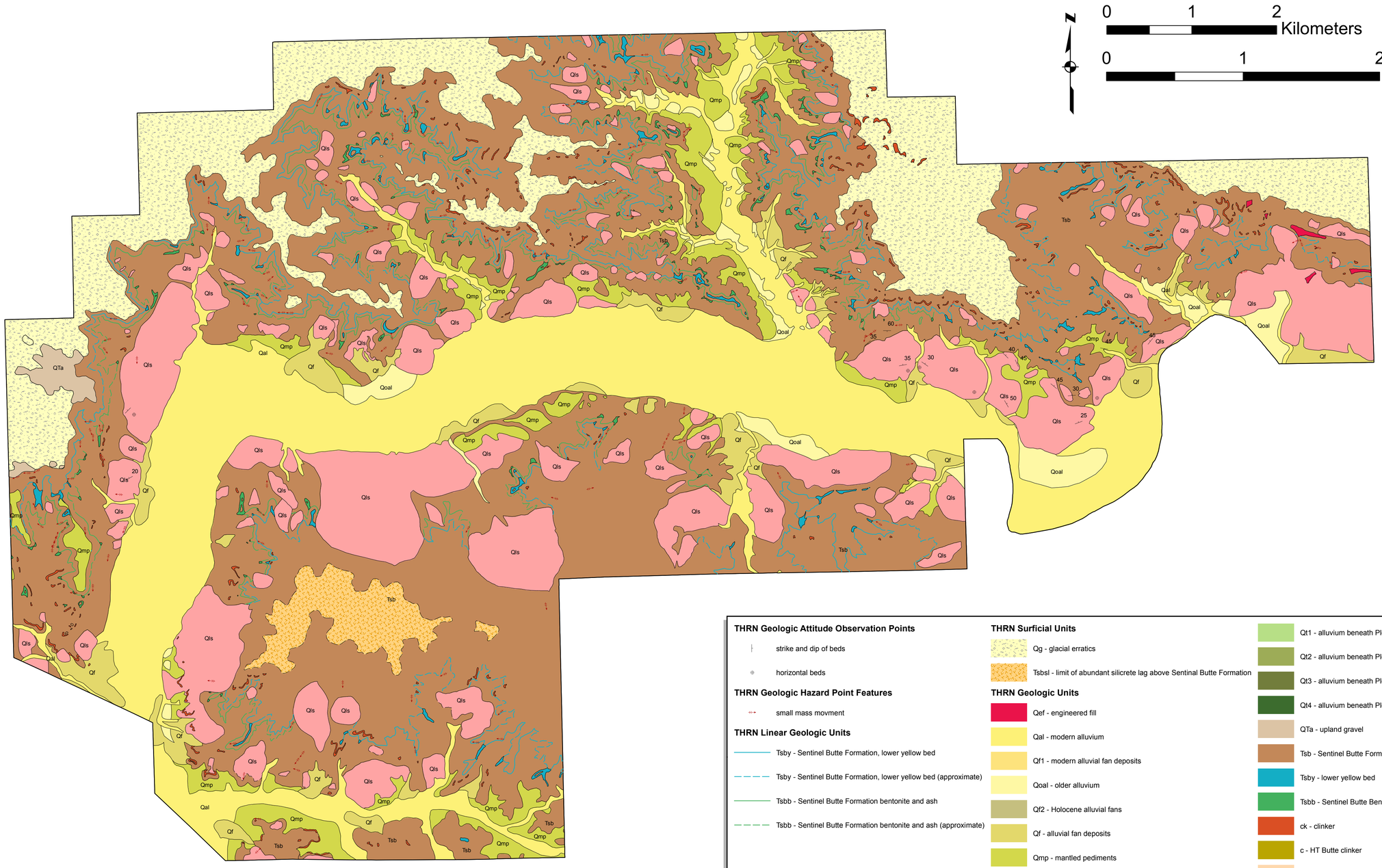
Theodore Roosevelt National Park
North Dakota

National Park Service
U.S. Department of the Interior

Geologic Map of Theodore Roosevelt National Park, North Dakota

North Unit



THRN Geologic Attitude Observation Points

- strike and dip of beds
- horizontal beds

THRN Geologic Hazard Point Features

- small mass movment

THRN Linear Geologic Units

- Tsby - Sentinel Butte Formation, lower yellow bed
- Tsby - Sentinel Butte Formation, lower yellow bed (approximate)
- Tsbb - Sentinel Butte Formation bentonite and ash
- Tsbb - Sentinel Butte Formation bentonite and ash (approximate)

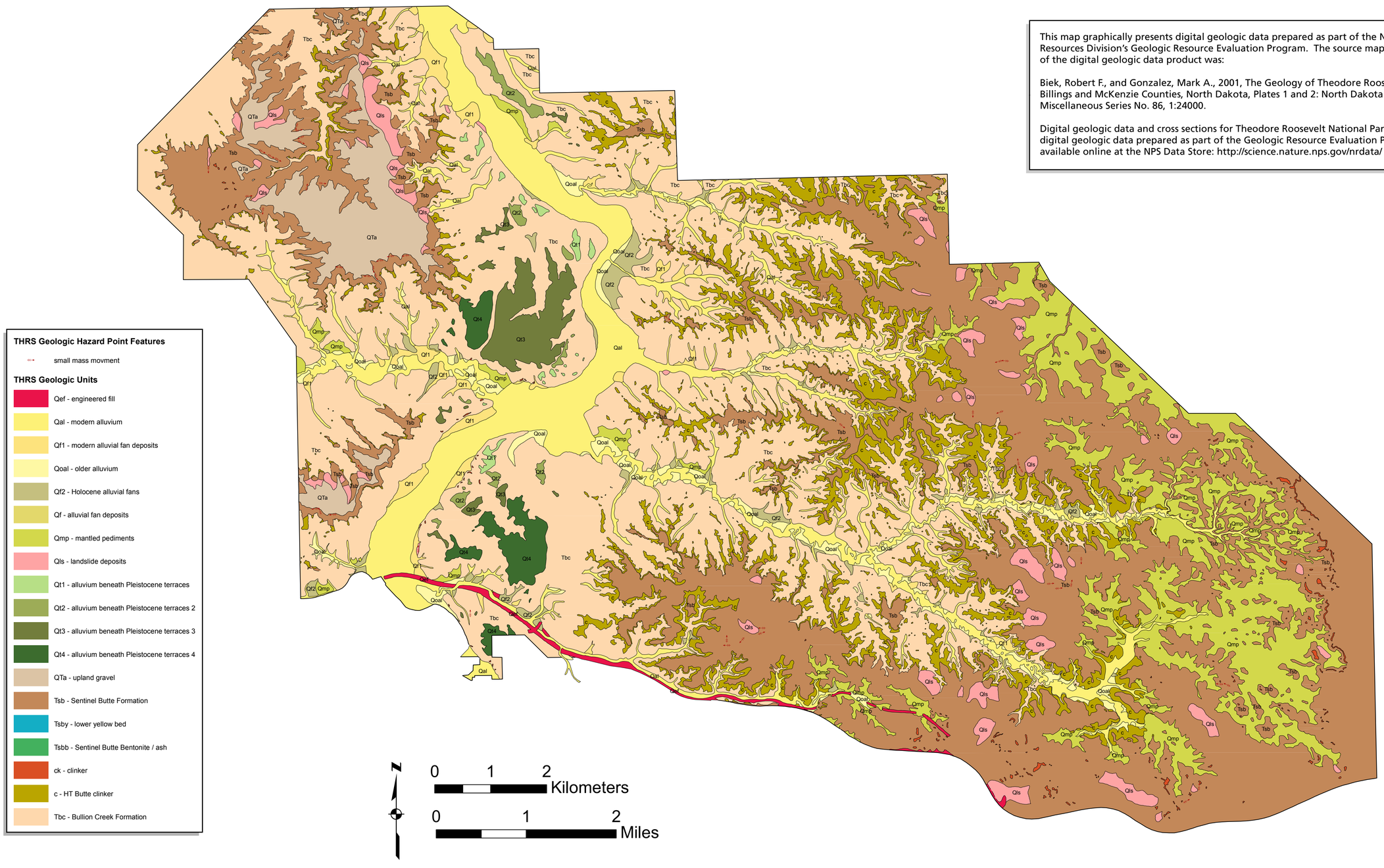
THRN Surficial Units

- Qg - glacial erratics
- Tsbsl - limit of abundant silicrete lag above Sentinal Butte Formation

THRN Geologic Units

- Qef - engineered fill
- Qal - modern alluvium
- Qf1 - modern alluvial fan deposits
- Qoal - older alluvium
- Qf2 - Holocene alluvial fans
- Qf - alluvial fan deposits
- Qmp - mantled pediments
- Qls - landslide deposits
- Qt1 - alluvium beneath Pleistocene terraces
- Qt2 - alluvium beneath Pleistocene terraces 2
- Qt3 - alluvium beneath Pleistocene terraces 3
- Qt4 - alluvium beneath Pleistocene terraces 4
- QTa - upland gravel
- Tsb - Sentinel Butte Formation
- Tsby - lower yellow bed
- Tsbb - Sentinel Butte Bentonite / ash
- ck - clinker
- c - HT Butte clinker
- Tbc - Bullion Creek Formation

South Unit



THRS Geologic Hazard Point Features

- small mass movment

THRS Geologic Units

- Qef - engineered fill
- Qal - modern alluvium
- Qf1 - modern alluvial fan deposits
- Qoal - older alluvium
- Qf2 - Holocene alluvial fans
- Qf - alluvial fan deposits
- Qmp - mantled pediments
- Qls - landslide deposits
- Qt1 - alluvium beneath Pleistocene terraces
- Qt2 - alluvium beneath Pleistocene terraces 2
- Qt3 - alluvium beneath Pleistocene terraces 3
- Qt4 - alluvium beneath Pleistocene terraces 4
- QTa - upland gravel
- Tsb - Sentinel Butte Formation
- Tsby - lower yellow bed
- Tsbb - Sentinel Butte Bentonite / ash
- ck - clinker
- c - HT Butte clinker
- Tbc - Bullion Creek Formation

This map graphically presents digital geologic data prepared as part of the NPS Geologic Resources Division's Geologic Resource Evaluation Program. The source map used in creation of the digital geologic data product was:

Biek, Robert F., and Gonzalez, Mark A., 2001, The Geology of Theodore Roosevelt National Park, Billings and McKenzie Counties, North Dakota, Plates 1 and 2: North Dakota Geological Survey, Miscellaneous Series No. 86, 1:24000.

Digital geologic data and cross sections for Theodore Roosevelt National Park and all other digital geologic data prepared as part of the Geologic Resource Evaluation Program, are available online at the NPS Data Store: http://science.nature.nps.gov/nrdata/

Produced by Geologic Resources Division

June 2007