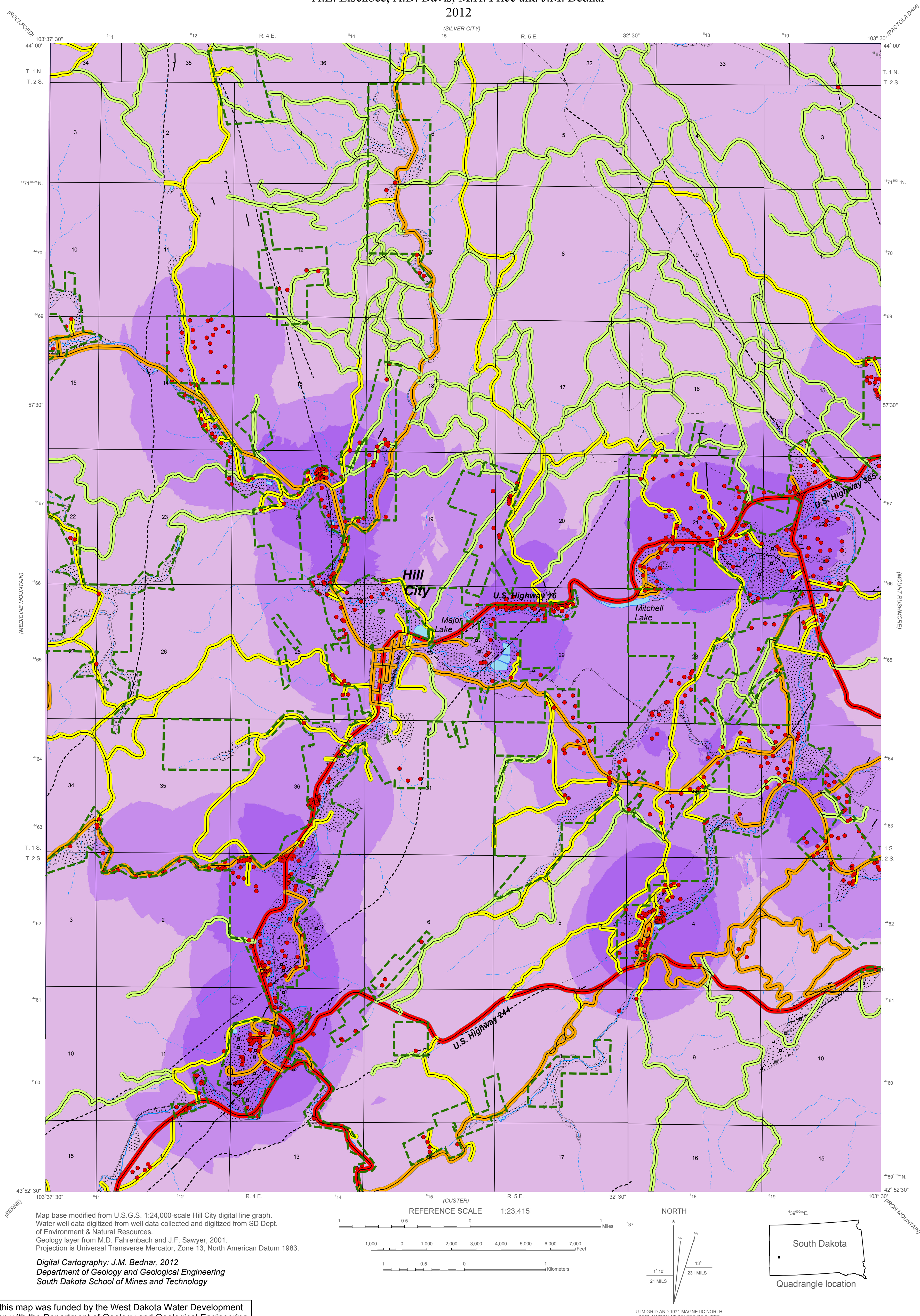


# Aquifer Vulnerability of the Precambrian Units Hill City Quadrangle

By  
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## Definition of Vulnerability

Aquifer vulnerability is the potential or likelihood that any contaminant could reach the ground-water supply, based on designated parameters described below.

**Areas of increased aquifer vulnerability due to the presence of on-site wastewater disposal systems over the Precambrian crystalline aquifer.**

Density (number of OSWDS per sq. mi.)	Rating
0 - 10	Low to Medium
10 - 40	Medium to High
40 - 94	High to Very High

**Increased aquifer vulnerability due to the presence of road (buffered 100 feet on either side) over the Precambrian crystalline aquifer.**

Type of Road	Rating
Trail	Low
Dirt Road	Low to Medium
Paved Road	Medium to High
Highway	High to Very High

## EXPLANATION

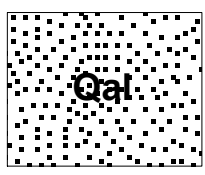
	Intermittent Stream
	Perennial Stream
	Black Hills National Forest Boundary
	Railroad
	Lake
	Springs
	On-Site Wastewater Disposal System (OSWDS)

## Geologic Structure

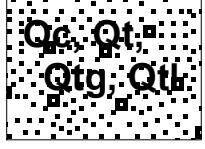
Fault

Solid where location certain; dashed where approximately located; queried where uncertain. Bar and ball on downthrown side.

## Surficial Deposits



**Surficial Floodplain Deposits**  
Alluvium- Loosely consolidated to unconsolidated, typically stratified, rounded to angular, poorly to well sorted, clay to boulder sized clasts. Deposited as alluvial fans, in stream valleys, and on present flood plains.



**Other Surficial Deposits**  
Terrace Deposits, Colluvium- Loosely consolidated to unconsolidated, typically stratified, poorly to well sorted, heterogeneous sand to boulder sized clasts deposited pediments, paleochannels, and terrace fills of older floodplains.