

# MICHIGAN: A GEOGRAPHY

## Chapter 16. Groundwater resources (David P. Lusch, Ph.D.)

### Bedrock geology

Structure

Lithology

Bedrock aquifers

Distribution

Accessibility (depth to bedrock)

Yield from bedrock aquifers

Flowing wells

Water Quality

Brackish and saline groundwater in bedrock

Arsenic in bedrock aquifers

Karst – areas of special concern

[FOCUS Michigan's Sink Holes]

### Glacial geology

Introduction

Lithology of the glacial deposits

Surface texture (soil texture)

Aquifer index with depth (0-20ft., 21-40 ft., 41-60 ft., 61-80 ft., 81-100 ft.)

Thickness of the glacial deposits utilized for water supplies

Yield from glacial aquifers

Flowing wells

[FOCUS Water, water everywhere – flowing well problems]

Water Quality

Nitrate contamination of glacial aquifers

Arsenic in glacial aquifers

Sites of environmental contamination (affecting groundwater)

[FOCUS Rural groundwater contamination] (Dacthol contamination at Coloma, Michigan)