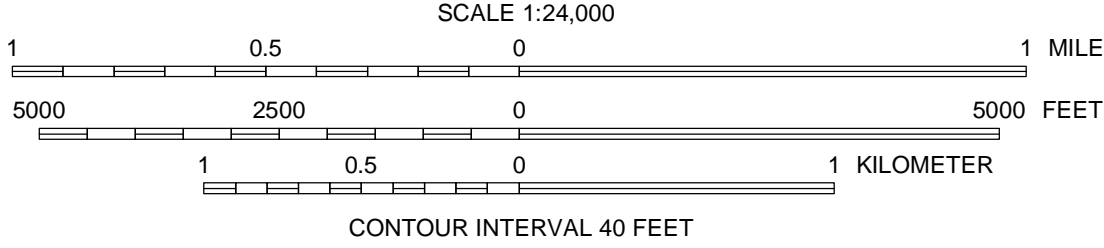




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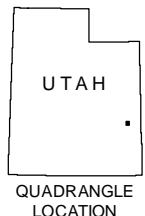
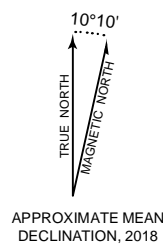


Base from USGS Moab 7.5' quadrangle (1989), topographic derived from the USGS 10-meter National Elevation Dataset (NED) (2009), and aerial photography from the National Agriculture Imagery Program (NAIP, 2011).
Projection: UTM Zone 12
Datum: NAD 1983
GIS and Cartography: Jessica J. Castleton
Utah Geological Survey
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PIPING AND EROSION SUSCEPTIBILITY MAP OF THE MOAB QUADRANGLE, GRAND COUNTY, UTAH

by

Jessica J. Castleton, Ben A. Erickson, and Emily J. Kleber 2018



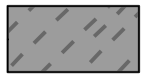
1	2	3
4	5	
6	7	8

ADJOINING 7.5' QUADRANGLE NAMES

1. Menmac Butte
2. The Windows Section
3. Big Bend
4. Gold Bar Canyon
5. Hill Creek
6. Shafer Basin
7. Trough Springs Canyon
8. Kane Springs



EXPLANATION

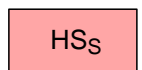


Not Mapped – Area not mapped due to significant and ongoing human disturbance.

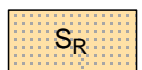
Piping and Erosion Susceptibility Categories



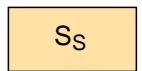
Highly Susceptible Rock – Bedrock units identified as having a high susceptibility to piping and erosion. Typically, fine-grained, poorly consolidated siltstone, mudstone, or claystone, and landslide deposits consisting of such rock types. For piping to develop, a free face and percolating water are also necessary.



Highly Susceptible Soil – Units identified as having a high susceptibility to piping and erosion. Typically, fine-grained, poorly consolidated loose to poorly consolidated sand or silt, and landslide deposits consisting of similar materials. For piping to develop, a free face and percolating water are also necessary.



Susceptible Rock – Typically, fine-grained, poorly consolidated siltstone, mudstone, or claystone, and landslide deposits consisting of such rock types. For piping to develop, a free face and percolating water are also necessary.



Susceptible Soil – Typically, fine-grained, loose to poorly consolidated sand or silt, and landslide deposits consisting of similar materials. For piping to develop, a free face and percolating water are also necessary.



Limited susceptibility for piping and erosion.

USING THE MAP

This map shows the location of known and possible areas that are potentially susceptible to piping and erosion in the Moab quadrangle. The map is intended for general planning purposes to indicate where the potential for piping and erosion may be present and where site-specific geotechnical/geologic-hazard investigations may be required. The UGS recommends a site-specific geotechnical/geologic-hazard investigation for development at all locations in the Moab quadrangle. Site-specific geotechnical/geologic-hazard investigations can resolve uncertainties inherent in generalized hazard mapping and help ensure safety by identifying the need for special engineering design, mitigation, and/or construction techniques. These investigations are particularly important for areas within the Moab quadrangle because local areas of damaging piping and erosion too small to show at the map scale (1:24,000) may be present anywhere within the quadrangle. This map is intended for use at a scale of 1:24,000, and is designed for use in general planning to indicate the need for site-specific geotechnical/geologic-hazard investigations.

For additional information about the piping and erosion potential in the Moab quadrangle, refer to the accompanying report.