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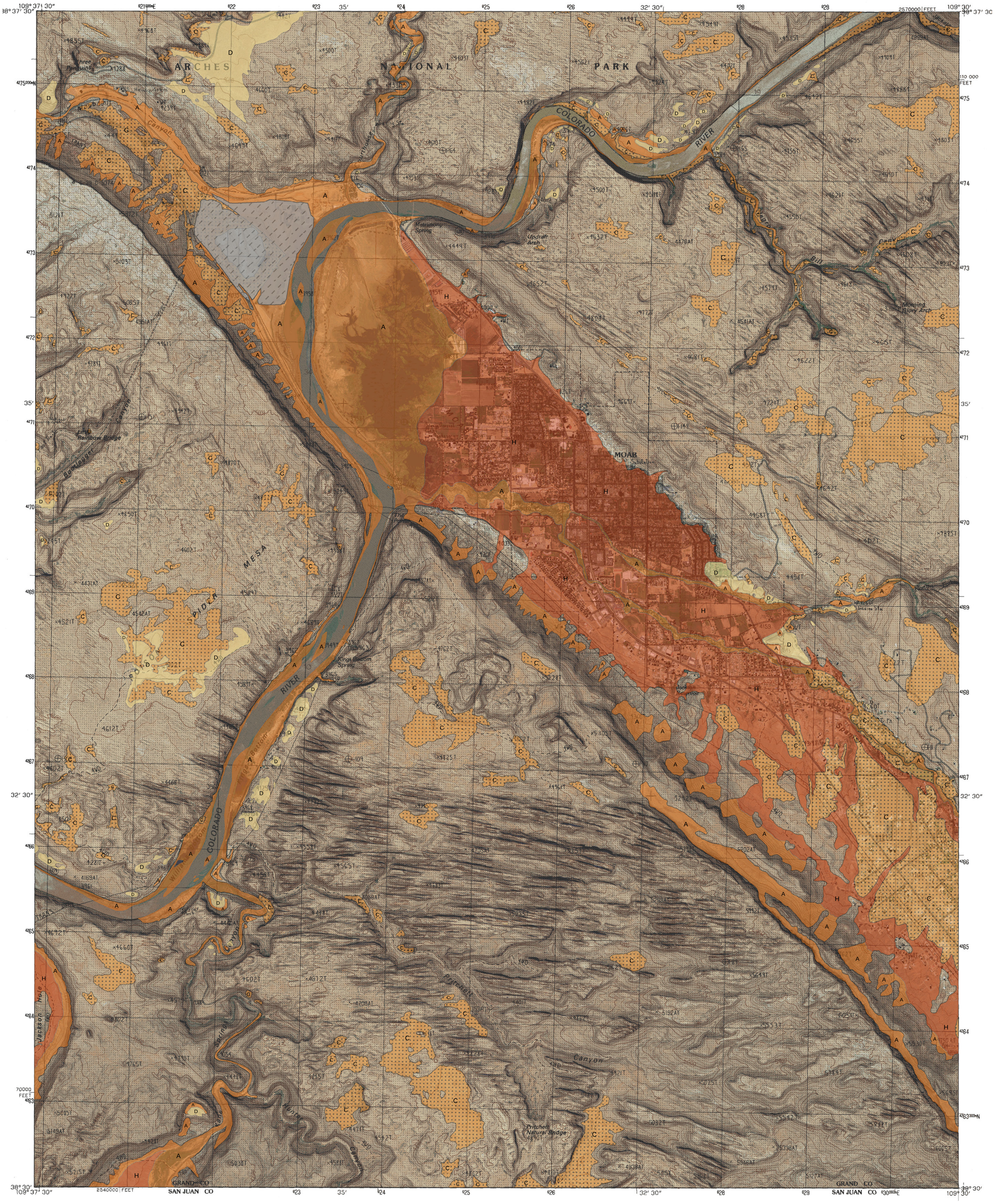

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SCALE 1:24,000

1 0.5 0 1 MILE

5000 2500 0 5000 FEET

1 0.5 0 1 KILOMETER

CONTOUR INTERVAL 40 FEET

Base from USGS Moab 7.5' quadrangle (1985), slopeshade 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

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COLLAPSIBLE SOIL SUSCEPTIBILITY MAP OF THE MOAB QUADRANGLE, GRAND COUNTY, UTAH

by

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

2018

APPROXIMATE MEAN DECLINATION, 2018

QUADRANGLE LOCATION

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

ADJOINING 7.5' QUADRANGLE NAMES

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EXPLANATION

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

Collapsible Soil Susceptibility Categories

H — **Highly Collapsible Soil –** Unconsolidated geologic units containing highly collapsible soils with reported collapse values greater than or equal to 5 percent. In areas continually subjected to saturation or flooding, collapsible soils are unlikely.

A — **Collapsible Soil A** – Unconsolidated geologic units having reported collapse values between 3 and 5 percent. In areas continually subjected to saturation or flooding, collapsible soils are unlikely.

C — **Collapsible Soil C –** Unconsolidated, young geologic units (Holocene) for which no geotechnical data are available, but which have a genesis or texture susceptible to collapse. In areas continually subjected to saturation or flooding, collapsible soils are unlikely.

D — **Collapsible Soil D** – Unconsolidated older geologic units (Pleistocene) for which no geotechnical data are available, but which have a genesis or texture susceptible to collapse. Because of their age, these deposits have experienced greater exposure to natural wetting and may have already experienced collapse, and/or the deposits may have become cemented by secondary calcium carbonate or other soluble minerals, making them less susceptible to collapse.

Bedrock – Area unlikely to be susceptible to collapse

USING THE MAP

This map shows the location of known and suspected collapsible soil conditions in the Moab quadrangle. The map is intended for general planning purposes to indicate where collapsible soils may exist. The UGS recommends performing a site-specific geotechnical/geologic-hazard investigation that includes collapsible soil testing for all development in the Moab quadrangle. Site-specific geotechnical/geologic-hazard investigations can resolve uncertainties inherent in generalized mapping and help ensure safety by identifying the need for special foundation designs, mitigation, and/or construction techniques. 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. The presence and severity of collapsible soil along with other geologic hazards should be addressed in these investigations. If collapsible soil is present at a site, appropriate design and construction recommendations should be provided.

For additional information about collapsible soil susceptibility in the Moab quadrangle, refer to the accompanying report.