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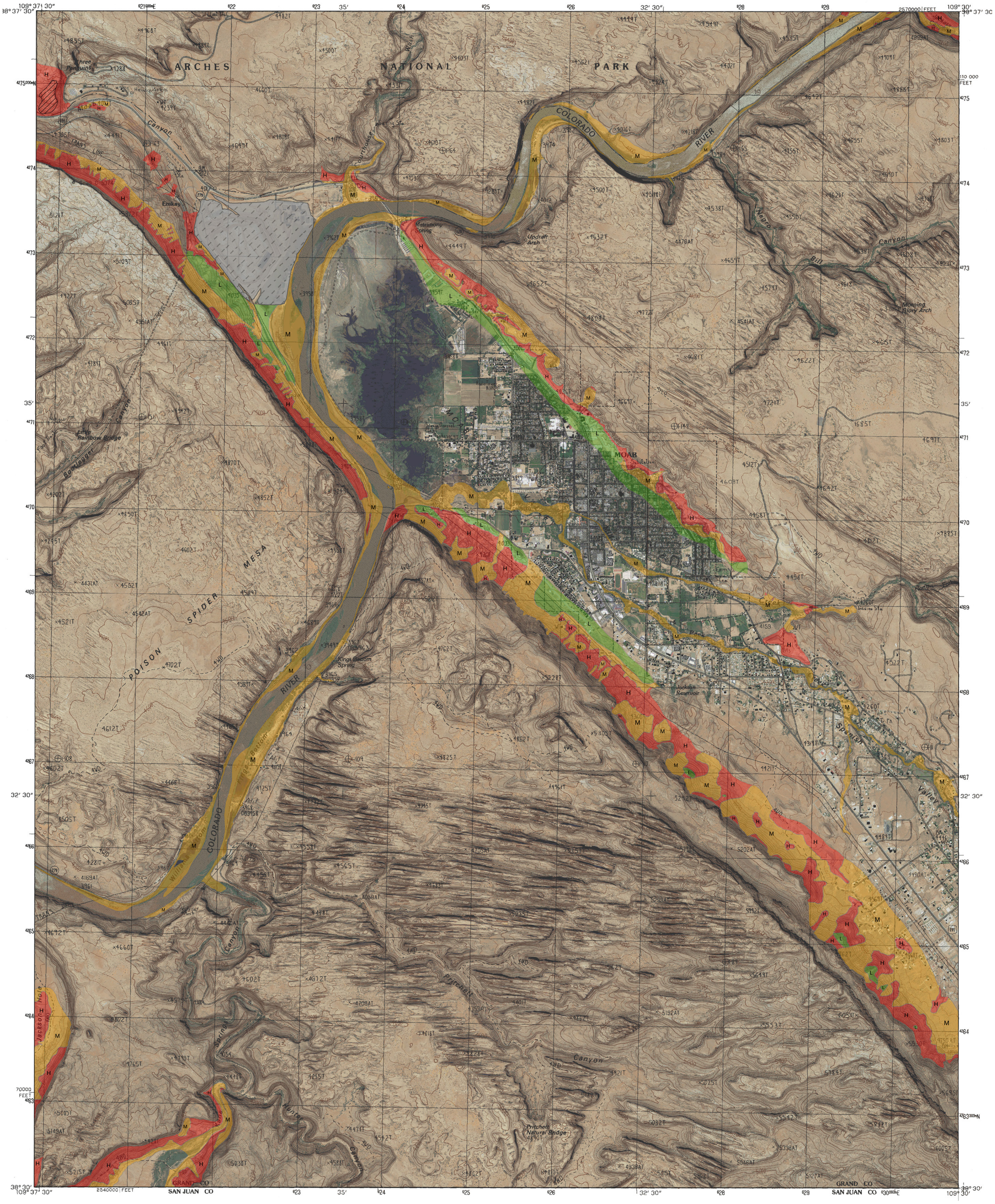

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SCALE 1:24,000

1 0.5 0 1 MILE

5000 2500 0 5000 FEET

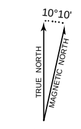
1 0.5 0 1 KILOMETER

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

GIS and Cartography: Ben A. Erickson and Jessica J. Castleton

Utah Geological Survey
1594 West North Temple, Suite 3110
P.O. Box 146100, Salt Lake City, UT 84114-6100
(801) 537-3300
geology.utah.gov



APPROXIMATE MEAN DECLINATION, 2018

LANDSLIDE SUSCEPTIBILITY MAP OF THE MOAB QUADRANGLE, GRAND COUNTY, UTAH

by

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

2018

QUADRANGLE LOCATION

1	2	3
4		5
6	7	8

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.

Landslide Deposit – As mapped by Doelling and others (2002) and identified by this study.

Landslide Hazard Categories

H — **High** – Area highly susceptible to future landslide movement, due to slope angle, geologic unit, and existing landslides within the geologic unit. A critical angle of 10 degrees was assigned to Quaternary deposits along the Colorado River tributaries, and 22 degrees for the Chinle and Moenkopi Formations.

M — **Moderate** – Area moderately susceptible to future landslide movement as defined by areas having slopes greater than the assigned critical angles in geologic units less susceptible to landsliding.

L — **Low** – Area of low landslide susceptibility as defined by areas having slopes below the critical angle in geologic units unlikely to be susceptible to landsliding.

Area having no significant landslide hazard.

USING THIS MAP

This map shows areas of relative landslide susceptibility and indicates where site-specific slope-stability conditions (material strength, orientation of bedding and/or fractures, groundwater conditions, erosion or undercutting) should be evaluated prior to development. The mapped boundaries between landslide-susceptibility categories are approximate, gradational, and subject to change with additional information. Landslide susceptibility at any particular site may be different than shown because of geological and hydrological variations within a map unit, gradational and approximate map-unit boundaries, and the generalized map scale. Small, localized areas of higher or lower landslide susceptibility are likely to exist within any given map area. The landslide-susceptibility categories do not consider hazards caused by cuts, fills, or other alterations to the natural terrain.

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-specifiland-slide and slope-stability investigations, which are required to produce more detailed landslide-susceptibility information. Mapped landslide susceptibilities indicate only the source zones of landslides (the parts of slopes that may fail). This map does nshow how far downslope the materials may travel before stopping. Proposed development in areas downslope of landslide sourcezones should consider this in site-specific investigations. A valid landslide-hazard investigation must address all pertinent conditions that could affect, or be affected by, the proposed development, including earthquake ground shaking.

For additional information about landslides and landslide susceptibility in the Moab quadrangle, refer to the accompanying report.