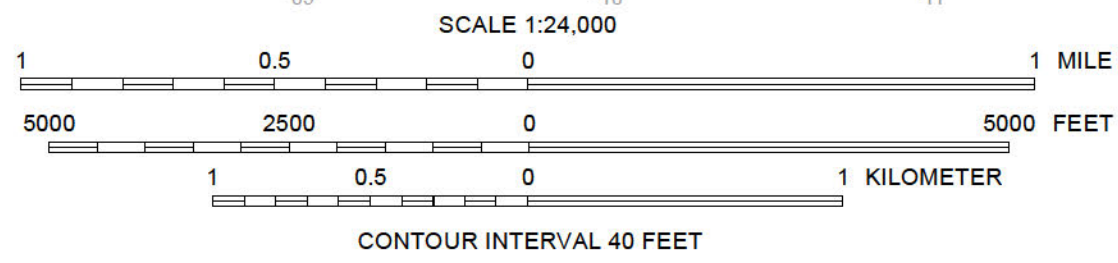


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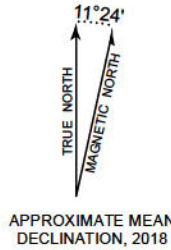
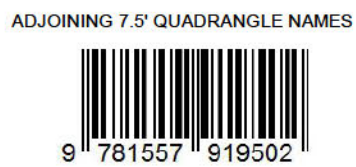


Base from USGS Tickville Spring 7.5' quadrangle (1997). The USGS topographic map published in 1997 conforms to the North American Datum of 1983 (NAD 83), however the boundary of the map conforms to the North American Datum of 1927 (NAD 27); therefore there is a slight offset in boundaries. National Agriculture Imagery Program (NAIP, 2011) Hillshade derived from 2-meter bare earth lidar (2006) data from the Utah Automated Geographic Reference Center State Geographic Information Database. Projection: UTM Zone 12 Datum: NAD 1983 Spheroid: Clarke 1866

GIS and Cartography: Jessica J. Castleton and Sofia Agopian

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1	2	3	1. Bingham Canyon
2	3	4	2. Copperton
3	4	5	3. Midvale
4	5	6	4. Lowe Peak
5	6	7	5. Jordan Narrows
6	7	8	6. Mercur
7	8		7. Cedar Fort
8			8. Saratoga Springs



COLLAPSIBLE SOIL SUSCEPTIBILITY MAP OF THE TICKVILLE SPRING QUADRANGLE, SALT LAKE AND UTAH COUNTIES, UTAH

by

Jessica J. Castleton, Ben A. Erickson, and Greg N. McDonald

2018

EXPLANATION

- Not Mapped** – Area not mapped due to significant and ongoing human disturbance.
- COLLAPSIBLE SOIL SUSCEPTIBILITY CATEGORIES**
- Hcss** **Highly Collapsible Soil** – Unconsolidated geologic units containing highly collapsible soils with reported collapse values greater than or equal to 5%.
- SU1css** **Collapsible Soil Unit 1** – Unconsolidated geologic units having reported collapse values between 3% and 5%. Collapsible soils are unlikely in areas continually subjected to saturation or flooding.
- SU2css** **Collapsible Soil Unit 2** – Unconsolidated geologic units lacking geotechnical collapse data, but for which other geotechnical information (chiefly low unit weight and moisture content) are indicative of materials susceptible to collapse. Collapsible soils are unlikely in areas continually subjected to saturation or flooding.
- SU3css** **Collapsible Soil Unit 3** – Unconsolidated, young geologic units (Holocene) for which no geotechnical data are available, but which have a genesis or texture susceptible to collapse. Collapsible soils are unlikely in areas continually subjected to saturation or flooding.
- SU4css** **Collapsible Soil Unit 4** – 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 not susceptible to collapse.

USING THIS MAP

This map shows the location of known and suspected collapsible soil conditions in the Tickville Spring quadrangle. The map is intended for general planning purposes to indicate where collapsible soils may exist. We recommend performing a site-specific geotechnical/geologic-hazard investigation for all development in the Tickville Spring 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 not intended for use at scales other than 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 Tickville Spring quadrangle, refer to the accompanying report.