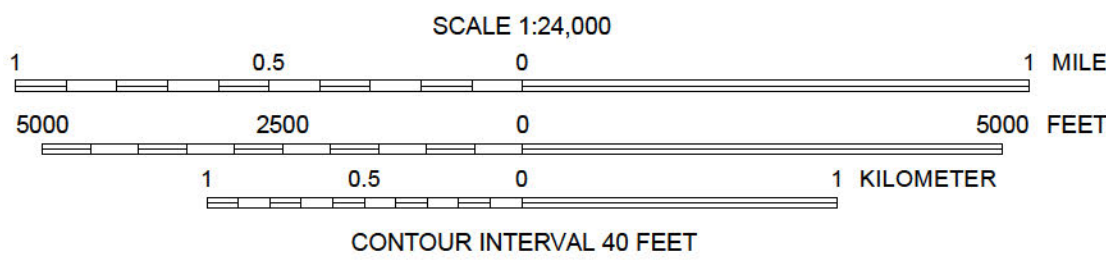


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Base from USGS Tickville Spring 7.5' quadrangle (1997). The USGS topographic map published in 1997 conforms to the North American Datum of 1983 (NAD 83), however the boundary of the map conforms to the North American Datum of 1927 (NAD 27); therefore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

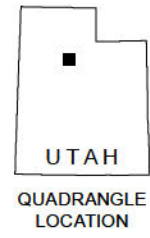
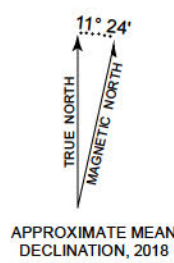
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SHALLOW GROUNDWATER SUSCEPTIBILITY MAP OF THE TICKVILLE SPRING QUADRANGLE, SALT LAKE AND UTAH COUNTIES, UTAH

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

2018



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

ADJOINING 7.5' QUADRANGLE NAMES



EXPLANATION

- Not Mapped** – Area not mapped due to significant and ongoing human disturbance.
- SHALLOW GROUNDWATER POTENTIAL CATEGORIES**
- S2sgs** **Shallow Groundwater unit 2** – Area identified as having potentially shallow groundwater, including soils mapped by the NRCS as poorly drained (depth to groundwater is likely less than 50 feet [15 m] below the ground surface), generally fine-grained soils that may develop shallow groundwater locally when rates of water application exceed the soil's drainage capacity. Subsurface drains are frequently required to prevent these soils from becoming saturated. Because these soils naturally drain slowly, they may remain wet for most of the year, even though water is applied only during the growing season. Permanent shallow groundwater is possible following urbanization.
- S3sgs** **Shallow Groundwater unit 3** – Area identified as having potentially shallow groundwater, including soils mapped by the NRCS as moderately to freely draining soils (depth to groundwater is likely greater than or equal to 50 feet [15 m] below the ground surface) that are commonly irrigated for agricultural purposes. However, where intense levels of water application occur, these soils may develop seasonally high groundwater, but typically drain quickly once water application stops or is reduced below the soil's drainage capacity. Seasonal or transient shallow groundwater is possible especially following development; landscape irrigation and other sources of urban runoff may cause groundwater to rise even higher in these areas.
- Bedrock** – Limited to no potential for shallow groundwater.

USING THIS MAP

This map shows the location of known and possible areas of shallow groundwater in the Tickville Spring quadrangle. The map is intended for general planning purposes to indicate where shallow groundwater 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 Tickville Spring 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 Tickville Spring quadrangle because local areas of shallow perched groundwater too small to show at the map scale (1:24,000) may be present anywhere within the quadrangle. 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. Site-specific geotechnical/geologic-hazard investigations may require installing and monitoring observation wells through more than one season and/or examining sediments exposed in test pits for evidence of seasonal groundwater fluctuations.

For additional information about the shallow groundwater potential in the Tickville Spring quadrangle, refer to the accompanying report.