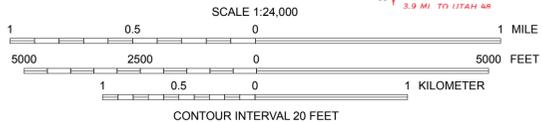


Although this product represents the work of professional scientists, the Utah Department of Natural Resources, Utah Geological Survey, makes no warranty, expressed or implied, regarding its suitability for a particular use, and does not guarantee accuracy or completeness of the data. The Utah Department of Natural Resources, Utah Geological Survey, shall not be liable under any circumstances for any direct, indirect, special, incidental, or consequential damages with respect to claims by users of this product. For use at 1:24,000 scale only.



Base from USGS Magna 7.5 Quadrangle (1999)
Hillshade derived from 2-meter base data LIDAR (2006) data from the Utah Automated Geographic Reference Center
State Geographic Information Database
Projection: UTM Zone 12
Datum: NAD 1983
Spheroid: Clarke 1886
GIS and Cartography: Jessica J. Castleton and Corey D. Unger

Utah Geological Survey
1584 West North Temple, Suite 3110
P.O. Box 146100, Salt Lake City, UT 84114-6100
(801) 537-3300
geology.utah.gov

SHALLOW BEDROCK MAP OF THE MAGNA QUADRANGLE, SALT LAKE COUNTY, UTAH

by
Ashley H. Elliott, Jessica J. Castleton, and Greg N. McDonald
2011



1	2	3	1. Antelope Island South
4	5	6	2. Balleys Lake
7	8	7	3. Salt Lake City North
		8	4. Farmworth Peak
			5. Salt Lake City South
			6. Bingham Canyon
			7. Copperton
			8. Midvale

ADJOINING 7.5' QUADRANGLE NAMES

EXPLANATION

- Not Mapped** – Areas not mapped due to significant and ongoing human disturbance.
- SHALLOW BEDROCK CATEGORIES**
- Hard** – Areas where generally hard and resistant (when unweathered) bedrock crops out at the ground surface as identified by Solomon and others (2007). Bedrock units in this category typically require blasting to excavate; includes bedrock units older than Tertiary age.
- Soft** – Areas where the less resistant Jordan Narrows unit of the Tertiary Salt Lake Formation crops out at the ground surface as identified by Solomon and others (2007). Even when unweathered bedrock can be excavated without blasting, although local blasting may be required. The Jordan Narrows unit contains expansive clay minerals and can be deeply weathered.
- Buried** – Areas where depth to bedrock is ≤ 10 feet (3 m) beneath soil cover.
- Areas where depth to bedrock is > 10 feet (3 m)

USING THIS MAP

This map shows the locations where bedrock crops out at the ground surface or is present in the shallow subsurface in the Magna quadrangle. The map is intended for general planning purposes to indicate where shallow bedrock conditions may exist and special investigations may be required. 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 can resolve uncertainties inherent in generalized mapping and help ensure safety by identifying the need for special foundation designs, mitigation, and/or construction techniques. The presence and severity of bedrock conditions along with other geologic hazards should be addressed in these investigations. If shallow bedrock is present at a site, appropriate design recommendations should be provided.

For additional information about shallow bedrock in the Magna quadrangle, refer to Chapter 7 of the accompanying report.