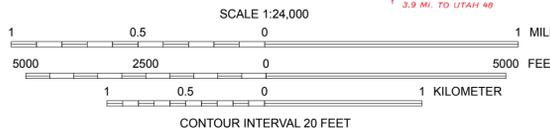


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Base from USGS Magna 7.5' quadrangle (1999)
 Hillshade derived from 2-meter bare earth LIDAR (2008) data from the Utah Automated Geographic Reference Center
 State Geographic Information Database
 Projection: UTM Zone 12
 Datum: NAD 1983
 Spheroid: Clarke 1886

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LIQUEFACTION SUSCEPTIBILITY MAP OF THE MAGNA QUADRANGLE, SALT LAKE COUNTY, UTAH

by

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2011



1	2	3	1. Antelope Island South
4	5	6	2. Baileys Lake
7	8	9	3. Salt Lake City North
10	11	12	4. Farnsworth Peak
13	14	15	5. Salt Lake City South
16	17	18	6. Bingham Canyon
19	20	21	7. Copperton
22	23	24	8. Midvale

ADJOINING 7.5' QUADRANGLE NAMES

EXPLANATION

- Not Mapped** – Areas not mapped due to significant and ongoing human disturbance
- LIQUEFACTION SUSCEPTIBILITY CATEGORIES**
- High** – Geologic units that consist of well-sorted sands, silty sands, and gravels where depth to groundwater is less than or equal to 50 feet (15 m) below the ground surface.
- Moderate** – Geologic units that consist of moderately to poorly sorted sands and gravels where depth to groundwater is less than or equal to 50 feet (15 m) below the ground surface.
- Low** – Geologic units that consist of moderately to poorly sorted sands and gravels where depth to groundwater is greater than or equal to 50 feet (15 m) below the ground surface.
- Very Low** – Geologic units that consist of poorly sorted sands and gravels where depth to groundwater is greater than 50 feet (15 m). Liquefaction susceptibility is considered very low in these units because of their textural characteristics, age, and/or degree of cementation.
- Not Susceptible** – Bedrock units not susceptible to liquefaction.

USING THIS MAP

This map shows areas of liquefaction susceptibility in the Magna quadrangle. The map is intended for general planning purposes to indicate where liquefaction susceptibility may exist and to assist in the design of liquefaction-hazard investigations. The map does not integrate earthquake ground motions with soil characteristics and depth to groundwater, which is required to determine relative liquefaction potential (potential is equal to susceptibility plus opportunity) in susceptible soils. This map is based on limited geologic, geotechnical, and hydrological data. The quality of the map depends on the quality of these data, which vary throughout the study area. The mapped boundaries between liquefaction-susceptibility categories are approximate and subject to change with additional information. The liquefaction susceptibility at any particular site may be different than shown because of geologic and hydrologic variations within a map unit, gradational and approximate map-unit boundaries, and the generalized map scale. Small, localized areas of higher or lower liquefaction susceptibility may exist anywhere within the study area, but their identification is precluded due to limitations of either data or map scale. Seasonal and long-term fluctuations in groundwater levels can alter liquefaction susceptibility at any given site. The 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 are required to produce more detailed information.

For land-use planning recommendations relative to the different susceptibility categories as well as additional information about liquefaction hazard in the Magna quadrangle, refer to Chapter 2 in the accompanying report.