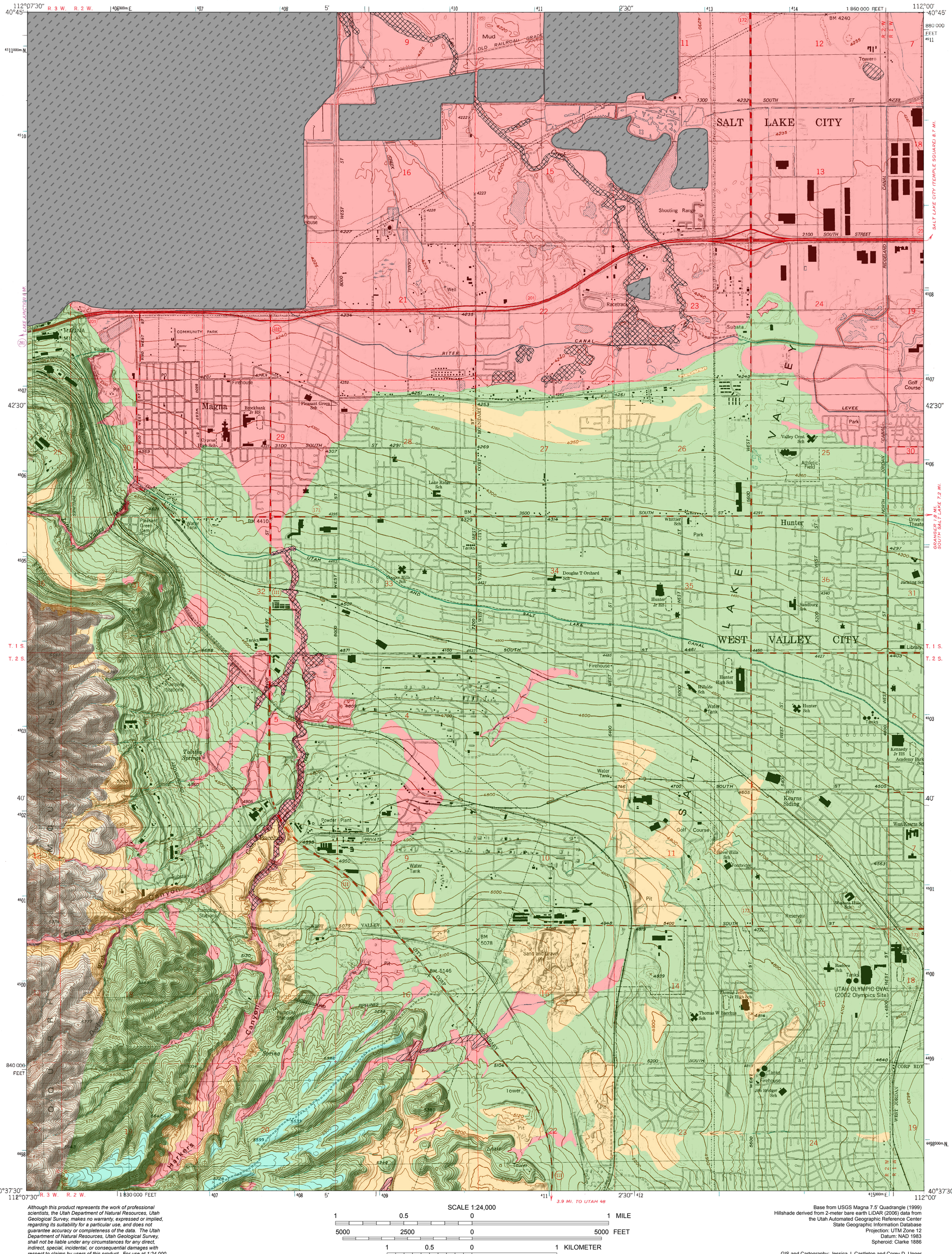
UTAH GEOLOGICAL SURVEY
a division of
Utah Department of Natural Resources

Plate 3
Utah Geological Survey Special Study 137
Geologic Hazard Maps of the Magna Quadrangle, Salt Lake County, Utah



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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 20 FEET

Base from USGS Magna 7.5' Quadrangle (1999)
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 1886

GIS and Cartography: Jessica J. Castleton and Corey D. Unger

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APPROXIMATE MEAN DECLINATION, 2010

FLOOD HAZARD MAP OF THE MAGNA QUADRANGLE, SALT LAKE COUNTY, UTAH

by

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2011

QUADRANGLE LOCATION

1	2	3
4		5
6	7	8

1. Antelope Island South
2. Baileys Lake
3. Salt Lake City North
4. Farnsworth 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.

Bedrock – Areas of bedrock in the Oquirrh Mountains where flooding will likely be minimal.

FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAP (FIRM) ZONES

Zone A – Areas having a 1% annual chance of flooding (100-year flood) and a 26% chance of flooding over the life of a 30-year mortgage. Flood event generally determined using approximate methodologies. Mandatory flood insurance purchase requirements and flood-plain management standards apply.

Areas having a 0.2% annual chance of flooding (500-year flood), and areas of 1% annual chance (100-year flood) with average depths of less than 1 foot (0.3 m) or having drainage areas less than 1 square mile (2.6 square km), and areas protected by levees from 100-year flood.

FLOOD HAZARD CATEGORIES

High – Active flood plains and low terraces along perennial and larger ephemeral streams, active alluvial fans, lacustrine deposits associated with Great Salt Lake, and young deltaic deposits that periodically flood due to shallow groundwater, and stream flow.

Moderate – Stream channels, flood plains, and low terraces along smaller, normally dry streams with comparatively small drainage basins subject to flooding during infrequent cloudburst storms; older alluvial-fan deposits, lagoon-fill deposits located in closed depressions, and colluvial and landslide deposits on mountain slopes and along mountain range fronts.

Low – Minor ephemeral drainages, subject to infrequent flooding from adjacent upland areas during cloudburst storms.

Very Low – Pediment-mantle alluvium on ridge tops.

USING THIS MAP

This map shows drainages covered by the Flood Insurance Rate Maps (FIRM) and other potential flood-hazard areas identified using geologic data. However, because intense cloudburst storms can create a potential for flash floods, debris flows, and sheetfloods anywhere in the study area, even locations outside of identified potential flood-hazard areas could be subject to periodic flooding. This map is designed for use in general planning to indicate the need for site-specific investigations and identify areas where the FIRM can be consulted to determine the availability of flood insurance. This map also shows where existing developments are within potential flood-hazard areas and therefore may require remedial flood-hazard-reduction measures.

This map is based on limited geological, 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 of the flood-hazard categories are approximate and subject to change with additional information. The flood hazard 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. This map is not intended for use at scales other than 1:24,000, and is designed for use in general planning and design to indicate the need for site-specific geotechnical/geologic-hazard investigations, which are required to produce more detailed flood-hazard information.

For additional information about the flood hazard in the Magna quadrangle, refer to Chapter 3 of the accompanying report.