Flood / Erosion Hazard Map

Santa Clara Vicinity

2016

SYMBOLS

- Municipality boundary
- Interstate Highway
- State Highway
- Major local surface street
- Other road

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

AE — Zone AE: Areas with a 1% annual chance of flooding and a 26% chance of flooding over the life of a 30-year mortgage. Flood event determined by detailed methods. Mandatory flood insurance purchase requirements and flood-plain management standards apply.

A — Zone A: Areas with a 1% annual chance of flooding 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.

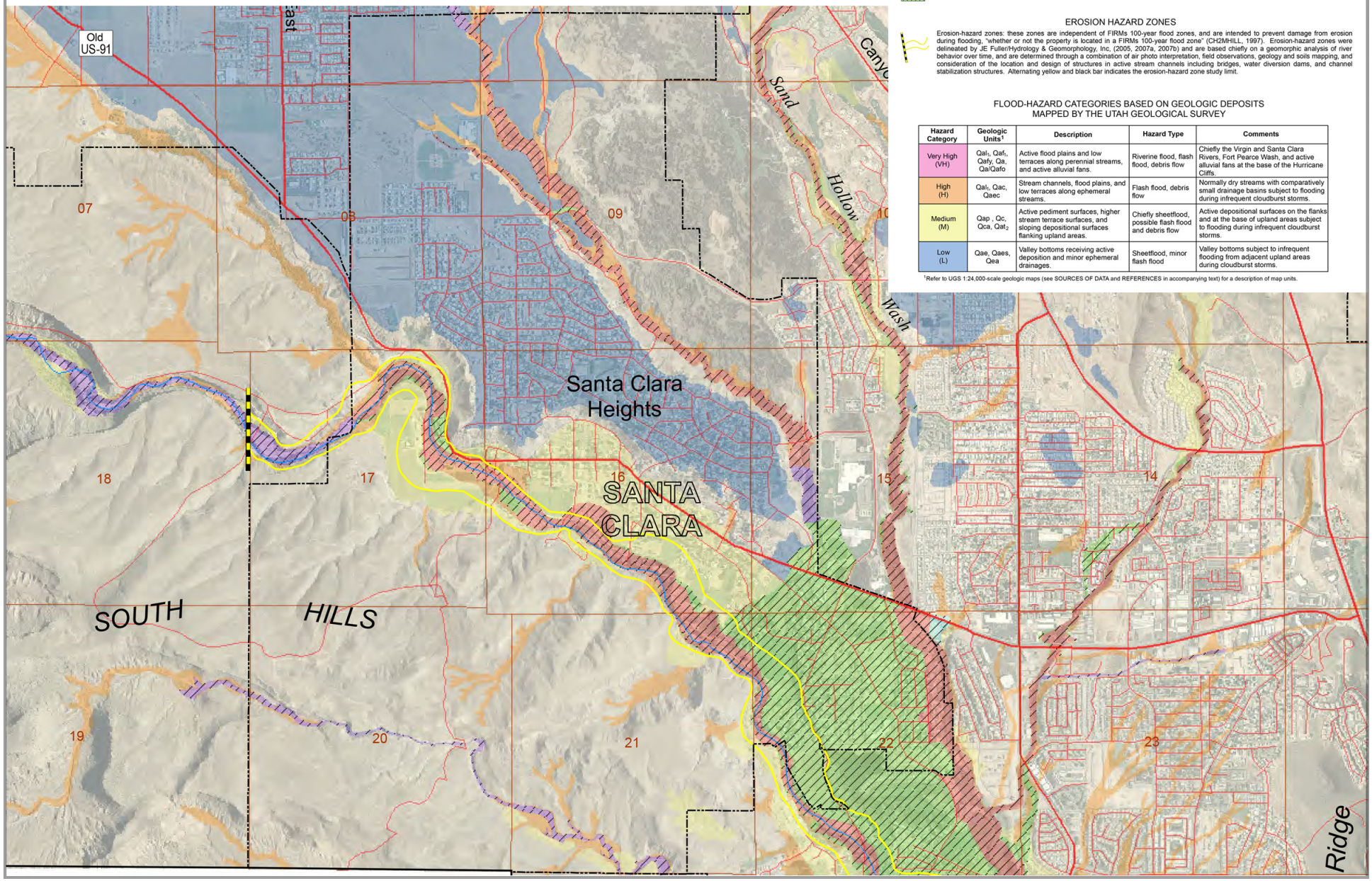
AO — Zone AO: Areas subject to inundation by 1-percent-annual-chance shallow flooding (usually sheet flow on sloping terrain) where average depths are between one and three feet. Some Zone AO have been designated in areas with high flood velocities such as alluvial fans and washes.

0.2-percent-annual-chance (or 500-year) flood plain

EROSION HAZARD ZONES

Erosion-hazard zones: these zones are independent of FIRMs 100-year flood zones, and are intended to prevent damage from erosion during flooding, "whether or not the property is located in a FIRMs 100-year flood zone" (CH2MHILL, 1997). Erosion-hazard zones were delineated by JE Fuller/Hydrology & Geomorphology, Inc. (2005, 2007a, 2007b) and are based chiefly on a geomorphic analysis of river behavior over time, and are determined through a combination of air photo interpretation, field observations, geology and soils mapping, and consideration of the location and design of structures in active stream channels including bridges, water diversion dams, and channel stabilization structures. Alternating yellow and black bar indicates the erosion-hazard zone study limit.

FLOOD-HAZARD CATEGORIES BASED ON GEOLOGIC DEPOSITS MAPPED BY THE UTAH GEOLOGICAL SURVEY

Hazard Category	Geologic Units[1]	Description	Hazard Type	Comments
Very High (VH)	Qal_1, Qaf_1, Qafy, Qa, Qa/Qafo	Active flood plains and low terraces along perennial streams, and active alluvial fans.	Riverine flood, flash flood, debris flow	Chiefly the Virgin and Santa Clara Rivers, Fort Pearce Wash, and active alluvial fans at the base of the Hurricane Cliffs.
High (H)	Qal_2, Qac, Qaec	Stream channels, flood plains, and low terraces along ephemeral streams.	Flash flood, debris flow	Normally dry streams with comparatively small drainage basins subject to flooding during infrequent cloudburst storms.
Medium (M)	Qap , Qc, Qca, Qal_2	Active pediment surfaces, higher stream terrace surfaces, and sloping depositional surfaces flanking upland areas.	Chiefly sheetflood, possible flash flood and debris flow	Active depositional surfaces on the flanks and at the base of upland areas subject to flooding during infrequent cloudburst storms.
Low (L)	Qae, Qaes, Qea	Valley bottoms receiving active deposition and minor ephemeral drainages.	Sheetflood, minor flash flood	Valley bottoms subject to infrequent flooding from adjacent upland areas during cloudburst storms.

[1]Refer to UGS 1:24,000-scale geologic maps (see SOURCES OF DATA and REFERENCES in accompanying text) for a description of map units.