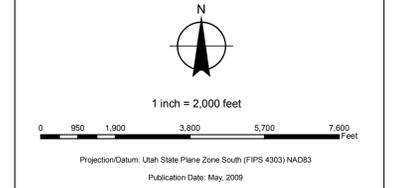


Adverse Construction Condition Collapsible Soil

Utah Geological Survey Special Study 127
Geologic Hazards and
Adverse Construction Conditions
St. George-Hurricane Metropolitan Area
Washington County, Utah, 2008

City of Hurricane
147 N 870 W
Hurricane, UT 84737
GIS



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Description
Collapsible soils have considerable dry strength and stiffness in their dry natural state, but can settle up to 10 percent of the susceptible deposit thickness when they become wet for the first time following deposition causing damage to property and structures. The categories are based on the type of geotechnical data available, and if the deposit genesis or texture is permissive of collapse.

Using This Map
The Collapsible-Soil-Susceptibility Map shows the location of known and suspected collapsible-soil conditions in the St. George-Hurricane metropolitan area. The map is intended for general planning purposes to indicate where collapsible-soil conditions may exist and special studies may be required. The UGS recommends performing a site-specific geotechnical foundation/geologic-hazards study for all development at all locations in the study area. Site-specific studies can resolve uncertainties inherent in generalized mapping and help ensure safety by identifying the need for special foundation designs or mitigation techniques. The presence and severity of collapsible soil along with other adverse construction conditions and geologic hazards should be addressed in these investigations. If collapsible soil is present at a site, appropriate design recommendations should be provided.

See section 7, "Problem Soil and Rock", in the full report for more detailed information.

Classification:
For a detailed explanation of the contents of this map, contact the Hurricane Planning Department for a copy of Special Study 127

- CSA-Stream/Terrace Alluvium >=3%
- CSB-Stream/Terrace Alluvium, no data
- CSC-Fan Alluvium, Holocene
- CSD-Fan Alluvium, Pleistocene
- HCS-Area of known high collapse soils

- Legend**
- Hurricane City Limits
 - Creek
 - Canal
 - Major Streets
 - Dirt St.
 - State Highway
 - I-15
 - Ramp
 - RCDR Babylon Section
 - Parcels
 - Virgin River

Map Sources:
Parcels, Hurricane GIS Dept. Modified from Washington County GIS data downloaded Feb., 2009.
Streets, Hurricane City GIS Dept. Modified from Washington County GIS data downloaded Feb., 2009.
Aerial, USDA, National Agriculture Imagery Program (NAIP) 2006. Distributed by the Utah AGRC and reprojected to Utah State Plane, South (FIPS 4303), NAD 83 (CONUS), Survey Feet from the original. SID source file.