Collapsible Soil Susceptibility

Dixie Clean Stormwater Coalition

0 1.5 3 6

Miles

Source: Lund, W.R. et al, 2008, Collapsible Soil Susceptibility for the St. George-Hurricane Metropolitan Area. Utah Geological Survey.

EXPLANATION

HCS	Area of known high collapse soils. Areas identified by geotechnical consultants working in the St. George – Hurricane metropolitan area as containing high collapse (≥5 percent) soils. Soils in these areas have a high potential for collapsible soil problems.
CS_A	Unconsolidated geologic units with reported collapse values of ≥3 percent.
CS_B	Unconsolidated geologic units lacking collapse data, but for which other geotechnical information (chiefly low unit weight and moisture content) are indicative of collapse-susceptible material.
CS_C	Geologically young (Holocene) unconsolidated geologic units for which no geotechnical data are available, but whose genesis or texture are permissive of collapse (chiefly geologically young alluvial, colluvial, and eolian deposits).
CS_D	Older unconsolidated geologic units (Pleistocene) for which no geotechnical data are available, but like category CS_C have a genesis or texture permissive of collapse. Because of their age, these deposits have had greater exposure to natural wetting and collapse may have occurred, and/or the deposits may have become cemented by secondary calcium carbonate or other soluble minerals.

Geologic Deposits Known or Likely to Have a Significant Potential for Soil Collapse

Type of Deposit	Map Units[1]	Collapsible Soil Category
Stream and Terrace Alluvium	Qal_1, Qat_2	CS_A
	Qa_2, Qat_2, Qat_4, Qat_5	CS_B
	Qat_6, Qat_7, QTat$_1$, Tat$_5$, QTato, Qato, Qatb, Qsg, Qas	CS_D
Fan Alluvium	Qae, Qac, Qap$_1$, Qaf$_1$, Qaf, Qaf$_5$, Qaec	CS_A
	Qa, Qaes, Qaec, Qafy, Qao, Qap$_2$, Qaco	CS_C
	Qacg, Qab, Qabo, Qap, Qap$_4$, Qap$_5$, Qaf$_6$, Qafo, Qmfo, Qaow	CS_D
Eolian Deposits	Qes, Qea, Qea$_1$, Qes/Qaf$_5$, Qes/Qafo, Qe/Qmsy	CS_A
	Qea$_2$, Qec	CS_C
	Qea$_3$, Qec, Qeo	CS_D
Colluvial Deposits	Qca	CS_A
	Qmt	CS_B
	Qc	CS_C
	Qmto, Qcao, Qco	CS_D

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