

**HEL Conversion for Updated Soil Survey  
Knox County, Tennessee  
Prepared by Nathan Hartgrove, March, 2008**

This document links the 2006 updated soil survey to the 1991 frozen HEL soils list referenced by the E-FOTG and other documents. Use the "HEL Reference" to make HEL determinations from the updated soil survey maps by referencing the listed map unit on the frozen 1991 list. These conversions are based on data gathered during the soil survey to the extent possible. There were a few instances where a direct conversion did not exist (for example, map units used to join surrounding counties). In such cases, a conversion was chosen to provide a correct classification.

<u>Map Symbol</u>	<u>Map Unit Name</u>	<u>HEL Reference</u>
AmC	APISON-MONTEVALLO COMPLEX, 5 TO 12 PERCENT SLOPES -----	Md
AmD	APISON-MONTEVALLO COMPLEX, 12 TO 25 PERCENT SLOPES -----	Ml
AmE	APISON-MONTEVALLO COMPLEX, 25 TO 35 PERCENT SLOPES, ROCKY -----	Mg
AmF	APISON-MONTEVALLO COMPLEX, 35 TO 75 PERCENT SLOPES, ROCKY -----	Mm
Bd	BLOOMINGDALE SILT LOAM, 0 TO 2 PERCENT SLOPES, OCCASIONALLY FLOODED -----	Mb
Bh	BLOOMINGDALE-HAMBLLEN COMPLEX, 0 TO 3 PERCENT SLOPES, OCCASIONALLY FLOODED -----	Ha
CcC	COGHILL-CORRYTON COMPLEX, 5 TO 12 PERCENT SLOPES -----	Tf
CcD	COGHILL-CORRYTON COMPLEX, 12 TO 25 PERCENT SLOPES -----	Te
CcE	COGHILL-CORRYTON COMPLEX, 25 TO 65 PERCENT SLOPES, ROCKY -----	Tg
CeB3	COLLEGEDALE SILTY CLAY LOAM, 2 TO 5 PERCENT SLOPES, SEVERELY ERODED -----	Fc
CeC3	COLLEGEDALE SILTY CLAY LOAM, 5 TO 12 PERCENT SLOPES, SEVERELY ERODED -----	Fb
CeD3	COLLEGEDALE SILTY CLAY LOAM, 12 TO 25 PERCENT SLOPES, SEVERELY ERODED -----	Fa *
CgB	COLLEGEDALE-LOYSTON-ROCK OUTCROP COMPLEX, 2 TO 5 PERCENT SLOPES -----	Cn
CkC	COLLEGEDALE-TALBOTT COMPLEX, 5 TO 12 PERCENT SLOPES, ROCKY -----	Gh
CkD	COLLEGEDALE-TALBOTT COMPLEX, 12 TO 25 PERCENT SLOPES, ROCKY -----	Ck
CoB	CORRYTON LOAM, 2 TO 5 PERCENT SLOPES -----	Sd
CoC	CORRYTON LOAM, 5 TO 12 PERCENT SLOPES -----	Sc
CoD	CORRYTON LOAM, 12 TO 25 PERCENT SLOPES -----	Se
CtB	CORRYTON-TOWNLEY COMPLEX, 2 TO 5 PERCENT SLOPES -----	Sn
CtC	CORRYTON-TOWNLEY COMPLEX, 5 TO 12 PERCENT SLOPES -----	Gg
CzC	CORRYTON-UDORTHENTS-URBAN LAND COMPLEX, 2 TO 12 PERCENT SLOPES -----	Sn
CzD	CORRYTON-UDORTHENTS-URBAN LAND COMPLEX, 12 TO 25 PERCENT SLOPES -----	Sg
DeB	DEWEY SILT LOAM, 2 TO 5 PERCENT SLOPES -----	Dn
DeC2	DEWEY SILT LOAM, 5 TO 12 PERCENT SLOPES, ERODED -----	Bg
DeD2	DEWEY SILT LOAM, 12 TO 25 PERCENT SLOPES, ERODED -----	Bf
DeE2	DEWEY LOAM, 25 TO 40 PERCENT SLOPES, ERODED -----	Bh
DgE3	DEWEY-COGHILL COMPLEX, 25 TO 60 PERCENT SLOPES, SEVERELY ERODED -----	Bf **
DwD	DEWEY-ETOWAH COMPLEX, 12 TO 20 PERCENT SLOPES -----	Bm
DwE	DEWEY-ETOWAH COMPLEX, 20 TO 35 PERCENT SLOPES -----	Bk
DyC	DEWEY-UDORTHENTS-URBAN LAND COMPLEX, 2 TO 12 PERCENT SLOPES -----	Bg
DyD	DEWEY-UDORTHENTS-URBAN LAND COMPLEX, 12 TO 25 PERCENT SLOPES -----	Bh
Dz	DUMPS, LANDFILLS -----	***
EmB	EMORY SILT LOAM, 2 TO 5 PERCENT SLOPES -----	Ea
EmC	EMORY SILT LOAM, 5 TO 12 PERCENT SLOPES -----	Eb
EtB	ETOWAH LOAM, 2 TO 5 PERCENT SLOPES -----	Eg
EvB	ETOWAH-MINVALE COMPLEX, 2 TO 5 PERCENT SLOPES -----	Gb
FuC2	FULLERTON GRAVELLY SILT LOAM, 5 TO 12 PERCENT SLOPES, ERODED -----	Fw
FuD2	FULLERTON GRAVELLY SILT LOAM, 12 TO 25 PERCENT SLOPES, ERODED -----	Fs
FuE2	FULLERTON GRAVELLY SILT LOAM, 25 TO 60 PERCENT SLOPES, ERODED -----	Fj
FvC	FULLERTON-MINVALE COMPLEX, 5 TO 12 PERCENT SLOPES -----	Ft
FzC	FULLERTON-UDORTHENTS-URBAN LAND COMPLEX, 2 TO 12 PERCENT SLOPES -----	Ft
FzD	FULLERTON-UDORTHENTS-URBAN LAND COMPLEX, 12 TO 25 PERCENT SLOPES -----	Fg
He	HEISKELL SILT LOAM, 0 TO 2 PERCENT SLOPES, OCCASIONALLY FLOODED -----	Gl
HeB	HEISKELL SILT LOAM, 2 TO 5 PERCENT SLOPES -----	Ld
LoC	LOYSTON-ROCK OUTCROP COMPLEX, 5 TO 12 PERCENT SLOPES -----	Bd
LoE	LOYSTON SILT LOAM, 25 TO 65 PERCENT SLOPES, ROCKY -----	Bb
LrF	LOYSTON-NONABURG-ROCK OUTCROP COMPLEX, 35 TO 80 PERCENT SLOPES, FLAGGY -----	Ac
LtC	LOYSTON-TALBOTT-ROCK OUTCROP COMPLEX, 2 TO 15 PERCENT SLOPES -----	Le
LtD	LOYSTON-TALBOTT-ROCK OUTCROP COMPLEX, 15 TO 50 PERCENT SLOPES -----	Ss
MfD	MINVALE-FULLERTON COMPLEX, 12 TO 25 PERCENT SLOPES, STONY -----	Cc
MfE	MINVALE-BODINE-FULLERTON COMPLEX, 25 TO 50 PERCENT SLOPES, STONY -----	Ce
NnD3	NONABURG CHANNERY SILT LOAM, 12 TO 25 PERCENT SLOPES, SEVERELY ERODED, ROCKY --	Ad
NnE3	NONABURG CHANNERY SILT LOAM, 25 TO 50 PERCENT SLOPES, SEVERELY ERODED, ROCKY --	Dd
Ph	PETTYJON-HAMBLLEN COMPLEX, 0 TO 3 PERCENT SLOPES, OCCASIONALLY FLOODED -----	Sr

<u>Map Symbol</u>	<u>Map Unit Name</u>	<u>HEL Reference</u>
Pz	PITS, MINES, AND DUMPS -----	***
Ro	ROCKDELL GRAVELLY LOAM, 0 TO 4 PERCENT SLOPES, RARELY FLOODED -----	Ra
SaC	SALACOA GRAVELLY LOAM, 5 TO 12 PERCENT SLOPES -----	Jd
SaD	SALACOA GRAVELLY LOAM, 12 TO 25 PERCENT SLOPES -----	Mh
SbC	SALACOA-APISON COMPLEX, 5 TO 12 PERCENT SLOPES -----	Ja
SeC	SALACOA-UDORTHENTS-URBAN LAND COMPLEX, 2 TO 12 PERCENT SLOPES -----	Jd
SeD	SALACOA-UDORTHENTS-URBAN LAND COMPLEX, 12 TO 25 PERCENT SLOPES -----	Mh
ShB	SHADY LOAM, 2 TO 5 PERCENT SLOPES -----	Cr
ShC	SHADY LOAM, 5 TO 12 PERCENT SLOPES -----	Wf
So	SHADY-WHITWELL COMPLEX, 0 to 3 PERCENT SLOPES, RARELY FLOODED -----	Cp
St	STEADMAN SILT LOAM, 0 TO 3 PERCENT SLOPES, OCCASIONALLY FLOODED -----	Lg
SwB	SWAFFORD SILT LOAM, 2 TO 5 PERCENT SLOPES -----	Lb
SwC	SWAFFORD SILT LOAM, 5 TO 12 PERCENT SLOPES -----	Ld
TbC2	TALBOT-ROCK OUTCROP-BRADYVILLE COMPLEX, 5 TO 20 PERCENT SLOPES, ERODED -----	Ss
Tc	TOCCOA FINE SANDY LOAM, 0 TO 3 PERCENT SLOPES, RARELY FLOODED -----	Cs
ToC	TOWNLEY SILT LOAM, 5 TO 12 PERCENT SLOPES -----	Sn
TsD	TOWNLEY-LOYSTON COMPLEX, 12 TO 25 PERCENT SLOPES, ROCKY -----	Bc
TvD	TOWNLEY-MONTEVALLO COMPLEX, 12 TO 20 PERCENT SLOPES -----	Mc
TvE	TOWNLEY-MONTEVALLO COMPLEX, 20 TO 35 PERCENT SLOPES -----	Me
TvF	TOWNLEY-MONTEVALLO COMPLEX, 35 TO 60 PERCENT SLOPES -----	Me
Ur	URBAN LAND -----	***
Uu	URBAN LAND-UDORTHENTS COMPLEX -----	***
W	WATER -----	***
WaF	WALLEN-ROCK OUTCROP COMPLEX, 25 TO 75 PERCENT SLOPES, BOULDERY -----	Su
WeB	WAYNESBORO LOAM, 2 TO 5 PERCENT SLOPES -----	Wd
WeC	WAYNESBORO LOAM, 5 TO 12 PERCENT SLOPES -----	Wc
WeD2	WAYNESBORO LOAM, 12 TO 25 PERCENT SLOPES, ERODED -----	Wa
WsC	WAYNESBORO COBBLY LOAM, 5 TO 12 PERCENT SLOPES -----	Nc
WwB	WHITWELL LOAM, 2 TO 5 PERCENT SLOPES, RARELY FLOODED -----	Sa

Footnotes:

- \* There are at least a couple of typographical errors on the original frozen HEL list. One is that there are 2 entries for symbol Fa. The correct symbol Fa references the soil called Farragut and is HEL.
- \*\* Another error on the original list is that it does not reference the symbol Gk, which would have been the correct conversion for this unit. Bf provides an appropriate conversion.
- \*\*\* This map unit is not assigned a HEL classification.

Special note: Symbols on pages 10 through 13 of the frozen HEL list are the only ones referenced. These are the symbols from the 1953 published soil survey for Knox County. The other symbols in the frozen list are from other mapping. Only the published soil survey was referenced as an official source when the soil survey update was done.

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