

TECHNICAL NOTE

SOIL TECHNICAL NOTE NO. 4

October 1, 2012

Guidance on Use of Archived Soil Survey Information for Highly Erodible Land (HEL) Determinations

(Deanna Peterson, State Soil Scientist)

New HEL determinations are required for “sodbusting” or in the situation where the United States Department of Agriculture participant has requested a field change. In either case, the 1990 frozen soils list in the South Dakota Technical Guide (FOTG), Section II, Soil Survey Information, Highly Erodible Land, and corresponding soil data, must be used in HEL determinations (National Food Security Act Manual (NFSAM), Part 511.0(c) and Part 511.1(b)). The soil map unit, its corresponding properties, calculations, and soil survey maps, are “frozen” as of that date.

The SD HEL Determination Tool was developed to facilitate and automate portions of the HEL determinations. With the exception of eight counties (stated below) in SD, HEL soil maps and auto populated calculation pages have been generated by using this HEL tool in ArcGIS.

County soil surveys are being continually updated through the Major Land Resource Area (MLRA) soil survey process. As a result, an archived (frozen) digital soil survey has been copied in the county F:\SD_Tools\HEL_Tool folder for use in new HEL determinations only. In all other activities such as conservation planning, the updated soils information (found under the F:/geodata/soils folders) should be used.

Because of extensive remapping of soils in Brookings, Codington, Minnehaha, Spink, and Lawrence Counties, it is not possible to use the county digital soil map information. The current soils information cannot be correlated to the frozen soil list, so new HEL determinations must be completed by using the paper copy of the old soil survey. As a result, the aforementioned counties cannot and will not have an archived digital soil survey in their F drives.

In addition, for the same reason, the HEL Determination Tool cannot be used within MLRA 65 in Bennett, Shannon, and Todd Counties. These counties will have an archived digital soil survey in their F drives to be utilized in the remaining portion of the county. However, this archived county dataset should not be used if the field needing a new HEL determination is within MLRA 65. Again, the new HEL determination must be completed in MLRA 65 areas using the paper copy of the old soil survey.

The HEL Determination Tool in ArcGIS methods can be used in the rest of the state without exclusions or restrictions.