

The HEL Soil Report Tool

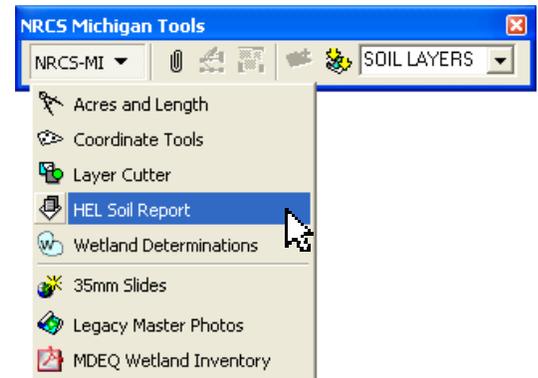
The HEL Soil Report tool generates a report detailing the acreage and percentage of highly erodible land soil ratings within each field of a tract, based on countywide HEL Soil Rating and Common Land Unit (CLU) layers.

The tool also includes options for saving the soils as clipped to the selected land unit boundaries and/or for creating a CPA-026E form.

Where is it?

The HEL Report Tool is located on the NRCS-MI ArcMap Toolbar.

NOTE: The following countywide layers must be present in order for the tool to be activated:



1. A county HEL soil layer, created via the NRCS-MI Soil Layers Tool, **and**
2. An overlapping county CLU layer

For more information on creating a countywide HEL soil layer, please refer to the “Soil Layers Tool” GIS skill builder.

Using the HEL Report Tool

1. Drill down on the NRCS-MI button and choose **HEL Soil Report**

NOTE: The tool automatically selects the HEL and CLU layers to use as input. If multiple countywide HEL layers are present in the ArcMap table of contents, the tool will use the “uppermost” HEL and CLU layers.

The county name of the soil layer appears near the top of the user form.

2. In the **Tract Number:** box, enter the tract number of interest.

As you type, the tool automatically queries the county CLU layer and lists all of the fields associated with that tract number.

Tract number entries must be in the form of numeric characters only. Letters and special characters are ignored.

FIELD	ACRES
<input type="checkbox"/> 1	1.77 ac.
<input type="checkbox"/> 2	2.76 ac.
<input type="checkbox"/> 3	0.08 ac.
<input type="checkbox"/> 4	39.18 ac.

Using the HEL Report Tool (continued)

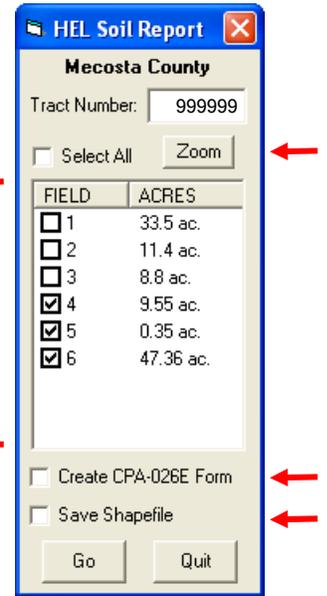
3. The **Zoom** button can be used to automatically zoom in on the tract.

4. Click the check box for each field you would like to include.

Select All will check/uncheck every field in the list.

5. Check the **Create CPA-026E Form** box if you would like to automatically create the form for an HEL determination.

(Refer to the “Output Options” sections for more information.)



6. Checking the **Save Shapefile** box will save the clipped soil data into a separate shapefile.

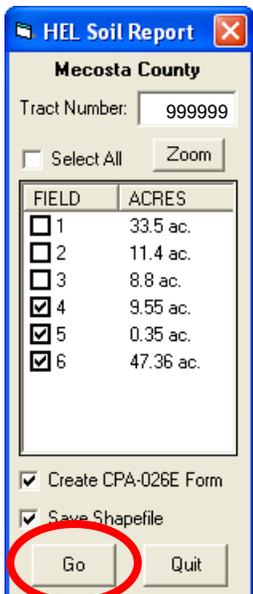
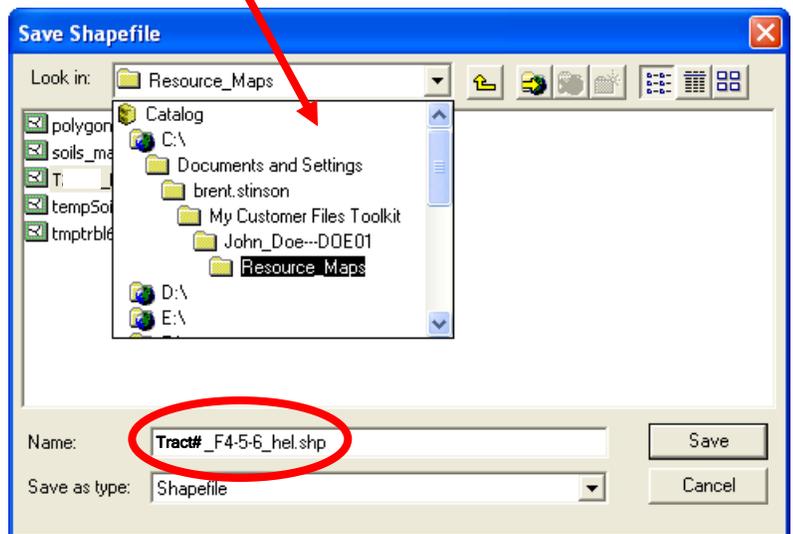
a. Navigate to the location in which you would like to save the shapefile.

REMINDER: Customer Service Toolkit client folders, are located at:

“C:\Documents and Settings\[YOUR.NAME]\My Customer Files Toolkit\[CLIENT FOLDER]”

b. Enter a name for the new shapefile and click **Save** to continue.

HINT: A descriptive file name is very helpful when retrieving the shapefile in the future.



7. When you are satisfied with your selections, click the **Go** button.

The HEL Report Tool utilizes the **NRCS-MI Layer Cutter** utility to cut and summarize HEL soil categories for the selected land units.

As with Layer Cutter, a progress bar appears at the bottom of your ArcMap session...



Output Option #1: Report Only

If you did not check the **Create CPA-026E Form** box, an output report will display in a web browser window.

Tract	Land Unit	mihel	Acres	% of Land Unit	% of Total
999999	4	HEL	6.13	64.14%	10.7%
999999	4	NHEL	3.43	35.81%	5.99%
999999	4		9.56 ac.	100%	16.69%
999999	5	NHEL	0.31	88.48%	0.54%
999999	5	HEL	0.04	11.52%	0.07%
999999	5		0.35 ac.	100%	0.61%
999999	6	NHEL	32.68	68.99%	57.06%
999999	6	HEL	14.68	31.01%	25.63%
999999	6		47.36 ac.	100%	82.7%
Total			57.27 ac.		100%

Mecosta CLU data - Updated 12/19/2007 3:55:51 PM

1. The report provides the following details which can be used when making HEL determinations:

- Acres of HEL soils per land unit
- Percent of land unit containing HEL soil map units

2. The “age” of the county CLU data appears at the bottom of the report.

NOTE: This date represents the last update of the entire CLU layer, not necessarily the last update of the selected land units.

3. Right-clicking within the report window shows options for printing, exporting to Microsoft Excel, etc.



For detailed information regarding the format and options of reports generated by the Layer Cutter utility, please refer to the NRCS-MI GIS skill builder entitled “Layer Cutter”.

Output Option #2: CPA-026E Form

If you did check the **Create CPA-026E Form** box, the document will open in MS-Word.

You will notice that some of the data entry fields are populated automatically, while some information must be entered manually...

Name	John Doe	Request Date:	1/2/08	County:	MECOSTA
Address:	1234 This Road That Town, MI 00000-0000	Agency or Person Requesting Determination:	John Doe	Tract No.:	999999
				FSA Farm No.:	1715

Section I - Highly Erodible Land

Is a soil survey now available for making a highly erodible land determination?	Yes
Are there highly erodible soil map units on this farm?	Yes

Fields in this section have undergone a determination of whether they are highly erodible land (HEL) or not; fields for which an HEL Determination has not been completed are not listed. In order to be eligible for USDA benefits, a person must be using an approved conservation system on all HEL.

Field(s)	HEL(Y/N)	Sodbust(Y/N)	Acres	Determination Date
4	-	-	9.55	01/25/2008
5	-	-	0.35	01/25/2008
6	-	-	47.36	01/25/2008

The Highly Erodible Land determination was completed in the Office

Name/Address: Will be automatically populated **only if** there is currently a client checked out in Toolkit who has a plan which contains land units attributed with the selected tract number.

HEL (Y/N): **Entry must be completed by user.**

Sodbust (Y/N): **Entry must be completed by user.**

You must enter each HEL determination manually.

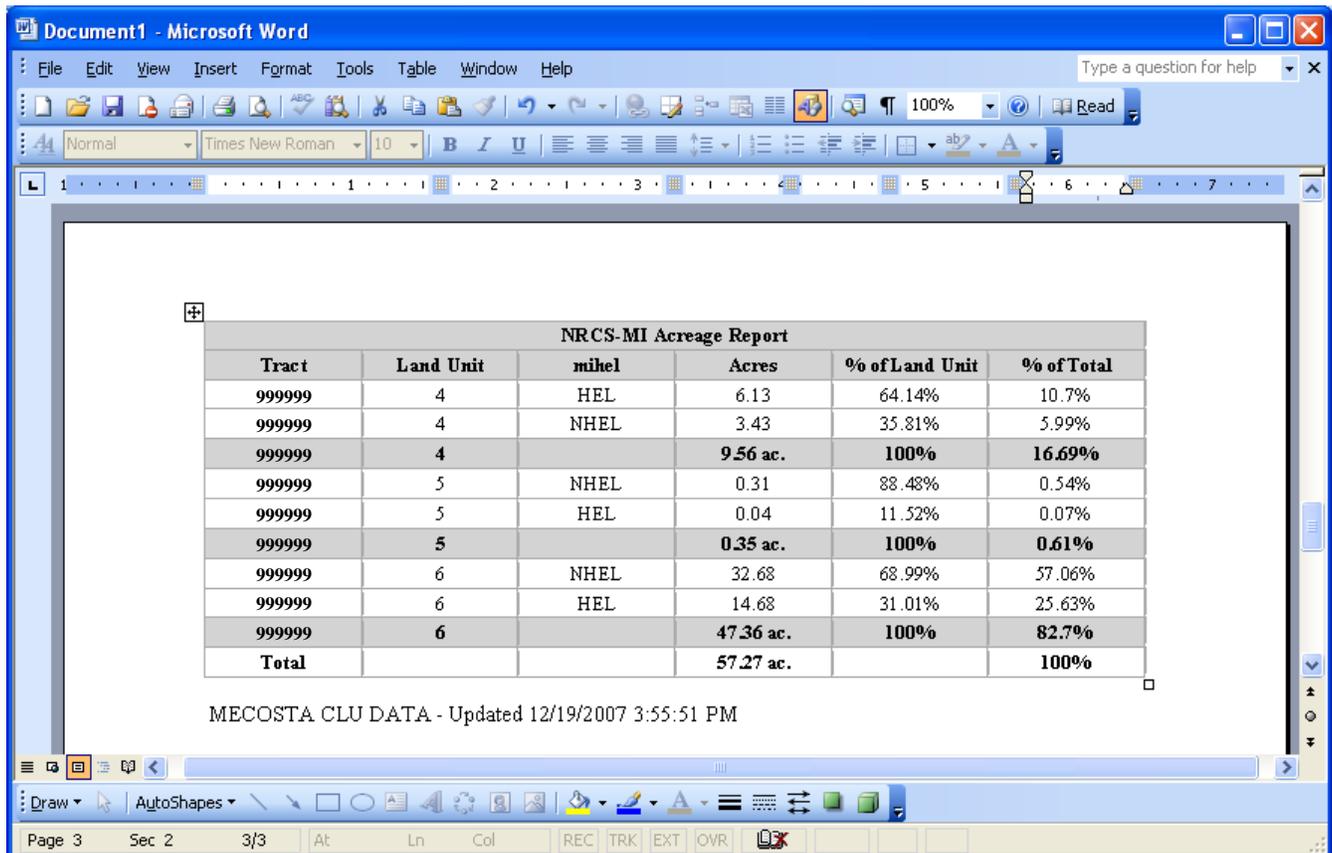
The remaining data entry fields are fairly self-explanatory and can be edited as required.

**** IMPORTANT: All automatically-populated entries should be ****
**** double-checked for accuracy before continuing. ****

Output Option #2: CPA-026E Form (continued)

The final page of the CPA-026E form contains the output report. The information in the report can provide information necessary for completing the CPA-026E.

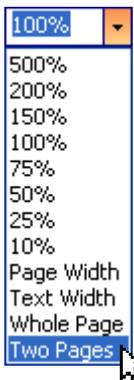
Saving this report within the CPA-026E document also serves as historical documentation.



The screenshot shows a Microsoft Word window titled 'Document1 - Microsoft Word'. The main content is a table with the following data:

NRCS-MI Acreage Report					
Tract	Land Unit	mihel	Acres	% of Land Unit	% of Total
999999	4	HEL	6.13	64.14%	10.7%
999999	4	NHEL	3.43	35.81%	5.99%
999999	4		9.56 ac.	100%	16.69%
999999	5	NHEL	0.31	88.48%	0.54%
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999999	6		47.36 ac.	100%	82.7%
Total			57.27 ac.		100%

MECOSTA CLU DATA - Updated 12/19/2007 3:55:51 PM



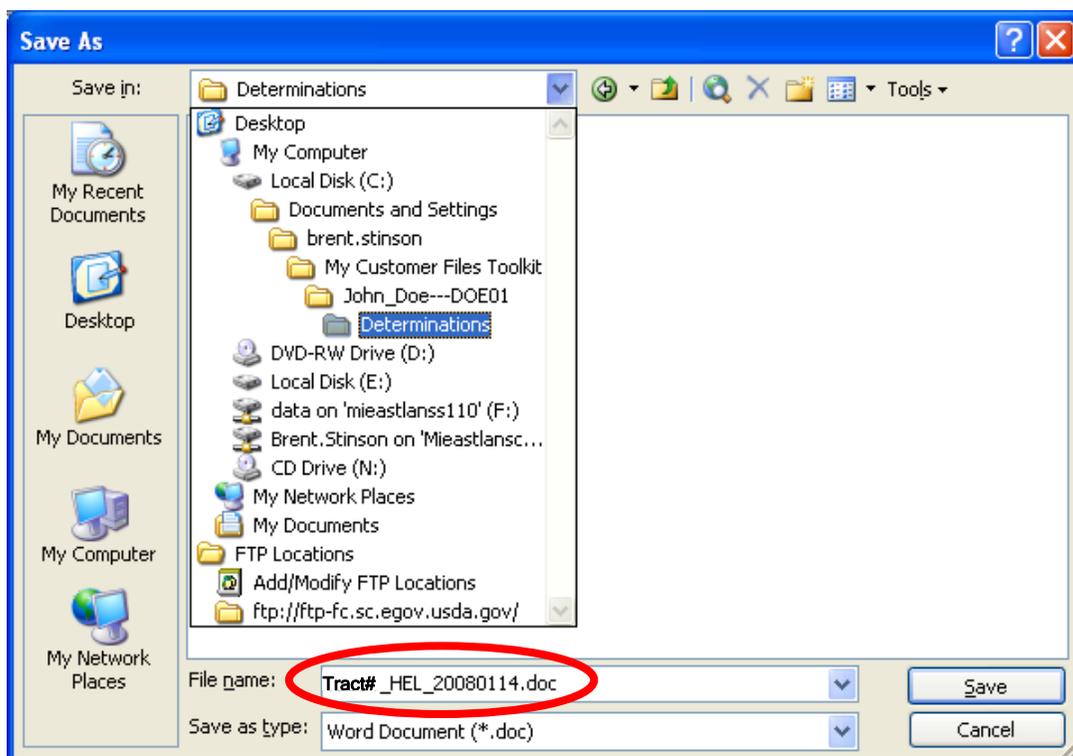
Data Entry Tip: In many cases, the acreage report can be viewed side-by-side with the data entry page of the CPA-026E by selecting “Two Pages” from the MS-Word “Zoom” list.

Viewing the pages side-by-side will often allow the user to fill out the 026 form entry fields without having to scroll back and forth through the document.

Saving the CPA-026E

After making all necessary revisions, you should save the CPA-026E document within the client's Toolkit folder structure. The file should be named in a clear, concise manner which will facilitate document identification and retrieval in the future.

1. Within the CPA-026E Word document, click “**File, Save As...**”
(Or simply close the document and choose “Yes” when Word asks if you would like to save)
2. Use the “**Save in:**” and folder lists to navigate to “**C:\Documents and Settings\[YOUR.NAME]\My Customer Files Toolkit\[CLIENT FOLDER]\Determinations**”.
3. Enter a file name in the “**File name:**” box. One recommended naming convention is “**T[TRACT NUMBER]_HEL_[YEAR][MONTH][DAY].doc**” as shown below.



Printing the CPA-026E

Choose “**File, Print**” or click the  **Print** button within the CPA-026E MS-Word document.

A signed, hardcopy version should also be stored within the client's case file.

Additional Information

**** PLEASE READ ****

- CLU Data

HEL determinations performed with GIS tools should use only CLU data to represent land units. Other land units, such as those created as part of the conservation planning process, may not accurately represent the land unit boundaries as administered by FSA.

Additionally, only the most up-to-date CLU data should be used as input. If the CLU modification date is not as expected, please contact your local FSA staff to determine when the CLU was most recently updated and exported.

NRCS-MI has implemented server utilities which check for exported CLU updates on a nightly basis. Therefore, updates should be available the day after exported by FSA.

- HEL Soil Ratings

HEL soil ratings used by this tool are based on the “frozen” HEL lists, as provided by the field offices to the NRCS-MI State Office in the fall of 2007.

Should an unexpected HEL rating appear, please confirm the rating as recorded on the paper version of the “frozen” HEL list located within the hardcopy Field Office Tech Guide. If a discrepancy does exist, please contact Brent Stinson, NRCS State GIS Specialist.

NOTE: Soil HEL ratings from any source other than the “frozen” lists located within the hardcopy Field Office Tech Guides should not be used when making HEL determinations. Invalid sources include eFOTG, Soil Data Viewer (SDV), and Web Soil Survey (WSS).

- Certified Wetland Determinations and the CPA-026E form

Users of the NRCS-MI ArcMap HEL Report Tool and Wetland Determination Tool will notice that the CPA-026E documents generated by these GIS utilities are based on customized MS Word templates created by NRCS-Michigan, and include only HEL or Wetland information, respectively. Users wishing to include both HEL and wetland determinations on one form should use the traditional CPA-026E as in the past.

The recommended storage location and file naming convention of CPA-026E documents also differs, depending on the type of determination being performed. This was intentionally designed, as HEL determinations tend to be more dependent upon client management decisions, whereas wetland determinations are generally based on geophysical phenomena not related to an individual client.

Additional Information

(continued)

- Working with Adjacent Counties

A client's land units are often physically located in an adjacent county even though the corresponding CLUs are digitized and maintained within the current county's CLU layer. The HEL Report Tool does allow HEL Soil and CLU layers from different counties as input, although this requires greater care in managing the order in which the layers appear in the Table of Contents (TOC).

Use the following steps if the current county's CLU features overlap into an adjacent county...

1. Click the ArcMap **Add Data**  button and navigate to "f:\geodata\soils". Select the adjacent county's "soilmu_a_mi[FIPS].shp" shapefile to load that county's SSURGO soils as a layer in the current ArcMap session.
2. If necessary, drag and drop the adjacent county's soil layer within the TOC so that it appears as the uppermost soil layer.
3. Use the NRCS-MI Soil Layers Tool to create an HEL soil ratings layer for the adjacent county. Remember, the Soil Layers Tool uses the first soil layer it finds in the TOC as input - If the adjacent county's soil layer is the uppermost soil layer in the TOC, an HEL soil ratings layer for the adjacent county will be created.
4. If multiple county CLU layers are present in the project, reposition the CLU layer which contains the land units of interest so that it is the uppermost CLU layer in the Table of Contents.
5. Run the HEL Report Tool. The uppermost HEL Ratings and CLU layers will be used as input, allowing the adjacent county's HEL ratings to be calculated based on features in the current county's CLU layer.