Using the SSURGO Template Database as a substitute for Soil Data Mart

The SSURGO Template Database can run many of the same functions as the Soil Data Mart used to, but there are a few steps that must be taken first;

 Go to your geodata drive and find the Soils folder for the county you want, and go into the tabular data folder. In that tabular data folder there should be an access database that will be named soil_d_XXXXX. In this case I am looking at Wood County, OH so it is named soil_d_oh173.

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70 items Offlir	Offline status: Online ne availability: Not available					

You will want to copy and paste this database onto your computer, as the geodata drive won't allow you to work off the F drive if you don't have permissions. Plus it's just easier to get to.

Go to where you saved the database and double click the database to start. The database should open up and look like the capture from the next page.

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corestrictions	Soil Reports (Template Version: 33)
	Vice Area Name
cosoiltemp	Map Unit Symbol Map Unit Name
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cosurfmorphgc	AnA Aurond loam, 0 to 2 percent slopes
cosurfmorphhpp	BeB Belmore sendy loam. 1 to 4 percent slopes BB Belmore loam. 1 to 4 percent slopes
cosurfmorphmr	C&A Castelia vitry Cotony User. No 2 percent slopes CXB Castelia vitry Cotony Libro Dis percent slopes
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The tables in the pane to the left should not need to be accessed, simply work off the soil reports box in the right hand side. For those of you familiar with Soil Data Mart, this should be a breeze, but I will go on with a few tips and tricks that might be of help.

Soil Reports (Te	emplate Version: 33)			23			
Soil Survey Area N	lame						
Wood County, Ohi	0		•	-			
Map Unit Symbol	Map Unit Name						
UcA UcE Ur WbA WmA WnA WyA WyA	Udorthents, Ioamy, 0 to 2 percent slopes Udorthents, Ioamy, 2 to 25 percent slopes Urban land Water Wabasha silty clay, 0 to 1 percent slopes, frequently flooded Wauseon loamy fine sand, 0 to 1 percent slopes Wauseon fine sandy Ioam, deep to till, 0 to 1 percent slopes Wauseon fine sandy Ioam, 0 to 1 percent slopes Wauseon-Urban land complex, 0 to 1 percent slopes						
•			•				
	Select All Clear Selections Selection Help						
Report Name Hydric Soils				•			
	Include Minor Soils Include Report Description		4	2			
G	enerate Report Exit System Reports						
If you are new to this determined by the select the Reports tab of the Database window and open the report titled addrestand and Use this Database".							

- 1. You can Select All to print county-wide lists or use control+left click to pick and choose mapunits
- 2. Use Report Name dropdown box to find the report you want.
- 3. For most reports, simply Click Generate Report

In this case I am using a simple report for Hydric Soils throughout Wood County After Clicking Generate Report, I get the following output (see page 4)

pil Survey Area Name								
lood County, Ohio		•		Hydri	ic Soils			
ap Unit Symbol Map Unit Name				Wood C	ounty, Ohio			
cA Udorthents Joamy () to 2 percent slopes			This report lists only those map unit com	conents that are rated as hydric.	Dashes ()	in any column indicate that	the data view n	st included in the
cE Udorthents, loamy, 2 to 25 percent slopes					-	-		
Urban land Water			map unit name	Componient	of map unit	Landform	Hydric	Hydric ortena
bA Wabasha silty clay, 0 to 1 percent slopes, frequently flooded			AgA					
mA Wauseon loamy fine sand, 0 to 1 percent slopes			Avada bain, 0 to 1 percent solpes	Alvada	95	Plats, Lake plains	Yes	283
VA Wauseon fine sandy loam, 0 to 1 percent slopes		=		Cay toam surrace layer	_	Flats, Lake plains	Tes	200
zA Wauseon-Urban land complex, 0 to 1 percent slopes		Ŧ		Inches thick	_	r an, care parte		
		- F		Till at 60 to 80 inches	-	Plats, Lake plains	Yes	283
Salact áll Class Salactions Salaction	lala		AmA: Aurand fine sandy loam, 0 to 2 percent strongs	Me mill	7	Depressions, Lake	Yes	283
	diar			Alvada	3	Depressions, Lake piains	Yes	283
pont vame dric Soils		-	AnA: Aurand loam, 0 to 2 percent slopes	Me mill	6	Depressions, Lake	Yes	283
Include Miner Seile Include Devent Description				Alvada	з	Depression s, Lake	Yes	283
Include Minor Sons Include Report Description	on		ASA					
Generate Report Exit System Rei	ports		Aurand-Urban land complex, 0 to 2 percent slopes	Me mill	7	Depressions, Lake piblins	Yes	283
				Alvada	3	Depressione, Lake olains	Yes	283
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			USDA Natural Resources Conservation Service	Sunvey Am Sunvey Area Vera	ea Version: 14 Ion Date: 09/2	14/2019		Page 1

The Hydric Soils report comes up as its own window. The default is that the report comes up as a print preview. There are multiple pages here, and to see them all, you have to use the Right/left arrows at the bottom left of Hydric Soils Report (location by blue arrow above)

The next section (starting page 5) will show you how to use the default print preview commands to print or export as .pdf and save.

SSURGO Template Database - 5

File	Print Preview Acrobat											
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Print	Size Margins Print Data Only	Portrait Landscape Columns Page Setup	Zoom One • Page	Two More Pages Pages *	Refresh All	Excel	Text PDF File or XI	E-mail	More	Close Print Preview	•	
4	Page Size	Page Layout	Zoo	om			Data			Close Preview		
								2				
								Hydri	c Soils			
								Wood C	ounty, Ohio			
				(This report li database. Do	sts only those ma efinitions of hydri	a punit com ic criteria co	ponents that are ra des are included a	ted as hydric. the end of the	Dashes () ir e report]	any column indicate tha	t fhe data were no	t included in the
					Map symbol and map unit name		Compo	nent	Percent ofmap unit	Landform	Hydric rating	Hyd ric oriteria
				AgA: Alvada loam	, 0 to 1 percent s	slopes	Alvada		95	Flats, Lake plains	Yes	283
							Clay loam surfa	xe la yer	-	Flats, Lake plains	Yes	283
							Sunface layer le in ches thick	as than 10	-	Flats, Lake plains	Yes	283
							Till at 60 to 80 in	dhes	-	Flats, Lake plains	Yes	283

- 1. To print this out hard copy, just Click the print button and proceed as normal
- 2. To save as .pdf, click PDF or XPS button. You will then get a box that looks like the one below. Simply find where you want to save it, then click publish (effectively same as saving)

Publish as PDF or XF	PS						×
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Hide Folders					Tools	✓ Publish	Cancel

The program will pop up a box saying it's publishing x number of pages then open the file automatically.

From here you can print also if you so desire.

Also you will get a command box that looks like this;

Export - PDF	8 🕺
Save Export Steps	
Finished exporting 'Hydric Soils' to file 'C:\Users\steven.baker\Documents\2014\Tech Assists\WSS for SDM\Hydric Soils Wood.pdf' success	sfully.
Do you want to save these export steps? This will allow you to quickly repeat the operation without using the wizard.	
Save export steps	
	Close

Simply close it, no need to save export steps.

To exit the print preview function, refer to page 5, green arrow. This will take you back to the main report screen shown on page 3.

From here you can run county wide reports such as Prime Farmland, Engineering Properties and RUSLE2Related Attributes. See chart below for some commonly run reports and what they entail.

	Commonly used County-Wide Reports in Template
	Report Name
	Hydric Soils ¹
	Engineering Properties ²
	RUSLE2 Related Attributes ³
	Prime and Other Important Farmlands ⁴
	Map Unit Description (Brief, Generated) ⁵
1	Report Generates similar to Hydric Soil List all Components in WSS
2	Texture by Horizon, Unified & AASHTO Classes, Frags, Sieves, Liquid Limit, Plasticity
	Index
3	HSG, Kf, T, and Particle Size Separates
4	Shows only units designated as Prime, Prime if drained, Unique, Local etc.
5	Basic soil description in paragraph format

Advanced use of the SSURGO Template

The template can also be used to run interpretations of soil properties for a given land use or practice. In this case your report name will be "Selected Soil Interpretations" as shown below. These can be run on all soils or only selected map units. If run county wide this can be a very large report so it is better suited to selected mapunits. In this example I will just run the interpretations on a few map units.

Soil Survey Ai	rea Name	
Wood County	, Ohio	•
Map Unit Sym	bol Map Unit Name	
GpA	Granby loamy fine sand, till substratum, 0 to 1 percent slopes	
HaA	Haney sandy loam, 0 to 2 percent slopes	
HaB	Haney sandy loam, 2 to 6 percent slopes	
HcA	Hoytville silty clay loam, 0 to 1 percent slopes	=
HdA	Haney loam, U to 2 percent slopes	
	Haney loam, 2 to 6 percent slopes Hacking and Digby till substratum fing candy loams. A to 2 percent clopes	
HeB	Haskins and Digby, an substratum, fine sandy loams, 0 to 2 percent slopes	
HfA	Haskins and Digby, till substratum, loams, 0 to 2 percent slopes	-
 III 		•
		,
	Select All Clear Selections Selection Help	
Report Name		
Selected Soil	Interpretations	•
ſ	Include Minor Soils	
ſ	Salact Peremetera	
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Now click on "Select Parameters" (red arrow)

You will get a screen that looks like this; (see next page)

cluded in the report. The first interpretation will be	the leftmost in the report.
1 st Interpretatio	n Heading (<= 80 characters, change as desired)
Reset Reset Reset Reset	on Heading (<= 80 characters, change as desired)
3rd Interpretatio	on Heading (<= 80 characters, change as desired)
Help	Exit
	cluded in the report. The first interpretation will be 1st Interpretation Reset 2nd Interpretation 3rd Interpretation TReset Help

You can now select interpretations that would have a direct bearing on the land use or practice that you are planning by using the drop down boxes. I chose the following three but you can do anywhere from 1-3;

Please select at least one soil interpretation to be included in the re	eport. The first inter	pretation will be the leftmost in the report.
1st Interpretation		1st Interpretation Heading (<= 80 characters, change as desired)
ENG - Construction Materials; Sand Source (OH)	Reset	ENG - Construction Materials; Sand Source (OH)
2nd Interpretation		2nd Interpretation Heading (<= 80 characters, change as desired)
ENG - Dwellings W/O Basements (OH)	Reset	ENG - Dwellings W/O Basements (OH)
3rd Interpretation		3rd Interpretation Heading (<= 80 characters, change as desired)
FOR - Soil Rutting Hazard (OH)	Reset	FOR - Soil Rutting Hazard (OH)
Report Title (<= 80 characters, change as desired)		
Selected Soil Interpretations		
Generate Report	Help	Exit

Now click Generate report. (Blue Arrow above)

The report will generate as follows on page 9.

Note that the process for saving or printing these reports is the same as outlined on pages 4-6.

Selected Soil Interpretations

Wood County, Ohio

[The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The table shows only the top five limitations for any given soil. The soil may have additional limitations. This report shows only the major soils in each map unit]

*This soil interpretation was designed as a "limitation" as opposed to a "potential" or "suitability". The numbers in the value column range from 0.01 to 1.00. The larger the value, the greater the potential limitation.

**This soil in terpretation was designed as a "potential" or "suitability", as opposed to a "limitation". The numbers in the value column range from 0.00 to 0.99. The smaller the value, the greater the limitation.

Map symbol and soil name	Pct. of	ENG - Construction Materials; Sand Source (OH)**		ENG - Dwellings W/O Bas (OH)*	ements	FOR - Soil Rutting Hazard (OH)*		
	unit	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	
HaA:								
Haney	100	Poor		Not limited		Moderate		
		Thickest layer	0.00			Low strength	0.50	
		Bottom layer	0.00					
HcA:								
Hoytville	91	Poor		Verylimited		Severe		
		Thickest layer	0.00	Ponding	1.00	Low strength	1.00	
		Bottom layer	0.00	Depth to saturated zone	1.00			
				Shrink-swell	0.50			

These report ratings appear in the same manner as discussed in the Using WSS instructions. The advantage of using the WSS is that you can generate thematic maps to visualize suitable areas for the practice or land use.

To dissect the ratings on this report a little, let's begin with Haney vs. Hoytville for Dwellings W/O basements;

Haney is rated as not limited (red arrow) because it has a lower water table, no ponding, and little shrink-swell issues in comparison to Hoytville. Hoytville's limitations in these categories show up in the table (blue arrow). If you were planning an Ag Chemical facility, the Haney site should be more suited than the Hoytville.

Along the same bend, the Hoytville is rated more severely than Haney for the Soil Rutting hazard. Both are considered low strength soils, but Hoytville is rated severely compared to Haney. Notice that Hoytville's value of one is higher than Haney's .5; this warrants the Severe (Hoytville) vs Moderate (Haney) Rutting Hazard.

Other Tips and Tricks;

 If you happen to accidentally close the soil reports window, you can get it back by going to the Forms in the left hand pane of the Access Program. Double Click Soil reports to bring the window back

For	ms G	» «	
-8	Drop Soil Survey Area		Soil Reports (Template Version: 33) 🗆 📼 🖾
-8	Export		Soil Survey Area Name
-8	FSA-CRP Create Data and Export		Wood County, Ohio
-8	Import		Map Unit Symbol Map Unit Name
-8	Import Feature Descriptions		AmA Aurand fine sandy loam, 0 to 1 percent slopes
-8	Report Parameters - Component Crops		AsA Aurand-Urban land complex. 0 to 2 percent slopes BeB Belmore sandy loam, 1 to 4 percent slopes BiB Belmore loam, 1 to 4 percent slopes CaA Castalia very cobby loam, 0 to 2 percent slopes
-8	Report Parameters - Component Text Kinds & Categories		
	Report Parameters - Counties or Parishes		CbB Castalia-Marblehead complex, very stony, 0 to 6 percent slopes CcA Colwood fine sandy loam, 0 to 1 percent slopes
-8	Report Parameters - Map Unit Description Categories	=	< []]
-8	Report Parameters - Mapunit Crops		Select All Clear Selections Selection Help
-8	Report Parameters - Mapunit Text Kinds & Categories		Report Name
-8	Report Parameters - Selected Soil Interpretation Descriptions		Acreage and Proportionate Extent of the Soils
-8	Report Parameters - Selected Soil Interpretations		Include Minor Soils Include Report Description
-8	Soil Reports		Generate Report Exit System Reports
-8	System Reports		If you are new to this database, please select the Reports tab of the Database window and
-8	Win-Pst Create Data and Export		open die report dieu Trow to Onderstand die Use tills Database .

Or,

2. Close the Access Program and reopen it. It should open the Soil Reports Form by default.