

Wisconsin Soils and Land Evaluation

Form # CUS003

Correct Mark:

Incorrect Marks:



Team/Schl ID

Team/Schl ID

0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

Codes

Sheet	Test	Team	Student
0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

Full Name (Last, Space, First)

A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G
H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H
I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
J	J	J	J	J	J	J	J	J	J	J	J	J	J	J	J	J	J	J	J
K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K
L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L
M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V
W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z

Part I- Surface Soil

Mark Only one answer for each site for each question (D and E)
Site Number

			1	2	3	4
D. Texture (5 Points)	Coarse	Sands and Loamy Sands	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Moderately Coarse	Sandy Loam	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Medium	Loam, Silt, Silt Loam	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Moderately Fine	Clay loam, Sandy clay loam, Silty clay loam	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Fine	Sandy clay, Silty clay, Clay	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Organic	Peat and Muck	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
E. Structure (5 Points)	Loose	Single Grained	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Granular	Fragments small, mostly rounded	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Blocky	Fragments irregular, some sharp corners	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Platy	Fragments flat and thin	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Cloddy	Fragments large and irregular	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Part I- Subsoil (thickest or most prominent layer below surface soil)- Answer regardless of soil depth

Mark Only one answer for each site for each question (F and G)
Site Number

			1	2	3	4
F. Texture (5 Points)	Coarse	Sands and Loamy Sands	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Moderately Coarse	Sandy Loam	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Medium-	Loam, Silt, Silt Loam	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Moderately Fine	Clay loam, Sandy clay loam, Silty clay loam	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Fine	Sandy clay, Silty clay, Clay	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Organic	Peat and Muck	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
G. Structure (5 Points)	Loose	Single Grained	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Granular	Fragments small, mostly rounded	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Blocky	Fragments irregular, some sharp corners	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Platy	Fragments flat and thin	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Prismatic, Columnar or Massive	Large Fragments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Part I- Surface Soil

Mark Only one answer for each site for each question (H and I)
Site Number

			1	2	3	4
H. Natural Drainage (5 Points)	Very Poorly	Organic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Poorly	Mottling above 12"	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Somewhat Poorly	Mottles between 12" and 36"	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Moderately Well or Well	No mottles above 36"	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I. Depth of Soil Favorable for Roots (5 Points)	Over 40 inches		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	20 - 40 inches		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	12 - 20 inches		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Less than 12 inches		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Part I- Site

Mark Only one answer for each site for each question (A, B, and C)

Site Number

			1	2	3	4	
A. Position in Landscape (5 Points)	Upland- Hilltop or Plain		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
	Sloping Hillside		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
	Depression and/or drainage way		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
	Stream or Bottom Bench- Nearly level		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
	Sloping		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Depressional		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
B. Slope (5 Points)	Nearly Level (0 - 2%)		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
	Gently Sloping (2 - 6%)		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
	Moderately Sloping (6 - 12%)		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
	Strongly Sloping (12 - 20%)		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
	Steep (20 - 30%)		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
	Very Steep (30% or greater)		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
C. Erosion or Deposition (5 Points)	None to slight-	over 75% of the original surface soil remains	water	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
		wind	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
	Moderate-	25% to 75% of the original surface soil remains	water	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
		wind	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
	Severe-	Less than 25% of the original surface soil remains	water	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
		wind	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
	Deposition	by wind or water		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Part I- Soil Test Report
Note- Check ALL needed amendments

(may be more than one box checked per site)

		Site Number			
		1	2	3	4
J. Soil Fertility and Nutrient Management (5 points)	pH adjustment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Nitrogen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Phosphorus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Potassium	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	No fertilizer/soil amendments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Part II. Soil Limitations

Mark ALL characteristics for each site. Yes (Y) if limiting,
No (N) if not limiting
(2 points for each correct answer)

		Site Number			
		1	2	3	4
1. Soil Subject to sheet, rill, or wind erosion		<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
2. Subject to occasional overflow or flooding		<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
3. Surface Drainage Restricted		<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
4. Subsoil drainage restricted from high water table		<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
5. Low available water capacity		<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
6. Stoniness		<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
7. No major limitations		<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>

Part III. Land Capability Classes

Mark the ONE Land Capability Class that is most appropriate for each site
(potential score 7 points. 3 points if answer is one class off)

		Site Number			
		1	2	3	4
CLASS I.	May be safely used for intensive production, such as continuous row crops, pasture, woodland, and wildlife habitat.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CLASS II.	Requires general conservation systems and can be used for crop production, pasture, woodland, and wildlife habitat.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CLASS III.	Requires specific practices and conservation systems and can be used for crop production, pasture, woodland, and wildlife habitat.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CLASS IV.	Requires intensive conservation systems and practices and can be used for crop production, pasture, woodland, and wildlife habitat.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CLASS V.	NOT USED IN WISCONSIN	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CLASS VI.	Generally ill-suited for cropland. Recommend permanent pasture, woodland, or wildlife habitat. Use conservation practices for all land uses.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CLASS VII.	Use very carefully for pasture. Improve for woodland or wildlife. Needs careful conservation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CLASS VIII.	Reserve for wildlife habitat. Not suitable for agricultural or commercial plant production.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Part IV. Conservation Practices for Long Term Land Use

Mark ALL practices for each site. Yes (Y) if it is needed, No (N) if not needed for most-intensive land use, unless otherwise indicated on Pit Information Card
(2 points for each correct answer)

		Site Number			
		1	2	3	4
1. Develop and implement a nutrient management plan		<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
2. Use residue management and/or plant cover crop		<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
3. Contour farming, contour buffer strips, contour strip cropping, or terraces		<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
4. Maintain existing terraces		<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
5. Construct or maintain grassed waterways, diversions, or erosion control structures		<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
6. Renovate or otherwise improve pasture		<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
7. Eliminate or manage grazing		<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
8. Improve timber stand or plant adapted trees in woodland		<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
9. Establish or maintain windbreaks		<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
10. Protect stream banks or lake shore		<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
11. Improve fish and wildlife habitat		<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
12. Establish/maintain riparian forest buffer or grass filter strip		<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
13. Control invasive species that are present		<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>

Part V. Non-Ag Use Limitations

Mark Yes (Y) if limitations are present for each of the following for each site, or No (N) if not.
(1 Point for each correct answer)

		Site Number			
		1	2	3	4
1. Houses with Basements		<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
2. Septic Tank Absorption Fields		<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
3. Local Roads, Streets and Driveways		<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>