

Land Capability Classification

The land capability classification of map units in the survey area is shown in this table. This classification shows, in a general way, the suitability of soils for most kinds of field crops (United States Department of Agriculture, Soil Conservation Service, 1961). Crops that require special management are excluded. The soils are grouped according to their limitations for field crops, the risk of damage if they are used for crops, and the way they respond to management. The criteria used in grouping the soils do not include major and generally expensive landforming that would change slope, depth, or other characteristics of the soils, nor do they include possible but unlikely major reclamation projects. Capability classification is not a substitute for interpretations designed to show suitability and limitations of groups of soils for rangeland, for forestland, or for engineering purposes.

In the capability system, soils are generally grouped at three levels: capability class, subclass, and unit.

Capability classes, the broadest groups, are designated by the numbers 1 through 8. The numbers indicate progressively greater limitations and narrower choices for practical use. The classes are defined as follows:

- Class 1 soils have slight limitations that restrict their use.
- Class 2 soils have moderate limitations that restrict the choice of plants or that require moderate conservation practices.
- Class 3 soils have severe limitations that restrict the choice of plants or that require special conservation practices, or both.
- Class 4 soils have very severe limitations that restrict the choice of plants or that require very careful management, or both.
- Class 5 soils are subject to little or no erosion but have other limitations, impractical to remove, that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.
- Class 6 soils have severe limitations that make them generally unsuitable for cultivation and that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.
- Class 7 soils have very severe limitations that make them unsuitable for cultivation and that restrict their use mainly to grazing, forestland, or wildlife habitat.
- Class 8 soils and miscellaneous areas have limitations that preclude commercial plant production and that restrict their use to recreational purposes, wildlife habitat, watershed, or esthetic purposes.

Capability subclasses are soil groups within one class. They are designated by adding a small letter, *e*, *w*, *s*, or *c*, to the class numeral, for example, 2e. The letter *e* shows that the main hazard is the risk of erosion unless close-growing plant cover is maintained; *w* shows that water in or on the soil interferes with plant growth or cultivation (in some soils the wetness can be partly corrected by artificial drainage); *s* shows that the soil is limited mainly because it is shallow, droughty, or stony; and *c*, used in only some parts of the United States, shows that the chief limitation is climate that is very cold or very dry.

In class 1 there are no subclasses because the soils of this class have few limitations. Class 5 contains only the subclasses indicated by *w*, *s*, or *c* because the soils in class 5 are subject to little or no erosion.

Report—Land Capability Classification

Land Capability Classification—Geauga County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
BgB—Bogart loam, 2 to 6 percent slopes				
	85	Bogart	2e	—
BrF—Brecksville silt loam, 25 to 70 percent slopes				
	85	Brecksville	7e	—
Ca—Canadice silt loam				
	85	Canadice	4w	—
CcA—Caneadea silt loam, 0 to 2 percent slopes				
	85	Caneadea	3w	—
CcB—Caneadea silt loam, 2 to 6 percent slopes				
	85	Caneadea	3w	—
CdB—Canfield silt loam, 2 to 6 percent slopes				
	90	Canfield	2e	—
CdC—Canfield silt loam, 6 to 12 percent slopes				
	90	Canfield	3e	—
Cf—Carlisle muck, ponded				
	85	Carlisle	5w	—
CnA—Chili loam, 0 to 2 percent slopes				
	85	Chili	2s	—
CnB—Chili loam, 2 to 6 percent slopes				
	100	Chili	2e	—
CnC—Chili loam, 6 to 12 percent slopes				
	100	Chili	3e	—
CoC2—Chili gravelly loam, 6 to 12 percent slopes, moderately eroded				
	100	Chili	3e	—
CoD2—Chili gravelly loam, 12 to 18 percent slopes, eroded				
	100	Chili	4e	—

Land Capability Classification--Geauga County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
CpA—Chili silt loam, 0 to 2 percent slopes				
	100	Chili	2s	—
CpB—Chili silt loam, 2 to 6 percent slopes				
	100	Chili	2e	—
CyD—Chili-Oshtemo complex, 6 to 18 percent slopes				
	57	Chili	4e	—
	28	Oshtemo	4e	—
CyF—Chili-Oshtemo complex, 25 to 50 percent slopes				
	60	Chili	7e	—
	30	Oshtemo	7e	—
Da—Damascus silt loam				
	85	Damascus	3w	—
Dm—Damascus loam				
	100	Damascus	3w	—
DrA—Darlen silt loam, bedrock substratum, 0 to 2 percent slopes				
	85	Darlen	3w	—
DrB—Darlen silt loam, bedrock substratum, 2 to 6 percent slopes				
	100	Darlen	3w	—
DsB—Darlen-Hornell silt loams complex, 2 to 6 percent slopes				
	48	Darlen	3w	—
	42	Hornell	3w	—
EhB—Ellsworth silt loam, 2 to 6 percent slopes				
	85	Ellsworth	2e	—
EhB2—Ellsworth silt loam, 2 to 6 percent slopes, eroded				
	85	Ellsworth, eroded	2e	—
EhC—Ellsworth silt loam, 6 to 12 percent slopes				
	90	Ellsworth	3e	—
EhC2—Ellsworth silt loam, 6 to 12 percent slopes, eroded				
	90	Ellsworth, eroded	3e	—

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Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
EhD—Ellsworth silt loam, 12 to 18 percent slopes				
	90	Ellsworth	4e	—
EhD2—Ellsworth silt loam, 12 to 18 percent slopes, eroded				
	90	Ellsworth, eroded	4e	—
EhE—Ellsworth silt loam, 18 to 25 percent slopes				
	90	Ellsworth	4e	—
EhF—Ellsworth silt loam, 25 to 70 percent slopes				
	85	Ellsworth	7e	—
EmC—Ellsworth silt loam, shale substratum, 6 to 12 percent slopes				
	85	Ellsworth, shale substratum	3e	—
EmD—Ellsworth silt loam, shale substratum, 12 to 18 percent slopes				
	85	Ellsworth, shale substratum	4e	—
EsB—Ellsworth silt loam, sandstone substratum, 2 to 6 percent slopes				
	85	Ellsworth, sandstone substratum	2e	—
FcA—Fitchville silt loam, 0 to 2 percent slopes				
	85	Fitchville	2w	—
FcB—Fitchville silt loam, 2 to 6 percent slopes				
	85	Fitchville	2e	—
Fr—Frenchtown silt loam				
	100	Frenchtown	3w	—
GaF—Gageville silt loam, 18 to 50 percent slopes				
	95	Gageville	7e	—
GbB—Geeburg silt loam, 2 to 6 percent slopes				
	85	Geeburg	3e	—
GbC—Geeburg silt loam, 6 to 12 percent slopes				
	85	Geeburg	4e	—
GfB—Glenford silt loam, 2 to 6 percent slopes				
	100	Glenford	2e	—
GfC—Glenford silt loam, 6 to 12 percent slopes				
	85	Glenford	3e	—

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Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
Ho--Holly silt loam, frequently flooded				
	85	Holly	3w	—
HsA--Haskins loam, 0 to 2 percent slopes				
	85	Haskins	2w	—
HsB--Haskins loam, 2 to 6 percent slopes				
	85	Haskins	2e	—
JmA--Jimtown loam, 0 to 2 percent slopes				
	90	Jimtown	2w	—
JmB--Jimtown loam, 2 to 6 percent slopes				
	100	Jimtown	2e	—
JtA--Jimtown silt loam, 0 to 3 percent slopes				
	85	Jimtown	2w	—
LrB--Lordstown loam, 2 to 6 percent slopes				
	85	Lordstown	2e	—
LrC--Lordstown loam, 6 to 12 percent slopes				
	85	Lordstown	3e	—
LxD--Lordstown-Rock outcrop complex, 12 to 18 percent slopes				
	65	Lordstown	4e	—
	20	Rock outcrop	—	—
LxF--Lordstown-Rock outcrop complex, 18 to 70 percent slopes				
	55	Lordstown	7e	—
	35	Rock outcrop	—	—
LyB--Loudonville silt loam, 2 to 6 percent slopes				
	85	Loudonville	2e	—
LyC--Loudonville silt loam, 6 to 12 percent slopes				
	85	Loudonville	3e	—
LyC2--Loudonville silt loam, 6 to 12 percent slopes, moderately eroded				
	100	Loudonville	3e	—
MgA--Mahoning silt loam, 0 to 2 percent slopes				
	85	Mahoning	3w	—
MgB--Mahoning silt loam, 2 to 6 percent slopes				
	85	Mahoning	3w	—

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			Nonirrigated	Irrigated
MgC—Mahoning silt loam, 6 to 12 percent slopes				
	85	Mahoning	3e	—
MnB—Mitiwanga silt loam, 2 to 6 percent slopes				
	100	Mitiwanga	2e	—
MsA—Mahoning silt loam, shale substratum, 0 to 2 percent slopes				
	85	Mahoning, shale substratum	3w	—
MsB—Mahoning silt loam, shale substratum, 2 to 6 percent slopes				
	85	Mahoning, shale substratum	3w	—
MtA—Mitiwanga silt loam, 0 to 3 percent slopes				
	85	Mitiwanga	2w	—
MvB—Mitiwanga silt loam, moderately well drained variant, 2 to 6 percent slopes				
	100	Mitiwanga variant	2e	—
MvC—Mitiwanga silt loam, moderately well drained variant, 6 to 12 percent slopes				
	100	Mitiwanga variant	3e	—
My—Mill silt loam, 0 to 2 percent slopes				
	86	Mill	4w	—
Or—Orrville silt loam, frequently flooded				
	85	Orrville	2w	—
OsB—Oshtemo sandy loam, 2 to 6 percent slopes				
	100	Oshtemo	3s	3e
OsC—Oshtemo sandy loam, 6 to 12 percent slopes				
	100	Oshtemo	3e	3e
Pg—Pits, gravel				
	100	Pits	—	—
Pq—Pits, quarry				
	100	Pits	—	—
PsA—Platea silt loam, 0 to 2 percent slopes				
	85	Platea	3w	—
PsB—Platea silt loam, 2 to 6 percent slopes				
	85	Platea	3e	—

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			Nonirrigated	Irrigated
PtA—Platea-Darien silt loams complex, 0 to 2 percent slopes				
	50	Platea	3w	—
	39	Darien	3w	—
PtB—Platea-Darien silt loams complex, 2 to 6 percent slopes				
	50	Platea	3e	—
	39	Darien	3w	—
ReA—Ravenna silt loam, 0 to 2 percent slopes				
	90	Ravenna	2w	—
ReB—Ravenna silt loam, 2 to 6 percent slopes				
	90	Ravenna	2e	—
RmB—Rawson silt loam, 2 to 6 percent slopes				
	85	Rawson	2e	—
RsB—Rittman silt loam, 2 to 6 percent slopes				
	85	Rittman	2e	—
RsC—Rittman silt loam, 6 to 12 percent slopes				
	90	Rittman	3e	—
RsC2—Rittman silt loam, 6 to 12 percent slopes, eroded				
	85	Rittman	3e	—
RsD—Rittman silt loam, 12 to 18 percent slopes				
	90	Rittman	4e	—
RsE—Rittman silt loam, 18 to 25 percent slopes				
	90	Rittman	6e	—
RsF—Rittman silt loam, 25 to 50 percent slopes				
	90	Rittman	7e	—
Sb—Sebring silt loam				
	85	Sebring	3w	—
Sf—Sheffield silt loam				
	85	Sheffield	3w	—
Tg—Tioga loam, frequently flooded				
	85	Tioga	2w	—
TrA—Trumbull silt loam, 0 to 2 percent slopes				
	90	Trumbull	4w	—

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			Nonirrigated	Irrigated
Ud—Udorthents, loamy				
	100	Udorthents	—	—
Ur—Urban land				
	100	Urban land	—	—
W—Water				
	100	Water	—	—
Wa—Wabasha silty clay loam, ponded				
	80	Wabasha	5w	—
WbA—Wadsworth silt loam, 0 to 2 percent slopes				
	85	Wadsworth	3w	—
WbB—Wadsworth silt loam, 2 to 6 percent slopes				
	85	Wadsworth	3e	—
Wc—Walkkill silt loam, ponded				
	85	Walkkill	5w	—
Wk—Wick silt loam, 0 to 2 percent slopes, frequently flooded				
	89	Wick	4w	—
Wt—Willette muck, ponded				
	85	Willette	5w	—
WuD—Wooster silt loam, 12 to 18 percent slopes				
	100	Wooster	4e	—

Data Source Information

Soil Survey Area: Geauga County, Ohio
 Survey Area Data: Version 15, Sep 19, 2014