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–Ashtabula County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
Be—Beaches				
	90	Beaches	—	—
BkA—Blakeslee silt loam, 0 to 2 percent slopes				
	92	Blakeslee	1	—
BkB—Blakeslee silt loam, 2 to 6 percent slopes				
	93	Blakeslee	2e	—
BkC—Blakeslee silt loam, 6 to 12 percent slopes				
	90	Blakeslee	3e	—
CaB—Cambridge silt loam, 2 to 6 percent slopes				
	90	Cambridge	2e	—
CaC—Cambridge silt loam, 6 to 12 percent slopes				
	85	Cambridge	3e	—
CaD—Cambridge silt loam, 12 to 18 percent slopes				
	92	Cambridge	4e	—
CcA—Canadice silt loam, 0 to 2 percent slopes				
	80	Canadice	4w	—
CdA—Caneadea silt loam, 0 to 2 percent slopes				
	85	Caneadea	3w	—
CdB—Caneadea silt loam, 2 to 6 percent slopes				
	90	Caneadea	3w	—
CeA—Caneadea-Canadice silt loams, 0 to 2 percent slopes				
	55	Caneadea	3w	—
	40	Canadice	4w	—
CfC2—Cardinal silt loam, 6 to 12 percent slopes, eroded				
	90	Cardinal	4e	—

Land Capability Classification–Ashtabula County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
CfD2—Cardinal silt loam, 12 to 18 percent slopes, eroded				
	90	Cardinal	6e	—
CfF—Cardinal silt loam, 18 to 50 percent slopes				
	88	Cardinal	7e	—
CgA—Carlisle muck, 0 to 1 percent slopes				
	90	Carlisle	5w	—
CkA—Chenango gravelly loam, 0 to 2 percent slopes				
	93	Chenango	2s	—
CkB—Chenango gravelly loam, 2 to 6 percent slopes				
	90	Chenango	2s	—
CkC—Chenango gravelly loam, 6 to 12 percent slopes				
	85	Chenango	3e	—
CkD—Chenango gravelly loam, 12 to 18 percent slopes				
	88	Chenango	4e	—
CoB—Colonie loamy fine sand, 2 to 6 percent slopes				
	86	Colonie	2s	—
CoD—Colonie loamy fine sand, 12 to 18 percent slopes				
	95	Colonie	4e	—
CpB—Colonie-Urban land complex, 2 to 6 percent slopes				
	60	Colonie	—	—
	30	Urban land	—	—
CtA—Conneaut silt loam, 0 to 2 percent slopes				
	90	Conneaut	3w	—
CuA—Conneaut-Urban land complex, 0 to 2 percent slopes				
	59	Conneaut	—	—
	35	Urban land	—	—
DAM—Dam				
	100	Dam	—	—

Land Capability Classification–Ashtabula County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
DeC—Darien and Platea silt loams, 6 to 12 percent slopes				
	75	Darien	3e	—
	20	Platea	3e	—
DeC2—Darien and Platea silt loams, 6 to 12 percent slopes, eroded				
	75	Darien	3e	—
	20	Platea	3e	—
DhB—Darien-Hornell silt loams, 2 to 6 percent slopes				
	48	Darien	3w	—
	42	Hornell	3w	—
EnB—Elnora loamy fine sand, 1 to 5 percent slopes				
	91	Elnora	2w	—
FcA—Fitchville silt loam, 0 to 2 percent slopes				
	92	Fitchville	2w	—
FcB—Fitchville silt loam, 2 to 6 percent slopes				
	95	Fitchville	2e	—
GaF—Gageville silt loam, 18 to 50 percent slopes				
	95	Gageville	7e	—
GfA—Glenford silt loam, 0 to 2 percent slopes				
	90	Glenford	1	—
GfB—Glenford silt loam, 2 to 6 percent slopes				
	90	Glenford	2e	—
GfC—Glenford silt loam, 6 to 12 percent slopes				
	95	Glenford	3e	—
GfD—Glenford silt loam, 12 to 18 percent slopes				
	100	Glenford	4e	—
HaA—Harbor fine sandy loam, 0 to 3 percent slopes				
	87	Harbor	2s	—
HaC—Harbor fine sandy loam, 6 to 12 percent slopes				
	75	Harbor	3e	—

Land Capability Classification–Ashtabula County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
HbB—Harbor-Urban land complex, 0 to 6 percent slopes				
	61	Harbor	—	—
	30	Urban land	—	—
HmA—Holly silt loam, 0 to 2 percent slopes, frequently flooded				
	85	Holly	3w	—
HoA—Hornell silt loam, 0 to 2 percent slopes				
	95	Hornell	3w	—
HoB—Hornell silt loam, 2 to 6 percent slopes				
	90	Hornell	3w	—
KfA—Kingsville loamy fine sand, 0 to 2 percent slopes				
	85	Kingsville	5w	—
La—Landfills				
	95	Landfills	—	—
MhA—Mill silt loam, 0 to 2 percent slopes				
	86	Mill	4w	—
MtA—Mitiwanga silt loam, 0 to 2 percent slopes				
	84	Mitiwanga	2w	—
MtB—Mitiwanga silt loam, 2 to 6 percent slopes				
	80	Mitiwanga	2e	—
OrA—Orrville silt loam, 0 to 2 percent slopes, frequently flooded				
	85	Orrville	2w	—
OtA—Otego silt loam, 0 to 2 percent slopes, frequently flooded				
	95	Otego	2w	—
OuC—Otisville gravelly sandy loam, 6 to 12 percent slopes				
	95	Otisville	4s	—
PaA—Painesville fine sandy loam, 0 to 2 percent slopes				
	82	Painesville	2w	—
PbA—Painesville-Urban land complex, 0 to 2 percent slopes				
	47	Painesville	—	—
	40	Urban land	—	—

Land Capability Classification–Ashtabula County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
PeC2—Pierpont silt loam, 6 to 12 percent slopes, eroded				
	75	Pierpont	3e	—
PeD—Pierpont silt loam, 12 to 18 percent slopes				
	75	Pierpont	4e	—
Pg—Pits, gravel				
	100	Pits, gravel	—	—
Pk—Pits, quarry				
	100	Pits, quarries	—	—
PrA—Platea-Darien silt loams, 0 to 2 percent slopes				
	50	Platea	3w	—
	39	Darien	3w	—
PrB—Platea-Darien silt loams, 2 to 6 percent slopes				
	50	Platea	3e	—
	39	Darien	3w	—
PrB2—Platea-Darien silt loams, 2 to 6 percent slopes, eroded				
	50	Platea	3e	—
	35	Darien	3w	—
PtB—Platea-Urban land complex, 2 to 6 percent slopes				
	60	Platea	—	—
	30	Urban land	—	—
PtC—Platea-Urban land complex, 6 to 12 percent slopes				
	60	Platea	—	—
	30	Urban land	—	—
RhA—Red Hook silt loam, 0 to 2 percent slopes				
	85	Red hook	3w	—
RhB—Red Hook silt loam, 2 to 6 percent slopes				
	85	Red hook	3w	—
Rw—Riverwash				
	90	Riverwash	—	—
SbA—Sebring silt loam, 0 to 2 percent slopes				
	78	Sebring	3w	—

Land Capability Classification–Ashtabula County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
StA—Stanhope silt loam, 0 to 2 percent slopes, frequently flooded				
	98	Stanhope	3w	—
ToC—Towerville silt loam, 6 to 12 percent slopes				
	90	Towerville	3e	—
ToD—Towerville silt loam, 12 to 18 percent slopes				
	100	Towerville	4e	—
TyB—Tyner-Otisville complex, 2 to 6 percent slopes				
	46	Tyner	3s	—
	31	Otisville	4s	—
Ud—Udorthents				
	90	Udorthents	—	—
Un—Urban land				
	90	Urban land	—	—
UrB—Urban land-Elnora complex, 1 to 5 percent slopes				
	70	Urban land	—	—
	27	Elnora	—	—
UtB—Urban land-Tyner-Otisville complex, 2 to 6 percent slopes				
	45	Urban land	—	—
	25	Tyner	—	—
	17	Otisville	—	—
VeA—Venango silt loam, 0 to 2 percent slopes				
	85	Venango	3w	—
VeB—Venango silt loam, 2 to 6 percent slopes				
	90	Venango	3w	—
W—Water				
	100	Water	—	—
WcA—Wick silt loam, 0 to 2 percent slopes, frequently flooded				
	89	Wick	4w	—
WeA—Willette muck, 0 to 1 percent slopes				
	85	Willette	5w	—

Data Source Information

Soil Survey Area: Ashtabula County, Ohio
Survey Area Data: Version 13, Sep 18, 2014