

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--Athens County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
AaC2—Aaron silt loam, 6 to 12 percent slopes, eroded				
	85	Aaron	3e	—
AbC—Aaron silt loam, 6 to 15 percent slopes				
	85	Aaron	3e	—
AdC2—Aaron-Gilpin complex, 6 to 12 percent slopes, eroded				
	45	Aaron	3e	—
	35	Gilpin	3e	—
AgC—Aaron-Gilpin complex, 8 to 15 percent slopes				
	50	Aaron	3e	—
	35	Gilpin	3e	—
BaF—Barkcamp gravelly sandy loam, 40 to 70 percent slopes				
	90	Barkcamp	8s	—
BkD—Berks-Westmoreland silt loams, 15 to 25 percent slopes				
	50	Berks	4e	—
	35	Westmoreland	4e	—
BkE—Berks-Westmoreland silt loams, 25 to 40 percent slopes				
	55	Berks	6e	—
	35	Westmoreland	6e	—
BkF—Berks-Westmoreland silt loams, 40 to 70 percent slopes				
	55	Berks	7e	—
	35	Westmoreland	7e	—
BmF—Bethesda channery loam, 20 to 70 percent slopes				
	85	Bethesda	7e	—
BoD—Bethesda shaly silty clay loam, 8 to 25 percent slopes				
	90	Bethesda	6s	—

Land Capability Classification--Athens County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
BoE—Bethesda shaly silty clay loam, 25 to 40 percent slopes				
	90	Bethesda	7e	—
BoF—Bethesda shaly silty clay loam, 40 to 70 percent slopes				
	90	Bethesda	7e	—
BrC—Brookside silt loam, 8 to 15 percent slopes				
	80	Brookside	3e	—
BrD—Brookside silt loam, 15 to 25 percent slopes				
	85	Brookside	4e	—
BrE—Brookside silt loam, 25 to 40 percent slopes				
	85	Brookside	6e	—
BtB—Bethesda channery loam, 0 to 8 percent slopes				
	90	Bethesda	6s	—
BtC—Bethesda channery loam, 8 to 20 percent slopes				
	90	Bethesda	6s	—
BtE—Bethesda channery loam, 20 to 40 percent slopes				
	90	Bethesda	7e	—
BtF—Bethesda channery loam, 40 to 70 percent slopes				
	90	Bethesda	7e	—
Chg1AF—Chagrin silt loam, 0 to 3 percent slopes, frequently flooded				
	95	Chagrin	2w	—
CmC—Clymer loam, 8 to 15 percent slopes				
	85	Clymer	3e	—
DkE—DeKalb loam, 25 to 40 percent slopes				
	80	Dekalb	6e	—
Dol1A1—Doles silt loam, 0 to 2 percent slopes				
	85	Doles	2w	—
DsG—DeKalb and Gilpin stony soils, 25 to 70 percent slopes				
	50	Gilpin	7s	—
	50	Dekalb	7s	—

Land Capability Classification--Athens County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
DtD—DeKalb-Westmoreland complex, 15 to 25 percent slopes				
	55	Dekalb	4e	—
	35	Westmoreland	4e	—
DtE—DeKalb-Westmoreland complex, 25 to 40 percent slopes				
	55	Dekalb	6e	—
	35	Westmoreland	6e	—
DtF—DeKalb-Westmoreland complex, 40 to 70 percent slopes				
	55	Dekalb	7e	—
	35	Westmoreland	7e	—
DuF—DeKalb-Westmoreland complex, benched, 40 to 70 percent slopes				
	55	Dekalb	7e	—
	35	Westmoreland	7e	—
Dy—Dumps, mine				
	100	Dumps	—	—
EbF—Elba-Brookside-Berks complex, 40 to 70 percent slopes				
	45	Elba	7e	—
	20	Berks	7e	—
	20	Brookside	7e	—
EcA—Euclid silt loam, rarely flooded				
	85	Euclid	2w	—
FaD—Fairpoint silt loam, 8 to 25 percent slopes				
	90	Fairpoint	4s	—
FbE—Fairpoint shaly clay loam, 25 to 40 percent slopes				
	90	Fairpoint	7e	—
FbF—Fairpoint shaly clay loam, 40 to 70 percent slopes				
	90	Fairpoint	7e	—
FcA—Fitchville silt loam, 0 to 3 percent slopes				
	85	Fitchville	2w	—
Gal2C1—Gallia loam, 6 to 12 percent slopes				
	85	Gallia	3e	—

Land Capability Classification--Athens County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
GdC—Gilpin silt loam, 8 to 15 percent slopes				
	80	Gilpin	3e	—
GdD—Gilpin silt loam, 15 to 25 percent slopes				
	85	Gilpin	4e	—
GdF—Gilpin silt loam, 25 to 35 percent slopes				
	90	Gilpin	6e	—
GeD—Germano-Gilpin complex, 15 to 25 percent slopes				
	40	Germano	4e	—
	35	Gilpin	4e	—
GeE—Germano-Gilpin complex, 25 to 40 percent slopes				
	65	Germano	6e	—
	15	Gilpin	6e	—
GfB—Glenford silt loam, 2 to 6 percent slopes				
	80	Glenford	2e	—
GgD—Gilpin-Guernsey complex, 15 to 25 percent slopes				
	50	Gilpin	4e	—
	30	Guernsey	4e	—
GgE—Gilpin-Guernsey complex, 25 to 40 percent slopes				
	50	Gilpin	6e	—
	35	Guernsey	6e	—
GhD2—Gilpin-Upshur complex, 12 to 20 percent slopes, eroded				
	45	Gilpin	4e	—
	40	Upshur	6e	—
GhE2—Gilpin-Upshur complex, 20 to 35 percent slopes, eroded				
	45	Gilpin	6e	—
	40	Upshur	7e	—
GhF—Gilpin-Upshur complex, 35 to 70 percent slopes				
	50	Gilpin	7e	—
	30	Upshur	7e	—

Land Capability Classification--Athens County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
GkC—Gilpin-Summitville-Upshur complex, 6 to 12 percent slopes				
	35	Gilpin	3e	—
	20	Summitville	3e	—
	20	Upshur	4e	—
GkD—Gilpin-Summitville-Upshur complex, 12 to 18 percent slopes				
	35	Gilpin	4e	—
	25	Summitville	4e	—
	20	Upshur	6e	—
GkE—Gilpin-Summitville-Upshur complex, 18 to 25 percent slopes				
	30	Gilpin	4e	—
	30	Summitville	4e	—
	25	Upshur	6e	—
GkE3—Gilpin-Summitville-Upshur complex, 18 to 25 percent slopes, severely eroded				
	30	Gilpin	6e	—
	30	Summitville	4e	—
	25	Upshur	7e	—
GkF—Gilpin-Summitville-Upshur complex, 25 to 35 percent slopes				
	40	Gilpin	6e	—
	30	Summitville	6e	—
	20	Upshur	7e	—
GIF—Gilpin-Summitville-Upshur complex, 25 to 35 percent slopes, benched				
	50	Gilpin	6e	—
	20	Summitville	6e	—
	20	Upshur	7e	—
GIG—Gilpin-Summitville-Upshur complex, 35 to 70 percent slopes, benched				
	50	Gilpin	7e	—
	20	Upshur	7e	—
	20	Summitville	7e	—
GmA—Glenford silt loam, 0 to 3 percent slopes				
	85	Glenford	1	—

Land Capability Classification--Athens County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
GmB—Glenford silt loam, 3 to 8 percent slopes				
	85	Glenford	2e	—
GmC—Glenford silt loam, 8 to 15 percent slopes				
	85	Glenford	3e	—
GoC2—Gilpin silt loam, 8 to 15 percent slopes, eroded				
	90	Gilpin	3e	—
GpC—Gilpin-Aaron complex, 6 to 15 percent slopes				
	50	Gilpin	3e	—
	25	Aaron	3e	—
GrC—Gilpin-Upshur silt loams, 8 to 15 percent slopes				
	50	Gilpin	3e	—
	30	Upshur	4e	—
GrD—Gilpin-Upshur silt loams, 15 to 25 percent slopes				
	50	Gilpin	4e	—
	30	Upshur	6e	—
GrE—Gilpin-Upshur complex, 25 to 50 percent slopes				
	45	Gilpin	6e	—
	35	Upshur	7e	—
GsB—Guernsey silt loam, 3 to 8 percent slopes				
	85	Guernsey	2e	—
GsC—Guernsey silt loam, 8 to 15 percent slopes				
	85	Guernsey	3e	—
GuC—Guernsey-Upshur complex, 8 to 15 percent slopes				
	50	Guernsey	3e	—
	30	Upshur	3e	—
GuD—Guernsey-Upshur complex, 15 to 25 percent slopes				
	50	Guernsey	4e	—
	30	Upshur	4e	—

Land Capability Classification--Athens County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
GwC—Guernsey-Westmoreland silt loams, 8 to 15 percent slopes				
	50	Guernsey	3e	—
	30	Westmoreland	3e	—
GwD—Guernsey-Westmoreland silt loams, 15 to 25 percent slopes				
	45	Guernsey	4e	—
	35	Westmoreland	4e	—
GwE—Guernsey-Westmoreland silt loams, 25 to 40 percent slopes				
	45	Guernsey	6e	—
	35	Westmoreland	6e	—
GxD—Guernsey-Gilpin complex, 15 to 25 percent slopes				
	45	Guernsey	4e	—
	40	Gilpin	4e	—
GxE—Guernsey-Gilpin complex, 25 to 40 percent slopes				
	45	Gilpin	6e	—
	45	Guernsey	6e	—
GyB—Gallipolis silt loam, 2 to 6 percent slopes				
	85	Gallipolis	2e	—
Hay1AF—Haymond silt loam, 0 to 3 percent slopes, frequently flooded				
	85	Haymond	2w	—
Hay1AO—Haymond silt loam, 0 to 3 percent slopes, occasionally flooded				
	88	Haymond	2w	—
HcA—Hackers silt loam, 0 to 3 percent slopes, rarely flooded				
	85	Hackers	1	—
He—Hartshorn silt loam				
	90	Hartshorn	2s	—
KeB—Keene silt loam, 3 to 8 percent slopes				
	90	Keene	2e	—
KeC—Keene silt loam, 6 to 12 percent slopes				
	80	Keene	3e	—

Land Capability Classification--Athens County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
KnL1AF—Kinnick-Lindside silt loams, 0 to 3 percent slopes, frequently flooded				
	70	Kinnick	2w	—
	20	Lindside	2w	—
Lck1BO—Licking silt loam, 1 to 4 percent slopes, occasionally flooded				
	85	Licking	2e	—
Lic1B1—Licking silt loam, 2 to 6 percent slopes				
	85	Licking	2e	—
Lic1C2—Licking silt loam, 6 to 12 percent slopes, eroded				
	85	Licking	4e	—
LoC—Lowell-Upshur complex, 6 to 12 percent slopes				
	45	Lowell	3e	—
	35	Upshur	4e	—
LrF—Lowell-Gilpin complex, 35 to 70 percent slopes				
	45	Lowell	7e	—
	40	Gilpin	7e	—
McA—McGary silt loam, 0 to 3 percent slopes				
	85	Mcgary	3w	—
Mel1AF—Melvin silt loam, 0 to 2 percent slopes, frequently flooded				
	90	Melvin	3w	—
MnD—Morristown silty clay loam, 6 to 20 percent slopes				
	100	Morristown	4s	—
Mos1AF—Moshannon silt loam, 0 to 3 percent slopes, frequently flooded				
	90	Moshannon	2w	—
MrF—Morristown channery clay loam, 20 to 70 percent slopes, very stony				
	85	Morristown	7e	—
NeC—Negley loam, 8 to 15 percent slopes				
	95	Negley	3e	—
New1AF—Newark silt loam, 0 to 3 percent slopes, frequently flooded				
	90	Newark	2w	—

Land Capability Classification--Athens County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
NgE—Negley gravelly loam, 25 to 40 percent slopes				
	95	Negley	6e	—
No—Nolin silt loam, 0 to 3 percent slopes, frequently flooded				
	90	Nolin	2w	—
Omu1B1—Omulga silt loam, 2 to 6 percent slopes				
	85	Omulga	2e	—
Omu1C1—Omulga silt loam, 6 to 12 percent slopes				
	85	Omulga	3e	—
Orr1AF—Orrville silt loam, 0 to 3 percent slopes, frequently flooded				
	85	Orrville	2w	—
OwB—Otwell silt loam, 2 to 6 percent slopes				
	85	Otwell	2e	—
OwC—Otwell silt loam, 6 to 12 percent slopes				
	80	Otwell	3e	—
PaB—Parke silt loam, 2 to 6 percent slopes				
	85	Parke	2e	—
Pg—Pits, gravel				
	100	Pits	—	—
PpS1AF—Pope-Stokly silt loams, 0 to 3 percent slopes, frequently flooded				
	45	Pope	2w	—
	40	Stokly	2w	—
RcC—Richland loam, 8 to 15 percent slopes				
	85	Richland	3e	—
RcD—Richland loam, 15 to 25 percent slopes				
	85	Richland	4e	—
RcE—Richland loam, 25 to 40 percent slopes				
	85	Richland	6e	—
SkP1AF—Stokly-Philo silt loams, 0 to 3 percent slopes, frequently flooded				
	55	Stokly	2w	—
	30	Philo	2w	—

Land Capability Classification--Athens County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
StD—Steinsburg sandy loam, 15 to 25 percent slopes				
	85	Steinsburg	4e	—
StE—Steinsburg sandy loam, 25 to 40 percent slopes				
	85	Steinsburg	7e	—
StF—Steinsburg sandy loam, 40 to 70 percent slopes				
	90	Steinsburg	7e	—
SvF—Steinsburg-Gilpin association, very steep				
	55	Steinsburg	7e	—
	20	Gilpin	7e	—
Ud—Udorthents, loamy				
	100	Udorthents	6s	—
UgC2—Upshur-Gilpin complex, 8 to 15 percent slopes, eroded				
	45	Upshur	4e	—
	40	Gilpin	3e	—
UgD—Upshur-Gilpin complex, 15 to 25 percent slopes				
	60	Upshur	6e	—
	25	Gilpin	4e	—
UgE—Upshur-Gilpin complex, 25 to 50 percent slopes				
	45	Upshur	7e	—
	35	Gilpin	7e	—
UpC—Upshur silty clay loam, 8 to 15 percent slopes				
	85	Upshur	4e	—
UpD—Upshur silty clay loam, 15 to 25 percent slopes				
	80	Upshur	6e	—
UsC—Upshur-Elba silty clay loams, 8 to 15 percent slopes				
	55	Upshur	4e	—
	35	Elba	4e	—

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Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
UsD—Upshur-Elba silty clay loams, 15 to 25 percent slopes				
	55	Upshur	6e	—
	35	Elba	6e	—
UvD—Upshur-Steinsburg complex, 15 to 25 percent slopes				
	50	Upshur	6e	—
	30	Steinsburg	4e	—
UwF—Upshur-Gilpin complex, 25 to 35 percent slopes				
	50	Upshur	7e	—
	20	Gilpin	6e	—
VaC—Vandalia silty clay loam, 8 to 15 percent slopes				
	80	Vandalia	3e	—
VbD—Vandalia-Brookside complex, 15 to 25 percent slopes				
	55	Vandalia	4e	—
	35	Brookside	4e	—
VbE—Vandalia-Brookside complex, 25 to 40 percent slopes				
	50	Vandalia	6e	—
	35	Brookside	6e	—
VcD—Vandalia-Richland complex, 15 to 25 percent slopes				
	50	Vandalia	4e	—
	35	Richland	4e	—
VcE—Vandalia-Richland complex, 25 to 40 percent slopes				
	55	Vandalia	6e	—
	35	Richland	6e	—
Vin1C1—Vincent silt loam, 6 to 12 percent slopes				
	85	Vincent	3e	—
VqD2—Vandalia silt loam, 15 to 25 percent slopes				
	80	Vandalia	4e	—
W—Water				
	100	Water	—	—

Land Capability Classification--Athens County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
WdB—Wellston silt loam, 3 to 8 percent slopes				
	85	Wellston	2e	—
WdC—Wellston silt loam, 8 to 15 percent slopes				
	85	Wellston	3e	—
WeB—Westmore silt loam, 3 to 8 percent slopes				
	100	Westmore	2e	—
WeC—Westmore silt loam, 8 to 15 percent slopes				
	100	Westmore	3e	—
WgD—Westmoreland-Gilpin complex, 15 to 25 percent slopes				
	40	Westmoreland	4e	—
	35	Gilpin	4e	—
WgE—Westmoreland-Gilpin complex, 25 to 40 percent slopes				
	40	Westmoreland	6e	—
	35	Gilpin	6e	—
WgF—Westmoreland-Gilpin complex, 40 to 70 percent slopes				
	40	Westmoreland	7e	—
	35	Gilpin	7e	—
WhC—Westmoreland-Guernsey silt loams, 8 to 15 percent slopes				
	50	Westmoreland	3e	—
	35	Guernsey	3e	—
WhD—Westmoreland-Guernsey silt loams, 15 to 25 percent slopes				
	50	Westmoreland	4e	—
	35	Guernsey	4e	—
WhE—Westmoreland-Guernsey silt loams, 25 to 40 percent slopes				
	50	Westmoreland	6e	—
	35	Guernsey	6e	—
WhF—Westmoreland-Guernsey silt loams, 40 to 70 percent slopes				
	50	Westmoreland	7e	—
	35	Guernsey	7e	—

Land Capability Classification--Athens County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
WkF—Westmoreland-Guernsey silt loams, benched, 40 to 70 percent slopes				
	50	Westmoreland	7e	—
	35	Guernsey	7e	—
WmC—Westmoreland-Upshur complex, 8 to 15 percent slopes				
	50	Westmoreland	3e	—
	35	Upshur	3e	—
WmD—Westmoreland-Upshur complex, 15 to 25 percent slopes				
	45	Westmoreland	4e	—
	40	Upshur	4e	—
WmE—Westmoreland-Upshur complex, 25 to 40 percent slopes				
	50	Westmoreland	6e	—
	35	Upshur	6e	—
WmF—Westmoreland-Upshur complex, 40 to 70 percent slopes				
	55	Westmoreland	7e	—
	30	Upshur	7e	—
WnC—Wellston silt loam, 6 to 12 percent slopes				
	100	Wellston	3e	—
WpB—Wheeling loam, 3 to 10 percent slopes				
	90	Wheeling	2e	—
WqB—Westmore silt loam, 2 to 6 percent slopes				
	85	Westmore	2e	—
WtB—Woodsfield silt loam, 3 to 8 percent slopes				
	90	Woodsfield	2e	—
WtC—Woodsfield silt loam, 8 to 15 percent slopes				
	85	Woodsfield	3e	—
Wya1B1—Wyatt silt loam, 2 to 6 percent slopes				
	85	Wyatt	3e	—
Wya3C2—Wyatt silty clay loam, 6 to 12 percent slopes, eroded				
	85	Wyatt	4e	—

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Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
ZnB--Zanesville silt loam, 3 to 8 percent slopes				
	100	Zanesville	2e	—

Data Source Information

Soil Survey Area: Athens County, Ohio
 Survey Area Data: Version 15, Sep 18, 2014