

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—Washington County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
AfB—Alford silt loam, 2 to 6 percent slopes	100	Alford	2e	—
AfC—Alford silt loam, 6 to 12 percent slopes	100	Alford	3e	—
AIB—Allegheny silt loam, 2 to 6 percent slopes	100	Allegheny	2e	—
AIC—Allegheny silt loam, 6 to 12 percent slopes	100	Allegheny	3e	—
AID—Allegheny silt loam, 12 to 18 percent slopes	100	Allegheny	4e	—
AIG—Allegheny silt loam, 18 to 50 percent slopes	100	Allegheny	7e	—
AsA—Ashton silt loam, 0 to 2 percent slopes	100	Ashton	1	—
AsB—Ashton silt loam, 2 to 6 percent slopes	100	Ashton	2e	—
BeC—Belpre clay, 6 to 12 percent slopes	100	Belpre	3e	—
BeD—Belpre clay, 12 to 18 percent slopes	100	Belpre	4e	—
BeE—Belpre clay, 18 to 25 percent slopes	100	Belpre	6e	—
BeF—Belpre clay, 25 to 35 percent slopes	100	Belpre	6e	—
BsC—Brookside silty clay loam, 6 to 12 percent slopes	95	Brookside	3e	—

Land Capability Classification--Washington County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
BsD—Brookside silty clay loam, 12 to 18 percent slopes				
	95	Brookside	4e	—
BsE—Brookside silty clay loam, 18 to 25 percent slopes				
	95	Brookside	4e	—
BtF—Brookside bouldery silty clay loam, 18 to 35 percent slopes				
	100	Brookside	7s	—
Cg—Chagrin silt loam, 0 to 3 percent slopes, occasionally flooded				
	85	Chagrin	2w	—
ChA—Chili loam, 0 to 2 percent slopes				
	100	Chili	2s	—
ChB—Chili loam, 2 to 6 percent slopes				
	100	Chili	2e	—
ChC—Chili loam, 6 to 12 percent slopes				
	100	Chili	3e	—
Chg1AF—Chagrin silt loam, 0 to 3 percent slopes, frequently flooded				
	95	Chagrin	2w	—
CIC—Clymer silt loam, 6 to 12 percent slopes				
	100	Clymer	3e	—
CID—Clymer silt loam, 12 to 18 percent slopes				
	100	Clymer	4e	—
CoA—Conotton gravelly loam, 1 to 6 percent slopes				
	100	Conotton	3s	—
CpE—Conotton-Chili gravelly loams, 18 to 25 percent slopes				
	40	Chili	6e	—
	40	Conotton	7e	—
DkC—DeKalb loam, 6 to 12 percent slopes				
	100	DeKalb	3e	—
DkD—DeKalb loam, 12 to 18 percent slopes				
	100	DeKalb	4e	—
DkE—DeKalb loam, 18 to 25 percent slopes				
	100	DeKalb	4e	—

Land Capability Classification--Washington County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
DkF—Dekalb loam, 25 to 35 percent slopes				
	100	Dekalb	6e	—
DsG—Dekalb and Gilpin stony soils, 25 to 70 percent slopes				
	50	Dekalb	7s	—
	50	Gilpin	7s	—
DtB—Duncannon silt loam, 2 to 6 percent slopes				
	100	Duncannon	2e	—
DtC—Duncannon silt loam, 6 to 12 percent slopes				
	100	Duncannon	3e	—
DuD—Duncannon-Lakin complex, 12 to 18 percent slopes				
	40	Duncannon	4e	—
	40	Lakin	6s	—
DuE—Duncannon-Lakin complex, 18 to 25 percent slopes				
	40	Duncannon	4e	—
	40	Lakin	6s	—
EID—Elba-Belpre complex, 12 to 18 percent slopes				
	45	Elba	4e	—
	20	Belpre	4e	—
EIE—Elba-Belpre complex, 18 to 25 percent slopes				
	45	Elba	4e	—
	20	Belpre	6e	—
EIF—Elba-Belpre complex, 25 to 35 percent slopes				
	45	Elba	6e	—
	20	Belpre	6e	—
Gal2B1—Gallia loam, 2 to 6 percent slopes				
	85	Gallia	2e	—
Gal2C1—Gallia loam, 6 to 12 percent slopes				
	85	Gallia	3e	—
Gal2D1—Gallia loam, 12 to 18 percent slopes				
	85	Gallia	4e	—

Land Capability Classification--Washington County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
GdB—Gilpin silt loam, 3 to 8 percent slopes				
	85	Gilpin	2e	—
GdC—Gilpin silt loam, 8 to 15 percent slopes				
	80	Gilpin	3e	—
GdD—Gilpin silt loam, 15 to 25 percent slopes				
	85	Gilpin	4e	—
GdE—Gilpin silt loam, 18 to 25 percent slopes				
	100	Gilpin	4e	—
GdF—Gilpin silt loam, 25 to 35 percent slopes				
	90	Gilpin	6e	—
GkC—Gilpin-Summitville-Upshur complex, 6 to 12 percent slopes				
	35	Gilpin	3e	—
	20	Upshur	4e	—
	20	Summitville	3e	—
GkD—Gilpin-Summitville-Upshur complex, 12 to 18 percent slopes				
	35	Gilpin	4e	—
	25	Summitville	4e	—
	20	Upshur	6e	—
GkD3—Gilpin-Summitville-Upshur complex, 12 to 18 percent slopes, severely eroded				
	30	Gilpin	6e	—
	30	Summitville	4e	—
	20	Upshur	7e	—
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	—

Land Capability Classification--Washington County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
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	Upshur	7e	—
	20	Summitville	6e	—
GIG—Gilpin-Summitville-Upshur complex, 35 to 70 percent slopes, benched				
	50	Gilpin	7e	—
	20	Upshur	7e	—
	20	Summitville	7e	—
GnA—Glenford silt loam, 0 to 3 percent slopes				
	85	Glenford	1	—
GnB—Glenford silt loam, 3 to 8 percent slopes				
	85	Glenford	2e	—
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	—
HcB—Hackers silt loam, 3 to 8 percent slopes, rarely flooded				
	85	Hackers	2e	—
HcC—Hackers silt loam, 6 to 12 percent slopes				
	100	Hackers	3e	—
He—Hartshorn silt loam				
	90	Hartshorn	2s	—
HgB—Hayter loam, 2 to 6 percent slopes				
	100	Hayter	2e	—
HgC—Hayter loam, 6 to 12 percent slopes				
	100	Hayter	3e	—
HgD—Hayter loam, 12 to 18 percent slopes				
	100	Hayter	4e	—

Land Capability Classification--Washington County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
HgE—Hayter loam, 18 to 25 percent slopes				
	100	Hayter	4e	—
HgF—Hayter loam, 25 to 35 percent slopes				
	100	Hayter	6e	—
HhE—Hayter very stony soils, 18 to 30 percent slopes				
	100	Hayter	6s	—
HkE—Hayter-Vandalia channery loams, 12 to 25 percent slopes				
	50	Hayter	4e	—
	25	Vandalia	4e	—
HkF—Hayter-Vandalia stony complex, 25 to 50 percent slopes				
	50	Hayter	7e	—
	25	Vandalia	7s	—
Hu—Huntington silt loam				
	95	Huntington	2w	—
KeB—Keene silt loam, 3 to 8 percent slopes				
	90	Keene	2e	—
KeC—Keene silt loam, 6 to 12 percent slopes				
	100	Keene	3e	—
KnL1AF—Kinnick-Lindside silt loams, 0 to 3 percent slopes, frequently flooded				
	70	Kinnick	2w	—
	20	Lindside	2w	—
LbC—Lakin loamy fine sand, 3 to 12 percent slopes				
	100	Lakin	3s	—
LbD—Lakin loamy fine sand, 12 to 18 percent slopes				
	100	Lakin	6s	—
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	—
Lic1D2—Licking silt loam, 12 to 18 percent slopes, eroded				
	85	Licking	6e	—

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Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
LoC—Lowell-Upshur complex, 6 to 12 percent slopes				
	45	Lowell	3e	—
	35	Upshur	4e	—
LoD—Lowell-Upshur complex, 12 to 18 percent slopes				
	45	Lowell	4e	—
	35	Upshur	6e	—
LoE—Lowell-Upshur complex, 18 to 25 percent slopes				
	45	Lowell	6e	—
	35	Upshur	6e	—
LoF—Lowell-Upshur complex, 25 to 35 percent slopes				
	45	Lowell	7e	—
	35	Upshur	7e	—
MbB—Markland silt loam, 2 to 6 percent slopes				
	100	Markland	3e	—
MbC—Markland silt loam, 6 to 12 percent slopes				
	100	Markland	4e	—
MbD2—Markland silt loam, 12 to 18 percent slopes, moderately eroded				
	100	Markland	6e	—
MbG—Markland silt loam, 18 to 50 percent slopes				
	100	Markland	7e	—
McA—McGary silt loam, 0 to 2 percent slopes				
	90	Mcgary	3w	—
MeA—Mentor silt loam, 0 to 2 percent slopes				
	100	Mentor	1	—
MeB—Mentor silt loam, 2 to 6 percent slopes				
	100	Mentor	2e	—
MeC—Mentor silt loam, 6 to 12 percent slopes				
	100	Mentor	3e	—
Mel1AF—Melvin silt loam, 0 to 2 percent slopes, frequently flooded				
	90	Melvin	3w	—

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Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
Mos1AF—Moshannon silt loam, 0 to 3 percent slopes, frequently flooded				
	90	Moshannon	2w	—
New1AF—Newark silt loam, 0 to 3 percent slopes, frequently flooded				
	90	Newark	2w	—
Nn—Newark silt loam				
	90	Newark	2w	—
No—Nolin silt loam, 0 to 3 percent slopes, occasionally flooded				
	85	Nolin, occasionally flooded	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	—
OmV1B1—Omulga-Vincent silt loams, 2 to 6 percent slopes				
	48	Omulga	2e	—
	42	Vincent	2e	—
OmV1C1—Omulga-Vincent silt loams, 6 to 12 percent slopes				
	53	Omulga	3e	—
	37	Vincent	3e	—
OtB—Otwell silt loam, 2 to 6 percent slopes				
	100	Otwell	2e	—
OtC—Otwell silt loam, 6 to 12 percent slopes				
	100	Otwell	3e	—
OvB—Otwell-Vincent silt loams, 2 to 6 percent slopes				
	40	Otwell	2e	—
	30	Vincent	2e	—
OvC—Otwell-Vincent silt loams, 6 to 12 percent slopes				
	40	Otwell	3e	—
	30	Vincent	3e	—
Pe—Peoga silt loam				
	100	Peoga	3w	—

Land Capability Classification--Washington County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
Pg—Pits, gravel				
	100	Pits, gravel	—	—
Pu—Pits, quarry				
	100	Pits, quarry	—	—
SaB—Sparta loamy sand, 0 to 6 percent slopes				
	100	Sparta	4s	—
SM—Strip mine spoil, calcareous				
	100	Strip mine spoil	—	—
SP—Strip mine spoil, acidic (toxic)				
	100	Strip mine spoil	—	—
SuD—Summitville silt loam, 10 to 20 percent slopes				
	100	Summitville	4e	—
TaA—Taggart silt loam, 0 to 2 percent slopes				
	90	Taggart	2w	—
Tg—Tioga fine sandy loam				
	95	Tioga	1	—
Ub—Udipsamments				
	100	Udipsamments	—	—
Ud—Udorthents				
	100	Udorthents	—	—
Uf—Udorthents, clayey				
	100	Udorthents, clayey	—	—
Uh—Udorthents, loamy				
	100	Udorthents, loamy	—	—
UpB—Upshur silty clay loam, 2 to 6 percent slopes				
	100	Upshur	3e	—
UpC—Upshur silty clay loam, 6 to 12 percent slopes				
	100	Upshur	4e	—
UpD—Upshur silty clay loam, 12 to 18 percent slopes				
	100	Upshur	6e	—
UpE—Upshur silty clay loam, 15 to 25 percent slopes				
	80	Upshur	6e	—

Land Capability Classification--Washington County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
UrD3—Upshur clay, 12 to 18 percent slopes, severely eroded				
	100	Upshur	7e	—
UrE3—Upshur clay, 18 to 25 percent slopes, severely eroded				
	100	Upshur	7e	—
UsF—Upshur-Gilpin complex, 25 to 35 percent slopes				
	50	Upshur	7e	—
	20	Gilpin	6e	—
UsF3—Upshur-Gilpin complex, 25 to 35 percent slopes, severely eroded				
	50	Upshur	7e	—
	20	Gilpin	7e	—
UTG—Upshur association, very stony, 25 to 70 percent slopes				
	100	Upshur	7s	—
UX—Urban land				
	100	Urban land	—	—
VaC—Vandalia silty clay loam, 6 to 12 percent slopes				
	95	Vandalia	3e	—
VaD—Vandalia silty clay loam, 12 to 18 percent slopes				
	95	Vandalia	4e	—
VaE—Vandalia silty clay loam, 18 to 25 percent slopes				
	95	Vandalia	4e	—
VaF—Vandalia silty clay loam, 25 to 35 percent slopes				
	85	Vandalia	6e	—
Vin1B1—Vincent silt loam, 2 to 6 percent slopes				
	80	Vincent	2e	—
Vin1C1—Vincent silt loam, 6 to 12 percent slopes				
	85	Vincent	3e	—
Vin1D1—Vincent silt loam, 12 to 18 percent slopes				
	85	Vincent	4e	—

Land Capability Classification--Washington County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
W—Water				
	100	Water	—	—
WaB—Watertown gravelly loamy sand, 2 to 6 percent slopes				
	100	Watertown	3s	—
WbA—Watertown sandy loam, 0 to 2 percent slopes				
	100	Watertown	3s	—
WbB—Watertown sandy loam, 2 to 6 percent slopes				
	100	Watertown	3s	—
WbC—Watertown sandy loam, 6 to 12 percent slopes				
	100	Watertown	3e	—
WhB—Wellston silt loam, 3 to 8 percent slopes				
	85	Wellston	2e	—
WhC—Wellston silt loam, 8 to 15 percent slopes				
	85	Wellston	3e	—
WhD—Wellston silt loam, 12 to 18 percent slopes				
	90	Wellston	4e	—
WkF—Westmore-Lowell-Elba complex, 25 to 35 percent slopes				
	30	Westmore	6e	—
	30	Lowell	7e	—
	20	Elba	6e	—
WkG—Westmore-Lowell-Elba complex, 35 to 70 percent slopes				
	30	Lowell	7e	—
	30	Westmore	7e	—
	20	Elba	7e	—
WIF—Westmore-Lowell-Elba complex, 25 to 35 percent slopes, benched				
	30	Westmore	6e	—
	30	Lowell	7e	—
	20	Elba	6e	—

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Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
WIG—Westmore-Lowell-Elba complex, 35 to 70 percent slopes, benched				
	30	Lowell	7e	—
	30	Westmore	7e	—
	20	Elba	7e	—
Wm1D2—Westmoreland silt loam, 12 to 18 percent slopes, eroded				
	85	Westmoreland	4e	—
WmW1D2—Westmoreland-Woodsfield silt loams, 12 to 18 percent slopes, eroded				
	45	Westmoreland	4e	—
	40	Woodsfield	4e	—
WrA—Wheeling silt loam, 0 to 2 percent slopes				
	100	Wheeling	1	—
WrB—Wheeling silt loam, 2 to 6 percent slopes				
	100	Wheeling	2e	—
WrC—Wheeling silt loam, 6 to 12 percent slopes				
	100	Wheeling	3e	—
WrD—Wheeling silt loam, 12 to 18 percent slopes				
	100	Wheeling	4e	—
WrF—Wheeling silt loam, 18 to 35 percent slopes				
	100	Wheeling	6e	—
WtB—Woodsfield silt loam, 2 to 6 percent slopes				
	100	Woodsfield	2e	—
WtC—Woodsfield silt loam, 6 to 12 percent slopes				
	100	Woodsfield	3e	—
WtD—Woodsfield silt loam, 12 to 18 percent slopes				
	100	Woodsfield	4e	—
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	—

Land Capability Classification--Washington County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
Wya3D2--Wyatt silty clay loam, 12 to 18 percent slopes, eroded				
	85	Wyatt	6e	—
WzB--Woodsfield-Zanesville silt loams, 2 to 6 percent slopes				
	50	Woodsfield	2e	—
	30	Zanesville	2e	—
WzC--Woodsfield-Zanesville silt loams, 6 to 12 percent slopes				
	50	Woodsfield	3e	—
	30	Zanesville	3e	—
ZnB--Zanesville silt loam, 2 to 6 percent slopes				
	100	Zanesville	2e	—
ZnC--Zanesville silt loam, 6 to 12 percent slopes				
	100	Zanesville	3e	—

Data Source Information

Soil Survey Area: Washington County, Ohio
 Survey Area Data: Version 9, Sep 19, 2014