

Report: Index Surface Runoff Classes  
USDA-NRCS Soil Survey Database

Butler County, Pennsylvania

MAP UNIT SYMBOL	MAP UNIT NAME	COMPONENT NAME	DRAINAGE	SURFACE RUNOFF
AnA	ANDOVER LOAM, 0 TO 3 PERCENT SLOPES	ANDOVER	poorly	Very high
AnB	ANDOVER LOAM, 3 TO 8 PERCENT SLOPES	ANDOVER	poorly	Very high
AnC	ANDOVER LOAM, 8 TO 15 PERCENT SLOPES	ANDOVER	poorly	Very high
AoB	ANDOVER LOAM, 0 TO 8 PERCENT SLOPES, VERY STONY	ANDOVER	poorly	Very high
AoC	ANDOVER LOAM, 8 TO 15 PERCENT SLOPES, VERY STONY	ANDOVER	poorly	Very high
Ar	ARENTS-URBAN LAND COMPLEX	ARENTS	well	---
Ar	ARENTS-URBAN LAND COMPLEX	URBAN LAND		--- (1)
At	ATKINS SILT LOAM	ATKINS	poorly	Very high
BeA	BRACEVILLE LOAM, 0 TO 3 PERCENT SLOPES	BRACEVILLE	moderately well	Very high
BeB	BRACEVILLE LOAM, 3 TO 8 PERCENT SLOPES	BRACEVILLE	moderately well	Very high
BeC	BRACEVILLE LOAM, 8 TO 15 PERCENT SLOPES	BRACEVILLE	moderately well	Very high
BrA	BRINKERTON SILT LOAM, 0 TO 3 PERCENT SLOPES	Brinkerton	poorly	Very high
BrB	BRINKERTON SILT LOAM, 3 TO 8 PERCENT SLOPES	Brinkerton	poorly	Very high
BrC	BRINKERTON SILT LOAM, 8 TO 15 PERCENT SLOPES	BRINKERTON	poorly	Very high
BuB	BUCHANAN LOAM, 3 TO 8 PERCENT SLOPES	BUCHANAN	moderately well	High
BuC	BUCHANAN LOAM, 8 TO 15 PERCENT SLOPES	BUCHANAN	moderately well	High
BxB	BUCHANAN LOAM, 0 TO 8 PERCENT SLOPES, VERY STONY	BUCHANAN	moderately well	High
BxD	BUCHANAN LOAM, 8 TO 25 PERCENT SLOPES, VERY STONY	BUCHANAN	moderately well	High
Cd	CANADICE SILTY CLAY LOAM	CANADICE	poorly	Very high
CeA	CANEADEA SILT LOAM, 0 TO 3 PERCENT SLOPES	CANEADEA	somewhat poorly	Very high
CeB	CANEADEA SILT LOAM, 3 TO 8 PERCENT SLOPES	CANEADEA	somewhat poorly	Very high
CeC	CANEADEA SILT LOAM, 8 TO 15 PERCENT SLOPES	CANEADEA VARIANT	somewhat poorly	Very high
CeD	CANEADEA SILT LOAM, 15 TO 25 PERCENT SLOPES	CANEADEA VARIANT	somewhat poorly	Very high
ClA	CAVODE SILT LOAM, 0 TO 3 PERCENT SLOPES	CAVODE	somewhat poorly	Very high

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ClB	CAVODE SILT LOAM, 3 TO 8 PERCENT SLOPES	Cavode	somewhat poorly	Very high
ClC	CAVODE SILT LOAM, 8 TO 15 PERCENT SLOPES	Cavode	somewhat poorly	Very high
ClD	CAVODE SILT LOAM, 15 TO 25 PERCENT SLOPES	CAVODE	somewhat poorly	Very high
CmB	CLYMER LOAM, 3 TO 8 PERCENT SLOPES	CLYMER	well	Medium
CmC	CLYMER SILT LOAM, 8 TO 15 PERCENT SLOPES	CLYMER	well	Medium
CoA	COOKPORT LOAM, 0 TO 3 PERCENT SLOPES	COOKPORT	moderately well	Very high
CoB	COOKPORT LOAM, 3 TO 8 PERCENT SLOPES	COOKPORT	moderately well	Very high
CoC	COOKPORT LOAM, 8 TO 15 PERCENT SLOPES	COOKPORT	moderately well	Very high
CoD	COOKPORT LOAM, 15 TO 25 PERCENT SLOPES	COOKPORT	moderately well	Very high
DAM	DAMS	Dams		--- (1)
Dd	DUMPS, INDUSTRIAL WASTE	DUMPS		--- (1)
Dm	DUMPS, MINE	DUMPS		--- (1)
ErB	ERNEST SILT LOAM, 3 TO 8 PERCENT SLOPES	Ernest	moderately well	Medium
ErC	ERNEST SILT LOAM, 8 TO 15 PERCENT SLOPES	Ernest	moderately well	Medium
ErD	ERNEST SILT LOAM, 15 TO 25 PERCENT SLOPES	ERNEST	moderately well	High
Fc	FLUVAQUENTS, COAL OVERWASH	FLUVAQUENTS, COAL OVERWASH	poorly	---
FeA	FREDON LOAM, 0 TO 3 PERCENT SLOPES	FREDON	somewhat poorly	Very high
FeB	FREDON LOAM, 3 TO 8 PERCENT SLOPES	FREDON	somewhat poorly	Very high
FrA	FRENCHTOWN SILT LOAM, 0 TO 3 PERCENT SLOPES	FRENCHTOWN	poorly	High
FrB	FRENCHTOWN SILT LOAM, 3 TO 8 PERCENT SLOPES	FRENCHTOWN	poorly	Very high
GlB	GILPIN SILT LOAM, 3 TO 8 PERCENT SLOPES	GILPIN	well	Medium
GlC	GILPIN SILT LOAM, 8 TO 15 PERCENT SLOPES	GILPIN	well	Medium
GmD	GILPIN CHANNERY SILT LOAM, 15 TO 25 PERCENT SLOPES	GILPIN	well	High
GnC	GILPIN-UPSHUR COMPLEX, 8 TO 15 PERCENT SLOPES	GILPIN	well	Medium
GnC	GILPIN-UPSHUR COMPLEX, 8 TO 15 PERCENT SLOPES	UPSHUR	well	Very high

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GnD	GILPIN-UPSHUR COMPLEX, 15 TO 30 PERCENT SLOPES	GILPIN	well	High
GnD	GILPIN-UPSHUR COMPLEX, 15 TO 30 PERCENT SLOPES	UPSHUR	well	Very high
GoB	GILPIN-WEIKERT CHANNERY SILT LOAMS, 3 TO 8 PERCENT SLOPES	GILPIN	well	Medium
GoB	GILPIN-WEIKERT CHANNERY SILT LOAMS, 3 TO 8 PERCENT SLOPES	WEIKERT	somewhat excessively	Low
GoC	GILPIN-WEIKERT CHANNERY SILT LOAMS, 8 TO 15 PERCENT SLOPES	GILPIN	well	Medium
GoC	GILPIN-WEIKERT CHANNERY SILT LOAMS, 8 TO 15 PERCENT SLOPES	WEIKERT	somewhat excessively	Low
GoD	GILPIN-WEIKERT CHANNERY SILT LOAMS, 15 TO 25 PERCENT SLOPES	Weikert	well	Medium
GoD	GILPIN-WEIKERT CHANNERY SILT LOAMS, 15 TO 25 PERCENT SLOPES	Gilpin	well	High
GoF	GILPIN-WEIKERT CHANNERY SILT LOAMS, 25 TO 70 PERCENT SLOPES	GILPIN	well	High
GoF	GILPIN-WEIKERT CHANNERY SILT LOAMS, 25 TO 70 PERCENT SLOPES	WEIKERT	somewhat excessively	Medium
GpC	GILPIN-WHARTON SILT LOAMS, 8 TO 15 PERCENT SLOPES	GILPIN	well	Medium
GpC	GILPIN-WHARTON SILT LOAMS, 8 TO 15 PERCENT SLOPES	WHARTON	moderately well	High
GpD	GILPIN-WHARTON COMPLEX, 15 TO 25 PERCENT SLOPES	GILPIN	well	High
GpD	GILPIN-WHARTON COMPLEX, 15 TO 25 PERCENT SLOPES	WHARTON	moderately well	Very high
GrA	GRESHAM SILT LOAM, 0 TO 3 PERCENT SLOPES	GRESHAM	somewhat poorly	Very high
GrB	GRESHAM SILT LOAM, 3 TO 8 PERCENT SLOPES	GRESHAM	somewhat poorly	Very high
GrC	GRESHAM SILT LOAM, 8 TO 15 PERCENT SLOPES	GRESHAM	somewhat poorly	Very high
HaB	HAZLETON CHANNERY LOAM, 3 TO 8 PERCENT SLOPES	HAZLETON	well	Low
HaC	HAZLETON CHANNERY LOAM, 8 TO 15 PERCENT SLOPES	HAZLETON	well	Low
HaD	HAZLETON CHANNERY LOAM, 15 TO 25 PERCENT SLOPES	HAZLETON	well	Medium

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HaE	HAZLETON CHANNERY LOAM, 25 TO 35 PERCENT SLOPES	HAZLETON	well	Medium
HbB	HAZLETON LOAM, 0 TO 8 PERCENT SLOPES, VERY STONY	HAZLETON	well	Low
HgD	HAZLETON AND GILPIN SOILS, 8 TO 25 PERCENT SLOPES, VERY STONY	HAZLETON	well	Medium
HgD	HAZLETON AND GILPIN SOILS, 8 TO 25 PERCENT SLOPES, VERY STONY	GILPIN	well	High
HgF	HAZLETON AND GILPIN SOILS, 25 TO 70 PERCENT SLOPES, VERY STONY	HAZLETON	well	Medium
HgF	HAZLETON AND GILPIN SOILS, 25 TO 70 PERCENT SLOPES, VERY STONY	GILPIN	well	High
MoB	MONONGAHELA SILT LOAM, 3 TO 8 PERCENT SLOPES	MONONGAHELA	moderately well	Very high
MoC	MONONGAHELA SILT LOAM, 8 TO 15 PERCENT SLOPES	MONONGAHELA	moderately well	Very high
Ph	PHILO LOAM	PHILO	moderately well	Low
Pn	PITS, SAND AND GRAVEL	PITS	somewhat excessively	Low
Po	POPE LOAM	POPE	well	Low
RdB	RIVERHEAD SANDY LOAM, 3 TO 8 PERCENT SLOPES	RIVERHEAD	well	Low
RdC	RIVERHEAD SANDY LOAM, 8 TO 15 PERCENT SLOPES	RIVERHEAD	well	Low
TaA	TILSIT SILT LOAM, 0 TO 3 PERCENT SLOPES	TILSIT	moderately well	Medium
TaB	TILSIT SILT LOAM, 3 TO 8 PERCENT SLOPES	TILSIT	moderately well	High
TeB	TITUSVILLE SILT LOAM, 3 TO 8 PERCENT SLOPES	TITUSVILLE	moderately well	Very high
TeC	TITUSVILLE SILT LOAM, 8 TO 15 PERCENT SLOPES	TITUSVILLE	moderately well	Very high
TrD	TITUSVILLE AND RIVERHEAD SOILS, 15 TO 30 PERCENT SLOPES	TITUSVILLE	moderately well	Very high
TrD	TITUSVILLE AND RIVERHEAD SOILS, 15 TO 30 PERCENT SLOPES	RIVERHEAD	well	Medium
UaB	UDORTHENTS, ACID MATERIAL, GENTLY SLOPING	UDORTHENTS	somewhat excessively	Negligible
UaD	UDORTHENTS, ACID MATERIAL, MODERATELY STEEP	UDORTHENTS	somewhat excessively	Very low

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UaF	UDORTHENTS, ACID MATERIAL, VERY STEEP	UDORTHENTS	somewhat excessively	Low
UB	URBAN LAND	URBAN LAND		--- (1)
UcD	UDORTHENTS, CALCAREOUS MATERIAL, MODERATELY STEEP	UDORTHENTS	somewhat excessively	Very low
UcF	UDORTHENTS, CALCAREOUS MATERIAL, VERY STEEP	UDORTHENTS	somewhat excessively	Low
UeB	URBAN LAND-ERNEST COMPLEX, 0 TO 8 PERCENT SLOPES	URBAN LAND		--- (1)
UeC	URBAN LAND-ERNEST COMPLEX, 8 TO 15 PERCENT SLOPES	URBAN LAND	excessively	High
UgD	URBAN LAND-GILPIN COMPLEX, 15 TO 25 PERCENT SLOPES	URBAN LAND	excessively	High
VcB	VANDERGRIFT-CAVODE SILT LOAMS, 3 TO 8 PERCENT SLOPES	VANDERGRIFT	moderately well	Very high
VcB	VANDERGRIFT-CAVODE SILT LOAMS, 3 TO 8 PERCENT SLOPES	CAVODE	somewhat poorly	Very high
VcC	VANDERGRIFT-CAVODE SILT LOAMS, 8 TO 15 PERCENT SLOPES	VANDERGRIFT	moderately well	Very high
VcC	VANDERGRIFT-CAVODE SILT LOAMS, 8 TO 15 PERCENT SLOPES	CAVODE	somewhat poorly	Very high
VcD	VANDERGRIFT-CAVODE SILT LOAMS, 15 TO 25 PERCENT SLOPES	VANDERGRIFT	moderately well	Very high
VcD	VANDERGRIFT-CAVODE SILT LOAMS, 15 TO 25 PERCENT SLOPES	CAVODE	somewhat poorly	Very high
W	WATER	WATER		---
WaA	WHARTON SILT LOAM, 0 TO 3 PERCENT SLOPES	WHARTON	moderately well	Medium
WaB	WHARTON SILT LOAM, 3 TO 8 PERCENT SLOPES	Wharton	moderately well	High
WaC	WHARTON SILT LOAM, 8 TO 15 PERCENT SLOPES	Wharton	moderately well	High
WhA	WHEELING SILT LOAM, 0 TO 3 PERCENT SLOPES	WHEELING	well	Low
WhB	WHEELING SILT LOAM, 3 TO 8 PERCENT SLOPES	WHEELING	well	Medium

(1) A null value in Ksat makes the calculated runoff class uncertain. Null values are most commonly in bedrock layers or hardpans that should be assigned impermeable or very slow Ksat values. Calculation Based on National Soils Handbook, Part 618-50; and Soil Survey Manual, p113-114