

Report: Soil Surface Runoff  
Franklin County, Pennsylvania  
USDA-NRCS Soil Survey Database

MAP UNIT SYMBOL	MAP UNIT NAME	COMPONENT NAME	DRAINAGE	SURFACE RUNOFF
AgB	Allegheny loam, 3 to 8 percent slopes	Allegheny	well	Medium
AnB	Andover gravelly loam, 3 to 8 percent slopes	Andover	poorly	Very high
AoB	Andover gravelly loam, 0 to 8 percent slopes, very stony	Andover	poorly	Very high
As	Atkins silt loam	Atkins	poorly	Very high
BaB	Bagtown cobbly loam, 3 to 8 percent slopes, very stony	Bagtown	moderately well	High
BaC	Bagtown cobbly loam, 8 to 15 percent slopes, very stony	Bagtown	moderately well	High
BbB	Bagtown cobbly loam, 0 to 8 percent slopes, extremely stony	Bagtown	well	Low
BbD	Bagtown cobbly loam, 8 to 25 percent slopes, extremely stony	Bagtown	well	Medium
BcE	Bagtown cobbly loam, 15 to 45 percent slopes, rubbly	Bagtown	well	High
Bf	Basher fine sandy loam	Basher	moderately well	Low
BhB	Bedington channery silt loam, 3 to 8 percent slopes	Bedington	well	Low
BhC	Bedington channery silt loam, 8 to 15 percent slopes	Bedington	well	Low
BkB	Berks channery silt loam, 3 to 8 percent slopes	Berks	well	Low
BkC	Berks channery silt loam, 8 to 15 percent slopes	Berks	well	Low
BlA	Blairton channery silt loam, 0 to 3 percent slopes	Blairton	moderately well	Medium
BlB	Blairton channery silt loam, 3 to 8 percent slopes	Blairton	moderately well	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
BuB	Buchanan gravelly loam, 3 to 8 percent slopes	Buchanan	moderately well	High
BuC	Buchanan gravelly loam, 8 to 15 percent slopes	Buchanan	moderately well	High
BxB	Buchanan cobbly loam, 0 to 8 percent slopes, extremely stony	Buchanan	moderately well	Medium
BxD	Buchanan cobbly loam, 8 to 25 percent slopes, extremely stony	Buchanan	moderately well	High

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MAP UNIT SYMBOL	MAP UNIT NAME	COMPONENT NAME	DRAINAGE	SURFACE RUNOFF
CaB	Calvin channery loam, 3 to 8 percent slopes	Calvin	well	Low
CaC	Calvin channery loam, 8 to 15 percent slopes	Calvin	well	Low
CaD	Calvin channery loam, 15 to 25 percent slopes	Calvin	well	Medium
CoB	Carbo silty clay loam, 3 to 8 percent slopes	Carbo	well	Very high
CsA	Clarksburg silt loam, 0 to 3 percent slopes	Clarksburg	moderately well	Low
CtB	Clearbrook channery silt loam, 0 to 8 percent slopes	Clearbrook	somewhat poorly	Very high
CvA	Covegap cobbly sandy loam, 0 to 3 percent slopes	Covegap	well	Very low
CvB	Covegap cobbly sandy loam, 3 to 8 percent slopes	Covegap	well	Low
CvC	Covegap cobbly sandy loam, 8 to 15 percent slopes	Covegap	well	Low
DAM	Dam	Dams		--- (1)
DbE	DeKalb-Bagtown complex, 25 to 65 percent slopes, extremely stony	DeKalb	well	Low
		Bagtown	well	Very high
DED	DeKalb and Hazleton soils, 3 to 25 percent slopes, rubbly	DeKalb	well	Very low
		Hazleton	well	Low
DEF	DeKalb and Hazleton soils, 25 to 75 percent slopes, rubbly	DeKalb	well	Low
		Hazleton	well	Medium
Dg	Deposit gravelly loam	Deposit	moderately well	Very low
Dm	Deposit gravelly loam, 0 to 8 percent slopes, very stony	Deposit	moderately well	Very low
DoB	Downsville gravelly loam, 3 to 8 percent slopes	Downsville	well	Medium
DoD	Downsville gravelly loam, 8 to 25 percent slopes	Downsville	well	Medium
DrB	Dryrun gravelly loam, 3 to 8 percent slopes	Dryrun	moderately well	Medium
DsA	Duffield silt loam, 0 to 3 percent slopes	Duffield	well	Low
DsB	Duffield silt loam, 3 to 8 percent slopes	Duffield	well	Medium

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DsC	Duffield silt loam, 8 to 15 percent slopes	Duffield	well	Medium
Du	Dunning silt loam	Dunning	very poorly	Very high
EcB	Edgemont channery loam, 3 to 8 percent slopes	Edgemont	well	Low
EcC	Edgemont channery loam, 8 to 15 percent slopes	Edgemont	well	Low
EdB	Edgemont channery loam, 0 to 8 percent slopes, very stony	Edgemont	well	Very low
EdD	Edgemont channery loam, 8 to 25 percent slopes, very stony	Edgemont	well	Low
EdF	Edgemont channery loam, 25 to 70 percent slopes, very stony	Edgemont	well	Medium
EeB	Edom-Carbo silty clay loams, 3 to 8 percent slopes	Edom	well	Medium
		Carbo	well	Very high
EeC	Edom-Carbo silty clay loams, 8 to 15 percent slopes	Edom	well	Medium
		Carbo	well	Very high
EeD	Edom-Carbo silty clay loams, 15 to 25 percent slopes	Edom	well	High
		Carbo	well	Very high
ErB	Ernest silt loam, 3 to 8 percent slopes	Ernest	moderately well	Medium
Fa	Fairplay marl	Fairplay	very poorly	Very low
Fu	Funkstown silt loam	Funkstown	moderately well	Low
HaA	Hagerstown silt loam, 0 to 3 percent slopes	Hagerstown	well	Low
HaB	Hagerstown silt loam, 3 to 8 percent slopes	Hagerstown	well	Medium
HaC	Hagerstown silt loam, 8 to 15 percent slopes	Hagerstown	well	Medium
HbB	Hagerstown-Carbo silty clay loams, 3 to 8 percent slopes	Hagerstown	well	Medium
		Carbo	well	Very high
HbC	Hagerstown-Carbo silty clay loams, 8 to 15 percent slopes	Hagerstown	well	Medium
		Carbo	well	Very high
HbD	Hagerstown-Carbo silty clay loams, 15 to 25 percent slopes	Hagerstown	well	High
		Carbo	well	Very high
HcB	Hagerstown-carbo silty clay loams, 3 to 8 percent slopes, very rocky	Hagerstown	well	Medium
		Carbo	well	Very high

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MAP UNIT SYMBOL	MAP UNIT NAME	COMPONENT NAME	DRAINAGE	SURFACE RUNOFF
HcC	Hagerstown-carbo silty clay loams, 8 to 15 percent slopes, very rocky	Hagerstown	well	Medium
		Carbo	well	Very high
HkB	Hagerstown-Rock outcrop complex, 3 to 8 percent slopes	Hagerstown	well	Medium
		Rock outcrop		Low
HkD	Hagerstown-Rock outcrop complex, 8 to 35 percent slopes	Hagerstown	well	High
		Rock outcrop		Medium
Hm	Hatboro silt loam	Hatboro	poorly	Very high
HRB	Hazleton and Dekalb soils, 0 to 8 percent slopes, extremely stony	Hazleton	well	Very low
		Dekalb	well	Negligible
HRD	Hazleton and Dekalb soils, 8 to 25 percent slopes, extremely stony	Hazleton	well	Low
		Dekalb	well	Very low
HRF	Hazleton and Dekalb soils, 25 to 75 percent slopes, extremely stony	Hazleton	well	Medium
		Dekalb	well	Low
HSB	Highfield and Catoctin channery silt loams, 3 to 8 percent slopes	Catoctin	well	Low
		Highfield	well	Medium
HSC	Highfield and Catoctin channery silt loams, 8 to 15 percent slopes	Catoctin	well	Low
		Highfield	well	Medium
HSD	Highfield and Catoctin channery silt loams, 15 to 25 percent slopes	Catoctin	well	Medium
		Highfield	well	High
HTB	Highfield and Catoctin channery silt loams, 0 to 8 percent slopes, extremely stony	Catoctin	well	Very low
		Highfield	well	Low
HTD	Highfield and Catoctin channery silt loams, 8 to 25 percent slopes, extremely stony	Catoctin	well	Low
		Highfield	well	Medium
HTF	Highfield and Catoctin channery silt loams, 25 to 50 percent slopes, extremely stony	Catoctin	well	Medium
		Highfield	well	High
HwB	Hustontown silt loam, 3 to 8 percent slopes	Hustontown	moderately well	Medium
Jg	Jugtown silt loam	Jugtown	moderately well	Low
LaB	Laidig gravelly loam, 3 to 8 percent slopes	Laidig	well	Medium

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LaC	Laidig gravelly loam, 8 to 15 percent slopes	Laidig	well	Medium
LbB	Laidig gravelly loam, 0 to 8 percent slopes, extremely stony	Laidig	well	Low
LbD	Laidig gravelly loam, 8 to 25 percent slopes, extremely stony	Laidig	well	Medium
LCE	Laidig and Hazleton soils, 25 to 60 percent slopes, extremely stony	Hazleton	well	Medium
		Laidig	well	High
LeA	Lantz silt loam, 0 to 3 percent slopes	Lantz	very poorly	Very high
LgB	Leetonia gravelly loamy sand, 0 to 15 percent slopes, extremely stony	Leetonia	well	Low
LhD	Lehew very channery fine sandy loam, 8 to 25 percent slopes, extremely stony	Lehew	well	Very low
Ln	Lindside silt loam	Lindside	moderately well	Low
Ma	Markes channery silt loam, 0 to 8 percent slopes	Markes	poorly	Very high
Mb	Maurertown silt loam	Maurertown	poorly	High
Me	Melvin silt loam	Melvin	poorly	Very high
MoB	Monongahela silt loam, 3 to 8 percent slopes	Monongahela	moderately well	Medium
MrA	Murrill gravelly loam, 0 to 3 percent slopes	Murrill	well	Low
MrB	Murrill gravelly loam, 3 to 8 percent slopes	Murrill	well	Medium
MrC	Murrill gravelly loam, 8 to 15 percent slopes	Murrill	well	Medium
MuB	Murrill cobbly sandy loam, 3 to 8 percent slopes	Murrill	well	Medium
MuC	Murrill cobbly sandy loam, 8 to 15 percent slopes	Murrill	well	Medium
MvB	Murrill gravelly loam, 3 to 8 percent slopes, extremely stony	Murrill	well	Medium
MvD	Murrill gravelly loam, 8 to 25 percent slopes, extremely stony	Murrill	well	Medium
MyB	Myersville silt loam, 3 to 8 percent slopes	Myersville	well	Medium
MyC	Myersville silt loam, 8 to 15 percent slopes	Myersville	well	Medium
MyD	Myersville silt loam, 15 to 25 percent slopes	Myersville	well	High

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MAP UNIT SYMBOL	MAP UNIT NAME	COMPONENT NAME	DRAINAGE	SURFACE RUNOFF
PcB	Pecktonville gravelly silt loam, 3 to 8 percent slopes	Pecktonville	well	High
PcC	Pecktonville gravelly silt loam, 8 to 15 percent slopes	Pecktonville	well	High
PcD	Pecktonville gravelly silt loam, 15 to 25 percent slopes	Pecktonville	well	Very high
PeE	Pecktonville-Rock outcrop complex, 25 to 45 percent slopes	Pecktonville	well	Very high
Pg	Penlaw silt loam, 0 to 3 percent slopes	Penlaw	somewhat poorly	Very high
Ph	Philo silt loam	Philo	moderately well	Low
Po	Pope silt loam	Pope	well	Low
Pu	Purdy silty clay loam	Purdy	poorly	High
Q	Quarries	Quarries		--- (1)
RaB	Rohrersville silt loam, 3 to 8 percent slopes	Rohrersville	somewhat poorly	Very high
RcB	Rohrersville silt loam, 0 to 15 percent slopes, very stony	Rohrersville	somewhat poorly	Very high
RyB	Ryder-Nollville channery silt loams, 3 to 8 percent slopes	Nollville	well	Medium
		Ryder	well	Low
RyC	Ryder-Nollville channery silt loams, 8 to 15 percent slopes	Ryder	well	Low
		Nollville	well	Medium
RyD	Ryder-Nollville channery silt loams, 15 to 25 percent slopes	Ryder	well	Medium
		Nollville	well	High
SeB	Sideling gravelly loam, 3 to 8 percent slopes	Sideling	moderately well	High
SeC	Sideling gravelly loam, 8 to 15 percent slopes	Sideling	moderately well	High
SrB	Sideling gravelly loam, 0 to 8 percent slopes, extremely stony	Sideling	moderately well	Medium
SrD	Sideling gravelly loam, 8 to 25 percent slopes, extremely stony	Sideling	moderately well	High
SSF	Sideling and Hazleton soils 25 to 60 percent slopes, extremely stony	Hazleton	well	Medium
		Sideling	moderately well	High
SwB	Swanpond-Edom complex, 0 to 8 percent slopes	Swanpond	moderately well	High
		Edom	well	Low
ThB	Thurmont gravelly loam, 3 to 8 percent slopes, stony	Thurmont	well	Medium

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ThC	Thurmont gravelly loam, 8 to 15 percent slopes, stony	Thurmont	well	Medium
ToD	Thurmont gravelly loam, 8 to 25 percent slopes, very stony	Thurmont	well	Medium
TrB	Trego gravelly silt loam, 3 to 8 percent slopes	Trego	moderately well	High
TrC	Trego gravelly silt loam, 8 to 15 percent slopes	Trego	moderately well	High
TsB	Trego gravelly silt loam, 3 to 8 percent slopes, very stony	Trego	moderately well	High
TsC	Trego gravelly silt loam, 8 to 15 percent slopes, very stony	Trego	moderately well	High
Ty	Tyler silt loam, 0 to 3 percent slopes	Tyler	somewhat poorly	Very high
UbB	Urban land-Berks complex, 0 to 8 percent slopes	Urban land Berks	 well	--- (1) Very low
UbC	Urban land-Berks complex, 8 to 15 percent slopes	Urban land Berks	 well	--- (1) Low
UdB	Urban land-Duffield complex, 0 to 8 percent slopes	Urban land Duffield	 well	--- (1) Low
UdC	Urban land-Duffield complex, 8 to 15 percent slopes	Urban land Duffield	 well	--- (1) Medium
UhB	Urban land-Hagerstown complex, 0 to 8 percent slopes	Urban land Hagerstown	 well	--- (1) Low
Uu	Urban land-Udorthents complex, 0 to 25 percent slopes	Udorthents Urban land	 	Medium --- (1)
VaD	Vanderlip cobbly loamy sand, 0 to 25 percent slopes	Vanderlip	well	Very low
VaE	Vanderlip cobbly loamy sand, 25 to 50 percent slopes	Vanderlip	well	Low
W	Water	Water		---
WeB	Weikert channery silt loam, 3 to 8 percent slopes	Weikert	well	Low
WeC	Weikert channery silt loam, 8 to 15 percent slopes	Weikert	well	Low
WeD	Weikert channery silt loam, 15 to 25 percent slopes	Weikert	well	Medium

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WkB	Weikert very channery silt loam, 3 to 8 percent slopes	Weikert	well	Low
WkC	Weikert very channery silt loam, 8 to 15 percent slopes	Weikert	well	Low
WkD	Weikert very channery silt loam, 15 to 25 percent slopes	Weikert	well	Medium
WkF	Weikert very channery silt loam, 25 to 60 percent slopes	Weikert	well	Medium
WtB	Weverton very flaggy loam, 0 to 8 percent slopes	Weverton	well	Low
WtC	Weverton very flaggy loam, 8 to 25 percent slopes	Weverton	well	Medium
WtF	Weverton-Rock outcrop complex, 25 to 45 percent slopes	Weverton	well	High
		Rock outcrop		Medium
WuB	Wurno-Nollville channery silt loams, 3 to 8 percent slopes	Wurno	well	Medium (1)
		Nollville	well	Medium
WuC	Wurno-Nollville channery silt loams, 8 to 15 percent slopes	Wurno	well	Medium (1)
		Nollville	well	Medium
WuD	Wurno-Nollville channery silt loams, 15 to 25 percent slopes	Wurno	well	High (1)
		Nollville	well	High
WuE	Wurno-Nollville channery silt loams, 25 to 45 percent slopes	Wurno	well	High
		Nollville	well	High

(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