

APPENDIX E - SOIL USE LIMITATIONS



The following table is a summarization of soil use limitations identified on the NRCS website. This table is intended to help those planning to do earthmoving within the Commonwealth as well as plan designers to become aware of potential hazards that could arise if these soil use limitations are not incorporated into the overall design of the project. Earthmovers and designers are encouraged to consult the NRCS website for additional information about soil limitations and possible remedies.

The Department acknowledges that soil characteristics can and do vary from one location to another. However, a survey of the characteristics described by the NRCS website for the soils in each county found them to be remarkably similar from one county to another. In fact, the limitations varied little from county to county. Obviously, the potential for sinkhole development is pertinent to the areas of Pennsylvania affected by karst topography. Some soils considered prime farmland in some locations are listed as poor sources of topsoil in others. Soils with slope stability problems are more pertinent in areas with steeper terrain. Otherwise, the limitations are fairly consistent.

The information contained in this table as well as that on the NRCS website is most valuable when used as an indicator. It should not be used instead of an on-site investigation. Rather, it should be used to guide such investigations into areas where more data is required, such as wetland determinations, subsurface drilling and sampling, etc.

A quick overview of the limitations reveals some important facts:

1. Every soil in Pennsylvania has significant limitations that need to be addressed in the overall design of any project. Not all limitations will affect every project, but every project will be affected by some limitations.
2. Virtually all Pennsylvania soils (92% of those listed) are susceptible to caving of cut banks. It is imperative that appropriate precautions be taken to safeguard workers during all trenching and excavation operations. All applicable OSHA standards and regulations must be implemented at all times.
3. The vast majority of Pennsylvania soils are corrosive to concrete (82%), uncoated steel (67%), or both. Suitable precautions should be taken to protect all underground pipes, conduits, and storage tanks.
4. Most soils (64%) have relatively shallow depths to saturated zones and/or seasonal high water tables. Unless on-site data indicates otherwise, it should be assumed that excavations into these soils will encounter water and appropriate means provided to handle that water.
5. Most of Pennsylvania's soils (73%) have a relatively low strength. Precautions should be taken to prevent slope failures due to improper construction practices such as over-steepening and overloading of slopes, removal of lateral support, and failure to prevent saturation of slopes. Setbacks should comply with the standards contained in Chapter 16 unless it can be shown that proposed cuts and fills do not pose a hazard to public safety or to surface waters. Also, road fill material will likely need to be imported in areas where soils have low strength.
6. Most of the soils in Pennsylvania (86%) have zones within their profile with slow infiltration rates. Soil tests are strongly recommended for infiltration BMPs proposed as part of a PCSM plan. See Appendix A of Pennsylvania's Stormwater Best Management Practices Manual for additional guidance.
7. Two thirds (68%) of Pennsylvania soils are poor sources of topsoil — at least in some locales. Many have problems with being droughty or too wet. Soil tests are strongly recommended to determine the proper application of soil amendments to promote the growth of the desired vegetation. Wherever soils that are fair or good sources of topsoil may exist on a site, they should

be carefully preserved and stored for later use in restoration. The final design should also address the proper moisture content for the proposed vegetative cover.

8. Frost action is also a serious problem in Pennsylvania (86% of the soils susceptible). Precautions are needed to prevent damage, especially to roadways.
9. Although other limitations, such as shrink-swell and potential sinkholes are found in relatively small percentages of our soils, they tend to be concentrated and therefore quite common in certain regions of the state.

For a more comprehensive list of soil limitations, please log onto the NRCS website at:
<http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx> .

TABLE E.1 LIMITATIONS OF PENNSYLVANIA SOILS PERTAINING TO EARTHMOVING PROJECTS (Absence of an X does not mean “No Potential Limitation”)
NOTE: THIS IS NOT NECESSARILY AN ALL-INCLUSIVE LIST.

SOIL NAME	CUTBANKS CAVE	CORROSIVE TO CONCRETE/STEEL	DROUGHTY	EASILY ERODIBLE	FLOODING	DEPTH TO SATURATED ZONE/ SEASONAL HIGH WATER TABLE	HYDRIC/ HYDRIC INCLUSIONS	LOW STRENGTH / LANDSLIDE PRONE	SLOW PERCOLATION	PIPING	POOR SOURCE OF TOPSOIL	FROST ACTION	SHRINK - SWELL	POTENTIAL SINKHOLE	PONDING	WETNESS
Abbottstown	X	C/S		X		X	X	X	X	X	X	X				X
Aeric Epiacquents	X	C/S	X			X	X				X	X				X
Albrights	X	C/S	X	X		X	X	X	X	X	X	X				X
Alden	X	C/S				X	X	X	X	X	X	X	X		X	X
Aldino	X	C/S				X	X	X	X	X		X				
Allegheny	X	C		X			X	X	X	X	X	X				
Allenwood	X	C/S					X	X	X	X	X	X				
Allis	X	X	X			X	X	X	X	X	X	X	X			
Alluvial Land	X	C/S			X	X	X		X	X	X	X		X		X
Alton	X	C	X						X		X	X				
Alvira	X	C/S	X	X		X	X	X	X	X	X	X				X
Amwell	X	C/S		X		X	X	X	X	X		X				
Andover	X	C/S	X	X		X	X	X	X	X	X	X				X
Aquepts	X	C/S				X	X	X	X	X	X	X			X	X
Aquults	X	C/S		X		X		X	X	X	X	X	X			X
Arents							X									
Arendtsville	X	C	X			X			X	X	X	X				X
Armagh	X	C/S				X	X	X	X	X	X	X	X			X
Arnot	X	C	X	X				X	X		X	X				
Ashton	X				X			X	X	X						
Atherton	X	S				X	X	X	X	X	X	X			X	X
Athol	X	C					X		X	X	X	X				
Atkins	X	C/S			X	X	X	X	X	X	X	X				X
Bagtown	X	C				X	X		X		X	X				X
Baile	X	C/S		X		X	X	X	X	X	X	X	X		X	X
Barbour	X	C	X		X	X	X				X	X				X
Basher	X	C/S			X	X	X	X	X	X	X	X				X

SOIL NAME	CUTBANKS CAVE	CORROSIVE TO CONCRETE/STEEL*	DROUGHTY	EASILY ERODIBLE	FLOODING	DEPTH TO SATURATED ZONE/ SEASONAL HIGH WATER TABLE	HYDRIC/ HYDRIC INCLUSIONS	LOW STRENGTH / LANDSLIDE PRONE	SLOW PERCOLATION	PIPING	POOR SOURCE OF TOPSOIL	FROST ACTION	SHRINK - SWELL	POTENTIAL SINKHOLE	PONDING	WETNESS
Bath	X	C/S				X	X		X		X	X				
Beach & Riverwash	X	C/S				X	X	X		X		X				
Beach Sand	X	C/S			X	X	X		X		X					
Bedington	X	C	X	X			X		X		X	X				
Belmont				X									X			
Beltsville	X	C/S		X		X	X	X	X	X		X				
Benson	X	C	X					X	X	X	X	X				
Berks	X	C	X	X			X		X	X	X					
Bermudian	X	C		X	X	X	X	X		X	X	X				X
Berrien	X	S		X		X	X		X	X		X			X	
Bethesda	X	C/S	X			X	X	X	X		X	X				X
Birdsall	X	C/S				X	X	X	X	X	X	X	X		X	X
Birdsboro	X	C/S		X		X	X		X	X	X	X				X
Blairton	X	C/S		X		X	X	X	X	X	X	X				X
Bowmansville	X	C/S			X	X	X	X	X	X	X	X				X
Braceville	X	C/S	X	X		X	X	X	X	X	X	X				X
Brandywine	X	C	X	X				X	X		X					
Brecknock	X	C	X						X	X	X	X				
Brinkerton	X	C/S	X	X		X	X	X	X	X	X	X	X			X
Brooke	X	S						X	X		X	X	X			
Brownsburg	X	C		X			X	X	X	X	X	X				
Buchanan	X	C/S	X	X		X	X	X	X	X	X	X				X
Buckingham	X	C/S		X		X	X	X	X	X	X	X				X
Bucks	X	C						X	X	X	X	X	X			
Burgin						X		X	X			X	X			
Butlertown	X	C/S		X		X	X	X	X	X		X				
Califon	X	C/S				X		X	X			X				X
Calvert	X	C/S		X		X	X	X	X	X	X	X	X			X
Calvin	X	C	X	X			X			X		X				
Cambridge	X	C/S		X		X	X	X	X	X		X			X	X
Canadice	X	S		X		X	X	X	X		X	X	X		X	X
Canaseraga	X	C/S		X		X		X	X	X		X				X
Caneadea	X	C/S		X		X	X	X	X		X	X	X			X
Canfield	X	C/S		X		X	X	X	X	X		X				X
Carbo	X	S	X	X				X	X		X		X	X		
Catden	X	S				X		X	X			X			X	X
Carlisle	X	S				X	X		X			X			X	X
Catoctin	X	C/S	X								X					
Cattaraugus	X	C	X			X			X		X	X				
Cavode	X	C/S		X		X	X	X	X	X		X	X			X
Cedarcreek	X	C/S	X			X	X	X			X					
Ceres	X	C						X	X		X	X				
Chagrin	X	C		X	X	X	X	X	X	X		X	X		X	X

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Chalfont	X	C/S		X		X	X	X	X	X	X	X				X
Chavies		C		X	X			X		X		X				
Chenango	X	C	X		X	X	X		X	X	X	X				
Chester	X	C		X				X	X	X	X	X				
Chewacla	X	C/S			X	X	X	X	X	X		X				X
Chili	X	C					X	X	X		X	X				
Chippewa	X	C/S	X	X		X	X	X	X	X		X	X		X	
Chrome	X	C/S	X					X	X		X	X	X			
Clarksburg	X	C/S		X		X	X	X	X	X	X	X	X	X		X
Clearbrook	X	C/S	X				X	X	X	X	X	X	X			
Clymer	X	C	X	X			X	X	X	X	X	X				X
Codorus	X	C/S			X	X	X	X	X	X		X				X
Cokesbury	X					X			X	X		X				
Collamer	X	C/S		X		X	X	X	X	X		X				X
Colonie	X	C	X					X	X		X					
Comly	X	C/S	X	X		X	X			X	X	X				
Comus	X	C		X	X		X	X	X	X		X				
Conestoga	X	C/S						X	X	X		X		X		
Congaree	X	C		X	X		X	X	X	X		X				
Conotton	X	C/S	X	X		X	X	X	X	X	X	X				
Conowingo	X	C/S		X		X		X	X	X		X	X			X
Cookport	X	C/S	X	X		X	X	X	X	X	X	X				X
Covegap	X	C/S							X		X	X		X		
Craigsville	X	C	X		X		X	X			X	X				
Croton	X	C/S		X		X	X	X	X	X	X	X			X	X
Culleoka	X	C		X				X	X	X	X	X				
Culvers	X	C/S	X			X		X	X	X		X				X
Dalton	X	C/S		X		X	X		X	X	X	X			X	
Darien	X	C/S				X		X	X	X	X	X	X			X
DeKalb	X	C	X					X	X	X	X	X				
Delaware	X	C			X		X		X			X				
Deposit	X	C/S	X		X	X	X		X		X					X
Dormont	X	C/S		X		X	X	X	X	X	X	X	X	X		X
Downsville	X	C							X		X	X		X		
Doylestown	X	C/S	X	X		X	X	X	X	X	X	X				X
Drifton	X	C/S		X		X	X	X	X		X	X				
Dryrun	X	C/S		X		X	X		X		X	X				
Duffield	X	C/S		X			X	X	X	X	X		X	X		X
Duncannon	X	C		X				X	X	X		X				
Dunning	X	C/S		X	X	X	X	X	X		X		X	X	X	X
Dystrochrepts	X	C/S	X	X	X	X	X	X	X	X	X	X				
Edgemere	X	C/S				X	X	X	X	X	X	X			X	X
Edgemont	X	C	X				X		X		X	X				

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Edom	X	S	X	X				X	X	X	X	X	X	X	X	
Elk	X	C/S		X			X	X	X	X						
Elkins	X	c/s			X	X	X	X	X	X	X	X	X			
Elko	X	C/S	X			X		X	X			X	X			X
Ellery	X	C/S	X			X	X	X	X	X	X	X			X	X
Elliber	X	C	X						X		X	X		X		
Elnora	X	C	X			X			X		X					X
Empyville	X	C	X			X	X		X		X	X				
Erie	X	S	X	X		X	X	X	X	X	X	X			X	X
Ernest	X	C/S		X		X	X	X	X	X	X	X	X			X
Evendale	X	C/S				X	X	X	X	X	X	X	X	X		X
Fairplay	X	S		X	X	X	X	X	X	X	X	X			X	
Fairpoint	X	C/S	X				X	X	X		X	X	X	X		
Fitchville	X	C/S				X	X	X	X	X	X	X	X			X
Fountainville	X	C/S		X		X		X	X	X		X				
Fleetwood	X	C	X					X			X					X
Fluvents	X	C/S	X	X	X	X	X			X		X				
Fluvequents	X	C/S	X	X	X	X	X	X		X		X				
Fredon	X	C/S	X	X		X	X	X	X		X	X				X
Freetown	X	C/S				X	X	X				X			X	
Frenchtown	X	C/S		X		X	X	X	X	X	X	X			X	X
Freshwater Marsh	X	S				X	X	X	X		X	X			X	
Funkstown	X	S		X	X	X		X	X	X		X				X
Gageville	X	C/S		X		X		X	X	X	X	X	X			X
Gaila	X	C/S						X	X		X	X				
Gibraltar	X	C/S		X	X	X	X	X	X	X		X				
Gilpin	X	C	X	X			X	X	X	X	X	X				
Ginat	X	C/S		X		X	X	X	X	X	X	X	X		X	X
Gladstone	X	C		X			X		X			X	X			
Glenelg	X	C		X			X	X	X	X	X	X				X
Gleneyre	X	C/S			X	X	X	X	X	X	X	X			X	X
Glenford	X	C/S				X	X	X	X	X		X	X			
Glenville	X	C/S				X	X	X	X	X	X	X				X
Gresham		X		X			X	X	X	X		X				X
Guernsey	X	C/S		X		X	X	X	X		X	X	X	X		X
Guthrie							X									
Hagerstown	X	S		X		X	X	X	X	X	X	X	X	X		
Halsey	X	C/S		X	X	X	X	X	X	X	X	X				X
Hanover	X	C/S				X	X	X	X	X		X	X			
Harbor	X	C/S				X		X	X			X	X			
Haplaquents							X									
Hartleton	X	C	X					X	X	X	X	X				
Hatboro	X	C/S			X	X	X	X	X	X	X	X				X

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Haven	X	C	X					X	X			X				
Hazleton	X	C	X	X			X	X	X	X	X	X				
Henrietta	X					X		X	X		X	X			X	
Highfield	X	C	X				X		X		X	X				
Hollinger	X	C						X	X	X		X		X		
Holly	X	C/S			X	X	X	X	X	X	X	X			X	X
Hornell	X	C/S	X	X		X		X	X		X	X	X			X
Howard	X		X	X			X		X		X	X				
Howell	X	C/S		X		X		X		X		X	X			
Hublersburg	X	C/S						X	X	X	X	X	X			
Huntington	X	C			X	X	X	X				X		X		
Hustontown	X	C/S	X			X	X		X	X		X				
Itmann	X	C/S	X					X	X		X	X				
Ivory	X	C/S		X		X	X	X	X	X	X	X	X			
Jimtown	X	C/S				X	X	X			X	X				X
Joanna	X	C					X	X	X	X		X				
Jugtown	X	S			X	X	X	X	X	X		X		X		
Kedron	X	C/S				X	X	X	X	X	X	X				X
Kanona							X									
Kimbles	X	C/S				X	X	X	X		X	X				X
Kingsville	X	C/S	X			X	X		X		X	X			X	X
Kinzua	X	C						X	X		X	X				
Klinesville	X	C/S	X	X			X		X		X	X				
Knauers	X	C/S	X		X	X	X	X	X		X	X			X	X
Kreamer	X	C/S		X		X	X	X	X	X		X		X		
Lackawanna	X	C	X			X	X	X			X	X				X
Laidig	X	C/S	X	X		X	X	X	X	X	X	X				
Lakin	X	C	X						X							
Lamington	X	C/S		X		X	X		X	X	X	X			X	X
Langford	X	S	X	X		X	X	X	X		X	X			X	X
Lansdale	X	C	X					X	X		X	X				
Lantz	X	C/S		X	X	X	X	X	X	X	X	X	X			X
Lawrenceville	X	C/S		X		X	X	X	X	X		X				X
Leck Kill	X	C						X	X	X	X	X				X
Leetonia	X	C	X	X			X				X					
Legore	X	C/S	X					X	X	X	X	X	X			
Lehew	X	C	X						X		X					
Lehigh	X	C/S				X	X		X	X	X	X				X
Lewisberry		C								X	X	X				
Library	X	C/S		X		X	X	X	X		X	X	X	X		X
Lickdale	X	C/S		X		X	X	X	X		X	X	X			
Linden	X	C			X	X	X	X	X	X		X				
Lindside	X	S			X	X	X	X	X	X		X		X		X

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Lobdell	X	C/S		X	X	X	X	X	X	X		X	X			X
Lordstown	X	C	X	X				X	X	X		X				
Loudonville	X	C/S						X	X	X		X	X			
Lowell	X	C/S						X	X	X	X	X	X	X		
Luray		X		X		X		X	X	X	X	X	X		X	X
Macove	X	C/S						X	X		X	X				
Mahoning	X	C/S		X		X	X	X	X	X	X	X	X		X	X
Manlius	X	C	X				X		X		X	X				
Manor	X	C		X				X	X	X	X	X				
Mardin	X	S	X	X		X	X	X	X	X		X				X
Markes	X	C/S	X			X		X	X		X	X				X
Matapeake	X	C/S		X			X	X	X			X				
Matewan	X	C	X						X		X					
Mattapex	X	C/S		X		X	X	X	X	X		X				
Maurertown	X	C/S		X	X	X	X	X	X	X	X	X	X		X	
Meckesville	X	C/S				X		X	X	X	X	X				X
Medihemists	X	S				X	X	X				X			X	X
Medifibrists	X	S				X	X					X			X	X
Medisaprists		S				X	X	X				X			X	X
Melvin	X	S		X	X	X	X	X	X	X	X	X	X	X	X	X
Mertz	X	C/S								X		X				
Middlebury	X	S			X	X	X		X	X		X	X			
Mill	X	C/S				X	X	X	X	X	X	X	X		X	X
Millheim		C/S		X				X	X	X	X		X			
Miner	X	C/S				X	X	X	X		X	X	X		X	X
Monongahela	X	C/S		X		X	X	X	X	X		X	X			X
Montalto	X	C/S					X	X	X		X	X	X			
Montevallo		C/S	X				X	X			X	X				
Morris	X	C/S	X	X		X	X	X	X		X	X				X
Morrison	X	C		X				X	X			X		X		
Mt. Airy	X	C	X				X				X	X				
Mt. Lucas	X	C/S				X	X	X	X	X	X	X				X
Mt. Zion	X	C/S		X		X	X	X	X	X	X	X	X			
Muck		X			X	X	X			X					X	X
Muck and Peat	X	S				X	X	X	X		X	X	X		X	X
Murrill	X	C/S					X	X	X	X	X	X		X		
Myersville	X	C/S						X	X	X	X	X				
Nanticoke	X	C			X	X	X	X	X	X	X				X	X
Natalie							X									
Neshaminy	X	C/S				X	X	X	X	X	X	X				
Newark	X	S		X	X	X	X	X	X	X	X	X		X		
Nockamixon	X	C/S		X		X	X	X	X	X		X				X
Nolin	X	C			X	X	X	X	X	X				X		

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Nollville	X	C/S						X	X		X	X	X	X		
Nolo	X	C/S	X			X	X	X	X	X	X	X				X
Norwich	X	C/S	X	X		X	X	X	X		X	X			X	X
Ochrepts	X	C	X						X		X	X				
Onoville	X	C/S	X			X		X	X	X	X	X	X			X
Opequon	X	S	X	X				X	X		X	X	X	X		
Oquaga	X	C	X	X			X		X			X				
Orrville	X	C/S			X	X	X	X	X	X		X				X
Otego	X	S		X	X	X		X	X	X		X				X
Othello	X	C/S				X	X	X	X	X	X	X				X
Ottawa	X	C	X						X			X				
Painesville	X	C/S				X	X		X	X	X	X				X
Palms	X	C/S				X	X	X	X		X	X			X	X
Papakating	X	C/S			X	X	X	X	X	X	X	X			X	X
Parker	X	C	X						X		X	X				
Paupack	X	S				X	X		X			X			X	X
Pecktonville	X	C/S		X		X		X	X		X	X	X	X		
Pekin					X		X			X		X				
Pen Argyl	X	C										X				
Penlaw	X	C/S		X		X	X	X	X	X	X	X	X	X		X
Penn	X	C	X				X	X		X	X	X				
Penn Val	X	C/S							X		X	X				
Pequea	X			X						X	X	X				
Phelps	X	S		X		X	X		X	X	X	X				X
Philo	X	C/S		X	X	X	X	X	X	X	X	X				X
Platea	X	C/S		X		X	X	X	X	X		X				X
Pocono	X	C	X						X		X					
Pope	X	C/S		X	X		X	X	X	X	X	X				
Portville	X	C/S				X	X		X	X	X	X	X			
Potomac	X	C	X		X						X					
Psammets	X	C	X		X	X			X		X					
Purdy	X	C/S		X		X	X	X	X	X	X	X	X			X
Rainsboro	X	X		X		X	X	X	X			X				
Ramsey		C	X						X		X					
Raritan	X	C/S				X	X		X	X	X	X				X
Ravenna		C/S		X		X			X	X	X	X				X
Ravenrock	X	C/S				X			X		X	X				
Rayne	X	C		X				X	X	X	X	X				
Readington	X	C/S		X		X	X	X	X	X	X	X				X
Reaville	X	C/S	X	X		X	X		X	X	X	X				X
Red Hook	X	C/S		X	X	X	X		X	X	X	X				
Rexford	X	C/S	X		X	X	X	X	X	X	X	X				X
Rimer	X	C/S	X	X		X	X		X	X	X	X	X			X

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Riverhead	X	C	X					X	X		X	X				X
Riverwash							X									
Rohrersville	X	C/S		X		X	X	X	X	X		X	X			X
Rowland	X	C/S		X	X	X	X	X	X	X	X	X				X
Rubble Land											X					
Rushtown	X	C	X						X							
Ryder	X	C/S						X	X	X		X		X		
Sassafras	X	C						X	X			X				
Scio	X	C/S		X		X	X	X	X	X		X				X
Sciotoville	X	C/S		X		X	X	X	X	X		X	X			X
Sebring	X	C/S				X	X	X	X	X	X	X	X		X	X
Sequatchie		X		X						X						
Sheffield	X	C/S				X	X	X	X	X		X			X	
Shelmadine	X	C/S	X			X	X	X	X	X	X	X				
Shelocta	X	C						X	X		X	X				
Shohola	X	C/S	X			X	X	X	X	X	X	X				X
Shongo	X	C/S				X	X	X	X	X	X	X	X			X
Sideling	X	C/S				X			X	X	X	X	X			
Skidmore	X	C	X		X	X	X		X		X					
Sloan	X	S		X	X	X	X	X	X	X	X	X	X			X
Solon	X	C	X					X			X	X				
Stanhope	X	C/S		X	X	X	X	X	X	X	X	X	X			X
Steff					X	X	X	X				X				
Steinsburg	X	C	X						X		X					
Stoney Land											X					
Swanpond	X	S		X		X		X	X		X	X	X			X
Suncook	X	C	X		X		X		X		X					
Swartswood	X	C	X	X		X		X	X	X	X					
Thorndale	X	C/S				X	X	X	X	X	X	X	X	X		X
Thurmont	X	C/S				X		X	X		X	X				
Tilsit	X	C/S		X		X	X	X	X	X						X
Tioga	X	C		X	X	X	X		X							
Timberville	X	C			X			X	X	X	X	X	X			
Titusville	X	C/S		X		X	X	X	X	X		X	X			X
Towhee	X			X		X	X	X	X	X	X	X	X			
Trego	X	C/S		X		X		X	X		X	X	X			
Trumbull	X	C/S		X		X	X	X	X	X	X	X	X		X	X
Tunkhannock	X	C	X				X		X		X					
Tygart	X	C/S		X		X	X	X	X	X	X	X	X			X
Tyler	X	C/S		X		X	X	X	X	X	X	X	X			X
Udifluents	X	C/S			X	X	X		X	X		X				
Udorthents	X	C/S	X	X				X	X		X	X				
Unadilla	X	C		X			X	X	X	X		X				

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Ungers	X	C		X				X	X			X				
Upshur	X	C/S	X	X				X	X		X	X	X			
Urbana						X						X				
Valois	X	C					X	X	X		X	X				
Vandergrift	X	C/S		X			X	X	X		X	X	X			X
Vanderlip	X	C	X						X							
Venango	X	C/S		X		X	X	X	X	X	X	X				X
Volusia	X	C/S	X	X		X	X	X	X	X	X	X				
Wallington	X	C/S		X		X	X	X	X	X	X	X				X
Warners		S		X	X	X	X	X	X		X	X			X	X
Washington	X	S				X	X	X	X	X		X	X	X		
Watchung	X	C/S		X		X	X	X	X	X	X	X	X			X
Watson	X	C/S	X			X	X	X	X	X		X	X			
Wauseon	X	C/S				X	X	X	X	X	X	X			X	X
Wayland	X	S		X	X	X	X	X	X	X	X	X			X	X
Wehadkee	X	C/S			X	X		X	X	X		X				X
Weikert	X	C/S	X				X	X	X	X	X	X				
Weinbach	X	C/S		X		X	X	X	X	X	X	X	X			X
Wellsboro	X	C/S	X	X		X	X	X	X	X		X				X
Westmoreland	X	C		X				X	X	X		X				
Weverton	X	C/S	X					X	X		X	X				
Wharton	X	C/S		X		X	X	X	X	X	X	X	X			X
Wheeling	X	C						X	X	X		X				
Whiteford																
Whitwell																
Wick	X	C/S		X	X	X	X	X	X	X	X	X				X
Wickham																
Williamson	X	C/S		X		X	X	X	X	X		X				X
Wiltshire					X					X						
Woodglen																
Woodstown	X	C/S				X		X	X	X	X	X				X
Wooster	X	C		X		X		X	X	X	X	X				
Worsham	X	C/S		X		X	X	X	X	X	X	X	X			
Worth	X	C	X	X		X	X		X	X	X	X				
Wurno	X		X					X	X		X	X		X		
Wurstboro	X	C/S				X	X		X		X	X				
Wyalusing	X	C/S			X	X	X	X	X		X	X				X
Wyoming	X	C	X				X		X		X					
Zipp		X				X	X	X		X	X	X	X			
Zoar	X	C/S				X	X	X	X	X		X	X			