

APPENDIX F

SOIL LIMITATIONS TO VEGETATIVE MANAGEMENT ACTIVITIES

INTRODUCTION

The following tables indicate the suitability and capability of the various soil mapping units on the Forest for vegetative management activities. These tables supplement information contained in the USDA published soil surveys of the various counties in which the forest lies. They are provided as guides to help plan and design harvesting, regeneration, and silvicultural activities. A moderate or severe rating alerts the Forest land manager that some site factor or mitigating measure should be reviewed or considered early in the planning stage of project implementation.

Table F-1, pages F-5 to F-18, presents information on limitations to the normal timber harvesting activities of haul road and major skid road construction, log landing construction, and equipment operability for logging areas.

Table F-2, page F-21 to F-31, has information on soil ratings for regeneration and silvicultural activities of mechanized site preparation and planting equipment, chemical site preparation and timber stand improvement, and prescribed fire.

LIMIT TO NORMAL TIMBER HARVEST ACTIVITIES

DESCRIPTION OF TABLE F-1 ITEMS (Page F-5)

Column 1: The soil name and map unit symbol are listed.

Column 2: (Haul Road and Major Skid Trail Location):

The intent of this rating is to indicate the degree and kind of limitations for location and construction of haul roads, and location of major skid trails associated with timber harvest activities. These ratings apply primarily to "low standard" haul roads, but should also be indicative of problems and relative costs associated with higher standard roads. The major difference is that a shallow depth to bedrock would be more critical on higher standard roads due to more cutting required in construction.

Considerable soil compaction can be expected on haul roads and major skid trails. Soils are rated on the properties that influence traffic ability and use of hauling equipment. The properties considered are, texture, Unified and AASHTO groups, depth to bedrock, duration and depth of water table, drainage, flooding, slope, surface stoniness and rock outcrops, erodibility and stability.

This rating is intended to be a guide to the relative physical suitability of alternative locations. It is not intended to provide specific design information as this requires on-site investigations. It should, however, provide some preliminary information for design consideration, especially as related to soil materials and drainage characteristics.

Subcolumn 2a:

Degree of limitation: This is rated "slight", "moderate", or "severe", according to the following definitions.

SLIGHT: No serious limitations to location, construction, long-term maintenance, season of use, or returning to forest production.

MODERATE: There is/are some limitation(s) which can be overcome through the application of routine construction techniques. Initial location, construction and/or maintenance costs will be higher than if rated slight. Temporary facility locations may be more difficult to return to desired condition than if rated "slight." Season of use may be somewhat limited.

SEVERE: There is/are some limitation(s) which would require the application of extraordinary and/or expensive techniques to overcome. Location, construction and/or maintenance costs would be high, or season of use may be severely restricted. There may be significant risk of environmental damage from constructing roads or locating trails on these areas unless special design techniques are used.

Subcolumn 2b:

Limiting Factor(s): If entry in column 2a is "slight", this entry is usually left blank. If entry in column 2a is "moderate" or "severe", the limiting site characteristic(s) is/are listed.

Column 3:

Log Landing Location: The intent of this rating is to indicate degree and kind of limitations for location of log landings.

This rating is intended to be a guide to the relative physical suitability of alternative locations. Soils are rated on the properties that influence trafficability and use of hauling and loading equipment. Soil properties considered are texture of surface layer and subsoil, slope, stoniness, depth to bedrock, drainage, wetness, flooding, erodibility, and stability. Slope affects equipment use, erodibility and cutting and filling needed. Large stones and boulders that are difficult to move affect equipment operability, configuration and location of landings. Wetness and flooding affect frequency and duration of use. Soil texture affects erodibility and trafficability. Stability reflects the possibility of mass slippage during and following use.

Subcolumn 3a:

Degree of Limitation: This is rated "slight", "moderate", or "severe", according to the following definitions.

SLIGHT: No serious limitations to location, season of use or returning to forest production.

MODERATE: There is/are some limitations(s) which can be overcome through such practices as grading, surfacing, drainage, etc. Landings located on these areas are usually more difficult to return to forest resource production than if rated "slight". Season of use may be somewhat limited.

SEVERE: There is/are some limitations which would require the application of extraordinary and/or expensive techniques to overcome. Costs of establishment and maintenance would be high, or season of use may be severely restricted. There may be significant risk of environmental damage from constructing log landings on these sites. Temporary landing locations may be difficult or impossible to return to desired condition.

Subcolumn 3b:

Limiting Factor(s): If entry in column 3a is "slight", this entry is usually left blank. If entry in column 3a is "moderate" or "severe", the limiting site characteristic(s) is/are listed.

Column 4:

Equipment Operability for Logging Areas: "Logging Areas" refers to the general logging area from the stump to a major skid trail. The "slight", "moderate", and "severe" adjective ratings apply primarily to the rubber-tired skidder. The definitions and subsequent subcolumns are intended to suggest that other types of log-moving equipment can sometimes be utilized to reduce or overcome site limitations that would apply to the rubber-tired skidder. Soils are rated on the properties that influence trafficability, erodability and stability. The site characteristics considered are slope, stability, wetness, drainage, stoniness and surface texture.

Subcolumn 4a:

Degree of Limitation is rated "Slight", "Moderate", or "Severe" according to the following definitions.

SLIGHT: Physical site characteristics impose little or no limitations on kind of equipment or time of operation.

MODERATE: Some limitations in kind of equipment and/or times of operation are needed in order to permit efficient equipment use and/or limit environmental damage.

SEVERE: Special equipment and/or techniques are needed, and/or time of efficient operation is very limited.

Subcolumn 4b:

Limiting factor(s): If the corresponding entry in Subcolumn 3a is "slight", this column is normally left blank; if "moderate" or "severe", the limiting site characteristic(s) is/are named.

Subcolumn 4c:

Operating period: This rating reflects a "best estimate" of the period of a normal year that a rubber tired skidder could be operated efficiently, unhampered by site characteristics, and without causing significant environmental damage. The rating is a range of the total number of months of the year that the rubber-tired skidder could be safely and efficiently operated. Note that on problem sites, this operating period could normally be extended through the use of high-flotation or track-type skidders, and/or high lead cable logging equipment. The following classes of rating periods are suggestions. The Forest may adjust these periods to better fit local conditions.

**Operating Season
No. Months**

Explanation

- 11-12 Year-long, no significant problems. Limited 1 to 3 days following significant rainfall during spring, summer, and fall.
- 9-11 Normally limited only during spring thaw, and for less than 3 to 4 days following significant rainfall during spring, summer and fall.
- 6-9 Limitations persist about 1 month following spring thaw, and for about a week following significant rainfall events during spring, summer, and fall.
- 3-6 Limitations normally persist throughout the spring months, in late fall before freeze, and for a week or more following significant rainfall events.
- 1-3 Limitations normally persist throughout the year except during the frozen winter period.
- 0 Normally too steep, too unstable, or too wet to consider the use of rubber-tired skidders.

TABLE F-1
SOIL RATINGS FOR TIMBER HARVEST ACTIVITIES

| (1) Soil Name/ Map Unit Symbol | Haul Road/Major Skid Trail (2) | | Log Landings (3) | | Equipment Operability for Logging Areas (4) | | |
|---|-----------------------------------|------------------------------|---------------------------------|------------------------------|--|----------------------------|--|
| | (2a) Degree of Limitation | (2b) Limiting Factors | (3a) Degree of Limitation | (3b) Limiting Factor | (4a) Degree of Limitation | (4b) Limiting Factor | Operating Period (4c) (No. Mos.) |
| Alford AfB AfC | Moderate Moderate | Texture Texture | Moderate Moderate | Texture Texture, Slope | Slight Slight | - - | 11-12 11-12 |
| AfD | Moderate | Texture, Slope | Severe | Slope | Slight | - | 11-12 |
| Allegheny AgB, AlB AgC, AIC, AkC | Moderate Moderate | Texture Texture | Moderate Moderate | Texture Texture, Slope | Slight Slight | - - | 11-12 11-12 |
| AID, AkD | Moderate | Texture Slope, Slope | Severe | Slope | Slight | - | 11-12 |
| AIG | Severe | Slope | Severe | Slope | Severe | Slope | 11-12 |
| Barkcamp BoD BaF, BoF | Moderate Severe | Slope Slope | Severe Severe | Slope Slope | Slight Severe | - Slope | 11-12 11-12 |
| Berks BeC | Moderate | Texture | Moderate | Texture, Slope | Slight | - | 11-12 |
| Berks- Westmoreland BkD BkE | Moderate Moderate | Texture Texture, Slope | Severe Severe | Slope Slope | Moderate Moderate | Slope Slope | 11-12 11-12 |
| BkF | Severe | Slope | Severe | Slope | Severe | Slope | 11-12 |
| Belpre BeC | Moderate | Texture | Moderate | Slope, Texture | Slight | - | 11-12 |
| BeD | Moderate | Texture, Slope | Severe | Slope | Slight | - | 11-12 |
| BeE | Moderate | Texture, Slope | Severe | Slope | Moderate | Slope | 11-12 |
| BeF | Severe | Slope | Severe | Slope | Moderate | Slope | 11-12 |

TABLE F-1 (continued)
SOIL RATINGS FOR TIMBER HARVEST ACTIVITIES

| (1) Soil Name/ Map Unit Symbol | Haul Road/Major Skid Trail (2) | | Log Landings (3) | | Equipment Operability for Logging Areas (4) | | |
|---|--|---|--|--|--|--|--|
| | (2a) Degree of Limitation | (2b) Limiting Factors | (3a) Degree of Limitation | (3b) Limiting Factor | (4a) Degree of Limitation | (4b) Limiting Factor | Operating Period (4c) (No. Mos.) |
| Bethesda BhB, BkB, BtB BtC BhD, BkD BoD BtE, BoE BoF, BhF, BkF | Moderate Moderate Moderate Moderate | Texture Texture Texture Texture, Slope | Moderate Moderate Severe Severe | Slope Slope Slope Slope | Slight Slight Moderate | - - Slope | 11-12 11-12 11-12 |
| Brookside BrC, BsC BrD, BsD BrE, BsE BtF | Moderate Moderate Moderate Severe | Texture Texture, Slope Texture, Slope | Moderate Severe Severe Severe | Texture, Slope Slope Slope Slope | Slight Moderate Moderate Moderate | - Slope Slope Slope | 11-12 11-12 11-12 11-12 |
| Chagrin Cg, Cd | Moderate | Texture | Moderate | Texture | Slight | - | 11-12 |
| Chili ChA ChB ChC | Moderate Moderate Moderate | Texture Texture Texture | Moderate Moderate Moderate | Texture Texture Texture, Slope | Slight Slight Slight | - - - | 11-12 11-12 11-12 |
| Coolville CoB | Moderate | Texture | Moderate | Texture | Slight | - | 11-12 |
| Coolville- Rarden CpC, CrC2 CrD2 | Moderate Moderate | Texture Texture, Slope | Moderate Severe | Texture, Slope Slope | Slight Moderate | - Slope | 11-12 11-12 |
| Cuba Cu | Moderate | Texture | Moderate | Texture | Slight | - | 11-12 |
| Culleoka-Upshur Cp C2 Cp D2 | Moderate Moderate | Texture Texture | Moderate Severe | Texture Slope | Slight Slight | - - | 11-12 11-12 |
| Culleoka- Steinsburg- Vandalia CsE | Moderate | Texture, Slope | Severe | Slope | Moderate | Slope | 11-12 |

TABLE F-1 (continued)
SOIL RATINGS FOR TIMBER HARVEST ACTIVITIES

| (1) Soil Name/ Map Unit Symbol | Haul Road/Major Skid Trail (2) | | Log Landings (3) | | Equipment Operability for Logging Areas (4) | | |
|---|--|---|--|--|--|------------------------------|--|
| | (2a) Degree of Limitation | (2b) Limiting Factors | (3a) Degree of Limitation | (3b) Limiting Factor | (4a) Degree of Limitation | (4b) Limiting Factor | Operating Period (4c) (No. Mos.) |
| DeKalb CkC, DkC2 | Moderate | Texture | Moderate | Texture, Slope | Slight | - | 11-12 |
| DkD, DkD2 DkE, DkE2 | Moderate Moderate | Texture Texture, Slope | Severe Severe | Slope Slope | Moderate Moderate | Slope Slope | 11-12 11-12 |
| DkF | Severe | Slope | Severe | Slope | Severe | Slope | 11-12 |
| DeKalb-Gilpin, Stony DsG | Severe | Slope | Severe | Slope | Severe | Slope | 11-12 |
| DeKalb-Rock Outcrop DkF | Severe | Slope | Severe | Slope | Severe | Slope | 11-12 |
| DeKalb-Stony loam DmF | Severe | Slope | Severe | Slope | Severe | Slope | 11-12 |
| DeKalb- Westmoreland DtD DtE | Moderate Moderate | Texture Texture, Slope | Severe Severe | Slope Slope | Moderate Slight | Slope - | 11-12 11-12 |
| DtF, DuF | Severe | Slope | Severe | Slope | Severe | Slope | 11-12 |
| Elba-Belpre Complex EID EIE EIF | Moderate Moderate Severe | Texture, Slope Texture, Slope Slope | Severe Severe Severe | Slope Slope Slope | Slight Moderate Moderate | - Slope Slope | 11-12 11-12 11-12 |
| Elba-Brookside- Berks Complex EbF | Severe | Slope | Severe | Slope | Severe | Slope | 11-12 |
| Enoch EnE | Moderate | Texture, Slope | Severe | Slope | Moderate | Slope | 11-12 |
| Fairpoint FaB FaD, FbD FbE FbF | Moderate Moderate Severe Severe | Texture Texture Slope Slope Slope | Moderate Severe Severe Severe | Texture, Slope Slope Slope Slope | Slight Moderate Severe Severe | - Slope Slope Slope | 11-12 11-12 11-12 11-12 |

TABLE F-1 (continued)
SOIL RATINGS FOR TIMBER HARVEST ACTIVITIES

| (1) Soil Name/ Map Unit Symbol | Haul Road/Major Skid Trail (2) | | Log Landings (3) | | Equipment Operability for Logging Areas (4) | | |
|--|-----------------------------------|-----------------------------|---------------------------------|------------------------------|--|----------------------------|--|
| | (2a) Degree of Limitation | (2b) Limiting Factors | (3a) Degree of Limitation | (3b) Limiting Factor | (4a) Degree of Limitation | (4b) Limiting Factor | Operating Period (4c) (No. Mos.) |
| Genesee Ge | Moderate | Texture | Moderate | Texture | Slight | - | 9-11 |
| Gilpin GdB GdC | Moderate Moderate | Texture Texture | Moderate Moderate | Texture Texture, Slope | Slight Slight | - - | 11-12 11-12 |
| GdD | Moderate | Texture, Slope | Severe | Slope | Moderate | Slope | 11-12 |
| GdE GdF | Severe Severe | Slope Slope | Severe Severe | Slope Slope | Moderate Severe | Slope Slope | 11-12 11-12 |
| Gilpin and DeKalb GdE GdG | Severe Severe | Slope Slope | Severe Severe | Slope Slope | Slight Severe | - Slope | 11-12 11-12 |
| Gilpin-Upshur Complex benched GIE GIG | Moderate Severe | Texture Slope | Moderate Severe | Texture, Slope Slope | Slight Severe | - Slope | 11-12 11-12 |
| Gilpin-Upshur Complex GkB2 GkC2 | Moderate Moderate | Texture Texture | Moderate Moderate | Texture Texture, Slope | Slight Slight | - - | 11-12 11-12 |
| GkD, GkD2 | Moderate | Texture | Moderate | Texture, Slope | Slight | - | 11-12 |
| GnE,GkE2,GkE3 GkG, GnG, GkG3 | Severe Severe | Slope Slope | Severe Severe | Slope Slope | Moderate Severe | Slope Slope | 11-12 11-12 |
| Gilpin-Latham GmD | Moderate | Texture | Moderate | Texture, Slope | Slight | - | 11-12 |
| Gilpin-Rarden GdE | Severe | Slope | Severe | Slope | Moderate | Slope | 11-12 |
| Gilpin- Westmoreland GoB2 GoC2 | Moderate Moderate | Texture Texture | Moderate Moderate | Texture Texture, Slope | Slight Slight | - - | 11-12 11-12 |
| CoD2, GoD3 | Moderate | Texture | Moderate | Texture, Slope | Slight | - | 11-12 |
| CoE2, GoE3 CpG, GoG2 | Severe Severe | Slope Slope | Severe Severe | Slope Slope | Moderate Severe | Slope Slope | 11-12 |

TABLE F-1 (continued)
SOIL RATINGS FOR TIMBER HARVEST ACTIVITIES

| (1) Soil Name/ Map Unit Symbol | Haul Road/Major Skid Trail (2) | | Log Landings (3) | | Equipment Operability for Logging Areas (4) | | |
|---|--|--|--|--|--|----------------------------------|--|
| | (2a) Degree of Limitation | (2b) Limiting Factors | (3a) Degree of Limitation | (3b) Limiting Factor | (4a) Degree of Limitation | (4b) Limiting Factor | Operating Period (4c) (No. Mos.) |
| Glenford GfA, GmA, GnA GfB, GmB, GnB GnC | Moderate Moderate Moderate | Texture Texture Texture | Moderate Moderate Moderate | Texture Texture Texture, Slope | Slight Slight Slight | - - - | 11-12 11-12 11-12 |
| Guernsey GsB GsC, GuC | Moderate Moderate | Texture Texture | Moderate Moderate | Texture Texture, Slope | Slight Slight | - - | 11-12 11-12 |
| Guernsey-Upshur Complex GuC, GrC2 GuD, GrD2 GuE, GrE2 GsG, GrG2, GuG | Moderate Moderate Severe Severe | Texture Texture Slope Slope | Moderate Moderate Severe Severe | Texture, Slope Texture, Slope Slope Slope | Slight Slight Moderate Severe | - - Slope Slope | 11-12 11-12 11-12 11-12 |
| Guernsey- Westmore GwC2 GwD2 GwE2, GwE3 GwG2 | Moderate Moderate Severe Severe | Texture Texture Slope Slope | Moderate Moderate Severe Severe | Texture, Slope Texture, Slope Slope Slope | Slight Slight Severe Severe | - - Slope Slope | 11-12 11-12 11-12 11-12 |
| Guernsey- Westmoreland GwC GwD GwE | Moderate Moderate Severe | Texture Texture Slope | Moderate Moderate Severe | Texture, Slope Texture, Slope Slope | Slight Slight Moderate | - - Slope | 11-12 11-12 11-12 |
| Lily LhC, LnC LgD, LnD | Moderate Moderate | Texture Texture, Slope | Moderate Severe | Texture, Slope Slope | Slight Moderate | - Slope | 11-12 11-12 |
| Lily-Upshur Complex LkD | Moderate | Texture, Slope | Severe | Slope | Moderate | Slope | 11-12 |

TABLE F-1 (continued)
SOIL RATINGS FOR TIMBER HARVEST ACTIVITIES

| (1) Soil Name/ Map Unit Symbol | Haul Road/Major Skid Trail (2) | | Log Landings (3) | | Equipment Operability for Logging Areas (4) | | |
|---|-----------------------------------|---|----------------------------------|---|--|----------------------------|---|
| | (2a) Degree of Limitation | (2b) Limiting Factors | (3a) Degree of Limitation | (3b) Limiting Factor | (4a) Degree of Limitation | (4b) Limiting Factor | Operating Period (4c) (No. Mos.) |
| Linside Ln, Lh | Moderate | Texture | Moderate | Texture | Slight | - | 9-11 |
| Melvin Md, Me, Mh | Severe | Drainage | Severe | Drainage | Moderate | Wetness | 6-9 |
| Mentor MeA MeB MeC | Moderate Moderate Moderate | Texture Texture Texture | Moderate Moderate Moderate | Texture Texture Texture, Slope | Slight Slight Slight | - - - | 11-12 11-12 11-12 |
| Negley NeC NeG | Moderate Severe | Texture Slope | Moderate Severe | Texture Slope | Slight Severe | - Slope | 11-12 11-12 |
| Newark Ne, Nn | Severe | Drainage | Severe | Drainage | Slight | - | 9-11 |
| Nolin No | Moderate | Texture | Moderate | Texture | Slight | - | 11-12 |
| Omulga OmB, OtB OmC, OtC | Moderate Moderate | Texture Texture | Moderate Moderate | Texture Texture, Slope | Slight Slight | - - | 11-12 11-12 |
| Orrville Or | Moderate | Texture | Moderate | Texture | Slight | - | 11-12 |
| Rarden-Coolville RcD2 | Moderate | Texture, Slope | Severe | Slope | Moderate | Slope | 11-12 |
| Rarden-Gilpin RbC2 RbD2 | Moderate Moderate | Texture Texture, Slope | Moderate Severe | Texture Slope | Slight Moderate | - Slope | 11-12 11-12 |
| Shelocta SbB SbC SbC | Moderate Moderate Moderate | Texture Texture Texture, Slope | Moderate Moderate Severe | Texture Texture Slope | Slight Slight Moderate | - - Slope | 11-12 11-12 11-12 |
| Shelocta-Berks Association SbE | Severe | Slope | Severe | Slope | Moderate | Slope | 11-12 |
| Shelocta- Browns- ville Assoc. ScE ScF | Severe Severe | Slope Slope | Severe Severe | Slope Slope | Moderate Severe | Slope Slope | 11-12 11-12 |

TABLE F-1 (continued)
SOIL RATINGS FOR TIMBER HARVEST ACTIVITIES

| (1) Soil Name/ Map Unit Symbol | Haul Road/Major Skid Trail (2) | | Log Landings (3) | | Equipment Operability for Logging Areas (4) | | |
|---|-----------------------------------|-----------------------------|---------------------------------|----------------------------|--|----------------------------|---|
| | (2a) Degree of Limitation | (2b) Limiting Factors | (3a) Degree of Limitation | (3b) Limiting Factor | (4a) Degree of Limitation | (4b) Limiting Factor | Operating Period (4c) (No. Mos.) |
| Shelocta-Cruze ScD | Moderate | Texture, Slope | Severe | Slope | Slight | - | 11-12 |
| ScE | Severe | Slope | Severe | Slope | Moderate | Slope | 11-12 |
| Shelocta-Latham Association SdE | Severe | Slope | Severe | Slope | Moderate | Slope | 11-12 |
| Shelocta- Steinsburg, Assoc. SeF | Severe | Slope | Severe | Slope | Severe | Slope | 11-12 |
| Shelocta-Wharton Assoc. SdE | Severe | Slope | Severe | Slope | Severe | Slope | 11-12 |
| Steinsburg StD | Moderate | Texture, Slope | Severe | Slope | Moderate | Slope | 11-12 |
| StE | Severe | Slope | Severe | Slope | Severe | Slope | 11-12 |
| StF | Severe | Slope | Severe | Slope | Severe | Slope | 11-12 |
| Steinsburg- Shelocta, Assoc. SeF | Severe | Slope | Severe | Slope | Severe | Slope | 11-12 |
| Stendal St | Severe | Drainage | Severe | Drainage | Slight | - | 9-11 |
| Tioga Tg, To | Moderate | Texture | Moderate | Texture | Slight | - | 11-12 |
| Upshur UpB | Moderate | Texture | Moderate | Texture | Slight | - | 11-12 |
| UpC, UpC2, UrC3 | Moderate | Texture | Moderate | Texture | Slight | - | 11-12 |
| UpD, UpD2, UrD3 | Moderate | Texture | Moderate | Texture, Slope | Slight | - | 11-12 |
| UpE | Severe | Slope | Severe | Slope | Slight | - | 11-12 |
| Upshur Association UtG | Severe | Slope | Severe | Slope | Severe | Slope | 11-12 |
| Upshur-Gilpin Assoc. UgC | Moderate | Texture | Moderate | Texture | Slight | - | 11-12 |
| UsF, UsF3 | Severe | Slope | Severe | Slope | Severe | Slope | 11-12 |

TABLE F-1 (continued)
SOIL RATINGS FOR TIMBER HARVEST ACTIVITIES

| (1) Soil Name/ Map Unit Symbol | Haul Road/Major Skid Trail (2) | | Log Landings (3) | | Equipment Operability for Logging Areas (4) | | |
|--|-----------------------------------|-----------------------------|---------------------------------|------------------------------|--|----------------------------|---|
| | (2a) Degree of Limitation | (2b) Limiting Factors | (3a) Degree of Limitation | (3b) Limiting Factor | (4a) Degree of Limitation | (4b) Limiting Factor | Operating Period (4c) (No. Mos.) |
| Upshur-Gilpin Assoc. UgE | Severe | Slope | Severe | Slope | Moderate | Slope | 11-12 |
| Upshur-Elba UsC | Moderate | Texture | Moderate | Slope, Texture | Slight | - | 11-12 |
| UsD | Moderate | Texture | Severe | Slope | Slight | - | 11-12 |
| Vandalia VaC | Moderate | Texture | Moderate | Texture, Slope | Slight | - | 11-12 |
| VaD | Moderate | Texture, Slope | Moderate | Texture, Slope | Slight | - | 11-12 |
| VaE | Severe | Slope | Severe | Slope | Moderate | Slope | 11-12 |
| VaF | Severe | Slope | Severe | Slope | Severe | Slope | 11-12 |
| Vandalia- Brookside Complex VbD | Moderate | Texture, Slope | Moderate | Texture, Slope | Slight | - | 11-12 |
| VbE | Severe | Slope | Moderate | Texture, Slope | Moderate | Slope | 11-12 |
| Vandalia- Culleoka Assoc. VpE | Severe | Slope | Moderate | Texture, Slope | Moderate | Slope | 11-12 |
| Vandalia-Culleoka Complex VnD3 | Moderate | Texture Slope, | Moderate | Texture, Slope | Slight | - | 11-12 |
| Wellston WdB, WeB, WhB, WhB2 WdC, WhC, WhC2 | Moderate Moderate | Texture Texture | Moderate Moderate | Texture Texture, Slope | Slight Slight | - - | 11-12 11-12 |
| WhD, WhD2 | Moderate | Texture Slope, | Severe | Slope | Slight | - | 11-12 |
| Westmore WeB, WmB WeC, WmC | Moderate Moderate | Texture Texture | Moderate Moderate | Texture Texture, Slope | Slight Slight | - - | 11-12 11-12 |

TABLE F-1 (continued)
SOIL RATINGS FOR TIMBER HARVEST ACTIVITIES

| (1) Soil Name/ Map Unit Symbol | Haul Road/Major Skid Trail (2) | | Log Landings (3) | | Equipment Operability for Logging Areas (4) | | |
|---|-----------------------------------|-----------------------------|---------------------------------|----------------------------|--|----------------------------|---|
| | (2a) Degree of Limitation | (2b) Limiting Factors | (3a) Degree of Limitation | (3b) Limiting Factor | (4a) Degree of Limitation | (4b) Limiting Factor | Operating Period (4c) (No. Mos.) |
| Westmoreland WmC, WoC | Moderate | Texture | Moderate | Texture, Slope | Slight | - | 11-12 |
| WmD, WoD | Moderate | Texture, Slope | Severe | Slope | Slight | | 11-12 |
| WmE, WnE | Severe | Slope | Severe | Slope | Moderate | Slope | 11-12 |
| Westmoreland- Berks Assoc. WpE | Severe | Slope | Severe | Slope | Moderate | Slope | 11-12 |
| Westmoreland- Guernsey WhC | Moderate | Texture | Moderate | Texture | Slight | - | 11-12 |
| WhD, WrD | Moderate | Texture | Moderate | Slope | Slight | - | 11-12 |
| WhE | Severe | Slope | Severe | Slope | Moderate | Slope | 11-12 |
| WhF | Severe | Slope | Severe | Slope | Severe | Slope | 11-12 |
| Wheeling WrA, WtA | Moderate | Texture | Moderate | Texture | Slight | - | 11-12 |
| WmB, WeB, WrB | Moderate | Texture | Moderate | Texture | Slight | - | 11-12 |
| WrC | Moderate | Texture | Moderate | Texture | Slight | - | 11-12 |
| WrD | Moderate | Texture, Slope | Severe | Slope | Slight | - | 11-12 |
| Woodsfield WoB, WtB | Moderate | Texture | Moderate | Texture | Slight | - | 11-12 |
| WtC, WtC2 | Moderate | Texture | Moderate | Texture | Slight | - | 11-12 |
| WtD, WtD2 | Moderate | Texture, Slope | Moderate | Texture | Slight | - | 11-12 |
| Woodsfield- Zanesville WzB | Moderate | Texture | Moderate | Texture | Slight | - | 11-12 |
| WzC | Moderate | Texture | Moderate | Texture | Slight | - | 11-12 |
| WzD | Moderate | Texture, Slope | Severe | Slope | Slight | - | 11-12 |
| Zanesville ZaB, ZnB, ZnB2 | Moderate | Texture | Moderate | Texture | Slight | - | 11-12 |
| ZnC, ZnC2 | Moderate | Texture | Moderate | Texture | Slight | - | 11-12 |
| ZnD, ZnD2 | Moderate | Texture, Slope | Moderate | Texture, Slope | Slight | - | 11-12 |

TABLE F-1 (continued)
SOIL RATINGS FOR TIMBER HARVEST ACTIVITIES

| (1) Soil Name/ Map Unit Symbol | Haul Road/Major Skid Trail (2) | | Log Landings (3) | | Equipment Operability for Logging Areas (4) | | |
|---|-----------------------------------|---|----------------------------------|--|--|----------------------------|---|
| | (2a) Degree of Limitation | (2b) Limiting Factors | (3a) Degree of Limitation | (3b) Limiting Factor | (4a) Degree of Limitation | (4b) Limiting Factor | Operating Period (4c) (No. Mos.) |
| Zanesville- Woodsfield ZoB, ZoB2 ZoC, ZoC2 ZoD2 | Moderate Moderate Moderate | Texture Texture Texture, Slope | Moderate Moderate Moderate | Texture: Texture Texture, Slope | Slight Slight Slight | - - - | 11-12 11-12 11-12 |

SOIL RATINGS FOR REGENERATION AND SILVICULTURAL ACTIVITIES

DESCRIPTION OF TABLE F-2 ITEMS

Column 1:

The soil name and map unit symbol are listed.

Column 2:

Mechanized Site Preparation, Planting and/or Row Seeding (does not include broadcast seeding)

This is to rate the degree and state the kind of limitations imposed by physical site characteristics, to mechanized operations such as site preparation, planting, and row seeding. The ratings are based on both limitations to efficient equipment operation, and hazards to the site from operation of the equipment.

There are many different methods and kinds of equipment that can be used to prepare a site for regeneration. Most of the mechanical methods and techniques result in some soil disturbance. The degree of soil disturbance varies tremendously according to kind of equipment, how the equipment is operated, and soil-site conditions at the time of the operation. The degree of soil disturbance needed to achieve the regeneration objectives varies according to species, regeneration methods, and site conditions.

The ratings are based on the assumption of operating techniques which do not displace or remove topsoil from the site, or create channels to concentrate storm runoff. Planting and row seeding equipment should be operated on the contour of the slope as much as possible, to minimize channeling of storm runoff.

Subcolumn 2a: Degree of Limitation

SLIGHT: Little or no limitation on kind of equipment or time of use due to erodibility or other physical characteristics of the site.

MODERATE: Moderate limitation on kind of equipment, season of use, or both, due to physical site characteristics. This may reflect a physical limitation to the efficient use of the equipment, or a hazard to the site from the use of the equipment, or both.

SEVERE: Severe limitations on kind of equipment, season of use, or both. May reflect physical limitation to efficient use of equipment, or a hazard to the site from the use of the equipment, or both.

Subcolumn 2b:

Limiting factors are stated for those sites rated moderate or severe.

Column 3:

Chemical site preparation: This is a subjective rating based on the expected influence of soil-site characteristics which would limit or fail to limit the movement of chemicals into groundwater or surface water supplies.

Subcolumn 3a:

SLIGHT: No significant environmental hazards from chemicals used in accordance with established guidelines. Soil characteristics are such that chemicals are not likely to be released into water supplies.

MODERATE: Small amounts of chemicals may be released into surface or underground water supplies in unusual circumstances, such as high rainfall soon after application of the chemical(s).

SEVERE: If chemicals are applied, there is a significant risk that a portion of them will be released into groundwater or surface water supplies.

Subcolumn 3b:

Limiting Factor(s)

Shows limiting factor(s) where rating in subcolumn 3a is moderate or severe.

Column 4:

Prescribed Burn:

Prescribed burn may be used to (1) reduce fire hazard, (2) improve planting opportunities, (3) retard plant competition, (4) prepare a seedbed, and (5) release seeds.

Prescribed burn can be influenced by season, soil moisture content, fuel moisture, fuel conditions, and wind.

There has been much debate regarding the effects of fire on soils. Research has shown both positive and negative effects. Generally, the adverse effects are related to the intensity and duration of heat at the soil surface; the higher the temperature and the longer the duration, the more the adverse effect. Soil-site characteristics are also important in determining the effects of fire.

Subcolumn 4a:

Ratings:

SLIGHT: Prescribed burn will not normally result in significant adverse impacts.

MODERATE: In order to avoid significant adverse impacts, more care is required to plan, schedule, and conduct prescribed burns under conditions of lower air temperatures, higher soil and fuel moisture conditions, etc.

SEVERE: Burning on these sites runs a risk of significant long-term adverse impacts to the site unless accompanied by extraordinary mitigating measures to minimize duration and intensity of surface heating.

Subcolumn 4b:

Limiting factors are stated for those sites rated moderate or severe.

TABLE F-2
SOIL RATINGS FOR REGENERATION AND SILVICULTURAL ACTIVITIES

| (1) Map Unit/ Taxonomic Unit | (2) Mechanized Site Preparation & Planting Equipment | | (3) Chemical Site Preparation/TSI | | (4) Prescribed Fire | |
|--|---|---|--|--|--|----------------------------------|
| | (2a) Degree of Limitation | (2b) Limiting Factor(s) | (3a) Degree of Limitation | (3b) Limiting Factor(s) | (4a) Degree of Limitation | (4b) Limiting Factor(s) |
| Alford AfB AfC AfD | Moderate Severe Severe | Erodes Easily Erodes Easily Erodes Easily | Moderate Moderate Severe | Runoff Runoff Runoff | Slight Slight Slight | -- -- -- |
| Allegheny AgB, AIB AgC, AICAkC AID, AkD AIG | Moderate Severe Severe Severe | Erodes Easily Erodes Easily Erodes Easily Erodes Easily | Moderate Moderate Moderate Severe | Runoff Runoff Runoff Runoff | Slight Slight Slight Moderate | -- -- -- Slope |
| Barkcamp BoD BaF, BoF | Severe Severe | Erodes Easily Erodes Easily | Moderate Severe | Runoff Runoff | Slight Severe | Slope |
| Berks BeC | Moderate | Erodes Easily | Moderate | Runoff | Slight | -- |
| Berks- Westmoreland BkD BkE BkF | Severe Severe Severe | Erodes Easily Erodes Easily Erodes Easily | Moderate Moderate Severe | Runoff Runoff Runoff | Slight Slight Severe | -- -- Slope |
| Belpre BeC BeD BeE BeF | Moderate Moderate Severe Severe | Erodes Easily Erodes Easily Erodes Easily Erodes Easily | Moderate Moderate Moderate Severe | Runoff Runoff Runoff Runoff | Slight Slight Moderate Moderate | -- -- Slope Slope |
| Bethesda BhB, BkB, BtB BtC BhD, BkD, BoD BtE, BoE BhF, BkF, BoF | Moderate Severe Severe Severe Severe | Erodes Easily Erodes Easily Erodes Easily Erodes Easily Erodes Easily | Moderate Moderate Moderate Moderate Severe | Runoff Runoff Runoff Runoff Runoff | Slight Slight Slight Moderate Severe | -- -- -- Slope Slope |
| Brookside BrC, BsC BrD, BsD BrE, BsE BtF | Severe Severe Severe Severe | Erodes Easily Erodes Easily Erodes Easily Erodes Easily | Moderate Moderate Moderate Severe | Runoff Runoff Runoff Runoff | Slight Slight Moderate Severe | -- -- Slope Slope |

TABLE F-2 (continued)
SOIL RATINGS FOR REGENERATION AND SILVICULTURAL ACTIVITIES

| (1) Map Unit/ Taxonomic Unit | (2) Mechanized Site Preparation & Planting Equipment | | (3) Chemical Site Preparation/TSI | | (4) Prescribed Fire | |
|--|---|--|--|--------------------------------------|--------------------------------------|----------------------------|
| | (2a) Degree of Limitation | (2b) Limiting Factor(s) | (3a) Degree of Limitation | (3b) Limiting Factor(s) | (4a) Degree of Limitation | (4b) Limiting Factor(s) |
| Chagrín Cg, Cd | Slight | -- | Slight | -- | Slight | -- |
| Chili ChA ChB ChC | Slight Slight Moderate | -- -- Erodes Easily | Slight Moderate Moderate | -- Runoff Runoff | Slight Slight Slight | -- -- -- |
| Coolville CoB | Moderate | Erodes Easily | Moderate | Runoff | Slight | -- |
| Coolville- Rarden CpC, CrC2 CrD2 | Moderate Severe | Erodes Easily Erodes Easily | Moderate Moderate | Runoff Runoff | Slight Slight | -- -- |
| Cuba Cu | Slight | -- | Slight | -- | Slight | -- |
| Culleoka- Upshur CpC2 CpD2 | Moderate Severe | Erodes Easily Erodes Easily | Moderate Moderate | Runoff Runoff | Slight Slight | -- -- |
| Culleoka- Stensburg- Vandalia CsE | Severe | Erodes Easily | Moderate | Runoff | Slight | -- |
| DeKalb DkC, DkC2 DkD, DkD2 DkE, DkE2 DkF | Moderate Severe Severe Severe | Erodes Easily Erodes Easily Erodes Easily Erodes Easily | Moderate Moderate Moderate Severe | Runoff Runoff Runoff Runoff | Slight Slight Slight Slight | -- -- Slope Slope |
| DeKalb- Gilpin, Stony DsG | Severe | Erodes | Severe | Runoff | Severe | Slope |
| DeKalb-Rock Outcrop DkF | Severe | Erodes Easily | Severe | Runoff | Severe | Slope |
| DeKalb Stony loan DmF | Severe | Erodes Easily | Severe | Runoff | Severe | Slope |

TABLE F-2 (continued)
SOIL RATINGS FOR REGENERATION AND SILVICULTURAL ACTIVITIES

| (1) Map Unit/ Taxonomic Unit | (2) Mechanized Site Preparation & Planting Equipment | | (3) Chemical Site Preparation/TSI | | (4) Prescribed Fire | |
|---|---|---|--|--|--|-------------------------------|
| | (2a) Degree of Limitation | (2b) Limiting Factor(s) | (3a) Degree of Limitation | (3b) Limiting Factor(s) | (4a) Degree of Limitation | (4b) Limiting Factor(s) |
| DeKalb- Westmoreland DtD DtE DtF, DuF | Severe Severe Severe | Erodes Easily Erodes Easily Erodes Easily | Moderate Moderate Severe | Runoff Runoff Runoff | Slight Slight Severe | -- -- Slope |
| Elba-Belpre- Complex EID EIE EIF | Moderate Severe Severe | Erodes Easily Erodes Easily Erodes Easily | Moderate Moderate Severe | Runoff Runoff Runoff | Slight Moderate Moderate | -- Slope Slope |
| Elba-Brookside- Berks Complex EbF | Severe | Erodes Easily | Severe | Runoff | Severe | Slope |
| Enoch EnE | Severe | Erodes Easily | Moderate | :Runoff | Moderate | Slope |
| Fairpoint FaB FaD, FbD FbE FbF | Moderate Severe Severe Severe | Erodes Easily Erodes Easily Erodes Easily Erodes Easily | Moderate Moderate Moderate Moderate | Runoff Runoff Runoff Runoff | Slight Slight Moderate Moderate | -- -- Slope Slope |
| Genesee Ge | Slight | -- | Moderate | Runoff | Slight | -- |
| Gilpin GdB GdC GdD GdE GdF | Moderate Moderate Severe Severe Severe | Erodes Easily Erodes Easily Erodes Easily Erodes Easily Erodes Easily | Moderate Moderate Moderate Moderate Moderate | Runoff Runoff Runoff Runoff Runoff | Slight Slight Slight Slight Moderate | -- -- -- -- Slope |
| Gilpin and DeKalb GdE GdG | Severe Severe | Erodes Easily Erodes Easily | Moderate Severe | Runoff Runoff | Slight Slight | -- -- |
| Gilpin-Rarden GdE | Severe | Erodes Easily | Moderate | Runoff | Slight | -- |

TABLE F-2 (continued)
SOIL RATINGS FOR REGENERATION AND SILVICULTURAL ACTIVITIES

| (1) Map Unit/ Taxonomic Unit | (2) Mechanized Site Preparation & Planting Equipment | | (3) Chemical Site Preparation/TSI | | (4) Prescribed Fire | |
|--|---|---|--|--|--|-------------------------------|
| | (2a) Degree of Limitation | (2b) Limiting Factor(s) | (3a) Degree of Limitation | (3b) Limiting Factor(s) | (4a) Degree of Limitation | (4b) Limiting Factor(s) |
| Gilpin- Westmoreland GoB2 GoC2 GoD2, GoD3 GoE2, GoE3 GpG, GoG2 | Moderate Moderate Severe Severe Severe | Erodes Easily Erodes Easily Erodes Easily Erodes Easily Erodes Easily | Moderate Moderate Moderate Moderate Moderate | Runoff Runoff Runoff Runoff Runoff | Slight Slight Slight Slight Moderate | -- -- -- -- Slope |
| Glenford GfA, GmA, GnA GfB, GmB, GnB GnC | Moderate Moderate Severe | Erodes Easily Erodes Easily Erodes Easily | Moderate Moderate Moderate | Runoff Runoff Runoff | Slight Slight Slight | -- -- -- |
| Guernsey GsB GsC, GuC | Moderate Moderate | Erodes Easily Erodes Easily | Moderate Moderate | Runoff Runoff | Slight Slight | -- -- |
| Guernsey- Upshur Complex GuC, GrC2 GuD, GrD2 Gue, GrE2 GsG, GrG2, GuG | Moderate Severe Severe Severe | Erodes Easily Erodes Easily Erodes Easily Erodes Easily | Moderate Moderate Moderate Moderate | Runoff Runoff Runoff Runoff | Slight Slight Moderate Severe | -- -- Slope Slope |
| Guernsey- Westmore GwC2 GwD2 GwE2, GwE3 GwG2 | Moderate Severe Severe Severe | Erodes Easily Erodes Easily Erodes Easily Erodes Easily | Moderate Moderate Moderate Severe | Runoff Runoff Runoff Runoff | Slight Slight Moderate Severe | -- -- Slope Slope |
| Guernsey- Westmoreland GwC GwD GwE | Moderate Severe Severe | Erodes Easily Erodes Easily Erodes Easily | Moderate Moderate Moderate | Runoff Runoff Runoff | Slight Slight Moderate | -- -- -- |
| Lily LhC, LnC LgD, LnD | Severe Severe | Erodes Easily Erodes Easily | Moderate Moderate | Runoff Runoff | Slight Slight | -- -- |
| Lily- Upshur Complex LkD | Severe | Erodes Easily | Moderate | Runoff | Slight | -- |

TABLE F-2 (continued)
SOIL RATINGS FOR REGENERATION AND SILVICULTURAL ACTIVITIES

| (1) Map Unit/ Taxonomic Unit | (2) Mechanized Site Preparation & Planting Equipment | | (3) Chemical Site Preparation/TSI | | (4) Prescribed Fire | |
|---------------------------------------|---|---|---|-------------------------------|---------------------------------|----------------------------|
| | (2a) Degree of Limitation | (2b) Limiting Factor(s) | (3a) Degree of Limitation | (3b) Limiting Factor(s) | (4a) Degree of Limitation | (4b) Limiting Factor(s) |
| Linside Ln, Lh | Slight | -- | Slight | -- | Slight | -- |
| Melvin Md, Me, Mh | Severe | Drainage | Severe | Drainage | Slight | -- |
| Mentor MeA MeB MeC | Slight Moderate Moderate | -- Erodes Easily Erodes Easily | Moderate Moderate Moderate | Runoff Runoff Runoff | Slight Slight Slight | -- -- -- |
| Negley NeC NeE | Moderate Severe | Erodes Easily Erodes Easily | Moderate Moderate | Runoff Runoff | Slight Moderate | -- -- |
| Newark Ne, Nn | Moderate | Drainage Erodes Easily | Moderate | Drainage | Slight | -- |
| Nolin No | Slight | -- | Moderate | Runoff | Slight | -- |
| Omulga OmB, OtB OmC, OtC | Moderate Moderate | Erodes Easily Erodes Easily | Moderate Moderate | Runoff Runoff | Runoff Runoff | -- -- |
| Orville Or | Slight | -- | Moderate | Runoff | Slight | -- |
| Rarden- Coolville RcD2 | Severe | Erodes Easily | Moderate | Runoff | Slight | -- |
| Rarden-Gilpin RbC2 RbD2 | Moderate Severe | Erodes Easily Erodes Easily | Moderate Moderate | Runoff Runoff | Slight Slight | -- -- |
| Shelocta SbB SbC SbD | Moderate Moderate Severe | Erodes Easily Erodes Easily Erodes Easily | Moderate Moderate Moderate | Runoff Runoff Runoff | Slight Slight Slight | -- -- -- |
| Shelocta- Berks Assoc. SbE | Severe | Erodes Easily | Moderate | Runoff | Slight | -- |

TABLE F-2 (continued)
SOIL RATINGS FOR REGENERATION AND SILVICULTURAL ACTIVITIES

| (1) Map Unit/ Taxonomic Unit | (2) Mechanized Site Preparation & Planting Equipment | | (3) Chemical Site Preparation/TSI | | (4) Prescribed Fire | |
|--|---|--|--|--------------------------------------|--------------------------------------|----------------------------|
| | (2a) Degree of Limitation | (2b) Limiting Factor(s) | (3a) Degree of Limitation | (3b) Limiting Factor(s) | (4a) Degree of Limitation | (4b) Limiting Factor(s) |
| Shelocta- Brownsville Association ScE ScF | Severe Severe | Erodes Easily Erodes Easily | Moderate Moderate | Runoff Runoff | Slight Moderate | -- Slope |
| Shelocta- Latham Assoc SdE | Severe | Erodes Easily | Moderate | Runoff | Moderate | Slope |
| Shelocta- Steinsburg Assoc ScF | Severe | Erodes Easily | Moderate | Runoff | Moderate | Slope |
| Shelocta- Wharton Assoc SdE | Severe | Erodes Easily | Moderate | Runoff | Moderate | Slope |
| Steinsburg StD StE StF | Severe Severe Severe | Erodes Easily Erodes Easily Erodes Easily | Moderate Moderate Moderate | Slight Moderate Severe | Runoff Runoff Runoff | -- Slope Slope |
| Steinsburg- Shelocta Assoc. SeF | Severe | Erodes Easily | Moderate | Runoff | Severe | Slope |
| Stendal St | Moderate | Drainage | Moderate | Drainage | Slight | -- |
| Tioga Tg, To | Slight | -- | Moderate | Runoff | Slight | -- |
| Upshur UpB UpC,UpC2,UrC3 UpD,UpD2,UrD3 UpE | Moderate Moderate Severe Severe | Erodes Easily Erodes Easily Erodes Easily Erodes Easily | Moderate Moderate Moderate Moderate | Runoff Runoff Runoff Runoff | Slight Slight Slight Slight | -- -- -- -- |
| Upshur Association UtG | Severe | Erodes Easily | Severe | Runoff | Severe | Slope |
| Upshur-Gilpin Complex UgC UsF, UsF3 | Moderate Severe | Erodes Easily Erodes Easily | Moderate Severe | Runoff Runoff | Slight Severe | -- Slope |

TABLE F-2 (continued)
SOIL RATINGS FOR REGENERATION AND SILVICULTURAL ACTIVITIES

| (1) Map Unit/ Taxonomic Unit | (2) Mechanized Site Preparation & Planting Equipment | | (3) Chemical Site Preparation/TSI | | (4) Prescribed Fire | |
|---|---|--|--|--------------------------------------|--|----------------------------|
| | (2a) Degree of Limitation | (2b) Limiting Factor(s) | (3a) Degree of Limitation | (3b) Limiting Factor(s) | (4a) Degree of Limitation | (4b) Limiting Factor(s) |
| Upshur-Gilpin Assoc UgE | Severe | Erodes Easily | Moderate | Runoff | Moderate | Slope |
| Upshur-Elba UsC UsD | Moderate Severe | Erodes Easily Erodes Easily | Moderate Moderate | Runoff Runoff | Slight Slight | -- -- |
| Vandalia VaC VaD VaE VaF | Moderate Severe Severe Severe | Erodes Easily Erodes Easily Erodes Easily Erodes Easily | Moderate Moderate Moderate Severe | Runoff Runoff Runoff Runoff | Slight Slight Moderate Severe | -- -- Slope Slope |
| Vandalia- Brookside Complex VbD VbE | Severe Severe | Erodes Easily Erodes Easily | Moderate Moderate | Runoff Runoff | Slight Moderate | -- Slope |
| Vandalia- Culleoka Assoc VpE | Severe | Erodes Easily | Moderate | Runoff | Moderate | Slope |
| Vandalia- Culleoka Complex VnD3 | Severe | Erodes Easily | Moderate | Runoff | Slight | -- |
| Wellston WdB, WeB, WhB, WhB2 WdC, WhC, WhC2 WhD, WhD2 | Moderate Severe Severe | Erodes Easily Erodes Easily Erodes Easily | Moderate Moderate Moderate | Runoff Runoff Runoff | Slight Slight Slight | -- -- -- |
| Westmore WeB, WmB WeC, WmC | Moderate Moderate | Erodes Easily Erodes Easily | Moderate Moderate | Runoff Runoff | Slight Slight | -- -- |
| Westmoreland WmC, WoC WmD, WoD WmE, WnE | Moderate Moderate Severe | Erodes Easily Erodes Easily Erodes Easily | Moderate Moderate Moderate | Runoff Runoff Runoff | Slight Slight Moderate | -- -- Slope |
| Westmoreland -Berks Assoc. WpE | Severe | Erodes Easily | Moderate | Runoff | Moderate | Slope |

TABLE F-2 (continued)
SOIL RATINGS FOR REGENERATION AND SILVICULTURAL ACTIVITIES

| (1) Map Unit/ Taxonomic Unit | (2) Mechanized Site Preparation & Planting Equipment | | (3) Chemical Site Preparation/TSI | | (4) Prescribed Fire | |
|---|---|--|--|--------------------------------------|--|----------------------------|
| | (2a) Degree of Limitation | (2b) Limiting Factor(s) | (3a) Degree of Limitation | (3b) Limiting Factor(s) | (4a) Degree of Limitation | (4b) Limiting Factor(s) |
| Westmoreland -Guernsey WhC WhD, WrD WhE WhF | Moderate Moderate Severe Severe | Erodes Easily Erodes Easily Erodes Easily Erodes Easily | Moderate Moderate Moderate Severe | Runoff Runoff Runoff Runoff | Slight Slight Moderate Severe | -- -- Slope Slope |
| Wheeling Wr, WtA WmB,WpB,WrB WrC WrD | Moderate Moderate Moderate Severe | Erodes Easily Erodes Easily Erodes Easily Erodes Easily | Moderate Moderate Moderate Moderate | Runoff Runoff Runoff Runoff | Slight Slight Slight Slight | -- -- -- -- |
| Woodsfield WoB, WtB WtC, WtC2 WtD, WtD2 | Moderate Moderate Severe | Erodes Easily Erodes Easily Erodes Easily | Moderate Moderate Moderate | Runoff Runoff Runoff | Slight Slight Slight | -- -- -- -- |
| Woodsfield- Zanesville WzB WzC WzD | Moderate Moderate Severe | Erodes Easily Erodes Easily Erodes Easily | Moderate Moderate Moderate | Runoff Runoff Runoff | Slight Slight Slight | -- -- -- |
| Zanesville ZaB, ZnB, ZnB2 ZnC, ZnC2 ZnD, ZnD2 | Moderate Moderate Severe | Erodes Easily Erodes Easily Erodes Easily | Moderate Moderate Moderate | Runoff Runoff Runoff | Slight Slight Slight | -- -- -- |
| Zanesville- Woodsfield ZoB, ZoB2 ZoC, ZoC2 ZoD2 | Moderate Moderate Severe | Erodes Easily Erodes Easily Erodes Easily | Moderate Moderate Moderate | Runoff Runoff Runoff | Slight Slight Slight | -- -- -- |