

Revisions to the Important Farmland Classification Ratings for Vermont Soil Map Units October 1, 2005

*USDA Natural Resources Conservation Service
356 Mountain View Drive, Suite 105
Colchester, Vermont 05446*

Part A. lists the revisions to individual soil map units by county.

Part B. provides information on revisions to the Footnotes used with the ratings.

Part C. provides a summary of the map unit acreage affected by these revisions.

Note on abbreviations: P=Prime Farmland, S=Farmland of Statewide importance, L=Farmland of Local importance, NPSL=Not Prime, Statewide, or Local.

Also, MWD=moderately well drained, SWPD=somewhat poorly drained, PD=poorly drained, VPD=very poorly drained.

Part A. Revisions to individual soil map units by county

Addison County (001)

County FIPS Code	Map Unit Symbol	Map Unit Name	Map Unit Acreage	Old Important Farmland Rating	New Revised Rating	Comments
VT001	AdB	Adams loamy fine sand, 5 to 12 percent slopes	528	L	S (a)	Changed to S with footnote (a). Sandy outwash soils are rated Statewide on slopes up to 8 percent in VT. This unit includes slopes less than 8 percent that qualify as Statewide. Using footnote (a) with this map unit {rating = S (a)} will cover areas where the slopes are above 8 percent. Note that a similar map unit, VT007-AdB-Adams and Windsor, 5-12%, is Statewide. See also VT001-DaB below, which is also Statewide.
VT001	BeC	Berkshire and Marlow stony loams, 12 to 25 percent slopes	1761	NPSL	S (a)	Areas that have 12 to 15% slopes within the 12-25% slope range qualify as Statewide. Given the same S(a) rating as VT007-Marlow-MaC. See also 12-20% slope units (VT001-PeC and VT007-PeC) listed below.

VT001	CtB	Colton gravelly sandy loam, 5 to 12 percent slopes	2211	L	S (a)	Changed to S with footnote (a). Sandy and gravelly outwash soils are rated Statewide on slopes up to 8 percent in VT. This unit includes slopes less than 8 percent that qualify as Statewide. Using footnote (a) with this map unit {rating = S (a)} covers areas where the slopes are above 8 percent.
VT001	DaB	Duane fine sandy loam, 5 to 12 percent slopes	221	S	S (a)	Add footnote a.
VT001	FdB	Farmington stony silt loam, moderately deep variant, 3 to 8 percent slopes	930	S	P	Changed to P. Moderately deep Farmington is the same as the Galway series - Galway on B slope in NY is P.
VT001	FnB	Farmington-Nellis rocky complex, 5 to 12 percent slopes	809	S (c)	S	Delete footnote c for map units that are "rocky." Use it only with "very rocky" map units.
VT001	Hh	Hadley very fine sandy loam, frequently flooded	1411	P	P (f)	Add new footnote f about frequent flooding.
VT001	Lf	Limerick silt loam, very wet	1716	S (b)	NPSL	Changed to NPSL to match 007-Lf.
VT001	Lh	Livingston clay	5667	S (b)	NPSL	Changed to NPSL. Some areas do not have good drainage outlets and even when drained is still wet, according to MUD.
VT001	LmB	Lyman-Berkshire rocky complex, 5 to 12 percent slopes	156	S (c)	S	Delete footnote c for map units that are "rocky." Use it only with "very rocky" map units.
VT001	MaA	Massena stony silt loam, 0 to 3 percent slopes	317	P(b)	P (b)	Keep footnote b. This series is SWPD - PD.
VT001	NaB	Nassau-Dutchess rocky complex, 3 to 8 percent slopes	500	P (c)	P	Delete footnote c for map units that are "rocky." Use it only with "very rocky" map units.
VT001	NaC	Nassau-Dutchess rocky complex, 8 to 15 percent slopes	363	S (c)	S	Delete footnote c for map units that are "rocky." Use it only with "very rocky" map units.
VT001	PeA	Peru stony loam, 0 to 5 percent slopes	180	P(b)	P	Delete footnote b.
VT001	PeB	Peru stony loam, 5 to 12 percent slopes	791	S (b)	S	Delete footnote b.
VT001	PeC	Peru stony loam, 12 to 20 percent slopes	507	NPSL	S (a)	Areas that have 12 to 15% slopes within the 12-20% slope range qualify as Statewide. Given the same S(a) rating as Marlow-VT007-MaC.

VT001	Sw	Swanton fine sandy loam	5750	S (b)	P (b)	Changed to P (b) to match other two counties where correlated. Series is SWPD - PD. Keep in PD category with footnote (b).
VT001	VrB	Vergennes rocky clay, moderately shallow variant, 2 to 6 percent slopes	525	S (c)	S	Delete footnote c for map units that are "rocky." Use it only with "very rocky" map units.
VT001	VrC	Vergennes rocky clay, moderately shallow variant, 6 to 12 percent slopes	430	NPSL	S	Changed to S - same as B slope unit rating.

Bennington County (003)

VT003	29A	Occum fine sandy loam, 0 to 3 percent slopes	1401	P	P (f)	Add new footnote f about frequent flooding.
VT003	34A	Pootatuck fine sandy loam, 0 to 3 percent slopes	1295	P	P (f)	Add new footnote f about frequent flooding.
VT003	68A	Massena silt loam, 0 to 3 percent slopes	822	P(b)	P (b)	Keep footnote b. This series is SWPD - PD.
VT003	68B	Massena silt loam, 3 to 8 percent slopes	773	P(b)	P (b)	Keep footnote b. This series is SWPD - PD.

Caledonia County (005)

VT005	46B	LAMOINE SILT LOAM, 3 TO 8 PERCENT SLOPES	na	S (b)	S	Delete footnote b.
VT005	46C	LAMOINE SILT LOAM, 8 TO 15 PERCENT SLOPES	na	S (b)	S	Delete footnote b.

Chittenden County (007)

VT007	AdB	Adams and Windsor loamy sands, 5 to 12 percent slopes	3157	S	S (a)	Add footnote a.
VT007	Au	Au Gres fine sandy loam	1851	S (b)	S	Delete footnote b.
VT007	CoB	Colton gravelly loamy sand, 5 to 12 percent slopes	565	S	S (a)	Add footnote a.
VT007	DdB	Duane and Deerfield soils, 5 to 12 percent slopes	1111	S	S (a)	Add footnote a.

VT007	FsB	Farmington-Stockbridge rocky loams, 5 to 12 percent slopes	1374	S (c)	S	Delete footnote c for map units that are "rocky." Use it only with "very rocky" map units.
VT007	Hh	Hadley very fine sandy loam, frequently flooded	2446	P	P (f)	Add new footnote f about frequent flooding.
VT007	HIB	Hartland very fine sandy loam, 2 to 6 percent slopes	799	P	S	Changed to S. Same as similar soil map unit in Addison county, Salmon (VT001-SaB).
VT007	Lh	Livingston clay	2582	S (b)	NPSL	Changed to NPSL. Outlets don't seem available, according to map unit description.
VT007	LmB	Lyman-Marlow rocky loams, 5 to 12 percent slopes	935	S (c)	S	Delete footnote c for map units that are "rocky." Use it only with "very rocky" map units.
VT007	MaC	Marlow stony loam, 12 to 20 percent slopes	965	S (a)	S (a)	No change to Important Farmland Classification rating. However, changed other units in this category. See: VT001-PeC, VT007-PeC, and also VT001-BeC.
VT007	MnC	Massena stony silt loam, 0 to 15 percent slopes	166	S	S (b)	Add footnote b. This series is SWPD - PD.
VT007	PeA	Peru stony loam, 0 to 5 percent slopes	809	S (b)	P	Changed to P. Delete footnote b.
VT007	PeB	Peru stony loam, 5 to 12 percent slopes	5106	S (b)	S	Delete footnote b.
VT007	PeC	Peru stony loam, 12 to 20 percent slopes	2504	NPSL	S (a)	Areas that have 12 to 15% slopes within the 12-20% slope range qualify as Statewide. Given the same S(a) rating as Marlow-VT007-MaC.

Essex County (009) – see Caledonia County.

Franklin County (011)

VT011	AuA	Au Gres loamy fine sand, 0 to 6 percent slopes	3166	S (b)	S	Delete footnote b.
VT011	DeC	Deerfield loamy fine sand, 8 to 15 percent slopes	342	S	NPSL	Changed to NPSL.. This was the only sandy outwash soil on a C slope (up to 15% slope) in the state that was rated Statewide – changed to bring in line with similar soils.
VT011	Ha	Hadley silt loam	655	P	P (f)	Add new footnote f about frequent flooding.
VT011	KbA	Kingsbury clay, 0 to 3 percent slopes	2648	S (b)	S	Delete footnote b.

VT011	KbB	Kingsbury clay, 3 to 8 percent slopes	157	S (b)	S	Delete footnote b.
VT011	Ly	Lyons stony loam	2290	NPSL	NPSL	No change to Important Farmland Classification rating - OK as NPSL, but changed drainage to VPD. Series is PD-VPD. In this county, Lyons is Cap class VIIw – which is more in line with VPD conditions. In Rutland county, Lyons is VPD, too.
VT011	MeA	Massena stony loam, 0 to 3 percent slopes	9124	P(b)	P (b)	Keep footnote b. This series is SWPD - PD.
VT011	MeB	Massena stony loam, 3 to 8 percent slopes	2612	P(b)	P (b)	Keep footnote b. This series is SWPD - PD.
VT011	MuB	Munson silt loam, 3 to 8 percent slopes	8591	S (b)	S	Delete footnote b.
VT011	MuC	Munson silt loam, 8 to 15 percent slopes	2636	S (b)	S	Delete footnote b.
VT011	Od	Ondawa variant silt loam	1333	P	P (f)	Add new footnote f about frequent flooding.
VT011	Pu	Podunk variant silt loam	1441	P	P (f)	Add new footnote f about frequent flooding.
VT011	Wh	Wareham loamy fine sand	2500	P	P (b)	Add footnote b.
VT011	WrA	Westbury stony fine sandy loam, 0 to 3 percent slopes	1901	S (b)	S	Delete footnote b.
VT011	WrB	Westbury stony fine sandy loam, 3 to 8 percent slopes	8192	S (b)	S	Delete footnote b.
VT011	WrC	Westbury stony fine sandy loam, 8 to 15 percent slopes	2205	NPSL	S	Changed to S.
VT011	Wt	Winooski silt loam	1654	P	P (f)	Add new footnote f about frequent flooding.

Grand Isle County (013)

VT013	BcA	Benson rocky loam, over massive limestone, 0 to 3 percent slopes	26	S (c)	S	Delete footnote c for map units that are "rocky." Use it only with "very rocky" map units.
VT013	BcB	Benson rocky loam, over massive limestone, 3 to 8 percent slopes	530	S (c)	S	Delete footnote c for map units that are "rocky." Use it only with "very rocky" map units.
VT013	BeA	Benson rocky silt loam, over shaly limestone, 0 to 3 percent slopes	166	S (c)	S	Delete footnote c for map units that are "rocky." Use it only with "very rocky" map units.
VT013	BeB	Benson rocky silt loam, over shaly limestone, 3 to 8 percent slopes	5265	S (c)	S	Delete footnote c for map units that are "rocky." Use it only with "very rocky" map units.
VT013	KbA	Kendaia silt loam, 0 to 3 percent slopes	4460	P(b)	P	Delete footnote b.

VT013	KbB	Kendaia silt loam, 3 to 8 percent slopes	379	P(b)	P	Delete footnote b.
VT013	SbB	St. Albans-Dutchess rocky loams, 3 to 8 percent slopes	350	S	P	A review of the depth to bedrock indicates the soils in this map unit are deep or very deep - rating should be P.

Lamoille County (015)

VT015	Po	Podunk fine sandy loam	1537	P	P (f)	Add new footnote f about frequent flooding.
-------	----	------------------------	------	---	-------	---

Orange County (017)

VT017	TbB	Tunbridge-Woodstock rocky fine sandy loams, 3 to 8 percent slopes	828	P (c)	P	Delete footnote c for map units that are "rocky." Use it only with "very rocky" map units.
VT017	VeC	Vershire-Glover rocky loams, 8 to 15 percent slopes	5099	S (c)	S	Delete footnote c for map units that are "rocky." Use it only with "very rocky" map units.
VT017	Wo	Winooski very fine sandy loam	3304	P	P (f)	Add new footnote f about frequent flooding.

Orleans County (019)

VT019	58B	Lamoine silt loam, 3 to 8 percent slopes	na	S (b)	S	Delete footnote b.
VT019	58C	Lamoine silt loam, 8 to 15 percent slopes	na	S (b)	S	Delete footnote b.

Rutland County (021)

VT021	40C	Galway-Nellis-Farmington complex, 8 to 15 percent slopes, rocky	3583	S (c)	S	Delete footnote c for map units that are "rocky." Use it only with "very rocky" map units.
VT021	50A	Massena silt loam, 0 to 8 percent slopes	1853	P(b)	P (b)	Keep footnote b. This series is SWPD - PD.
VT021	58C	Colton-Duxbury complex, 8 to 15 percent slopes	1231	S	NPSL	Changed to NPSL to match rating in 3 other counties (005, 015, 019).
VT021	80A	Kingsbury silty clay loam, 0 to 3 percent slopes	6184	S (b)	S	Delete footnote b.
VT021	80B	Kingsbury silty clay loam, 3 to 8 percent slopes	7840	S (b)	S	Delete footnote b.
VT021	163	Canandaigua silt loam	891	P(b)	P (b)	No change to Important Farmland Classification rating, but changed drainage to PD. Series is PD - VPD. Capability subclass is 3w – more representative of PD conditions.

Washington County (023)

VT023	2A	Ondawa fine sandy loam, 0 to 3 percent slopes	539	P	P (f)	Add new footnote f about frequent flooding.
VT023	44B	Lamoine silt loam, 3 to 8 percent slopes	1214	S (b)	S	Delete footnote b.
VT023	44C	Lamoine silt loam, 8 to 15 percent slopes	1539	S (b)	S	Delete footnote b.
VT023	59A	Waitsfield silt loam, 0 to 3 percent slopes	965	P	P (f)	Add new footnote f about frequent flooding.
VT023	60A	Weider very fine sandy loam, 0 to 3 percent slopes	970	P	P (f)	Add new footnote f about frequent flooding.

Windham County (025)

VT025	9B	Deerfield fine sandy loam, 2 to 8 percent slopes	1000	S (b)	S	Delete footnote b.
VT025	23	Ondawa fine sandy loam	2332	P	P (f)	Add new footnote f about frequent flooding.
VT025	24	Podunk fine sandy loam	2428	P	P (f)	Add new footnote f about frequent flooding.
VT025	25B	Westbury fine sandy loam, 3 to 8 percent slopes	1116	S (b)	S	Delete footnote b.
VT025	25C	Westbury fine sandy loam, 8 to 15 percent slopes	816	NPSL	S	Changed to S.
VT025	29	Walpole fine sandy loam	568	NPSL	P (b)	Changed to Prime (b). Walpole in all other counties is Prime (b).
VT025	33	Rumney fine sandy loam	1692	S	S (b)	Add footnote b.
VT025	37	Hadley silt loam	978	P	P (f)	Add new footnote f about frequent flooding.
VT025	39	Winooski silt loam	512	P	P (f)	Add new footnote f about frequent flooding.
VT025	40	Limerick silt loam	623	NPSL	S (b)	Changed to S (b).

Windsor County (027) – no changes to current ratings

Part B. Revisions to Footnotes used in conjunction with Important Farmland Classification ratings

General comments:

- References to Locally Important Farmland have been removed from all the footnotes, since there are no soil or slope criteria used in deciding what is Local. It's based on what NRCs propose to the State Conservationist.

1. Footnote a – Old wording

If the upper slope class limit of the soil map unit is between 9 and 15 percent then the areas of the soil map unit that exceed 8 percent slope don't qualify as Prime, Statewide, or Local. If the upper slope class limit exceeds 15 percent then the areas of the soil map unit that exceed 15 percent slope don't qualify as Important Farmland.

Footnote a – Revised wording

For this soil map unit, one of two qualifications apply: 1) if the upper slope limit is between 9 and 15 percent, then the areas of the soil map unit that exceed 8 percent slope do not qualify as Prime Farmland or Farmland of Statewide Importance; or 2) if the upper slope limit exceeds 15 percent, then the areas of the soil map unit that exceed 15 percent slope do not qualify as Prime Farmland or Farmland of Statewide Importance.

2. Footnote b.

- Footnote b is used only with map units that have poorly drained major soils (i.e., soils listed in the map unit name). This also includes soils that are dual drainage (somewhat poorly drained and poorly drained), like Fredon and Massena.
- Footnote b is not used with map units that have only somewhat poorly drained or moderately well drained soils.
- Footnote b is not used with map units that have very poorly drained soils unless poorly drained soils are also one of the named components.
- In reviewing the National Soil Survey Handbook and the Code of Federal Regulations about Prime Farmland, they indicate that wet soils are Prime only where drained – not if they can be drained. That is behind the change in the wording of this footnote.

Footnote b – Old wording

The soils in this soil map unit have a wetness limitation that may be difficult and/or unfeasible to overcome. Areas of this soil map unit don't qualify as Prime, Statewide, or Local, if artificial drainage is not feasible. Feasible means it is possible to install artificial drainage. No consideration is given to the cost of overcoming the drainage limitation or any law governing the installation of artificial drainage, when making an Important Farmland determination.

Footnote b – Revised wording

One or more of the soils in this soil map unit have a severe wetness limitation due to the presence of a shallow water table during the cropping season. Areas of this soil map unit do not qualify as Prime Farmland or Farmland of Statewide Importance if artificial drainage is not installed.

3. Footnote c.

- Footnote c is used only with map units that have a “very rocky” rock outcrop condition. Areas of very rocky map units typically have more than 2 percent rock outcrops.
- Footnote c is not used with map units that are “rocky.” Areas of rocky map units typically have less than 2 percent rock outcrops.

Footnote c – Old wording

Bedrock outcrops commonly cover more than 2 percent of the surface. Areas of this soil map unit will not qualify as Prime, Statewide, or Local, if bedrock outcrops are extensive enough to prohibit efficient farming.

Footnote c – Revised wording

Bedrock outcrops commonly cover more than 2 percent of the surface. Areas of this soil map unit will not qualify as Prime Farmland or Farmland of Statewide Importance if bedrock outcrops are extensive enough to prohibit efficient farming.

4. Footnote d – No change to current wording

The soils in this soil map unit have a wetness limitation that may not be feasible to overcome. Agricultural Value Group assignments are based on the assumption that installing artificial drainage is feasible. Feasible means it is possible to install artificial drainage. Areas of this soil map unit, where artificial drainage is not feasible, should be placed in Agricultural Value Group 11. Normally, the cost of installing artificial drainage and laws governing the installation of artificial drainage should not be considered when making this determination. In some situations, if laws prevent the installation of corrective measures, the area in question should be placed in Agricultural Value Group 11. This footnote is assigned to Agricultural Value Groups 1 through 8.

5. Footnote e – No change to current wording

Bedrock outcrops cover more than 2 percent of the surface. Areas of this soil map unit should be placed in Agricultural Value Group 11, if bedrock outcrops are extensive enough to prohibit efficient farming. This footnote is assigned to Agricultural Value Groups 1 through 8.

6. New footnote f. for Prime Farmland soil map units that are frequently flooded.

- This footnote addresses the NSSH/CFR criteria that Prime Farmland map units can't be frequently flooded during the growing season.
- This footnote basically says that *frequent flooding* occurs outside the growing season and that during the growing season, there is just *occasional flooding*. Flooding criteria from the NSSH is referenced in this footnote.

The soils in this soil map unit are frequently flooded. Flooding is likely to occur often under usual weather conditions, and there is more than a 50 percent chance of flooding in any year. Typically, however, flooding occurs outside of the growing season. During the growing season, flooding is expected infrequently under usual weather conditions, with a 5 to 50 percent chance of flooding in any year.

Part C. Summary of Revisions

REVISION	TOTAL ACREAGE AFFECTED
Change map unit rating from Local to Statewide.	2739
Change map unit rating from NPSL to Statewide.	8846
Change map unit rating from NPSL to Prime.	568
Change map unit rating from Statewide to Prime.	7839
Change map unit rating from Statewide to NPSL.	11538
Change map unit rating from Prime to Statewide.	799
Add footnote a. to map unit rating.	5054
Add footnote b. to map unit rating.	4358
Delete footnote b. from map unit rating.	58951
Delete footnote c. from map unit rating.	20159
Add footnote f. to map unit rating.	18648

CONTACT INFORMATION

If you have questions about Important Farmland Classification ratings, contact:

Stephen H. Gourley, State Soil Scientist
356 Mountain View Drive, Suite 105
Colchester, VT 05446
802-951-6796 ext. 236
Steve.Gourley@vt.usda.gov

Or

Thomas Villars, Soil Resource Specialist
28 Farmvu Drive
White River Junction, VT 05001
802-295-7942 ext. 24
Thomas.Villars@vt.usda.gov