## Major Land Resource Area 142X St. Lawrence-Champlain Plain

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## **Ecological site keys**

## MLRA 142 PES key (Mesic/Frigid)

1a. Soils frigid, shorter growing season (St. Lawrence Valley and Upper Champlain Valley)
2a. Site periodically flooded during the growing season, adjacent to a river or stream [Medomak, Sloan, Redwater] ... F142XA001NY – Low Floodplain Frigid

2b. Site not periodically flooded during the growing season, not adjacent to a river or stream

3a. Substrate mostly organic (Histosols)

4a. pH > 4.5; swamps and fens [Wonsqueak, Markey, Dorval] ... F142XA002NY – Mucky Depression Frigid LRU

4b. pH < 4.5, bog [Wonsqueak, Loxley, Knob Lock, Dawson, Churubusco] ... F142XA003NY – Acidic Peaty Depression

3b. Substrate mostly mineral (Alfisols, Inceptisols, Spodosols, Entisols)

5a. Parent material glacial outwash, soils coarse textured (sands) to moderately coarse textured (sandy loams)

- 6a. Soils excessively drained to well drained
  - 7a. pH of upper 50 cm less than 5.5, low base saturation (acidic)

8a. Soils shallow (< 50cm) to root restricting ortstein layer (iron cementation) [Constable,

Wallace] ... F142XA004NY - Acidic Shallow Sandy Outwash

8b. Soils very deep (>150cm) to bedrock [Stetson, Ondawa, Colosse, Adams, Melrose] ... F142XA005NY – Acidic Sandy Outwash

7b. pH of upper 50 cm greater than greater than 5.5, higher base saturation (rich) [Missisquoi, Champlain, Waddington, Raquette, Trout River] ... F142XA022NY – Rich Dry Outwash Frigid

6b. Soils moderately well drained to very poorly drained

9a. pH of upper 50 cm less than 5.5, low base saturation (acidic), watertable 25-100 cm deep (moderately well drained or somewhat poorly drained) [Lovewell, Occur, Coveytown, Duane, Au Gres, Wainola, Naumburg] ... F142XA006NY – Acidic Moist Outwash Frigid

9b. pH of upper 50 cm greater than 5.5, higher base saturation (rich)

10a. Watertable 25-100 cm deep (moderately well drained or somewhat poorly drained)
[Mooers, Sheddenbrook, Fahey, Flackville, Sciota, Northway, Eelweir] ... F142XA007NY – Rich Moist Outwash Frigid

10b. Watertable <25 cm deep (poorly drained) [Searsport, Deinache, Stockholm, Cook, Coveytown, Deford, Munuscong, Pinconning] ... F142XA008NY – Wet Outwash Depression

5b. Parent material glacial till or glaciolacustrine, soils coarse textured (sandy loams) to fine textured (clavs)

11a. Parent material glaciolacustrine, soils moderately coarse textured to fine textured

12a. Soils well drained to somewhat poorly drained

13a. pH of upper 50 cm less than 5.5, low base saturation (acidic) [Salmon, Nicholville] ... F142XA010NY – Acidic Lacustrine Terraces Frigid

13b. pH of upper 50 cm greater than 5.5, higher base saturation (rich) [Buxton, Heuvelton,

Depeyster, Elmwood, Muskellunge, Matoon, Hailsboro] ... F142XA012NY – Rich Lacustrine Terraces Frigid

12b. Soils poorly drained to very poorly drained [Adjidaumo, Guff, Wegatchie, Swanton, Whately] ... F142XA014NY – Wet Lacustrine Depression

11b. Parent material glacial till, soils moderately coarse textured to medium textured

14a. Soils poorly drained to very poorly drained) [Hannawa, Lyonmounten, Runeberg] ... F142XA021NY – Wet Till Depression

14b. Soils excessively drained to somewhat poorly drained

15a. pH of upper 50 cm less than 5.5, low base saturation (acidic)

16a. Soils shallow and well drained to excessively drained (< 50cm) to bedrock [Ricker, Woodstock, Taconic, Success, Lyman, Hubbardton, Hogback, Irona, Insula, Quetico, Abram, Conic] ... F142XA015NY – Shallow Acidic Till Upland Frigid

16b. Soils shallow to very deep; somewhat poorly drained to well drained [Berkshire, Monadnock, Worth, Turnbridge, Rawsonville, Parishville, Mundalite, Millsite, Macomber, Gretor, Sunapee, Westbury, Skerry, Ampersand, Chazy, Topknot, Moira, Schroon] ... F142XA019NY – Acidic Moist Till Frigid

15b. pH of upper 50 cm greater than 5.5, higher base saturation (rich)

17a. Soils shallow (< 50cm) to bedrock [Gouverneur, Summerville/Kings Falls] ... F142XA016NY – Shallow Rich Till Upland

17b. Soils moderately deep to very deep (> 50cm) to bedrock or densic horizon

18a. Soils well drained [Stowe, Marlow, Grenville, Pyrities, Nehasne, Neckrock,

Galway cool] ... F142XA018NY - Rich Till Upland Frigid

18b. Soils (moderately well drained or somewhat poorly drained) [Peru, Hogansburg, Kalurah, Ogdensburg, Malone, Brayton, Peasleeville] ... F142XA020NY – Rich Moist Till Frigid

1b. Soils mesic, longer growing season (Eastern Ontario Plain and Lower Champlain Valley)

19a. Substrate mostly organic (Histosols) [Aquents, Palms, Willette/Whallonsburg] ... F142XB001NY – Mucky Depression

19b. Substrate mostly mineral (Mollisol, Alfisols, Inceptisols, Spodosols, Entisols)

20a. Landform a floodplain

21a. Soils somewhat poorly to somewhat excessively drained [Reserved]

21b. Soils poorly or very poorly drained [Reserved]

20b. Landform not a floodplain

22a. Parent material glacial outwash, soils coarse textured (sands) to moderately coarse textured (sandy loams)

23a. Soils poorly drained to very poorly drained [Scarboro, Rumney, Saco, Rippowam, Limerick,

Gougeville, Enosburg] ... F142XB004VT - Wet Outwash Depression

23b. Soils somewhat poorly drained to excessively drained

24a. Soils well drained to excessively drained [Warwick, Tioga, Occum, Hamlin, Hadley, Kars, Factoryville, Hinesburg, Bonapart, Agawam, Arkport, Colonie, Copake, Grattan, Groton, Howard, Merrimac, Plainfield, Windsor] ... F142XB002VT – Dry Outwash

24b. Soils moderately well drained or somewhat poorly drained [Teel, Podunk, pootatuck, phelps, Lobdell, Herkimer, Castile, Wareham, Eldridge, Covertfalls, Northway, Cosad, Deerfield, Homer, Pipestone] ... F142XB003VT – Moist Outwash

22b. Parent material glacial till or glaciolacustrine, soils coarse textured (sandy loams) to fine textured (clays)

25a. Parent material glaciolacustrine, soils medium textured to fine textured

26a. Soils somewhat poorly drained to well drained

27a. Soils fine to very fine texture (clay, clay loam, silty clay loam) [Vergennes, Wilpoint Cayuga, Hudson, Chaumont, Churchville, Kingsbury, Rhinebeck] ... F142XB005VT – Clayplain

27b. Soils coarse-silty, coarse loamy over clayey, sandy over clayey (silt loam, fine sandy loam, sandy loam, loamy fine sand) [Unadilla, Hartland, Belgrade, Claverack, Elmridge, Munson, Niagara, Stafford, Tonawanda] ... F142XB018VT – Moist Lake Plain

26b. Soils very poorly to poorly drained [Covington, Guffin, Binghamville, Livingston, Madalin, Panton] ... F142XB007VT – Wet Clayplain Depression

25b. Parent material glacial till, soils moderately coarse textured to medium textured

28a. Soils excessively drained to well drained

29a. pH of upper 50 cm less than 5.5, low base saturation (acidic)

30a. Soils shallow to very shallow (< 50cm) to bedrock [Hollis, Galoo acid phase] ... F142XB019NY – Shallow Acidic Till Upland

30b. Soils moderately deep to very deep (> 50cm) to bedrock or densic horizon [Paxton, Charlton, Chatfield, Duchess, Lordstown, St. Albans] ... F142XA009NY – Steep Acidic Lacustrine Slope Frigid

29b. pH of upper 50 cm greater than 5.5, higher base saturation (rich)

31a. Soils shallow to very shallow (< 50cm) to bedrock [Benson, Galoo, Farmington] ... F142XB010NY – Shallow Rich Till Upland

31b. Soils moderately deep to very deep (> 50cm) to bedrock or densic horizon [Madrid, Nellis, Lowville, Galway, Gardenisle, Dover, Pittsfield, Stockbridge, Palatine, Farmington - moderately deep phase] ... F142XB012VT – Rich Till Upland

28b. Soils moderately well drained to very poorly drained

32a. Soils moderately well drained to somewhat poorly drained [Amenia, Angola, Bombay,

Empeyville, Georgia, Kendaia, Massena, Newstead] ... F142XB013NY - Moist Till Upland

32b. Soils poorly drained to very poorly drained

33a. pH of upper 50 cm less than 5.5, low base saturation (acidic) [Ridgebury, Whitman] ... F142XB021NY – Acidic Wet Till Depression

33b. pH of upper 50 cm greater than 5.5, higher base saturation (rich) [Lyons, Sun]  $\dots$  F142XB014NY – Rich Wet Till Depression