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 (clays)
 - 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)

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

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,

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] $\,\dots\,$ 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] ... F142XB014NY Rich Wet Till Depression