

# Major Land Resource Area 142X

## St. Lawrence-Champlain Plain

Accessed: 11/21/2024

---

### 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)
      - 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) [Aquets, 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, Dutchess, 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