

# Major Land Resource Area 142X

## St. Lawrence-Champlain Plain

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### Ecological site keys

#### MLRA 142 - Frigid Soil Temperature Regime (St. Lawrence Valley and Upper Champlain Valley)

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- I. Site periodically flooded during the growing season, adjacent to a river or stream [Medomak, Sloan, Redwater] ... F142XA001NY – Low Floodplain Frigid
- II. Site not periodically flooded during the growing season, not adjacent to a river or stream
  - A. Substrate mostly organic (Histosols)
    - 1 pH greater 4.5; swamps, fens, and marshes landforms [Wonsqueak, Markey, Dorval] ... F142XA002NY – Mucky Depression Frigid LRU
    - 2 pH less than 4.5, bog landforms [Wonsqueak, Loxley, Knob Lock, Dawson, Churubusco] ... F142XA003NY – Acidic Peaty Depression
  - B. Substrate mostly mineral (Alfisols, Inceptisols, Spodosols, Entisols)
    - 1 Parent material glacial outwash, soils coarse textured (sands) to moderately coarse textured (sandy loams)
      - i. Soils excessively- to well-drained
        - a. pH of upper 50 cm less than 5.5, low base saturation (acidic)
          - 1) Soils shallow (< 50cm) to root restricting ortstein layer (iron cementation) [Constable, Wallace] ... F142XA004NY – Acidic Shallow Sandy Outwash
          - 2) Soils very deep (>150cm) to bedrock [Stetson, Ondawa, Colosse, Adams, Melrose] ... F142XA005NY – Acidic Sandy Outwash
        - b. 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
      - ii. Soils moderately well- to very poorly- drained
        - a. pH of upper 50 cm less than 5.5, low base saturation (acidic), water table 25-100 cm deep (moderately well- or somewhat poorly- drained) [Lovewell, Occur, Coveytown, Duane, Au Gres, Wainola, Naumburg] ... F142XA006NY – Acidic Moist Outwash Frigid
        - b. pH of upper 50 cm greater than 5.5, higher base saturation (rich)
          - 1) Water table 25-100 cm deep (moderately well- or somewhat poorly- drained) [Mooers, Sheddenbrook, Fahey, Flackville, Sciota, Northway, Eelweir] ... F142XA007NY – Rich Moist Outwash Frigid
          - 2) Water table <25 cm deep (poorly- drained) [Searsport, Deinache, Stockholm, Cook, Coveytown, Deford, Munuscong, Pinconning] ... F142XA008NY – Wet Outwash Depression
    - 2 Parent material glacial till or glaciolacustrine, soils coarse textured (sandy loams) to fine textured (clays)
      - i. Parent material glaciolacustrine, soils moderately coarse textured to fine textured
        - a. Soils well- to somewhat poorly- drained
          - 1) pH of upper 50 cm less than 5.5, low base saturation (acidic) [Salmon, Nicholville] ... F142XA010NY – Acidic Lacustrine Terraces Frigid
          - 2) 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

- b. Soils poorly- to very poorly- drained [Adjidaumo, Guff, Wegatchie, Swanton, Whately] ... F142XA014NY – Wet Lacustrine Depression
- ii. Parent material glacial till, soils moderately coarse textured to medium textured
  - a. Soils poorly- to very poorly- drained) [Hannawa, Lyonmounten, Runeberg] ... F142XA021NY – Wet Till Depression
  - b. Soils excessively- to somewhat poorly- drained
    - 1) pH of upper 50 cm less than 5.5, low base saturation (acidic)
      - a) Soils shallow and well- to excessively- drained (< 50cm) to bedrock [Ricker, Woodstock, Taconic, Success, Lyman, Hubbardton, Hogback, Irona, Insula, Quetico, Abram, Conic] ... F142XA015NY – Shallow Acidic Till Upland Frigid
      - b) Soils shallow to very deep; somewhat poorly- 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
    - 2) pH of upper 50 cm greater than 5.5, higher base saturation (rich)
      - a) Soils shallow (< 50cm) to bedrock [Gouverneur, Summerville/Kings Falls] ... F142XA016NY – Shallow Rich Till Upland
      - b) Soils moderately deep to very deep (> 50cm) to bedrock or densic horizon
        - (1) Soils well- drained [Stowe, Marlow, Grenville, Pyrities, Nehasne, Neckrock, Galway cool] ... F142XA018NY – Rich Till Upland Frigid
        - (2) Soils moderately well- or somewhat poorly- drained [Peru, Hogansburg, Kalurah, Ogdensburg, Malone, Brayton, Peasleeville] ... F142XA020NY – Rich Moist Till Frigid