

APPENDIX 12-IV

Polytype and Ecosite Definitions

**APPENDIX 12-IV
POLYSITE AND ECOTYPE DEFINITIONS**

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APPENDIX 12-IV POLYSITE AND ECOTYPE DEFINITIONS

Table 12-IV-1: Polytype Definitions

| Polytype Code | Polytype Full Name | Polytype Description | Source |
|---------------|-----------------------------|---|---------------------------------------|
| BFL | Buffered Line | Delineates linear disturbances (typically 40 to 45 m wide). | FRI and aerial imagery ^(a) |
| BFW | Buffered Watercourse | Outlines watercourses (i.e. rivers and streams). Polygons are typically 5 m in width. | FRI and aerial imagery ^(a) |
| BSH | Brush and Alder | Non-commercial forest areas with trees and shrub species. Commonly associated with wetlands and water features lacking productive forest. Does not include similar areas created as a result of forest management operations. | MNR 2009 |
| DAL | Developed Agricultural Land | Cultivated lands for growing crops, orchards and floral gardens, for example. Also includes abandoned agricultural lands. | MNR 2009 |
| FOR | Forest | Timber productive areas with the capability of supporting tree growth. Depending on the stage of development, these areas may or may not currently have productive timber growing on site. | MNR 2009 |
| GRS | Grass and Meadow | Agricultural areas used as pasture for domesticated animals including abandoned grass and meadows. Does not include 'barren and scattered' areas and is not part of the productive forest land base. Usually fenced. | MNR 2009 |
| ISL | Small Island | Small islands between 0.0025 to 8 ha. Unlike larger islands, small islands are not further interpreted into polytype codes, such as FOR or BSH. | MNR 2009 |
| OMS | Open Wetland | Wetland areas composed of mosses, grasses, sedges and herbaceous plant species, often scattered with small patches of open water. | MNR 2009 |
| OTH | Other | Islands associated with water. | FRI and aerial imagery ^(a) |
| RCK | Rock | Exposed rock or barren areas, such as bedrock, cliff face and talus slope. Scattered trees may occur but are less than or equal to 25%. | MNR 2009 |
| RRW | Road RoW | Disturbance associated with roads and the cleared right-of-way surrounding roads. | FRI and aerial imagery ^(a) |
| TMS | Treed Wetland | Wet or dry muskeg areas with stunted trees spaced widely or in small groupings. | MNR 2009 |
| UCL | Unclassified | Non-forested areas typically cleared of trees and without timber production. Includes areas such as roads, logging camps, mines, railroads, gravel pits, airports and utility corridors among other uses. | MNR 2009 |
| WAT | Water | Lakes, ponds, reservoirs, and wide rivers. There is no differentiation between lakes and wide rivers. Polygon delineations are to the high water mark. Rivers includes those that can be defined by an area not a line and area identified as rivers 10 m or wider. Rivers below 10 m in width are mapped as linear features not as a WAT polytype. | MNR 2009 |

Source: MNR (Ministry of Natural Resources). 2009. Forest Information Manual 2009: Forest Resources Inventory Technical Specification Draft for August 2009. Available at: <https://dr6j45jk9xcmk.cloudfront.net/documents/2837/fim-tech-spec-forest-resources-inventory.pdf>. Accessed July 7, 2016.

a) The polytype was not defined. Instead, the FRI polygon was superimposed over available aerial imagery to identify the feature and provide a description.

FRI = Forest Resources Inventory.

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Table 12-IV-2: Ecosite Definitions

| Ecosite Map Code | Ecosite Name | General Description/Vegetation | Typical Soils | Typical Moisture Regime | Typical Nutrient Regime | Source |
|------------------|--|--|--|-------------------------|-------------------------|----------------------|
| C11 | White Pine-Red Pine | White pine-red pine dominated forests. Medium amounts of conifer regeneration, low hardwood shrubs and feathermosses in the understory. Herbs infrequent. | Sandy to coarse loamy | Dry to moist | Medium | Chambers et al. 1997 |
| C12 | Red Pine | Red pine dominated forests. White pine common in the main canopy. Medium amounts of conifer regeneration, low hardwood shrubs and feathermosses in the understory. Herbs infrequent. | Sandy to coarse loamy | Dry to moist | Medium | Chambers et al. 1997 |
| C13 | Jack Pine-White Pine-Red Pine | Jack pine-white pine-red pine dominated forests. Medium amounts of conifer and hardwood regeneration, ericaceous shrubs, low hardwood shrubs, lichens and feathermosses in the understory. Herbs infrequent. | Sandy to coarse loamy. Usually shallow sites | Dry to moist | Poor to medium | Chambers et al. 1997 |
| C15 | Jack Pine | Jack pine dominated. Black spruce in the subcanopy. Ericaceous shrubs, feathermosses and regenerating conifers in the understory. Small number of herbs. | Sandy, coarse loamy, or silty soils | Dry to very moist | Poor | Chambers et al. 1997 |
| C16 | Black Spruce-Pine | Black spruce-pine dominated. White pine, red pine or Jack pine can be present in the main canopy. Subcanopy with balsam fir and black spruce. Moderate amounts of ericaceous shrubs; regenerating conifers and feathermoss abundant. Small amounts of herbs. | Sandy to coarse loamy soils | Dry to very moist | Poor | Chambers et al. 1997 |
| C17 | Poplar-White Birch | Poplar-white birch dominated. Medium amounts of hardwood regeneration and herbs in the understory. | Sandy, coarse loamy, or silty soils | Dry to moist | Medium | Chambers et al. 1997 |
| C18 | Poplar-White Birch-White Spruce-Balsam Fir | Poplar-white birch-white spruce-balsam fir mixedwood forests. Medium amounts of conifer and hardwood regeneration in the understory. Medium amount of herbs. | Sandy to coarse loamy, but can have a variety of soils | Dry to moist | Medium | Chambers et al. 1997 |
| C19 | Poplar-Jack Pine-White Spruce-Black Spruce | Poplar-Jack pine-white spruce-black spruce dominated forests. Medium amounts of conifer regeneration and hardwood shrubs in the understory. Herbs in moderate amounts. Feathermoss present. | Sandy to coarse loamy | Dry to moist | Medium | Chambers et al. 1997 |
| C20 | White Pine-Red Pine-White Spruce-White Birch-Trembling Aspen | White pine-red pine-white spruce-intolerant hardwood mixedwood forests. Medium to high amounts of conifer and hardwood regeneration and tall hardwood shrubs in the understory. Medium amount of herbs. | Sandy to coarse loamy | Dry to very moist | Medium | Chambers et al. 1997 |

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|------------------|---|--|--|---------------------------|-------------------------|----------------------|
| C21 | White Cedar-White Pine-White Birch-White Spruce | White cedar-white pine-white birch-white spruce mixedwood forests. Medium amounts of conifer regeneration and tall hardwood shrubs in the understory. Medium amount of herbs. | Sandy to coarse loamy, but can be a variety of soil textures | Dry to moist | Medium | Chambers et al. 1997 |
| C22 | White Cedar-Other Conifer | White cedar-other conifer dominated forests. Main canopy and subcanopy trees are composed of white cedar, balsam fir, black spruce, white birch and white spruce. Medium amounts of conifer regeneration, tall hardwood shrubs feathermosses and liverworts in the understory. Medium amount of herbs. | Sandy to coarse loamy | Dry to moist | Medium | Chambers et al. 1997 |
| C27 | Sugar Maple-White Birch-Poplar-White Pine | Sugar maple-white birch-poplar-white pine dominated forests. Harwood regeneration and tall shrubs abundant. Medium amount of herbs. | Usually sandy to coarse loamy, but can be a range of soil textures | Dry to moist | Medium | Chambers et al. 1997 |
| C29 | Sugar Maple-Yellow Birch | Sugar maple-yellow birch dominated forests. Medium amounts of hardwood and conifer regeneration and tall hardwood shrubs in the understory. Ground hemlock common in the shrub layer. Medium amount of herbs. | Sandy to coarse loamy, but can be a variety of soil textures. Moderate to high amounts of coarse fragments on upper, mid or level slopes | Dry to moist | Medium | Chambers et al. 1997 |
| C31 | Black Spruce-Tamarack: very moist mineral and wet organic soils | Black spruce-tamarack dominated forests. Medium amounts of conifer regeneration and high amounts of ericaceous shrubs and <i>Sphagnum</i> spp. in the understory. Herbs infrequent. | Organic soils. Sometimes mineral | Very moist to wet (fresh) | Poor | Chambers et al. 1997 |
| C32 | White Cedar-Black Spruce-Tamarack: very moist mineral and wet organic soils | White cedar-black spruce-tamarack dominated forests. Red spruce occasional. Medium amount of conifer regeneration and tall hardwood shrubs in the understory. <i>Sphagnum</i> spp. and feathermoss abundant. Medium amount of herbs. | Organic soils. Sometimes mineral | Very moist to wet (fresh) | Poor to medium | Chambers et al. 1997 |
| C33 | White Cedar-Other Conifer: very moist to wet soils | White cedar-other conifer dominated forests. Main canopy and subcanopy trees are composed of black spruce and balsam fir. Medium amounts of conifer regeneration and tall hardwood shrubs in the understory. <i>Sphagnum</i> spp., feathermosses and liverworts abundant. Medium number of herbs. | Mineral soils | Very moist to wet | Medium | Chambers et al. 1997 |

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|------------------|---|---|--|-------------------------|-------------------------|----------------------|
| C35 | Lowland Hardwoods: fresh to very moist soils | Lowland hardwood dominated forests. Main and subcanopy diverse. Shrub layer diverse. High amounts of hardwood shrubs in the understory. High levels of herbs. | Soils in flats, telluric slopes and fluvial sites | Fresh to very moist | Medium | Chambers et al. 1997 |
| NE01 | Black Spruce - Jack Pine/White Spruce - White Birch | Dominated by black spruce and Jack pine (coniferous) or white spruce and white birch (mixedwood). Moderate amount of shrubs and few herbs. | Very shallow soils (0-30 cm) over bedrock | Dry to fresh | Poor | Chambers et al. 1997 |
| NE02 | Jack Pine - Coarse Soil | Jack pine stands with abundant ericaceous shrubs, feathermoss and lichens. | Deep, sandy to coarse loamy soils | Dry to fresh | Poor | Taylor et al. 2000 |
| NE03 | White Birch - Trembling Aspen - Black Spruce - Coarse Soil | Mixedwood dominated by white birch, trembling aspen and black spruce. Medium number of shrubs and herbs with abundant bunchberry. | Sandy to coarse loamy soils | Fresh (dry) | Poor | Taylor et al. 2000 |
| NE04 | Black Spruce - Jack Pine - Coarse Soil | Dominated by black spruce and Jack pine. Medium number of shrubs and herbs. | Sandy to coarse loamy soils | Dry to fresh | Poor | Taylor et al. 2000 |
| NE05 | Black Spruce - Fine/Medium Soil | Dominated by black spruce and sometimes Jack pine on drier sites. Medium number of shrubs and herbs. | Soils very from coarse to fine | Fresh to moist | Poor | Taylor et al. 2000 |
| NE06 | Black Spruce-Trembling Aspen/Trembling Aspen - Black Spruce - Jack Pine/Trembling Aspen - Black Spruce - Balsam Fir | Mixedwood stands. Moderate amounts of shrubs and herbs. | Loamy, silty, or clayey soils. Sometimes sandy to coarse loamy | Fresh to moist (dry) | Medium to rich | Taylor et al. 2000 |
| NE07 | Trembling Aspen - White Birch/Trembling Aspen - White Spruce - White Birch | Hardwood mixedwood stands. Medium number of shrubs and herbs. Abundant tall shrubs. | Loamy, silty, or clayey soils. Sometimes sandy to coarse loamy | Fresh (dry or moist) | Medium | Taylor et al. 2000 |
| NE08 | Black Spruce - Feathermoss - Sphagnum - Moist Soil | Black spruce dominated. Abundant feathermoss and <i>Sphagnum</i> spp. | Sandy to clayey soils | Moist | Poor | Taylor et al. 2000 |
| NE09 | Black Spruce - Larch/White Spruce - Balsam Fir - White Cedar | Coniferous stands. Medium number of shrubs and medium to high number of herbs with a high cover of feathermoss. | Sandy to clayey | Moist (fresh) | Medium to rich | Taylor et al. 2000 |
| NE10 | Trembling Aspen - Black Spruce - Balsam Poplar - Moist Soil | Dominated by hardwood mixedwood stands. Medium number of shrubs and herbs. Speckled alder commonly found. | Sandy to clayey | Moist | Medium | Taylor et al. 2000 |
| NE11 | Black Spruce - Labrador Tea - Organic Soil | Black spruce dominated. Labrador tea, <i>Sphagnum</i> spp. and feathermoss abundant. | Wet deep fibric organic soils | Wet (moist) | Poor | Taylor et al. 2000 |
| NE12 | Black Spruce - Larch - Labrador Tea - Organic Soil | Black spruce and larch dominated. Medium number of shrubs and herbs. | Wet moderately deep fibric organic soils | Wet (moist) | Poor | Taylor et al. 2000 |

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|------------------|--|--|---|--|-------------------------|--------------------|
| NE13 | Black Spruce - Larch - Speckled Alder/White Cedar - Black Spruce | Dominated by black spruce and larch or white cedar and black spruce. Abundant to medium number of shrubs and herbs. Abundant <i>Sphagnum</i> spp. and feathermosses. | Deep fibric organic soils | Wet (moist) | Rich | Taylor et al. 2000 |
| NE14 | Black Spruce - Leatherleaf - Organic Soil | Medium number of ericaceous shrubs and herbs. | Wet very deep fibric organic soils | Wet | Poor | Taylor et al. 2000 |
| NE15 | Red Maple | Tolerant hardwood mixedwood stands with red maple in the canopy and sapling layer. Abundant beaked hazel and mountain maple. Feathermoss present. Leaf litter with scattered stones and bedrock. | Sandy to silty soil. Coarse-textured soils deposited by glacial ice | Fresh | Medium | Taylor et al. 2000 |
| NW01 | Beach / Bar | Sparse because of continual erosion. Annual herbs and graminoids sometimes present. | Sand and gravel deposits. Either localized or extending for kilometers. Bars are formed by waves or currents creating emergent embankments of sand or gravel. | Dry to moist | Not described | Racey et al. 1996 |
| NW03 | Bluff | Sparse. May have mosses, liverworts, lichens or ferns. | Mineral soil. Vertical cut banks. | Dry | Not described | Racey et al. 1996 |
| NW04 | Cliff | Graminoids and ferns in areas of soil accumulation. Mosses, lichens and liverworts. | Vertical rock faces. Soil may be found in crevices and shelves. | Dry (some moisture from precipitation) | Not described | Racey et al. 1996 |
| NW05 | Talus or Steep Slope | Sparse. Mostly lichen and mosses present. May be some shrubs, herbs or graminoids. | Boulders or other coarse rocky materials deposited at the base of a cliff on a slope. Soil may accumulate. | Dry when exposed; moist when shady | Not described | Racey et al. 1996 |
| NW07 | Rock Barren | Sparsely vegetated with lichens, mosses, liverworts, herbs and graminoids. Some scattered trees and shrubs. | Bedrock. Shallow patches of soil. | Very dry | Not described | Racey et al. 1996 |
| NW10 | Prairie / Savannah | Graminoids, herbs, shrubs or sometimes scattered trees. | Mineral soil | Dry to very dry (fresh to moist) | Not described | Racey et al. 1996 |
| NW11 | Red Pine - White Pine - Jack Pine: Very Shallow Soil | Conifer dominated forests with red, white and Jack pine. White cedar may be locally abundant. Ground cover composed of bedrock, needle litter, feathermoss and lichen. | Very shallow (<20 cm) with bedrock outcrops | Dry | Poor | Racey et al. 1996 |
| NW12 | Black Spruce - Jack Pine: Very Shallow Soil | Dominated by black spruce and Jack pine. Poor shrubs and herbs. Lichens and feathermoss. | Very shallow (<20 cm) with bedrock outcrops. Bedrock covered by a shallow litter layer. | Dry | Poor | Racey et al. 1996 |

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|------------------|---|--|---|-------------------------|-------------------------|-------------------|
| NW13 | Jack Pine - Conifer: Dry - Moderately Fresh Sandy Soil | Jack pine dominated. Black spruce sparse to abundant. Feathermoss abundant within closed canopy, lichens abundant with open canopy. | Rapidly to well-drained coarse to fine sand | Dry to moderately fresh | Poor | Racey et al. 1996 |
| NW14 | Pine - Spruce Mixedwood: Sandy Soil | Dominated by Jack pine and black spruce. Usually abundant herbs and shrubs. Groundcover composed of feathermoss and leaf litter. | Rapidly well-drained coarse to fine sand. Shallow to moderately deep soils. | Dry to moderately fresh | Medium | Racey et al. 1996 |
| NW15 | Red Pine - White Pine: Sandy Soil | Conifer dominated or mixed stands composed of red and white pine and white birch. Groundcover composed of feathermoss and leaf litter. | Rapidly well-drained coarse to fine sand | Dry to moderately fresh | Poor | Racey et al. 1996 |
| NW16 | Hardwood - Fir - Spruce Mixedwood: Sandy Soil | Dominated by trembling aspen, white birch and balsam fir. Deciduous portion of canopy is >50%. Shrubs and herbs abundant. Groundcover composed of leaf litter and wood. | Rapidly to well-drained coarse to fine sand. Moderately deep soil sites. | Dry to moderately fresh | Medium | Racey et al. 1996 |
| NW17 | White Cedar: Fresh - Moist, Coarse - Fine Loamy Soil | Cedar dominated conifer and mixedwood stands. Shrub layer dominated by <i>Acer spicatum</i> , balsam fir and white cedar. Ground cover composed of leaf litter, wood and feathermoss. | Wide range | Fresh to moist | Medium | Racey et al. 1996 |
| NW18 | Red Pine - White Pine: Fresh, Coarse Loamy Soil | Conifer dominated or mixed stands with red and white pine. Variable understory. Ground cover composed of leaf litter, feathermoss and wood. | Well drained. Coarse loamy. | Fresh | Poor | Racey et al. 1996 |
| NW19 | Hardwood - Fir - Spruce Mixedwood: Fresh, Sandy - Coarse Loamy Soil | Dominated by trembling aspen, white birch and balsam fir. Deciduous portion of canopy is >50%. Understory variable. | Well drained. Coarse loamy to fine sand. Shallow soil sites. | Fresh | Medium | Racey et al. 1996 |
| NW20 | Spruce - Pine / Feathermoss: Fresh, Sandy - Coarse Loamy Soil | Dominated by black spruce and Jack pine. Few shrubs and herbs. Ground cover composed of feathermoss and leaf litter. | Rapidly to well-drained, fine to coarse sand or coarse loam | Dry to fresh | Medium | Racey et al. 1996 |
| NW21 | Fir - Spruce Mixedwood: Fresh, Coarse Loamy Soil | Dominated by balsam fir, white spruce and black spruce. Coniferous portion of canopy is >50%. Low cover of shrubs and herbs. <i>Acer spicatum</i> may be locally abundant. Ground cover composed of leaf litter, feathermoss and wood. | Well-drained, coarse loam | Fresh | Medium | Racey et al. 1996 |
| NW22 | Spruce - Pine / Ledum / Feathermoss: Moist, Sandy - Coarse Loamy Soil | Dominated by black spruce and Jack pine. Moderate shrub and herb cover. Ground cover composed of feathermoss, leaf litter and Sphagnum. | Sandy to coarse loam | Moist | Poor | Racey et al. 1996 |

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|------------------|---|---|---|-------------------------|-------------------------|-------------------|
| NW23 | Hardwood - Fir - Spruce - Mixedwood: Moist, Sandy - Coarse Loamy Soil | Dominated by trembling aspen, white birch and balsam fir. Deciduous portion of canopy is >50%. Moderate cover of shrub and herbs. Ground cover composed of leaf litter, feathermoss, and patches of <i>Sphagnum</i> spp. | Sandy to coarse loam | Moist | Medium | Racey et al. 1996 |
| NW24 | Red Pine - White Pine: Fresh, Fine Loamy Soil | Mixed stands dominated by conifers and composed of red pine, white pine and white birch. Understory species include <i>Acer spicatum</i> , <i>Corylus cornuta</i> and <i>Aster macrophyllus</i> . Ground cover composed of leaf litter, feathermoss and wood. | Fine loam. Well-drained. | Fresh | Medium | Racey et al. 1996 |
| NW25 | Pine - Spruce / Feathermoss: Fresh, Silty Soil | Dominated by Jack pine and black spruce. Scattered trembling aspen, white birch and balsam fir. Low covers of shrub and herbs in younger fire original stand. Increased silt or a reduction in crown closure may lead to an abundance of shrubs and herbs. | Silt to silt loam. Well to moderately well-drained. | Fresh | Medium | Racey et al. 1996 |
| NW26 | Spruce - Pine / Feathermoss: Fresh, Fine Loamy - Clayey Soil | Dominated by black spruce and Jack pine. Low cover of shrubs and herbs. Ground cover composed of feathermoss, leaf litter and wood. | Well to moderately well-drained. Fine loamy-clayey. | Fresh | Medium | Racey et al. 1996 |
| NW27 | Fir - Spruce Mixedwood: Fresh, Silty - Fine Loamy Soil | Dominated by balsam fir, black spruce and white spruce. High cover of shrubs and herbs. Ground cover composed of leaf litter, feathermoss and wood. | Well to moderately well-drained. Silty to fine loamy. | Fresh | Medium | Racey et al. 1996 |
| NW28 | Hardwood - Fir - Spruce Mixedwood: Fresh, Silty Soil | Dominated by trembling aspen and white birch. Deciduous portion of canopy is >50%. High cover of shrubs and herbs. Ground cover composed of leaf litter, feathermoss and wood. | Well to moderately well-drained silt or silt loam | Fresh | Rich | Racey et al. 1996 |
| NW29 | Hardwood - Fir - Spruce Mixedwood: Fresh, Fine Loamy - Clayey Soil | Dominated by trembling aspen with a conifer mix of balsam fir, white spruce and black spruce. Deciduous portion of canopy is >50%. High cover of shrubs and herbs. Ground cover composed of leaf litter, feathermoss and wood. | Moderately well to well-drained, fine loamy-clayey | Fresh | Rich | Racey et al. 1996 |
| NW30 | Black Ash Hardwood: Fresh, Silty - Clayey Soil | Dominated by black ash. High cover of shrubs and herbs. Ground cover composed of leaf litter, feathermoss and wood. | Well to imperfectly drained, silty to clayey soils | Fresh to moist | Rich | Racey et al. 1996 |
| NW31 | Spruce - Pine / Feathermoss: Moist, Silty - Clayey Soil | Dominated by black spruce and Jack pine. Low cover of shrubs and herbs. Ground cover composed of feathermoss, leaf litter and wood. Patches of <i>Sphagnum</i> spp. in wet locations. | Silty to clayey | Moist | Medium | Racey et al. 1996 |

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| NW32 | Fir - Spruce Mixedwood: Moist, Silty - Clayey Soil | Dominated by balsam fir, white spruce, trembling aspen, and black spruce. Ground cover composed of leaf litter, feathermoss, and wood. | Silty to clayey | Moist | Medium | Racey et al. 1996 |
| NW33 | Hardwood - Fir - Spruce Mixedwood: Moist, Silty - Clayey Soil | Dominated by trembling aspen, white birch, balsam fir and white spruce. Medium cover of shrubs and herbs. Coniferous portion of canopy is <50%. Ground cover composed of leaf litter and wood. | Imperfectly to poorly drained. Silty to clayey textured. | Moist | Rich | Racey et al. 1996 |
| NW34 | Treed Bog: Black Spruce / Sphagnum: Organic Soil | Dominated by black spruce. Understory dominated by ericaceous shrubs and sedges. Ground cover composed of <i>Sphagnum spp.</i> and scattered feathermoss and leaf litter. | Sphagnum peat typically deeper than 40 cm | Wet | Poor | Racey et al. 1996 |
| NW35 | Poor Swamp: Black Spruce: Organic Soil | Dominated by black spruce. Understory dominated by ericaceous shrubs and plants that are indicators of flowing water. Ground cover composed of feathermoss, <i>Sphagnum spp.</i> , leaf litter and grass/sedge litter. | Fibric, woody or sphagnum peat typically deeper than 40 cm | Wet | Poor | Racey et al. 1996 |
| NW36 | Intermediate Swamp: Black Spruce (Tamarack): Organic Soil | Dominated by black spruce. Often also with tamarack, balsam fir or white cedar. Shrubs dominated by <i>Alnus incana</i> among other. Moderate cover of shrubs and herbs. High moss cover. Ground cover composed of feathermoss, <i>Sphagnum spp.</i> and leaf litter. | Woody or sphagnum peat | Wet | Poor | Racey et al. 1996 |
| NW37 | Rich Swamp: Cedar (Other Conifer): Organic Soil | Dominated by white cedar and less commonly tamarack or black spruce. <i>Acer spicatum</i> and <i>Alnus incana</i> commonly found in low covers. High cover of herbs. Ground cover composed of feathermoss, leaf litter, <i>Sphagnum spp.</i> and wood. | Organic or peaty | Wet | Medium | Racey et al. 1996 |
| NW38 | Rich Swamp: Black Ash (Other Hardwood): Organic - Mineral Soil | Dominated by black ash and/or white elm. Species compositions variable with high covers of shrub, herb and graminoids. Ground cover consists of leaf litter, logs and patches of moss. | Seasonally flooded with the water table at or close to the surface for the majority of the growing season. Sometimes with small permanent pools. Well-developed soils of woody peat or fine-textured mineral soil. | Wet | Rich | Racey et al. 1996 |
| NW39 | Open Bog: Ericaceous Shrub / Sedge / Sphagnum: Organic Soil | Open peatland. Scattered black spruce and/or tamarack (<10% cover and >2 m tall). Ericaceous shrubs common at high percent covers. Overall species poor with variable graminoid cover. Ground cover composed of <i>Sphagnum spp.</i> | Fibric peat consisting of sphagnum. Water table below the surface for the majority of the growing season. | Wet | Poor | Harris et al. 1996 |

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|------------------|---|---|---|-------------------------|-------------------------|--------------------|
| NW40 | Treed Fen: Tamarack - Black Spruce / Sphagnum: Organic Soil | Scattered tamarack and black spruce (>10% cover and >2 m tall). <i>Betula pumila</i> and/or ericaceous shrubs common. Herb and graminoid species variable. Ground cover composed of Sphagnum in poor fens and greater amounts of brown moss, sedge litter and bare peat in richer fens. | Water table at or below the surface for the majority of the growing season. Fibric to mesic peat consisting mostly of sphagnum and sedges. | Wet | Medium | Harris et al. 1996 |
| NW41 | Open Poor Fen: Ericaceous Shrub - Sedge / Sphagnum: Organic Soil | Open peatland. Scattered tamarack and/or black spruce with stunted growth at <10% cover. High cover of ericaceous shrubs and/or <i>Betula pumila</i> . Low number of herb and graminoid species. Ground cover composed of <i>Sphagnum</i> spp., bare peat, shrub and sedge litter. | Water table at or below the surface for the majority of the growing season. Fibric to mesic peat consisting of sphagnum. | Wet | Poor to medium | Harris et al. 1996 |
| NW42 | Open Moderately Rich Fen: Ericaceous Shrub / Sedge: Organic Soil | Open peatland. Scattered tamarack and/or black spruce with stunted growth at <10% cover. High shrub cover with moderate amounts of herbs, graminoid and moss layers. Ground cover composed of Sphagnum, brown mosses, sedge litter and bare peat. | Water table at or below the surface for the majority of the growing season. Fibric to mesic peat consisting of sedge material. | Wet | Medium | Harris et al. 1996 |
| NW43 | Open Extremely Rich Fen: Ericaceous Shrub / Sedge / Brown Moss: Organic Soil | Open peatland. Scattered stunted tamarack, white cedar and/or black spruce found at <10% cover. Shrubs infrequent. Herbs, graminoids and moisture abundant. Ground cover composed of brown mosses with smaller amounts of <i>Sphagnum</i> spp., sedge litter and bare peat. | Fibric to mesic peat. Water table at or below the surface for the majority of the growing season. | Wet | Medium to rich | Harris et al. 1996 |
| NW44 | Thicket Swamp: Organic - Mineral Soil | Tall shrubs dominated by willows, <i>Alnus incana</i> and <i>Cornus stolonifera</i> . High species diversity with variable composition. Ground cover composed of exposed soil, leaf litter, grass stem mats and moss clumps. | Seasonally flooded with the water table at or close to the surface for the majority of the growing season. Sometimes with small permanent pools. Well-developed decomposed peat or fine mineral soil. | Wet | Rich | Harris et al. 1996 |
| NW45 | Shore Fen: Organic Soil | Open wetlands found adjacent to streams and lakes with low wave and current energy. Dominated by sedges and shrubs with smaller amounts of grasses and herbs. Ground cover composed of sedge litter, bare peat and water. | Seasonally flooded. Water table at or above the soil surface for the majority of the growing season. A floating mat of fibric to mesic peat found over water or loose sedimentary peat. | Wet | Medium | Harris et al. 1996 |

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Table 12-IV-2: Ecosite Definitions

| Ecosite Map Code | Ecosite Name | General Description/Vegetation | Typical Soils | Typical Moisture Regime | Typical Nutrient Regime | Source |
|------------------|---|--|---|-------------------------|-------------------------|--------------------|
| NW46 | Meadow Marsh: Organic - Mineral Soil | Floodplains beside streams, lakes, beaver meadows ditched and sometimes isolated basins. Graminoid dominated (sometime herb dominated). Tall shrubs may be found at <25% cover. Infrequent mosses. Ground cover composed of mats of grass and sedge stems and leaves. | Seasonally flooded. Water table at or slightly below the soil surface for the majority of the growing season. | Wet | Rich | Harris et al. 1996 |
| NW47 | Sheltered Marsh: Emergent: Sedimentary Peat Substrate | Herb dominated found adjacent to bays, isolated basins and small streams with low wave and current energy. Emergent species >25% cover. Submergent and floating vegetation can be found in high covers. Ground cover composed of partially decomposed stalks and leaves or bare. | Water table above the soil surface for the majority of the growing season. Rich sedimentary peat combined with fine-textured mineral soil. | Wet | Medium | Racey et al. 1996 |
| NW48 | Exposed Marsh: Emergent: Mineral Substrate | Typically found along wave-washed shorelines and river with high water energy. Sometimes found on lakeshores, streambanks or ditches. Emergent plants with >25% cover. Submergent plants variable in cover. | Water table above the soil surface for the majority of the growing season. Sand and sometimes held together by a root mat. Sometimes a layer of partially decomposed plant litter is found. | Wet | Rich | Racey et al. 1996 |
| NW50 | Open Water Marsh: Submergent: Mineral Substrate | Submergent communities beside wave-washed shores and rivers with high water energy. Emergent cover <25%. | Sand. Water table above the surface for the majority of the growing season. Sometimes rocky, oligotrophic (low primary productive) lake. | Wet | Medium | Racey et al. 1996 |

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Note: Moisture and nutrients regimes in brackets are less commonly found based on field plots for the ecosite.

< = less than; > = greater than; spp. = multiple species.