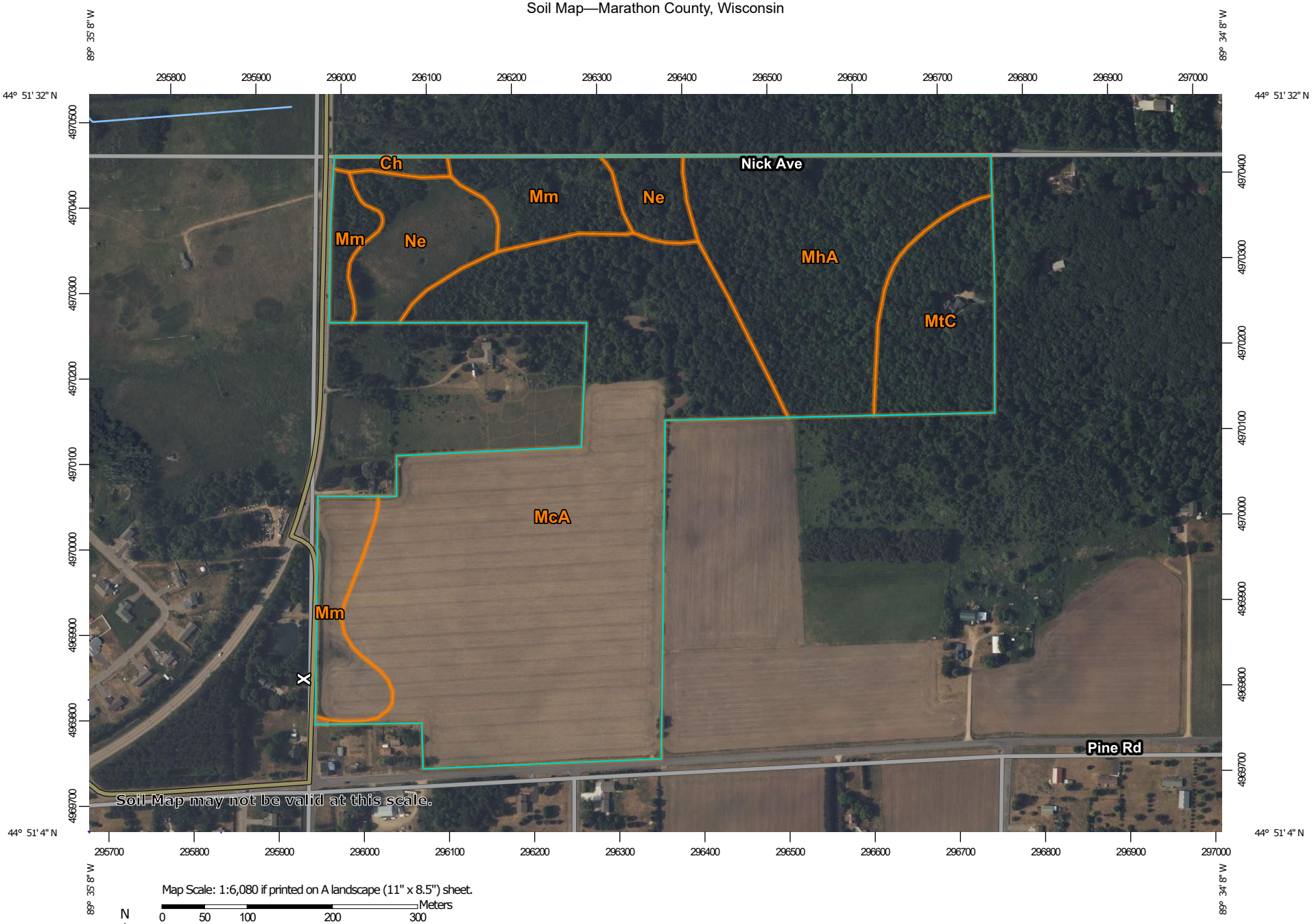
Soil Map—Marathon County, Wisconsin



Map Scale: 1:6,080 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 50 100 200 300

Feet
0 250 500 1000 1500

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features

- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Marathon County, Wisconsin
Survey Area Data: Version 22, Sep 3, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 7, 2023—Jun 8, 2023

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Ch	Cathro muck, 0 to 1 percent slopes	0.7	0.8%
McA	Mahtomedi loamy sand, moderately well drained, 0 to 3 percent slopes	45.1	52.4%
MhA	Meadland loam, 0 to 3 percent slopes, stony	16.4	19.1%
Mm	Meehan loamy sand, 0 to 2 percent slopes	9.3	10.8%
MtC	Mosinee sandy loam, 2 to 15 percent slopes, stony	7.4	8.5%
Ne	Newson mucky loamy sand, river valley, 0 to 1 percent slopes	7.2	8.4%
Totals for Area of Interest		**86.0**	**100.0%**

Marathon County, Wisconsin

Ch—Cathro muck, 0 to 1 percent slopes

Map Unit Setting

National map unit symbol: ggvn
Elevation: 600 to 1,400 feet
Mean annual precipitation: 28 to 36 inches
Mean annual air temperature: 39 to 48 degrees F
Frost-free period: 120 to 170 days
Farmland classification: Not prime farmland

Map Unit Composition

Cathro and similar soils: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Cathro

Setting

Landform: Depressions on lake plains, depressions on outwash plains, drainageways on ground moraines, drainageways on lake plains, drainageways on outwash plains, depressions on ground moraines
Landform position (two-dimensional): Toeslope
Down-slope shape: Concave, linear
Across-slope shape: Concave
Parent material: Organic material over silty or loamy drift

Typical profile

Oe - 0 to 5 inches: muck
Oa1-Oa3 - 5 to 28 inches: muck
C1,C2 - 28 to 60 inches: loam

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Very poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.14 to 1.98 in/hr)
Depth to water table: About 0 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Calcium carbonate, maximum content: 25 percent
Available water supply, 0 to 60 inches: Very high (about 16.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6w
Hydrologic Soil Group: B/D

Ecological site: F090BY002WI - Mucky Swamp
Forage suitability group: Not suited, flooded or organics (G090BY010WI)
Other vegetative classification: Not suited, flooded or organics (G090BY010WI), Picea mariana-Larix laricina/Ledum groenlandicum(Aronia melancarpa variant) , Black Spruce-Tamarack/Labrador Tea(BlackChokeberry variant) (5PmLLe-An)
Hydric soil rating: Yes

Data Source Information

Soil Survey Area: Marathon County, Wisconsin
Survey Area Data: Version 22, Sep 3, 2024

Marathon County, Wisconsin

McA—Mahtomedi loamy sand, moderately well drained, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 2xk6w
Elevation: 670 to 1,600 feet
Mean annual precipitation: 28 to 36 inches
Mean annual air temperature: 39 to 48 degrees F
Frost-free period: 120 to 170 days
Farmland classification: Not prime farmland

Map Unit Composition

Mahtomedi, moderately well drained, and similar soils: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Mahtomedi, Moderately Well Drained

Setting

Landform: Outwash plains, stream terraces
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Sandy outwash

Typical profile

Ap - 0 to 7 inches: loamy sand
Bw1 - 7 to 19 inches: loamy coarse sand
Bw2 - 19 to 26 inches: gravelly coarse sand
C - 26 to 60 inches: gravelly sand

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: About 42 to 60 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 3.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4s
Hydrologic Soil Group: A
Ecological site: F090BY013WI - Sandy Upland

Forage suitability group: Low AWC, adequately drained (G090BY002WI)
Other vegetative classification: Low AWC, adequately drained (G090BY002WI), Pinus strobus - Acer rubrum / Vaccinium angustifolium - Amphicarpa bracteata , Eastern White Pine - Red Maple / Low Sweet Blueberry - Hog-peanut (PArVAm), Pinus strobus - Quercus spp. / Gaultheria procumbens - Ceanothus americanus , Eastern White Pine - Oak spp. / Wintergreen - New Jersey Tea (PQGCe)
Hydric soil rating: No

Data Source Information

Soil Survey Area: Marathon County, Wisconsin
Survey Area Data: Version 22, Sep 3, 2024

Marathon County, Wisconsin

MhA—Meadland loam, 0 to 3 percent slopes, stony

Map Unit Setting

National map unit symbol: ggwy
Elevation: 800 to 1,950 feet
Mean annual precipitation: 28 to 36 inches
Mean annual air temperature: 39 to 48 degrees F
Frost-free period: 120 to 170 days
Farmland classification: Prime farmland if drained

Map Unit Composition

Meadland and similar soils: 98 percent
Minor components: 2 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Meadland

Setting

Landform: Ground moraines
Landform position (two-dimensional): Footslope
Down-slope shape: Linear
Across-slope shape: Concave
Parent material: Loamy drift over loamy till and/or loamy residuum weathered from igneous and metamorphic rock

Typical profile

A,E - 0 to 5 inches: loam
Bs,B/E - 5 to 15 inches: sandy loam
Bt - 15 to 25 inches: loam
C - 25 to 60 inches: loam

Properties and qualities

Slope: 0 to 3 percent
Surface area covered with cobbles, stones or boulders: 0.1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.14 to 1.98 in/hr)
Depth to water table: About 6 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 8.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3s
Hydrologic Soil Group: B/D

Ecological site: F090BY011WI - Moist Loamy Lowland
Forage suitability group: Mod AWC, high water table (G090BY004WI)
Other vegetative classification: Mod AWC, high water table (G090BY004WI), Tsuga canadensis / Maianthemum canadense - Coptis groenlandica , Eastern Hemlock / Wild Lily-of-the-valley - Goldthread (TMC)
Hydric soil rating: No

Minor Components

Dancy
Percent of map unit: 1 percent
Landform: Depressions
Ecological site: F090BY006WI - Wet Loamy Lowland
Other vegetative classification: Fraxinus nigra-Acer rubrum/ Impatience capensis(Ilex verticillata variant) , Black Ash-Red Maple/Spotted Touch-me-not(Winterberry variant) (5FnArI-Ix)
Hydric soil rating: Yes

Sherry
Percent of map unit: 1 percent
Landform: Depressions
Ecological site: F090BY006WI - Wet Loamy Lowland
Other vegetative classification: Fraxinus nigra-Acer rubrum/ Impatience capensis(Ilex verticillata variant) , Black Ash-Red Maple/Spotted Touch-me-not(Winterberry variant) (5FnArI-Ix)
Hydric soil rating: Yes

Data Source Information

Soil Survey Area: Marathon County, Wisconsin
Survey Area Data: Version 22, Sep 3, 2024

Marathon County, Wisconsin

Mm—Meehan loamy sand, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: ggwz
Elevation: 670 to 1,950 feet
Mean annual precipitation: 28 to 36 inches
Mean annual air temperature: 39 to 48 degrees F
Frost-free period: 120 to 170 days
Farmland classification: Not prime farmland

Map Unit Composition

Meehan and similar soils: 99 percent
Minor components: 1 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Meehan

Setting

Landform: Outwash plains, stream terraces
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Concave
Parent material: Sandy outwash

Typical profile

Ap - 0 to 10 inches: loamy sand
Bw1,Bw2,BC - 10 to 30 inches: sand
C - 30 to 60 inches: sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: About 6 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 4.4 inches)

Interpretive groups

Land capability classification (irrigated): 4e
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: A/D
Ecological site: F090BY009WI - Moist Sandy Upland
Forage suitability group: Low AWC, high water table (G090BY001WI)

Other vegetative classification: Low AWC, high water table (G090BY001WI), Acer rubrum - Abies balsamea / Vaccinium angustifolium - Coptis groenlandica , Red Maple Balsam Fir/ Low Sweet Blueberry - Goldthread (ArAbVC), Acer rubrum / Vaccinium angustifolium - Rubus pubescens , Red Maple / Low Sweet Blueberry - Dwaf raspberry (ArVRp)
Hydric soil rating: No

Minor Components

Newson
Percent of map unit: 1 percent
Landform: Depressions
Ecological site: F090BY005WI - Wet Sandy Lowland
Other vegetative classification: Pinus strobus-Acer rubrum/ Gaylussacia baccata , Eastern White Pine-Red Maple/Black Huckleberry (5PArGy)
Hydric soil rating: Yes

Data Source Information

Soil Survey Area: Marathon County, Wisconsin
Survey Area Data: Version 22, Sep 3, 2024

Marathon County, Wisconsin

MtC—Mosinee sandy loam, 2 to 15 percent slopes, stony

Map Unit Setting

National map unit symbol: ggx6
Elevation: 800 to 1,950 feet
Mean annual precipitation: 28 to 36 inches
Mean annual air temperature: 39 to 48 degrees F
Frost-free period: 120 to 170 days
Farmland classification: Not prime farmland

Map Unit Composition

Mosinee and similar soils: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Mosinee

Setting

Landform: Hills
Landform position (two-dimensional): Shoulder, backslope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loamy drift over shattered bedrock igneous and/or metamorphic

Typical profile

A - 0 to 7 inches: sandy loam
Bw1,Bw2 - 7 to 18 inches: gravelly sandy loam
Bw3,Bw4 - 18 to 41 inches: gravelly sandy loam
R - 41 to 60 inches: bedrock

Properties and qualities

Slope: 2 to 15 percent
Surface area covered with cobbles, stones or boulders: 0.1 percent
Depth to restrictive feature: 40 to 60 inches to lithic bedrock
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Very low to high (0.00 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 4.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: A
Ecological site: F090BY014WI - Loamy Bedrock Upland

Forage suitability group: Mod AWC, adequately drained (G090BY005WI)
Other vegetative classification: Mod AWC, adequately drained (G090BY005WI), Acer saccharum / Viburnum acerifolium , Sugar Maple / Maple-leaved Viburnum (AVb)
Hydric soil rating: No

Data Source Information

Soil Survey Area: Marathon County, Wisconsin
Survey Area Data: Version 22, Sep 3, 2024

Marathon County, Wisconsin

Ne—Newson mucky loamy sand, river valley, 0 to 1 percent slopes

Map Unit Setting

National map unit symbol: 2xxj2
Elevation: 1,080 to 1,430 feet
Mean annual precipitation: 28 to 36 inches
Mean annual air temperature: 39 to 48 degrees F
Frost-free period: 120 to 170 days
Farmland classification: Not prime farmland

Map Unit Composition

Newson and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Newson

Setting

Landform: Stream terraces, valley trains
Landform position (three-dimensional): Tread, talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Sandy outwash

Typical profile

Oe - 0 to 3 inches: mucky peat
Oa - 3 to 5 inches: muck
A - 5 to 7 inches: mucky loamy sand
Bg - 7 to 15 inches: loamy sand
BCg - 15 to 26 inches: sand
Cg - 26 to 79 inches: sand

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 6.00 in/hr)
Depth to water table: About 0 to 6 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 5.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6w

Hydrologic Soil Group: A/D
Ecological site: F090BY005WI - Wet Sandy Lowland
Forage suitability group: Low AWC, high water table (G090BY001WI)
Other vegetative classification: Low AWC, high water table (G090BY001WI), Larix laricina-Acer rubrum/Ilex verticillata , Tamarack-Red Maple/Winterberry (1LArIx)
Hydric soil rating: Yes

Minor Components

Meehan

Percent of map unit: 10 percent
Landform: Stream terraces, valley trains
Landform position (three-dimensional): Tread, talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F090BY009WI - Moist Sandy Upland
Other vegetative classification: Low AWC, high water table (G095AY001WI), Acer rubrum - Abies balsamea / Vaccinium angustifolium - Coptis groenlandica , Red Maple Balsam Fir/ Low Sweet Blueberry - Goldthread (ArAbVC), Acer rubrum / Vaccinium angustifolium - Rubus pubescens , Red Maple / Low Sweet Blueberry - Dwaf raspberry (ArVRp)
Hydric soil rating: No

Dancy

Percent of map unit: 5 percent
Landform: Stream terraces, valley trains
Landform position (three-dimensional): Tread, talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F090BY006WI - Wet Loamy Lowland
Other vegetative classification: Mod AWC, high water table (G090BY004WI), Fraxinus nigra-Acer rubrum/Impatience capensis(Ilex verticillata variant) , Black Ash-Red Maple/ Spotted Touch-me-not(Winterberry variant) (5FnArI-Ix)
Hydric soil rating: Yes

Markey

Percent of map unit: 5 percent
Landform: Valley trains
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave
Ecological site: F090BY002WI - Mucky Swamp
Other vegetative classification: Not suited, flooded or organics (G090AY010WI), Picea mariana-Larix laricina/Ledum groenlandicum(Aronia melancarpa variant) , Black Spruce-Tamarack/Labrador Tea(BlackChokeberry variant) (5PmLLe-An)

Hydric soil rating: Yes

Data Source Information

Soil Survey Area: Marathon County, Wisconsin
Survey Area Data: Version 22, Sep 3, 2024