



**Landtype Associations  
(LTAs) of the Central  
Lake Michigan Coastal**

Scale: 1:1,000,000  
Wisconsin Transverse Mercator NAD83(91)  
Map CLMC3 - ams

- Landtype Associations**
- 212Za01
  - 212Za02
  - 212Za03
  - 212Za04
  - 212Za05
  - 212Za06
  - 212Zb01
  - 212Zb02
  - 212Zb03
  - 212Zb04
  - 212Zb05
  - 212Zb06
  - 212Zc01
  - 212Zc02
  - 212Zc03
  - 212Zc04
  - 212Zc05
  - 212Zc06
  - 212Zc07
  - 212Zc08
  - 212Zc09
  - 212Zc10
  - 212Zc11
  - 212Zc12
  - 212Zc13
- Ecological Landscape
  - County Boundaries
  - Sections
  - Subsections

This map is based on the National Hierarchical Framework of Ecological Units (NHFEU) (Cleland et al. 1997).

The ecological landscapes used in this handbook are based substantially on Subsections of the NHFEU. Ecological landscapes use the same boundaries as NHFEU Sections or Subsections. However, some NHFEU Subsections were combined to reduce the number of geographical units in the state to a manageable number. LTA descriptions can be found on the back page of this map.



### Landtype Association Descriptions for the Central Lake Michigan Coastal Ecological Landscape

212Za01	Manawa-Hortonville Moraines	The characteristic landform pattern is rolling moraine with scattered drumlins, dissected by stream terraces. Soils are predominantly well drained silt loam over calcareous loam till. Common habitat types include forested lowland, hydromesic, AH, AFAd, ATiFrCi and ArDe.
212Za02	Embarrass Plains	The characteristic landform pattern is nearly level lake plain with swamps common. Soils are predominantly moderately well drained silt loam over calcareous silty and sandy lacustrine. Common habitat types include forested lowland, hydromesic, AH, AFAd, AFH and PARVPo.
212Za03	Leeman Plains	The characteristic landform pattern is nearly level lake plain with common swamps, scattered dunes, and old beaches. Soils are predominantly somewhat poorly drained loamy fine sand. Common habitat types include forested lowland, PARVPo, TMC and hydromesic.
212Za04	Murphy Corners Moraines	The characteristic landform pattern is nearly level moraine. Soils are predominantly somewhat poorly drained silt loam over calcareous loam till. Common habitat types include forested lowland, hydromesic, AH, AFAd and AFH.
212Za05	Greenville Moraines	The characteristic landform pattern is undulating moraine. Soils are predominantly well drained silt loam over calcareous loam till. Common habitat types include forested lowland, hydromesic, AH, AFAd, AFH and AFAs-O.
212Za06	Mosquito Hill Plains	The characteristic landform pattern is nearly level lake plain with morainic hills and knolls, and many swamps. Soils are predominantly moderately well drained silt loam over calcareous silty and sandy lacustrine. Common habitat types include forested lowland, hydromesic, AH, AFAd, AFAs-O and PARVPo.
212Zb01	Fox River Valley	The characteristic landform pattern is nearly level lake plain dissected by narrow v-shaped valleys. Soils are predominantly moderately well drained silty clay loam over calcareous clay lacustrine or till. Common habitat types include forested lowland, hydromesic, AFAs, AFH, AFAs-O and ATiFrCa.
212Zb02	Freedom Plains	The characteristic landform pattern is nearly level lake plain complex. Soils are predominantly moderately well drained silt loam over calcareous loamy and clayey till or lacustrine. Common habitat types include forested lowland, hydromesic, AFH, AFAs and AFAs-O.
212Zb03	Howard Ridges	The characteristic landform pattern is rolling ridge and plain complex. Soils are predominantly well drained silt loam over calcareous silty and sandy lacustrine loam till or outwash. Common habitat types include forested lowland, hydromesic, AFAs-O, AFH, AFVb and AVb.
212Zb04	Holland Plains	The characteristic landform pattern is undulating plain dissected by deep v-shaped valleys. Soils are predominantly well drained silt loam over calcareous clay lacustrine or till. Common habitat types include hydromesic, forested lowland, AFH, AFAs and AFAs-O.
212Zb05	Preble Plains	The characteristic landform pattern is nearly level lake plain dissected by narrow v-shaped valleys. Soils are predominantly well drained silt loam over calcareous clay lacustrine or till. Common habitat types include forested lowland, hydromesic, AFH and AFAs.
212Zb06	Green Bay Plains	The characteristic landform pattern is nearly level lake plain with scattered low dunes. Soils are predominantly somewhat poorly drained loamy fine sand over sandy and silty lacustrine and beach deposits. Common habitat types include forested lowland, hydromesic and AFTD.
212Zc01	Sheboygan Moraines	The characteristic landform pattern is undulating moraine with deep valleys and escarpments. Soils are predominantly well drained silty clay loam over calcareous clay till. Common habitat types include AFH, AFAs, AFAs-O and forested lowland.
212Zc02	Manitowoc Plains	The characteristic landform pattern is nearly level lake plain with dunes and old beaches common. Soils are predominantly well drained loam over calcareous clayey, silty, and sandy lacustrine. Common habitat types include AFH, AFAs, AFAs-O, forested lowland and AFTD.
212Zc03	Point Beach	The characteristic landform pattern is nearly level lake beaches and fans. Soils are predominantly poorly drained sand over outwash. Common habitat types include forested lowland, AFTD and AFAs-O.
212Zc04	Cooperstown Moraines	The characteristic landform pattern is rolling collapsed moraine dissected with stream terraces. Soils are predominantly well drained silt loam over calcareous loam till. Common habitat types include AFAs-O, AFAs, AFH and forested lowland.

212Zc05	Krok Plains	The characteristic landform pattern is nearly level outwash plain intermixed with swamps. Soils are predominantly well drained sandy loam over calcareous outwash. Common habitat types include forested lowland, AFTD, AFAs-O and AFH.
212Zc06	Collins Moraines	The characteristic landform pattern is undulating moraine with common bedrock knolls and many swamps. Soils are predominantly well drained loam over calcareous clay till. Common habitat types include forested lowland, AFH, AFAs and AFAs-O.
212Zc07	Hilbert Moraines	The characteristic landform pattern is undulating moraine. Soils are predominantly well drained loam over calcareous clay till. Common habitat types include forested lowland, AFH, AFAs and AFAs-O.
212Zc08	Wayside Moraines	The characteristic landform pattern is undulating moraine with many swamps. Soils are predominantly well drained silt loam over calcareous loam till. Common habitat types include forested lowland, AFAs, AFH and AFAs-O.
212Zc09	Poland Moraines	The characteristic landform pattern is undulating moraine. Soils are predominantly well drained silt loam over calcareous clay till. Common habitat types include AFH, AFAs, AFAs-O, forested lowland and AFTD.
212Zc10	Chapel Ridge	The characteristic landform pattern is moderately steep ridges with deep cut valleys and escarpments. Soils are predominantly well drained silt loam over calcareous clay till or dolomite bedrock. Common habitat types include AFAs, AFAs-O and AFH.
212Zc11	Two Creeks Moraines	The characteristic landform pattern is undulating moraine. Soils are predominantly well drained silt loam over calcareous clay or loam till. Common habitat types include AFAs, AFH, AFAs-O, AFTD and forested lowland.
212Zc12	Alaska Moraines	The characteristic landform pattern is undulating moraine with many small- and medium-sized swamps. Soils are predominantly well drained silty loam over calcareous loam till. Common habitat types include forested lowland, AFAs-O, AFAs, AFH and AFTD.
212Zc13	Rosiere Moraines	The characteristic landform pattern is undulating bedrock-controlled moraine with common swamps. Soils are predominantly well drained silt loam over calcareous clay or loam till and dolomite bedrock. Common habitat types include AFAI, AFH, AFTPo, AFTD and forested lowland.