

# Major Land Resource Area 097X

## Southwestern Michigan Fruit and Vegetable Crop Belt

Accessed: 05/11/2026

### Ecological site keys

#### MLRA 97

---

**1a. Beaches and Sand dunes within 2 km of Great Lakes, sometimes subject to strong wind, waves, and fog; or River Mouths subject to variation in water levels of Great Lakes, including storm surges.**

**2a. Sites in river mouths.** ... R097XA024MI – Great Lakes Marsh

**2b. Sites not in river mouths.**

**3a. Storm wave washed or active windblown dunes** ... R097XA001MI – Beach And Foredune

**3b. Large/older forested dunes.**

**4a. Historically infrequent fire (except locally) and mean annual snowfall roughly >160 cm, northeast of Galien River, (Berrien County, Michigan).** ... F097XA002MI – Backdune

**4a. Historically frequent fire (widespread) and annual snowfall roughly <160 cm, west of Trail Creek, southwest of Galien River, (Berrien County, Michigan).** ... F097XB003IN – Chicago Backdune

**1b. Inland, not subject to immediate coastal influences.**

**5a. Historically infrequent fire (except locally) and mean annual snowfall roughly >160 cm, east of Trail Creek, (LaPorte County, Indiana) inland, or northeast of Galien River, (Berrien County, Michigan) near Lake Michigan.**

**6a. Floodplain.**

**7a. Hydric Soil.** ... F097XA027MI – Wet Floodplain

**7b. Non-Hydric Soil.** ... F097XA025MI – Moist Floodplain

**6b. Non-Floodplain.**

**8a. Mineral Soil with no histic epipedon.**

**9a. Sandy Site: ? 80% sand in the top 150 cm and ? 70% sand in the top 50 cm; or ? 80% sand in top 50 cm; or < 20% clay in top 150 cm, pH <6, and ultic subgroup.**

**10a. No water table (well drained or drier).**

**11a. Slope ? 15%.** ... F097XA010MI – Sandy Slopes

**11b. Slope < 15%.** ... F097XA004MI – Dry Sandy Lake Plain

**10b. Seasonal water table present (moderately well Drained or wetter).**

**12a. Non-hydric Soil.**

**13a. pH ? 5.5 or Mollisol.** ... F097XA012MI – Moist Sandy Depression

**13b. pH < 5.5 or Spodosol or Ultic subgroup.** ... F097XA006MI – Moist Acidic Sandy Flatwoods

**12b. Hydric Soil.**

14a. pH ? 5.5 or Mollisol. --- Wet Sandy Depression ... F097XA008MI – Wet Sandy Flatwoods

14b. pH < 5.5 or Spodosol or Ultic subgroup. ... F097XA007MI – Wet Acidic Sandy Flatwoods

9b. Loamy Site: < 80% sand in the top 150 cm or < 70% sand in the top 50 cm; and not in ultic subgroup unless pH ?6 or clay ?20%.

15a. No water table

16a. Slope ? 15%. ... F097XA017MI – Loamy Slopes

16b. Slope < 15%. ... F097XA018MI – Dry Loamy Drift Plains

15b. Seasonal water table present (moderately well Drained or wetter).

17a. Non-hydric Soil. ... F097XA022MI – Moist Loamy Drift Plains

17b. Hydric Soil. ... F097XA023MI – Wet Loamy Depression

8b. Histosol or Histic Subgroup.

18a. pH of the top 50 cm ? 5.0 or euic if pH unknown. ... F097XA030MI – Mucky Depression

18b. pH of the top 50 cm < 5.0 or dysic if pH unknown. ... F097XA031MI – Acidic Peaty Depression

5b. Historically frequent fire (widespread) and annual snowfall roughly <160 cm, west of Trail Creek, (LaPorte County, Indiana) inland, or southwest of Galien River, (Berrien County, Michigan) near Lake Michigan

19a. Floodplain.

20a. Hydric Soil. ... F097XB049IN – Chicago Wet Floodplain

20b. Non-Hydric Soil. ... F097XB044IN – Chicago Moist Floodplain

19b. Non-Floodplain.

21a. Mineral Soil with no histic epipedon.

22a. Sandy Site: ? 80% sand in the top 150 cm and ? 70% sand in the top 50 cm; or ? 80% sand in top 50 cm; or < 20% clay in top 150 cm, pH <6, and ultic subgroup.

23a. No water table (well drained or drier).

24a. Slope ? 15%. ... F097XB040IN – Chicago Sandy Slopes

24b. Slope < 15%. ... F097XB033IN – Chicago Dry Sandy Lake Plain

23b. Seasonal water table present (moderately well Drained or wetter).

25a. Non-hydric Soil.

26a. pH ? 5.5 or Mollisol. ... F097XB035IN – Chicago Moist Sandy Swale

26b. pH < 5.5 or Spodosol or Ultic subgroup. --- F097XA006MI --- Acidic Sandy Flatwoods

25b. Hydric Soil.

27a. pH ? 5.5 or Mollisol. --- Wet Sandy Depression ... R097XB036IN – Chicago Wet Sandy Swale

27b. pH < 5.5 or Spodosol or Ultic subgroup. --- F097XA007MI --- Wet Acidic Sandy Flatwoods

22b. Loamy Site: < 80% sand in the top 150 cm or < 70% sand in the top 50 cm; and not in ultic subgroup unless pH ?6 or clay ?20%.

28a. Slope ? 15%. ... F097XB041IN – Chicago Loamy Slopes

**28b. Slope < 15%.**

**29b. Non-hydric Soil.** ... R097XB046IL – Chicago Moist Clayey Flats

**29b. Hydric Soil.** ... R097XB047IL – Chicago Wet Clayey Flats

**21b. Histosol or Histic Subgroup.** ... R097XB051IL – Chicago Mucky Depression