MAP LEGEND

Area of Interest (AOI)

Soils

Soil Map Units

Soil Ratings

0 - 25
25 - 50
50 - 100
100 - 150
150 - 200
> 200

Political Features

Cities
PLSS Township and Range
PLSS Section

Water Features

Oceans
Streams and Canals

Transportation

Rails
Interstate Highways
US Routes
Major Roads
Local Roads

MAP INFORMATION

Map Scale: 1:13,300 if printed on A size (8.5" x 11") sheet.
The soil surveys that comprise your AOI were mapped at scales ranging from 1:15,840 to 1:20,000.

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

Source of Map: Natural Resources Conservation Service
Coordinate System: UTM Zone 17N NAD83

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

Soil Survey Area: Macomb County, Michigan
Survey Area Data: Version 5, Dec 14, 2006

Soil Survey Area: Oakland County, Michigan
Survey Area Data: Version 7, Dec 14, 2009

Your area of interest (AOI) includes more than one soil survey area. These survey areas may have been mapped at different scales, with a different land use in mind, at different times, or at different levels of detail. This may result in map unit symbols, soil properties, and interpretations that do not completely agree across soil survey area boundaries.

Date(s) aerial images were photographed: 7/30/2005

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.
### Depth to Water Table— Summary by Map Unit — Macomb County, Michigan

<table>
<thead>
<tr>
<th>Map unit symbol</th>
<th>Map unit name</th>
<th>Rating (centimeters)</th>
<th>Acres in AOI</th>
<th>Percent of AOI</th>
</tr>
</thead>
<tbody>
<tr>
<td>BrA</td>
<td>Boyer loamy sand, 0 to 2 percent slopes</td>
<td>&gt;200</td>
<td>15.2</td>
<td>3.7%</td>
</tr>
<tr>
<td>BrB</td>
<td>Boyer loamy sand, 2 to 6 percent slopes</td>
<td>&gt;200</td>
<td>14.8</td>
<td>3.6%</td>
</tr>
<tr>
<td>BsA</td>
<td>Boyer sandy loam, 0 to 2 percent slopes</td>
<td>&gt;200</td>
<td>1.0</td>
<td>0.2%</td>
</tr>
<tr>
<td>BsB</td>
<td>Boyer sandy loam, 2 to 6 percent slopes</td>
<td>&gt;200</td>
<td>0.2</td>
<td>0.1%</td>
</tr>
<tr>
<td>BsC</td>
<td>Boyer sandy loam, 6 to 12 percent slopes</td>
<td>&gt;200</td>
<td>0.7</td>
<td>0.2%</td>
</tr>
<tr>
<td>BsE</td>
<td>Boyer sandy loam, 18 to 25 percent slopes</td>
<td>&gt;200</td>
<td>0.3</td>
<td>0.1%</td>
</tr>
<tr>
<td>Cf</td>
<td>Ceresco fine sandy loam</td>
<td>46</td>
<td>5.0</td>
<td>1.2%</td>
</tr>
<tr>
<td>Cm</td>
<td>Cohoctah fine sandy loam</td>
<td>0</td>
<td>216.1</td>
<td>52.1%</td>
</tr>
<tr>
<td>Gd</td>
<td>Gilford sandy loam</td>
<td>0</td>
<td>2.5</td>
<td>0.6%</td>
</tr>
<tr>
<td>Md</td>
<td>Made land</td>
<td>&gt;200</td>
<td>0.5</td>
<td>0.1%</td>
</tr>
<tr>
<td>Pb</td>
<td>Pits, borrow</td>
<td>&gt;200</td>
<td>13.0</td>
<td>3.1%</td>
</tr>
<tr>
<td>Pg</td>
<td>Pits, gravel</td>
<td>&gt;200</td>
<td>51.0</td>
<td>12.3%</td>
</tr>
<tr>
<td>Sa</td>
<td>Sanitary land fill</td>
<td>&gt;200</td>
<td>3.7</td>
<td>0.9%</td>
</tr>
<tr>
<td>Ta</td>
<td>Tawas muck</td>
<td>0</td>
<td>33.4</td>
<td>8.0%</td>
</tr>
<tr>
<td>Ur</td>
<td>Urban land</td>
<td>&gt;200</td>
<td>23.1</td>
<td>5.6%</td>
</tr>
<tr>
<td>W</td>
<td>Water</td>
<td>&gt;200</td>
<td>19.8</td>
<td>4.8%</td>
</tr>
<tr>
<td>WIA</td>
<td>Wasepi sandy loam, 0 to 2 percent slopes</td>
<td>46</td>
<td>13.7</td>
<td>3.3%</td>
</tr>
</tbody>
</table>

Subtotals for Soil Survey Area: 413.8 \(99.8\%\)

Totals for Area of Interest: 414.7 \(100.0\%\)

### Depth to Water Table— Summary by Map Unit — Oakland County, Michigan

<table>
<thead>
<tr>
<th>Map unit symbol</th>
<th>Map unit name</th>
<th>Rating (centimeters)</th>
<th>Acres in AOI</th>
<th>Percent of AOI</th>
</tr>
</thead>
<tbody>
<tr>
<td>17A</td>
<td>Wasepi sandy loam, 0 to 3 percent slopes</td>
<td>46</td>
<td>0.3</td>
<td>0.1%</td>
</tr>
<tr>
<td>27</td>
<td>Houghton and Adrian mucks</td>
<td>0</td>
<td>0.4</td>
<td>0.1%</td>
</tr>
<tr>
<td>42</td>
<td>Pits</td>
<td>&gt;200</td>
<td>0.0</td>
<td>0.0%</td>
</tr>
<tr>
<td>49</td>
<td>Cohoctah fine sandy loam</td>
<td>0</td>
<td>0.1</td>
<td>0.0%</td>
</tr>
<tr>
<td>68</td>
<td>Cohoctah-Fox association</td>
<td>0</td>
<td>0.0</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

Subtotals for Soil Survey Area: 0.9 \(0.2\%\)

Totals for Area of Interest: 414.7 \(100.0\%\)
Description

"Water table" refers to a saturated zone in the soil. It occurs during specified months. Estimates of the upper limit are based mainly on observations of the water table at selected sites and on evidence of a saturated zone, namely grayish colors (redoximorphic features) in the soil. A saturated zone that lasts for less than a month is not considered a water table.

This attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

Rating Options

Units of Measure: centimeters

Aggregation Method: Dominant Component

Aggregation is the process by which a set of component attribute values is reduced to a single value that represents the map unit as a whole.

A map unit is typically composed of one or more "components". A component is either some type of soil or some nonsoil entity, e.g., rock outcrop. For the attribute being aggregated, the first step of the aggregation process is to derive one attribute value for each of a map unit's components. From this set of component attributes, the next step of the aggregation process derives a single value that represents the map unit as a whole. Once a single value for each map unit is derived, a thematic map for soil map units can be rendered. Aggregation must be done because, on any soil map, map units are delineated but components are not.

For each of a map unit's components, a corresponding percent composition is recorded. A percent composition of 60 indicates that the corresponding component typically makes up approximately 60% of the map unit. Percent composition is a critical factor in some, but not all, aggregation methods.

The aggregation method "Dominant Component" returns the attribute value associated with the component with the highest percent composition in the map unit. If more than one component shares the highest percent composition, the corresponding "tie-break" rule determines which value should be returned. The "tie-break" rule indicates whether the lower or higher attribute value should be returned in the case of a percent composition tie.

The result returned by this aggregation method may or may not represent the dominant condition throughout the map unit.

Component Percent Cutoff: None Specified

Components whose percent composition is below the cutoff value will not be considered. If no cutoff value is specified, all components in the database will be considered. The data for some contrasting soils of minor extent may not be in the database, and therefore are not considered.

Tie-break Rule: Lower
The tie-break rule indicates which value should be selected from a set of multiple candidate values, or which value should be selected in the event of a percent composition tie.

*Interpret Nulls as Zero:* No

This option indicates if a null value for a component should be converted to zero before aggregation occurs. This will be done only if a map unit has at least one component where this value is not null.

*Beginning Month:* January

*Ending Month:* December