

UNITED STATES DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MLRA REGION 11
Indianapolis, Indiana 46278

THIRD AMENDMENT to the
SEPTEMBER 1987 CLASSIFICATION AND CORRELATION
of the SOILS of CARROLL COUNTY, INDIANA

JULY 2005

This amendment results from recertifying the SSURGO data of the Carroll County Soil Survey, the update of the NASIS database, and conforming to the Keys to Soil Taxonomy, 9th Edition, 2003.

AMENDMENT NO. 3

Page 8 – Addition:

Add the map unit symbol and name "Omz – Orthents, earthen dam" for earthen dams more than 1.43 acres in size.

Page 11 - Replace the 37A dated 1/87, with the attached Indiana Official 37A for Compilation, Digitizing, and DMF, Revised June 30, 2004.

Page 21- Replace the special feature definitions with the following. Only the following standard soil survey features will be shown on the legend and placed on the digitized soil maps:

<u>Feature</u>	<u>Name</u>	<u>Description</u>
GPI	Gravel pit	An open excavation from which soil and underlying material have been removed and used, without crushing, as a source of sand or gravel. Typically 0.2 to 2 acres.
GRA	Gravelly spot	A spot where the surface layer has more than 35 percent, by volume, rock fragments that are mostly less than 3 inches in diameter in an area with less than 15 percent fragments. Typically 0.2 to 2 acres.
LVS	Levee	An embankment that confines or controls water, especially one built along the banks of a river to prevent overflow of lowlands.
MAR	Marsh or swamp	A water-saturated, very poorly drained area, intermittently or permanently covered by water. Marsh areas are dominantly vegetated by sedges, cattails, and rushes. Swamps are dominantly vegetated by trees or shrubs. Typically 0.2 to 2 acres.
MPI	Mine or quarry	An open excavation from which soil and underlying material are removed and bedrock is exposed. Also denotes surface openings to underground mines. Typically 0.2 to 2 acres.

<u>Feature</u>	<u>Name</u>	<u>Description</u>
ROC	Rock outcrop	An exposure of bedrock at the surface of the earth. Not used where the named soils of the surrounding map unit are shallow over bedrock, or where "Rock outcrop" is a named component of the map unit. Typically 0.2 to 2 acres.
SAN	Sandy Spot	A spot where the surface layer is loamy fine sand or coarser in areas where the surface layer of the named soils in the surrounding map unit is very fine sandy loam or finer. Typically 0.2 to 2 acres.
SLP	Short, steep slope	Narrow soil area that has slopes that are at least two slope classes steeper than the slope class of the surrounding map unit.

Only the following ad hoc features will be shown on the legend and placed on the digitized soil maps:

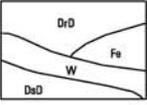
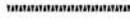
<u>Label</u>	<u>Symbol ID</u>	<u>Name</u>	<u>Description</u>
CNS	21	Channery spot	A spot where the surface layer has more than 15 percent, by volume, rock fragments that are flat in shape and mostly less than 6 inches in length. Typically 0.2 to 2 acres.
COB	20	Cobbly spot	A spot where the surface layer has more than 15 percent, by volume, rock fragments that are mostly 3 to 10 inches in diameter. Typically 0.2 to 2 acres.
LBR	17	Limestone bedrock at 40 to 60 inches	An area underlain with limestone bedrock at depths of 40 to 60 inches. Typically 0.2 to 2 acres.
MUC	30	Muck spot	An area within a poorly drained or very poorly drained soil that has a histic epipedon or where the surface is organic. The spot symbol is used only in map units consisting of mineral soil. Typically 0.2 to 2 acres.
OVW	3	Overwash spot	An area with overwash 10 to 40 inches thick over the original surface. Typically 0.2 to 2 acres.
SAM	38	Small dam	Small, earthen dam. Typically 0.2 to 2 acres.
SBR	19	Shale bedrock at 20 to 40 inches	An area underlain with shale bedrock at depths of 20 to 40 inches. Typically 0.2 to 2 acres.
UWT	44	Unclassified water	Small, natural or man-made lake, pond, or pit that contains water, of an unspecified nature, most of the year. Typically 0.2 to 2 acres.

FEATURE AND SYMBOL LEGEND FOR SOIL SURVEY

Soil Survey Area: Carroll County

State: Indiana

Date: _____

DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL																																																																																																																																										
SOIL SURVEY FEATURES		CULTURAL FEATURES (Optional)		HYDROGRAPHIC FEATURES (Optional)																																																																																																																																											
<p>SOIL DELINEATIONS AND LABELS</p>  <p>STANDARD LANDFORM AND MISCELLANEOUS SURFACE FEATURES</p> <p>Bedrock escarpment </p> <p>Nonbedrock escarpment </p> <p>Gully </p> <p>Lewee </p> <p>Short steep slope </p> <p>Blowout </p> <p>Borrow pit </p> <p>Clay spot </p> <p>Closed depression </p> <p>Gravel pit </p> <p>Gravelly spot </p> <p>Landfill </p> <p>Marsh or swamp </p> <p>Mine or quarry </p> <p>Rock outcrop </p> <p>Sandy spot </p> <p>Severely eroded spot </p> <p>Sinkhole </p> <p>Slide or slip </p> <p>Spoil area </p> <p>Stony spot </p> <p>Very stony spot </p> <p>Wet spot </p>		<p>BOUNDARIES</p> <p>National, state or province </p> <p>County or parish </p> <p>Minor civil division </p> <p>Reservation (Military) </p> <p>Land grant (Optional) </p> <p>Field sheet matchline and neatline </p> <p>Public Land Survey System Section Corner Ticks </p> <p>GEOGRAPHIC COORDINATE TICK </p> <p>ROAD EMBLEMS</p> <p>Interstate </p> <p>Federal </p> <p>State </p> <p>LOCATED OBJECTS</p> <p>Airport (Label only)  Davis Airport or Airstrip</p>		<p>Drainage end (Indicates direction of flow) </p> <p>Unclassified stream </p>																																																																																																																																											
<p>AD HOC FEATURES (Describe on back)</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>LABEL</th> <th>SYMBOL ID</th> <th>SYMBOL</th> <th>LABEL</th> <th>SYMBOL ID</th> <th>SYMBOL</th> </tr> </thead> <tbody> <tr> <td>DCS</td> <td>1</td> <td></td> <td>CRO</td> <td>23</td> <td></td> </tr> <tr> <td>DKS</td> <td>2</td> <td></td> <td>WIA</td> <td>24</td> <td></td> </tr> <tr> <td>OVW</td> <td>3</td> <td></td> <td>CGW</td> <td>25</td> <td></td> </tr> <tr> <td>VMS</td> <td>4</td> <td></td> <td>HEL</td> <td>26</td> <td></td> </tr> <tr> <td>EAS</td> <td>5</td> <td></td> <td></td> <td>27</td> <td></td> </tr> <tr> <td>MAS</td> <td>6</td> <td></td> <td>SID</td> <td>28</td> <td></td> </tr> <tr> <td>SAS</td> <td>7</td> <td></td> <td></td> <td>29</td> <td></td> </tr> <tr> <td>CAF</td> <td>8</td> <td></td> <td>WUC</td> <td>30</td> <td></td> </tr> <tr> <td>CAL</td> <td>9</td> <td></td> <td></td> <td>31</td> <td></td> </tr> <tr> <td>SLR</td> <td>10</td> <td></td> <td></td> <td>32</td> <td></td> </tr> <tr> <td>DUN</td> <td>11</td> <td></td> <td></td> <td>33</td> <td></td> </tr> <tr> <td>BRV</td> <td>12</td> <td></td> <td></td> <td>34</td> <td></td> </tr> <tr> <td>BRW</td> <td>13</td> <td></td> <td>WRL</td> <td>35</td> <td></td> </tr> <tr> <td>BRD</td> <td>14</td> <td></td> <td></td> <td>36</td> <td></td> </tr> <tr> <td>OBR</td> <td>15</td> <td></td> <td></td> <td>37</td> <td></td> </tr> <tr> <td>SSR</td> <td>16</td> <td></td> <td>SAM</td> <td>38</td> <td></td> </tr> <tr> <td>LBR</td> <td>17</td> <td></td> <td></td> <td>39</td> <td></td> </tr> <tr> <td>WDP</td> <td>18</td> <td></td> <td>VSE</td> <td>40</td> <td></td> </tr> <tr> <td>SDR</td> <td>19</td> <td></td> <td></td> <td>41</td> <td></td> </tr> <tr> <td>COB</td> <td>20</td> <td></td> <td></td> <td>42</td> <td></td> </tr> <tr> <td>CNS</td> <td>21</td> <td></td> <td></td> <td>43</td> <td></td> </tr> <tr> <td>FES</td> <td>22</td> <td></td> <td>UNT</td> <td>44</td> <td></td> </tr> </tbody> </table>						LABEL	SYMBOL ID	SYMBOL	LABEL	SYMBOL ID	SYMBOL	DCS	1		CRO	23		DKS	2		WIA	24		OVW	3		CGW	25		VMS	4		HEL	26		EAS	5			27		MAS	6		SID	28		SAS	7			29		CAF	8		WUC	30		CAL	9			31		SLR	10			32		DUN	11			33		BRV	12			34		BRW	13		WRL	35		BRD	14			36		OBR	15			37		SSR	16		SAM	38		LBR	17			39		WDP	18		VSE	40		SDR	19			41		COB	20			42		CNS	21			43		FES	22		UNT	44	
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Pages 19 and 20 – Replace the Classification of the Soils table with the following:
 Carroll County, Indiana Taxonomic Classification of the Soils
 (An asterisk in the first column indicates a taxadjunct to the series.)

Soil name	Family or higher taxonomic class
Alvin-----	Coarse-loamy, mixed, superactive, mesic Typic Hapludalfs
Armiesburg-----	Fine-silty, mixed, superactive, mesic Fluventic Hapludolls
Beaucoup-----	Fine-silty, mixed, superactive, mesic Fluvaquentic Endoaquolls
Camden-----	Fine-silty, mixed, superactive, mesic Typic Hapludalfs
Casco-----	Fine-loamy over sandy or sandy-skeletal, mixed, superactive, mesic Inceptic Hapludalfs
Ceresco-----	Coarse-loamy, mixed, superactive, mesic Fluvaquentic Hapludolls
Ceresco Variant-----	Coarse-loamy, mixed, superactive, mesic Fluvaquentic Hapludolls
Cohoctah-----	Coarse-loamy, mixed, active, mesic Fluvaquentic Endoaquolls
Cohoctah Variant-----	Coarse-loamy, mixed, active, calcareous, mesic Fluvaquentic Endoaquolls
Coloma-----	Mixed, mesic Lamellic Udipsamments
Crosby-----	Fine, mixed, active, mesic Aeric Epiaqualfs
Crosier-----	Fine-loamy, mixed, active, mesic Aeric Epiaqualfs
*Cyclone-----	Fine-silty, mixed, superactive, mesic Typic Endoaquolls
Fincastle-----	Fine-silty, mixed, superactive, mesic Aeric Epiaqualfs
Fox-----	Fine-loamy over sandy or sandy-skeletal, mixed, superactive, mesic Typic Hapludalfs
Hennepin-----	Fine-loamy, mixed, active, mesic Typic Eutrudepts
Houghton-----	Euic, mesic Typic Haplosaprists
Jules-----	Coarse-silty, mixed, superactive, calcareous, mesic Typic Udifluvents
*Kalamazoo-----	Fine-loamy, mixed, active, mesic Typic Hapludalfs
Kendall-----	Fine-silty, mixed, superactive, mesic Aeric Endoaqualfs
Kendallville-----	Fine-loamy, mixed, superactive, mesic Typic Hapludalfs
Landes-----	Coarse-loamy, mixed, superactive, mesic Fluventic Hapludolls
Landes Variant-----	Coarse-loamy, mixed, superactive, mesic Fluventic Hapludolls
Mahalasville-----	Fine-silty, mixed, superactive, mesic Typic Argiaquolls
Martinsville-----	Fine-loamy, mixed, active, mesic Typic Hapludalfs
Miami-----	Fine-loamy, mixed, active, mesic Oxyaquic Hapludalfs
Milford-----	Fine, mixed, superactive, mesic Typic Endoaquolls
*Millsdale-----	Fine-loamy, mixed, active, mesic Typic Argiaquolls
Milton Variant-----	Loamy-skeletal, mixed, active, mesic Lithic Hapludalfs
Moundhaven-----	Sandy, mixed, mesic Typic Udifluvents
Mudlavia-----	Clayey-skeletal, mixed, superactive, mesic Chromic Vertic Hapludalfs
Mudlavia Variant-----	Clayey-skeletal, mixed, superactive, mesic Chromic Vertic Hapludalfs
Ockley-----	Fine-loamy, mixed, active, mesic Typic Hapludalfs
Ormas-----	Loamy, mixed, active, mesic Arenic Hapludalfs
Orthents-----	Orthents
Palms-----	Loamy, mixed, euic, mesic Terric Haplosaprists
Palms Variant-----	Loamy, mixed, euic, mesic Terric Haplosaprists
Patton-----	Fine-silty, mixed, superactive, mesic Typic Endoaquolls

Carroll County, Indiana Classification of the Soils - continued

Soil name	Family or higher taxonomic class
Pella-----	Fine-silty, mixed, superactive, mesic Typic Endoaquolls
Piankeshaw Variant--	Loamy-skeletal, mixed, active, calcareous, mesic Typic Udifluvents
Riddles-----	Fine-loamy, mixed, active, mesic Typic Hapludalfs
Rockfield-----	Fine-silty, mixed, superactive, mesic Oxyaquic Hapludalfs
Ross-----	Fine-loamy, mixed, superactive, mesic Cumulic Hapludolls
Rush-----	Fine-silty, mixed, superactive, mesic Typic Hapludalfs
Sleeth-----	Fine-loamy, mixed, active, mesic Aeric Endoaqualfs
Sloan-----	Fine-loamy, mixed, superactive, mesic Fluvaquentic Endoaquolls
Starks-----	Fine-silty, mixed, superactive, mesic Aeric Endoaqualfs
Stonelick-----	Coarse-loamy, mixed, superactive, calcareous, mesic Typic Udifluvents
Treaty-----	Fine-silty, mixed, superactive, mesic Typic Argiaquolls
Udorthents, loamy---	Udorthents
Walkill-----	Fine-loamy, mixed, superactive, nonacid, mesic Fluvaquentic Humaquepts
Warners Variant-----	Fine-silty, carbonatic, mesic Fluvaquentic Endoaquolls
*Washtenaw-----	Fine-silty, mixed, active, nonacid, mesic Aeric Fluvaquents
Waynetown-----	Fine-silty, mixed, superactive, mesic Aeric Endoaqualfs
Westland-----	Fine-loamy, mixed, superactive, mesic Typic Argiaquolls
Whitaker-----	Fine-loamy, mixed, active, mesic Aeric Endoaqualfs
Williamstown-----	Fine-loamy, mixed, active, mesic Aquic Hapludalfs

Approval Signatures

 TRAVIS NEELY
 State Soil Scientist/MLRA Leader
 Indianapolis, Indiana

 Date

 JANE E. HARDISTY
 State Conservationist
 Indianapolis, Indiana

 Date