

UNITED STATES DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MLRA REGION 11
Indianapolis, Indiana 46278

SECOND AMENDMENT
TO THE
APRIL 1987 CLASSIFICATION AND CORRELATION
OF THE SOILS OF
WARREN COUNTY, INDIANA

JANUARY 2007

This amendment results from digitizing the Warren County Soil Survey, the update of the NASIS database, and conforming to the Keys to Soil Taxonomy, 10th Edition, 2006.

AMENDMENT NO. 2

Page 4, Soil Correlation – Change the following Approved map unit name:

Publication symbol Approved map unit name

FROM:

GoF Gosport shaly silt loam, 25 to 40 percent slopes

TO:

GoF Gosport channery silt loam, 25 to 40 percent slopes

Page 7, Soil Correlation – Delete the following Approved map unit:

Publication symbol Approved map unit name

ObB2 Ockley loam, sandy substratum, 2 to 6 percent slopes, eroded

(This map unit did not appear in the spatial data. From scanning the published soil survey it appears it was converted to the CbB2 map unit. Thus, with this amendment this map unit is deleted.)

Page 10, Soil Correlation – Add the following map unit:

<u>Field symbols</u>	<u>Field map unit name</u>	<u>Publication symbol</u>	<u>Approved map unit name</u>
W	Water	W	Water
Water	Water	W	Water

Page 17, Conventional and Special Symbol Legend - Replace the Conventional Symbols Legend dated 11 /86, with the attached Indiana Official 37A for Compilation, Digitizing, and DMF, Revised June 30, 2004.

Only the following standard soil survey features will be shown on the legend and placed on the digitized soil maps:

Feature	Name	Description
ESB	Escarpment, bedrock	A relatively continuous and steep slope or cliff, which generally is produced by erosion or faulting, that breaks the general continuity of more gently sloping land surfaces. Exposed material is hard or soft bedrock.
ESO	Escarpment, nonbedrock	A relatively continuous and steep slope or cliff, which Generally is produced by erosion but can be produced by faulting, that breaks the continuity of more gently sloping land surfaces. Exposed Earthy material is nonsoil or very shallow soil.
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.
MAR	Marsh or swamp	A water saturated, very poorly drained area, intermittently or permanently covered by water. Sages, cattails, and rushes dominate marsh areas. Trees or shrubs dominate swamps. 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 used to denote surface openings to underground mines. 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 are at least two slope classes steeper than the slope class of the surrounding map unit.
STN	Stony spot	A spot where 0.01 to 0.1 percent of the surface cover is rock fragments that are greater than 10 inches in diameter in areas where the surrounding soil has no surface stones. Typically 0.2 to 2 acres.
STV	Very stony spot	A spot where 0.1 to 3 percent of the surface cover is rock fragments that are greater than 10 inches in diameter where the surrounding soil has less than 0.01 percent of surface cover of stones. Typically 0.2 to 2 acres.

Feature	Name	Description
WET	Wet spot	A somewhat poorly to very poorly drained area that is at least two drainage classes wetter than the named soil in the surrounding map unit. Typically 0.2 to 2 acres.

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>
OVW	3	Overwash spot	Areas with overwash 10 to 40 inches thick over the original surface. Typically 0.2 to 2 acres.
WDP	18	Wet depression	A shallow, concave area within poorly or very poorly drained soils that ponds water for intermittent periods and is saturated for appreciably longer periods of time than the surrounding soil. Typically 0.2 to 2 acres.

The “WDP, Wet depression” label replaces what had been labeled as “Very poorly drained soils in potholes” in the 1987 correlation.

VSE	40	Very severely Eroded spot	An area where class 4 erosion exists. The original A, E, and upper B horizons have been lost to erosion. Most areas consist of an intricate pattern of U-shaped gullies. The original soil can only be identified in areas adjacent to these very severely eroded spots. Typically 0.2 to 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.

Page 14, Conversion Legend – Add the following:

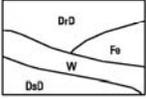
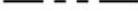
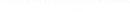
<u>Field symbol</u>	<u>Publication symbol</u>
Water, W	W

FEATURE AND SYMBOL LEGEND FOR SOIL SURVEY

Soil Survey Area: WARREN COUNTY

State: Indiana

Date: DECEMBER 2006

DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL
SOIL SURVEY FEATURES		CULTURAL FEATURES (Optional)		HYDROGRAPHIC FEATURES (Optional)	
SOIL DELINEATIONS AND LABELS		BOUNDARIES		Drainage end (indicates direction of flow)	
STANDARD LANDFORM AND MISCELLANEOUS SURFACE FEATURES		National, state or province		Unclassified stream	
Bedrock escarpment		County or parish			
Nonbedrock escarpment		Minor civil division			
Gully		Reservation (Military)			
Levee		Land grant (Optional)			
Short steep slope		Field sheet matchline and neatline			
Blowout		Public Land Survey System Section Corner Tics			
Borrow pit		GEOGRAPHIC COORDINATE TICK			
Clay spot		ROAD EMBLEMS			
Closed depression		Interstate			
Gravel pit		Federal			
Gravelly spot		State			
Landfill		LOCATED OBJECTS			
Marsh or swamp		Airport (Label only)		Davis Airport or Airstrip	
Mine or quarry					
Rock outcrop					
Sandy spot					
Severely eroded spot					
Sinkhole					
Slide or slip					
Spoil area					
Stony spot					
Very stony spot					
Wet spot					
AD HOC FEATURES (Describe on back)					
LABEL	SYMBOL ID	SYMBOL	LABEL	SYMBOL ID	SYMBOL
DCS	1		CRO	23	
DKS	2		WIA	24	
GVW	3		CGM	25	
VWS	4		NIL	26	
EAS	5		27	27	
MAS	6		28	28	
SAS	7		29	29	
CAF	8		MOC	30	
CAL	9		31	31	
SLR	10		32	32	
DUM	11		33	33	
BRV	12		34	34	
BRW	13		MRL	35	
BRD	14		36	36	
OBR	15		37	37	
SSR	16		SAM	38	
LBR	17		39	39	
WOP	18		WDE	40	
SBR	19		41	41	
COB	20		42	42	
CNS	21		43	43	
FES	22		WTF	44	

Pages 19-20 – Classification of the Soils - Replace the Classification of the Soils table with the following:

Warren County, Indiana Taxonomic Classification of the Soils
 (An asterisk in the first column indicates a taxadjunct to the series. See text for a description of those characteristics that are outside the range of the series.)

Soil name	Family or higher taxonomic class
Alford-----	Fine-silty, mixed, superactive, mesic Ultic Hapludalfs
Armiesburg variant--	Fine, mixed, superactive, mesic Fluventic Hapludolls
Barce-----	Fine-loamy, mixed, superactive, mesic Oxyaquic Argiudolls
Beaucoup-----	Fine-silty, mixed, superactive, mesic Fluvaquentic Endoaquolls
Beckville-----	Coarse-loamy, mixed, superactive, mesic Fluvaquentic Eutrudepts
Billett-----	Coarse-loamy, mixed, superactive, mesic Mollic Hapludalfs
Blount-----	Fine, illitic, mesic Aeric Epiaqualfs
*Boyer-----	Coarse-loamy, mixed, superactive, mesic Typic Hapludalfs
Brenton-----	Fine-silty, mixed, superactive, mesic Aquic Argiudolls
Cadiz-----	Fine-silty, mixed, superactive, mesic Oxyaquic Hapludalfs
Camden-----	Fine-silty, mixed, superactive, mesic Typic Hapludalfs
*Carmi-----	Coarse-loamy, mixed, superactive, mesic Typic Hapludolls
Chatterton-----	Sandy, mixed, mesic Fluventic Hapludolls
Comfrey-----	Fine-loamy, mixed, superactive, mesic Cumulic Endoaquolls
Corwin-----	Fine-loamy, mixed, active, mesic Oxyaquic Argiudolls
Cyclone-----	Fine-silty, mixed, superactive, mesic Typic Argiaquolls
Drummer-----	Fine-silty, mixed, superactive, mesic Typic Endoaquolls
Du Page-----	Fine-loamy, mixed, superactive, mesic Cumulic Hapludolls
Eldean-----	Fine, mixed, superactive, mesic Typic Hapludalfs
Elliott-----	Fine, illitic, mesic Aquic Argiudolls
*Elston-----	Coarse-loamy, mixed, active, mesic Mollic Hapludalfs
Gilboa-----	Fine-loamy, mixed, superactive, mesic Aquic Argiudolls
Glenhall-----	Fine-loamy, mixed, active, mesic Mollic Oxyaquic Hapludalfs
Gosport-----	Fine, illitic, mesic Oxyaquic Dystrudepts
Hennepin-----	Fine-loamy, mixed, active, mesic Typic Eutrudepts
High Gap-----	Fine-loamy, mixed, active, mesic Typic Hapludalfs
High Gap variant----	Fine-loamy, mixed, active, mesic Ultic Hapludalfs
Houghton-----	Euic, mesic Typic Haplosaprists
*Iona-----	Fine-silty, mixed, superactive, mesic Aquic Hapludalfs
Ipava-----	Fine, smectitic, mesic Aquic Argiudolls
*Jules-----	Fine-silty, mixed, superactive, calcareous, mesic Typic Udifluvents
La Hogue-----	Fine-loamy, mixed, superactive, mesic Aquic Argiudolls
Lafayette-----	Fine-silty, mixed, superactive, mesic Aquic Argiudolls
Landes-----	Coarse-loamy, mixed, superactive, mesic Fluventic Hapludolls
Markham-----	Fine, illitic, mesic Mollic Oxyaquic Hapludalfs
Martinsville-----	Fine-loamy, mixed, active, mesic Typic Hapludalfs
Miami-----	Fine-loamy, mixed, active, mesic Oxyaquic Hapludalfs
*Miami-----	Fine-loamy, mixed, active, mesic Typic Hapludalfs
Milford-----	Fine, mixed, superactive, mesic Typic Endoaquolls
Millbrook-----	Fine-silty, mixed, superactive, mesic Udollic Endoaqualfs

Taxonomic Classification of the Soils--Continued

Soil name	Family or higher taxonomic class
*Montmorenci-----	Fine-loamy, mixed, superactive, mesic Mollic Oxyaquic Hapludalfs
Morley-----	Fine, illitic, mesic Oxyaquic Hapludalfs
Moundhaven-----	Sandy, mixed, mesic Typic Udifluvents
Mudlavia-----	Clayey-skeletal, mixed, superactive, mesic Chromic Vertic Hapludalfs
Ockley-----	Fine-loamy, mixed, active, mesic Typic Hapludalfs
Ormas-----	Loamy, mixed, active, mesic Arenic Hapludalfs
Oshtemo-----	Coarse-loamy, mixed, active, mesic Typic Hapludalfs
Peotone-----	Fine, smectitic, mesic Cumulic Vertic Endoaquolls
Piankeshaw variant--	Loamy-skeletal, mixed, active, calcareous, mesic Typic Udifluvents
Proctor-----	Fine-silty, mixed, superactive, mesic Typic Argiudolls
*Ragsdale-----	Fine-silty, mixed, superactive, mesic Typic Endoaquolls
Rainsville-----	Fine-loamy, mixed, active, mesic Oxyaquic Hapludalfs
Reesville-----	Fine-silty, mixed, superactive, mesic Aquic Hapludalfs
Rockfield-----	Fine-silty, mixed, superactive, mesic Oxyaquic Hapludalfs
Rodman-----	Sandy-skeletal, mixed, mesic Typic Hapludolls
Rush-----	Fine-silty, mixed, superactive, mesic Typic Hapludalfs
Sable-----	Fine-silty, mixed, superactive, mesic Typic Endoaquolls
Shadeland variant---	Fine, mixed, active, mesic Aeric Endoaqualls
Starks-----	Fine-silty, mixed, superactive, mesic Aeric Endoaqualls
Stonelick-----	Coarse-loamy, mixed, superactive, calcareous, mesic Typic Udifluvents
Strawn-----	Fine-loamy, mixed, active, mesic Typic Hapludalfs
Symerton-----	Fine-loamy, mixed, superactive, mesic Typic Argiudolls
*Tuscola-----	Fine-loamy, mixed, active, mesic Oxyaquic Hapludalfs
Varna-----	Fine, illitic, mesic Oxyaquic Argiudolls
Wakeland variant----	Coarse-silty, mixed, superactive, nonacid, mesic Fluvaquentic Endoaquepts
Wallkill variant-----	Fine, mixed, superactive, mesic Cumulic Endoaquolls
Warners variant-----	Fine-silty, mixed, superactive, mesic Fluvaquentic Endoaquolls
*Washtenaw-----	Fine-silty, mixed, active, nonacid, mesic Aeric Fluvaquents
Waupecan-----	Fine-silty, mixed, superactive, mesic Typic Argiudolls
Weikert variant-----	Coarse-loamy, mixed, active, mesic Dystric Eutrudepts
Williamsport-----	Fine, mixed, active, mesic Aquic Argiudolls
*Williamstown-----	Fine-loamy, mixed, active, mesic Oxyaquic Hapludalfs

*Miami taxadjunct is for map units MoE2 and MpD3

Approval Signatures

 TRAVIS NEELY
 State Soil Scientist/MLRA Leader
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 Date

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 State Conservationist
 Indianapolis, Indiana

 Date