UNITED STATES DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE

MLRA REGION 11

Indianapolis, Indiana 46278

FIRST AMENDMENT TO THE MARCH 1978 CLASSIFICATION AND CORRELATION OF THE SOILS OF POSEY COUNTY, INDIANA

JUNE 2006

This amendment results from digitizing the Posey County Soil Survey, the update of the NASIS database, and conforming to the Keys to Soil Taxonomy, 9^{th} Edition, 2003.

AMENDMENT NO. 1

Pages 1 to 6 – Changes:

Change the fo	llowing map unit names-	
Map Symbol	Approved name (1978)	Approved Name - Amended (2006)
Ar	Armiesburg silt loam	Armiesburg silt loam, frequently flooded
As	Armiesburg Variant silt loam	Armiesburg silt loam, rarely flooded
Bd	Birds silt loam	Birds silt loam, frequently flooded
EkA	Elkinsville silt loam, 0 to 2 percent	Elkinsville silt loam, 0 to 2 percent slopes,
	slopes	rarely flooded
EkB2	Elkinsville silt loam, 2 to 6 percent	Elkinsville silt loam, 2 to 6 percent slopes,
	slopes, eroded	eroded, rarely flooded
Ev	Evansville silt loam	Evansville silt loam, rarely flooded
Ge	Genesee loam	Genesee loam, frequently flooded
Gn	Ginat silt loam	Ginat silt loam, rarely flooded
На	Haymond silt loam	Haymond silt loam, wet substratum, frequently
		flooded
HeA	Henshaw silt loam, 0 to 2 percent	Henshaw silt loam, 0 to 2 percent slopes, rarely
	slopes	flooded
Ld	Landes sandy loam	Landes sandy loam, occasionally flooded
Nk	Newark silty clay loam	Newark silty clay loam, frequently flooded
Pa	Patton silty clay loam	Patton silty clay loam, rarely flooded
PeA	Pekin silt loam, 0 to 2 percent	Pekin silt loam, 0 to 2 percent slopes,
	slopes	rarely flooded
PeB2	Pekin silt loam, 2 to 6 percent	Pekin silt loam, 2 to 6 percent slopes,
	slopes, eroded	eroded, rarely flooded
Pg	Peoga silt loam	Peoga silt loam, rarely flooded
Ph	Petrolia silty clay loam	Petrolia silty clay loam, frequently flooded
PnB	Plainfield Variant loamy fine sand,	Plainfield loamy fine sand, warm, 0 to 6 percent
	0 to 6 percent slopes	slopes
Ps	Psamments	Psamments, frequently flooded
Rh	Rahm silt loam	Rahm silt loam, occasionally flooded

Pages 1 to 6 -	- Changes – continued:	
Map Symbol	Approved name (1978)	Approved Name - Amended (2006)
Rn	Rensselaer clay loam	Rensselaer clay loam, clay loam substratum, rarely flooded
St	Stonelick fine sandy loam	Stonelick fine sandy loam, frequently flooded
UnA	Uniontown silt loam, 0 to 2 percent slopes	Uniontown silt loam, 0 to 2 percent slopes, rarely flooded
UnB2	Uniontown silt loam, 2 to 6 percent slopes, eroded	Uniontown silt loam, 2 to 6 percent slopes, eroded, rarely flooded
UnB3	Uniontown silt loam, 2 to 6 percent slopes, severely eroded	Uniontown silt loam, 2 to 6 percent slopes, severely eroded, rarely flooded
UnC3	Uniontown silt loam, 6 to 12 percent	Uniontown silt loam, 6 to 12 percent slopes,
	slopes, severely eroded	severely eroded, rarely flooded
Vn	Vincennes loam	Vincennes loam, rarely flooded
Wa	Wakeland silt loam	Wakeland silt loam, frequently flooded
WbA	Weinbach silt loam, 0 to 2 percent slopes	Weinbach silt loam, 0 to 2 percent slopes, rarely flooded
WhA	Wheeling silt loam, 0 to 2 percent slopes	Wheeling silt loam, 0 to 2 percent slopes, rarely flooded
WhB	Wheeling silt loam, 2 to 6 percent slopes	Wheeling silt loam, 2 to 6 percent slopes, rarely flooded
WhC2	Wheeling silt loam, 6 to 12 percent slopes, eroded	Wheeling silt loam, 6 to 12 percent slopes, eroded, rarely flooded
Wm	Wheeling Variant silt loam	Wheeling Variant silt loam, rarely flooded
Wz	Woodmere silt loam	Woodmere silt loam, occasionally flooded
W Z Zp	Zipp silty clay loam	Zipp silty clay loam, occasionally flooded
Z-P	Zipp sitty Clay Ioani	Zipp sitty clay loain, occasionally flooded

Pages 2 to 5 – Additions:

Zu

The Map Unit Symbol and Name "Du – Dumps, mine" will be used for areas of waste and stockpiles adjacent to power plants.

Zipp Variant sandy loam, occasionally flooded

The Map Unit Symbol and Name "Ppu - Pits, sand and gravel" will be used for areas of active sand and gravel pits.

The Map Unit Symbol and Name "Ud – Udorthents, cut and filled" will be used for disturbed areas adjacent to commercial or industrial sites.

The Map Unit Symbol and Name "W - Water" will be used for water areas more than 1.43 acres in size.

Page 3 – Changes:

Change the following map unit symbol and name-

Map Symbol Aprroved Map Unit Name

Zipp Variant sandy loam

From: No Nolin silt loam

To: Mc McAdoo silt loam, frequently flooded

Page 8 – Replace the Conventional and Special Symbols Legend, dated March 1978, with the attached Indiana Official 37A for Compilation, Digitizing, and DMF, Revised June 30, 2004.

Indiana Official 37A For Compilation, Digitizing, and DMF Revised June 30, 2004 FOSEY COUNTY Soil Survey Area:

FEATURE AND SYMBOL LEGEND FOR SOIL SURVEY

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE

State: Indiana

MAY 2006 Date:

DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL
SOIL SURVEY FEATURES		CULTURAL FEATURES (Optional)		HYDROGRAPHIC FEATURES (Optional)	
SOIL DELINEATIONS AND LABELS	DrO Fe W DaD	BOUNDARIES National, state or province		Drainage end (indicates direction of flow) Unclassified stream	•
STANDARD LANDFORM AND MISCELL ANEQUS SURFACE FEATURES	10 TO	County or parish		SideSand aroun	
Bedrock escarpment	******************	Minor civil division			
Nonbedrock escarpment		Reservation (Military)			
Gully	***************************************	Land grant (Optional)			
Levee Short steep slope			13 - 13 - 13 - 13 - 13 - 13 - 13 - 13 -		
Blowout	Θ	Field sheet matchline and neatline		<u>*</u>	
Borrow pit Clay spot	•	Public Land Survey System Section Comer Tics	+		
Closed depression	•	3000 Table 1000 Table			
Gravel pit	×	GEOGRAPHIC COORDINATE TICK	+		
Gravelly spot Landfill	. 0				
Marsh or swamp	¥	ROAD EMBLEMS			
Mine or quarry	*	Interstate	(7)		
Rock outcrop Sandy spot	×	1999 UNIV. S. J. A.	~		
Severely eroded spot	÷	Federal	U		
Sinkhole Slide or slip	3	State	0		
Spoil area	5				
Stony spot Very stony spot	o as	LOCATED OBJECTS			
Wet spot	¥	Airport (Label only)	Davis Airport or Airstrip		
AD HOG FEATURES (Describe on back)					
LANCE. SYMBOLID SYMBOL	LARIT. SYMBOLID SYMBOL				
ocs ı ≪	CRO 23 Ô				
OVW 3	MIA 24 0 CGM 25 0				
ovw a 🗆	CGM 25 €				
EAS 5 II.	<i>n</i> •				
SAS 7 H	SID 26 ©				
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WOP 18 *	VSE 40 H				
SBR 19 X	41 ** 42 #				
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res 22 G	UNIT 44 ♣				

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

<u>Feature</u>	Name	Description
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.
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.
GUL	Gully	A small channel with steep sides cut by running water through which water ordinarily runs only after a rain, or after ice or snow melts. It generally is an obstacle to wheeled vehicles and is too deep to be obliterated by ordinary tillage.
LVS	Levee	An embankment that confines or controls water, especially one built along the banks of a river to prevent overflow of lowlands. Levees built according to COE standards.
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. 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.
ERO	Severely eroded spot	An area where on the average 75 percent or more of the original surface layer has been lost because of accelerated erosion. Not used in map units that are named severely eroded, very severely eroded, or gullied. 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.
WET	Wet spot	A somewhat poorly drained to very poorly drained area that is at least two drainage classes wetter than the named soils 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 Symbol ID</u>	<u>Name</u>	<u>Description</u>
DKS 2 (Labeled as "Areas w 10ac. or less" in publi	1	An area with a surface layer that has chroma and value, moist, of 3 or less in areas where the surface layer of the named soils have chroma and/or value of more than 3. Typically 0.2 to 10 acres.
CAF 8 (Labeled as "Disturbe In published survey)	Cut and fill dareas 10 ac. or less"	An area where soil material has been excavated in one place and deposited as compacted fill in an adjacent place, as in the construction of a road or other structure. Typically 0.2 to 5 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 12-15 – Notes to Accompany Classification and Correlation

Alford Series

The Alford series has been re-classified to an Ultic Hapludalfs, and therefore are no longer taxadjuncts.

Armiesburg Variant

The Armiesburg Variant is changed to a taxadjunct with this amendment. It classifies as Coarse-silty, mixed, superactive, mesic Fluventic Hapludolls. As stated in the correlation document, these soils have morphology similar to the Armiesburg series except they are lower in clay content. The Armiesburg Series is in the fine-silty particle-size family.

Haymond Series

The Haymond series in Posey County are re-correlated as a wet substratum phase, and the soil moisture data is revised for a seasonal water table at 3.5 to 6 feet.

Junius Series

Junius soils are no longer considered to be taxadjuncts as they classify as the Official Soil Series (OSD); mixed, mesic Typic Psammaquents. The horizon data reflects the more loamy material in the substratum which is outside OSD range in characteristics (RIC).

Nolin series

The typical pedon in Posey County is the current type location for the McAdoo Series. Thus, the Nolin series is re-correlated to the McAdoo Series.

Onarga Series

The Onarga Series in Posey County are outside their MLRA area. They classify as Fine-loamy, mixed, active, mesic Typic Argiudolls. They have more clay in the upper part of the subsoil and are considered to have a lower CEC activity class than is typical of the Ongara Series, and therefore are taxadjuncts.

Pekin Series

The Pekin soils in Posey County are outside their typical MLRA range, and correlated along the Ohio River in association with other river terrace soils. They have a higher base status, and classify as Fragiudalfs. Therefore, they are taxadjuncts. In a future update, these soils will be evaluated and are more likely to fit better in the concept of the Sciotoville series.

Plainfield Variant

The Plainfield Variant is changed to a warm phase of the Plainfield Series with this amendment and will no longer be considered a variant. It classifies the same as the Plainfield series, Mixed, mesic Typic Udipsamments. MAAT for the Plainfield Series is 45 to 53 degrees F and in Posey County is 52 to 57 degrees F. MAP is also higher (40 to 46 inches) in Posey County than for the OSD (28 to 38 inches).

Reesville Series

The Reesville soils in Posey County are outside the typical series concept in that they formed entirely in loess. Reesville series correlated in MLRA 115A will be evaluated in the future, and will be correlated to a new or different series. The Reesville soils in Posey County classify as Aeric Endoaqualfs and, therefore are taxadjuncts.

Uniontown Series

The Uniontown series in Posey County classify the same as the OSD, and therefore are no longer taxadjuncts.

Weinbach Series

The Weinbach series in Posey County are considered to dominantly classify, and fit within the concept of the Hatfield Series which classify as Aeric Fragic Epiaqualfs. Therefore, they are taxadjuncts.

Wheeling Series

The Wheeling series in Posey County have soil properties that fit within the concept of the Millstone Series. Although base status is unknown, these soils are reclassified to Typic Hapludults which is the same as the Millstone Series, and therefore are taxadjuncts.

Zipp Variant

The Zipp Variant soils share many properties with the Driftwood series, and are close to the concept of this series.

Pages 16 to 18-- Replace the Classification of the Soils table with the following,

Posey 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
Armiesburg *Armiesburg Birds Bloomfield Elkinsville	Fine-silty, mixed, superactive, mesic Ultic Hapludalfs Fine-silty, mixed, superactive, mesic Fluventic Hapludolls Coarse-silty, mixed, superactive, mesic Fluventic Hapludolls Fine-silty, mixed, superactive, nonacid, mesic Typic Fluvaquents Sandy, mixed, mesic Lamellic Hapludalfs Fine-silty, mixed, active, mesic Ultic Hapludalfs Fine-silty, mixed, superactive, nonacid, mesic Typic Endoaquepts Fine-loamy, mixed, superactive, mesic Fluventic Eutrudepts
	Fine-ioamy, mixed, superactive, mesic Fluventic Eutrudepts Fine-silty, mixed, active, mesic Typic Endoaqualfs

Soil name	Family or higher taxonomic class
Haymond	Coarse-silty, mixed, superactive, mesic Dystric Fluventic Eutrudepts
•	Fine-silty, mixed, active, mesic Aquic Hapludalfs
	Fine-silty, mixed, active, mesic Oxyaquic Fragiudalfs
	Fine-silty, mixed, superactive, mesic Oxyaquic Hapludalfs
	Mixed, mesic Typic Psammaquents
	Coarse-loamy, mixed, superactive, mesic Fluventic Hapludolls
	Coarse-loamy, mixed, superactive, mesic Typic Endoaquolls
•	Fine-silty, mixed, superactive, mesic Fluventic Eutrudepts
	Fine-silty, mixed, active, nonacid, mesic Fluventic Endoaquepts
	Fine-loamy, mixed, active, mesic Typic Argiudolls
_	Fine-silty, mixed, superactive, mesic Typic Endoaquolls
	Fine-silty, mixed, active, mesic Aquic Fragiudalfs
	Fine-silty, mixed, superactive, mesic Fragic Epiaqualfs
Petrolia	Fine-silty, mixed, superactive, nonacid, mesic Fluvaquentic Endoaquepts
Plainfield	Mixed, mesic Typic Udipsamments
Princeton	Fine-loamy, mixed, active, mesic Typic Hapludalfs
Psamments	Mixed, calcareous, mesic Typic Udipsamments
	Fine-silty, mixed, superactive, mesic Typic Argiaquolls
Rahm	Fine-silty, mixed, active, nonacid, mesic Fluvaquentic Endoaquepts
*Reesville	Fine-silty, mixed, superactive, mesic Aeric Endoaqualfs
	Fine-loamy, mixed, superactive, mesic Typic Argiaquolls
Stonelick	Coarse-loamy, mixed, superactive, calcareous, mesic Typic Udifluvents
	Fine-silty, mixed, superactive, mesic Typic Hapludalfs
	Fine-silty, mixed, superactive, mesic Oxyaquic Hapludalfs
Vincennes	Fine-loamy, mixed, active, nonacid, mesic Typic Endoaquepts
Wakeland	Coarse-silty, mixed, superactive, nonacid, mesic Aeric Fluvaquents
*Weinbach	Fine-silty, mixed, active, mesic Aeric Fragic Epiaqualfs
	Fine-silty, mixed, active, mesic Ultic Hapludalfs
*Wheeling	Fine-loamy, mixed, active, mesic Typic Hapludults
	Fine-loamy, mixed, active, mesic Aquultic Hapludalfs
_	Fine, mixed, active, mesic Oxyaquic Eutrudepts
Zipp	Fine, mixed, active, nonacid, mesic Typic Endoaquepts
	Fine, mixed, active, acid, mesic Typic Endoaquepts

Approval Signatures and Date

TRAVIS NEELY	Date	JANE E. HARDISTY	Date
State Soil Scientist/MLRA Leader		State Conservationist	
Indianapolis, Indiana		Indianapolis, Indiana	