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Date: May 11, 2008

This document describes the fields in the Reg_Combined_Soils_Final_V3.xls dataset. Fields taken from the NRCS SSURGO dataset were described using the metadata directly from the NRCS metadata (http://soildatamart.nrcs.usda.gov/SSURGOMetadata.aspx).

Field	Table	Name	Column Label
	Description		
MUSYM	Mapunit	Musym	Mapunit Symbol
	The symbol used to uniquely identify the soil mapunit in the soil survey.		
MUKEY	Mapunit	Mukey	Mapunit Key
	A non-connotative string of characters used to uniquely identify a record in the Mapunit table.		
COMP_P	Component	Comppct_r	Comp% - Representaitve value
	The percentage of the component of the mapunit.		
RANK	Non SSURGO – Rank by relative percentage of soil		
MU_NAME	Mapunit	Muname	Mapunit name
	Correlated name of the mapunit (recommended name or field name for surveys in progress).		
HZ_NAME	Chorizon	Hzname	Designation
	The concatenated string of four kinds of symbols (five data elements) used to distinguish different kinds of layers in the soil. (SSM)		
HZ_FIX	Non SSURGO - Fixed horizon names based on SCD horizon (ie: H1 = A)		
TOP_HZ	Chorizon	Hzdept_r	Top depth – representative value
	The distance from the top of the soil to the upper boundary of the soil horizon.		
BOT_HZ	Chorizon	Hzdepb_r	Bottom depth – representative value
	The distance from the top of the soil to the base of the soil horizon.		
THICKNESS	Chorizon	Hzthk_r	Thickness – representative value
	A measurement from the top to bottom of a soil horizon throughout its areal extent		

Field	Table	Name	Column Label
			Description
SANDTOT	Chorizon	Sandtotal_r	Total Sand - Representative Value
	Mineral particles 0.05mm to 2.0mm in equivalent diameter as a weight percentage of the less than 2 mm fraction.		
SILTTOT	Chorizon	Silttotal_r	Total Silt - Representative Value
	Mineral particles 0.002 to 0.05mm in equivalent diameter as a weight percentage of the less than 2.0mm fraction.		
CLAYTOT	Chorizon	Claytotal_r	Total Clay - Representative Value
	Mineral particles less than 0.002mm in equivalent diameter as a weight percentage of the less than 2.0mm fraction.		
TEXTURE	Chtexturegrp	Texture	Tex mod & class
	Name for the concatenation of TEXTURE_MODIFIER and TEXTURE_CLASS.		
OM_R	Chorizon	Om_r	OM – Representative Value
	The amount by weight of decomposed plant and animal residue expressed as a weight percentage of the less than 2 mm soil material.		
CACO3___RE	Chorizon	Caco3_r	CaCO3 - Representative Value
	The quantity of Carbonate (CO3) in the soil expressed as CaCO3 and as a weight percentage of the less than 2 mm size fraction.		
DBOVENDRY_	Chorizon	Dbovendry_r	Db oven dry - Representative Value
	The oven dry weight of the less than 2 mm soil material per unit volume of soil exclusive of the desication cracks, measured on a coated clod.		
DBTHIRDBAR	Chorizon	Dbthirdbar_r	Db 0.33 bar H2O - Representative
	The oven dry weight of the less than 2 mm soil material per unit volume of soil at a water tension of 1/3 bar.		
PBRAY_PHOS	Chorizon	Pbray1_r	Bray 1 Phos - Representative Value
	The amount of phosphorous in the less than 2mm fraction, that is extractable using the Bray1 method. It represents the plant available phosphorous content.		

Field	Table	Name	Column Label
			Description
TOTAL_PHOS	Chorizon	Ptotal_r	Total Phos – Representative Value
	The estimate of the total phosphorous content of the soil, measured after total dissolution of a size fraction of the soil material. It is reported as a gravimetric percent oxide of the size fraction used.		
PH_H2O_R	Chorizon	Ph1to1h2o_r	pH H2O – Representative Value
	The negative logarithm to the base 10, of the hydrogen ion activity in the soil using the 1:1 soil-water ratio method. A numerical expression of the relative acidity or alkalinity of a soil sample. (SSM)		
SUMBASES_R	Chorizon	Sumbases_r	Sum of Bases – Representative Value
	The sum of NH4Oac extractable bases (pH 7.0), reported on less than 2mm base.		
KSAT___REP	Chorizon	Ksat_r	Ksat – Representative Value
	The amount of water that would move vertically through a unit area of saturated soil in unit time under unit hydraulic gradient.		
AWC_R	Chorizon	Awc_r	AWC – Representative Value
	The amount of water that an increment of soil depth, inclusive of fragments, can store that is available to plants. AWC is expressed as a volume fraction, and is commonly estimated as the difference between the water contents at 1/10 or 1/3 bar (field capacity) and 15 bars (permanent wilting point) tension and adjusted for salinity, and fragments.		
HYDGRPDCD	Muaggatt	Hydgrpdcd	Hydrologic Group – Dominant conditions
	Hydrologic Group is a grouping of soils that have similar runoff potential under similar storm and cover conditions. This column displays the dominant hydrologic group for the map unit, based on composition percentage of each map unit component.		
FRAGGT10_R	Chorizon	Fraggt10_r	Rock >10 – Representative Value
	The percent by weight of the horizon occupied by rock fragments greater than 10 inches in size.		
FRAG3TO10_	Chorizon	Frag3to10_r	Rock 3-10 – Representative Value
	The percent by weight of the horizon occupied by rock fragments 3 to 10 inches in size.		

Field	Table	Name	Column Label
			Description
KWFACT	Chorizon	Kwfact	Kw
	An erodibility factor which quantifies the susceptibility of soil particles to detachment and movement by water. This factor is adjusted for the effect of rock fragments.		
KFFACT	Chorizon	Kffact	Kf
	An erodibility factor which quantifies the susceptibility of soil particles to detachment by water.		
AWS025WTA	Muaggatt	Aws025wta	Available Water Storage 0-25 cm – Weighted Average
	Available water storage (AWS). The volume of water that the soil, to a depth of 25 centimeters, can store that is available to plants. It is reported as the weighted average of all components in the map unit, and is expressed as centimeters of water. AWS is calculated from AWC (available water capacity) which is commonly estimated as the difference between the water contents at 1/10 or 1/3 bar (field capacity) and 15 bars (permanent wilting point) tension, and adjusted for salinity and fragments.		
AWS050WTA	Muaggatt	Aws050wta	Available Water Storage 0-50 cm – Weighted Average
	Available water storage (AWS). The volume of water that the soil, to a depth of 50 centimeters, can store that is available to plants. It is reported as the weighted average of all components in the map unit, and is expressed as centimeters of water. AWS is calculated from AWC (available water capacity) which is commonly estimated as the difference between the water contents at 1/10 or 1/3 bar (field capacity) and 15 bars (permanent wilting point) tension, and adjusted for salinity and fragments.		
AWS0100WTA	Muaggatt	Aws100wta	Available Water Storage 0-100 cm – Weighted Average
	Available water storage (AWS). The volume of water that the soil, to a depth of 100 centimeters, can store that is available to plants. It is reported as the weighted average of all components in the map unit, and is expressed as centimeters of water. AWS is calculated from AWC (available water capacity) which is commonly estimated as the difference between the water contents at 1/10 or 1/3 bar (field capacity) and 15 bars (permanent wilting point) tension, and adjusted for salinity and fragments.		

Field	Table	Name	Column Label
			Description
AWS0150WTA	Muaggatt	Aws150wta	Available Water Storage 0-150 cm - Weighted Average
	Available water storage (AWS). The volume of water that the soil, to a depth of 150 centimeters, can store that is available to plants. It is reported as the weighted average of all components in the map unit, and is expressed as centimeters of water. AWS is calculated from AWC (available water capacity) which is commonly estimated as the difference between the water contents at 1/10 or 1/3 bar (field capacity) and 15 bars (permanent wilting point) tension, and adjusted for salinity and fragments.		
RUNOFF	Component	Runoff	Runoff class
	Runoff potential class for the soil.		
PMMODIFIER	Copm	Pmmodifier	Textural modifier
	General description of the texture of the parent material. Class limits correspond to those of textural groupings defined in the Soil Survey Manual and family particle-size classes in Soil Taxonomy.		
PMORDER	Copm	Pmorder	Vertical order
	A yes/no field that indicates if a listed parent material is representative for the component.		
RVINDICATO	Copmgrp	Rvindicator	RV Yes/No
	Name for the concatenation of PARENT_MATERIAL_MODIFIER, PARENT_MATERIAL_KIND, and PARENT_MATERIAL_ORIGIN for each of the parent materials that may occur in a vertical cross section of a soil.		
GROUP_NAME	Copmgrp	Pmgroupname	Group name
	Name for the concatenation of PARENT_MATERIAL_MODIFIER, PARENT_MATERIAL_KIND, and PARENT_MATERIAL_ORIGIN for each of the parent materials that may occur in a vertical cross section of a soil.		
GENERAL_MO	Copm	Pmgenmod	General modifier
	A user specified term(s) used to further describe the nature of the parent material for a given soil.		

Field	Table	Name	Column Label
			Description
KIND	Copm	Pmkind	Kind
	A term describing the general physical, chemical and mineralogical composition of the material, mineral or organic, from which the soil develops. Mode of deposition and/or weathering may be implied or implicit.		
ORIGIN	Copm	Pmorigin	Origin
	The type of bedrock from which the parent material was derived.		
P_KEY	SCD – Pedon ID Key (#)		
SCD_DESIGN	SCD – Horizons		
HZN_T	SCD – Horizon Top Depth		
HZN_B	SCD – Horizon Bottom Depth		
N_TOT	SCD – Total Nitrogen in %wt		
N_GM2	SCD – Total Nitrogen in g/m2		
C_TOT	SCD – Total Carbon in %wt		
NITROGEN_M	SCD – Method of Nitrogen sample		
CARBON_MET	SCD – Method of Carbon sample		