

Official Series Descriptions—Maintenance: Assignment and Responsibility

(Last edit = 4/20/09)

- Objective:** Review and maintain the official series descriptions (OSD) and soil series classification (SC) file at a refresh rate of five (5) years in order to keep these data as a current and consistent portion of the National Soil Information System (NASIS) in MLRA Soil Survey Region 10.
- Justification:** The National Soil Survey Handbook (NSSH), Part 614.06 (d) 1, states that soil scientists must revise soil series descriptions if one or more of the following conditions exist:
- change in the concept of the soil series, including the range in characteristics;
 - change in the classification of the soil series; and
 - change in the type location of the soil series.
- Background:** The official soil series descriptions are the second part of the National Soil Classification System. The Soil Survey Division (SSD) maintains the [official soil series description](#) file and the [soil series classification file](#). These files list the classification of established, tentative, and inactive soil series of the United States, Puerto Rico, the Pacific Basin, and the U.S. Virgin Islands. The official soil series description file is the official reference to soil series descriptions. The soil series classification file is the official source for the classification of the soil series. The soil series is the lowest category of the national soil classification system. The name of a soil series or the phase of a soil series is the most common reference term used in soil map unit names. The name of a soil series is also the most common reference term used as a soil map unit component. The map unit components provide the interpretive applications within soil survey for most detailed purposes.
- Benefits:** This project improves and maintains the data that are used to support the following soil survey program mission functions, which have a direct impact on the soil survey program in our region:
1. make an inventory of the soil resources of the United States;
 2. keep the soil survey relevant to ever-changing needs;
 3. interpret the information and make it available in a useful form; and
 4. promote the soil survey and provide technical assistance in its use for a wide range of community planning and resource development issues related to nonfarm and farm uses.
- Procedure:** Region 10 has assigned a specific MLRA Soil Survey Office (SSO) to be responsible for each OSD in the Region. Initially, the assignment of OSDs to SSOs has been made based on the type location of the typical pedon for each series. However, in the event that the type location for a series is located outside of the MO boundary, the assignment has been based on series extent of correlated map units as per NASIS. Situations that require additional responsibility assignment criteria will be addressed by the Region 10 office as needed.
- If an MLRA SSO believes another office should have responsibility for an OSD assigned to their SSO, or believes they should have responsibility for a particular OSD, the MLRA SSO Leader should contact the Region 10 office.
- The OSD workload should be prioritized, and work should begin on benchmark and extensive series or series affected by ongoing projects in the MLRA.

The following items should be addressed on each OSD (see NSSH Part 614.06 for additional guidance):

- a. validate the data in the opening paragraph using NASIS data;
- b. validate the taxonomic classification using the most current edition of Soil Taxonomy;
- c. determine if the pedon is representative for that series (high importance);
- d. update to 2 meters (if possible);
- e. convert to metric units of measure;
- f. georeference the type location (if possible);
- g. ensure that the map unit at the type location has a component named for the respective series correlated in its representative data map unit;
- h. review and update the horizon nomenclature;
- i. review and update the Range in Characteristics section, correlate with NASIS data, and convert to semitabular format;
- j. review and update the Competing Series section;
- k. review and update the Geographic Setting section;
- l. review and update the Geographically Associated Soils section;
- m. review and update the Drainage and Saturated Hydraulic Conductivity section (this header is to be changed from the outdated Drainage and Permeability);
- n. validate the data in the Use and Vegetation, Distribution and Extent, MLRA Office Responsible (MO), and Series Established sections;
- o. review and update the Remarks Section, add statements identifying any diagnostic and special features in the typical pedon, and identify the moisture subclass, moisture class, and temperature regime associated with the respective series concept;
- p. reference any additional data in the Additional Data section.

Note: A request to add an “MLRA Soil Survey Office Responsible” header to the OSD template is being submitted to the National Soil Survey Center (NSSC). If the header is added to the OSD template, the data will need to be populated and maintained.

The following sequence of events is suggested for revising an OSD:

MLRA SSO:

1. Refers to the Region 10 “OSD Process” document and follows guide.
2. Revises the OSD using MS Word software and the Track Changes tool.
 - a. Refers to the Region 10 “Editing OSDs” guidance document and follows guide.
3. Saves the revised document as a *.doc file and as a *.txt file. The *.doc file will preserve the tracked changes, and the *.txt file will be compatible with the OSD Check program.
4. Uses the MS Word Spelling and Grammar tool on the edited document.
5. Uses the OSD Check program as a quality control tool to validate the edited OSD.
6. If, through the revision process, there is a change in classification, type location, or a significant change in morphology, sends the revision for peer review to the MLRA soil survey leaders and the State Soil Scientists (SSS) who have the respective series correlated in their area of responsibility.
7. Incorporates any peer reviewer comments and ensures that quality control is maintained.
8. Documents revisions in the series by saving a copy of the revised document with Track Changes.

9. Submits the edited OSD files to the Region 10 office in *.doc format, which includes tracked changes, and in *.txt format for quality assurance.

Note: The historical series files are available for review and background by request from the Region 10 office. Region 10 is working on a process to make these files available electronically.

Note: The Tripoli series is a good example of a recently revised OSD.

MLRA Region 10 Office:

1. Reviews proposed changes and ensures that the series concept remains intact.
2. Uses the OSD Check program to validate the revised OSD.
3. Reviews documentation in NASIS and the series historical file.
4. Uploads revised OSD to the OSD database.
5. Edits the SC file (if needed).

Needs: CCE-compliant personal computer with access to NASIS and the World Wide Web that has the OSD Check and ArcGIS applications installed.

Duration: This is an ongoing project that is expected to be goaled in order to facilitate a refresh rate of five (5) years for the OSD database and SC file. It is estimated that each OSD will require between 4 and 16 staff hours of time to revise, depending on the age of the OSD. The older OSDs require more staff time to bring them up to modern standards. There are currently 1,491 established series, 51 tentative series, and 4 inactive series in Region 10, according to the SC file. There are 94 benchmark soils identified in the Region, according to the SC file. The electronic file "Region 10 MLRA SSO Series Assigns.xls" assigns the OSDs that the Region 10 office has responsibility for to their respective MLRA SSOs.

Personnel General workload: MLRA SSO staff
Quality control: MLRA SSO leader
Quality assurance: Region 10 soil data quality specialist (SDQS)

Contact Person: Tom Neuenfeldt, Soil Data Quality Specialist
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References: U.S. Department of Agriculture, Natural Resources Conservation Service, 2007. National Soil Survey Handbook, title 430-VI. [Online] Available: <http://soils.usda.gov/technical/handbook/>.

Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Official Soil Series Descriptions [Online WWW]. Available URL: "<http://soils.usda.gov/technical/classification/osd/index.html>" [Accessed 27 February 2009]. USDA-NRCS, Lincoln, NE.

Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Soil Series Classification Database [Online WWW]. Available URL: "<http://soils.usda.gov/soils/technical/classification/scfile/index.html>" [Accessed 27 February 2009]. USDA-NRCS, Lincoln, NE.

Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Soil Survey Program Strategic Plan 2005–2015.

Region 10 MLRA SSO Series Assigns.xls

MLRA SSO	OSDs	Benchmark Series
10-1 (Bemidji, MN)	117	5
10-2 (Fergus Falls, MN)	76	3
10-3 (Stanton, NE)	50	6
10-4 (Duluth, MN)	241	11
10-5 (Albert Lea, MN)	165	10
10-6 (Atlantic, IA)	108	13
10-7 (Gallatin, MO)	49	5
10-8 (Marquette, MI)	195	5
10-9 (Rhineland, IA)	196	9
10-10 (La Crosse, WI)	171	13
10-11 (Waverly, IA)	108	10
10-12 (Fairfield, IA)	61	4

Signatures:

Illinois State Soil Scientist

Date

Iowa State Soil Scientist

Date

Kansas State Soil Scientist

Date

Michigan State Soil Scientist

Date

Minnesota State Soil Scientist/Region 10 Leader

Date

Missouri State Soil Scientist

Date

Nebraska State Soil Scientist

Date

North Dakota State Soil Scientist/Region 7 Leader

Date

South Dakota State Soil Scientist

Date

Wisconsin State Soil Scientist

Date