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Pacific Southwest MLRA Soil Survey Region (MO-2)
National Cooperative Soil Survey
Technical Note No. 430-6.v.5

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SUBJECT: SOI – Soil Survey Manuscripts Technical Note

Purpose. To provide guidance, consistency and organization to the development of the soil survey manuscript.

Background. The NRCS publishes soil surveys for the National Cooperative Soil Survey (NCSS). Part 644, of the National Soil Survey Handbook (NSSH), Chapter 7 in the *Soil Survey Manual*, and the "Guide to Authors of Soil Survey Manuscripts" provide information on the planning, development, organization, and content of soil survey manuscripts. NSSH, exhibit 644-6, "Guide to Authors of Soil Survey Manuscripts", has helpful information, practical examples, and guidelines for the organization, format, and content of a soil survey manuscript. The MLRA office is responsible for performing technical editing for soil survey reports. The English editor checks the coherence, consistency, syntax, and logic of the text. The editor is also responsible for editing, formatting, proofreading and preparing the text and tables and preparing the electronic files for publication on CD-ROM and the Web Soil Survey.

Survey Area Soil Handbook: The Survey Area Soil Handbook is the basis for developing the manuscript that is ultimately submitted for technical and English editing prior to publication. "The arrangement and format of material in the survey soil handbook is similar to that in published soil surveys. In addition to the descriptive legend, the handbook includes the soil survey manuscript prewritten material, original material that is prepared by the soil survey project and guest authors, block diagrams, references, and pictures. The handbook is usually maintained in loose-leaf binders with dividers that separate major parts." (NSSH 627.08(g)).

The Soil Handbook is maintained throughout the life the soil survey project and is reviewed periodically, usually during the Progress Field Review.

As part of the quality assurance process, the Review Team Leader (RTL) will check that the Handbook is being updated incrementally at each review. The RTL will keep the MLRA Office Soil Survey Publications Specialist (SSPS) informed of any problems with the Handbook that could potentially delay the development of the manuscript. The RTL will request assistance from the SSPS to help the project staff with potential problem areas.

Manuscript Preparation: The SSPL, with concurrence from the RTL, will request manuscript preparation assistance from the MLRA Office Soil Survey Publications Specialist when ready to develop the complete manuscript for publication. The SSPS will assist in organizing and structuring all the components of the manuscript and preparing for final technical and English edits.

General Manuscript Preparation: In order to facilitate the work of the Technical and English editors, the SSPL shall follow these steps in developing the manuscript.

1. Organize folder structure as in this example:

CA612-Manuscript

Illustrations - store photos, diagrams, interpretive maps, etc.

GSM - store the general soil map descriptions

MUDS - store the MUG

NASIS-M02-PWM – unzip the "NASIS-M02-PWM.zip" file to this folder

PWM-NEW - store all the text segment and new section files you create

Tables - store the tables generated from NASIS. Save as .txt files.

TUDS - store the TUDS

2. Unzip the file "NASIS-MO2-PWM.zip" to the **NASIS-MO2-PWM** folder. This file can be downloaded from <http://www.ca.nrcs.usda.gov/intranet/techres/mlra02/technotes.html>.
3. Print the Pre-Written Material files and arrange in a binder. Use tabs to separate files.
4. Make all edits on the hard copy in red ink. Do not edit the electronic files. For deletions, cross out the unnecessary text. Minor edits such as a word or phrase could be added by drawing and arrow from the location where the text will be placed and writing the text on the margins.
5. If large portions of text will be added to a particular file, type the text in MS-Word. If more than one segment will be added to the same file, identify each segment using a numerical sequence such as, #1, #2, etc. Save the file using the following convention: ca###_filename.doc, where ### is the soil survey area ID (ssaid), and filename is the original name of the file, for example, USEMGT. The complete file name should be similar to this example: **ca612_usemgt.doc**. Type the filename on the first line of text. Save the file to the **PWM-New** folder. Print a copy of the newly created file and place on top of the original hardcopy in the binder. This will alert the editor that there is new text to be added.
6. On the hard copy, write the name of the newly created file (ex: ca612_USEMGT.doc) at the top of the hardcopy in red ink. Next, indicate where the segments will be inserted. Write the sequence number (ex: #1, #2, etc.) exactly where you want the text to be added.
7. Several PWM files have been customized for use in MO-2. Use the files ca_bldgsite.txt, ca_ecosite_desc.txt, ca_erosion_properties.txt, ca_glossary.txt, ca_nps_table.txt, ca_rangeland.txt, ca_recrea.txt, ca_references.txt, ca_sanfacil.txt, ca_statefar.txt, ca_storie.txt, ca_texturepara.txt, and ca_watermgt.txt, instead of the corresponding National PWM files (BLDGSITE.txt, RECREA.txt, SANFACIL.txt, WATERMGT.txt, etc). These files can be found in the NASIS-MO2-PWM folder.

The ca_texturepara.txt is the PWM for the ca_texture.txt table. Use this table if you are using the texture abbreviations in the engineering index properties table. Cross out any entries as appropriate. For a sample of the formatted table see the file "sample texture table.pdf." The PWM file includes entries for the table and the glossary.

The ca_nps_table.txt is for National Park Service survey manuscripts only, to be used in conjunction with the table MANU – NPS – Landscape, Parent Material and Ecosite ID.

8. There are several sample files included in the PWM to help in developing portions of the manuscript that are more unique to California. The files are: mlra_mo2.doc, tortoise_mo2.doc, and soilform_mo2.doc.

Please keep in mind that these are samples that were written for other survey areas. Open the files in MS-Word and edit as necessary. It is not necessary to use Track Changes. Just delete or add any text as required for your survey area. Save the newly created files using the following naming convention: ca###_filename_mo2.doc, where ### is the ssaid, and filename is the original name. For example: ca612_storie_mo2.doc. Store the file in the PWM-New folder. Print the file and put in the binder in the location where you want the file to appear. Add a divider and identify the filename on the tab. Make a note that you need to add the heading and the name of the file to the Contents.

9. Indicate the exact location of each figure (photos, diagrams, interpretive maps) on the text with the caption "<figure##>", where ## is the corresponding illustration number, as in figure1, figure10, etc.
10. If using citations in the text, list author and date, in parenthesis, after the reference item (Burns, 1946).
11. Develop the Contents using the file contents_mo2.doc. Copy the file to the **PWM-New** folder, name it ca###_contents.doc, where ### is the ssaid, and edit appropriately. Make sure to type the name of this new file on the first line of the document. This file contains a table with two columns. The first column is the heading as it will appear in the manuscript. The second column corresponds to the filename you are using. If the file corresponding to a particular section is one of the NASIS_PWM files, just write the name in the second column. For example, USEMGT.txt for the Use and Management of the Soils section. If using a file you created, use the new filename. For example, ca###_storie_mo2.doc. Delete headings not in the manuscript. Insert headings unique to the survey area. If the survey does not follow the standard order or format, make this clear on the

hardcopy of the ca###_contents.doc. Do not put page numbers. Print the Contents and add to the binder on top of the original CONTENTS.txt printout.

12. The references (ca_references.txt) and the glossary (ca_glossary.txt) have already been customized for use in MO-2. They contain most of the entries we generally use. Add any other entries as necessary. Print these files and mark edits in red ink on hard copy. If large segments of text are to be added, follow the guidance in steps 5-6, above. Print copies of the documents containing additional text and place on top of the existing hardcopies. This will alert the editor that text is to be inserted.

References: For journal articles and conference proceedings, give page numbers of articles referenced. Be sure that each reference listed in the Reference section can be found in the text.

Glossary: If adding new definitions, make sure they are used in the text. Delete any definitions not used in the text.

13. Tables: Make sure that information in tables is correct and that revisions have been made. Make sure that electronic and hardcopy versions match. Print all tables directly from NASIS using Citrix and put in a binder, each table separated by a divider page. Write the filename on the tab. Save the tables as .txt files and store in the Tables folder. Use the naming convention ssaid###_tablename.txt.
14. Request assistance from the Soil Survey Publications Specialist as many times as needed throughout the process.

Photos, Illustrations and Block Diagrams: Follow these guidelines for photos, illustrations and block diagrams:

1. Photos should be taken at 300 dpi resolution; 5" x 7". The cover photo should be taken in landscape mode. Set your camera for 2288 x 1520 pixels; .tif file type (if option available on your camera). The resulting files may be large in size (up to 10 MB) each. If photos need to be cropped, send a printout of the photo with the area to be cropped outlined on the printout. Do not manipulate the files in any way, especially if you are taking photos in .jpg format. .Jpg files get further compressed every time you save the file, degrading the quality of the photo. Just submit the photos as they are downloaded from your camera and include special instructions to the editor as to how you want the photos enhanced. It is advisable to include a professional print of each photo to give the editor a better idea of the actual color in the photograph.
2. Line work, such as illustrations, block diagrams and interpretive maps (includes general soil map) should be 800 dpi. These are normally 8.5" x 11". The general soil map is normally ANSI D (22" x 34").
3. Hand-drawn block diagrams or other illustrations are sent to the National Cartographic and Geospatial Center (NCGC) at Fort Worth, TX, for professional rendering. Send the hand-drawn creations to the SSPS to begin the process. Remember to allow several months for this process, therefore, start early.

Climate Data: The write-up provided by the Climate Data Center with your climate tables can be substituted with your own written material.

General Soil Map: The GSM can be procured from the State Soil Survey GIS Specialist covering your area or it can be produced by NCGC. Let the Soil Survey Publications Specialist know which source you will use. Again, products from NCGC take quite some time, thus, send your request early.

Optional Sections: The following sections are optional for soil survey manuscripts in MO-2 and will be part of the report if schedule allows, as long as the project is within the timeline of the workplan. The Soil Survey Project Leader (SSPL), in concurrence with the RTL, and subject to the approval by the SSS, will decide which sections will be included or dropped from a survey.

- General Soil Map
- History, Natural Resources
- Crop Yields
- Survey Procedures: Include only if specifically relevant to the survey

- Physical and Chemical Analyses: List only selected soils from the final correlation document, or include downloaded laboratory data for selected pedons. The list should include "Sampled as" name, "Current" name and the lab pedon number. Include the following caption as a header for the list: "Laboratory data for the following soils are at <http://ssldata.nrcs.usda.gov/querypage.asp>."
- Formation of the Soils
- Photos, Block Diagrams and Thematic Maps

Dropped Sections: The following sections will no longer be used in soil survey manuscripts in MO-2:

- Transportation Facilities
- Engineering Test Data

Standard Sections: The following sections will always be included:

- Use and Management – Use only major land uses
- Introduction - Focus on major land uses and interpretations for survey area.
- Climate – Use National Water and Climate Center data. Use custom data to supplement WCC data or if WCC data are not available.

Maintaining a Directory Structure: The manuscript material shall be stored on the computer hard drive following the structure in this example:

	<p>GSM – MS Word files describing the general soil map units</p> <p>Illustrations – photos, diagrams, charts</p> <p>MUDS – MUG output file from NASIS</p> <p>NASIS-M02-PWM – original PWM files. Do not edit files in this folder.</p> <p>PWM-New – MS Word files containing the text segment and other files you create</p> <p>Sample Files – sample manuscript processing files for reference.</p> <p>Tables – Tables downloaded from NASIS. Save as .txt files.</p> <p>TUDS – MS Word files containing taxonomic unit descriptions</p> <p>At the root directory include the completed Certification of Report Tables and Certification of Text, Photos & Diagrams documents</p>
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List of files in the **NASIS-M02-PWM** folder: The following is a listing of the pre-written material files. These files shall not be renamed. If you want to keep copies as backup, please store in a separate folder outside of this directory structure.

BLDGSITE.txt BOX.txt Ca_bldgsite.txt Ca_ecosite_desc.txt Ca_erosion_properties.txt Ca_glossary.txt Ca_nps_table.txt Ca_rangeland.txt Ca_recrea.txt Ca_references.txt Ca_sanfacil.txt Ca_statefar.txt Ca_storie.txt Ca_texture.txt (sample file) Ca_texturepara.txt Ca_watermgt.txt CHEMPROP.txt CLASSIF.txt CLIMATE.txt CONSTMAT.txt	CONTENTS.txt contents_mo2.doc COVER.txt CROPPAS.txt DSM.txt ENGINDPR.txt ENGINEER.txt ENGITEST.txt FOREST.txt FOREWORD.txt GLOSSARY.txt GSM.txt HOWSURMA.txt HYDRIC.txt INTRO.txt LANDCAP.txt mlra_mo2.doc NOTES.txt PHYPROPA.txt PHYPROPB.txt	PHYSCHEM.txt PRIMEFAR.txt RANGE-C1.txt RANGE-C2.txt RECREA.txt REFER.txt Sample texture table.pdf SANFACIL.txt SOILFEA.txt soilform_mo2.doc SOILPROP.txt tortoise_mo2.doc uniquefarm_mo2.doc USEMGT.txt WATERFEA.txt WATERMGT.txt WILDLIFE.txt WINDBREA.txt YIELDS.txt
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Certifications: The SSPL will prepare the Certification of Report Tables and the Certification of Text, Photo & Diagrams documents and include with the rest of the manuscript materials. The SSPL initials the appropriate boxes after a 100% check of the section is completed. These two files will be stored at the root directory for the survey. This guidance includes a Sample Certification of Text, Photo & Diagrams to illustrate the file naming conventions.

Submitting a Manuscript for Final Technical and English Edits: When the manuscript is ready for final technical edits, the SSPL, with approval from the SSS, will submit the manuscript package to the SSPS. The package will include a printout of the entire manuscript in binders. Include with the package prints of all illustrations and a CD-ROM with the electronic files.

The MO-2 SSPS will review and ensure that all parts have been assembled in the proper order following these guidelines. If errors or omissions are found, the SSPS will return the package to the SSPL for correction. When corrections are made, the SSPL will again send the package to the SSPS for a second review. If there are no problems, the SSPS will forward the manuscript package to the appropriate Review Team Leader for conducting technical review.

Technical Edit: The RTL at the MLRA Office will perform technical edits. Edits will be marked in blue ink on the hardcopy for the original PWM. The RTL will mark edits to any additional files created by the SSPL by hand, directly on the printed copy.

The RTL may send an inquiry to the SSPL asking for clarification on any items where they may be discrepancies or errors. The SSPL shall answer the inquiry in writing via email. The RTL will make any changes to the manuscript as needed. This process may repeat until all questions have been answered. When technical edit is completed, the RTL will certify that the manuscript is ready for English edit and will send to the SSPS. The RTL and the SSPL will cc the SSPS on any correspondence related to technical edits. The RTL initials the appropriate boxes of the Certification of Report Tables and the Certification of Text, Photo & Diagrams documents after the review is completed.

Preparing the Manuscript for English Edit: The SSPS will check that the manuscript package is complete and in proper order. If edits were made to the electronic files with Track Changes, the SSPS will accept any final changes and get the files ready for English edit. The SSPS, with approval from the MO Leader, will send the manuscript to the English editor. If the editor has questions, he or she will route all communication concerning the manuscript to the RTL. The SSPS will monitor the progress of the editing process.

Process for Manuscript Publication: When the manuscript is ready for publication, the English editor will create a CD-ROM containing all the text, tables, and page size versions of the maps. The National Cartographic and Geospatial Center (NCGC) will make the requested number of copies of the manuscript and the CD-ROM as per the SOI-7. The English editor will import the manuscript to the staging server. The MLRA Office will commit the manuscript to the Soil Data Warehouse/Soil Data Mart for use by the Web Soil Survey.

Supporting Documents: The following are supporting documents to this guidance document:

Certification_Photo-Diagrams.doc

Certification_Report_Tables.doc

Certification_Text.doc

Pre-Written Material Electronic Files (NASIS-M02-PWM.zip)

Sample Files: This folder includes several sample files for reference only.

Filing Instructions. This document is to be filed in National Soil Survey Handbook (NSSH) Part 644 "Soil Survey Manuscripts".

Distribution. Copies of this technical note and supporting documents may be downloaded from the California NRCS website at: <http://www.ca.nrcs.usda.gov/intranet/techres/mlra02/technotes.html>.

A handwritten signature in blue ink, reading "David W. Smith". The signature is written in a cursive style with a large, stylized "D" and "S".

DAVID W. SMITH
MLRA Office Leader/State Soil Scientist