

## TECHNICAL NOTES

SSR01 Technical Note Number 36 (Version 2.00)

NASIS – Mapunit Management: Adding to Legend, Adding to a Project, Making Additional, Changing Name, and Linking to a DMU.

## Overview

The goal of this technical note is to ensure all SSR01 staff are managing project mapunits, legend mapunits and mapunits in a consistent manner. It addresses management of mapunits in initial soil surveys that use legends and update soil survey projects that use Projects. This technical note provides the following guidance:

- How to create a new mapunit.
- How to link the mapunit to a DMU.
- How to add a new mapunit to a Project.
- How to add the new mapunit to the Legend.
- How to make an existing legend mapunit additional.
- Changing the name of a mapunit.

It provides step by step instructions and it provides guidance on how to correctly populate the Legend Text, Legend Mapunit History, and Mapunit History tables.

## General Notes

- Text notes should be used liberally as they leave a paper trail for future soil scientists.
- Data Mapunits must be in your local database in order to link them to the Mapunit.
- Mapunits must be in your local database in order to link them to your Legend or Project.
- A Mapunit CANNOT have more than one representative data mapunit.
- The mapunit type is only populated during MLRA update projects. It should be NULL for initial and extensive revision soil surveys.
- Information about mapunits can be captured in the Legend Mapunit History and Mapunit History tables. The table below will help you understand how and where to store information about mapunits.

<b>Event</b>	<b>Table Where Captured</b>
Mapunit name change	Mapunit History
New mapunit created	Mapunit History
New mapunit added to legend	Legend Mapunit History
Mapunit made additional	Legend Mapunit History
Mapunit Symbol changed	Legend Mapunit History

## Creating a New Mapunit and Adding it to Legend

A new mapunit must be created in the Mapunit object and linked to the representative DMU before it can be added to the legend.

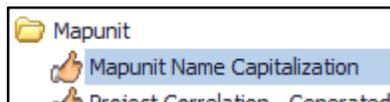
- 1) To create a new Mapunit, open the Mapunit Table and add a new row. You can click in the cell under the Mapunit Name to add a new row. The “N” on the far left indicates a new row has been added.

	Mapunit Name	S	Kind
N			

- 2) Enter a **Mapunit Name** and populate the **Kind**. DO NOT POPULATE ANY OTHER FIELDS. This is all that should be populated when you are done.

	Mapunit Name	S	Kind	Mapunit Type	National Mapunit Symbol	Linear Feature Width	Point Feature Area	USFS Map Unit Concept				
						Low	RV	High	Low	RV	High	
N	Alpha-Beta complex, 0 to 8 percent slopes	M	complex		2wc3s							

- 3) The “S” field to the right of the Mapunit Name field indicates whether or not the Mapunit Name Capitalization NASIS calculation was used. You should use this NASIS calculation to ensure that proper capitalization was used.



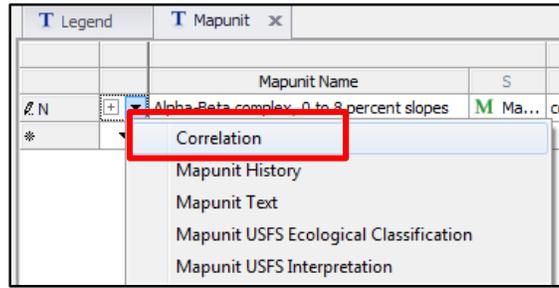
- 4) Open the Mapunit History table and add a new row.

	Mapunit Name	S	Kind	Mapunit Type	National Mapunit Symbol	Linear Feature	
						Low	RV
N	Alpha-Beta complex, 0 to 8 percent slopes	M	complex		2wc3s		

5) Use the following table as guidance for populating the Mapunit History table:

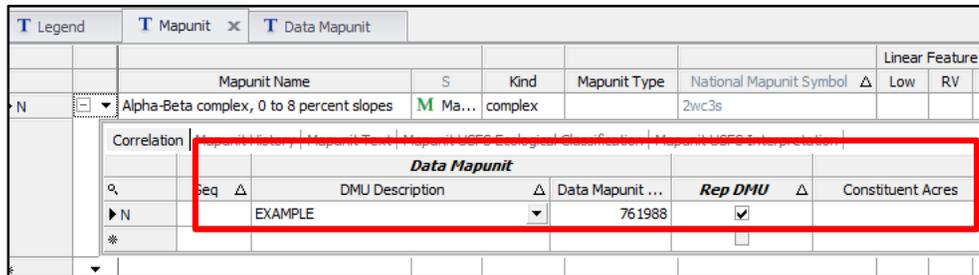
- |   |                   |   |
|---|-------------------|---|
| 1 | Seq               | <p><u>Population Standard:</u> <b>Do not populate</b></p> <p><u>SSR01 Guidance:</u> Horizons sort based on horizon depth by default. Sequence is unnecessary.</p>   |
| 2 | Date              | <p><u>Definition:</u> <i>The date associated with a particular record, expressed as month, day, year -- xx/xx/xxxx.</i></p> <p><u>Population Standard:</u> <b>Required</b></p> <p><u>SSR01 Guidance:</u> Enter the date that the mapunit was added to NASIS.</p>  |
| 3 | Author            | <p><u>Definition:</u> <i>Name of the person who entered, or is responsible for, a particular record.</i></p> <p><u>Population Standard:</u> <b>Required</b></p> <p><u>SSR01 Guidance:</u> Enter the name of the person that added the record to the mapunit history table.</p>  |
| 4 | Correlation Kind  | <p><u>Definition:</u> <i>The type or kind of correlation decision that is being documented. This includes "join statements" and "notes to accompany" the correlation event.</i></p> <p><u>Population Standard:</u> <b>Required</b></p> <p><u>SSR01 Guidance:</u> Select "<b>status change – added</b>"</p>                                  |
| 5 | Correlation Event | <p><u>Definition:</u> <i>The activity or event during which the documented correlation decision was made.</i></p> <p><u>Population Standard:</u> Optional</p> <p><u>SSR01 Guidance:</u> Mapunits are created at different times of the year and under different circumstances. You can populate this field as needed or leave it blank.</p> |
| 6 | Historical Name   | <p><u>Definition:</u> <i>The name(s) of the soil mapunit used during the course of a soil survey.</i></p> <p><u>Population Standard:</u> <b>DO NOT POPUALTE</b>, when creating new mapunits.</p>  |
| 7 | Status (obsolete) | <p><u>Definition:</u> <i>Identifies the status of the map unit from the time that it is added to the identification legend until it is officially correlated and approved for publication.</i></p> <p><u>Population Standard:</u> <b>DO NOT POPUALTE</b></p>  |
| 8 | Text Entry        | <p><u>Definition:</u> <i>The actual narrative text portion of a text entry. The other parts of a text entry are its identifiers: kind, category and subcategory.</i></p> <p><u>Population Standard:</u> <b>Required</b></p> <p><u>SSR01 Guidance:</u> Enter a statement about why this mapunit was created.</p>                             |

- Open the Correlation table.

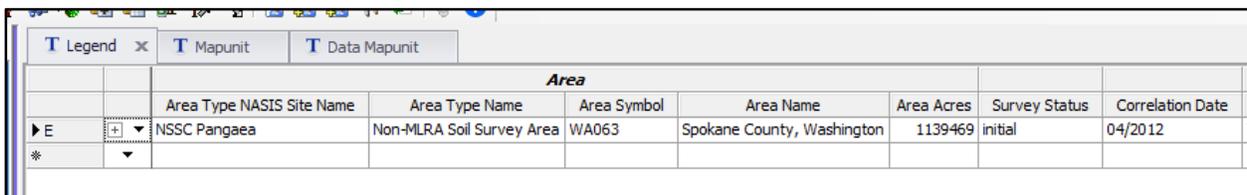


**NOTE:** This next step assumes you have already created a DMU. If you have not, you will need to create a DMU so it can be linked to the mapunit.

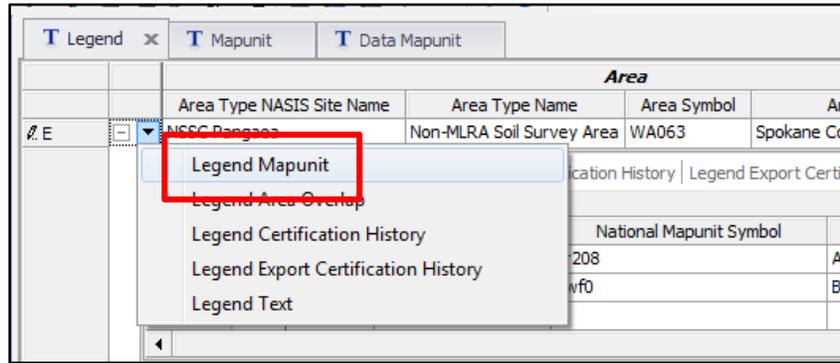
- Click in the DMU Description field and choose your representative DMU. Make sure the Rep DMU field is checked and leave the Constituent Acres empty.



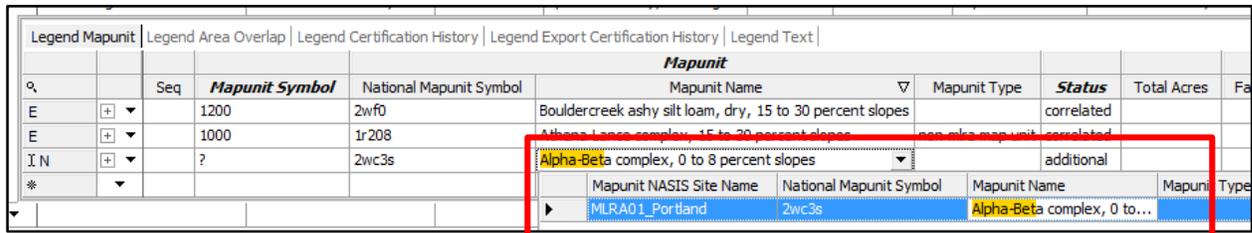
- Open the Legend table and check out your legend.



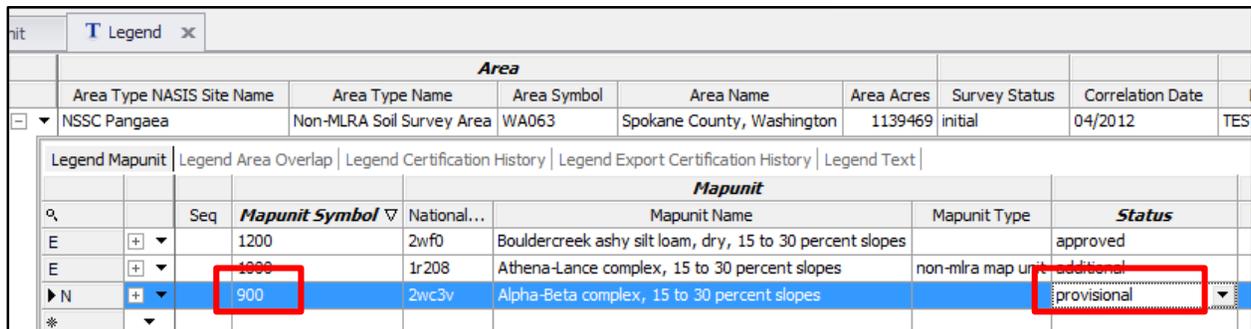
9) Open the Legend Mapunit table.



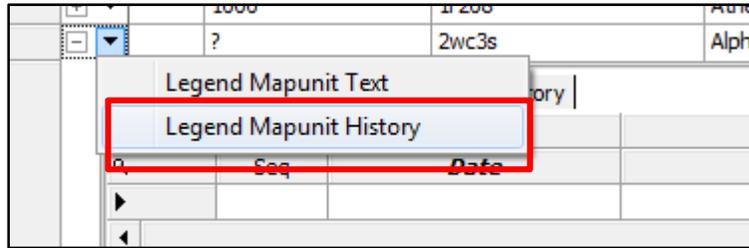
10) In the last row on the legend mapunit table, click in the Mapunit Name field and begin typing your new Mapunit Name. This will bring up a list of mapunits in your local database. As you enter the mapunit name, it will filter the list. You could also locate your mapunit by the National Mapunit Symbol.



11) Enter the Mapunit Symbol and change the status from additional to either provisional or approved. Use SSR01 guidance for assigning provisional or approved status. Total Acres and Farm Class can be populated when the survey has been completed.



12) Open the Legend Mapunit History table.



13) Add a new row and use the following table to populate the Legend Mapunit History table. This is basically an identical entry to what was populated in the Mapunit History table.

- 1 Seq                      Population Standard: **Do not populate**  
SSR01 Guidance: Horizons sort based on horizon depth by default. Sequence is unnecessary.
  
- 2 Date                      Definition: *The date associated with a particular record, expressed as month, day, year -- xx/xx/xxxx.*  
Population Standard: **Required**  
SSR01 Guidance: Enter the date that the mapunit was added to NASIS.
  
- 3 Author                      Definition: *Name of the person who entered, or is responsible for, a particular record.*  
Population Standard: **Required**  
SSR01 Guidance: Enter the name of the person that added the record to the mapunit history table.
  
- 4 Correlation Kind        Definition: *The type or kind of correlation decision that is being documented. This includes "join statements" and "notes to accompany" the correlation event.*  
Population Standard: **Required**  
  
SSR01 Guidance: Select **"status change – added"**
  
- 5 Correlation Event        Definition: *The activity or event during which the documented correlation decision was made.*  
Population Standard: Optional  
  
SSR01 Guidance: Mapunits are created at different times of the year and under different circumstances. You can populate this field as needed or leave it blank.
  
- 6 Historical Name            Definition: *The name(s) of the soil mapunit used during the course of a soil survey.*  
Population Standard: **DO NOT POPUALTE**, when creating new mapunits.
  
- 7 Status (obsolete)        Definition: *Identifies the status of the map unit from the time that it is added to the identification legend until it is officially correlated and approved for publication.*  
  
Population Standard: **DO NOT POPUALTE**

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8 Text Entry

Definition: *The actual narrative text portion of a text entry. The other parts of a text entry are its identifiers: kind, category and subcategory.*

Population Standard: Required

SSR01 Guidance: Enter a statement about why this mapunit was added to the legend.

## Creating a New Mapunit and Adding it to a Project

A new mapunit must be created in the Mapunit object and linked to the representative DMU before it can be added to a Project. The guidance in this section is similar to guidance in the “Creating a New Mapunit and Adding it To a Legend” section but it does contain key differences.

- 1) To create a new Mapunit, open the Mapunit Table and add a new row. You can click in the cell under the Mapunit Name to add a new row. The “N” on the far left indicates a new row has been added.

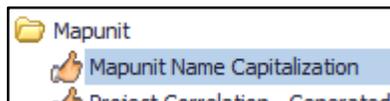
Legend		Mapunit	
		Mapunit Name	Kind
I N	▼		

- 2) Enter a **Mapunit Name**, populate **Kind**, and populate **Mapunit Type**. New mapunits created for MLRA update projects should typically have a Mapunit Type of “mlra map unit”. Contact your SDQS if you need additional guidance on how to populate this field.

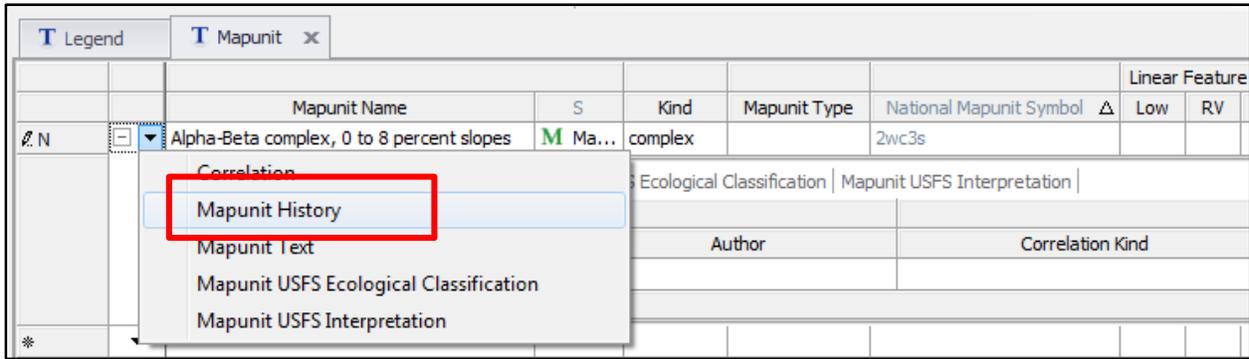
DO NOT POPULATE ANY OTHER FIELDS. This is all that should be populated when you are done.

Mapunit		Data Mapunit	Project
Mapunit Name	S	Kind	Mapunit Type
Alpha-Beta complex, 0 to 8 percent slopes	M	complex	mlra map unit

- 3) The “S” field to the right of the Mapunit Name field indicates whether or not the Mapunit Name Capitalization NASIS calculation was used. You should use this calculation to ensure that proper capitalization was used.



- 4) Open the Mapunit History table and add a new row.



5) Use the following table as guidance for populating the Mapunit History table:

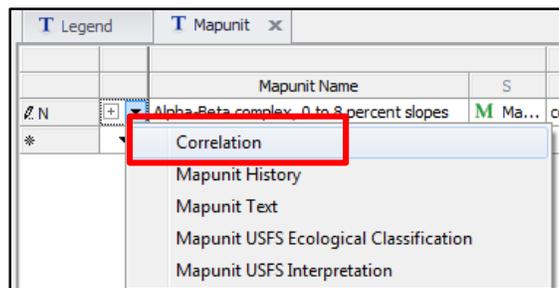
- 1 Seq                      Population Standard: **Do not populate**  
SSR01 Guidance: Horizons sort based on horizon depth by default. Sequence is unnecessary.
  
- 2 Date                      Definition: *The date associated with a particular record, expressed as month, day, year -- xx/xx/xxxx.*  
Population Standard: **Required**  
SSR01 Guidance: Enter the date that the mapunit was added to NASIS.
  
- 3 Author                      Definition: *Name of the person who entered, or is responsible for, a particular record.*  
Population Standard: **Required**  
SSR01 Guidance: Enter the name of the person that added the record to the mapunit history table.
  
- 4 Correlation Kind              Definition: *The type or kind of correlation decision that is being documented. This includes "join statements" and "notes to accompany" the correlation event.*  
Population Standard: **Required**  
  
SSR01 Guidance: Select **"status change – added"**
  
- 5 Correlation Event              Definition: *The activity or event during which the documented correlation decision was made.*  
Population Standard: Optional  
  
SSR01 Guidance: Mapunits are created at different times of the year and under different circumstances. You can populate this field as needed or leave it blank.
  
- 6 Historical Name              Definition: *The name(s) of the soil mapunit used during the course of a soil survey.*  
Population Standard: **DO NOT POPUALTE**, when creating new mapunits.
  
- 7 Status (obsolete)              Definition: *Identifies the status of the map unit from the time that it is added to the identification legend until it is officially correlated and approved for publication.*  
Population Standard: **DO NOT POPUALTE**

- 8 Text Entry *Definition: The actual narrative text portion of a text entry. The other parts of a text entry are its identifiers: kind, category and subcategory.*

Population Standard: Required

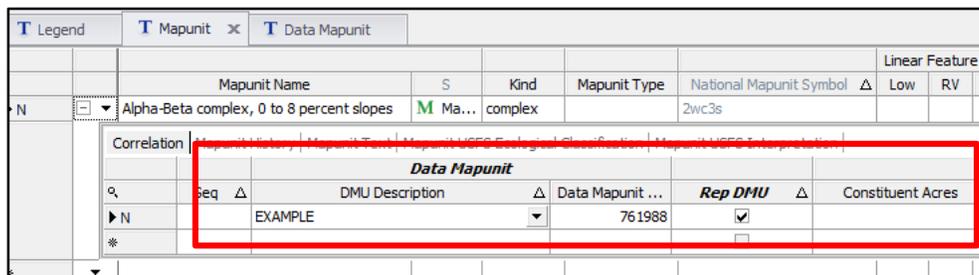
SSR01 Guidance: Enter a statement about why this MLRA mapunit was created.

- 6) Open the Correlation table



**NOTE:** This next step assumes you have already created a DMU. If you have not, you will need to create a DMU so it can be linked to the mapunit.

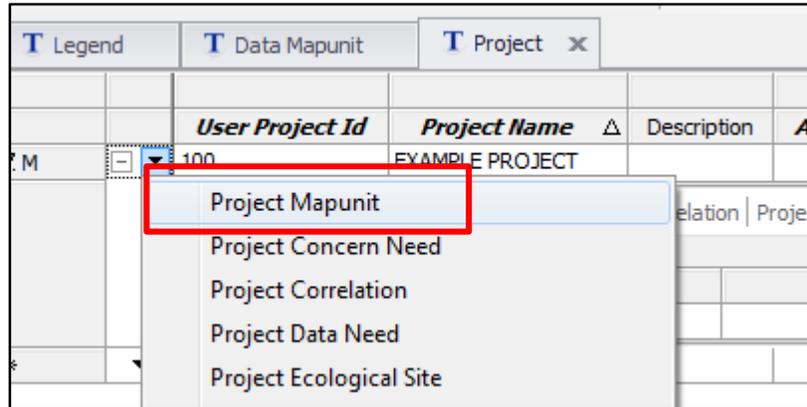
- 7) Click in the DMU Description field and choose your representative DMU. Make sure the Rep DMU field is checked and leave the Constituent Acres empty.



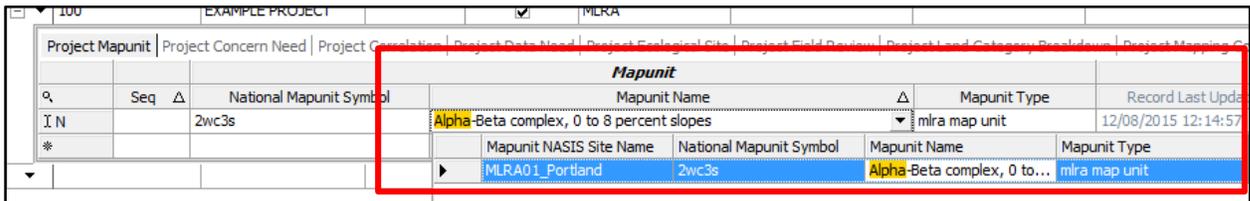
- 8) Open the Project table and check out your Project.

		User Project Id		Project Name	Description	Approved?	Project Type
		Project Name		Description	Approved?	Project Type Name	
I E	+	100	EXAMPLE PROJECT		<input checked="" type="checkbox"/>	MLRA	
*					<input type="checkbox"/>		

9) Open the Project Mapunit table.



10) Click in the Mapunit Name field and begin typing in your new Mapunit Name. This will bring up a list of mapunits in your local database. As you enter the mapunit name, it will filter the list. You could also locate your mapunit by the National Mapunit Symbol. This is the last step.



## Making a Legend Mapunit Additional

When a Legend Mapunit will no longer be used in the spatial layer it typically should NOT BE DELETED, but rather it should be switched to “additional” and it should be linked to the new legend mapunit that serves as the replacement. The following step by step instructions explain how to make a mapunit additional, how to populate the appropriate history tables, and how to link the additional mapunit to the new mapunit.

This process assumes that you have already created the new mapunit that will replace an existing mapunit. You will be working in the Legend Mapunit table, Legend Mapunit History table, and Correlation table.

In this example, legend mapunit 1000 Athena – Lance complex, 15 to 30 percent slopes will be made additional to the new Alpha-Beta complex, 15 to 35 percent slopes legend mapunit.

- 1) Open your legend and check it out for editing. At this stage, the new mapunit has not been added to the legend.

<i>Area</i>					
	Area Type NASIS Site Name	Area Type Name	Area Symbol	Area Name	Area Acres
E	NSSC Pangaea	Non-MLRA Soil Survey Area	WA063	Spokane County, Washington	1139469
*					

- 2) Open the Legend Mapunit table.

<i>Area</i>					
	Area Type NASIS Site Name	Area Type Name	Area Symbol	Area Name	Area Acres
E	NSSC Pangaea	Non-MLRA Soil Survey Area	WA063	Spokane County, Washington	1139469
*					

- Legend Mapunit
- Legend Area Overlap
- Legend Certification History
- Legend Export Certification History
- Legend Text

- 3) Locate your mapunit that will be made additional and change the Status to Additional.

Legend Mapunit							
Mapunit							
Seq	Mapunit Symbol	National Mapunit Symbol	Mapunit Name	Mapunit Type	Status	Total Act	
E	1200	2wfd	Boulder creek ashy silt loam, dry, 15 to 30 percent slopes		approved		
E	1000	1r208	Athena-Lance complex, 15 to 30 percent slopes		approved		
*					provisional		
					approved		
					correlated		
					additional		

4) For the same mapunit, open the Legend Mapunit History table and add a new row.

Legend Mapunit							
Mapunit							
Seq	Mapunit Symbol	National...	Mapunit Name	Mapunit Type	Status		
E	1200	2wfd	Boulder creek ashy silt loam, dry, 15 to 30 percent slopes		approved		
M	1000	1r208	Athena-Lance complex, 15 to 30 percent slopes		additional		

Legend Mapunit History							
Seq	Date	Author	Correlation Kind				

5) Populate the row it according to the table below.

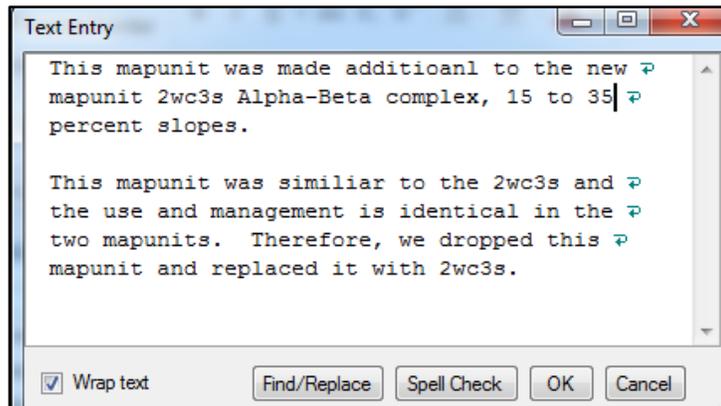
- 1 Seq                      Population Standard: **Do not populate**  
SSR01 Guidance: Horizons sort based on horizon depth by default. Sequence is unnecessary.
  
- 2 Date                      Definition: The date associated with a particular record, expressed as month, day, year -- xx/xx/xxxx.  
Population Standard: **Required**  
SSR01 Guidance: Enter the date that the mapunit was added to NASIS.
  
- 3 Author                      Definition: Name of the person who entered, or is responsible for, a particular record.  
Population Standard: **Required**  
SSR01 Guidance: Enter the name of the person that added the record to the mapunit history table.
  
- 4 Correlation Kind                      Definition: The type or kind of correlation decision that is being documented. This includes "join statements" and "notes to accompany" the correlation event.  
Population Standard: **Required**  
SSR01 Guidance: Select "status change – dropped/combined"

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- 5 Correlation Event Definition: *The activity or event during which the documented correlation decision was made.*  
Population Standard: Optional  
SSR01 Guidance: Mapunits are made additional at different times of the year and under different circumstances. You can populate this field as needed or leave it blank.
  
- 6 Historical Name Definition: *The name(s) of the soil mapunit used during the course of a soil survey.*  
Population Standard: **DO NOT POPUALTE**
  
- 7 Status (obsolete) Definition: *Identifies the status of the map unit from the time that it is added to the identification legend until it is officially correlated and approved for publication.*  
Population Standard: **DO NOT POPUALTE**
  
- 8 Text Entry Definition: *The actual narrative text portion of a text entry. The other parts of a text entry are its identifiers: kind, category and subcategory.*  
Population Standard: **Required**  
SSR01 Guidance: Enter a statement about why this mapunit was made additional. Include the National Mapunit Symbol and Mapunit Name that replaces the mapunit.  
 Contact your SDQS if dealing with a unique situation.

This is an example of a correctly populated Legend Mapunit History Entry.

Seq	Date	Author	Correlation Kind	Correlation Event	Historical Name	Historical Status	Text Entry
N	12/08/2015	Kyle Stephens	status change - dropped/combined				This mapunit ...



- Go back up to the Legend Mapunit table and add the new Mapunit. Notice that NASIS defaults the status to additional.

Legend Mapunit   Legend Area Overlap   Legend Certification History   Legend Export Certification History   Legend Text							
Mapunit							
Seq	Mapunit Symbol	National...	Mapunit Name	Mapunit Type	Status	Total	
E	1200	2wf0	Bouldercreek ashy silt loam, dry, 15 to 30 percent slopes		approved		
M	1000	1r208	Athena-Lance complex, 15 to 30 percent slopes		additional		
I N	?		Alpha-Beta complex, 15 to 35 percent slopes		additional		
			Mapunit NASIS Site Name	National Mapunit Symbol	Mapunit Name		Ma
			MLRA01_Portland	2wc3s	Alpha-Beta complex, 15 t...		

- Enter the Mapunit Symbol and change the status to either Provisional or Approved. Consult SSR01 guidance for determining the appropriate status.

Area Type NASIS Site Name	Area Type Name	Area Symbol	Area Name	Area Acres	Survey Status	Correlation Date	L
NSSC Pangaea	Non-MLRA Soil Survey Area	WA063	Spokane County, Washington	1139469	initial	04/2012	TEST

Legend Mapunit   Legend Area Overlap   Legend Certification History   Legend Export Certification History   Legend Text							
Mapunit							
Seq	Mapunit Symbol	National...	Mapunit Name	Mapunit Type	Status	Total	
E	1200	2wf0	Bouldercreek ashy silt loam, dry, 15 to 30 percent slopes		approved		
N	1000	2wc3s	Alpha-Beta complex, 15 to 35 percent slopes		provisional		
M	1000	1r208	Athena-Lance complex, 15 to 30 percent slopes		additional		
*							

For the remainder of the steps, make sure you have both the additional mapunit and the new mapunit loaded in your mapunit table. If they are not in the Mapunit table, you can query your local database to load them or use the Load Related function to add them to your selected set.

- Open the Mapunit table, locate the additional mapunit, and open the Correlation table. Write down or remember the representative DMU Description.

Some mapunits have more than one DMU in the Correlation table. You are only interested in the Rep DMU.

In the screen shot below, the WA0636003 DMU Description was noted. We will use this in the next step.

Mapunit Name		S	Kind	Mapunit Type
E	Alpha-Beta complex, 15 to 35 percent slopes	M M...	complex	
P	Bouldercreek ashy silt loam, dry, 15 to 30 perc...	C C...	consociation	
	Athena-Lance complex, 15 to 30 percent slopes	M M...	complex	

Data Mapunit				
Seq	DMU Description	Data Mapunit ...	Rep DMU	
	WA0636035	507203	<input type="checkbox"/>	
	WA0636003	501048	<input checked="" type="checkbox"/>	

9) Open the Correlation table for the new Mapunit (the one that is not additional). Add a new row to the correlation table and type the DMU Description form the previous step into the row.

Mapunit Name		S	Kind	Mapunit Type	Nation
	Alpha-Beta complex, 15 to 35 percent slopes	M M...	complex		2wc3s

Data Mapunit				
Seq	DMU Description	Data Mapunit ...	Rep DMU	Cons
E	EXAMPLE	761988	<input checked="" type="checkbox"/>	
I N	WA0636003		<input checked="" type="checkbox"/>	

Data Mapunit NASIS Site Name	DMU Description	Data Mapunit
MLRA01_Portland	WA0636003	

10) IMPORTANT: Remove the check mark in the Rep DMU column for the DMU you just added to the correlation table. This is the last step. You have now linked the additional mapunit to the new mapunit.

Mapunit Name		S	Kind	Mapunit Type
	Alpha-Beta complex, 15 to 35 percent slopes	M M...	complex	

Data Mapunit				
Seq	DMU Description	Data Mapunit ...	Rep DMU	
E	EXAMPLE	761988	<input checked="" type="checkbox"/>	
I N	WA0636003	501048	<input type="checkbox"/>	

## Changing the Name of a Mapunit

This section explains how to record changes to the name of the mapunit. Name changes are only documented in the Mapunit History table, not the Legend Mapunit History table. The guidance assumes you have the mapunit loaded into the Mapunit table.

- 1) Open the Mapunit table and check out your mapunit that will have its name changed.

		Mapunit Name	S	Kind
▶ E	+ ▼	Alpha-Beta complex, 15 to 35 percent slopes	M M...	complex
*	▼			

- 2) Click the Mapunit Name field, select the entire name, right click, and copy.

		Mapunit Name	S
▶ E	+ ▼	Alpha-Beta complex, 15 to 35 percent slopes	
*	▼		

Undo  
 Cut  
**Copy**  
 Paste

- 3) Open the Mapunit History table and add a new row. Right click in the Historical Name field and paste the Mapunit Name.

		Mapunit Name	S	Kind	Mapunit Type	National M...	Linear Feature Width	Point Fea	
▶ M	□ ▼	Alpha-Beta complex, 15 to 35 percent slopes	M M...	complex		2wc3s	Low RV High	Low R	
Correlation Mapunit History   Mapunit Text   Mapunit USFS Ecological Classification   Mapunit USFS Interpretation									
Ⓞ	Seq Δ	Date ▾	Author	Correlation Kind	Correlation Event	Historical Name	Status (obsolete)		
E		12/08/2015	Kyle Stephens	status change - added		Alpha-Beta complex, 15 to 35 percent slopes			
Ⓞ N									
*									

Undo  
 Cut  
**Paste**  
 Delete

- 4) Populate the rest of the fields according to table below.

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- 1 Seq                    Population Standard: **Do not populate**  
SSR01 Guidance: Horizons sort based on horizon depth by default. Sequence is unnecessary.
  
- 2 Date                    Definition: *The date associated with a particular record, expressed as month, day, year -- xx/xx/xxxx.*  
Population Standard: **Required**  
SSR01 Guidance: Enter the date that the mapunit was added to NASIS.
  
- 3 Author                    Definition: *Name of the person who entered, or is responsible for, a particular record.*  
Population Standard: **Required**  
SSR01 Guidance: Enter the name of the person that added the record to the mapunit history table.
  
- 4 Correlation Kind       Definition: *The type or kind of correlation decision that is being documented. This includes "join statements" and "notes to accompany" the correlation event.*  
Population Standard: **Required**  
SSR01 Guidance: Select "**name change**"
  
- 5 Correlation Event      Definition: *The activity or event during which the documented correlation decision was made.*  
Population Standard: Optional  
SSR01 Guidance: Mapunits are made additional at different times of the year and under different circumstances. You can populate this field as needed or leave it blank.
  
- 6 Historical Name        Definition: *The name(s) of the soil mapunit used during the course of a soil survey.*  
Population Standard: **DO NOT POPUALTE**
  
- 7 Status (obsolete)      Definition: *Identifies the status of the map unit from the time that it is added to the identification legend until it is officially correlated and approved for publication.*  
Population Standard: **DO NOT POPUALTE**
  
- 8 Text Entry                Definition: *The actual narrative text portion of a text entry. The other parts of a text entry are its identifiers: kind, category and subcategory.*  
Population Standard: **Required**  
SSR01 Guidance: Enter a statement about why the name changed.

5) Go back up the mapunit table and change the Mapunit Name as Needed. This is the last step.T