

MO-03 Technical Note

Date: June 3, 2005

Subject: Changes to NASIS database and Soil Data Mart

Soil Survey maintenance is a continuous activity of data collection, reviews, evaluations, and additions to existing soil survey information. (NSSH 610.00). It includes updating the NASIS data with current data elements and correcting errors and omissions. Official soil survey information is housed in the Soil Data Mart. As soon as changes are made in NASIS due to maintenance activities, there is a difference in the datasets. There is a need to have a reasonable set of parameters for creating a new export from NASIS to the Soil Data Mart in order to keep the official soil survey information current. Exporting too frequently creates a hardship for users of the data mart; exporting too little can prevent important changes from being made available.

To keep an orderly system of maintenance in the NASIS database and export to the Soil Data Mart, MO-03 intends to implement the following guidelines:

- 1. For soil surveys having minor or routine maintenance performed during the year.**
 - A. Changes to the NASIS data can be made as part of the normal maintenance activity (NSSH 610.06(b)). Ownership of the datamapunit object for published soil surveys is normally kept by the administration group from each state. If edits are to be made by others, make sure to notify the database manager to have the appropriate ownership assigned. When editing is complete, notify the database manager to change ownership back to an administration group.
 - B. ***Changes must be documented*** so that it is possible to track activity in the database. The record of changes will be monitored to identify surveys that need to be exported to Soil Data Mart. The state soil scientist in each state initiates the exports.
 - i) For changes affecting individual soil components, track edits by creating a text note in the *component_text* table. Enter date of change; your name; text kind = "edit notes"; and text to describe the changes made. Add a keyword under text category and subcategory at your own discretion. They might add value for your local queries or for tracking progress on particular changes made.
 - ii) For changes that are applied to large numbers of components or map units, a single entry in the *legend_text* table is more efficient. For example, a project to update all the fragment and sieve entries to be in line with current guidance could have an entry in the *legend_text* table, saving hundreds of component edit notes. Ownership of the legend object is generally kept by the data quality specialist or state soil scientist. They can create the text notes when requested by email. Provide them with the following information: date of change; your

name; text kind = “edit notes”; and text to describe the changes made. Add a keyword under text category and subcategory at your own discretion.

- C. The NASIS data will be queried by the state soil scientist on an annual basis and if changes are found, an export to the Soil Data Mart will be created. This review should be done around December each year. NASIS queries “Edit notes in Comp Text > SSURGO archive date by nasis site” and ” Edit notes in Legend Text > SSURGO archive date by nasis site” are designed to help locate surveys with changes.

- 2. **For soil surveys having substantial changes to composition, additions of map units, removal of map units, modification for exact joins, etc.,** a correlation amendment needs to be prepared, changes made to the database, and immediate export to the Soil Data Mart will be completed.
 - A. Changes will primarily be documented in the map unit history table by the correlation staff. Additional changes made concurrent with these substantial changes, should be documented in *component_text* or *legend_text* tables as described in item 1.B, above.
- 3. **For soil surveys that have changes to the map sheets,** review the map changes with correlation staff and the state soil scientist.
 - A. If they agree that the changes are substantial, the map sheets will be forwarded to the appropriate digitizing unit and a NASIS export will be prepared.
 - B. If the decision is made that changes are not significant enough to justify immediate update to the official soil survey data in Soil Data Mart, provide changes to the MO-03 GIS specialist. The GIS specialist will implement the changes to a working copy of the digitized maps and retain it for updating the Soil Data Mart on the annual cycle. A *legend_text* note must be created as documented in item 1.B.ii, above.