



NASIS

National Soil Information System

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Number 1

a brief update on current developments in NASIS

Current Operational Status

NASIS software is installed at all 17 MLRA Offices plus the National Soil Survey Center. The system is providing services to about 950 soil scientists from NRCS, USFS, BLM, BIA, NPS and several Universities at a wide variety of locations – from soil survey project offices to National Headquarters.

Telecommunications

Nearly all offices have adequate network speed and bandwidth to support NASIS. USDA is planning to increase network security sometime this year, which may affect locations not on the USDA network. NASIS developers are working with NRCS and USDA telecom specialists to assure a telecommunication architecture that accommodates all NASIS users.

Current Capabilities in NASIS

- manage all kinds of legends, including MLRA legends
- record and manage complete soil profile descriptions using the latest standards and terminology

- create new interpretive criteria using fuzzy logic tools
- print manuscript tables, map unit descriptions, and many other kinds of standard and customized reports
- export complete or custom data sets that can be used by other database systems, including GIS
- track soil survey mapping and SSURGO progress using any conventional web browser

Windows PEDON

A new version of WinPEDON is scheduled for release in August, 2000. It will be CCE certified and compatible with the NASIS 5.0 data structure. WinPEDON is designed for data entry of soil profile descriptions, independent of NASIS. Sometime after NASIS 5.0 is released, we will have the capability to transfer profile descriptions recorded in WinPEDON directly into NASIS.

PEDON Data Conversion

Older versions of the PEDON program store profile descriptions in a PEDON 3.6 data structure. To preserve these older profile descriptions, they must be

converted to NASIS 4.1 before NASIS 5.0 is released. Conversion software will be available by July, 2000 so that MLRA offices can convert pedon descriptions into NASIS.

NASIS 5.0 – Central Server

NASIS 5.0 is scheduled for release in November, 2000. This release will consolidate all NASIS data on a single Central Server located at Fort Collins, thus giving us the ability to link and share data between MLRA offices.

Since all data will be available on the Central Server, data replication services to Iowa State University will cease when 5.0 is installed. Moreover, the existing Hewlett-Packard (HP) machines located at MLRA offices will no longer be used for NASIS and can be released to the states.

The savings in direct costs and personnel will be dramatic. Maintenance and support will be redirected from 19 sites to the Central Server and the intensive support required by data replication will be eliminated entirely.

New SSURGO Export

NASIS 5.0 will have an export function to create attribute datasets for SSURGO using the new SSURGO data structure. This structure is consistent with the structure used in the Customer Service Toolkit. A unique feature of the new structure is a special table designed for GIS users, which will present selected data and interpretations that have been aggregated to a single value for each map unit.

Easy Access to Soil Data

Work is underway to provide web-based access to soil survey information. To support web-based access, the Soil Survey Division expects to implement a Soil Data Warehouse sometime in 2001.

The warehouse will hold “fixed” versions of data produced from the NASIS transactional database. These snapshots of data represent a release of soil survey information from State Soil Scientists and will become the sole source for distribution to the general public through web-based access, manuscripts, field office technical guides, and other distribution formats.

NRI and NASIS

The Natural Resource Inventory needs access to soil survey data to support its responsibilities for inventory and analysis. NRI’s requirements are one of the major driving forces in development of the soil data warehouse.

For More Information

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