NGDA Dataset Report

Official NGDA Title: Major Land Resource Area (MLRA)

Metadata Record Title: Major Land Resource Areas (MLRA)

A–16 NGDA Theme: Soils

Executive NGDA Theme Champion(s):

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Metadata:

Registration Status: Complete
Registered on
GeoPlatform Link*: https://www.geoplatform.gov/node/243/5eb02e8e-dbb2-43e5-8ed9-c864afbd909d
Data.gov Metadata Link*: http://catalog.data.gov/harvest/object/efe2caf6-e421-428a-a5aa-6f3a5892e1ab/html

*If the metadata has been updated and reharvested after publication of this report, the link may no longer be valid. The dataset may be searched for manually in Data.gov or GeoPlatform.gov.

Created: 2015/12/31
NGDA Lifecycle Maturity Assessment (LMA) Report

Time Frame:
Baseline assessment is for data from the 2006 MLRA Geographic Database, version 4.2 (entire U.S., zipped shapefile format, 27 MB)

LMA Submission:
Status: Complete  
Date: 10/20/2015  
Extension Requested: Yes

LMA Reviewer(s):
Supervisor: Did not review  
Theme Lead: David Hoover; David.Hoover@lin.usda.gov  
Executive Champion: Did not review  
SAOGI*: Did not review  
Other: SME Tammy Cheever; Tammy.Cheever@lin.usda.gov

LMA Verifier:
Name: Tammy Cheever  
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Attachments:
To get access to any attachments referenced in the report, email the LMA Help Desk at NGDA_LMA_help@fgdc.gov. Please use the subject "Dataset Report Attachment(s)" and indicate the associated official NGDA title.

*Senior Agency Official for Geospatial Information (SAOGI)
Lifecycle Maturity Assessment (LMA) Summary

Overall Maturity:
- **Optimized; Established**
  - Rank = 5
  - Dataset meets virtually all business needs of all users. The dataset is considered authoritative by owners and secondary users. It is curated across all stages of the approved lifecycle. Future needs are defined on a regular basis and resources for addressing both current and future business requirements are available.

- **Mature; Consistent**
  - Rank = 4
  - Dataset meets all the business needs of the primary owner and most of the secondary users. The dataset is curated and used as authoritative by the primary owner. Dataset is used widely by secondary users actively engaged in sustaining the dataset. Future needs are identified and steps are planned to address these. All stages are supported and reviewed on a recurring basis. The dataset is well managed in relation to the approved lifecycle.

- **Managed; Predictable**
  - Rank = 3
  - Dataset meets a significant number of the business needs of the primary owner and is widely used as an authoritative resource by secondary users. Benchmark activities are occurring in at least four of the approved lifecycle stages. Management practices in relation to the approved lifecycle is moderate but consistent. Dataset is integrating changing business requirements in lifecycle stages impacting overall maturity.

- **Transition; Transformation**
  - Rank = 2
  - Dataset meets business needs of the primary owner and has moderate use by secondary users. Benchmark activities are occurring in at least three stages. Efforts to integrate funding, include partners, and obtain data are not supported in a sustained manner. Management practices in relation to the stages of the approved lifecycle is limited.

- **Planned; Initial Development**
  - Rank = 1
  - Dataset limited in meeting business needs of the primary owner. Benchmark activities in the approved lifecycle are just starting to consider secondary uses, partnerships are forming to support additional dataset uses. Dataset development is in a very early stage. Minimal or limited management against the benchmarks in the approved lifecycle.

- **No Activity**
  - Rank = no activity
  - Dataset meets project or local business needs of the primary owner, secondary or additional uses or users were not considered, not recognized as an authoritative data or is part of a similar dataset. Not managed to any of the benchmarks in the approved lifecycle.

NGDA Dataset Maturity Definitions:

General Questions: 91%
- Stage 1 - Define/Plan: 95%
- Stage 2 - Inventory/Evaluate: 100%
- Stage 3 - Obtain: 88%
- Stage 4 - Access: 100%
- Stage 5 - Maintain: 100%
- Stage 6 - Use/Evaluate: 88%
- Stage 7 - Archive: 100%

**How To Calculate Maturity:** [https://www.geoplatform.gov/sites/default/files/How_to_Calculate_Maturity.pdf](https://www.geoplatform.gov/sites/default/files/How_to_Calculate_Maturity.pdf)

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General Questions for All Stages

1) Is there a recurring process to obtain funding for all lifecycle stages of this dataset?
Answer: Funding support exists but is not adequate to meet known requirements, most lifecycle stages are supported.

Justification Comment: Funding is inconsistent but based on a 10-year refresh cycle.

2) Is there a process in place to ensure that open government and transparency guidelines are followed in all lifecycle stages for this dataset?
Answer: Process is published as appropriate with respect to sensitivity requirements, process is transparent, published appropriately.

Justification Comment: All Personal Identifiable Information (PII) that may be contained in the MLRA database is screened and filtered from any publicly delivered product. Full transparency is given on all development steps and access to any non-PII data.

3) Are there processes and tools in place so that staff are sufficiently knowledgeable to ensure a continuity of the dataset for all stages of the lifecycle, especially during staffing transitions?
Answer: Processes and tools to ensure dataset continuity are in place and implemented for all lifecycle stages.

Justification Comment: The MLRA dataset is maintained by the National Soil Survey Center with sufficient tools and knowledge transfer to maintain its lifecycle.

STAGE 1 - Define/Plan

4) Are user and business requirements defined and formalized?
Answer: A recurring process exists for gathering partners/stakeholders requirements is in place and is in the beginning stages of implementation.

Justification Comment: Business requirements are refined as data refresh cycles approach.

The Ag Handbook 296 is used as a basis for decisions regarding national and regional land resource issues targeting efforts in education, finance, and technical services. It is also used to identify needs for research and additional inventories, as well as a vehicle for extrapolating research results across political boundaries. The handbook also serves various agencies within USDA by organizing and operating conservation program and other land resource and management programs.


5) How are partners/stakeholders involved in the requirements collection process?
Answer: A recurring process is in place, including defining new partner and stakeholder business needs as they arise, and is fully implemented.

Justification Comment: Annual meetings of the National Cooperative Soil Survey, a user-based Soils Hotline, and frequent communication with user groups help ensure the identification of partner and stakeholder business needs.

6) Is there a quality assurance process for the dataset?
**Answer:** Quality assurance published as appropriate with respect sensitivity requirements.

**Justification Comment:**
Data are not published as part of the Agency authoritative data unless established quality assurance processes are met for both the tabular and spatial components.

http://www.nrcresearchinfo.gov/wps/portal/nrcs/detail/soils/ref/?cid=nrcs142p2_054242

7) Is there a process to evaluate the sensitivity, privacy, and confidentiality of this dataset?
**Answer:** Sensitivity, privacy, and confidentiality evaluations fully implemented, reviewed and updated on a recurring basis.

**Justification Comment:**
There are both agency and departmental checks on potential PII content.


8) Are defined data standards used in collecting, processing, and/or rendering the data?
**Answer:** Standards fully implemented documented and published as appropriate.

**Justification Comment:**
A recurring process is in place, including defining new partner and stakeholder business needs as they arise, and is fully implemented.

There are several agency policy documents that are published and online that detail the standards that MLRA data is developed and measured by.

http://www.nrcresearchinfo.gov/wps/portal/nrcs/detail/soils/ref/?cid=nrcs142p2_054243

**STAGE 2 - Inventory/Evaluate**

9) Is there a process for determining if data necessary to meet requirements already exist from other sources (either within or outside the agency) before collecting or acquiring new data?
**Answer:** Process for determining appropriate data is being reused fully implemented, reviewed, and updated on a regular basis.

**Justification Comment:**
SSURGO represents soils data that is developed by numerous entities in the National Cooperative Soil Survey. All data is held to the same SSURGO standards, regardless of origin, before it is published as the authoritative data set.

http://www.nrcresearchinfo.gov/wps/portal/nrcs/detail/soils/ref/?cid=nrcs142p2_054242

**STAGE 3 - Obtain**

10) Is there a process for obtaining data in relation to this dataset?
**Answer:** Process is being implemented.

**Justification Comment:**
Metrics are available only for amount of data downloads.

11) Is the metadata in a FGDC endorsed geospatial metadata standard?
**Answer:** Metadata is available in a format endorsed by the FGDC, it fully describes the dataset and provides all the information required to make the dataset discoverable, accessible, and
SSURGO data has CSDGM compliant metadata and it cataloged on the Geoplatform.gov site as an NGDA dataset.

http://www.geoplatform.gov/

12) How complete is the geographic coverage as defined in the requirements for the dataset?

**Part 1 Answer:** Business requirements for cyclic updates identified and a process is in place.

**Part 2 Answer:** Dataset has presently attained the greatest geographic coverage as defined by the current requirements or roughly 100%.

**Justification Comment:** Dataset is for Continental United States and is complete.

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**STAGE 4 - Access**

13) Do you have a process for providing users access to the data in an open digital machine readable format?

**Answer:** User access process is fully implemented, data is available, process is reviewed and updated on a recurring basis.

**Justification Comment:** Access to data set is through the Geospatial Data Gateway and Web Soil Survey.

https://gdg.sc.egov.usda.gov/

http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm

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**STAGE 5 - Maintain**

14) Is there a maintenance process for updating and storing the dataset?

**Answer:** Dataset maintenance process is fully implemented and processes are reviewed and periodically updated.

**Justification Comment:** Current dataset is for 2006 MLRA version 4.2 and is available from:
http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/survey/geo/?cid=nrcs142p2_053624

The Ag Handbook 296 is used as a basis for decisions regarding national and regional land resource issues targeting efforts in education, finance, and technical services. It is also used to identify needs for research and additional inventories, as well as a vehicle for extrapolating research results across political boundaries. The handbook also serves various agencies within USDA by organizing and operating conservation program and other land resource and management programs.

A data refresh is planned for 2016.

15) Is there an error correction process as part of dataset maintenance?

**Answer:** Error correction process includes user notification, process reviewed on a recurring basis.

**Justification Comment:** Errors, both tabular and spatial, are identified through quality control processes throughout the year, authorized through a quality assurance process, corrected by a technical staff and update annually or more frequently if deemed critical.
16) Is there a process to determine if the dataset meets user needs?
Answer: Process is fully implemented and repeated on a recurring basis.

Justification Comment: Discussions on meeting user needs are discussed at regular national and regional meetings with cooperators.


17) Is there a process to provide users information on how to access and properly use the dataset?
Answer: Process is fully implemented supporting access and proper use, process is reviewed on a recurring basis.

Justification Comment: Sufficient documentation is available on line and through the public assistance available at the National Soil Survey Center.

http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/survey/geo/?cid=nrcs142p2_053624

18) Are the business processes and management practices assessed to meet changing technology?
Answer: Assessment process implementation started for taking advantage of changing technology.

Justification Comment: Yes, new database and server technologies are being continually evaluated for possible use in the development and delivery system.

Currently the MLRA Viewer is available from: http://www.cei.psu.edu/mlra

An interactive map-based presentation of USDA Agriculture Handbook 296. With the tools in this application, you can: (1) search for LRRs and MLRAs using a variety of geographical and textual queries; (2) select which handbook sections to display; and (3) save and print a customized subset of the handbook.

19) Is there an archiving process for the dataset?
Answer: Archival and disposition processes are fully implemented.

Justification Comment: All data are archived through all versions.

The dataset is archived in the Soil Data Warehouse and delivered via the Web Soil Survey and Geospatial Data Gateway.

http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/ref/?cid=nrcs142p2_054217