

# NGDA Dataset Report

**Official NGDA Title:** Omernik's Level III Ecoregions Of The Conterminous United States

**Metadata Record Title:** Omernik's Level III Ecoregions of the Continental United States - Direct Download

**A-16 NGDA Theme:** Biota

## Executive NGDA Theme Champion(s):

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## Theme Lead(s):

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## Dataset Manager(s):

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## Metadata:

**Registration Status:** Complete

**Registered on**

**GeoPlatform Link\*:** <https://www.geoplatform.gov/node/243/1f3c6b84-65c4-4613-9c2d-a0edefb91c11>

**Data.gov Metadata Link\*:** <http://catalog.data.gov/harvest/object/4d1c22f9-3540-4acd-8e18-7bed1089a5a4/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.

# NGDA Lifecycle Maturity Assessment (LMA) Report

## Time Frame:

Baseline assessment responses include dataset activities from 1987 to 2015

## LMA Submission:

**Status:** Complete

**Date:** 10/29/2015

**Extension Requested:** No

## LMA Reviewer(s):

**Supervisor:** Did not review

**Theme Lead:** Marcia McNiff

**Executive Champion:** Did not review

**SAOGI\*:** Did not review

**Other:** Did not review

## LMA Verifier:

**Name:** Marcia McNiff

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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](mailto: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:

**Transition; Transformation**

General Questions: 82%

**Mature; Consistent**

Stage 4 - Access: 25%

**Planned; Initial Development**

Stage 1 - Define/Plan: 71%

**Mature; Consistent**

Stage 5 - Maintain: 44%

**Transition; Transformation**

Stage 2 - Inventory/Evaluate: 25%

**Managed; Predictable**

Stage 6 - Use/Evaluate: 55%

**Managed; Predictable**

Stage 3 - Obtain: 54%

**Managed; Predictable**

Stage 7 - Archive: 33%

**Transition; Transformation**

### NGDA Dataset Maturity Definitions:

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)

Maturity	Maturity Characteristics for All Lifecycle Stages
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.

## General Questions for All Stages

1) Is there a recurring process to obtain funding for all lifecycle stages of this dataset?

**Answer:** Funding support is part of agency budget on a recurring basis, funding is consistent and tied to business processes, and supports all lifecycle stages.

**Justification Comment:**

**Attachment(s):** 0

Dataset is static - support is built in with staff FTE allocation at USGS and US EPA (one USGS staff member supporting and one EPA). Data is fully developed, no further modifications are planned, funding is in place for staff to maintain and archive as well as answer questions about data.

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:**

**Attachment(s):** 0

The process used in creating, updating, and maintaining Level III ecoregions is fully documented in the dataset metadata (<https://www.geoplatform.gov/node/243/1f3c6b84-65c4-4613-9c2d-a0edefb91c11>). All processing steps over time are clearly articulated in the metadata processing steps, logical consistency issues are noted, and all historic peer-reviewed published papers concerning the approach to creating ecoregions are cited in the metadata.

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 under development.

**Justification Comment:**

**Attachment(s):** 0

Continuity is a matter of training more than 1 person on staff where data is, metadata structure, how to maintain records on ftp site, etc. FTP site is <ftp://ftp.epa.gov/wed/ecoregions/> and ecoregions web site is <http://www.epa.gov/wed/ecoregions/>. No more updates to the data set are anticipated, staffing needs revolve around maintenance of data on ftp and webpage and maintenance of metadata.

## STAGE 1 - Define/Plan

4) Are user and business requirements defined and formalized?

**Answer:** Ad hoc process is used for involving Partners/stakeholders in identifying requirements.

**Justification Comment:**

**Attachment(s):** 0

No formalized process in place

5) How are partners/stakeholders involved in the requirements collection process?

**Answer:** Ad hoc process is used for involving Partners/stakeholders in identifying requirements.

**Justification Comment:**

**Attachment(s):** 0

No formal process in place

6) Is there a quality assurance process for the dataset?

**Answer:** Quality assurance published as appropriate with respect sensitivity requirements.

**Justification Comment:**

**Attachment(s):** 0

Quality assurance published using default EPA standard

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:**

**Attachment(s):** 0

The dataset is listed as 'No Confidentiality' under the security classification designation using EPA security designation in metadata (<https://www.geoplatform.gov/node/243/1f3c6b84-65c4-4613-9c2d-a0edefb91c11>). The dataset is based completely and entirely on open, available biophysical data layers in the creation of ecoregions, there is no sensitive information whatsoever in the data.

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**8)** Are defined data standards used in collecting, processing, and/or rendering the data?

**Answer:** Standards being implemented.

**Justification Comment:**

**Attachment(s):** 0

Yes, standards are referenced in the metadata specifically under processing steps and abstract: <https://www.geoplatform.gov/node/243/1f3c6b84-65c4-4613-9c2d-a0edefb91c11>. Papers that describe historic (back to 1987) processes used in the development of the ecoregion classification framework for processing and rendering the data are referenced in the metadata.

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## 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 is under development to identify datasets promoting reuse and reduce unnecessary duplication.

**Justification Comment:**

**Attachment(s):** 0

New data is not collected, the process of delineating ecoregions is fully referenced in the metadata, ecoregion delineation is complete and modifications are not anticipated.

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## STAGE 3 - Obtain

**10)** Is there a process for obtaining data in relation to this dataset?

**Answer:** No.

**Justification Comment:**

**Attachment(s):** 0

Data is not currently obtained as part of the process. Ancillary data used in original delineation of ecoregions is referenced in the ecoregions metadata: <https://www.geoplatform.gov/node/243/1f3c6b84-65c4-4613-9c2d-a0edefb91c11>

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**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 usable.

**Justification Comment:**

**Attachment(s):** 0

Metadata is fully FGDC compliant: <https://www.geoplatform.gov/node/243/1f3c6b84-65c4-4613-9c2d-a0edefb91c11>

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

**Part 1 Answer:** Business requirement targets are on track, milestones are being met.

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

**Justification Comment:**

**Attachment(s):** 0

Dataset complete with coverage of all 50 states at a nominal resolution of 1:250,000

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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:** Process is under development.

**Justification Comment:****Attachment(s):** 0

Data is publicly available as ESRI shapefiles with corresponding metadata, some web services have been developed for data. Data was originally delineated on paper maps, digitized using a digitizing tablet as ESRI coverage files, and converted to shapefiles in ensuing years. PDF maps of ecoregions are published alongside shapefiles on the ecoregions website: <http://www.epa.gov/wed/ecoregions/>

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**STAGE 5 - Maintain****14) Is there a maintenance process for updating and storing the dataset?****Answer:** Dataset maintenance process is under development.**Justification Comment:****Attachment(s):** 0

Maintenance process in place - current version of ecoregions data is maintained on ftp site: <ftp://ftp.epa.gov/wed/ecoregions/>. Prior versions of ecoregions data is stored on archive directory on server at US EPA Western Ecology Division.

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**15) Is there an error correction process as part of dataset maintenance?****Answer:** Error correction process established.**Justification Comment:****Attachment(s):** 0

Errors checked for and corrected as found on regular basis. Typical error checking steps outlined in processing steps in ecoregions metadata: <https://www.geoplatform.gov/node/243/1f3c6b84-65c4-4613-9c2d-a0edefb91c11>

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**STAGE 6 - Use/Evaluate****16) Is there a process to determine if the dataset meets user needs?****Answer:** Process is complete and being implemented on ad hoc basis.**Justification Comment:****Attachment(s):** 0

Ecoregions were originally developed (as described in metadata - <https://www.geoplatform.gov/node/243/1f3c6b84-65c4-4613-9c2d-a0edefb91c11>) "to serve as a spatial framework for the research, assessment, management, and monitoring of ecosystems and ecosystem components. These general purpose regions are critical for structuring and implementing ecosystem management strategies across federal agencies, state agencies, and nongovernment organizations that are responsible for different types of resources within the same geographical areas." The ecoregions website maintains and frequently updates a list of applications across multiple agencies, scales, and applications: <http://www.epa.gov/wed/ecoregions/>

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**17) Is there a process to provide users information on how to access and properly use the dataset?****Answer:** Process implementation started for access and proper use.**Justification Comment:****Attachment(s):** 0

Ecoregions website clearly states intended use of the data: <http://www.epa.gov/wed/ecoregions/> and ecoregions metadata lists use limitations: <https://www.geoplatform.gov/node/243/1f3c6b84-65c4-4613-9c2d-a0edefb91c11>

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**18) Are the business processes and management practices assessed to meet changing technology?****Answer:** Assessment process is being developed to take advantage of changing technology.**Justification Comment:****Attachment(s):** 0

We've looked at and can provide data and symbology in alternate formats. A web service was developed by EPA Shared Enterprise Geodata and Services (SEGS) but needs to be updated to current version of ecoregions. No formal process for updates to changing technology in place, occurs on ad hoc basis.

## STAGE 7 - Archive

19) Is there an archiving process for the dataset?

**Answer:** Archival and/or disposition processes are in development.

**Justification Comment:**

**Attachment(s):** 0

Data are archived but process is not fully outlined, done on an 'as needed' basis. At each step as ecoregions have evolved, versions of ecoregions have been archived on server at EPA Western Ecology Division. Older versions of ecoregions are maintained in original format, typically as .tar files of ESRI coverages. Previous versions of ecoregion maps in pdf form are archived as well.