NGDA Dataset Report

Official NGDA Title: International Boundary United States Mexico Minute 315

Metadata Record Title: International Boundary United States Mexico Minute 315

A–16 NGDA Theme: Governmental Units, and Administrative and Statistical Boundaries

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Metadata:
  Registration Status: Complete
  Registered on 2/10/2011
  GeoPlatform Link*: https://www.geoplatform.gov/node/243/b62af7ce-cd79-4b3f-b36f-0ec18d5f1e98
  Data.gov Metadata Link*: http://catalog.data.gov/harvest/object/b3ef334b-443d-4e49-98c5-ec103d0907e2/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 based on Minute 315, approved by both sections of the IBWC on November 2009. http://www.ibwc.state.gov/Files/Minutes/Minute_315.pdf

LMA Submission:
Status: Complete
Date: 10/21/2015
Extension Requested: No

LMA Reviewer(s):
Supervisor: Did not review
Theme Lead: Did not review
Executive Champion: Did not review
SAOGI*: Did not review
Other: IBWC Chief of Environmental Management

LMA Verifier:
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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)

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

Overall Maturity:

<table>
<thead>
<tr>
<th>Maturity</th>
<th>General Questions:</th>
<th>Stage 4 - Access: 100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transition; Transformation</td>
<td>Transition; Transformation</td>
<td>Optimized; Established</td>
</tr>
<tr>
<td>Stage 1 - Define/Plan: 30%</td>
<td></td>
<td>Stage 5 - Maintain: 12%</td>
</tr>
<tr>
<td>Stage 2 - Inventory/Evaluate: 25%</td>
<td></td>
<td>Planned; Initial Development</td>
</tr>
<tr>
<td>Stage 3 - Obtain: 88%</td>
<td></td>
<td>Stage 6 - Use/Evaluate: 33%</td>
</tr>
</tbody>
</table>

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)

<table>
<thead>
<tr>
<th>Maturity</th>
<th>Maturity Characteristics for All Lifecycle Stages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optimized; Established</td>
<td>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.</td>
</tr>
<tr>
<td>Rank = 5</td>
<td></td>
</tr>
<tr>
<td>Mature; Consistent</td>
<td>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.</td>
</tr>
<tr>
<td>Rank = 4</td>
<td></td>
</tr>
<tr>
<td>Managed; Predictable</td>
<td>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.</td>
</tr>
<tr>
<td>Rank = 3</td>
<td></td>
</tr>
<tr>
<td>Transition; Transformation</td>
<td>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.</td>
</tr>
<tr>
<td>Rank = 2</td>
<td></td>
</tr>
<tr>
<td>Planned; Initial Development</td>
<td>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.</td>
</tr>
<tr>
<td>Rank = 1</td>
<td></td>
</tr>
<tr>
<td>No Activity</td>
<td>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.</td>
</tr>
<tr>
<td>Rank = no activity</td>
<td></td>
</tr>
</tbody>
</table>
General Questions for All Stages

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

**Answer:** Funding is planned at agency level, supporting staff assigned, but funding is not recurring, some lifecycle stages are supported.

**Justification Comment:**

It’s important to remember that the International Boundary and Water Commission is a binational agency that consists of two sections, the United States Section (USIBWC) and the Mexican Section (MxIBWC). This dataset gets updated when both sections of the Commission agree to initiate a boundary mapping project. Once both sections agree, funding and support staff are provided from within the agency. However, we do try to partner with other U.S. agencies for aerial imagery collection. This allows us to share cost and leverage the expertise of larger agencies that collect large amounts of aerial data on a regular basis. Previous boundary mapping efforts partnered with USDA and NGA.

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 under development.

**Justification Comment:**

The process for delineating the boundary line in a set of boundary maps has only been done a few times since the signing of the 1970 Boundary Treaty, and is evolving with technology. We are currently reviewing a proposed process to standardize boundary mapping by the Commission.

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:**

See answer to Question 2. A process for the delineation of the boundary line as depicted in our official boundary maps is currently under review. Processes from previous boundary mapping efforts are documented for reference in our internal library. Treaty Minutes and Joint Reports that provide a high level summary of the process are signed by both sections of the Commission and archived for reference and public distribution.

**STAGE 1 - Define/Plan**

4) Are user and business requirements defined and formalized?

**Answer:** No involvement.

**Justification Comment:**

While we partner with other agencies to obtain aerial imagery and help publish the final maps with the delineated boundary, there is very little outside involvement for the actual delineation and updating of the International Boundary Line. The requirements for the line are based on Provisions within the 1970 Boundary Treaty with Mexico. Having said that, we have partnered with INEGI (Mexico) and USGS (United States) to leverage their expertise at production mapping.

5) How are partners/stakeholders involved in the requirements collection process?
<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
<th>Justification Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>5) How are partners/stakeholders involved in the requirements collection process?</td>
<td>No involvement.</td>
<td>See answer to question 4.</td>
</tr>
<tr>
<td>6) Is there a quality assurance process for the dataset?</td>
<td>Process under development.</td>
<td>Processes are currently under review by USIBWC and MxBWC.</td>
</tr>
<tr>
<td>7) Is there a process to evaluate the sensitivity, privacy, and confidentiality of this dataset?</td>
<td>Sensitivity, privacy, and confidentiality evaluations fully implemented, reviewed and updated on a recurring basis.</td>
<td>The dataset does not contain any sensitive information, and once approved by both sections of IBWC becomes available for public distribution. The dataset is also published in publicly available official boundary maps by the Commission. While it is publicly available, it should be noted that the dataset is distributed under the condition that it only be used for reference purposes. The line is intended for use on maps at a scale of 1:25,000 or smaller. For uses that require survey grade precision (e.g. legal disputes), the public must communicate directly with our Boundary and Realty office.</td>
</tr>
<tr>
<td>8) Are defined data standards used in collecting, processing, and/or rendering the data?</td>
<td>Standards being researched and/or under development.</td>
<td>The current version of the boundary line is the first that is available in GIS format. Current practice is based on previous survey efforts by the Commission to delineate the boundary in the 1970s and 1980s. However, standards are currently under review by MxBWC and USIBWC for approval and use in future delineations of the boundary in GIS format.</td>
</tr>
<tr>
<td>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?</td>
<td>Process is under development to identify datasets promoting reuse and reduce unnecessary duplication.</td>
<td>Given that the location of the International Boundary Line is the responsibility of the International Boundary and Water Commission, and also because the Commission performs its own surveys and maintenance of the International Boundary Monuments, there are no external data from which we can use. However, we do reuse in-house data as appropriate in order to reduce unnecessary effort.</td>
</tr>
<tr>
<td>10) Is there a process for obtaining data in relation to this dataset?</td>
<td>Process is being implemented.</td>
<td>Based on previous boundary mapping efforts, a general process is in place to obtain the necessary source data to delineate the International Boundary. However, the process has been evolving with each rendition of the boundary maps, and a proposed standardization is currently under review by</td>
</tr>
</tbody>
</table>
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:**
The original metadata were in FGDC format, but have been updated to ISO 19115 and published to Data.gov. The metadata are also available in its original format on ArcGIS Online. In both cases, the metadata have been tagged with pertinent keywords.

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:**
The entire United States/Mexico International Boundary is covered, including Maritime Boundaries, the Land Boundary, the Colorado River Boundary, and the Rio Grande Boundary as defined in the 1970 Boundary Treaty.

### 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:**
The dataset is accessible to the public through multiple means. Non-proprietary shapefile format is often used for direct distribution. Users can also use existing web map services on ArcGIS Online, and soon use web map services from IBWC’s own ArcGIS Server.

### STAGE 5 - Maintain

14) Is there a maintenance process for updating and storing the dataset?
**Answer:** Dataset maintenance process is under development.

**Justification Comment:**
This dataset is currently undergoing its first major update. As such, the process is still under development.

15) Is there an error correction process as part of dataset maintenance?
**Answer:** No.

**Justification Comment:**
A standard error correction process has not been defined. Currently errors are addressed when identified in a manual fashion.

### STAGE 6 - Use/Evaluate
16) Is there a process to determine if the dataset meets user needs?

**Answer:** No.

**Justification Comment:**
Currently, the needs of the dataset are defined in the 1970 Boundary Treaty.

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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:**
The current process is very simple. When the data are distributed in response to a request, the end-user is advised of the dataset’s limitations. The metadata also describe limitations under the use constraints and purpose.

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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:**
This is a young dataset for the agency, and currently going through its first major update. A standardized process for updating it is currently under review.

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**STAGE 7 - Archive**

19) Is there an archiving process for the dataset?

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

**Justification Comment:**
Currently, geospatial data are actively available within our ArcSDE Environment. The Official Boundary Maps that depict the boundary line are on an archival schedule with NARA. However, there is currently no schedule for the electronic geospatial data. Our Records Management Office is currently reviewing/updating our archival schedule, and this is a topic that is under discussion.