Appendix B. Enterprise Data Promotion Forms

Appendix Contents Version Date: 2015.05.27

Initial Stewardship Plan

The enterprise data promotion process requires Stewards to submit forms to the EGC and obtain approval for them before engaging in major promotion tasks. All data sets require submission of an Initial Stewardship Plan (ISP). The ISP is an opportunity for the Stewards to propose an ideal candidate data set, ensure adequate resources and staffing exist for support, plan for future maintenance, and, in cases where the data are new data sets or are edited on an ongoing basis, design Data Models that will best support the various long-run end uses in the most powerful way. The submitted ISP will be reviewed by EGC and EGC sub-committees, and will either generate requests for modifications or be approved by EGC signatures. Once EGC signatures are received, major tasks for promotion to Atlas may ensue.

The ISP includes the following sections:

- Stewardship Roles & Responsibilities Signoff.
- EGC Chair Signoff.
- Identified Candidate Data Set.
- Geodatabase Management Plan.
- Archiving & Maintenance Plan.
- Data Model (New DWR-Created Data Sets Only).

Stewards (and sub-stewards) should draft the ISP and sign the Stewardship Signoff section. The individual sections in the template of the form (which is included, below, and is also available as a separate blank MS Word document that Stewards may use to fill out) prompt for the types of information each section is seeking. For new DWR-created data sets, the Data Model section is a particularly important piece of the ISP. No single standard exists for what is incorporated in the Data Model section, though supplied text prompts for the type of information that would be desirable. Examples of ISPs and Data Model submittals are included as part of the end of this appendix. Additional examples of actual DWR enterprise GIS Data Models, which might illustrate different cases, may be requested from EGC, as needed.

Independent QA Signoff

New spatial data sets or data sets edited by DWR on a going-forward basis will require signoff from an independent QA reviewer (who cannot be the Steward). That form is supplied subsequent to the ISP document template, below, and also is available as a standalone document for use by the Steward.

CALIFORNIA DEPARTMENT OF WATER RESOURCES
ENTERPRISE GIS DATA SET
INITIAL STEWARDSHIP PLAN (ISP)

DATA SET NAME: i12_Reservoirs_Federal

ISP SUBMITTAL DATE: 20151104

DATA SET STEWARD NAME: Jane Schafer-Kramer

DATA SET STEWARD ORGANIZATION WITHIN DWR: Bay-Delta Office

DATA SET SUB-STEWARD NAMES: NOT APPLICABLE

STEWARDSHIP ROLES & RESPONSIBILITIES SIGNOFFS:

Jane Schafer-Kramer _____ 11/04/2015
DATA SET STEWARD DATE

_____ _____
GEODATABASE ADMINISTRATOR DATE

_____ _____
DATA SET SUB-STEWARD, IF APPLICABLE DATE

_____ _____
DATA SET SUB-STEWARD, IF APPLICABLE DATE

_____ _____
DATA SET SUB-STEWARD, IF APPLICABLE DATE

_____ _____
DATA SET SUB-STEWARD, IF APPLICABLE DATE

DWR ENTERPRISE GIS COMMITTEE SIGNOFF:

_____ _____
CHAIR, DWR EGC DATE

ISP Section 1: Identified Candidate Data Set

[*Replace the following text with your own words.*] Stewards should submit a brief description of the data set version they are proposing as the candidate data set for inclusion in Atlas. Information on source, completeness, methods, and other descriptions of how and where this data set comes from should be included. If appropriate, some discussion about alternative versions of the data and cursory comparisons with those alternatives should be included.

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Description: Polygons representing man-made water bodies that store water behind a dam, within the State of California, that are operated by the federal government, specifically either the United States Bureau of Reclamation or the United States Army Corps of Engineers.

The origin of this dataset is the NHDWaterbody selection where FType = Reservoir and where FType =LakePond* but are operated as reservoirs, based on the information in the "Owner" column in the "List of dams and reservoirs in California" Wikipedia article as of July 24, 2014. http://en.wikipedia.org/wiki/List_of_dams_and_reservoirs_in_California

Any reservoir in or overlapping the boundary of the State of California that has its owner listed as the United States Bureau of Reclamation or the United States Army Corps of Engineers in that table is included in this feature class if its existence could be verified on imagery (either NAIP on the parcgis image server or Imagery on ArcGIS online) and by verifying it on the owning agency's website. There are a few dams with corresponding reservoirs on this list that exist only for control of flash flooding in desert areas and not for storage of water; those are not considered to be reservoirs for this feature class as they are dry most of the time.

These polygons are intended for graphic visualization and general location purposes only. The actual shape and extent of reservoirs varies constantly depending on the volume of water in place at any given moment.

*The NHD uses the FType "Reservoir" to describe "a constructed basin formed to contain water or other liquids." A waterbody formed by a dam built on a stream is described as a "LakePond."
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ISP Section 2: Geodatabase Management Plan

Dataset stewards should write up a brief description of the Geodatabase Management Plan. The plan should include at least the following elements:

- Proposed geodatabase feature class name.
  - i12_Reservoirs_Federal
- Estimated initial size and projected future size of data set.
  - 2 MB (initial and future)
- Dataset format (e.g., raster, tables, vector, LIDAR, TIN, etc.).
  - Polygon feature class (vector) with a relationship class to i99_agency_masterlist
- Describe workflow between Steward and any sub-stewards.
  - No sub-stewards
- Frequency of updates and how updates will flow to geodatabase managers.
  - Once per year steward will check the NHD for updates/changes.
- Required SDE administration steps and tuning.
  - Per normal procedure
- Versioning approach.
  - Not applicable
- How and whether data will be provided as service and/or as feature class.
  - Feature class initially; feature service eventually if needed

Other descriptions relevant to geodatabase administration not listed above may be included.

ISP Section 3: Archiving & Maintenance Plan

Stewards should describe archiving and maintenance plan. Elements can include:

- Update procedures.
  - Every November (after GIS Day) will check the NHD to determine is updates are needed. Will check every feature. If the NHD has changed the status of any feature, will update accordingly. Otherwise, if the steward becomes aware of any new reservoirs or decommissioning of existing reservoirs, a new version of the feature class will be created to reflect this.

- Types and frequency of data updates.
  - See above

- Estimated annual cost for dataset maintenance.
  - 8-20 hours of my time
  -
- Frequency of re-certifying that the data meet the Standards, including positional accuracy.
  - Annually

- Criteria for determining whether EGC needs to be involved in evaluating maintenance or compliance with standards.
  - Not sure what this means

- Metadata update plan.
  - Same as feature update plan

- Any applicable requirement for archiving and, if one exists, the specific requirement.
  - No special requirements for archiving; standard procedure will suffice.

- Frequency of archiving, if applicable.
  - Only upon the addition or deletion of a feature

- Naming conventions upon archiving.
  - No special requirements for archiving; standard procedure will suffice.

- Portions of data set that need to be archived.
  - All

ISP Section 4: Data Model (New DWR-Created data sets only)

Steward should submit a data model. While there is no one way to compile a data model, a data model may include some or all of the following elements:

- Verbal description of the physical model. This includes a description of how the data are represented. For example, are roads a polygon of the road pavement, a road's centerlines, a series of parallel linear lanes, or etc.?
- Data model diagram (aka geodatabase schema).
- Data dictionary.
  - A data dictionary may include many things. See the attached example, which is a very detailed data dictionary for a complex database (the California Levee Database). At a minimum, a data dictionary should include feature types; descriptions of abbreviations, codes, and numerical classifications used; a field list that includes descriptions, types, ranges and domains of field values; aliases used; and attribute data units.
- Topology rules used.
- Linear referencing.
- Geometric networks.
- Relationship classes.

Because the six minimum mandatory fields are always required, the template for these fields may be inserted into the applicable data dictionary section (and modified as necessary):

Field	Data Type	Description
***ID	Object ID	Auto generated by ArcMap, or else may be supplied by other ID system in separate field.
COMMENTS	Text	Any user-provided comments.
SOURCE	Text	Original source of the boundary and attribute information.
LAST_MODIFIED_DATE	Date	Date record was last modified.
MODIFIED_BY	Text	Name of person who last modified the record.
DATE_DATA_REFERS_TO	Date	Date the data refers to, i.e. a sampling date, survey date, etc.
GNIS_Name	Text	This field came from the National Hydrography Dataset; it contains the common name of the feature from the Geographic Names Information System database expressed in mixed case.
OwnerID	Double	The code used in the OrganizationID table in the i99agencies_masterlist that corresponds with the federal agency that owns and operates the reservoir.
Dam_Name	Text	Name of the dam associated with the reservoir, as indicated in the website of the owner agency (US Bureau of Reclamation or US Army Corps of Engineers.)
ReachCode	Text	The national Hydrography Dataset Reach Code assigned to the corresponding feature in NHDWaterbody or NHDArea feature class.

Examples of sample data model diagrams and actual data models submitted for DWR ISPs are included at the end of this appendix.