



National Park Service
U.S. Department of the Interior

Natural Resource Stewardship and Science

GRSM Standard Operating Procedure: Data Certification

Suggested Citation: National Park Service. 2016. GRSM Standard Operating Procedure: Data Certification. Version 2016-07-20. National Park Service, Great Smoky Mountains National Park. Gatlinburg, Tennessee.

Contents

Purpose.....	3
Scope	3
Introduction	3
Data Certification Process.....	3
Roles and Responsibilities.....	4
Contact Information	5
Attachments	5
References.....	5

Version History		
Version	Update Date	Changes
20160719	20160719	Revised draft to appropriate format

Purpose

The purpose of this Standard Operating Procedure (SOP) is to establish and maintain well-documented guidance for data certification. This SOP considers the general workflow of certifying project data before it is made available to the public or any outside collaborators. All data must be certified before it can be released to anyone outside NPS including collaborators and members of the public.

Scope

These guidelines apply to all GRSM RMS staff that create, maintain, or solicit project data

Introduction

Data certification is a benchmark in the project information management process and indicates that: 1) the data are complete for the period of record; 2) they have undergone and passed specified quality assurance checks; 3) that they are appropriately documented and in a condition for archiving, posting and distribution as appropriate. Note that some data sets may never be appropriate for public dissemination, for example data sets concerning rare species. Yet, these data sets must still undergo certification. Certification does not guarantee that the data are completely free of errors or inconsistencies which may or may not have been detected during quality assurance reviews.

Data Certification Process

Data sets should be certified both at the close of a project and at regular intervals, such as yearly at the close of the field season after data entry, verification and validation have been completed. The interval at which project data is certified should be identified in the project protocol. Only certified data should be disseminated (see Data Dissemination SOP). The Project Lead and the Data Manager will utilize the Data Certification Form ([link/reference](#)) to work through the process of certification. At the predefined interval, the Data Manager will create a read-only snapshot of the project database, screen for sensitive species (if applicable), and populate the data certification form as much as possible. The Data Manager will then notify the Project Lead. The project Lead will then complete the remainder of the data certification form including drafting a purpose and abstract/description for the data set. The Data Manager will use this information to populate an IRMA Data Store reference. Before making the reference public, the Data Manager will ask the Project Lead to review the reference and approve its release. The steps of data certification are outlined in Figure 1.

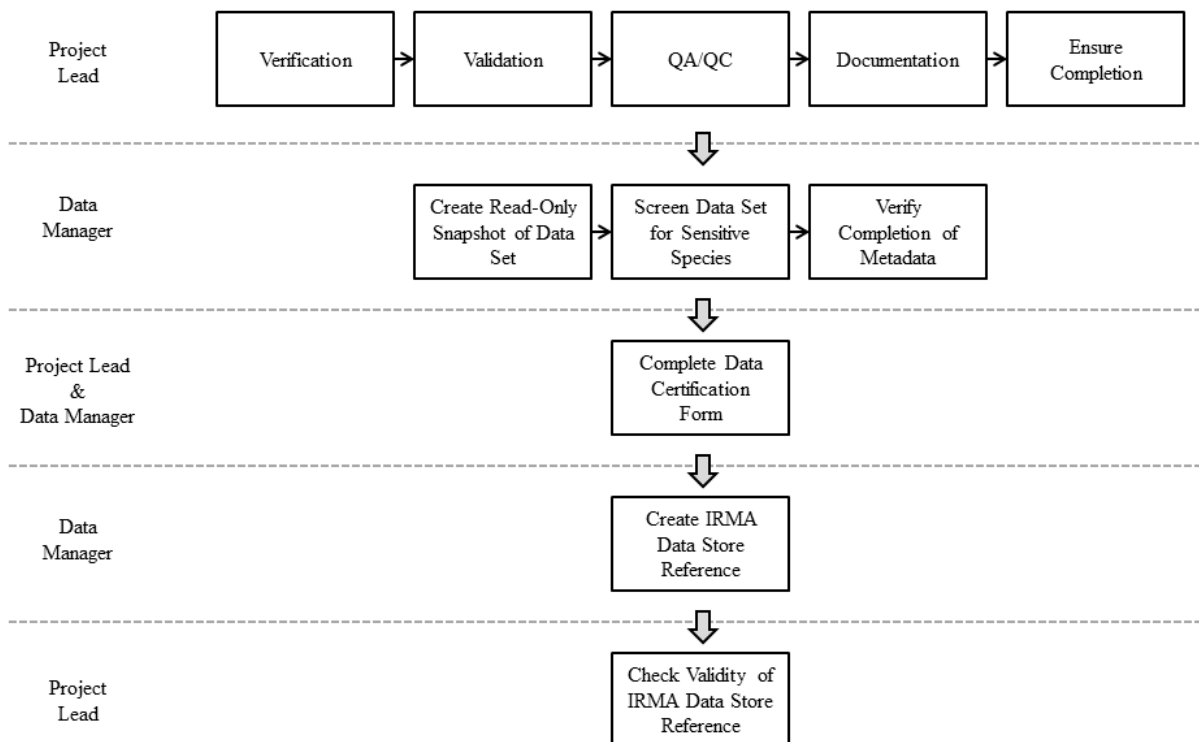


Figure 1. Data certification process

Roles and Responsibilities

Role	Responsibility
Project Lead	Ensure that metadata is complete including table and field descriptions within a database.
	Ensure that data set is complete for the time of record.
	Ensure that data set has passed quality assurance checks as outlined in the project protocol or other documentation.
	Recommend handling of sensitive species locations in project data set (if applicable) (see Sensitive Data Handling SOP).
	Fill in Data Certification form
	Review IRMA reference created by Data Manager.
Data Manager	Create a standalone, read-only snapshot of the data set and store it in the appropriate project subfolder (Data/Final) (see Directory Structure SOP).
	Screen data set for sensitive species records.
	Document any occurrence of a rare species within the data certification form.
	Redact sensitive species occurrences or fuzz locations depending on recommendation of Project Lead (see Sensitive Data Handling SOP)
	Utilize information provided by Project Lead in the Data Certification Form to create an IRMA reference for the data set
	Gather, review and QAQC metadata before posting

	Post data set to IRMA and activate reference following Project Lead's approval
GIS Specialist	Provide automated GIS data validation tools.
	Maintains systems that filter data from public exposure that have been classified as sensitive.
	Inserts language into metadata detailing issues with data that has been certified as poor or incomplete.
	Redact sensitive species occurrences or fuzz locations depending on recommendation of Project Lead (see Sensitive Data Handling SOP)
	Gather, review and QAQC metadata before posting
	Post data set to web-based mapping platforms and activate reference following Project Lead's approval

Contact Information

Great Smoky Mountains National Park
National Park Service
Gatlinburg, TN

Kendra Straub
Data manager
(865)436-1703
Kendra_Straub@nps.gov

Thomas Colson
GIS Specialist
(865)436-1701
Thomas_Colson@nps.gov

Attachments

None

References

Angell, Deborah L. 2005. Sonoran Desert Network Data Management Plan. National Park Service, Inventory and Monitoring Program, Sonoran Desert Network, Tucson, AZ. 80 pp.

Cook, R. R., and P. Lineback. 2008. Sierra Nevada Network data management plan. Natural Resource Report NPS/NRPC/NRR—2008/070. National Park Service, Fort Collins, Colorado

Mohren, Sean. 2007. Data Certification Guidelines. Klamath Inventory and Monitoring Network, National Park Service. pp5.