

Standard Operating Procedure (SOP) #16

Post-season Data Quality Review and Certification

Version 1.01 (April 27, 2021)

Change History

New Version #	Revision Date	Author	Changes Made	Reason for Change	Previous Version #
1.01	4/27/2021	Kelly Kozar, Kim Weisenborn	Updates to general instructions. Added references of newly created appendices.	To accurately reflect the data certification procedure. Making PACN Project Data Certification Form accessible, and content more consistent across protocols	1.0

Only changes in this specific SOP will be logged here. Version numbers increase incrementally by hundredths (e.g., version 1.01, version 1.02) for minor changes. Major revisions should be designated with the next whole number (e.g., version 2.0, 3.0, 4.0). Record the previous version number, date of revision, author of the revision, changes made, and reason for the change along with the new version number.

Purpose

This SOP document describes the procedures for validation and certification of data in the working project database for the Pacific Island Network (PACN) Established Invasive Plant Species (EIPS) Monitoring Protocol. Refer also to Chapter 4: Overview of Database Design, Data Quality Review, and Data Certification and Delivery sections for related guidance and a clarification of the distinction between the working database and the master database.

After the season's field data have been entered and processed, they need to be reviewed and certified by the PACN Botanist for quality, completeness and logical consistency. Data validation is the process of checking data for completeness, structural integrity, and logical consistency.

Once the data have been through the validation process and metadata have been developed for them, they are to be certified by completing the PACN Project Data Certification Form, available in Appendix SOP 19.b in [SOP #19 Product Delivery Specifications](#), or from the PACN Data Manager. The completed form, certified data, and updated metadata may then be delivered to the PACN Data Manager according to the timeline in [SOP #19 Product Delivery Specifications](#).

Data Quality Review

At the end of each field season, the PACN Botanist and the PACN data management staff are collectively responsible for finalizing a validated dataset for that field season. The PACN Botanist or

Biological Technician(s) will complete all data validation. Some validation (ensuring that the data make sense) methods have been incorporated into the EIPS Monitoring Database. Other, more specific validation routines will be worked out with the protocol PACN Botanist and/or project staff and incorporated into the database as appropriate. These modifications will be described in the edit log and the functionality of the validation routines will be explained in detail in the [EIPS Monitoring Database User Guide](#).

Upon completion of the validation routines, the PACN Data Manager is to be informed that the particular data has been certified. The PACN Botanist will complete the PACN Project Data Certification Form, available in Appendix SOP 19.b in [SOP #19 Product Delivery Specifications](#), or from the PACN Data Manager. The PACN Botanist will maintain a record of data status for the EIPS program that includes entry, verification, certification, and publication, which may be a chart or spreadsheet.

Completing Data Certification

Data certification is a benchmark in the project information management process that indicates that:

1. The data are complete for the period of record.
2. They have undergone and passed the quality assurance checks.
3. That they are appropriately documented and in a condition for archiving, posting and distribution as appropriate. Certification is not intended to imply that the data are completely free of errors or inconsistencies which may or may not have been detected during quality assurance reviews.

To ensure that only quality data are included in reports and other project deliverables, the data certification step is an annual requirement for all tabular and spatial data. The PACN Botanist is primarily responsible for completing a PACN Project Data Certification Form, available in Appendix SOP 19.b in [SOP #19 Product Delivery Specifications](#), or from the PACN Data Manager. This brief form and the certified data should be submitted according to the timeline in SOP #19 Product Delivery Specifications.

Once a given field season's dataset has been certified, the PACN Data Manager will be responsible for archiving the certified dataset, posting the metadata (and dataset, if appropriate) to the Integrated Resource Management Application Portal's (IMRA portal) Data Store (see [SOP #17 Metadata Development](#), and [SOP #20 Product Posting and Distribution](#) for more information), and distributing read-only copies of the certified datasets to the parks.