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Standard Operating Procedure #18: Revising the Protocol, Version SCPN_WATER_QUALITY_SOP18_20160901

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Standard Operating Procedure #18: Revising the Protocol

Version SCPN_Water_Quality_SOP18_20160901				
Revision History Log				
Previous version number	Revision date	Section and paragraph	Change(s) made	Approved by

Only changes in this specific SOP will be logged here. Record the previous version number and date of revision; identify sections and paragraphs where changes were made, who approved the revision, and the new version number. More detailed descriptions of the changes made and the reason for the changes is provided at the end of this SOP.

This standard operating procedure (SOP) explains how to make and track changes to the Southern Colorado Plateau Network (SCPN) Water Quality Monitoring Protocol Narrative and associated SOPs. Over time, the protocol narrative and SOPs may require modifications. The following procedures must be followed when making changes to ensure that previous data collection and processing procedures are clearly understood and accounted for when using and interpreting data collected under this protocol. Similarly, clearly articulating new methods is critical to credible interpretation of data acquired after the implementation of changes. Personnel making changes must be familiar with this SOP to ensure that proper reviews are conducted, and that documentation standards are followed.

1 Modifications

Small changes or additions to existing methods will be reviewed in-house by SCPN staff. An outside review will be considered for major changes in methods. All modifications will trigger the creation of a new version of the SOP or narrative that will go through the process outlined here. In short, modifications will result in a new version of the narrative or an SOP. The new SOP will be used in data collection, identified by version in the database to allow linking data to collection methods, and will be published as a unique version to IRMA.

2 Revision history

All changes must be documented, and updated protocol versions must be recorded in the Revision History Log that accompanies the protocol narrative and each SOP, and a

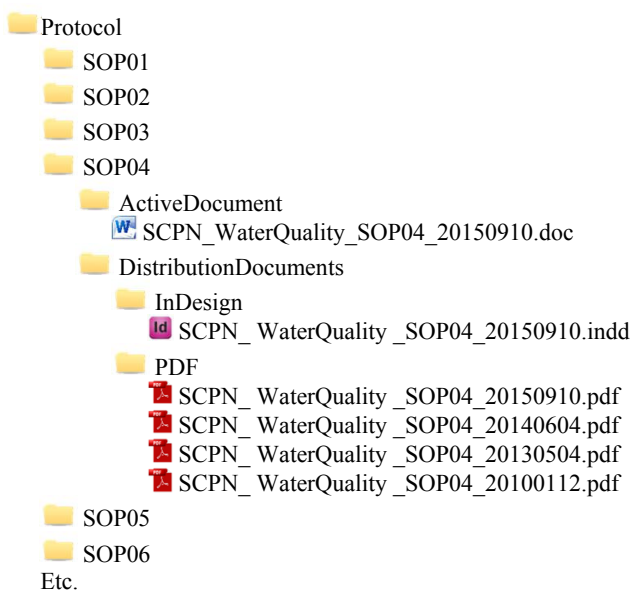


Figure 18-1. Proposed file structure for tracking SCPN Water Quality Monitoring Protocol SOPs.

more detailed explanation of the changes and justifications will be provided at the end of each document. Changes are recorded only in the document being modified (protocol narrative or SOP). Date stamps are used to identify versions because they are more intuitive and easier to manage. The revision history will include the SOP version, author, sections affected, a description of the changes, and the justification (reason) for the changes.

Here is an example:

SCPN_Water_Quality_SOP11_20150910

Author: Lee McCoy

Section(s) affected: 11.2

Changes & reasons: The method used for documenting revisions was changed from a table, with limited space for describing the changes made to the SOP, to a more narrative approach as an addendum to each SOP

3 Narrative and SOP updates may occur independently

A change in one SOP will not necessarily invoke changes in other SOPs, or the narrative (but it could). The narrative and SOPs will

be maintained as separate documents so that changes can be made and tracked independently. As the narrative or SOPs are revised, they will go through the steps described in section 11.6, including adding the updated SOP to IRMA. Updates to an SOP can be quickly tracked independently of the other SOPs and independently linked to the data collected by version.

4 Tracking which SOP was used to collect data

All of the data in the SCPN Water Quality Database must be linked to the exact methods and procedures used during collection. Since the SOPs can change over time, it is critical to identify the SOP version associated with each record in the database. The SOP version used to collect each of the major types of data will be included for each record. To facilitate linking data with the exact methods used to collect it, a look up table in the database identifies the current version of each of the SOPs. As data is collected, each record is tagged with the relevant active SOP version. Data comparability between years and with other datasets can be confirmed or filtered by reviewing the SOP versions used during data collection.

5 Proposed file structure

Since the narrative and SOPs will be tracked and modified independently, each SOP will be maintained in its own sub-directory of the protocol folder. Figure 18.1 illustrates a suggested file structure that will facilitate the process of modifying and tracking each of the SOPs. The narrative and each SOP will have the same sub-folder structure as is shown for SOP#4. The MS Word, Adobe In-design, and PDF files are examples to show the file name convention.

6 Revision procedures

This section describes the process and person responsible for each step in revising the narrative or SOPs. When it is determined that changes are needed, the project manager should alert the data manager as soon as

possible—especially if the methods changed will occur mid-field season. The project manager makes a copy of the active version from the ActiveDocument folder and makes the desired changes. After consulting with the program manager and data manager, and securing the proper internal or external reviews, the project manager gives a completed draft to the editor. The editor replaces the old version with the new in the ActiveDocument folder. The editor then creates and updates a new version in InDesign. The editor and project manager may make additional changes as the editor transfers these changes into InDesign. These changes should also be made in the MS Word version in the Active Document folder so they are present in the active version for future editing. When complete, the editor creates a final pdf, publishes the new version to IRMA (<https://irma.nps.gov/App/Portal/Home>), and alerts the data manager and project manager that the new version has been published.

7 Tracking SOPs in the database

The SOP used for collecting each data record will be recorded in the database at the appropriate level. The current version of each relevant SOP is kept in a look up table (tlu_CurrentSOP) and is set to auto-populate as each record is created. When a change is made to an SOP, the name of the active SOP is updated in tlu_CurrentSOP. New data collected with the methods described in the new SOP are tagged with the new SOP version. The timing of changing an SOP version in the database is critical. Ideally, the expectation is that changes to SOPs will occur in between sampling seasons. After the SOP changes are complete, the new SOP version can be incorporated into the blank back end and front end database sent into the field. If, however, the method change occurs mid-season, it may be necessary to change the SOP version in the database before the changes are completely documented and published. Any methods changes made in the field should be immediately brought to the attention of the data manager so that the SOP version can be updated in the database.

8 Revision history

Provide the following information for each revision made to SOP #18.

New version:

SCPN_Water_Quality_SOP18_YYYYMMDD

Date:

Author:

Sections affected:

Changes & reasons: