

Standard Operation Procedure (SOP) #25

After Field Activities

Version 2.01 (June 3, 2024)

Change History

New Version #	Revision Date	Author	Changes Made	Reasons for Change	Previous Version #
2.0	6/22/2022	Kim Weisenborn, Amanda McCutcheon, Anne Farahi	Updated outdated hyperlink references; text edits for clarification; removed FlowTracker info from this SOP into its own SOP. Updated language and added reference to FlowTracker SOP. Updated content to refer to new PACN I&M SharePoint.	Text was outdated and some items needed clarification. PACN data is no longer stored on a networked server (I:\ drive) and is now stored on the PACN SharePoint site.	1.0
2.01	6/3/2024	Kim Weisenborn	Renumbered SOP from #24 to #25. Updated SOP references. Added procedures for filling out streams data log. Added section for GPS files.	A new SOP has been added to the protocol therefore some SOP reference #s have changed. Streams data log is used to keep track of data processing progress. GPS files are also processed after the field.	2.0

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, identify paragraphs and pages where changes are made, who approved the revision, and the reason for making the changes along with the new version number.

Purpose

This SOP describes procedures for field staff to follow after the field season. There are four subsections of this SOP: (1) returning field equipment; (2) data sheets and data management; (3) summarizing field notes; and (4) reporting scientific collecting activities. Note that additional information regarding data management is provided in [SOPs #25-35](#).

Procedures

Returning Field Equipment

1. Clean all equipment and gear before storage to prevent the spread of invasive species.
Following sampling and prior to leaving the sampling area, all water as well as any visible mud, plants, and animals should be removed from all field and personal gear. When in an appropriate location, clean and dry all gear that came in contact with water. Clean all gear with freshwater then soak gear in a 10% bleach solution (e.g., two cups of bleach added to 14 cups of water) for 20 minutes. Gear should then be rinsed with freshwater, dried, and sprayed with 70% alcohol prior to the next sampling event. Note: Protective unlined rubber gloves should be worn when working with bleach and care should be taken to keep bleach away from sensitive areas such as the eyes.
2. Sign in and store field equipment. The crew leader should sign in all gear that was issued at the beginning of the season. Any problems with equipment or gear should be reported to the crew leader. Any damaged equipment should be set aside to be repaired or replaced; all other equipment should be properly stored.
3. Repair or replace damaged equipment. When possible, damaged equipment should be repaired. Otherwise, damaged equipment should be replaced. The Field Lead is responsible for making sure that all necessary equipment is functional and accounted for before the next field season.

Streams Data Log

The Streams Data Log is a Microsoft® Excel spreadsheet that is used to keep track of stream data processing, entry, verification, and certification throughout the field season. It is to be updated after completing each assigned task in order to inform staff what has and hasn't been accomplished throughout the sampling year and is stored in SharePoint.

1. Navigate to the “[Database](#)” folder, and then to the current year working copy folder (e.g., 2023_working_copy) (see figure below).
2. Select the data log Excel file (.xlsx) to open the Stream Data Log for that year (Figure SOP 25.1 and 25.2).

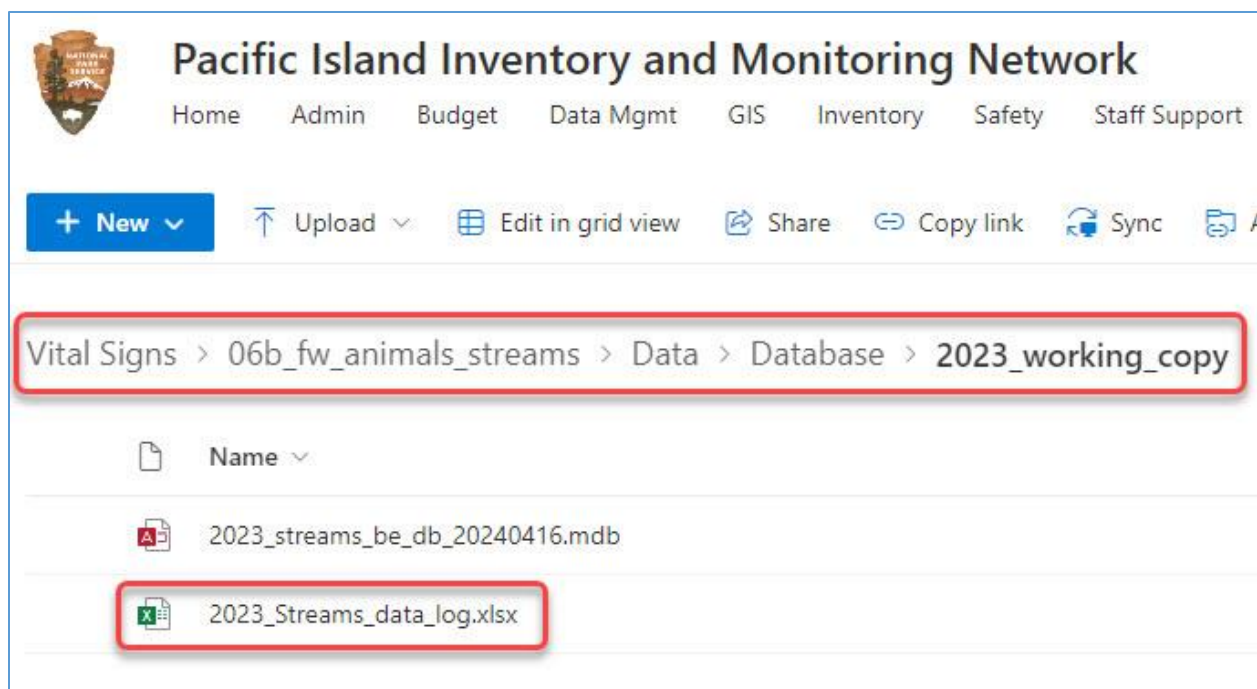


Figure SOP 25.1. Example of a file location for a data log file for a particular sampling year in SharePoint.

AutoSave On 2023_Streams_data_log... Last Modified: 25m ago Search

File Home Insert Draw Page Layout Formulas Data Review View Help Acrobat

Clipboard Font Alignment Number Styles Cells Editing

Calibri 11 A A

B I U Wrap Text

General

Conditional Formatting Format as Table Cell Styles

Insert Delete Format

AutoSum Fill Clear

Sort & Filter

L14

	A	B	C	D	E	F	G	H	I	J	K
1	Park	Year	Trip Report uploaded to SharePoint	Datasheets Scanned and uploaded to SharePoint	Datasheets Entered	GPS file downloaded from GPS and uploaded to Spatial_info\GPS Folder	Flowtracker files downloaded from device and uploaded to SharePoint	Flowtracker files converted to PDF and uploaded to SharePoint	Flowtracker PDF files copied to Database	Flowtracker PDFs linked to DB	Images downloaded from camera and uploaded to SharePoint Images Folder
2	HALE	2023		AGA	AGA				AGA	AGA	GPS
3	KALA	2023	AGA	AGA	AGA	GPS			AGA	AGA	GPS
4	WAPA	2023		AF	AGA				AF	AGA	GPS
5	NPSA	2023		AGA	AGA				AGA	AGA	GPS

Figure SOP 25.2. Streams Data Log.

3. Create a new row and add sampling event details (if not already added) to the *Park* and *Year* columns.
4. Add your initials to any of the table cells for completed tasks.
5. When done modifying, close the file. Updates are automatically saved.

Datasheets

Datasheets should be handled in accordance with [SOP #27 Datasheet Handling Procedures](#).

1. Scan datasheets. All datasheets (Site Characterization, Fish, Shrimp, Snails, Habitat Assessment [FlowTracker], Pebble Count, and Photo Log) should be organized into one PDF file, in the order listed above, per site. Ensure all scanned datasheets are legible and adjust the scan settings as necessary to achieve legible scans. Scanned datasheets should be uploaded to the “[Datasheets](#)” folder in SharePoint as soon as possible after returning from the field.
2. Proofread the datasheets. Proofread the datasheets to ensure that they are complete and legible. Although all datasheets should be reviewed for completeness in the field, some errors may not be identified until later. Ensure that each sample site has all datasheets. If a blank datasheet needs to be filled out, fill it out and include with others. For example, if no FlowTracker measurements were collected because there was no flow, fill out a datasheet with site name and reason why data wasn’t collected. This is especially important with snail datasheets where zero snails were recorded. Be sure to fill out a datasheet with zeros snails recorded for the site. Zeros are important data too.
3. Indicate corrections on the datasheets with red pen. Corrected errors and changes made on a data form should be crossed out with a red pen, dated, and initialed. A short explanation of the change should be included in the margin of that form. Rescan any corrected datasheets.
4. Archive original datasheets. Organize and file datasheets by sampling location. The original datasheets should be permanently filed with the Field Lead at HAVO.
5. Data entry. Data entry should be completed by the Field Lead or other biological science technician as soon as possible after field season following [SOP #29 Data Entry and Verification](#).
6. Update the *Datasheet* section in the [Streams Data Log](#) Excel spreadsheet.

Photos

1. Refer to [SOP #28 Managing Photographic Images](#) for procedures on uploading the field images to ESRI, processing the images in R, uploading them to SharePoint, and linking the photos to the Stream Monitoring Database.
2. Identify the data photos using the photo log and any field notes (see [SOP #6 Collecting Stream Transect Photographs](#)).
3. Update the *Images* section in the [Streams Data Log](#) Excel spreadsheet.

FlowTracker Data

1. Refer to [SOP #24 Using the FlowTracker and Processing Data](#) for detailed instructions on how to download the instrument and process the data.
2. Update the *FlowTracker* section in the [Streams Data Log](#) Excel spreadsheet.
3. Remove the batteries from the FlowTracker and store it.

GPS/GIS Files

1. Refer to [SOP #5 Downloading and Uploading Data from/to a Garmin GPS](#) for procedures on processing GPS data and uploading to SharePoint.
2. Update the *GPS* section in the [Streams Data Log](#) Excel spreadsheet.

Summarizing Field Notes

1. Photocopy the field notes from all crew members. Store the copies of the field notes with the original datasheets.
2. Compile trip reports from the sampling season. The Field lead should compile all sampling reports that were written during the sampling season. Trip reports should include sampling dates, team, protocols, sites monitored, general sampling activities, comments/issues, advice for next sampling season, any equipment that needs to be repaired or replaced, and any weather-related issues. These should be completed in order to assist staff with next sampling season and document activities for annual operational review. Examples can be found in the "[Trip reports](#)" folder in SharePoint.

Preparing samples for transport

If voucher specimens are collected in the field, such as shrimp samples at WAPA. These samples must be prepped for shipment under the proper permit (DMWR for Guam). Coordination of the permit and shipment to a lab that can ID the samples often takes months. It is vitally important that the samples are properly preserved and stored until shipment can be arranged.

1. Decant each specimen jar after 24 hours in 95% alcohol.
2. Refill specimen jar with 95% alcohol. You only need enough alcohol to cover the specimens (not the entire sample jar).
3. Decant each specimen jar a second time after 24 hours
4. Refill specimen jar with 95% alcohol and leave in alcohol until shipping is ready to begin. You only need enough alcohol to cover the specimens (not the entire sample jar).
5. Obtain export permit from appropriate agency. You will need to know approximately how many specimens of each type you will have.
6. Obtain a certificate of origin from the local government natural resources division.

7. Make copies of the collection permit, the export permit, and the certificate of origin.
8. Call the lab specimens are being shipped to, so they can prepare to receive them. It is important to know how many samples, how many boxes, and when the samples will be expected to arrive.
9. Decant alcohol from the specimen jar and place cotton damp with alcohol in the specimen jar to gently fill the void.
10. Place in shipping box(s) along with collection permit, certificate of origin, and export permit.
11. Mail package. It needs to arrive within 1 week from the last decanting. Lab will refill with alcohol and process.

Reporting Scientific Collecting Activities

1. Prepare and submit reports. Aquatic ecologist is in charge of preparing and submitting reports for all scientific collecting activities via the [NPS Research Permit and Reporting System \(RPRS\)](https://irma.nps.gov/RPRS/) website¹.

¹ NPS Research Permit and Reporting System (RPRS), <https://irma.nps.gov/RPRS/> (last accessed 3 June 2024).