

South Florida/Caribbean Network

National Park Service
Inventory and Monitoring Division



Standard Operating Procedure SEA07

Entering, Verifying and Performing a 100% QA/QC Check of Seagrass Data in the NPStoret Seagrass Database — Version 1.1

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Purpose

This standard operating procedure (SOP) describes the procedures for entering seagrass field data into the local SFCN NPStoret database. Once the original observer completes and verifies the data entry, a second observer will perform a 100% Quality Assurance/Quality Control (QA/QC) review of the data. QA/QC reviewed data will be sent to the data manager for review and certification.

Revision Log

Revision Date	Author	Changes Made	Reason for Change	New Version #
2/1/2021	Mario Londoño	Added steps to install NPSTORET and connect to the backend database. Updated data entry steps for NPSTORET version 2.0.	The installation steps were missing. A new version of NPSTORET was released by NPS WRD.	1.1

Procedures

Installing NPSTORET and Linking to the Back-end Database on the Server

1. Download the latest version of NPSTORET from Data Store:
<https://irma.nps.gov/DataStore/Reference/Profile/2285022>.
2. Start the NPSTORET executable file by double clicking.
3. Click the 'Next' button to proceed.
4. Click the 'Next' button to proceed after reviewing the installation instructions as needed.
5. Check off the box to agree to the terms and conditions of the license agreement. Then click 'Next.'
6. Leave the NPSTORET Application, User Data, and Linked Tables features checked for installation. Leave the default installation folder as 'C:\NPSTORET.' Click 'Next.'
7. Click the 'Install' button to proceed.
8. Click the 'Continue' button to proceed.
9. The NPSTORET front end will open and display a 'Data Initialization...' window.
 - a. Select the first option for 'Select Handling of Prior Version.'
 - b. For 'Locate prior version of NPSTORET_BE' click on the 'Browse button' and navigate to the appropriate server address where the back-end database is located and select it. For the SFCN, it is located in
'Z:\SFCN\Vital_Signs\Seagrass\data\NPStoret_data.'
 - c. Click the 'OK' button.
10. Click 'OK' on the 'Back End Update Completed' window.
11. The NPSTORET database is ready to for use. The main switchboard will display.

Note: For more information regarding installing NPSTORET on a computer please review the following National Park Service publication 'NPSTORET – Installation Details.' It can be found at: <https://irma.nps.gov/DataStore/Reference/Profile/2285143>.

Open NPStoret Database and Navigate to Data Entry Page

1. Open the NPStoret database.
2. Select "SFCN" in the "Available Organizations" window.
3. Select your name in the "Available Log In IDs" window (the SFCN data manager add your name to the list if it is not available).

- Visits, Activities, and Results for Project: Seagrass (SFCN_SEAGRASS)

Quick Filter for Station:

Quick Filter for Activity Start Date:

NPSTORET Result Entry Template

Choose Input Group:

Jump to Activity:

Station ID:

Station Name:

Visit: of 49

Visit Start Date:

Vis#:

Hydrologic Event:

Visit Comment:

Files: 0

Add New Visit

Delete Visit

Activity ID:

Activity Type:

QC: ☐

Start Date:

Start Time:

Zone:

Depth:

Units:

Profile?: ☐

Custody ID:

End Date:

End Time:

Zone:

Relative Depth:

Person(s):

Sampling Component:

Sampling Component Order:

Activity Comment:

Activity:

Files: 0

Add New Activity

Repeat Activity

Delete Activity

Double-click a record to pop up an alternate data editing form

Change Status

Clean Activity

Auto Fill

Local Name	Detection Condition	Result Value	Units	Value Status
Current	Detected and Quantified	Light		Verified
Visibility	Detected and Quantified	30	ft	Verified
Syringodium filiforme_BBA	Detected and Quantified	1		Verified
SFIL_Canopy	Detected and Quantified	22	cm	Verified
Halophila stipulacea_BBA	Detected and Quantified	3		Verified
HSTI_Canopy	Detected and Quantified	8	cm	Verified
UDOT_BBA	Detected and Quantified	0.5		Verified
Green Algae Total_BBA	Detected and Quantified	0.5		Verified

Record: of 12

No Filter

Search

Filter

Print

Import

Options ...

Close Results

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Check if Data for the Specific Site has already been Entered

1. The data management team will create new station numbers for every survey in the YY### format described in SOP SEA04 *Sample Allocation*—Version 1.1 (SFCN 2022).
2. Select the station number in the “Quick Filter for Station” window.
3. Select the date the station was visited in the “Quick Filter for Activity Start Date.”
4. If the date does not appear in the drop-down window, the visit has not been created yet.
5. If a visit for a specific site was already created, and site-level data already exist for that site, skip to the “Enter Data” section.
6. If the visit has not yet been created, continue to next section.

Choose the Station for which Aata will be Entered

1. Click the “Add New Visit” button. The upper portion of the “NPSTORET Result Entry Template” window will now display.
2. Select the station in the “Station ID” window.
3. Add the start date for the mission in the “Start Date” window. Click on the Hydrologic Event drop-down (no selection needed). This will display the rest of the “NPSTORET Result Entry Template” window and populate the “Activity ID” window.
4. Add the start time for the first record of the mission in the “Start Time” window.
5. Select “AST,” “EDT,” or “EST” as appropriate in the “Zone” window.
6. Select “Field Msr/Obs-Habitat Assessment” in the “Activity Type” window.

Enter Station Data (Each Diver)

1. Fill out the site depth in the “Depth” window in feet.
2. Select “ft” in the “Units” window.
3. Type the Braun-Blanquet (BB) diver’s name in the “Person(s)” window.
4. Select “ft” in the “Units” window.
5. Enter any pertinent site notes in the “Visit Comment” window.

Enter Quadrat Data

1. In the “Activity Comment” window enter the BB quadrat number.
2. Enter the appropriate data in the “Result Value” column for each parameter.
 - a. Substrate: select the appropriate substrate type from the drop-down menu.

- b. Sediment Depth: enter the value in centimeters.
 - c. Current: select the appropriate current category from the drop-down menu.
 - d. Visibility: enter visibility value in feet.
 - e. Taxa: select the BB abundance score for each taxon present in the quadrat.
 - i. For seagrass species: also enter canopy height in centimeters.
 - f. Add any pertinent comments for “a” through “e” in the “Comments” column.
- 3. When done entering data for the first quadrat, or when entering data for a previously created visit that already contains data, click on the “Add New Activity” button.
 - a. When entering data from a previously created visit, the new activity number should be “3” and the following activity number will be “4.”
 - b. When a visit has already been created, there is no need to change the “Start Date” or the “Start Time” values. However, the “Start Date” should be identical for both divers, while the “Start Time” may be slightly different. If there are gross discrepancies in these two fields between the two divers, both divers must confer and determine the accurate values.
 - c. Make sure to add any pertinent comments to the “Visit Comment” window.
- 4. To continue with a new quadrat at the same site:
 - a. Select “Field Msr/Obs-Habitat Assessment” in the “Activity Type” window.
 - b. Re-enter the site depth in the “Depth” window in feet.
 - c. Select “ft” in the “Units” window.
 - d. Type the BB diver’s name in the “Person(s)” window.
 - e. In the “Activity Comment” enter the BB quadrat number.
 - f. Repeat steps 2a–2f.
- 5. The original observer should perform a data entry review and correct any discrepancies as they go along.

Enter Queen Conch Data

- For all Queen Conch data, enter the appropriate data in the “Results Value” column for each parameter.
 - Conch_Count: enter the number of Queen Conch observed within a 7.5 meter (24.6 ft) radius.

- Conch_LifeStage: select one of the following options from the Permitted Values window – ADULT or JUVENILE.

100% QA/QC Verification of Entered Data

The primary observer (diver) will conduct a 100% QA/QC verification of the entered data. QA/QC of the data should occur after data from the entire survey has been completed.

1. Open the NPStoret database.
2. Select “SFCN” in the “Available Organizations” window.
3. Select your name in the “Available Log In IDs” window.
4. Click on the “Results” tab.
5. Select “SFCN_Seagrass” in the “Available Projects” window.
6. Select “All the Organization’s Stations” in the “Available Station Input Groups.”
7. Select “All the Organization’s Characteristics” in the “Available Characteristic Input Groups.”
8. Click the “OK” button.
9. The “NPStoret Result Entry Template” window will open up.
 - a. Utilize the Quick Filters for “Station ID” and “Visit Start Date” at the top of the screen for navigation.
 - b. Compare each Visit, Activity, and Characteristic to the original field data sheet and fix discrepancies when they are discovered. Refer questions to the original observer for clarification.
10. Upon completing a 100% review of all the datasheets, the Project Leader will inform the Marine Ecologist who will do a spot check of the entered data and also check for anomalies in an ecological context. The Marine Ecologist will update the “Value Status” of all verified records from “Raw” to “Provisional.” This can be accomplished in bulk but must be applied to each day of a seagrass survey.
 - a. Click the “Remove Filter” button at the bottom of the “NPSTORET Result Entry Template.”
 - b. In the “Quick Filter for Activity Start Date” select the first date that was verified.
 - c. Click the “Change Status” button and choose the “On all Station Visits for Project as filtered.”
 - d. In the ‘Set to:’ section choose “Provisional.”

- e. Click “OK” to apply the change.
 - f. Repeat steps b–e for any additional days that were verified.
11. After data verification is performed as described and all discrepancies addressed, the data are referred to the South Florida/Caribbean Network’s marine ecologist for validation and then final certification.

Literature Cited

South Florida/Caribbean Network. 2022. Sample allocation—Version 1.1. South Florida/Caribbean Network Standard Operating Procedure NPS/SFCN/SOP—SEA04. South Florida/Caribbean Network, Palmetto Bay, Florida. Available at:
<https://irma.nps.gov/DataStore/Reference/Profile/2285062> (last accessed February 2022).