



References: The Foundation of DataStore

Please cite this as:

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National Park Service Inventory and Monitoring Division.

Summary

This informational document provides details about the DataStore reference, including an introduction to the reference, descriptions of each reference tab, how to clone references and guidelines for creating new references. For new DataStore users, this entire document should be read before beginning the creation of a new reference.

Change Log

Revision Date	Author	Changes Made	Reason for Change	Release	New Version #

Table of Contents

What is a Reference and why is it Important?	4
Part I. A Tour of the Reference Profile	4
The Core Information Tab	4
Digital Files and Links	6
Permissions	6
Units and Geography	8
Keywords	9
Taxonomy	9
Methods	10
History	10
Version History	10
Related References	11
Part II. Creating a New Reference	14
One Does Not Simply Choose a Reference Type	14
Changing a Reference Type	16
The Clone Wars: Reference Edition	16
Core Information: Just the Facts	18
Permissions	18
Reference Editors	20
Reference Access Level	20
File Access Level	21
Files and Links	24
Units and Geography	26
Keywords	26
Taxonomy	27
Cross Referencing	27

Literature Cited.....	28
Appendix A— Reference Permissions	29
Reference Editors	29
Reference Access Level	29
File Access Level	29
Legal Authority	29
Point of Contact for Non-Public data	33
Appendix B. Reference Types.....	34

What is a Reference and why is it Important?

References are the foundation of DataStore, the ‘Bricks in the Wall.’ Every product in DataStore starts with a reference. When adding a new product to DataStore, remember someone spent weeks, months, or maybe even years working on that piece of art. Take a few minutes and give it the sendoff it deserves. Make sure reference information is both accurate and complete and then sit back and bask in the glow of excellent metadata—and a product that is easy to locate, download, and use.

This document will explain the DataStore Reference, why each component is important, and how to create effective reference metadata.

Part I. A Tour of the Reference Profile

The reference profile is a user’s first impression, so make sure you’re sending out the correct message. This section refers to non-organizational reference types. Projects and Programs are covered in a separate help document.

The Core Information Tab

When you click on a link to go to a DataStore reference, the default landing page is the Core Info tab. The top portion of the Core Info tab contains the following information (see Figure 1):

1. The Reference Type, Reference Code, Status (Active, Draft) and Visibility (Public, Internal). If the reference contains sensitive information, there is also a banner with the Controlled Unclassified Information designation.
2. Functional keys based on your permissions for that specific reference. If you are not a Reference Editor for that reference, you will not see these. These functions are covered in more detail in the Creating a Reference section. The Export Reference Profile is only available for Data Package type references.
3. The Reference Type and Reference Title.
4. The left navigation pane, which provides one-click access to further details about the reference (covered in more detail below).
5. The Digital Files and Links panel lists the Products included in the reference in a condensed format. The number in parentheses is the total number of files and links. There is a scroll bar to scroll through the products, or you can click on the Digital Files and Links tab on the left to open a new window with further information about the files. Note that the Reference and the Files have separate permissions settings. If a file name has a green symbol to the left, it is available for public download. A yellow symbol indicates internal visibility (National Park Service staff and partners), and a red symbol indicates a file that contains Controlled Unclassified Information (CUI), such as

endangered species locations or information about sensitive cultural areas. More information about CUI is found in Appendix A: Reference Permissions.

Files can be downloaded by checking the box to the left of each file name and then clicking Download All or Download Selected in the top right of the Digital Files and Links pane. It is not necessary to select files if you want to use the Download All option.

6. The Citation and Date Published for the Reference. These are required fields and should be in every reference.

The screenshot shows the NPS DataStore interface. The top navigation bar includes links for Home, Search, Reports, Create, My Content, and Administrator. The user is logged in as Wendy_Thorsdatter@nps.gov. The main content area displays the reference profile for 'Data Package: Terrestrial Vegetation Monitoring in National Parks of the Southeast Coast Network, 2019-2023'. The interface includes a sidebar with navigation options like Core Info, Digital Files and Links, Permissions, Units and Geography, Keywords, Taxonomy, Methods, History, and Originating Projects. The main content area displays the reference details, including a table of digital files and links, and citation information. Red numbers 1 through 6 are overlaid on the image to highlight specific features: 1 points to the Data Package (Code: 2305052) - Active PUBLIC status; 2 points to the Add To Collection, Clone, Edit, and Export Reference Profile buttons; 3 points to the Data Package title; 4 points to the Units and Geography link in the sidebar; 5 points to the Digital Files and Links table; and 6 points to the Citation and Date Published section.

Figure 1. The reference profile provides basic information for the selected reference.

The bottom portion of the Core Info tab (Figure 2) contains additional information about the reference and the products included with the reference. These field labels may differ slightly based on the reference type selected, but generally include information about the authors and editors, [ORCID](#) identifiers (if provided), the publisher and location published, a persistent Digital Object Identifier (DOI) if one was assigned at the time of publication, any additional notes about the holding, and whether or not the content was produced by or for the National Park Service.

License information refers to any Creative Commons licenses that are applied to that product. The 'License Info' link will go to the website for the license that is selected. If no license is selected, this button is inactive.

- Reference Editors (previously called Reference Owners) are users that have access to edit the reference. Trained Data Stewards and DataStore Admins also have permission to curate references.
- Reference Access Level is either Public (all users) or Internal (NPS staff and Partners). As of the 4.0 release, Internal access for References has been deprecated. References with a grandfathered 'Internal' profile page should be updated to public once the reference editor has determined no sensitive information is available on the Profile page.
- The File Access Level indicates whether files are available for downloading to:
 - Public (all users),
 - Internal (NPS Staff and partners), or
 - Specific Individuals
- Additional Use Constraints is a notes field for other important information about the reference. For new references, this field will be empty. For references created prior to the 4.0 release, this field may contain information that was visible in version 3.3, but is no longer available, such as Usage or Quality. This information is no longer being collected with the new Permission procedures.

If the reference contains files with sensitive information (internal or specific users), you'll see additional fields with information about the legal authority for withholding the files, as well as the contact email. See 'Creating a New Reference' for more information.

Display Citation: Boyle MF and Thorsdatter W. 2024. Data Package: Terrestrial Vegetation Monitoring in National Parks of the Southeast Coast Network, 2019-2023. National Park Service, Fort Collins CO <https://doi.org/10.57830/2305052>

Current Lifecycle: Active **Reference Type:** Data Package

Permissions
Control who may edit this reference and who has access to both the reference and any associated digital files.

Reference Editors *

Name	User Code	Email
Maxwell (Forbes) B...	mboyle@nps.gov	maxwell.boyle@nps.gov
Wendy Thorsdatter	WThorsdatter@nps.gov	Wendy.Thorsdatter@nps.gov

Previously called Reference Owners. Trained Data Stewards and Admins also have the ability to curate references.

Reference Access Level

All DataStore landing pages must be visible to the public. Use the "File Access Level" below if there is a legal authority to protect the files.

☒ Open / Public

☐ Internal (deprecated)

File Access Level

Who can access the file(s)?

☒ Open / Public

☐ Internal (all employees and credentialed contractors / cooperators)

☐ Specific Individuals

Additional Use Constraints

File Sensitivity: Not Sensitive | Usage: none | Quality: High

Figure 4. Graphic showing information available on the 'Permissions' tab.

Units and Geography

The Units and Geography tab contains geographical information about the content, like Producing Unit, Content Unit, and geospatial points if provided (Figure 5).

Data Package (Code: 2305293) - Active

PUBLIC Add To Collection Clone Edit Export Reference Profile

Southeast Coast Network Assessment of Estuarine Water Quality at Fort Pulaski National Monument, 2007-2023

Producing Unit Link(s)

Unit Name	Unit Code
Southeast Coast Network	SECN

Content Unit Link(s)

Unit Name	Unit Code
Fort Pulaski National Monument	FOPU

Geography Show All

Description 1
FOPU01_2007
FOPU01_2014
FOPU01_2018
FOPU01_2023
FOPU02_2007

Figure 5. Geographic information relevant to the reference content.

Keywords

The keywords tab contains user-defined keywords and a selection of custom vocabularies and terms, if utilized at publication. To increase findability of your reference, include at least one keyword. It is better to spell keywords out instead of using acronyms (Figure 6).

The screenshot shows the 'Keywords' tab for a data package titled 'Terrestrial Vegetation Monitoring in National Parks of the Southeast Coast Network, 2019-2023'. The interface includes a sidebar with navigation options: Core, Permissions, Files and Links, Units and Geography, Keywords (selected), Taxonomy, Methods, Cross-References, Version History, and History. The main content area is divided into two sections: 'Keywords, Vocabularies and Terms' and 'Keywords'. The 'Keywords' section contains a text input field with the text 'Database, Forest Health, MS Access, Terrestrial Vegetation, Vegetation Plot'. The 'Vocabularies and Terms' section features a table with columns for 'Vocabulary 1' and 'Term'. The table lists three entries under 'Ecological Framework': 'Biological Integrity | Invasive Species | Invasive/Exotic plants', 'Biological Integrity | Focal Species or Communities | Vegetation Complex', and 'Landscapes | Landscape Dynamics | Land Cover and Use'. There are 'Add' and 'Remove All' buttons at the top right of the table.

Vocabulary 1	Term
Ecological Framework	Biological Integrity Invasive Species Invasive/Exotic plants
Ecological Framework	Biological Integrity Focal Species or Communities Vegetation Complex
Ecological Framework	Landscapes Landscape Dynamics Land Cover and Use

Figure 6. Graphic displaying keywords and vocabularies available on the 'Keywords' tab.

Taxonomy

The 'Taxonomy' tab contains taxonomic information contained in the reference. The top panel contains records that were entered manually as part of the reference creation. The bottom panel contains taxonomic information that was extracted from metadata. This extracted metadata and resulting taxonomy is only available in Data Package type references (Figure 7).

The screenshot shows the 'Taxonomy' tab for a data package titled 'Southeast Coast Network Landbird Monitoring in the Southeastern United States, 2025 cumulative data package'. The interface includes a sidebar with navigation options: Core Info, Digital Files and Links (4), Permissions, Units and Geography, Keywords, Taxonomy (182) (selected), Methods, History, and Originating Projects (1). The main content area is divided into two sections: 'Taxonomic Records for this Reference (0)' and 'Taxonomic Records Extracted from Metadata for this Reference (182)'. The 'Taxonomic Records Extracted from Metadata' section contains a table with columns: Source, Reported Taxon ID, Taxon ID, Rank, Scientific Name, Common Names, Kingdom, Phylum, Class, Order, Family, and Genus. The table lists 182 records, including 'Acadian Flycatcher', 'Accipiter cooperii', 'Agelaius phoeniceus', 'Aix sponsa', 'American Crow', 'American Redstart', 'Ammodramus maritimus', 'Ammodramus nelsoni', and 'Antrostomus carolinensis'. The table is scrollable, and a search bar is visible at the bottom.

Source	Reported Taxon ID	Taxon ID	Rank	Scientific Name	Common Names	Kingdom	Phylum	Class	Order	Family	Genus
itis	28307		unknown	Acadian Flycatcher							
	21389		unknown	Accipiter cooperii							
	21396		unknown	Agelaius phoeniceus							
	21399		unknown	Aix sponsa							
itis	28262		unknown	American Crow							
itis	28282		unknown	American Redstart							
https://itis.gov	1058	179346	species	Ammodramus maritimus	Seaside Sparrow						
	28298		unknown	Ammodramus nelsoni							
https://itis.gov	1060	1077350	species	Antrostomus carolinensis	Chuck-will's-widow	Animalia	Chordata	Aves	Caprimulgiformes	Caprimulgidae	Antrostomus

Figure 7. Graphic displaying taxonomic information available on the Taxonomy tab.

Methods

For Data Package type references, there will be a 'Methods' tab on the left below taxonomy. This mirrors information in the methods section of the xml metadata file and is populated when the xml metadata is extracted (Figure 8).

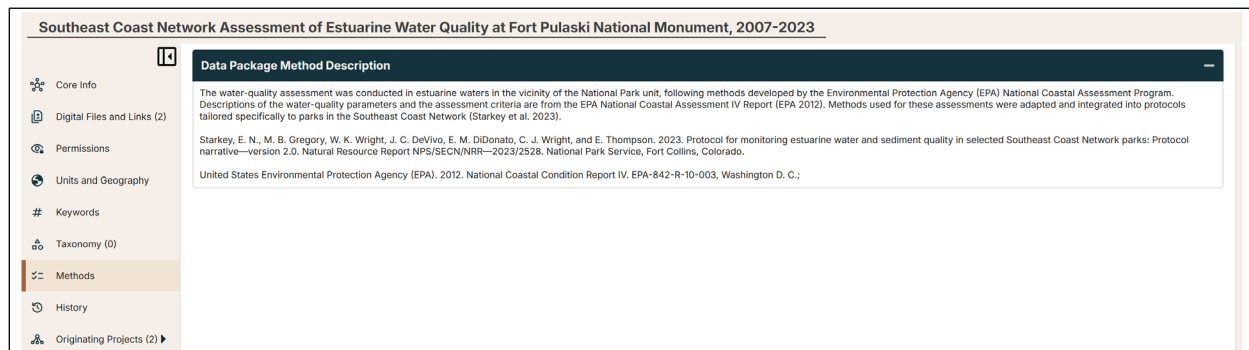


Figure 8. A sample Methods section.

History

The History tab contains important information about when the reference was created, activated, and edited, who performed those actions, and additional metadata information for Data Package type references (Figure 9).

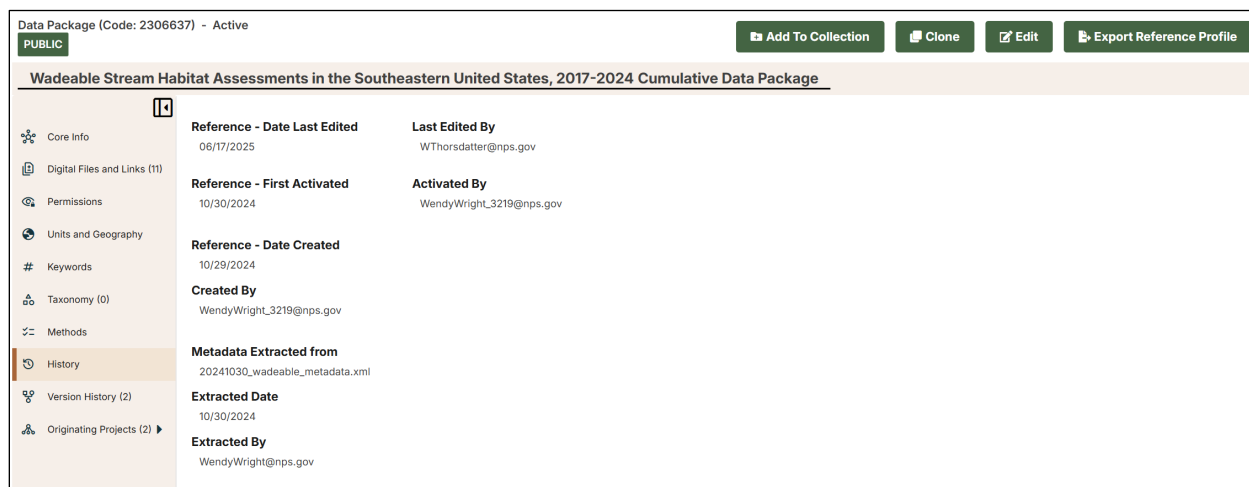


Figure 9. Graphic displaying reference information available on the History tab.

Version History

The Version History tab appears in the left navigation bar when there is more than one version of the document. It will show information for both prior and subsequent versions (Figure 10).

Updating References in DataStore 4.0 — Version 1.1					
Core Info Digital Files and Links (1) Permissions Units and Geography Keywords Taxonomy (0) History Version History (2) Originating Projects (1) ▶	Version History (2)				
	File Count	Code	Type	Title	Year
	1	2316402	Help Documentation	Updating References in DataStore 4.0 — Version 1.1	2025
	1	2316350	Help Documentation	Updating References in DataStore 4.0 — Version 1.0	2025

Figure 10. Graphic displaying version information on the version history tab..

Related References

On the left navigation bar, below the History tab there may be additional tabs to show related references in Data Store. The count in parentheses refers to the number of related references; however, these tabs do not show if the reference count is zero or the relationship does not apply. For example, if a published report is not included in a project, the ‘Originating Projects’ tab would not appear in that reference.

Depending on the specific reference, one or more of the following tabs may show:

1. **Related**—Some references, including those for report series, books, newsletters, and conference proceedings, may function as containers and organize one or more ‘child’ references, e.g., a journal reference with several related journal issues (Figure 11) or a Project containing several Products.

Journal (Code: 2017815) - Active

PUBLIC

Add To Collection

Clone

Edit

Palaeogeography, Palaeoclimatology, Palaeoecology

Core Info

Digital Files and Links (1)

Permissions

Units and Geography

Keywords

Taxonomy (0)

History

Related Journal Issues (38)

Digital Files and Links (1)

Download All

Download Selected

	Code	Type	Download Link	Size	Description
☐	753545	Link	https://www.sciencedirect.com/journal/palaeo...		Journal Home page

Citation

Palaeogeography, Palaeoclimatology, Palaeoecology, ScienceDirect
<https://irma.nps.gov/DataStore/Reference/Profile/2017815>

Description

Palaeogeography, Palaeoclimatology, Palaeoecology publishes high quality studies in the field of palaeoenvironmental geoscience. We seek submissions that address broad scientific questions of interest to a wide international community and focus on significant events in the evolution of life and environment. The reach of the journal covers the entire deep-time history of the biosphere from the Archaean through to the Quaternary. A key criterion for consideration is that submissions address some key aspect of palaeoenvironmental change as their major theme including, but not limited to, studies of palaeoecology, palaeoclimatology, and palaeobiogeography. We also look favourably on submissions that use a multi-disciplinary approach and/or bring together large quantitative datasets. As the journal aims to cut across the boundaries of established sciences, every effort should be made to present research findings in a way that is understandable for a general readership.

Publisher

ScienceDirect

Origination

The information resource described by this reference was not created by or for the NPS

Figure 11. Example of Related Journal Issues on a Journal reference.

2. Product—If the reference type is a project, this tab will list each unique reference included as part of the project. The number in parentheses is the total number of products in that project (Figure 12).

File Count	Code	Type	Title	Year
1	2316562	Help Documentation	Adding Series Items in DataStore 4.0 — Version 1.0	2026
1	2316402	Help Documentation	Updating References in DataStore 4.0 — Version 1.1	2025
1	2299325	Help Documentation	Automatic DOI Registration for DataStore Datasets	2023
1	2299714	Help Documentation	DataStore Search Ranking Documentation	2023
1	2274106	Help Documentation	Digital Object Identifiers and the Data Store - FAQ	2020
1	2299326	Help Documentation	Extract an EML Document to Populate a Data Package Reference	2023
1	2252201	Help Documentation	How to Clone a Reference in NPS DataStore	2018
1	2252190	Help Documentation	How to Create a Reference in the NPS DataStore	2016
1	2252204	Help Documentation	Creating Quality Content in the NPS DataStore	2004
1	2252200	Help Documentation	Adding the Cross-Reference Link in the NPS DataStore	2005

Figure 12. Products panel.

3. Originating Project and Related Products—If this reference is nested in a project, the Originating Projects tab will appear on the left. Clicking on the Originating Projects tab will expand it to show a list of all the projects that include that reference. Clicking on one of the Projects listed will open a panel that shows all the references in that project (Figure 13).

File Count	Code	Type	Title	Year
	2310058	Project	DataStore Help Documentation	2010
1	2252200	Help Documentation	Adding the Cross-Reference Link in the NPS DataStore	2005
1	2299325	Help Documentation	Automatic DOI Registration for DataStore Datasets	2023
1	2252204	Help Documentation	Creating Quality Content in the NPS DataStore	2004
1	2299714	Help Documentation	DataStore Search Ranking Documentation	2023
1	2274106	Help Documentation	Digital Object Identifiers and the Data Store - FAQ	2020
1	2299326	Help Documentation	Extract an EML Document to Populate a Data Package Reference	2023
1	2252201	Help Documentation	How to Clone a Reference in NPS DataStore	2018
1	2252190	Help Documentation	How to Create a Reference in the NPS DataStore	2016
1	2252187	Help Documentation	How to create and manage a collection of references in the NPS DataStore	2002
1	2252203	Help Documentation	How to Link Products to a Project in NPS DataStore	2018

Figure 13. Originating Projects panel.

4. See Also—A list of cross-references or other relevant resources (Figure 14).

Published Report (Code: 2299077) - Active

PUBLIC

[Add To Collection](#) [Clone](#) [Edit](#)

Protocol for monitoring estuarine water and sediment quality in selected Southeast Coast Network parks: Protocol narrative—version 2.0

See Also (23)

File Count	Code	Type	Title	Year
1	2284582	Standard Operating ...	SOP 11.06 Shipping and tracking of laboratory samples Version 2.0	2022
1	2284576	Standard Operating ...	SOP 1.2.01 Generating spatially-balanced sampling locations for coastal assessments using ArcGIS 10 Version 2.0	2022
1	2284594	Standard Operating ...	SOP 1.2.02 Park-wide Assessment Navigation and Field Evaluation of Sampling Locations—Version 2.0	2022
1	2284595	Standard Operating ...	SOP 1.2.03 Field Water Quality Measurements for Coastal Assessments Version 2.0	2022
1	2284596	Standard Operating ...	SOP 1.2.04 Water Sample Collection for Analysis of Nutrients and Chlorophyll a for Parkwide Assessments Version 2.0	2022
1	2284597	Standard Operating ...	SOP 1.2.05 Park-wide benthic sediment sample collection and processing Version 2.0	2022
1	2284602	Standard Operating ...	SOP 1.2.07 Laboratory analysis criteria for estuarine water and sediment quality monitoring Version 2.0	2022
1	2284578	Standard Operating ...	SOP 1.2.08 Fixed-station water quality monitoring station installation and maintenance - Version 3.0	2022
1	2284573	Standard Operating ...	SOP 1.2.09 Fixed-station water quality VCI FQC data entry, maintenance, calibration, validation and retrieval - Version 2.0	2022

Figure 14. References that are linked to this reference.

Part II. Creating a New Reference

So, you're ready to create a new reference. This section provides background and details on many features of the DataStore reference. If you're new to DataStore, it's good to read this section first and understand the purpose of each feature. If you're a DataStore Jedi, this section also contains information on new 4.0 release features that you might find useful.

Where to begin? First, and most importantly, make sure it isn't already published! Do a quick search, especially if you stumbled across an older document that you think merits publication. There are literally thousands of references on DataStore that are looking for a digital file to feel complete. If you find an existing reference that you think might work, send a message to NRSS_DataStore@nps.gov and request access. The DataStore Team simply loves playing file and reference matchmaker!

Second, is there something very similar already published? DataStore has a reference creation cheat in the form of a clone button. See the cloning section for more info.

Once you've decided a new reference is necessary, it's time to decide what kind.

One Does Not Simply Choose a Reference Type

Selecting a reference type might be the hardest decision you have to make when publishing in DataStore. Is it audio? Is it data? Is it audio data? Reference type selection affects search results and the discoverability of your reference. The DataStore team is reviewing how reference types are used, and a simplification is expected in a future release. In the meantime...

There are currently five reference-type groups containing more than 60 options. DataStore is in the process of simplifying these options, but for now, you should focus on the 'form' of the product, and leverage keywords and vocabularies for function. Photographs taken during field data collection belong in photographs, with keyword tags for data, protocol, etc.

DataStore version 4.0 has made the selection process slightly easier. First, choose your reference group. There are five:

- **Code**—Just like it sounds. Scripts, code collections, code packages, it all goes here. Common data types are R or Python scripts, csv, txt, or xlsx files, SQL scripts, or Access databases, but your mileage may vary. The Code reference may also contain associated documentation (such as README files). If your code project is housed in a version control system, you can upload the entire repository.
- **Data Sets**—Collections of data. Spreadsheets, data packages, tabular or geospatial, vector or raster. If it was collected, it's data! This includes field data sheets or other

unstructured data, even though they may be scanned documents. 3D models and relational databases also go here.

- Document—Reports, briefs, methods, standard operating procedures, letters, articles, compliance and legislative documents, books, brochures, posters, and academic papers.
- Multimedia—Audio, video, photos, visual media, web-based content, and presentations
- Organizational—These are references you create to organize other references, like projects or programs. They also include several series groups, like Newsletter and Published Report Series, but series creation must be done by a DataStore administrator.
- If you know what kind of reference type you have, you can choose ‘All Reference Type Groups’ and it will give you the full list to scroll through.

Once you’ve pinned down your group, the second dropdown lists everything within that group. Appendix B has a full list of reference type groups, reference types, and definitions. See Figure 15.

NPS DataStore
Integrated Resource Management Applications

HOME ▾ SEARCH ▾ REPORTS CREATE ▾ MY CONTENT ▾ ADMINISTRATOR ▾

Select a Reference Type

You can view a [list of all Reference Types and their descriptions](#) or learn more about [how to create a reference](#).

Please help to prevent duplicate content and do a [search](#) of DataStore before uploading.

Reference Type Group ⓘ

Documents ▾

Reference Type (Documents)*

Resource Brief ▾

Resource Brief: A short summary concerning the status of park resources.

CREATE

Figure 15. Example of the ‘Select a Reference Type’ screen.

A note about series types: DataStore is in the process of changing how we manage series reference types. Users are no longer allowed to manually fill in information about parent or grandparent references; for example, a Journal Issue or Journal information

for a Journal Article. Child references such as Journal Articles and Newspaper Articles must be linked to an existing parent reference.

Additionally, due to ongoing curation of hierarchical series references, creation of parent and grandparent references is limited to admins only. If you do not see the record you need to link to, please reach out NRSS_DataStore@nps.gov. More information is available in the help document [Adding Series Items in DataStore 4.0—Version 1.0](#) (Thorsdatter and Patterson 2026).

A note about paywalled and other articles: if you are creating a reference for an article (Journal, Newspaper, etc.) make sure you check copyright and license information. If the content is paywalled or otherwise restricted, access should be managed by the publisher unless redistribution permission is stated in the copyright or license information.

Changing a Reference Type

If you are a designated editor for a reference, you can change the reference type, with limitations. You will **not** be able to change the reference type if:

- There has been a Digital Object Identifier (DOI) issued
- The reference is in a Program or Project. For these, you can remove the reference, change the reference type, and then add it back.
- The reference has been versioned. For these, you can break the link for the version, and then re-link it once you've changed the reference type.

To change the reference type, go into Edit, click 'Change Type' on the left panel, and select a new reference type. Make sure to save and reactivate your reference.

The Clone Wars: Reference Edition

Cloning references is an easy and effective way to publish new versions of old things, or multiple versions of similar things. It's especially handy for serial documents, like annual data reports or standard operating procedures that will be versioned, or similar references, like reports that cover one topic but are published individually across several parks. To clone a reference, open the reference you'd like to copy. Click the green Clone button on the top right (Figure 16).

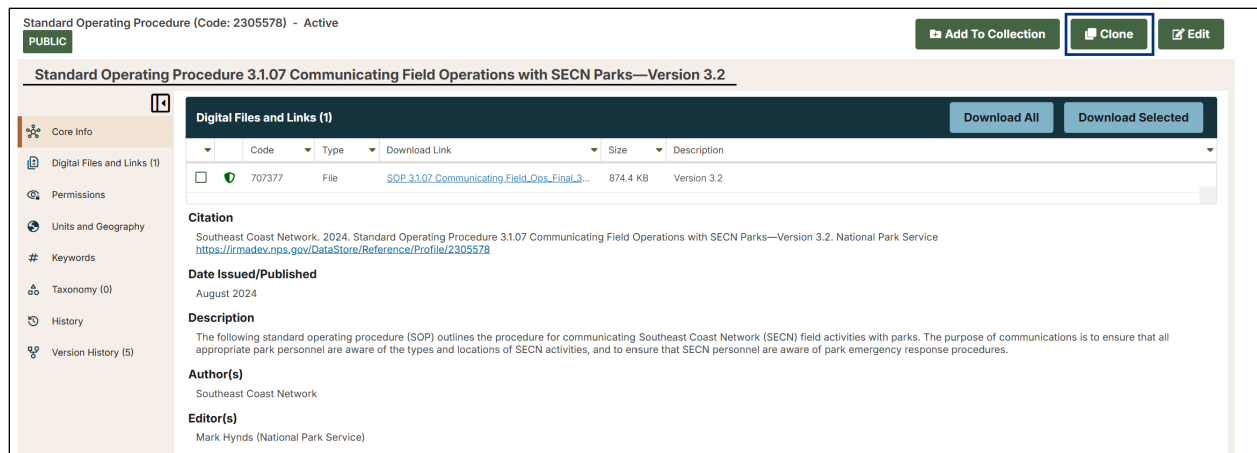


Figure 16. Graphic showing the location of the 'Clone' button.

A window will open, allowing you to choose additional options (Figure 17). The checkboxes are self-explanatory and allow you to decide whether to keep existing owners, unit links, and cross-references.

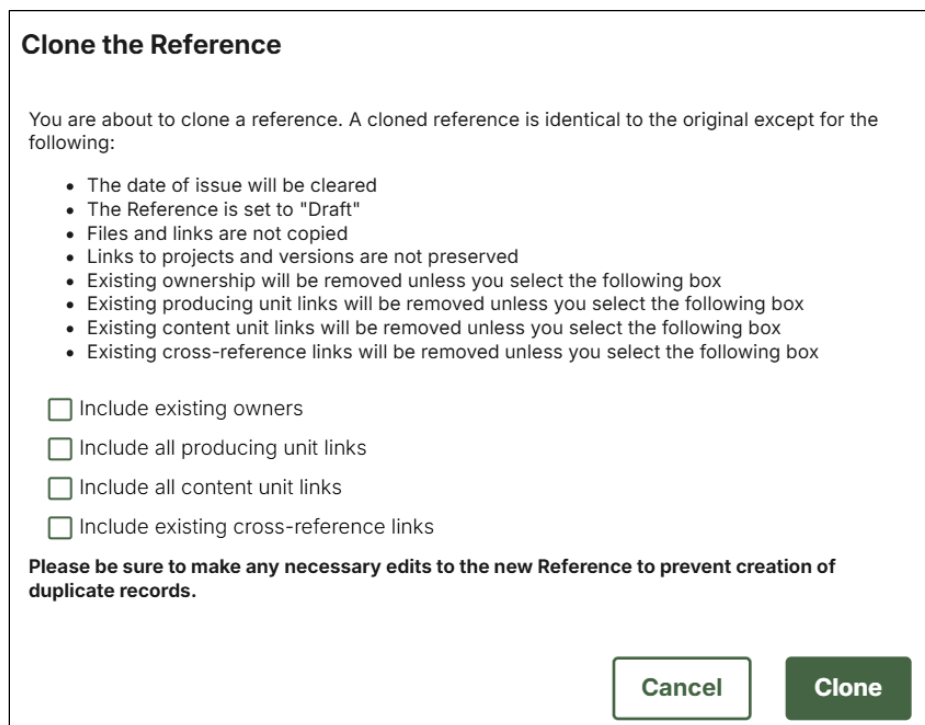


Figure 17. The popup box with options for reference cloning.

A new reference will open, ready for you to fill in the missing pieces. Make sure to check or update all fields!

Now that you've created your new reference, it's time to fill in some blanks!

Core Information: Just the Facts

The core info tab contains the basics of your reference. For better search results and metadata, be thorough when filling in the details. Fields on the core tab vary by reference type but generally speaking, you'll need the following:

Title—Make sure it is descriptive and try to include the 'what where when' in the title, for example 'Cute seal population counts in the pacific northwest in 2025.' Try to avoid abbreviations or acronyms such as park codes. Instead, spell out the park or network name.

Date Issued—Generally the date first made available to an audience outside of the creators. For older documents this can be as vague as the year, for newer documents you can use an exact date.

Created by or for the NPS—Was this product created by the NPS, or for the NPS by a partner or contractor with NPS funding? This is an important field, especially if you're assigning a Digital Object Identifier. DOIs cannot be assigned in DataStore to products that were NOT created by or for the NPS. The general rule of thumb is that if a product was funded in whole or in part, sponsored by, or permitted by the NPS, it is considered 'By or for the NPS.' This includes staff effort such as research, field work, or authorship.

Authors—A list of all authors or creators. Most programs and divisions have individual authorship guidelines that can be followed for most reference types. Data Packages have [specific authorship guidance provided by IMD](#).

Publisher—For NPS series, such as science reports, this should be the National Park Service. For less formal documents such as standard operating procedures or programmatic documents, this can be a program, division, network, or other branch of the NPS.

Notes—This is a generic field to be used in whatever way best suits the user.

License—License information refers to any Creative Commons license that is applied to that product. The 'License Info' link will go to the website for the license that is selected. If no license is selected, this button is inactive.

Other fields may vary based on reference type selected.

Permissions

One of the biggest changes made in DataStore 4.0 is how permissions are handled. Notably, it is no longer possible to restrict a reference profile. All DataStore references must have a public landing page. The File Access options have not changed, but

limiting file access now requires providing a legal authority (a dropdown list of the most common is provided), and a contact name and email for users requesting access to the files. These changes are part of an effort to make DataStore more compatible with NARA requirements.

Appendix A contains detailed information about permissions settings and a table of legal authorities. This list of legal authorities is also provided in the dropdown box when filling out the permissions tab on a new reference or when editing a reference.

Before you create your reference and fill in the permissions tab, you'll need to have on hand the following information:

- **Reference Editors**—Previously called reference owners, these are the individuals that will have access to edit or share this reference. Reference editors must be NPS staff or cooperators (anyone with an @nps.gov email, including partners and contractors), or previously authorized partners (currently only NPS staff consolidated to DOI that had existing DataStore references).
- **Reference Access Level**—This will always be public. If you edit an older reference, you will be required to remove any sensitive information from the profile and change it from restricted (Internal or Specific Individuals) to public.
- **File Access Level**—This will be either
 - Public (no restrictions),
 - Internal (all employees and credentialed contractors / cooperators), or
 - Specific Individuals.
- **Additional Use Constraints**—This is a notes field for the user to provide any additional information deemed helpful to users. This field is not required.

Note: To restrict file access, you must have a listed legal authority and the name of the person making that decision, along with a contact email address. The contact name provided is for administrative use only and is not made available to DataStore users. The contact email address is made public to DataStore users that may request access to those files. Access to restricted files can be granted by any reference editor, trained Data Steward, or DataStore Administrator.

Once you've gathered your information, proceed with filling in the permissions tab.

Reference Editors

Start with the Reference Editors. Click the Add button, and choose whether the Editor is an NPS individual (any staff member with an @nps.gov email) or a DOI individual (Figure 18).

The screenshot shows a web interface titled 'Permissions' with a subtitle 'Control who may edit this reference and who has access to both the reference and any associated digital files.' Below this is a section titled 'Reference Editors *'. It contains a table with three columns: 'Name', 'User Code', and 'Email'. The table lists three editors: Christopher (Stephen) Cooper, Maxwell (Forbes) Boyle, and Wendy Thorsdatter. To the right of the table is an 'Add' button with a dropdown arrow. The dropdown menu is open, showing two options: 'NPS Individual' and 'DOI Individual'.

Name	User Code	Email
✕ Christopher (Stephen) Cooper	cscoper@nps.gov	Christopher_Cooper@nps.gov
✕ Maxwell (Forbes) Boyle	mboyle@nps.gov	maxwell_boyle@nps.gov
✕ Wendy Thorsdatter	WThorsdatter@nps.gov	Wendy_Thorsdatter@nps.gov

Figure 18. A graphic showing the Add options for Reference Editors.

A popup window will appear (Figure 19). Begin typing the user's name. You can start with first name, last name, or user ID. The field should auto-populate based on user entry. If the user has provided their [ORCiD](#) in their user profile ([myaccount.nps.gov](#) under position information) it will also populate here.

NOTE: If a user has an ORCiD profile set up to allow automatic population, and their ORCiD is provided in their profile, and a DOI is assigned to the reference, the reference information should automatically appear in the user's ORCiD account within a day or two.

The screenshot shows a 'Add an Owner' popup window. It has a 'User' search field with a dropdown arrow. The search results show 'Wendy Thorsdatter (Wendy_Thorsdatter@nps.gov)'. Below the search field are labels for 'Last Name' and 'User Code'. At the bottom are 'Close' and 'Add' buttons.

Figure 19. A graphic showing the Add an Editor window.

Continue this process until all Reference Editors are entered. The next step is the Reference Access Level

Reference Access Level

For new references, all DataStore landing pages must be publicly accessible (Figure 20).

Reference Access Level ⓘ *

● All DataStore landing pages must be visible to the public. Use the "File Access Level" below if there is a legal authority to protect the files.

☒ Open / Public

☐ Internal (deprecated)

Figure 20. Reference Access Level selection options.

If you are editing an existing reference Created prior to the release of DataStore 4.0, there is additional guidance of requirements to update references available in [Updating References in DataStore 4.0—Version 1.1](#) (Thorsdatter 2025)

File Access Level

You have three options for File Access:

- Open/Public allows full access of all files to any DataStore user, both internal and public. The National Park Service strives to provide public access to all files unless there exists legal authority to withhold access. For example, files containing Personally Identifiable Information (PII), information about the location of sensitive or exploited natural resources, or copyrighted information, should not be shared. Appendix A contains detailed information about existing legal authorities. Specific guidance on what information can and cannot be shared may differ across different park units.

If you select Open / Public (Figure 21), no other selections are required, and you can move on to the 'Additional Constraints' field.

File Access Level ⓘ *

Who can access the file(s)?

☒ Open / Public

☐ Internal (all employees and credentialed contractors / cooperators)

☐ Specific Individuals

Additional Use Constraints

Additional Use Constraints

Figure 21. File access Level options with 'Open / Public' selected.

- If you select Internal (Figure 22), you are required to select at least one legal authority (only one is required, additional selections are optional). You must provide a contact name for the person making the decision to restrict file access. This name is only available to DataStore administrators and is not made available to the public. You must also provide an @nps email address for users requesting access to the files. This can be an individual email address or a more generic mailbox. It does need to be an email address that is monitored regularly. **You should not leave the default contact information.**

NOTE: Internal access allows National Park Service staff and credentialed contractors and cooperators to download files.

The screenshot shows a web form titled "File Access Level" with a blue information icon and a red asterisk. The form is divided into several sections. The first section, "Who can access the file(s)?", has three radio button options: "Open / Public", "Internal (all employees and credentialed contractors / cooperators)" (which is selected), and "Specific Individuals". The second section, "What is the legal authority for protection?", contains a dropdown menu with the text "Select the legal authorities that apply". Below this is a table with two columns: "Marking" and "Legal Authority (drag and drop to change order)". The table has one row with the marking "CUI//SP-NPSR" and the legal authority "National Park System Resources". The third section, "Who is the NPS point of contact (and email) for this restriction?", includes a note: "This information will be used if there are future questions about these restrictions. Any individual or group email ending in nps.gov is acceptable." It has two sub-sections: "Point of Contact (This is kept internal)" with a text field containing "I. M. Groot", and "NPS email (This is shared publicly)" with a text field containing "imgroot@nps.gov". The final section, "Additional Use Constraints", has a text area containing the text "Please do not make files available to Dr. Strange."

File Access Level ⓘ *

Who can access the file(s)?

☐ Open / Public

☒ Internal (all employees and credentialed contractors / cooperators)

☐ Specific Individuals

What is the legal authority for protection?

Select the legal authorities that apply

Marking	Legal Authority (drag and drop to change order)
CUI//SP-NPSR	National Park System Resources

Who is the NPS point of contact (and email) for this restriction? *

🔴 This information will be used if there are future questions about these restrictions. Any individual or group email ending in nps.gov is acceptable.

Point of Contact (This is kept internal) *

I. M. Groot

NPS email (This is shared publicly) *

imgroot@nps.gov

Additional Use Constraints

Please do not make files available to Dr. Strange.

Figure 22. File Access Level options with 'Internal' selected.

Appendix A contains detailed information about the legal authorities provided in the dropdown selection, and every effort was made to cover all existing scenarios. “But what if none of those apply to me?!” you ask in a panicked voice? We’ve got you covered.

If you have a legal authority that is not listed in the dropdown, select ‘Other / User Defined Authority.’ With this selection, two additional fields will appear. Fill in the name of your custom legal authority, and the justification for that authority (Figure 23). These custom authorities will be monitored and added to the existing dropdown list when appropriate. Creative use of the custom authority selection to limit file access when legal authority doesn’t exist is discouraged.

What is the legal authority for protection?

Select the legal authorities that apply

	Marking	Legal Authority (drag and drop to change order)	
		CUI//SP-NPSR	National Park System Resources
		Other	User Defined Authority

User Defined Authority *

Other Authority *

Hawkins Lab

Justification *

Portal locations to the upside down should not be revealed.

Who is the NPS point of contact (and email) for this restriction? *

This information will be used if there are future questions about these restrictions. Any individual or group email ending in nps.gov is acceptable.

Point of Contact (This is kept internal) *

Henry Creel

NPS email (This is shared publicly) *

henry_creel@nps.gov

Figure 23. File Access Level options with 'Other Authority' selected.

VERY IMPORTANT NOTE: For References created prior to 4.0 that had file access limited to Internal or Specific Users, a default legal authority titled 'For Internal Use Only' is selected. In this case a 'Justification' field appears that contains a disclaimer, and any permissions selections that were made when the reference was originally created, such as Copyright or Quality (Figure 24). If there is not a legal authority to continue restricting access, the File Access option should be changed to 'Open / Public.' If there is legal authority, it should be selected from the dropdown menu. **Once the proper legal authority is selected and the record is saved, the information in the 'Justification' box is no longer necessary, and this box will no longer appear.** As of the 4.0 release, DataStore no longer collects sensitivity designations, copyright or other usage information, or quality data.

What is the legal authority for protection?

Select the legal authorities that apply

	Marking	Legal Authority (drag and drop to change order)	
		Other	For Internal Use Only

This material needs to be evaluated for potential CUI. Materials in this category are restricted from full and open access but may need to be provided to the public upon request.

Justification *

This material contains information categorized as sensitive within DataStore prior to alignment with the government-wide CUI framework, or as justified under another legal authority. Materials in this category remain restricted from full and open access until validated by NPS. File Sensitivity: No Restriction | Usage: Unknown | Quality: NULL | Sensitivity Qualifiers: NULL

Figure 24. Sample default values for references that have grandfathered restricted file access.

ADDITIONAL IMPORTANT NOTE: Reference editors will be given a reasonable amount of time to curate references that are currently restricting file access without indicating a legal authority. Reference editors will be expected to update the reference

and either make the file access public OR provide a legal authority and contact information. Your references will not be made public without your knowledge. If you need assistance with this curation effort, please contact the DataStore team via email at NRSS_DataStore@nps.gov. We are happy to help!

- And finally, Specific Individuals allows file access to a designated list of individuals. The options are the same as Internal, with one extra field to add users that will have file access. The 'Add' box works the same as if you were adding an owner.

Files and Links

The Files and Links tab is where you will select what digital files, external links, or you want to add to your reference. For digital files, click Add and a window will pop up with additional options. You can add one or multiple files, either by browsing or by using the drag and drop option (Figure 25).

Add Digital File(s)

Click Browse to select files to upload or Drag and Drop files directly to the "Add Digital File(s)" file grid panel (lower pane)

You can upload multiple files at one time:

- To select non-contiguous files, "Ctrl + left-click"
- To select contiguous files, "Shift + left-click"

After uploading files, click the edit icon in the row, to edit the "508 Compliant" or "Description" values.

Browse...

Cancel

Clear

	FileName	Size	Type	Status	Progress
✕	Screenshot 2025-12-04 091651.png	23.1 KB	image/png	ready	0%

Close

Upload

Figure 25. The 'Add Digital Files' window.

After you've completed your file uploads, click on the edit icon to the left of each individual file name to edit the description or 508 information (Figure 26). Click save, and then close.

Edit Digital File(s)

Description

Operational review for CY 2023

508 Compliance

508 Compliant

Close Save

Figure 26. The 'Edit Digital File(s)' window.

For external links, you'll need the url, the last date verified, and a description (Figure 27).

Add External Link

Url*

https://www.dundermifflin.com

Last Verified*

12/04/2025

Description

Paper supplies website

Cancel Add

Figure 27. The 'Add External Link' window.

To add a web service (not common), you'll need the service type, endpoint, and description.

Once you've added all your Files and Links, click save and move on to the Units and Geography tab.

Units and Geography

The Units and Geography tab provides information about the Producing Unit, which could be a park, network, or other division of the National Park Service. The Content Unit specifies which park or division units are included in the reference. For example, if an I&M network produces a data summary about seals in a park, the Producing Unit would be the network, or IMD, or both. The Content Unit would be the park(s) that is/are the topic of the data summary. The Geography panel includes the points and polygons included in the files. This will include polygons for the units selected as Producing and Content Units, if you select 'Add related geography' when adding those units. It will include linked units if that box is selected. For example, selecting a network as the producing unit and checking 'Include Linked Units' will add the park units linked to that network.

For a data package, if geography is included in the extracted metadata, those points and polygons will also appear in the geography tab once the reference is activated (Figure 28).

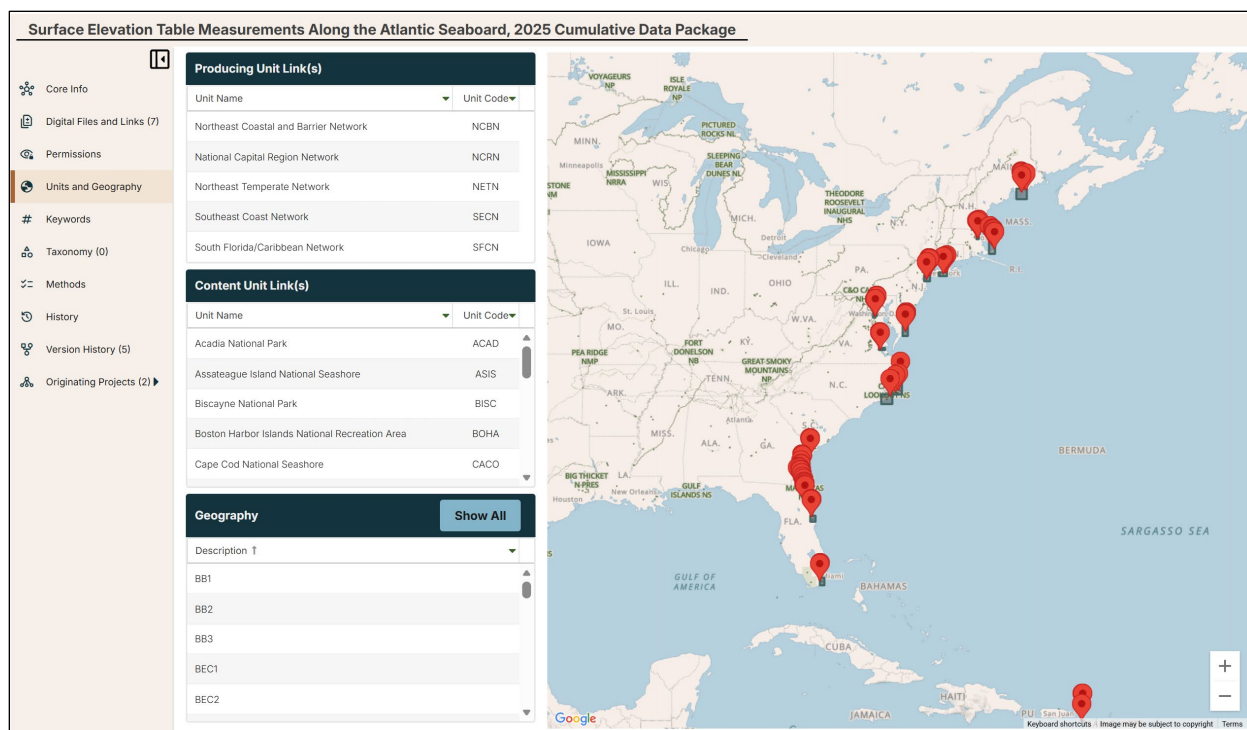


Figure 28. Units and Geography on an activated Data Package Reference.

Keywords

Keywords may be manually entered, or defined vocabulary may be assigned. If you are defining your keywords, it's helpful to spell them out and not use acronyms. The use of at least one keyword will increase findability in searches.

Defined vocabularies include terms for Ecological Framework, NPS.gov subject sites, and Cultural Resources. To add defined vocabulary, simply click 'add', select the desired vocabulary, and scroll through the options. Multiple vocabularies can be assigned.

Taxonomy

Taxonomy may be manually added by searching by taxa or searching by taxa code. Click 'add,' select your option, and click search.

Taxonomy may also be added by extracting eml metadata from a Data Package. Extracted taxonomy will show up in the bottom panel of the taxonomy page.

Cross Referencing

Creating cross references is an efficient way to link related products; for example, linking a protocol to the related standard operating procedures, or linking metadata code to data packages. To add a cross reference in edit mode, simply click the 'Add' button on the Cross References tab. Click 'Code Search' to add by reference code, or 'Text Search' to

Literature Cited

Thorsdatter, W. and J. Patterson. 2025. Updating References in DataStore 4.0—Version 1.1. National Park Service Inventory and Monitoring Division, Ft. Collins, CO. Available at: <https://irma.nps.gov/DataStore/Reference/Profile/2316402> (Last accessed February 24, 2026)

Thorsdatter, W. and J. Patterson. 2026. Adding Series Items in DataStore 4.0—Version 1.0. National Park Service Inventory and Monitoring Division, Ft. Collins, CO. Available at: <https://irma.nps.gov/DataStore/Reference/Profile/2316562> (Last accessed February 24, 2026)

Appendix A— Reference Permissions

In DataStore, sensitivity and permissions settings play an important role in protecting resources and permitting public access. This section provides guidance for Data Store users to make informed decisions about their resource availability. Several features have been added to DataStore to enable compliance with the [Open Government Data Act of 2018](#). DataStore now interacts with [Data.gov](#) to provide additional public access to National Park Service documents. How, or if, your reference is mined by other sources is contingent on settings in this section.

Reference Editors

Reference editors (previously called reference owners) are given full access to edit the reference. The reference creator is a reference editor by default. You should provide access to a least one other person. To add a reference editor, while in Edit mode, Click the 'Add' button and select NPS Individual (for anyone with an @nps.gov email) or DOI Partner (for approved DOI partners). Non-NPS staff may not act as a reference editor. Begin typing the person's name and select the user from the drop-down menu. Click 'Add' and then close.

Reference Access Level

Reference access determines who can see the profile information. Public allows the reference profile to be viewed by everyone and is the default setting. The Internal setting allowed NPS staff and partners to view the profile but has been deprecated in release 4.0. In all cases, the Reference Access Level should be set to Public. It is up to the reference creator to make sure there is no sensitive information in the reference profile.

File Access Level

File access applies to all digital files in the reference. Open/Public allows the files to be seen and downloaded by all users. Internal allowed the files to be seen and downloaded by internal NPS staff and credentialed contractors and partners. Specific Individuals allows you to assign access to internal users individually. Data.gov will only harvest records designated as Public.

Legal Authority

The legal authority section provides more information about the sensitivity of attached digital files. If you select Internal or Specific Individuals, additional sections will appear. Before limiting access to files, if you're not already familiar with the legal authorities that apply to your files, you can read about the most common legal authorities for withholding content in the links provided in Table 1.

- For specific individuals, type the user's name into the box. Repeat for additional users.
- For the Legal Authority box, select the legal authority that provides protection for the reference. If your relevant legal authority is not in the drop-down list, enter it into the other Legal Authority box. Enter a justification for that authority in the Type in a Justification box.

Table A1. Accepted legal authorities for withholding records. Labels and markings are used to populate the CUI banner displayed on the reference profile page.

Type	Label	Marking	Detail	Additional Information
CUI	Archeological Resources	CUI//ARCHR	Related to information about the nature and location of any archaeological resource for which the excavation or removal requires a permit or other permission.	https://www.archives.gov/cui/registry/category-detail/archaeological-resources#authority-list
CUI	National Park System Resources	CUI//SP-NPSR	This material contains information concerning the nature and specific location of a National Park System resource that is endangered, threatened, rare, or commercially valuable, of mineral or paleontological objects within System units, or of objects of cultural patrimony within System units.	https://www.archives.gov/cui/registry/category-detail/national-park-system-resources#authority-list
CUI	Historical Properties	CUI//SP-HISTP	Related to the location, character, or ownership of historic property.	https://www.archives.gov/cui/registry/category-detail/historic-properties#authority-list
CUI	General Privacy	CUI//PRVCY	Refers to personal information, or, in some cases, "personally identifiable information," as defined in OMB M-17-12, or "means of identification" as defined in 18 USC 1028(d)(7).	https://www.archives.gov/cui/registry/category-detail/privacy.html#authority-list
CUI	Personnel Records	CUI//PERS	Related to the employees of federal agencies.	https://www.archives.gov/cui/registry/category-detail/personnel-records#authority-list
CUI	Information Systems Vulnerability Information		Related to information that if not protected, could result in adverse effects to information systems. Information system means a discrete set of information resources organized for the collection, processing, maintenance, use, sharing, dissemination, or disposition of information.	https://www.archives.gov/cui/registry/category-detail/info-systems-vulnerability-info.html
Other	Personally Identifiable Information	null	Any data that can be used to distinguish or trace an individual's identity, either directly or indirectly. This includes information like a person's name, social security number, email address, phone number, or date of birth.	https://www.gsa.gov/reference/gsa-privacy-program/rules-and-policies-protecting-pii-privacy-act

Type	Label	Marking	Detail	Additional Information
Other	Copyrighted	null	A legal right that protects original works of authorship, granting the creator exclusive rights to their work, including the ability to reproduce, distribute, and adapt it.	https://www.copyright.gov/what-is-copyright/
Other	The Federal Cave Resources Protection Act of 1988	–	Restricts the release of information concerning the location of any Federal cave. Authorizes the Secretary to provide such information upon the written request by Federal and State agencies or bona fide educational and research institutions. Requires such a request to include an assurance to protect the confidentiality of such information.	https://www.congress.gov/bill/100th-congress/house-bill/1975
Other	Tribal Data Sovereignty	null	The right of Indigenous Nations and communities to govern the collection, ownership, and application of their own data, including information related to their peoples, lands, and resources.	–
Other	Other	null	null	null
CUI	Legal: Legal Privilege	CUI//PRIVILEGE	Per 15 USC 78x(f)(4): The term "privilege" includes any work-product privilege, attorney-client privilege, governmental privilege, or other privilege recognized under Federal, State, or foreign law. Per 502(g): (1) "attorney-client privilege" means the protection that applicable law provides for confidential attorney-client communications, and (2) "work-product protection" means the protection that applicable law provides for tangible material (or its intangible equivalent) prepared in anticipation of litigation or for trial.	https://www.archives.gov/cui/registry/category-detail/legal-privilege.html#authority-list

Point of Contact for Non-Public data

If the decision is made to restrict file access, a point of contact must be provided. The contact's name will not show on the reference but may be used by DataStore administrators for future questions about the restrictions or requests to access the files. A contact email is also required. It does not have to be a personal email; a shared mailbox that is monitored is accepted. The email will be used in the CUI banner that will appear on the Reference.

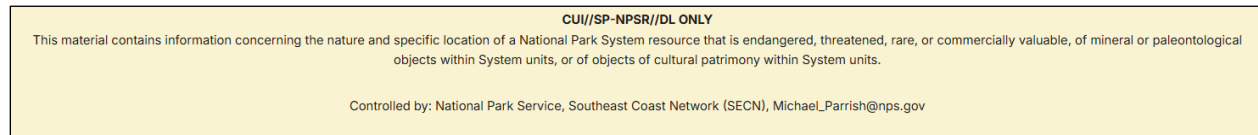


Figure A-1. Sample CUI Banner containing information about the legal authority and CUI content.

Appendix B. Reference Types

Table B1. List of reference types and definitions. (S) indicates it is part of a series.

Reference Group	Reference Type	Definition
Code	Script	A sequence of instructions that are interpreted or carried out by another program or software application. Examples include PowerShell, R, or python scripts and packages.
Code	Software	A program or application used by a computer to direct its operations. Examples include executable files and plugins.
Datasets	Aerial Photograph (S)	Photographs taken off the ground from an elevated position where the camera is not supported by a ground-based structure. The most common platform for aerial photography is fixed-wing aircraft.
Datasets	Data Package	A collection consisting of an XML metadata file and one or more CSV files. Data Packages require strict adherence to standards. If you do not have an XML file select reference type: Tabular, Generic, Geospatial, or Raster Dataset.
Datasets	Generic Dataset	Applied to any type of spatial or tabular data that cannot be more specifically defined (e.g. as a vector dataset).
Datasets	Geospatial Dataset	Any dataset that is inherently geospatial and can be natively rendered using geospatial software.
Datasets	Imagery	All forms of Aerial Photography: flight-based (aircraft, helicopter, unmanned aerial vehicle) pictures captured typically from nadir but can be oblique, AND/OR Satellite Imagery: pictures of objects from high elevation (>80,000 ft) or space-based platforms. Includes all spectral bands or ranges. Additional types include LIDAR, RADAR, IFSAR and other measurement tools from aerial or space-based platforms.
Datasets	Lidar Image	Light Detection and Ranging Image.
Datasets	Photogrammetry Assemblage	A grouping of processed three-dimensional data files, available in open format (*.OBJ, *.MLT, *.LAS) and associated image files. Photogrammetry is the art, science, and technology of obtaining reliable information about physical objects and the environment through processes of recording, measuring, and interpreting photographic images.
Datasets	Photogrammetry Image	A digital photograph to be used in the imaging technique for estimating three-dimensional structures from two-dimensional photographic sequences. Photogrammetry is the art, science, and technology of obtaining reliable information about physical objects and the environment through processes of recording, measuring, and interpreting photographic images.

Reference Group	Reference Type	Definition
Datasets	Raster Dataset	Storage format for managing the location of geospatial information as grids and their associated attribute information. Raster datasets are natively geospatial.
Datasets	Relational Database	A database containing more than one table, with the tables sharing data.
Datasets	Satellite Image	Digital image taken of the Earth's surface using electromagnetic sensors on board a fixed-path orbiting or geostationary space-based satellite.
Datasets	Tabular Dataset	A collection of data. Data is presented in tabular form, where each column represents a particular variable, either as text string or geography (i.e. points, lines and polygons), and each row corresponds to a given member of the data set in question.
Datasets	Vector Dataset	Storage format for managing the location of geospatial information (points, lines and polygons) and their associated attribute information. Vector datasets are natively geospatial.
Documents	Book (S)	A written or printed work consisting of pages glued along one side and bound in covers.
Documents	Book Chapter (S)	One of the main divisions of a book. Chapters are generally numbered or titled.
Documents	Brochure	A brief document, often consisting of a single folded sheet of paper printed on both sides, containing pictures and information about a resource or information topic.
Documents	Compliance Document	A document that records the process through which natural and cultural resources are considered in federal actions. Regulatory requirements that frame compliance activities include the National Environmental Policy Act (NEPA), Section 106 of the National Historic Preservation Act, and executive orders as well as state requirements.
Documents	Conference Proceeding (S) (Admin creation only)	Collection of academic papers or abstracts that are published in the context of an academic conference. They are usually distributed as printed books (or sometimes CDs) either before the conference opens or after the conference has closed. Proceedings contain the contributions and presentations made by researchers at the conference.
Documents	Conference Proceeding Paper (S)	A paper or abstract from a conference proceeding.
Documents	Data Standard	A standard pertaining to the management of data.
Documents	Dissertation	Document submitted in support of completing a Doctorate Degree that presents the author's research and findings.
Documents	Docket	Summary of legal documents.

Reference Group	Reference Type	Definition
Documents	Email	A digital message from one person to one or more other persons.
Documents	Environmental Impact Statement	A formal document prepared to describe the effects of proposed activities on the environment. The environment, in this case, is defined as the natural and physical environment and the relationship of people with that environment.
Documents	Generic Document	Any original or official paper that conveys information. Applied to any type of document that cannot be more specifically defined.
Documents	Help Documentation	A document prepared for the purpose of training, especially in the use of a computer application.
Documents	Journal Article (S)	An article from a peer-reviewed periodical relating to a particular academic discipline.
Documents	Journal Issue (S) (Admin creation only)	A single issue of a journal.
Documents	Letter	A hand-written or typed message from one person to another.
Documents	Map (S)	A visual representation of an area highlighting relationships between objects, regions, and themes.
Documents	Mapbook-Atlas	A digital file, book or other bound resource containing a collection of maps, sometimes with supplementary illustrations and graphic analyses.
Documents	Memorandum	A communication that contains directive, advisory, or informative matter.
Documents	Newsletter (S)	A newsletter series
Documents	Newsletter Article (S)	A single article from a newsletter.
Documents	Newsletter Issue (S) (Admin creation only)	A single issue of a newsletter.
Documents	Newspaper Article (S)	An article within a newspaper.
Documents	Notes	An informal record, especially one written down to aid the memory or document a process.
Documents	Permit	A document that gives formal permission to conduct an activity.
Documents	Plan	Any generic planning document, including monitoring or management plans.
Documents	Project Summary	A summary of a longer report, proposal, or project-related information presented so that readers can rapidly become acquainted with a large body of materials.

Reference Group	Reference Type	Definition
Documents	Proposal	A document used to apply for sponsored program funds and/or permission to conduct activities that would otherwise not be allowed.
Documents	Protocol Development Summary	A report summarizing progress towards the development of a monitoring protocol.
Documents	Protocol Narrative	A rule, guidelines, or document which guides how an activity should be performed.
Documents	Published Report (S)	Written work that relays information, data, or events in a widely presentable form. A published report is one that is formally published and widely available for distribution and/or sale and is often peer-reviewed.
Documents	Published Report Section (S)	A section or chapter of a published report.
Documents	Resource Brief	A short summary concerning the status of park resources.
Documents	Resource Guide	A document intended to provide an overview and inventory of natural resources.
Documents	Standard	A document that is established by authority, custom, or general consent as a model or example.
Documents	Standard Operating Procedure	Detailed written instructions to achieve uniformity of the performance of a specific function.
Documents	Survey	A method for collecting quantitative information about items in a population.
Documents	Technical Assistance Report	Document generated for the purpose of responding to requests for technical assistance by NPS units. Internally peer-reviewed and approved for release at the Program, Division or Branch Chief level.
Documents	Thesis	Document submitted in support of completing a master's degree that presents the author's research and findings.
Documents	Unpublished Report	Written work that relays information, data, or events in a widely presentable form. One that is unpublished is not formally published and not widely available for distribution and/or sale, and not peer reviewed.
Documents	Web Site	A collection of related web pages, images, videos or other digital assets that are addressed relative to a common Uniform Resource Locator (URL).
Multimedia	Audio Recording	An electrical or mechanical inscription and re-creation of sound waves, such as the spoken voice or the ambient environment.
Multimedia	Generic Multimedia	Any collection of data including text, graphics, images, audio and video that cannot be more specifically defined.

Reference Group	Reference Type	Definition
Multimedia	Movie/Video	A collection of still images, that when viewed in series, show motion.
Multimedia	Photograph	A picture captured by an optical device, including cameras, mirrors, lenses, telescopes, and microscopes.
Multimedia	Poster	Any piece of printed paper designed to be attached to a wall or vertical surface. Typically, posters include both textual and graphic elements, although a poster may be either wholly graphical or wholly text. In some cases, a poster can also be a digital file that would be used for the purpose of printing a hard copy.
Multimedia	Presentation	Used for the purpose of showing and explaining the content of a topic to an audience or learner. Most often this is a set of slides that rely on simple text statements and graphics.
Organizational	Assemblage (Admin creation only)	A grouping of various information sources that cannot be described individually. Assemblages will be deprecated in Release 4.2
Organizational	Program	The ongoing/permanent organizational unit that manages multiple interdependent projects.
Organizational	Project	A planned endeavor, usually with a specific goal and accomplished in several steps or stages that produces a variety of end-products.
Organizational	Published Report Series (S) (Admin creation only)	A succession of reports published with related subjects or authors, similar format, and/or continuous numbering.