# USER GUIDE for MERLIN

## (MEtadata Records Library And Information Network)

GULF COAST ECOSYSTEM RESTORATION COUNCIL
RESTORE

# User Guide for MERLIN
# (MEtadata Records Library and Information Network)
# Gulf Coast Ecosystem Restoration Council

**V. 3 Spring 2020**

For further assistance please email
**merlin.metadata@restorethegulf.gov**

*This guide uses a sample project dataset to illustrate processes within MERLIN, but is by no means a complete representation of every use case RESTORE Council agency data stewards may need.*
*This document offers guidance to metadata Editors, Reviewers and Administrators on the use and functionality of the MERLIN tool.*

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## Using MERLIN: User Administrator

# Introduction and Background

## What is MERLIN?

MERLIN stands for the MEtadata Records Library and Information Network or (MERLIN). MERLIN is an online metadata records application hosted on the Gulf Coast Ecosystem Restoration Council's (RESTORE Council) website. The RESTORE Council provides MERLIN as a tool to help its award recipients prepare and submit required ISO-19115 metadata records that describe observational data collected as part of RESTORE Council funded activities. MERLIN provides a publicly available catalogue of published RESTORE Council funded observational metadata records. Anyone with or without a MERLIN user profile can access and search the catalogue.
To access MERLIN go to **https://restorethegulf.gov/merlin.**

## Logging In

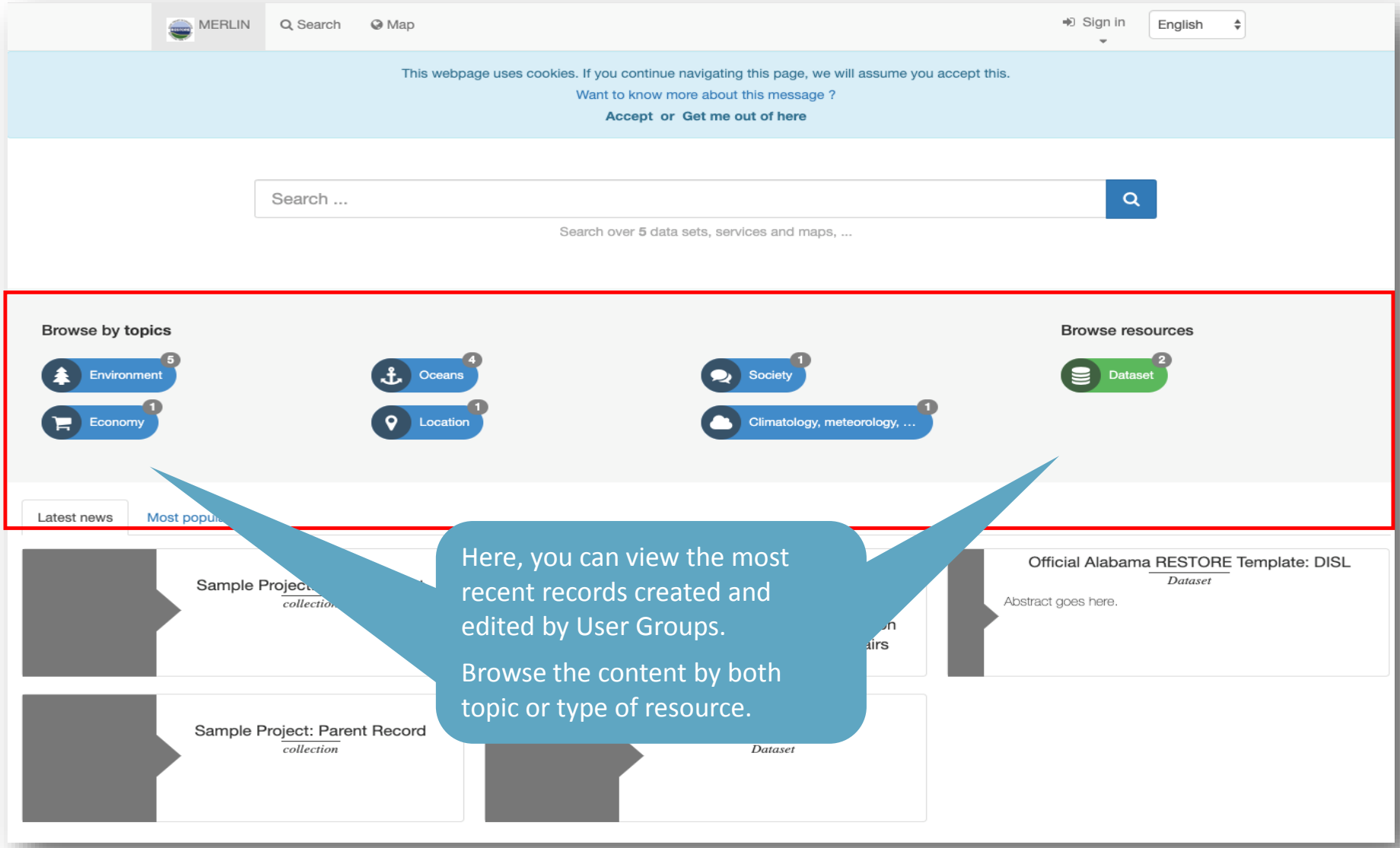
A MERLIN Administrator from the RESTORE Council or your Agency's User Administrator will manage your account, provide you with permissions in MERLIN, and assign you a role based on the agency your work is associated with, also known as your user group. User accounts are established under three given roles: **Editor, Content Reviewer,** and **User Administrator**. To request an account for access to MERLIN please email **merlin.metadata@restorethegulf.gov.**

When logging in, please accept the cookies, they enable the MERLIN tool to function properly. Once logged in, change your password. Passwords should contain a minimum of 12 characters and include a combination of lower case, upper case, special characters and numbers (example: Met@daT@R0ck$).

*To change your password:*

1. *Select your name in the top right corner. This will take you to the "**Manage users**" page.*
2. *Select your name from the list of Users on the left of the screen to get to "**Update user**" page.*
3. *Select the "**Reset password**" button on the right*
4. *The password reset box will appear*
5. *Type and repeat your new password*
6. *Click the "**Reset password**" button to save.*

# MERLIN Interface

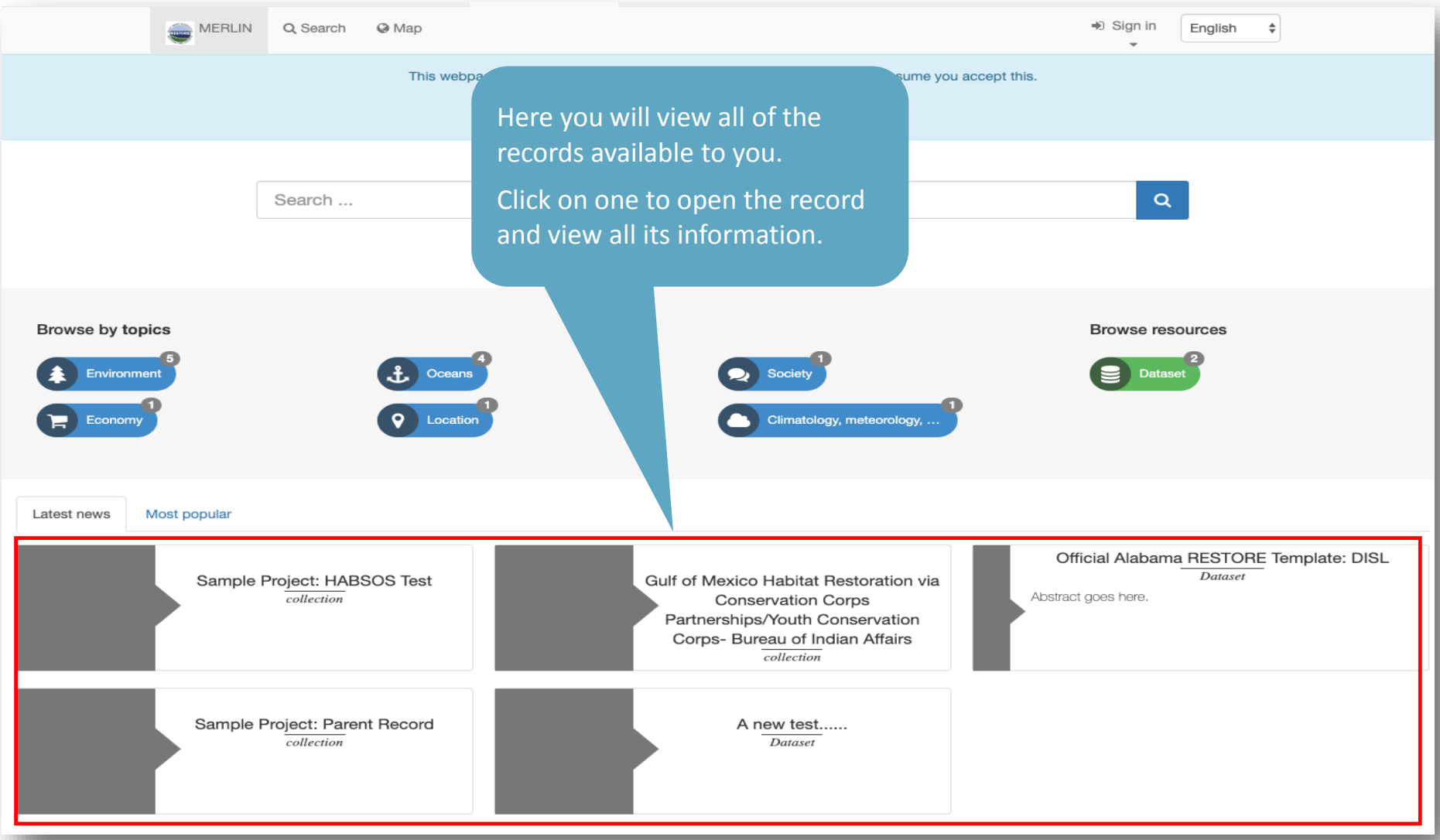



Here, you can view the most recent records created and edited by User Groups.

Browse the content by both topic or type of resource.

*This is the publicly available **MERLIN** Home Screen*

# MERLIN Interface

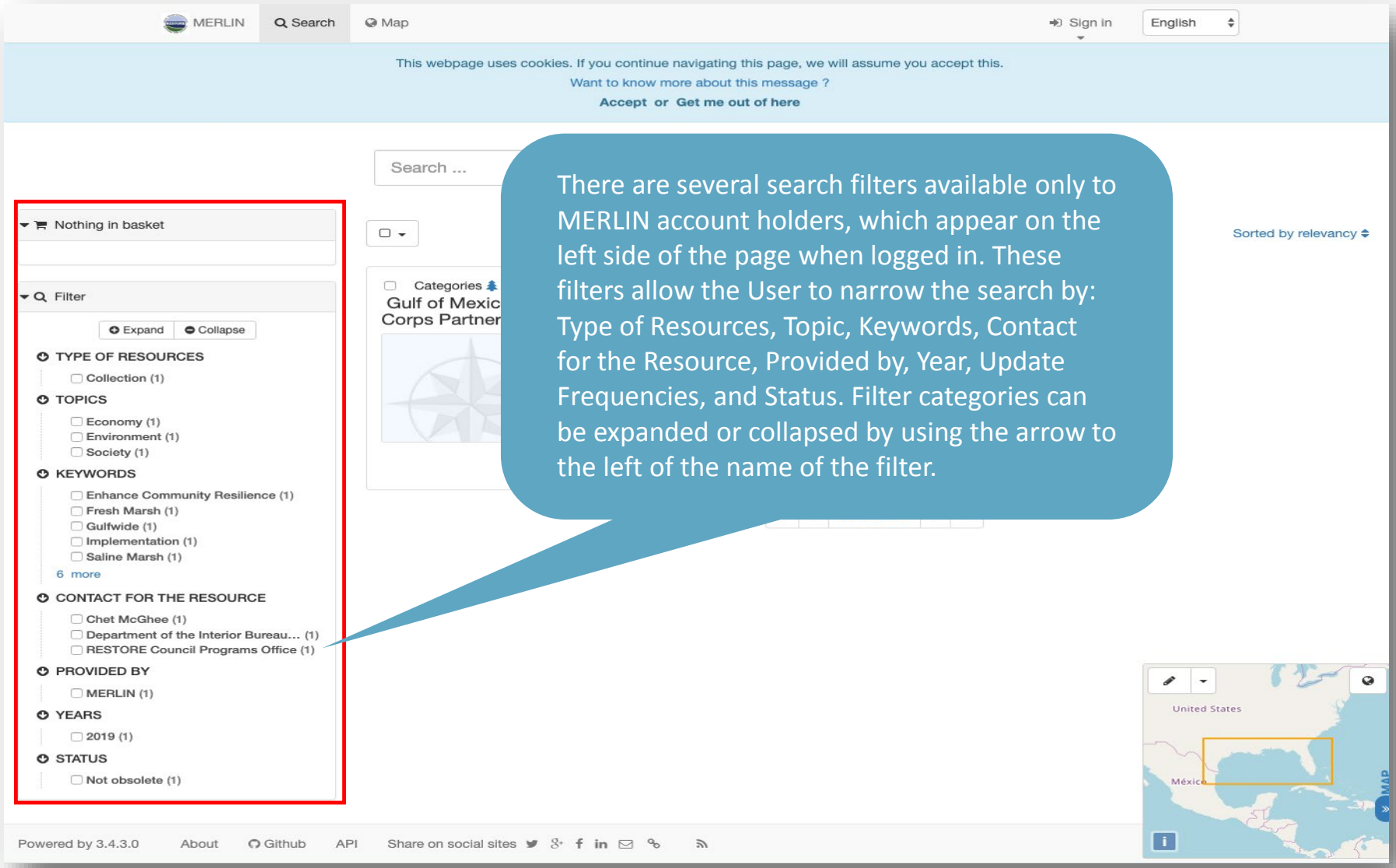



Here you will view all of the records available to you.

Click on one to open the record and view all its information.

*This is the publicly available **MERLIN** Home Screen*

# MERLIN Interface




There are several search filters available only to MERLIN account holders, which appear on the left side of the page when logged in. These filters allow the User to narrow the search by: Type of Resources, Topic, Keywords, Contact for the Resource, Provided by, Year, Update Frequencies, and Status. Filter categories can be expanded or collapsed by using the arrow to the left of the name of the filter.

*This is the publicly available **MERLIN** Home Screen*

# MERLIN Interface

MERLIN | Search | Map | Sign in | English

This webpage uses cookies. If you continue navigating this page, we will assume you accept this.
Want to know more about this message ?
**Accept or Get me out of here**

Search ...

Nothing in basket

Filter

Expand | Collapse

TYPE OF RESOURCES
- Collection (1)

TOPICS
- Economy (1)
- Environment (1)
- Society (1)

KEYWORDS
- Enhance Community Resilience (1)
- Fresh Marsh (1)
- Gulfwide (1)
- Implementation (1)
- Saline Marsh (1)

6 more

CONTACT FOR THE RESOURCE
- Chet McGhee (1)
- Department of the Interior Bureau... (1)
- RESTORE Council Programs Office (1)

PROVIDED BY
- MERLIN (1)

YEARS
- 2019 (1)

STATUS
- Not obsolete (1)

1 results

Sorted by relevancy

Categories

Gulf of Mexico Habitat Restoration via Conservation Corps Partnerships/Youth...

The Department of the Interior (DOI) submitted a project application to the Council titled "Gulf of Mexico Habitat Restoration via Conservation Corps Partnerships/Youth." The primary objective of the project was to support, promote and create stewardship opportunities for Tribal youth through meaningful training and employment, which includes

1 results

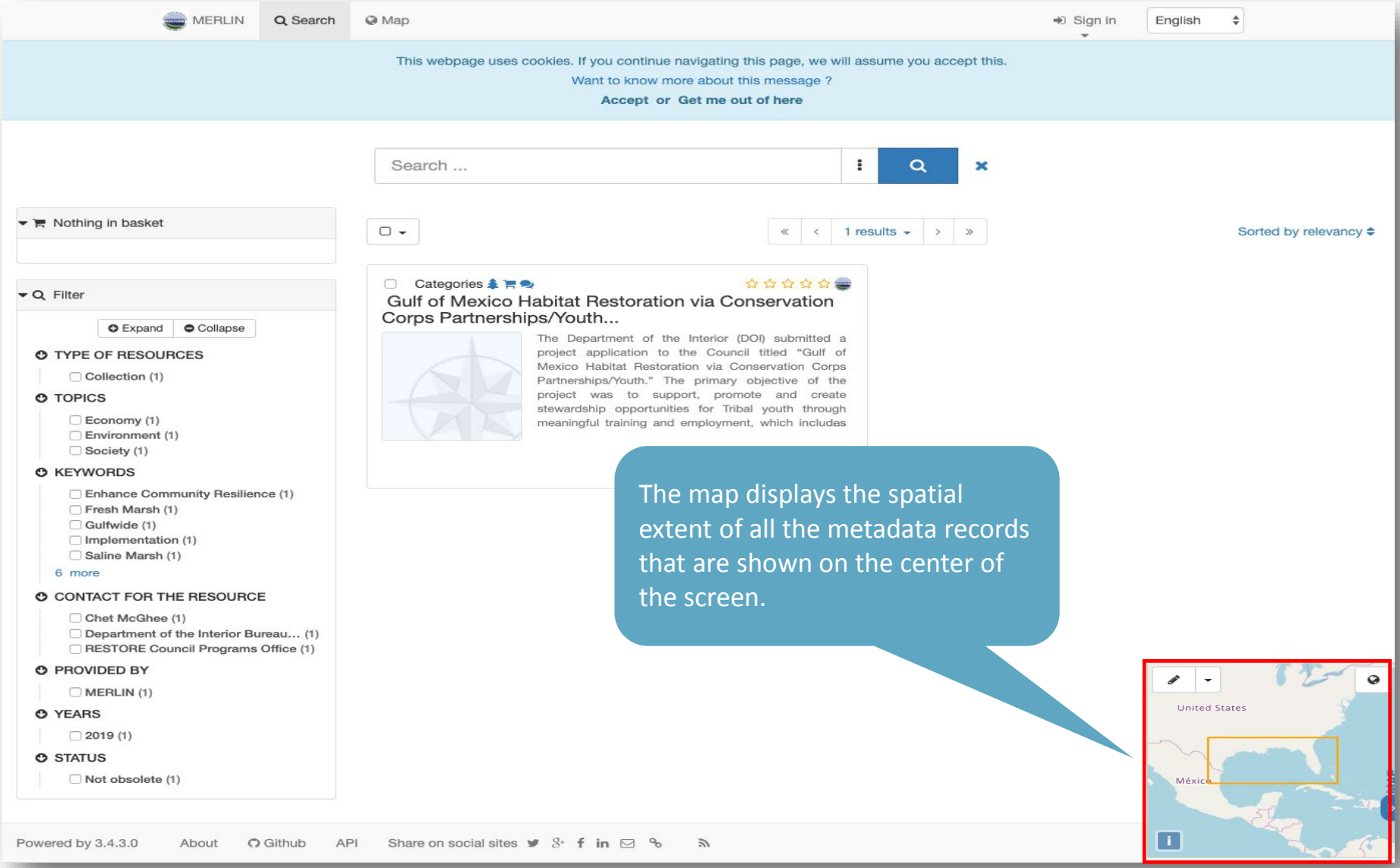
Published metadata records are displayed in the center of the MERLIN page. "Categories", the "Metadata Title", and the "Metadata Abstract" are visible.

Records can be sorted by relevance, modification date, Title or other parameters on the page.

Powered by 3.4.3.0 | About | Github | API | Share on social sites

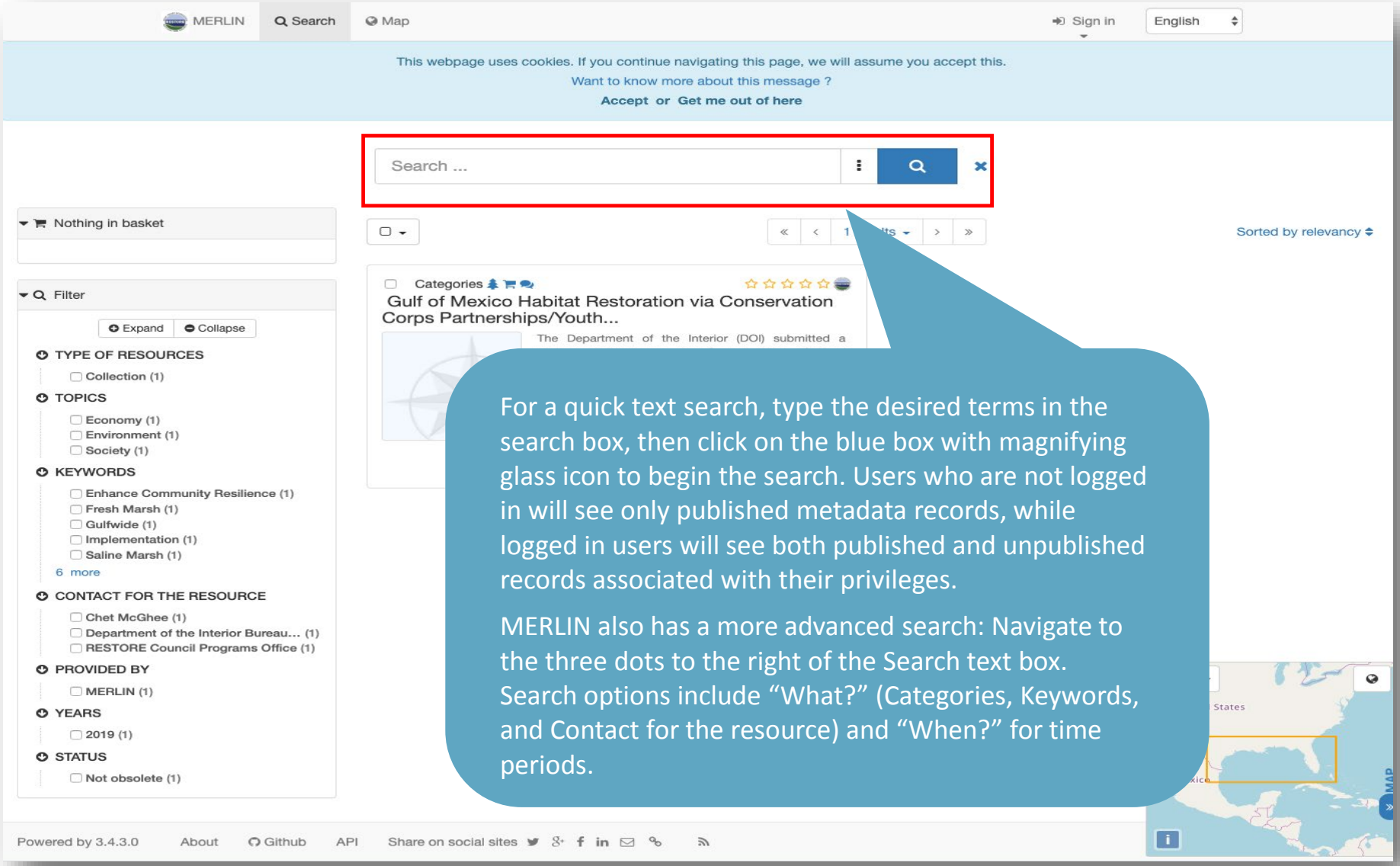
*This is the publicly available **MERLIN** Home Screen*

# MERLIN Interface




*This is the publicly available **MERLIN** Home Screen*

# MERLIN Interface

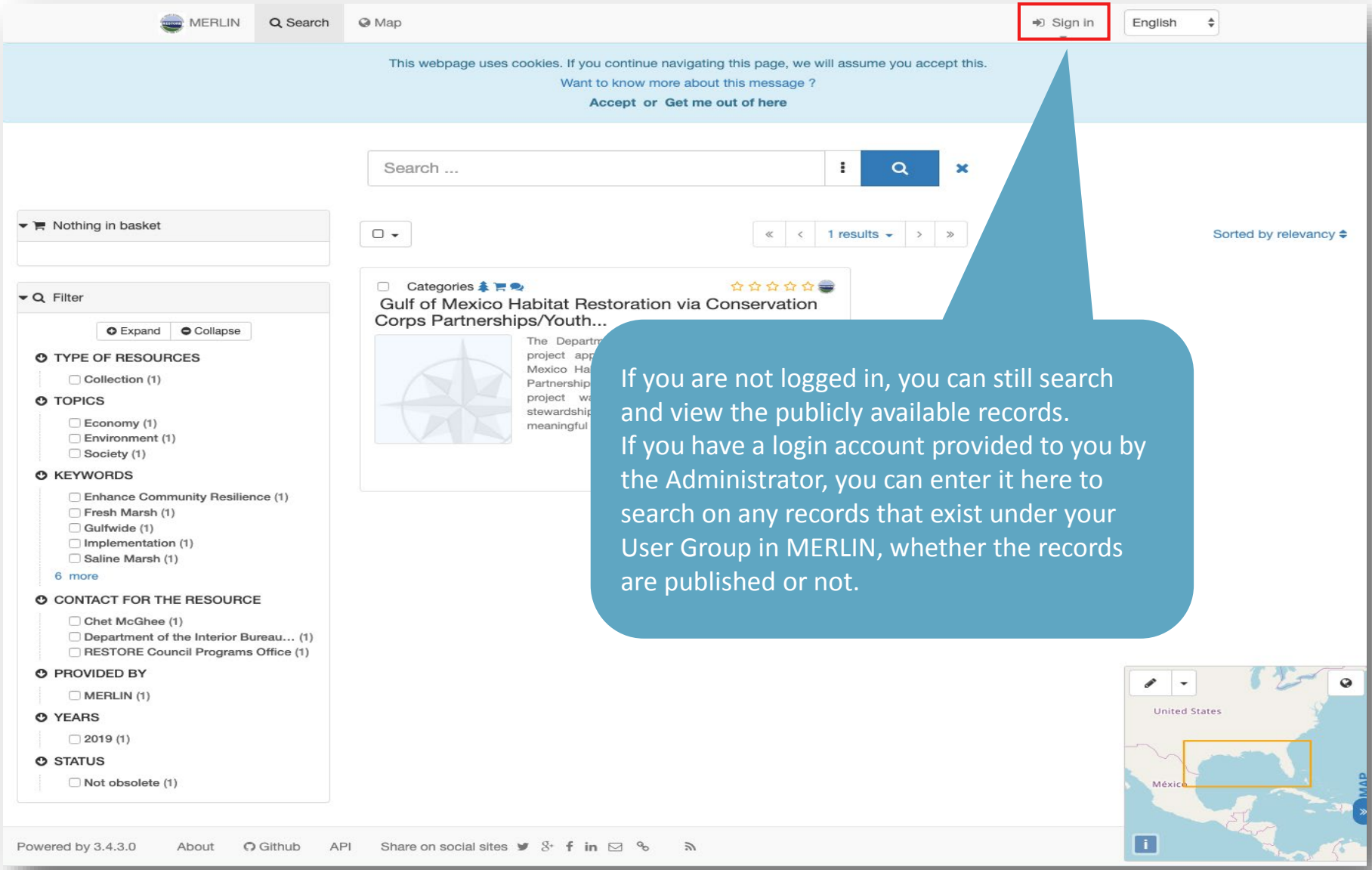



For a quick text search, type the desired terms in the search box, then click on the blue box with magnifying glass icon to begin the search. Users who are not logged in will see only published metadata records, while logged in users will see both published and unpublished records associated with their privileges.

MERLIN also has a more advanced search: Navigate to the three dots to the right of the Search text box. Search options include “What?” (Categories, Keywords, and Contact for the resource) and “When?” for time periods.

*This is the publicly available **MERLIN** Home Screen*

# MERLIN Interface




If you are not logged in, you can still search and view the publicly available records.
If you have a login account provided to you by the Administrator, you can enter it here to search on any records that exist under your User Group in MERLIN, whether the records are published or not.

*This is the publicly available **MERLIN** Home Screen*

# Metadata

**METADATA STANDARDS:** In June 2017, the RESTORE Council approved the adoption of the International Organization for Standardization (ISO) 19115 metadata standard (and the associated series of standards) for Council-funded activities.

The adoption of this standard is in line with the December 2016 Federal Geographic Data Committee (FGDC) Steering Committee endorsement of ISO standards, and push to move all Federal agencies to use the ISO standard. The adoption of the ISO standard will bring consistency to documenting ecosystem data collected on Council-funded projects, allowed for the development of MERLIN to support Council member agencies and their staff, and will support the discoverability of ecosystem data across Council agencies.

## Metadata Standards in MERLIN

MERLIN is configured to support metadata records in two metadata standards. These standards were chosen based on the identification of those standards in common use by Council member agencies. The standards include the FGDC Content Standard for Digital Geospatial Metadata (CSDGM), and the ISO 19115. The ISO 19115:2003 has since been revised by ISO 19115-1:2014. Record creation in MERLIN will adhere to the ISO 19115 standard.

## Metadata for New Datasets

Metadata records can be created using MERLIN. An adapted ISO-19115- RESTORE TEMPLATE was created for RESTORE projects and includes some pre-filled data fields. While editors can create a record entirely from scratch using the template, in most cases, you will generate a “child” copy from a parent record that has already been pre-populated for your convenience with overview details about each RESTORE-funded project.

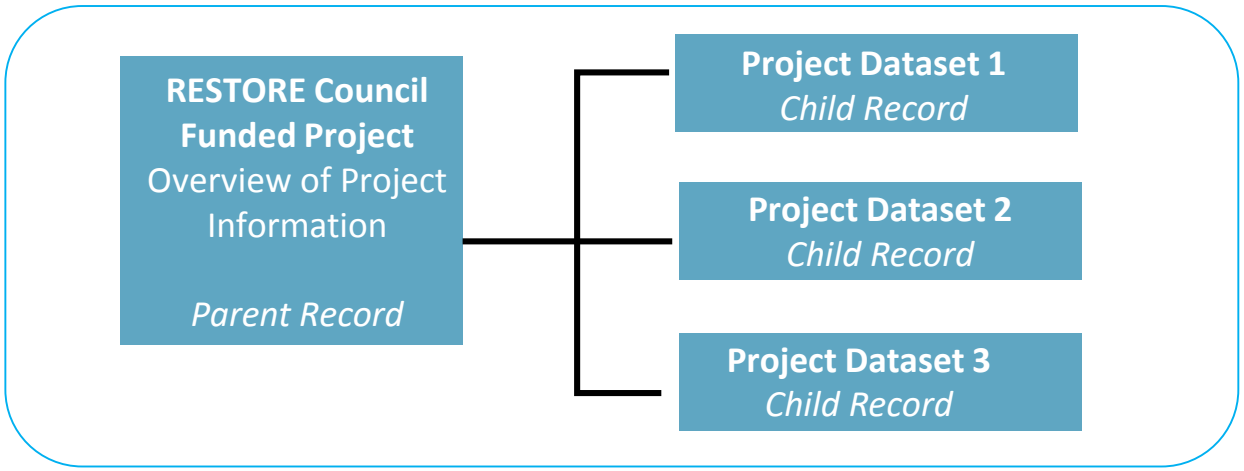
## Metadata for Existing Datasets

Existing ISO 19115-1 metadata records can be imported into MERLIN. Both editors and reviewers can import existing metadata in the FGDC Content Standard for Digital Geospatial Metadata (CSDGM) or ISO 19115-2 format, then transform the records to the ISO 19115-1 standard.

# Structure of records in MERLIN

MERLIN provides a form interface to facilitate the creation of records. This means that the Editor does not have to work with the native XML format of ISO 19115-1 metadata and CSDGM metadata. An adapted ISO-19115 form template was created for RESTORE projects and includes some pre-filled data fields. The final result will be a description of the dataset that follows a standard metadata format. Once the record is complete, the Editor will submit it to a Content Reviewer using the Workflow function in MERLIN.

Parent records with details about each RESTORE funded project have been pre-populated in MERLIN for your convenience. Each individual parent record represents a RESTORE council-funded project or program (hereinafter referred to as project). New metadata records under these projects should be created as “child” records. Parent records that represent a RESTORE council-funded project are categorized as “collection” data types, and child records are categorized as "dataset" data types.




Parent records are categorized as "collection" data types and should *not* be edited. When you create a “child” copy for individual datasets, you will only need to modify the fields specific to that dataset. The remaining information will be carried over from the parent record’s project overview information. This will facilitate the creation of consistent, associated records across datasets generated from a single project or program.
Note: For Programs with multiple projects, a parent record will be created for the program, and child records will be created for each project.

# The RESTORE Template

The RESTORE TEMPLATE was adapted specifically for the purpose of creating metadata records for data sets associated with RESTORE-funded projects. A blank template includes some pre-filled data fields with information that does not require any editing by the user. The information in the blank template is managed by RESTORE Council staff. **When working in MERLIN, you will typically not create records from this blank template, but will instead create "child records" from pre-filled "parent records" in which the template has been populated with overview information for the RESTORE-funded project that your dataset is associated with.**

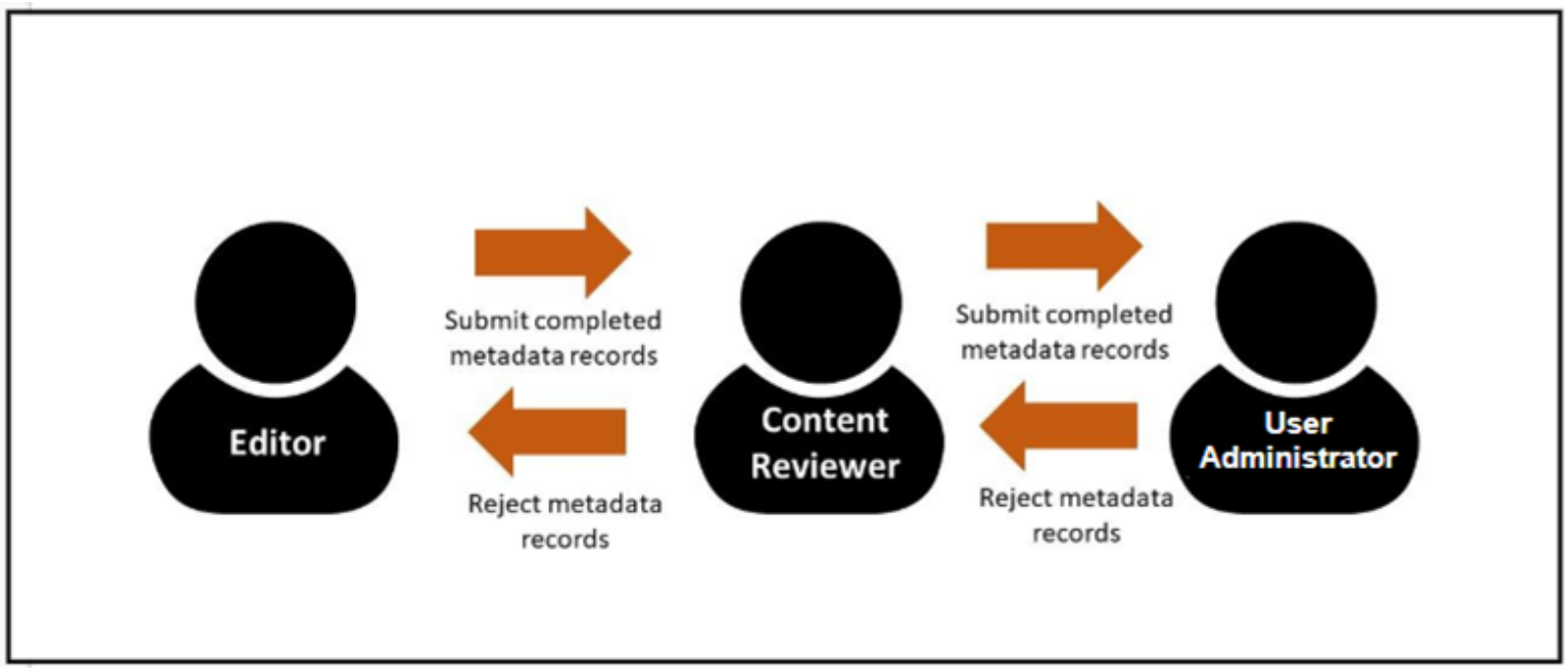
The XML template developed for RESTORE Council dataset metadata is transparent to the Editor when using MERLIN. The RESTORE template is a simple form interface where information can be entered into the text boxes, calendar and time widgets or through drop-down selections. Please be sure to verify/input information for each section of the form to ensure valid metadata records. An asterisk (*) indicates a required field.

**Managing templates**: Templates are managed similarly in the catalog as metadata records, but they have a special "template" tag. The icon that appears next to the template looks different from the icon for other records. Templates can be created, updated and removed in the Contribute section. Metadata records can be converted to templates and vice versa at any time from the Metadata Editor using the "**Save as template**" button. Templates can be assigned to limited Groups, so only these Groups can use the template in their work process.

*The Points of contact, abstract, dates and other elements were determined to be the requirements needed for inclusion in MERLIN. Further requests or requirements for additional fields can be brought to the attention of your Administrator or RESTORE directly at* ***merlin.metadata@restorethegulf.gov***

# The Workflow

The WORKFLOW involves the Editor and the Content Reviewer and/or User Administrator. When the Editor completes the metadata record, they will submit it to a Content Reviewer/User Administrator. The Content Reviewer/User Administrator can either modify/revalidate the record themselves, return the record to the editor for changes, submit the reviewed record to another user for review, or provide final review of the record by verifying that record can be released to the public catalog.



# Using MERLIN: Editor

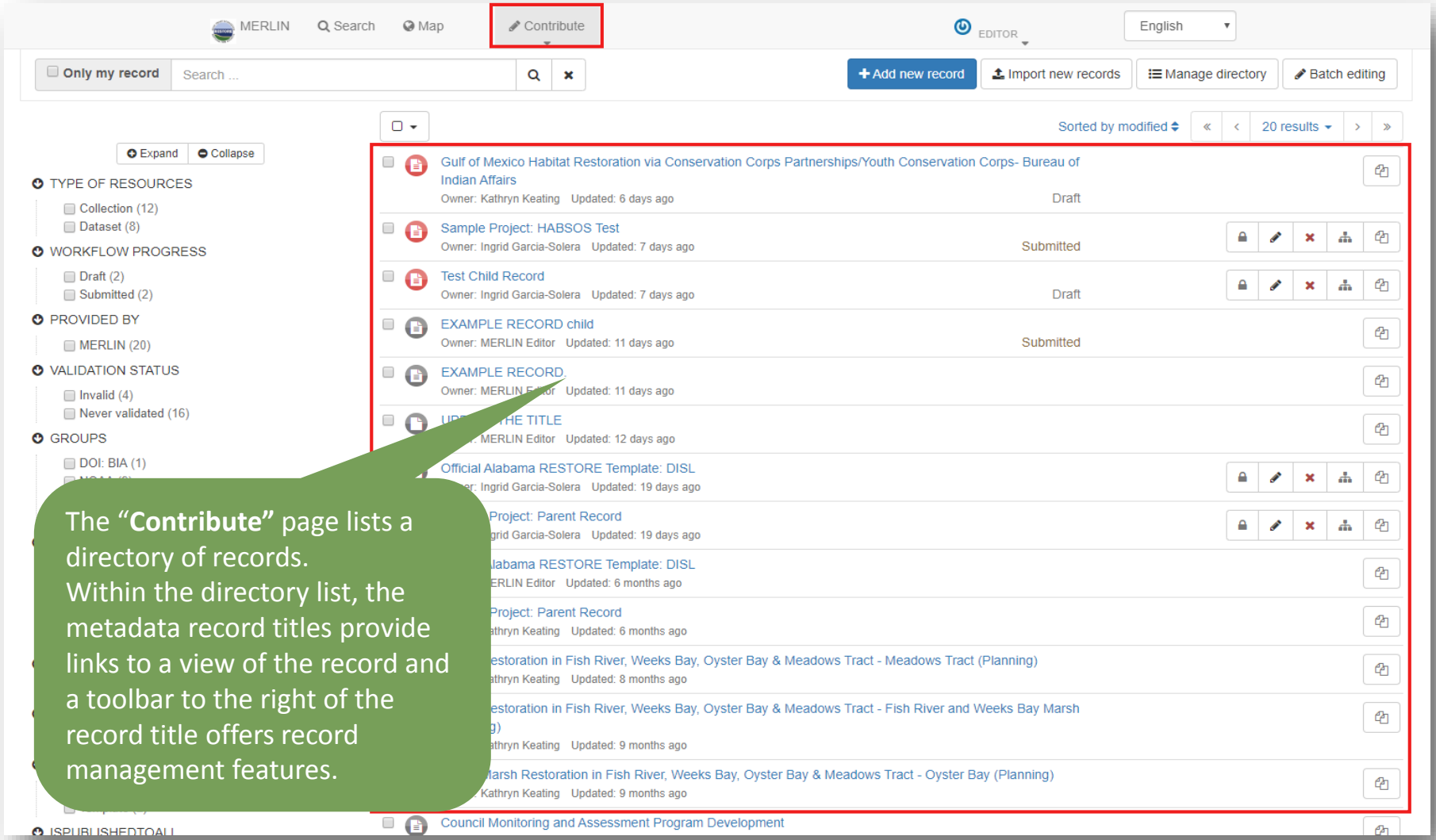
## The Editor

The bulk of the work of the EDITOR will be to add new records by gathering information about RESTORE datasets to generate and edit a “child” copy from a pre-populated parent record that has overview details about each RESTORE-funded project. The final result will be a metadata record for the dataset that follows the ISO 19115-1 metadata standard and has information that is consistent with other datasets linked to the same RESTORE-funded project.

The EDITOR role allows the user to add new metadata records, to edit metadata records, validate metadata records, and submit completed metadata records for review by a Content Reviewer. The primary work of the EDITOR is to compile information about RESTORE Council datasets and generate/edit “child” copies of records from a pre-populated parent record that has overview details already provided.

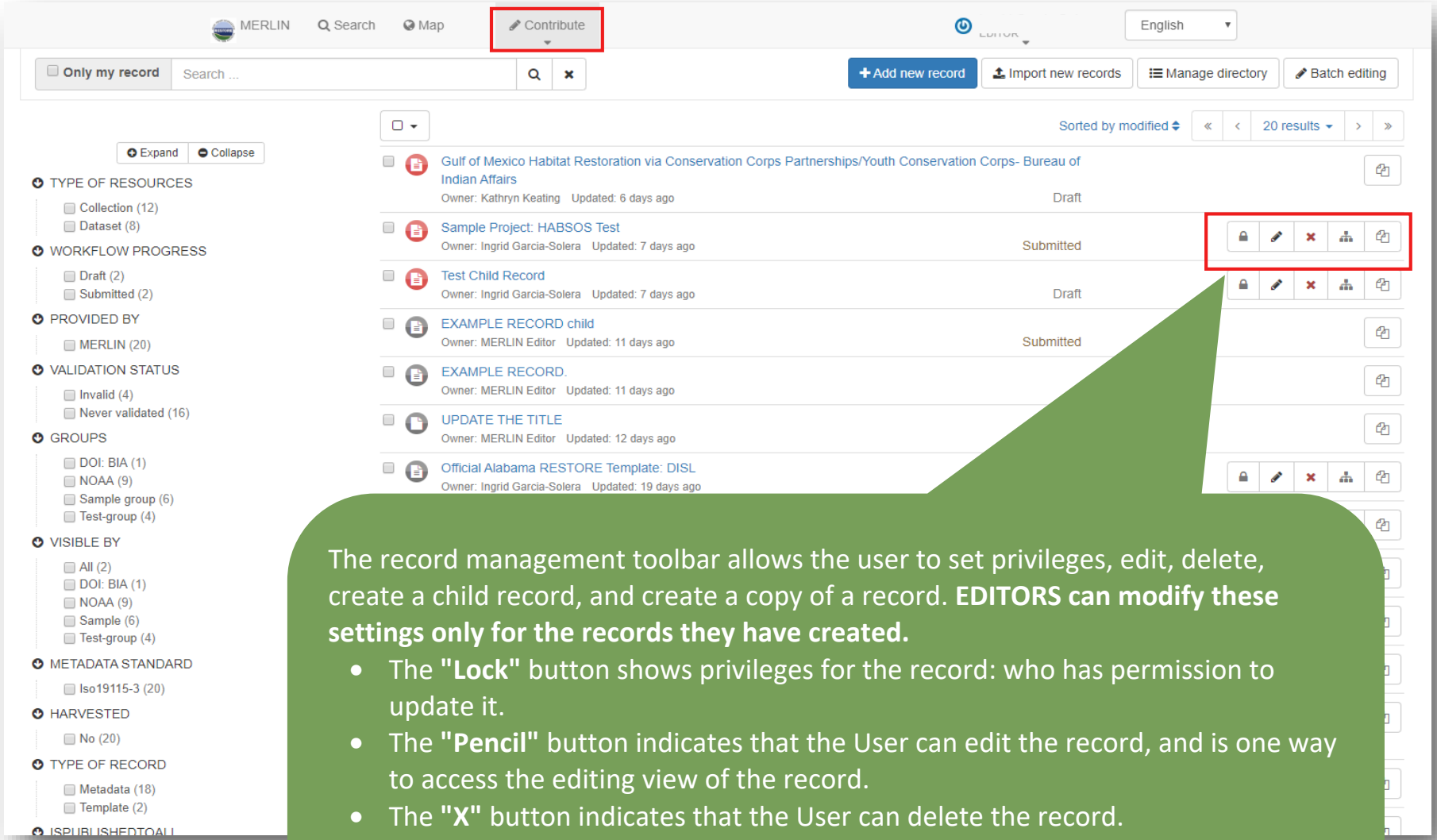
When the EDITOR completes a metadata record, the record can be submitted for review to the Content Reviewer.

# The Editor




*As an **EDITOR**, you have access to the Contribute Page. From here, an **EDITOR** can begin the process to view and edit an existing record, to add a new record, to import new records, to manage records, and to batch edit records.*

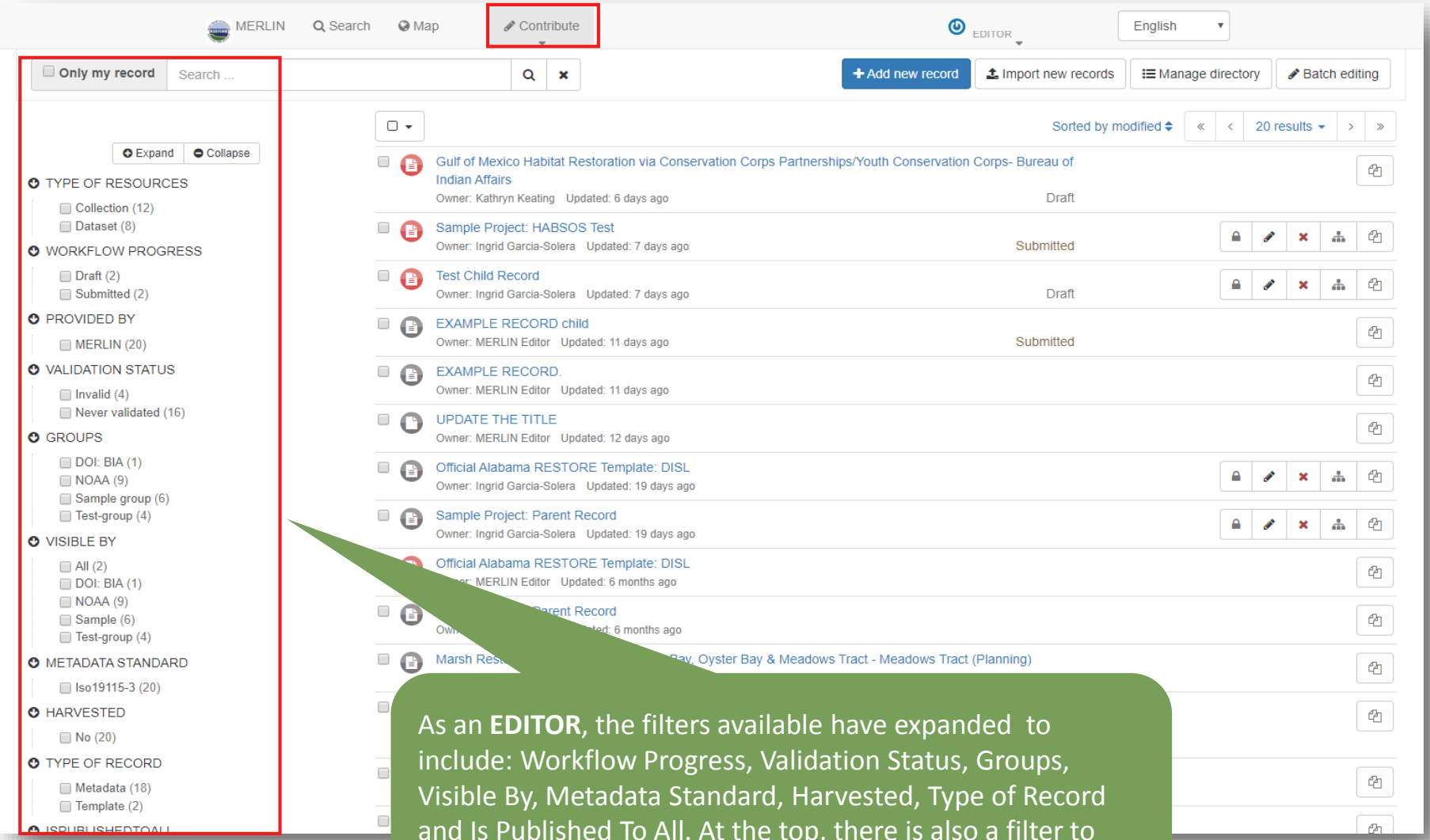
# The Editor




The record management toolbar allows the user to set privileges, edit, delete, create a child record, and create a copy of a record. **EDITORS can modify these settings only for the records they have created.**

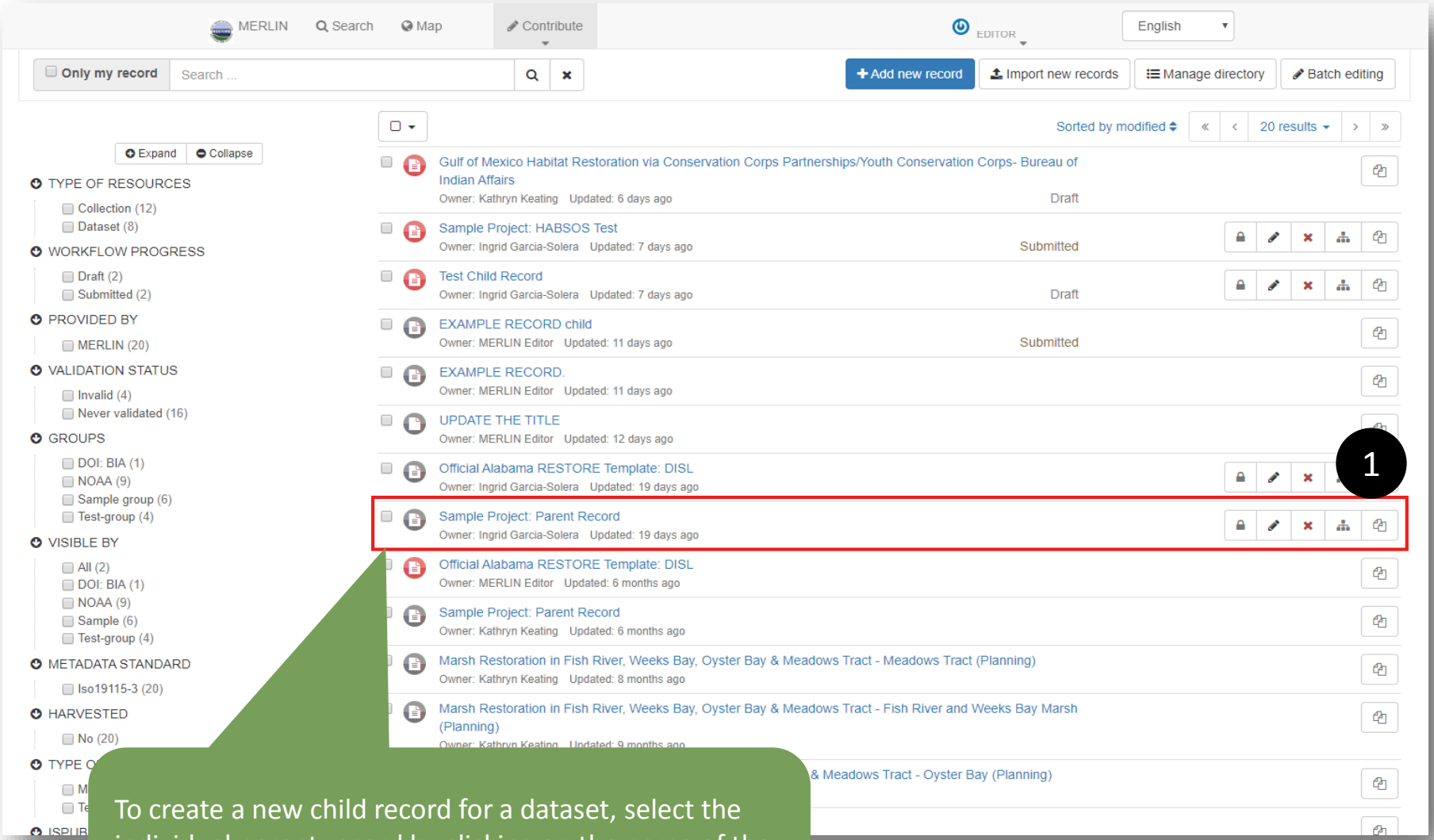
- The **"Lock"** button shows privileges for the record: who has permission to update it.
- The **"Pencil"** button indicates that the User can edit the record, and is one way to access the editing view of the record.
- The **"X"** button indicates that the User can delete the record.
- The **"Hierarchy"** button shows that the User can create a child of the record.
- The **"Document"** button is used to make a copy of the record. This can be useful when some of the information in a record can be reused in another record.

# The Editor



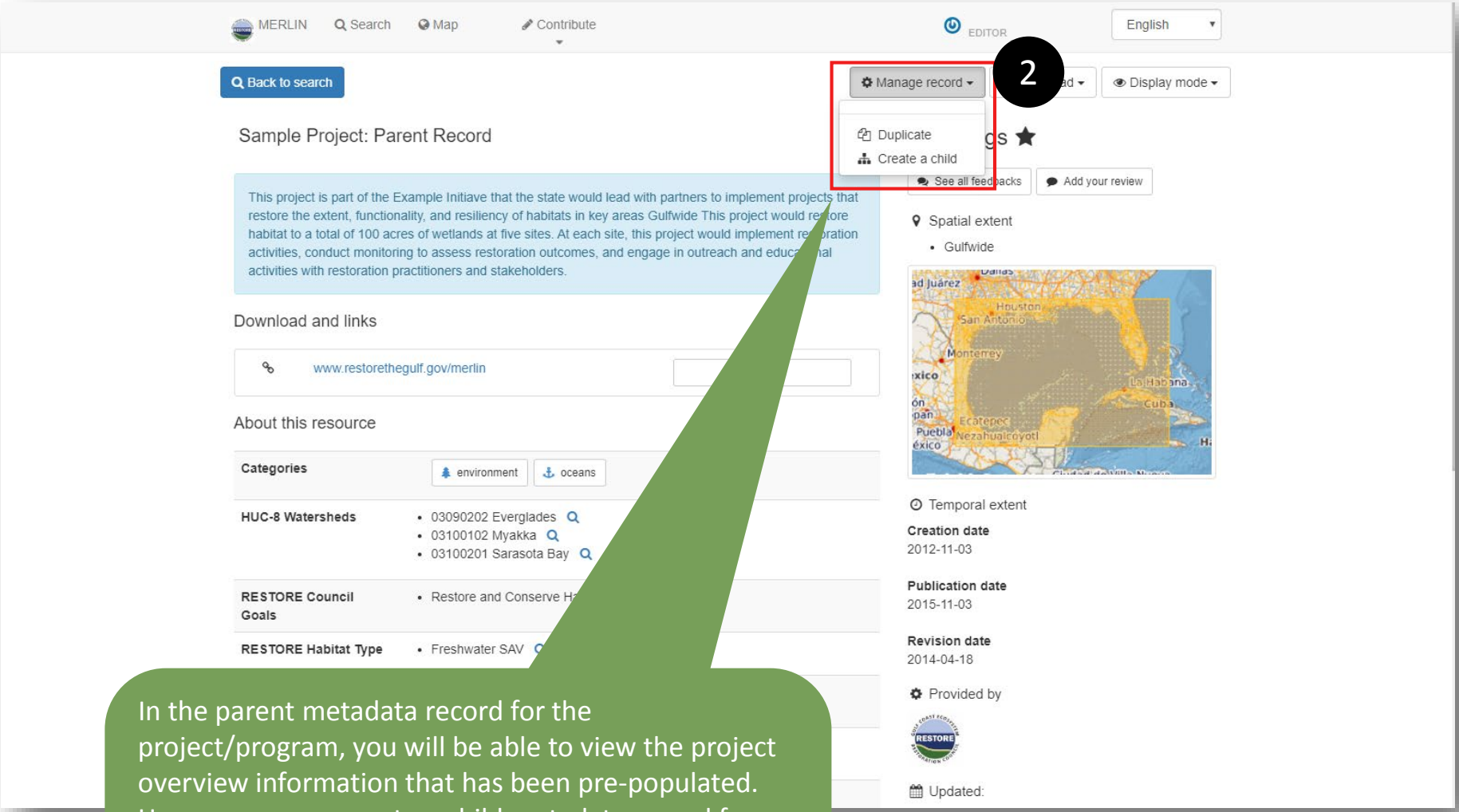

As an **EDITOR**, the filters available have expanded to include: Workflow Progress, Validation Status, Groups, Visible By, Metadata Standard, Harvested, Type of Record and Is Published To All. At the top, there is also a filter to view only the records you have created; "**Only My record**"

# Creating a Child Record from a RESTORE Template



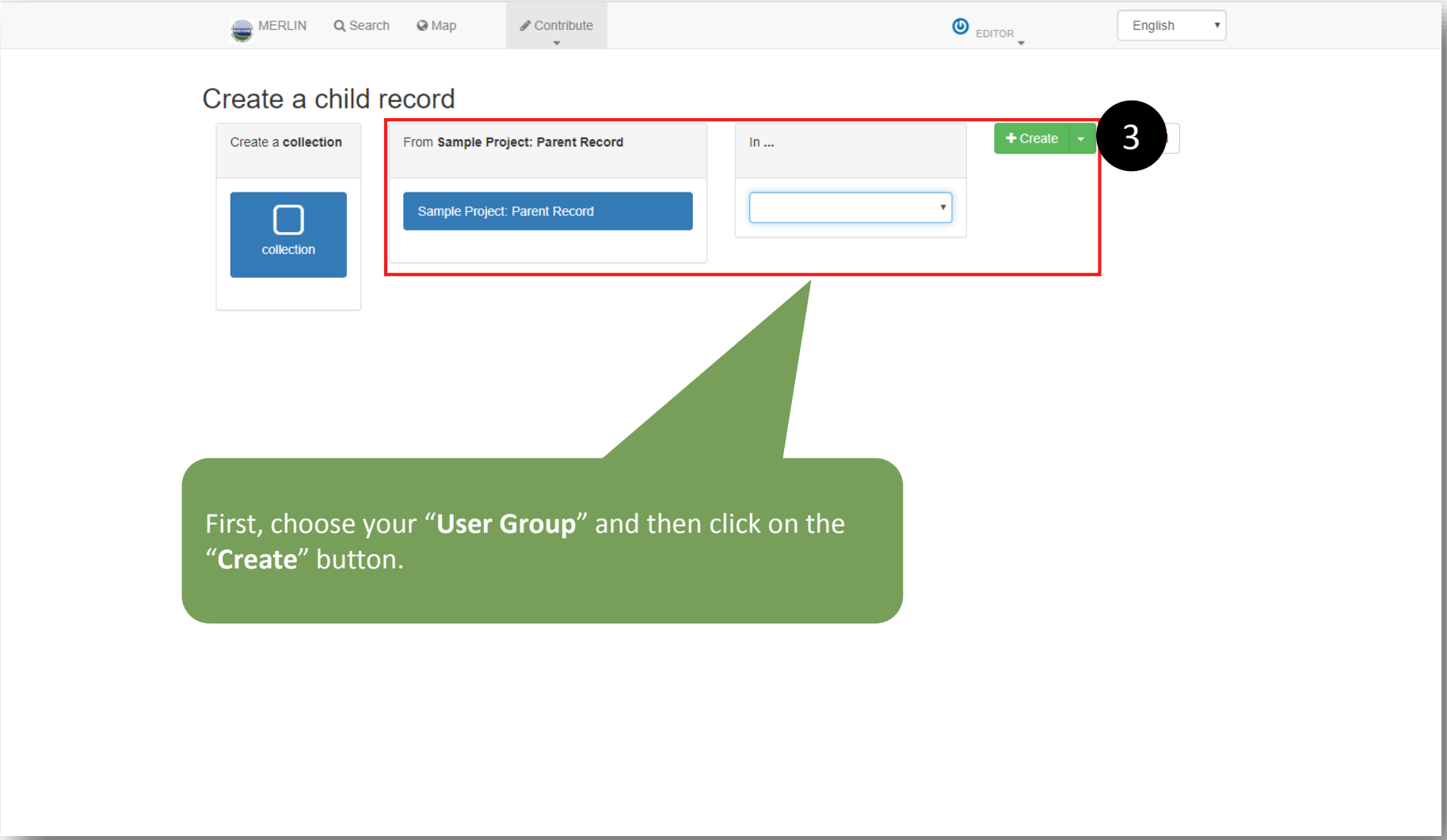

To create a new child record for a dataset, select the individual parent record by clicking on the name of the record, and you will be brought to the record view of the parent metadata record for that project/program.

# Creating a Child Record from a RESTORE Template




In the parent metadata record for the project/program, you will be able to view the project overview information that has been pre-populated. Here, you can generate a child metadata record for your new dataset by selecting the "**Manage record**" button and then choosing "**Create a child**" button. This will open a pre-populated template for you to edit/update with the appropriate metadata information for your dataset.

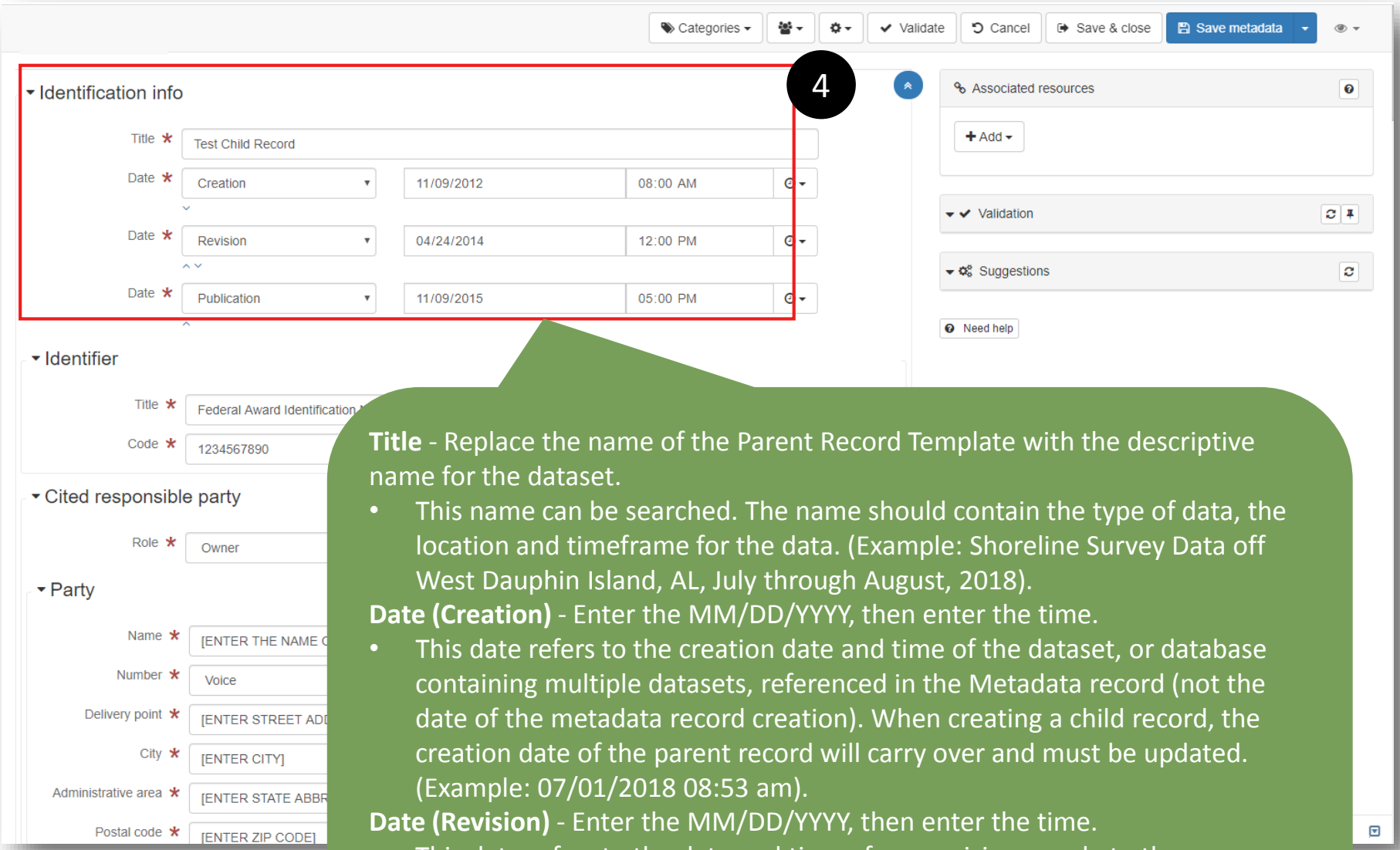
# Creating a Child Record from a RESTORE Template




First, choose your "**User Group**" and then click on the "**Create**" button.

***Please note:*** *When creating a child record, MERLIN duplicates the information from the parent record. Much of this information can be retained, but some must be changed. First, edit the record title with the unique name for the dataset within the project for each child record first. The next pages provide details on each field, and indicates which field should be updated in your child record.*

# Creating a Child Record from a RESTORE Template




**Title** - Replace the name of the Parent Record Template with the descriptive name for the dataset.

- This name can be searched. The name should contain the type of data, the location and timeframe for the data. (Example: Shoreline Survey Data off West Dauphin Island, AL, July through August, 2018).

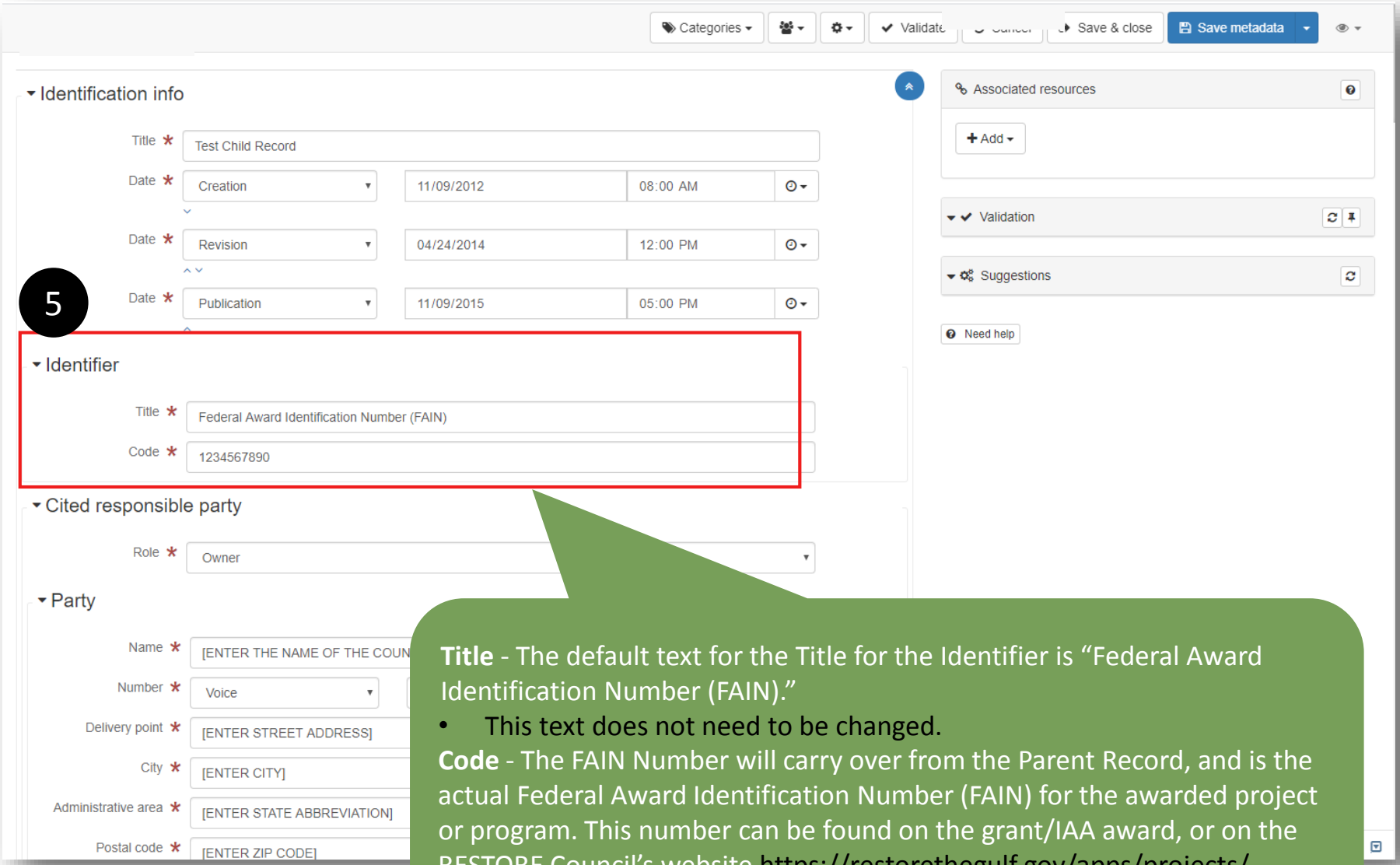
**Date (Creation)** - Enter the MM/DD/YYYY, then enter the time.

- This date refers to the creation date and time of the dataset, or database containing multiple datasets, referenced in the Metadata record (not the date of the metadata record creation). When creating a child record, the creation date of the parent record will carry over and must be updated. (Example: 07/01/2018 08:53 am).

**Date (Revision)** - Enter the MM/DD/YYYY, then enter the time.

- This date refers to the date and time of any revisions made to the dataset/database. If there is no revision date, please leave blank.

# Creating a Child Record from a RESTORE Template

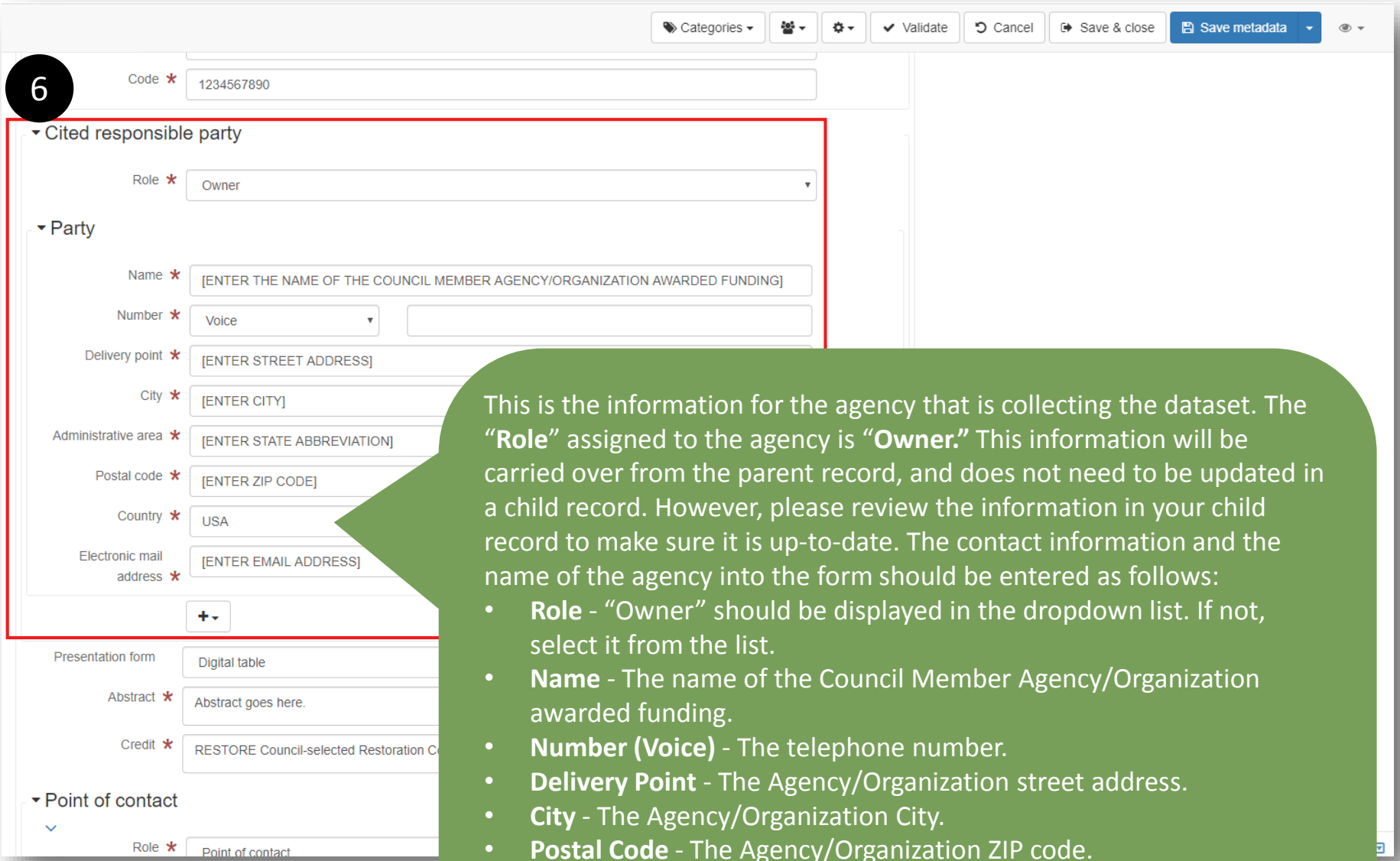



**Title** - The default text for the Title for the Identifier is "Federal Award Identification Number (FAIN)."

- This text does not need to be changed.

**Code** - The FAIN Number will carry over from the Parent Record, and is the actual Federal Award Identification Number (FAIN) for the awarded project or program. This number can be found on the grant/IAA award, or on the RESTORE Council's website https://restorethegulf.gov/apps/projects/.

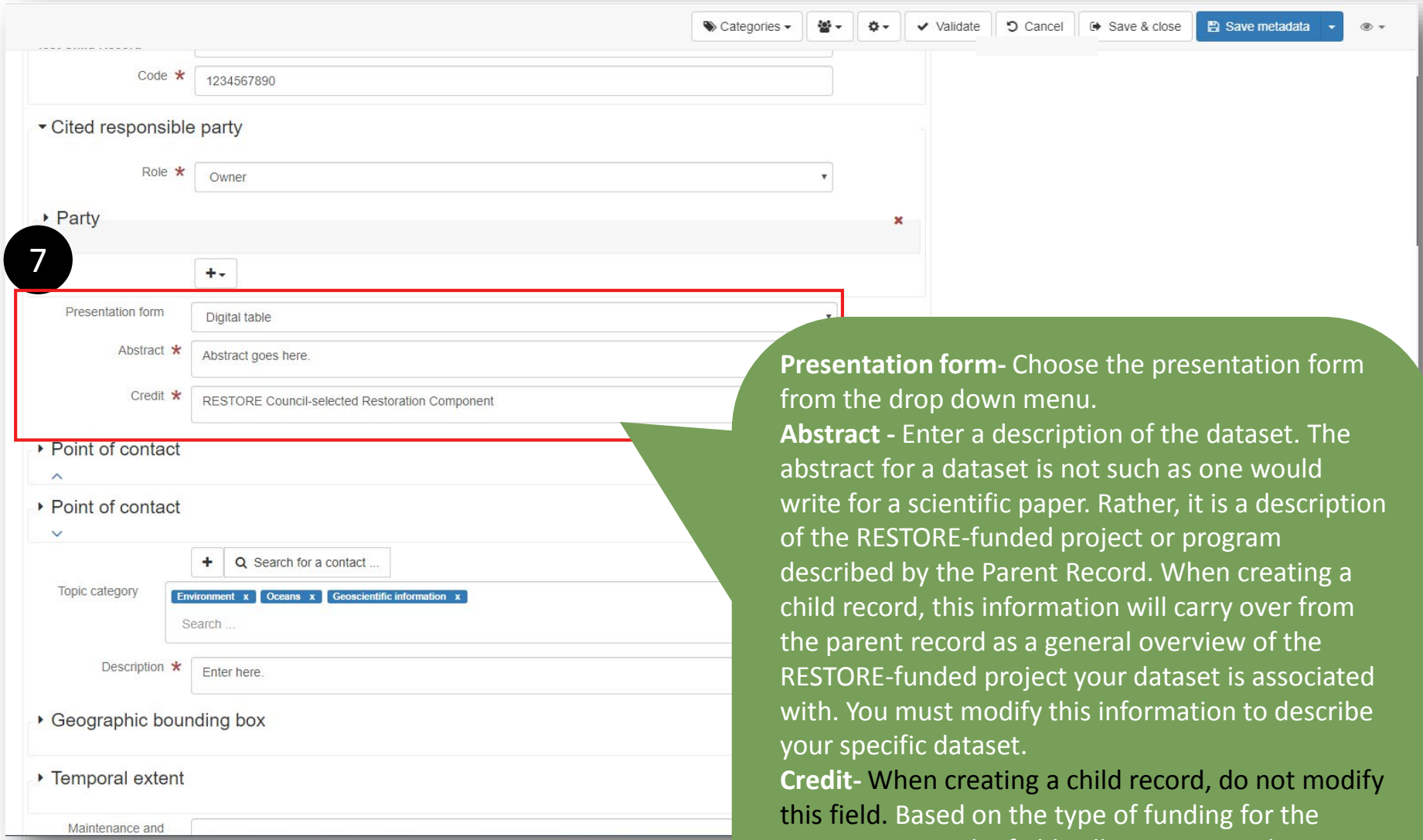
# Creating a Child Record from a RESTORE Template




This is the information for the agency that is collecting the dataset. The "**Role**" assigned to the agency is "**Owner.**" This information will be carried over from the parent record, and does not need to be updated in a child record. However, please review the information in your child record to make sure it is up-to-date. The contact information and the name of the agency into the form should be entered as follows:

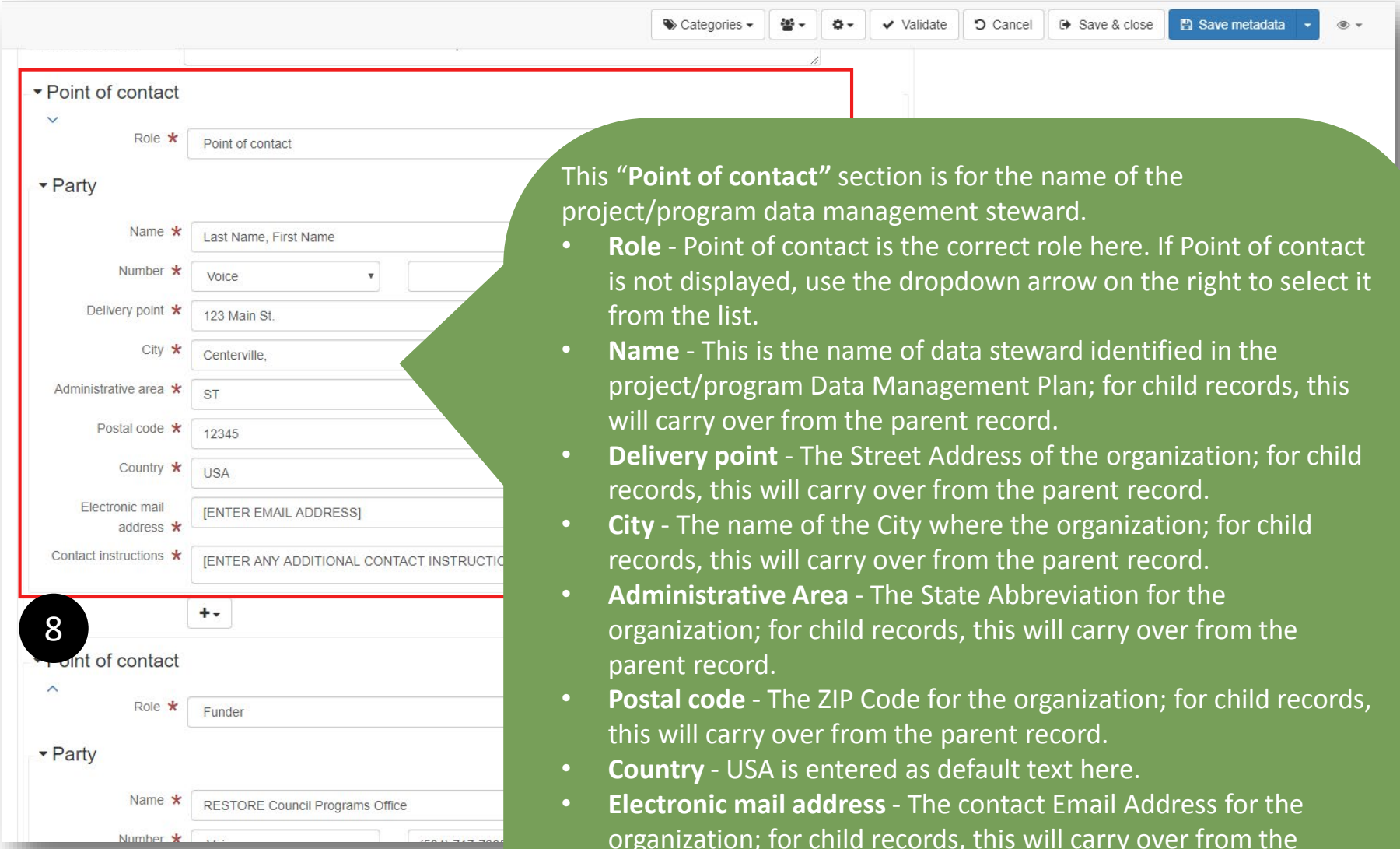
- **Role** - "Owner" should be displayed in the dropdown list. If not, select it from the list.
- **Name** - The name of the Council Member Agency/Organization awarded funding.
- **Number (Voice)** - The telephone number.
- **Delivery Point** - The Agency/Organization street address.
- **City** - The Agency/Organization City.
- **Postal Code** - The Agency/Organization ZIP code.
- **Country –** USA is entered as default text here.
- **Electronic mail address** - The Agency/Organization Email address.

# Creating a Child Record from a RESTORE Template




**Presentation form-** Choose the presentation form from the drop down menu.
**Abstract -** Enter a description of the dataset. The abstract for a dataset is not such as one would write for a scientific paper. Rather, it is a description of the RESTORE-funded project or program described by the Parent Record. When creating a child record, this information will carry over from the parent record as a general overview of the RESTORE-funded project your dataset is associated with. You must modify this information to describe your specific dataset.
**Credit-** When creating a child record, do not modify this field. Based on the type of funding for the parent project, the field will carry over either "RESTORE Council-selected Restoration Component" OR "RESTORE Council Spill Impact Component".

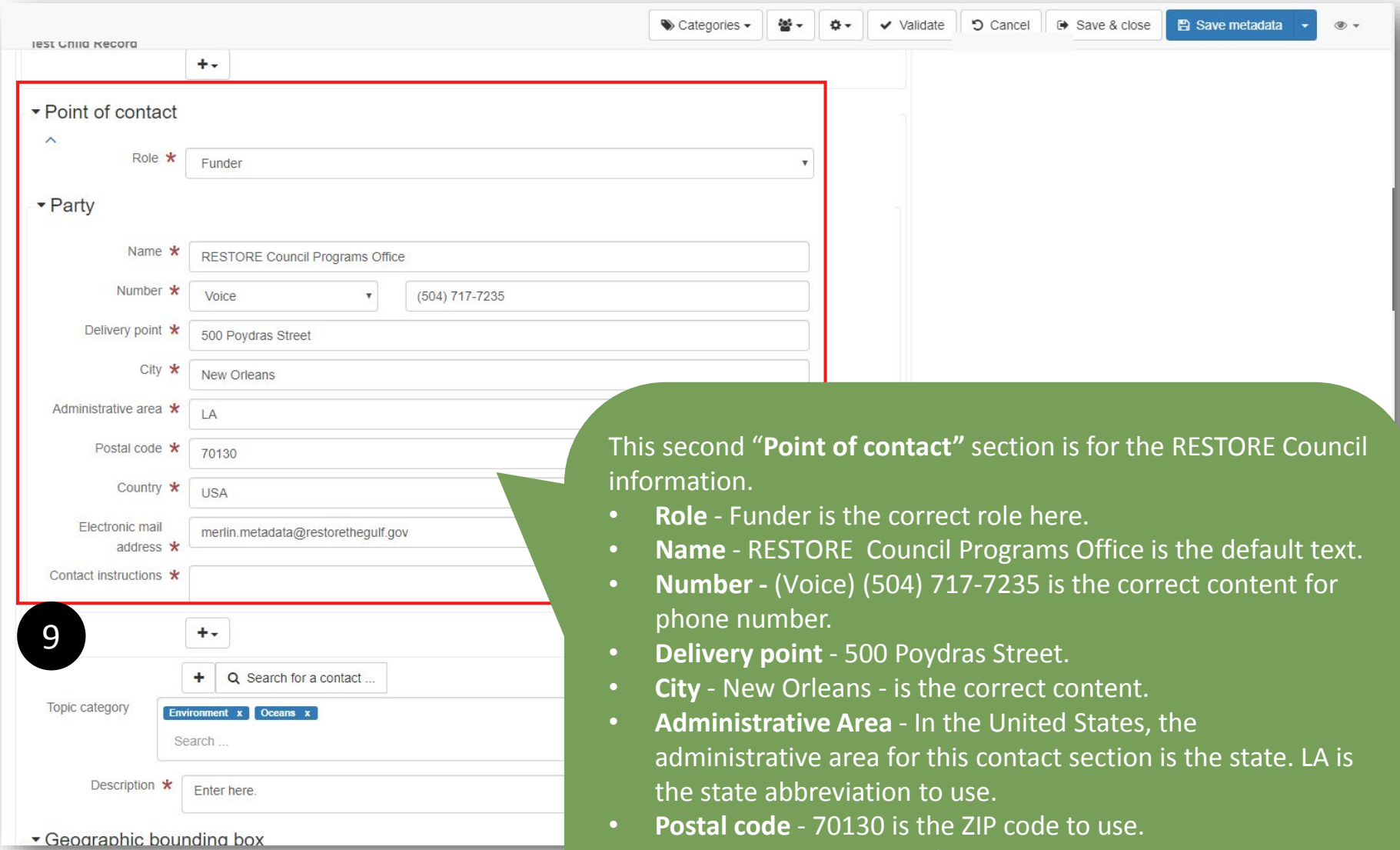
# Creating a Child Record from a RESTORE Template




This "**Point of contact**" section is for the name of the project/program data management steward.

- **Role** - Point of contact is the correct role here. If Point of contact is not displayed, use the dropdown arrow on the right to select it from the list.
- **Name** - This is the name of data steward identified in the project/program Data Management Plan; for child records, this will carry over from the parent record.
- **Delivery point** - The Street Address of the organization; for child records, this will carry over from the parent record.
- **City** - The name of the City where the organization; for child records, this will carry over from the parent record.
- **Administrative Area** - The State Abbreviation for the organization; for child records, this will carry over from the parent record.
- **Postal code** - The ZIP Code for the organization; for child records, this will carry over from the parent record.
- **Country** - USA is entered as default text here.
- **Electronic mail address** - The contact Email Address for the organization; for child records, this will carry over from the parent record.
- **Contact Instructions** - Instructions are entered here are needed; for child records, this will carry over from the parent record.

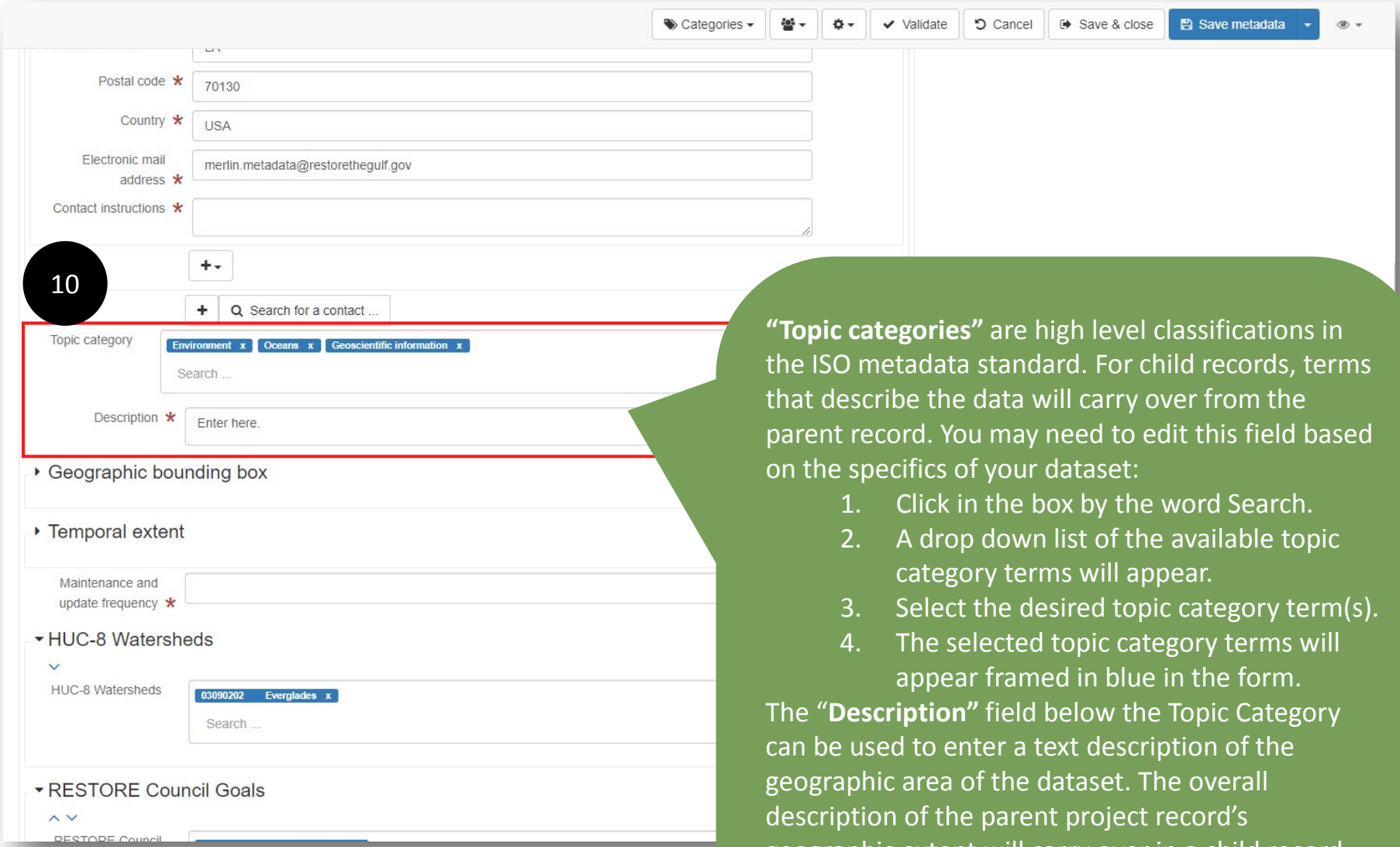
# Creating a Child Record from a RESTORE Template




This second "**Point of contact**" section is for the RESTORE Council information.

- **Role** - Funder is the correct role here.
- **Name** - RESTORE Council Programs Office is the default text.
- **Number -** (Voice) (504) 717-7235 is the correct content for phone number.
- **Delivery point** - 500 Poydras Street.
- **City** - New Orleans - is the correct content.
- **Administrative Area** - In the United States, the administrative area for this contact section is the state. LA is the state abbreviation to use.
- **Postal code** - 70130 is the ZIP code to use.
- **Country** - USA is entered.
- **Electronic mail address** - merlin.metadata@restorethegulf.gov is the email to use.

# Creating a Child Record from a RESTORE Template

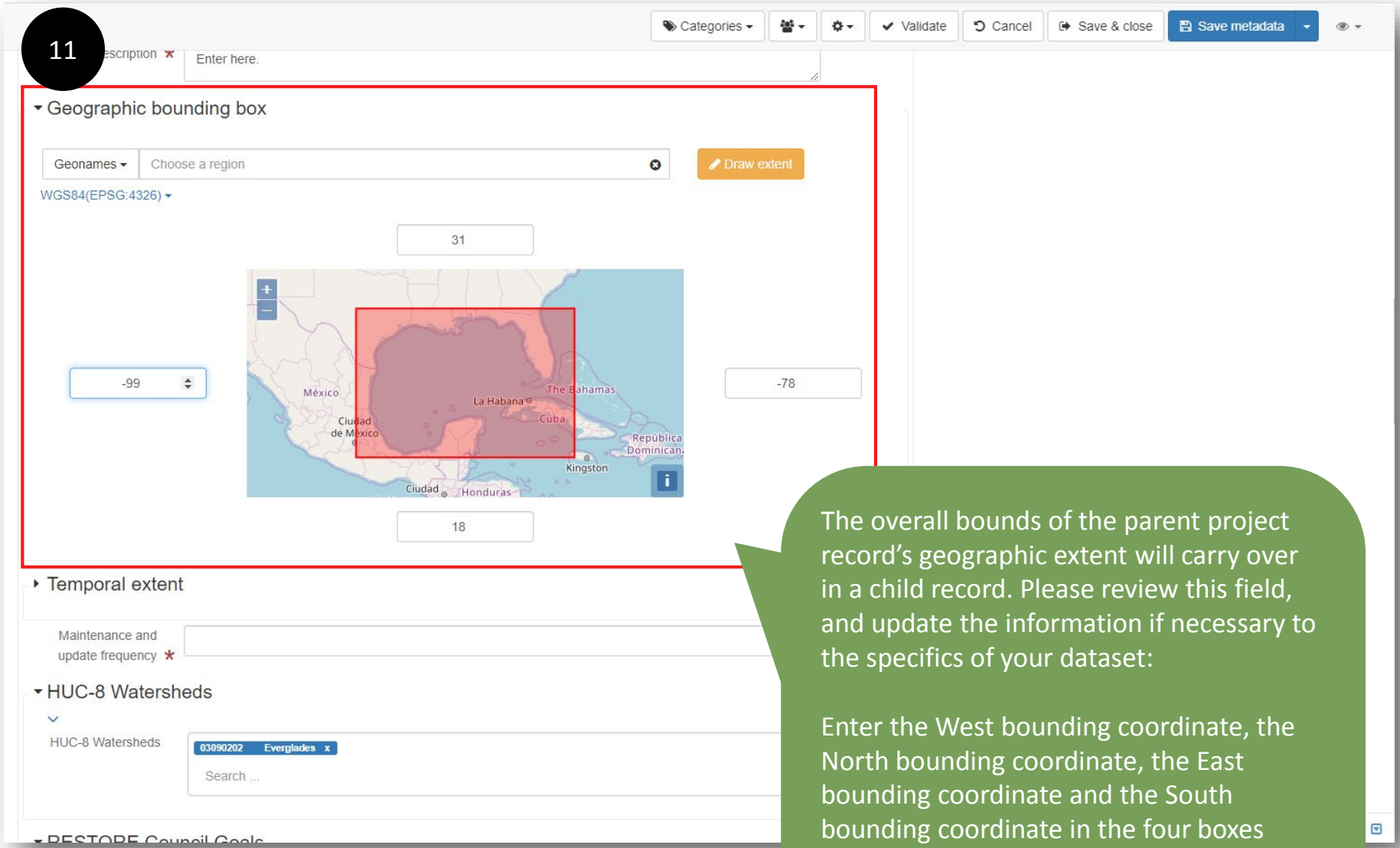



**"Topic categories"** are high level classifications in the ISO metadata standard. For child records, terms that describe the data will carry over from the parent record. You may need to edit this field based on the specifics of your dataset:

1. Click in the box by the word Search.
2. A drop down list of the available topic category terms will appear.
3. Select the desired topic category term(s).
4. The selected topic category terms will appear framed in blue in the form.

The "**Description"** field below the Topic Category can be used to enter a text description of the geographic area of the dataset. The overall description of the parent project record's geographic extent will carry over in a child record. Update this information to the specifics of your dataset.

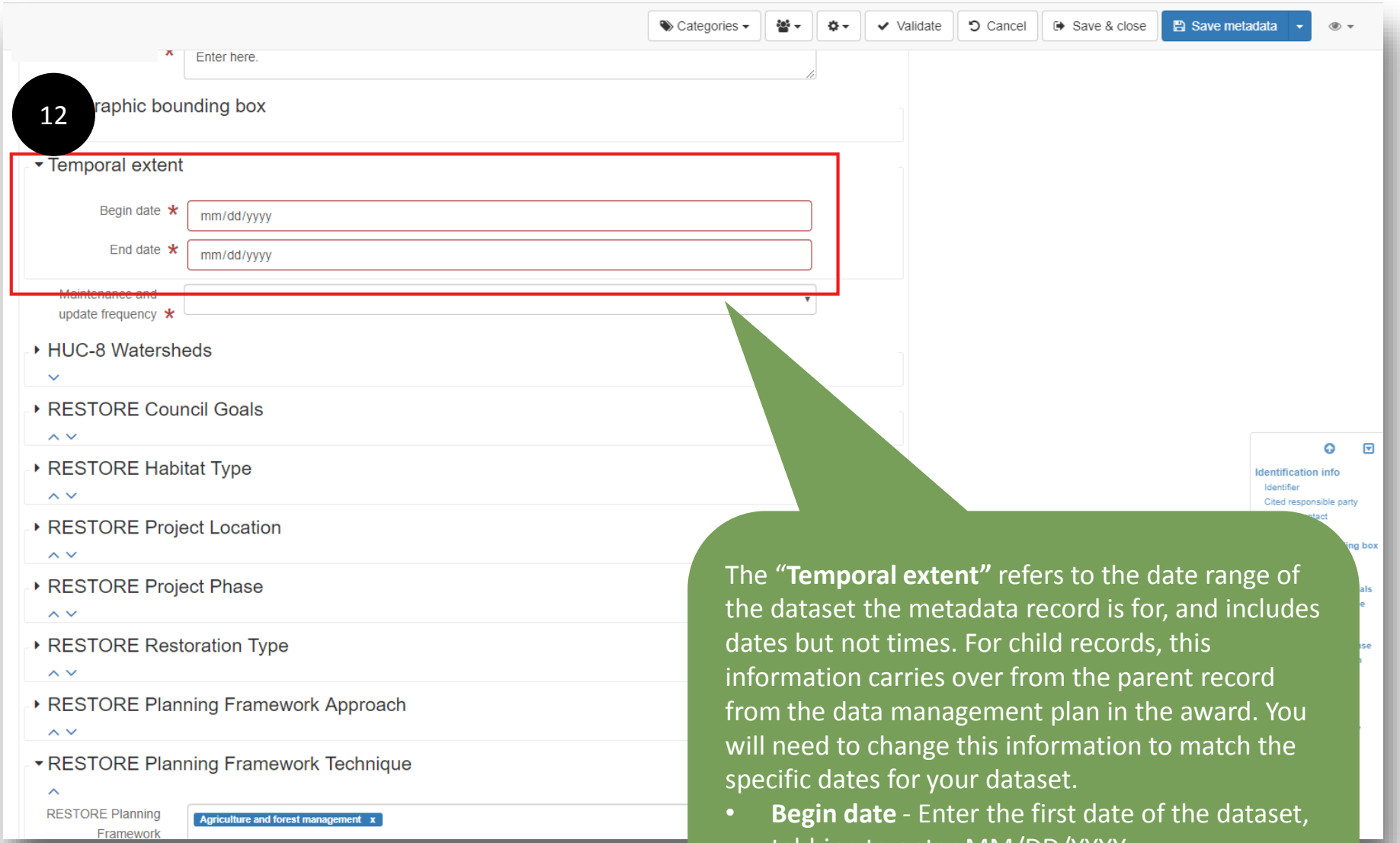
# Creating a Child Record from a RESTORE Template




The overall bounds of the parent project record's geographic extent will carry over in a child record. Please review this field, and update the information if necessary to the specifics of your dataset:

Enter the West bounding coordinate, the North bounding coordinate, the East bounding coordinate and the South bounding coordinate in the four boxes surrounding the map insert. The default is set so that it will focus on the Gulf of Mexico area.

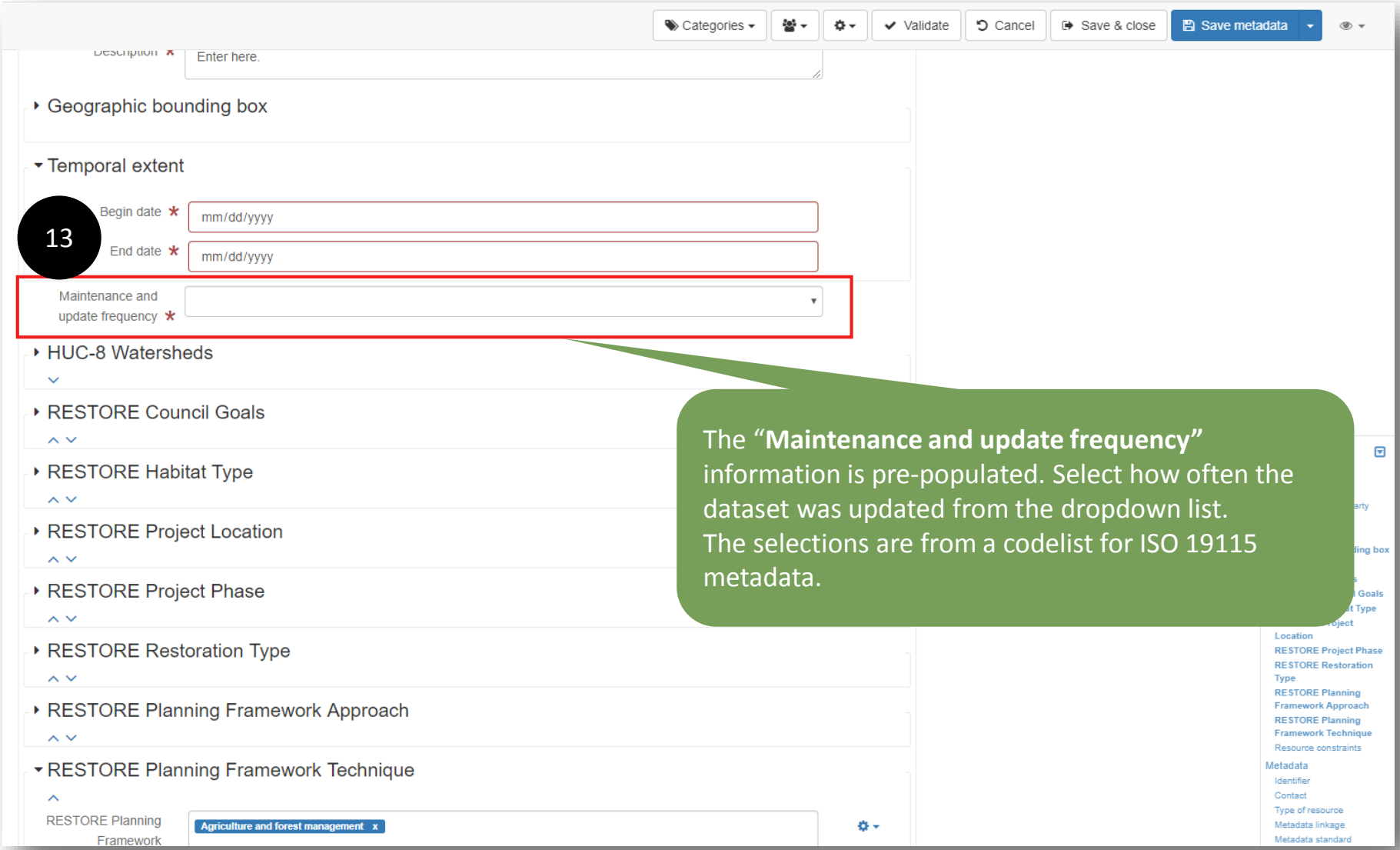
# Creating a Child Record from a RESTORE Template




The "**Temporal extent**" refers to the date range of the dataset the metadata record is for, and includes dates but not times. For child records, this information carries over from the parent record from the data management plan in the award. You will need to change this information to match the specific dates for your dataset.

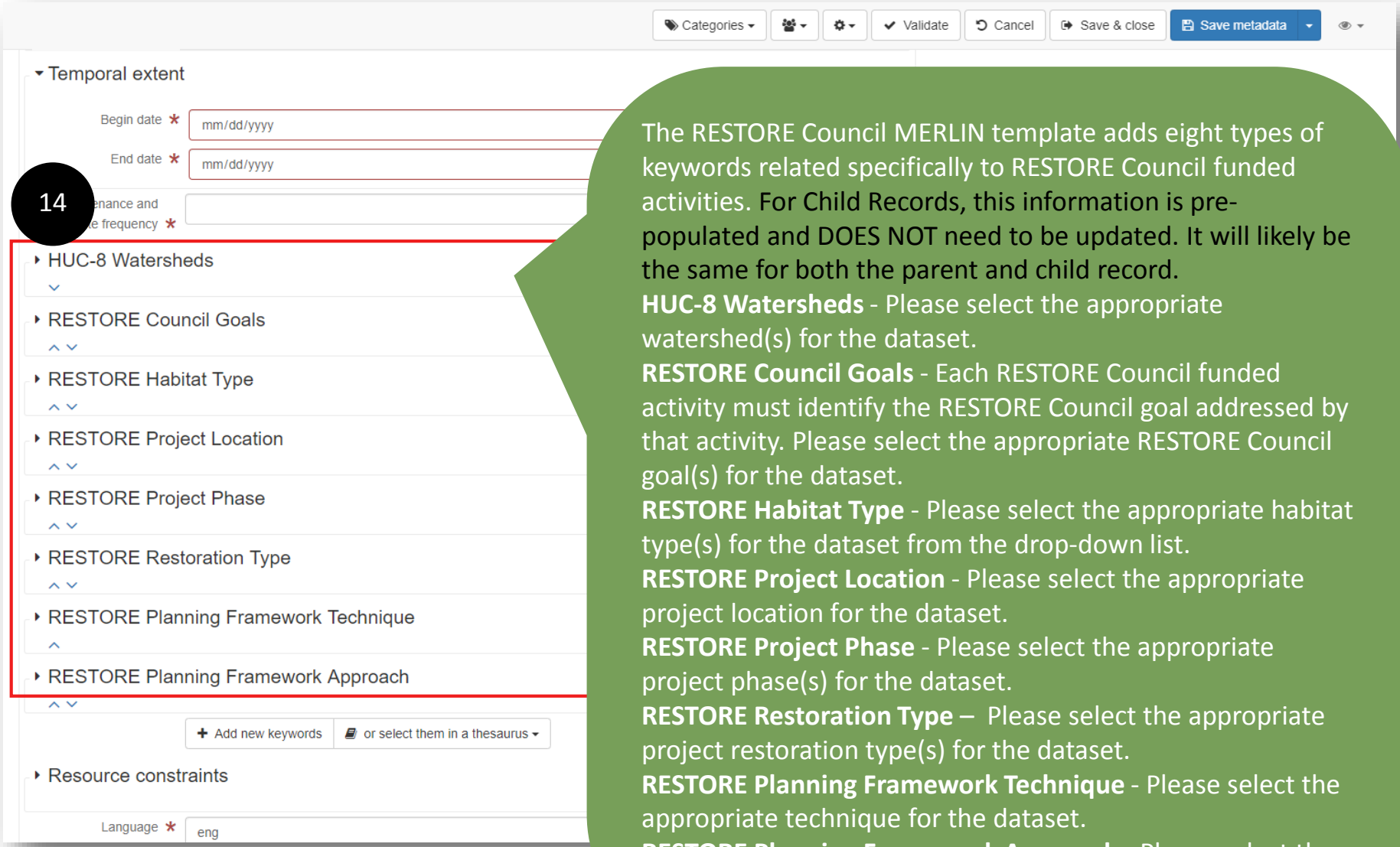
- **Begin date** - Enter the first date of the dataset, tabbing to enter MM/DD/YYYY
- **End date** - Enter the last date of the dataset, tabbing to enter MM/DD/YYYY

# Creating a Child Record from a RESTORE Template




The "**Maintenance and update frequency**" information is pre-populated. Select how often the dataset was updated from the dropdown list. The selections are from a codelist for ISO 19115 metadata.

# Creating a Child Record from a RESTORE Template




The RESTORE Council MERLIN template adds eight types of keywords related specifically to RESTORE Council funded activities. For Child Records, this information is pre-populated and DOES NOT need to be updated. It will likely be the same for both the parent and child record.

**HUC-8 Watersheds** - Please select the appropriate watershed(s) for the dataset.

**RESTORE Council Goals** - Each RESTORE Council funded activity must identify the RESTORE Council goal addressed by that activity. Please select the appropriate RESTORE Council goal(s) for the dataset.

**RESTORE Habitat Type** - Please select the appropriate habitat type(s) for the dataset from the drop-down list.

**RESTORE Project Location** - Please select the appropriate project location for the dataset.

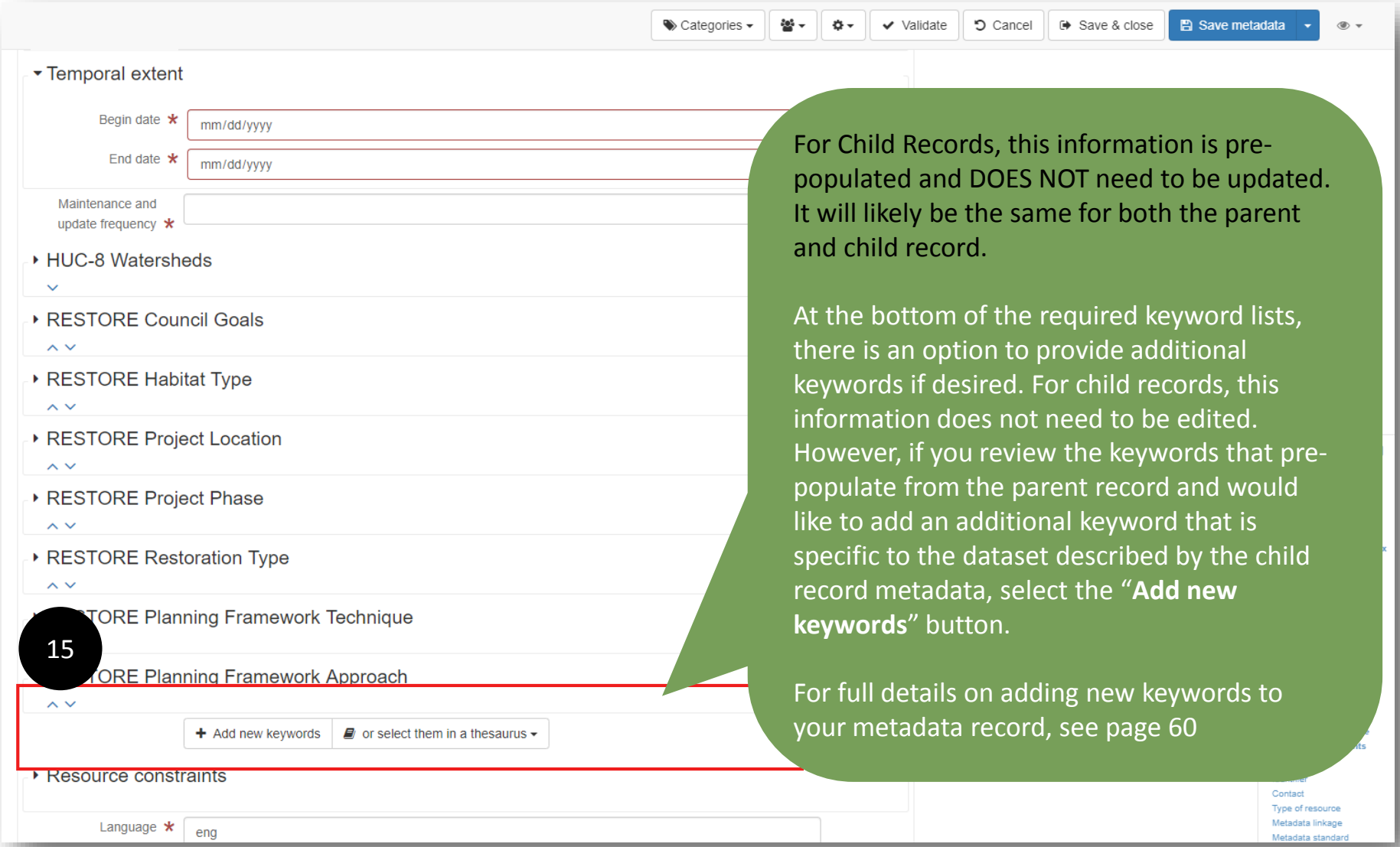
**RESTORE Project Phase** - Please select the appropriate project phase(s) for the dataset.

**RESTORE Restoration Type** – Please select the appropriate project restoration type(s) for the dataset.

**RESTORE Planning Framework Technique** - Please select the appropriate technique for the dataset.

**RESTORE Planning Framework Approach** - Please select the appropriate approach for the dataset.

# Creating a Child Record from a RESTORE Template

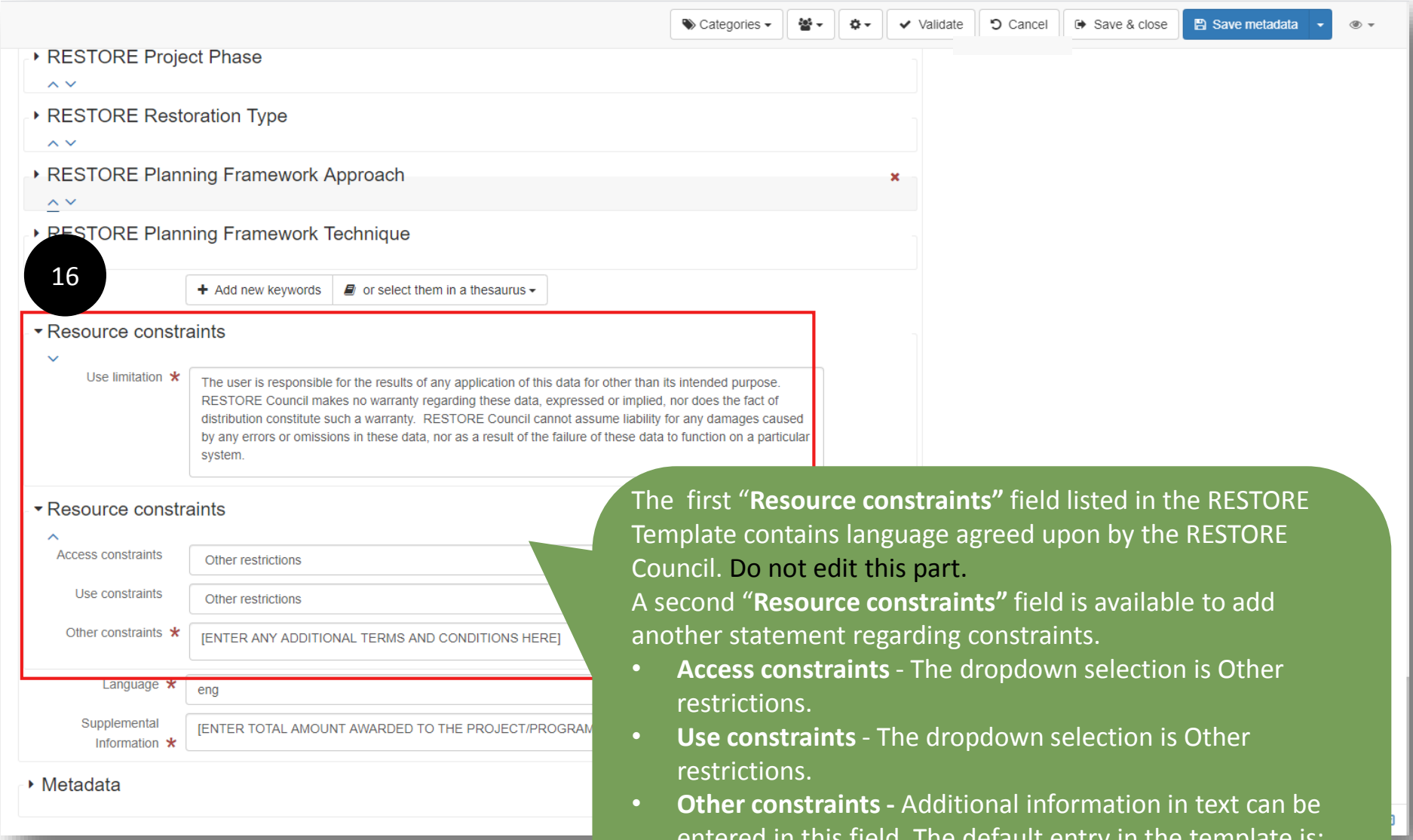



For Child Records, this information is pre-populated and DOES NOT need to be updated. It will likely be the same for both the parent and child record.

At the bottom of the required keyword lists, there is an option to provide additional keywords if desired. For child records, this information does not need to be edited. However, if you review the keywords that pre-populate from the parent record and would like to add an additional keyword that is specific to the dataset described by the child record metadata, select the "**Add new keywords**" button.

For full details on adding new keywords to your metadata record, see page 60

# Creating a Child Record from a RESTORE Template

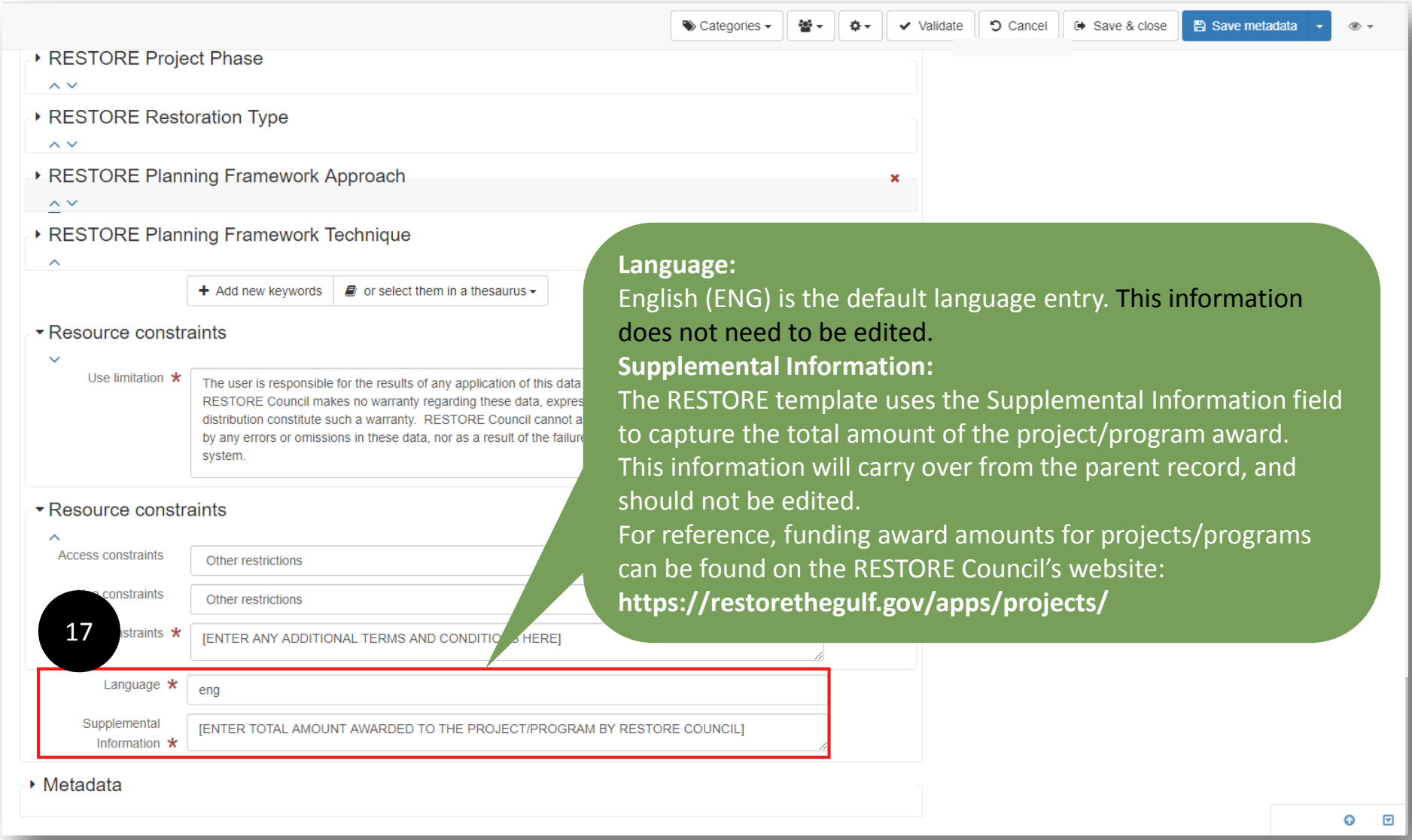



The first "**Resource constraints"** field listed in the RESTORE Template contains language agreed upon by the RESTORE Council. Do not edit this part.

A second "**Resource constraints"** field is available to add another statement regarding constraints.

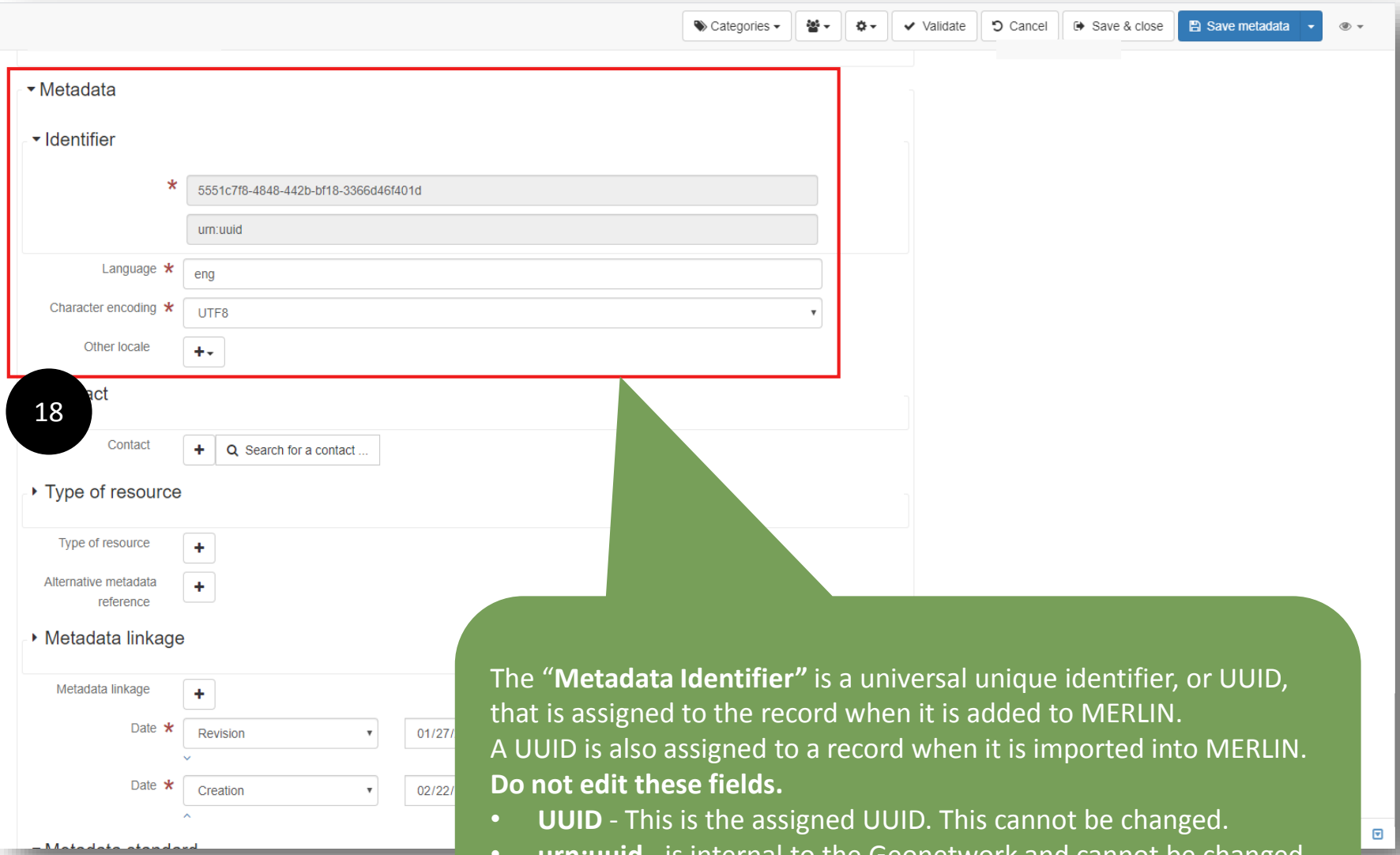
- **Access constraints** - The dropdown selection is Other restrictions.
- **Use constraints** - The dropdown selection is Other restrictions.
- **Other constraints -** Additional information in text can be entered in this field. The default entry in the template is: [ENTER ANY ADDITIONAL TERMS AND CONDITIONS HERE]. If you do not have anything to add here, remove the default text.

# Creating a Child Record from a RESTORE Template




**Language:**
English (ENG) is the default language entry. This information does not need to be edited.
**Supplemental Information:**
The RESTORE template uses the Supplemental Information field to capture the total amount of the project/program award. This information will carry over from the parent record, and should not be edited.
For reference, funding award amounts for projects/programs can be found on the RESTORE Council's website:
**https://restorethegulf.gov/apps/projects/**

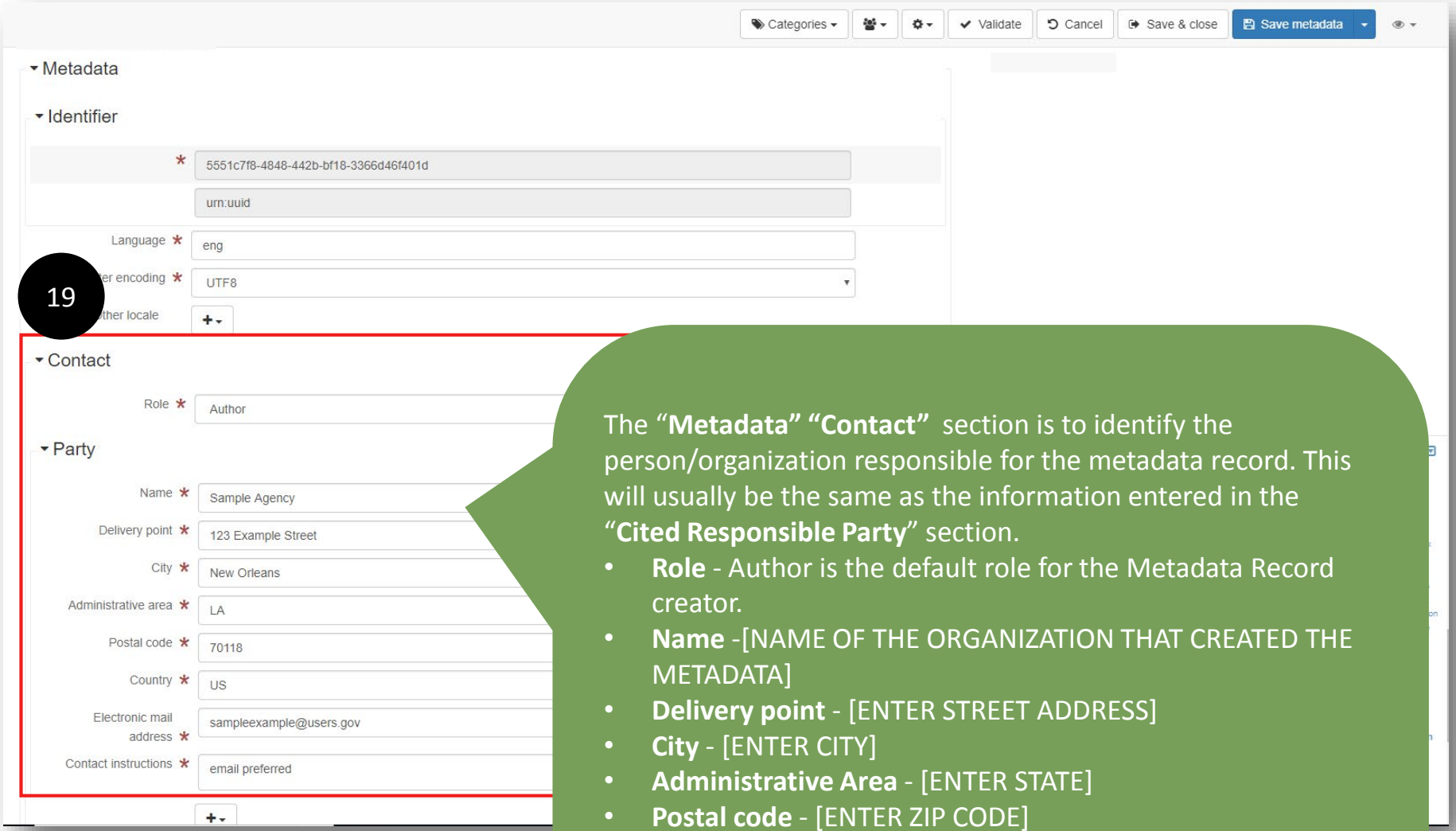
# Creating a Child Record from a RESTORE Template




The "**Metadata Identifier"** is a universal unique identifier, or UUID, that is assigned to the record when it is added to MERLIN.
A UUID is also assigned to a record when it is imported into MERLIN.
**Do not edit these fields.**

- **UUID** - This is the assigned UUID. This cannot be changed.
- **urn:uuid** - is internal to the Geonetwork and cannot be changed.
- **Language** - eng
- **Character encoding** - UTF8

# Creating a Child Record from a RESTORE Template

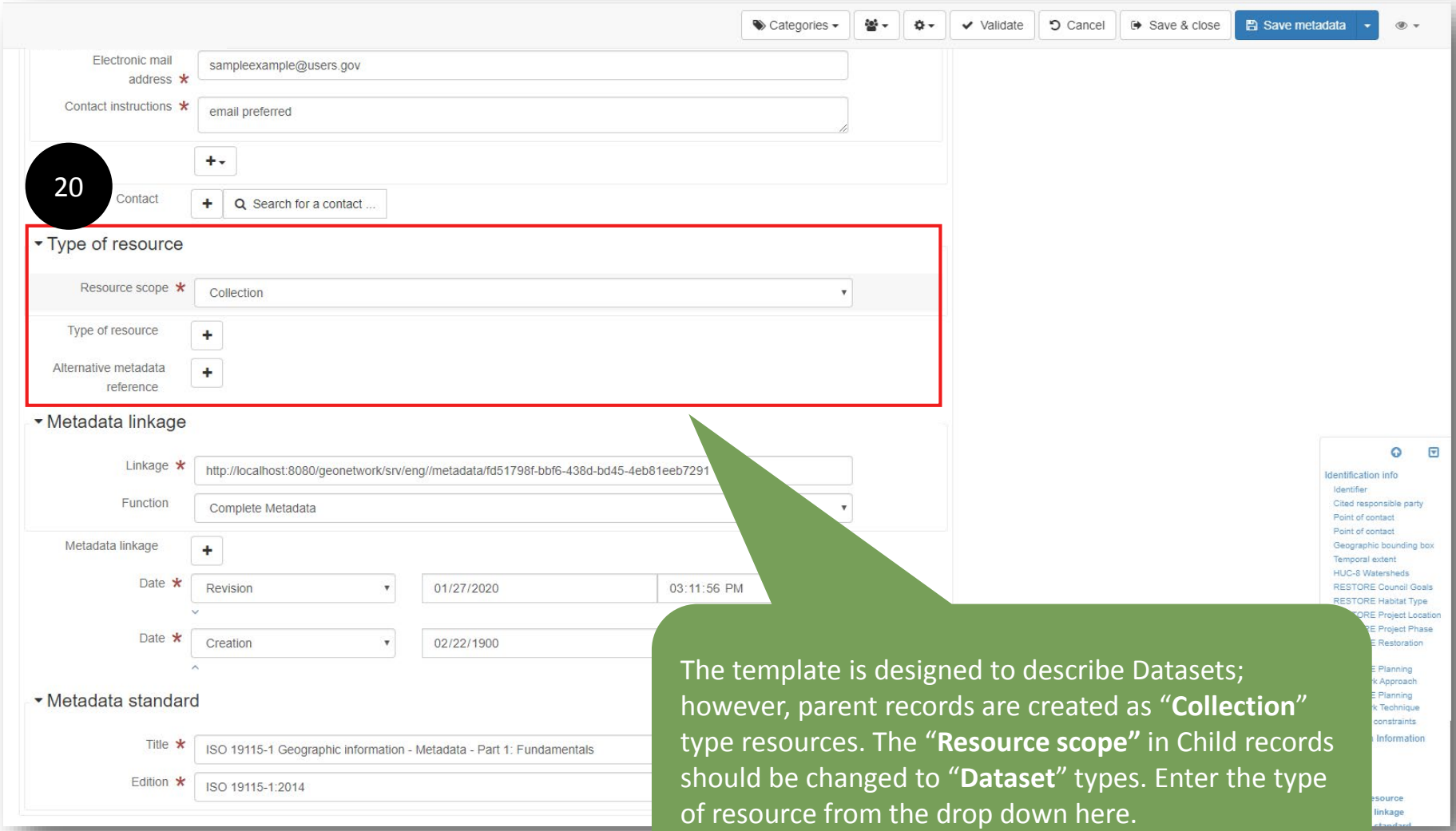



19

The "**Metadata" "Contact"** section is to identify the person/organization responsible for the metadata record. This will usually be the same as the information entered in the "**Cited Responsible Party**" section.

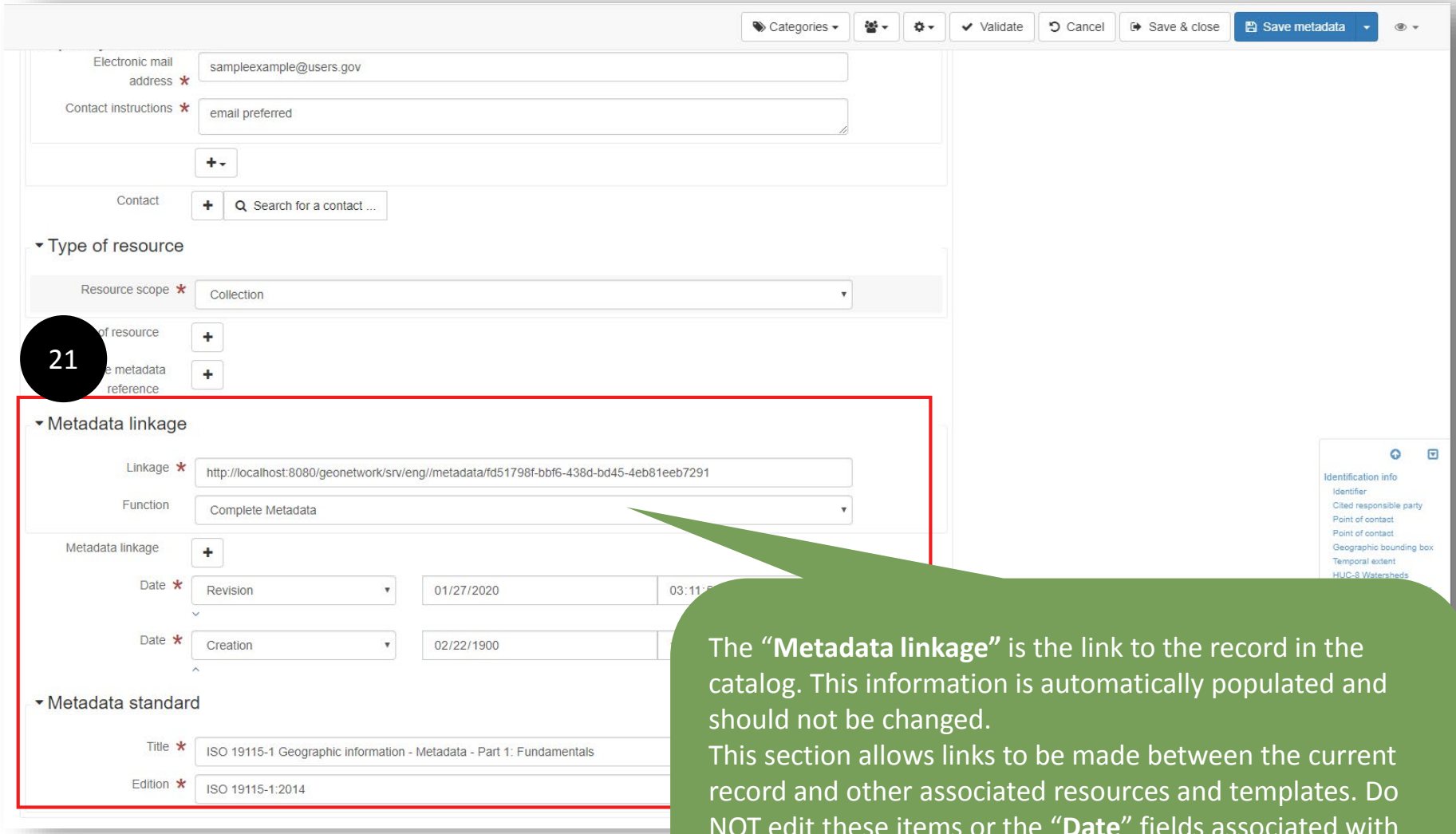
- **Role** - Author is the default role for the Metadata Record creator.
- **Name** -[NAME OF THE ORGANIZATION THAT CREATED THE METADATA]
- **Delivery point** - [ENTER STREET ADDRESS]
- **City** - [ENTER CITY]
- **Administrative Area** - [ENTER STATE]
- **Postal code** - [ENTER ZIP CODE]
- **Country** - USA is entered as default text here.
- **Electronic mail address** - [ENTER EMAIL ADDRESS]
- **Contact instructions** - [ENTER ANY ADDITIONAL CONTACT INSTRUCTIONS]

# Creating a Child Record from a RESTORE Template




The template is designed to describe Datasets; however, parent records are created as "**Collection**" type resources. The "**Resource scope**" in Child records should be changed to "**Dataset**" types. Enter the type of resource from the drop down here.

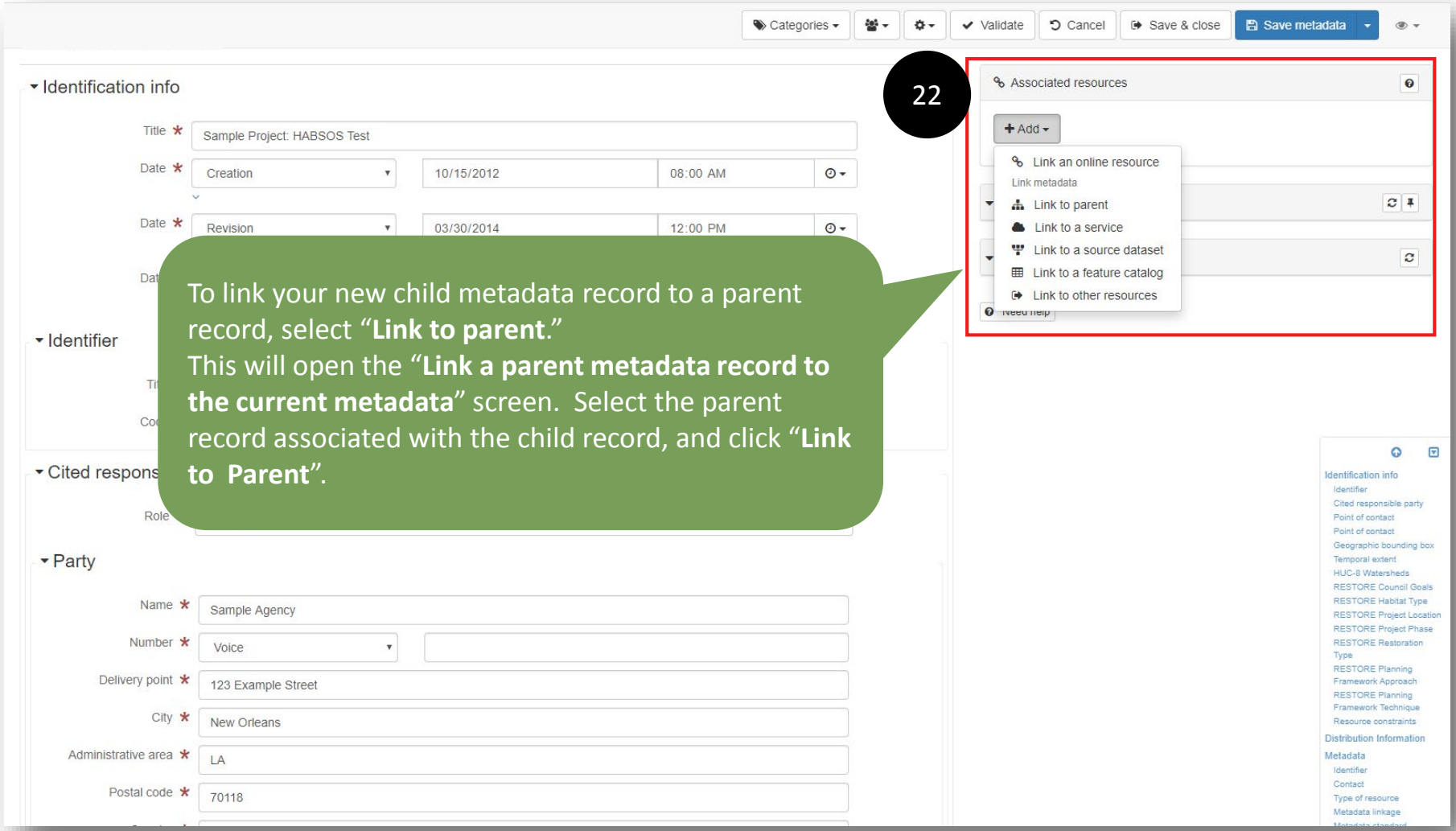
# Creating a Child Record from a RESTORE Template




The "**Metadata linkage"** is the link to the record in the catalog. This information is automatically populated and should not be changed.
This section allows links to be made between the current record and other associated resources and templates. Do NOT edit these items or the "**Date**" fields associated with them.

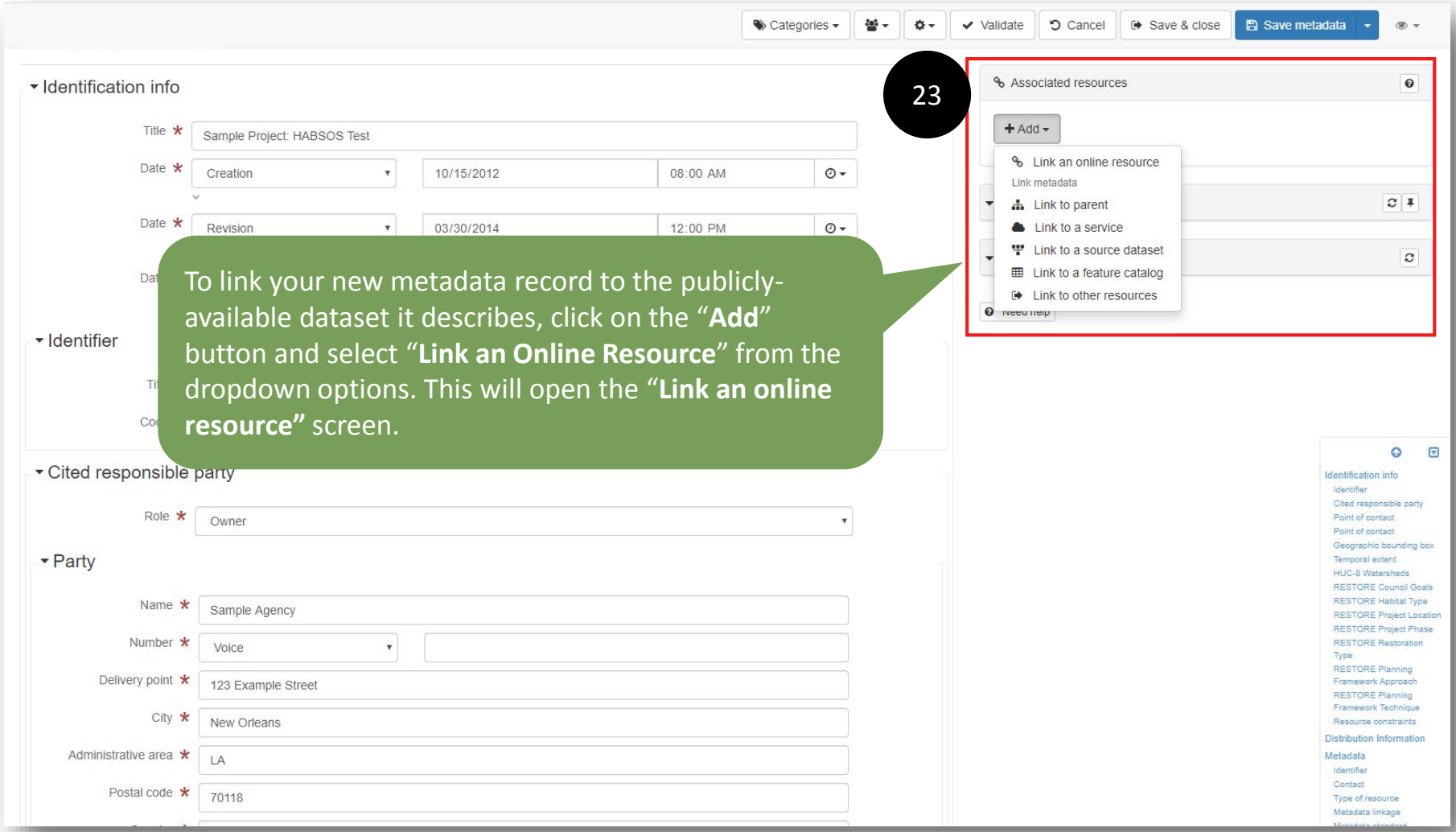
The "**Metadata standard"** in use is automatically populated by the RESTORE template and should not be changed.

# Creating a Child Record from a RESTORE Template



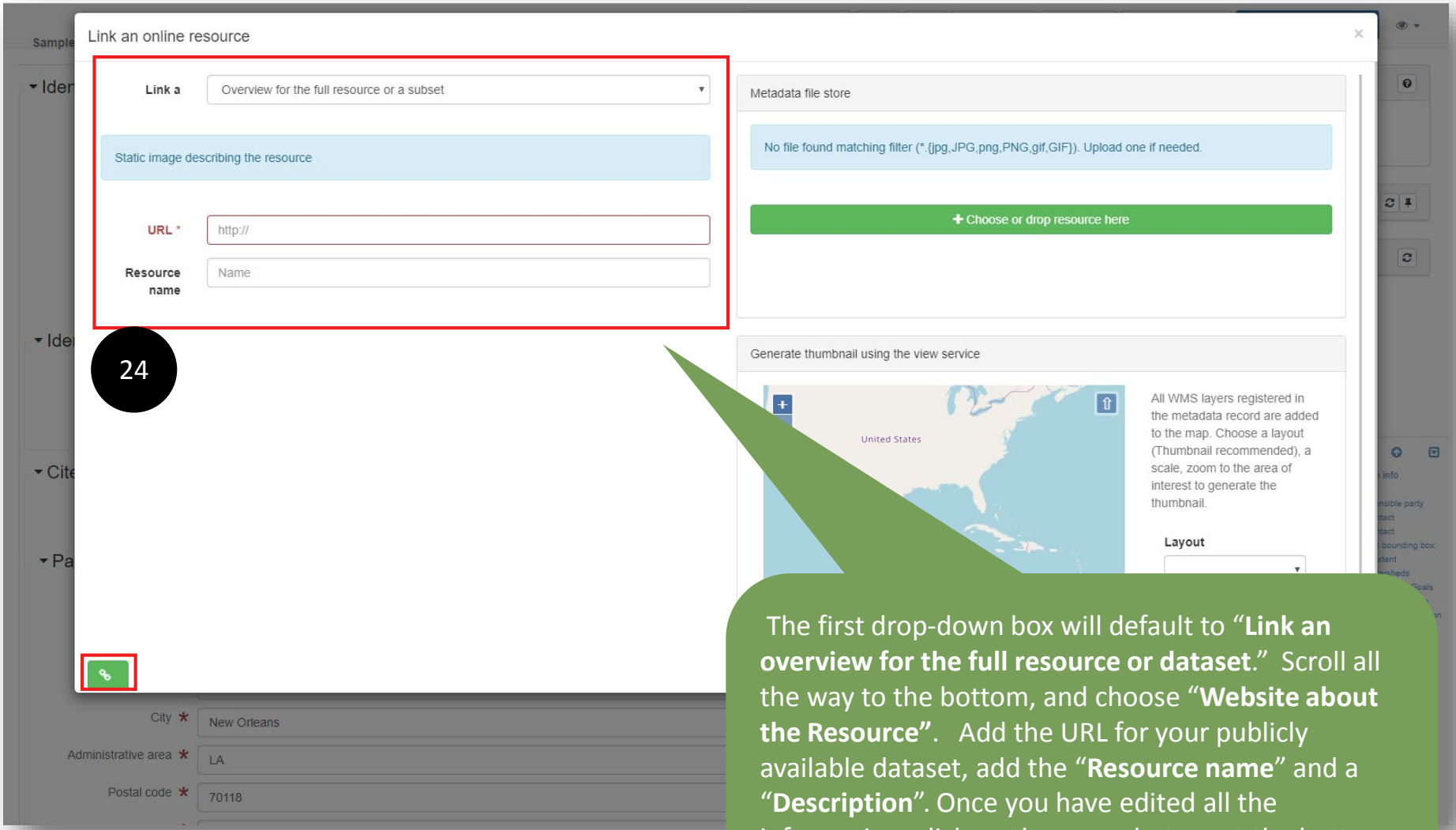

*The "**Associated Resources**" tool creates relationships between metadata records and any associated files. Any time a child record is created, the user must associate it with the appropriate parent record.*

# Creating a Child Record from a RESTORE Template



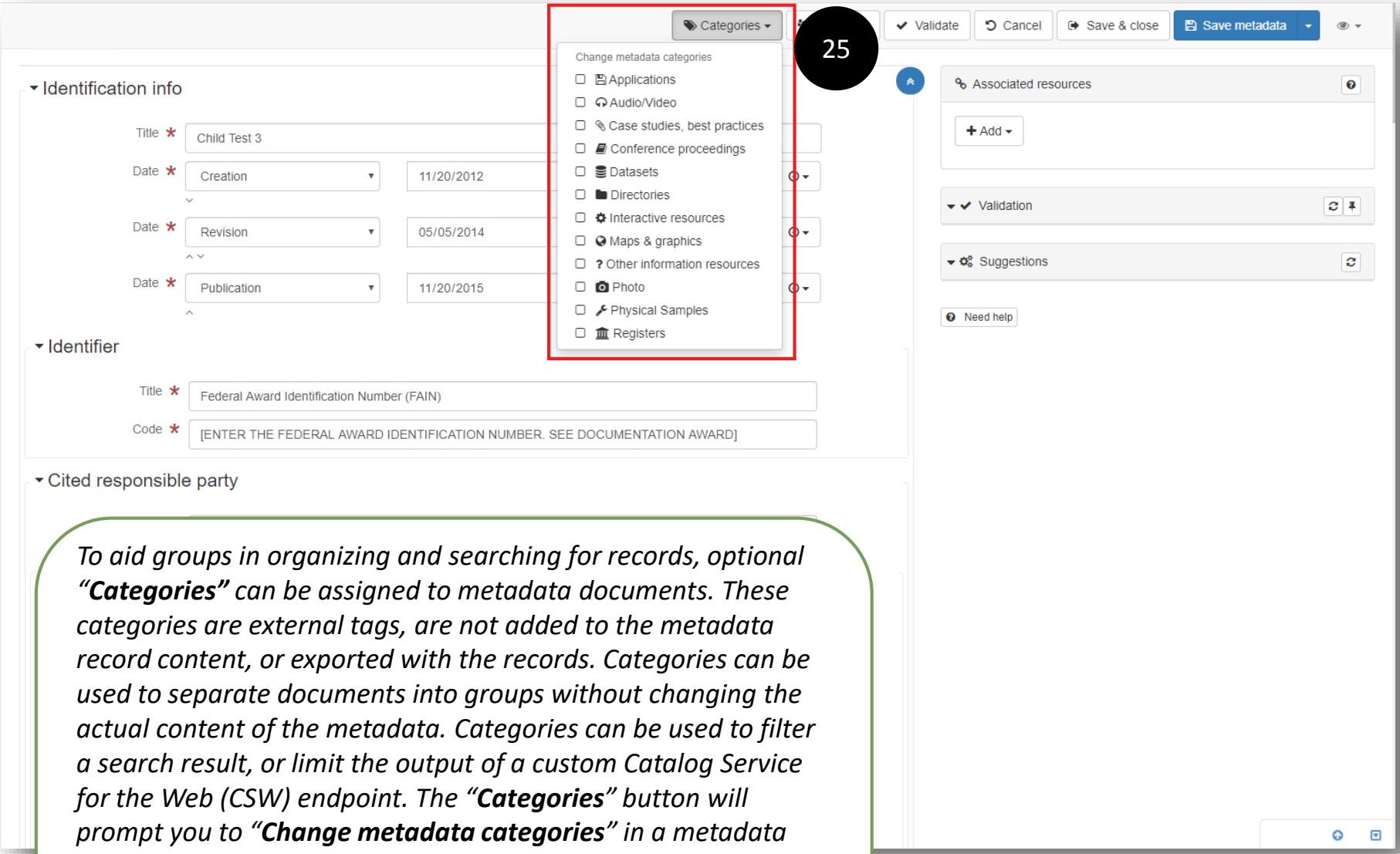

***Aside from a parent/child association, the most common associated resource you will add in MERLIN is a link to the publicly available dataset your metadata record describes.*** *When editing a record, you will see the "**Associated resources**" box on the right hand side of the page. Using this button, records may also be linked to other documents, a service, source dataset, feature catalog or other resources.*

# Creating a Child Record from a RESTORE Template



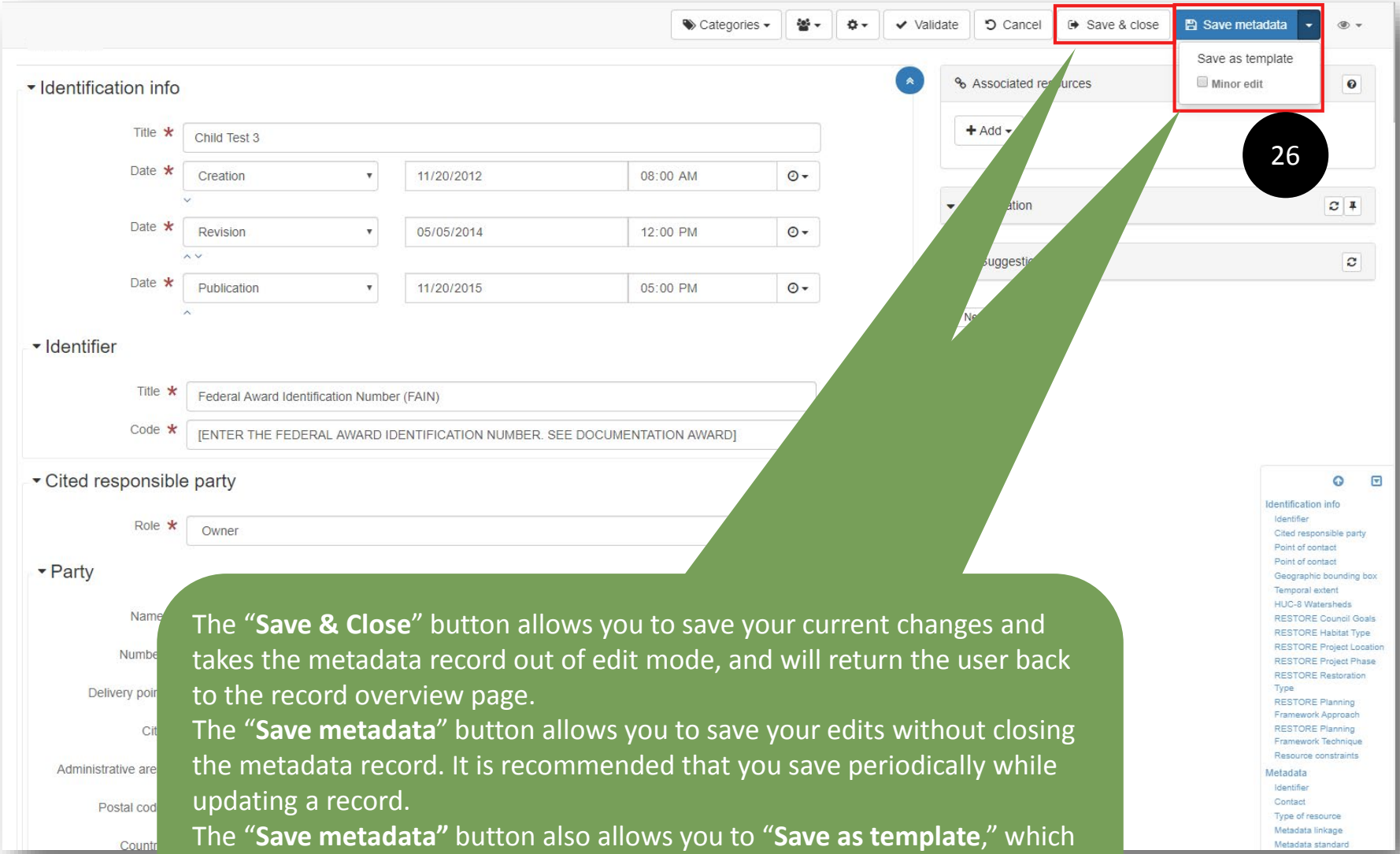

The first drop-down box will default to "**Link an overview for the full resource or dataset**." Scroll all the way to the bottom, and choose "**Website about the Resource**". Add the URL for your publicly available dataset, add the "**Resource name**" and a "**Description**". Once you have edited all the information, click on the green button at the bottom left hand corner of the screen. This will add the link to your resource to your metadata record.

# Creating a Child Record from a RESTORE Template




*To aid groups in organizing and searching for records, optional "**Categories**" can be assigned to metadata documents. These categories are external tags, are not added to the metadata record content, or exported with the records. Categories can be used to separate documents into groups without changing the actual content of the metadata. Categories can be used to filter a search result, or limit the output of a custom Catalog Service for the Web (CSW) endpoint. The "**Categories**" button will prompt you to "**Change metadata categories**" in a metadata record. The list of available categories will display when you click on the categories button. The Category list can be modified by a MERLIN Administrator.*

# Creating a Child Record from a RESTORE Template

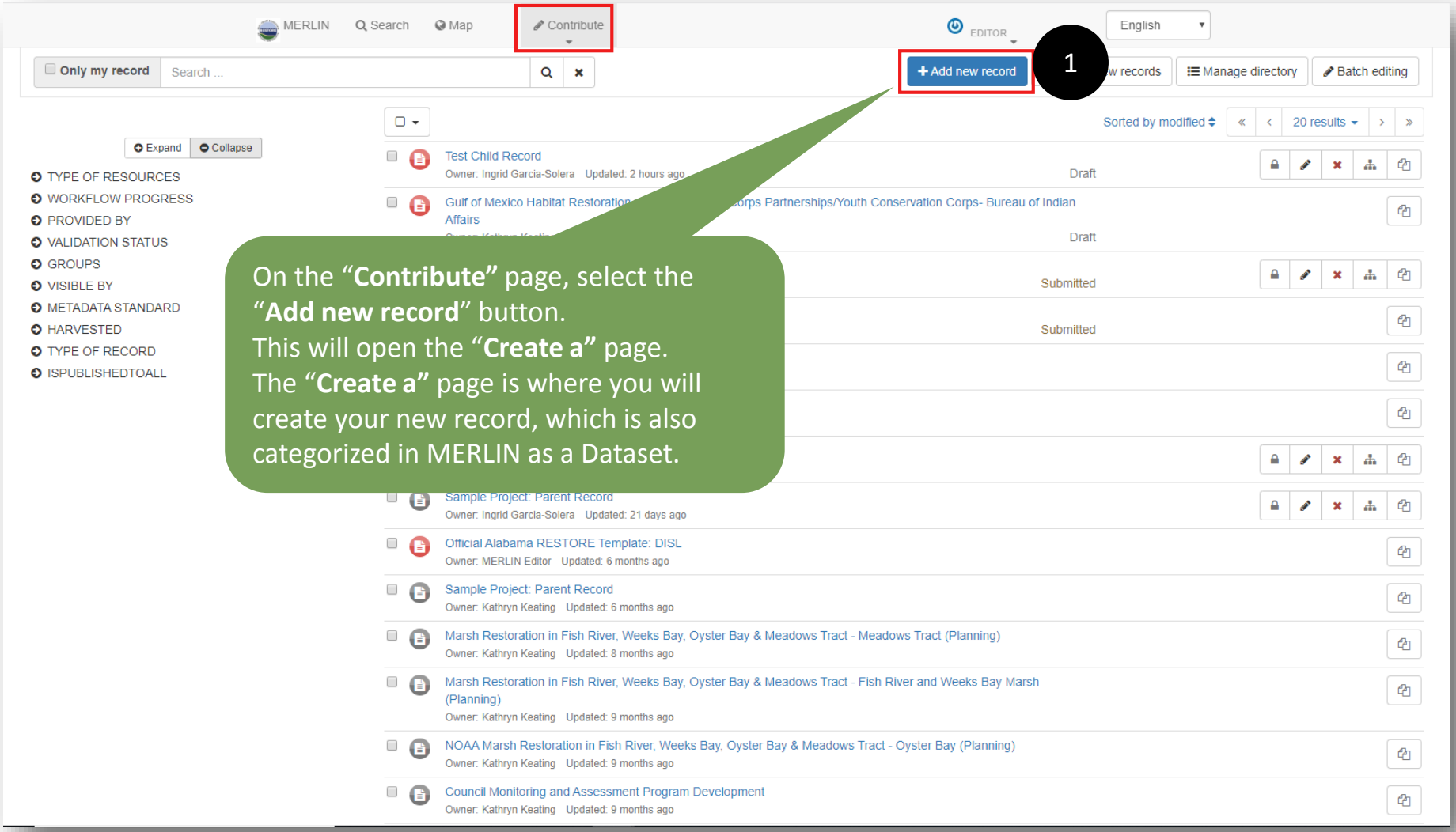



The "**Save & Close**" button allows you to save your current changes and takes the metadata record out of edit mode, and will return the user back to the record overview page.

The "**Save metadata**" button allows you to save your edits without closing the metadata record. It is recommended that you save periodically while updating a record.

The "**Save metadata"** button also allows you to "**Save as template**," which lets you retain your edits as a template for future records. It is unlikely that you will need to use this save function, as agency templates have already been created for RESTORE records.

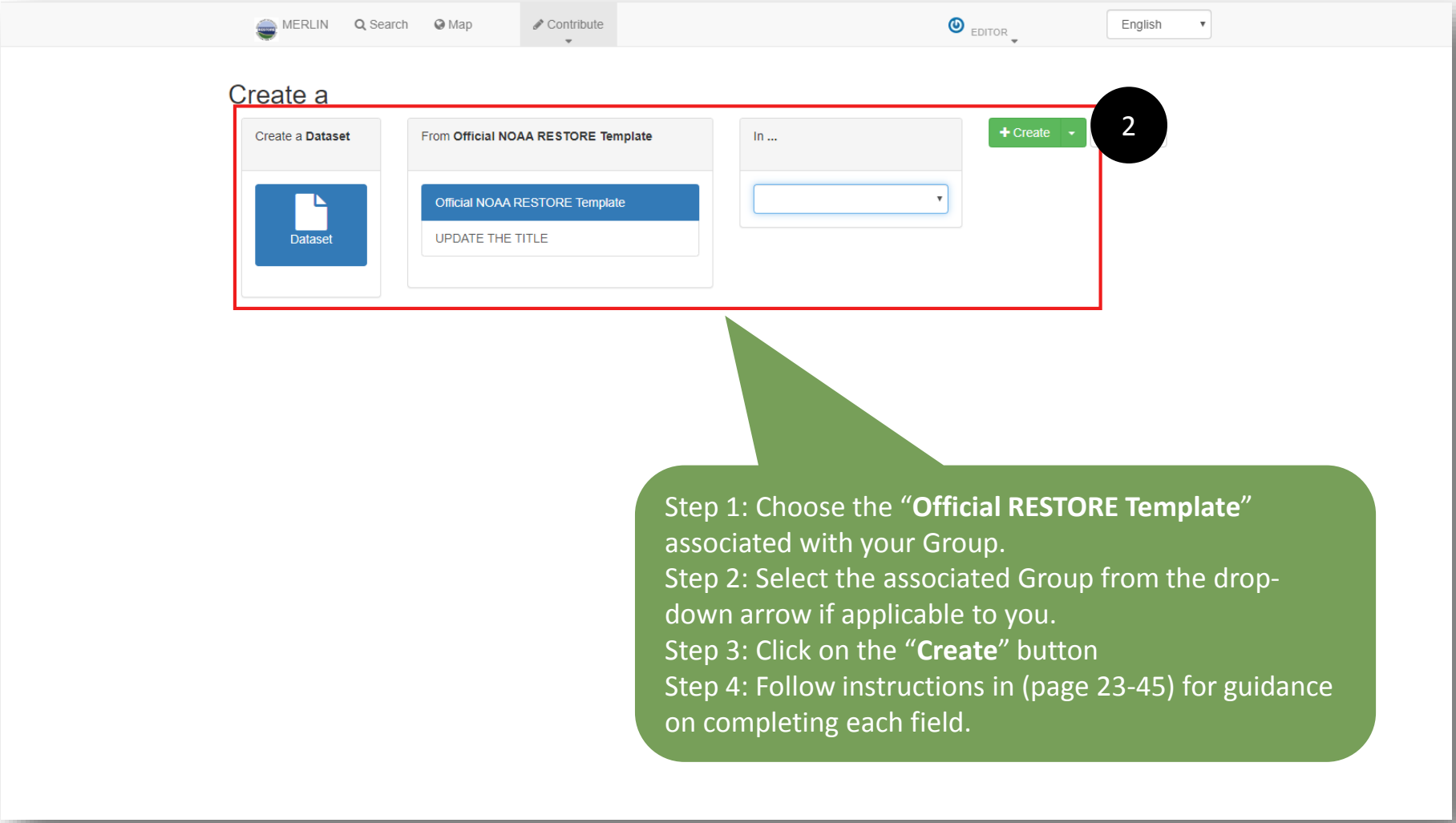
# Creating a Record from a Blank RESTORE Template




On the "**Contribute**" page, select the "**Add new record**" button.
This will open the "**Create a**" page.
The "**Create a**" page is where you will create your new record, which is also categorized in MERLIN as a Dataset.

*Although the editor's primary task is to generate child records from parent records associated with RESTORE-funded projects, there may be instances (such as the creation of a new parent record) in which a new record must be produced from a blank RESTORE template. If this is the case,* ***please be sure to reference the original award information*** *when completing the template.*

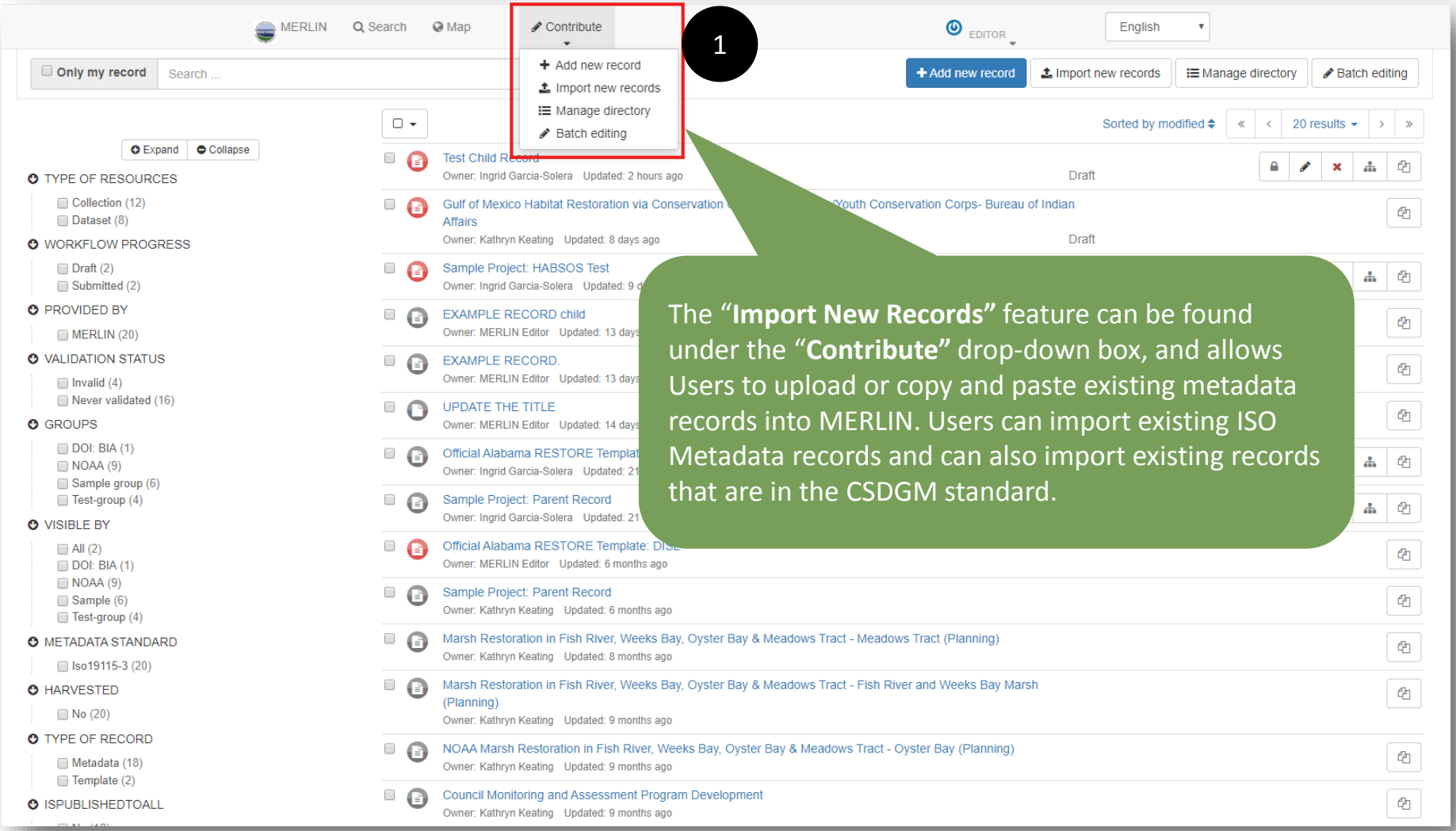
# Creating a Record from a Blank RESTORE Template




Step 1: Choose the "**Official RESTORE Template**" associated with your Group.
Step 2: Select the associated Group from the drop-down arrow if applicable to you.
Step 3: Click on the "**Create**" button
Step 4: Follow instructions in (page 23-45) for guidance on completing each field.

*If you are an EDITOR who has permission to create metadata for more than one Group, you may have access to more than one template. You will have a drop down menu from which to select the RESTORE TEMPLATE and a drop down list to select the associated Group for which you are creating this metadata record.*

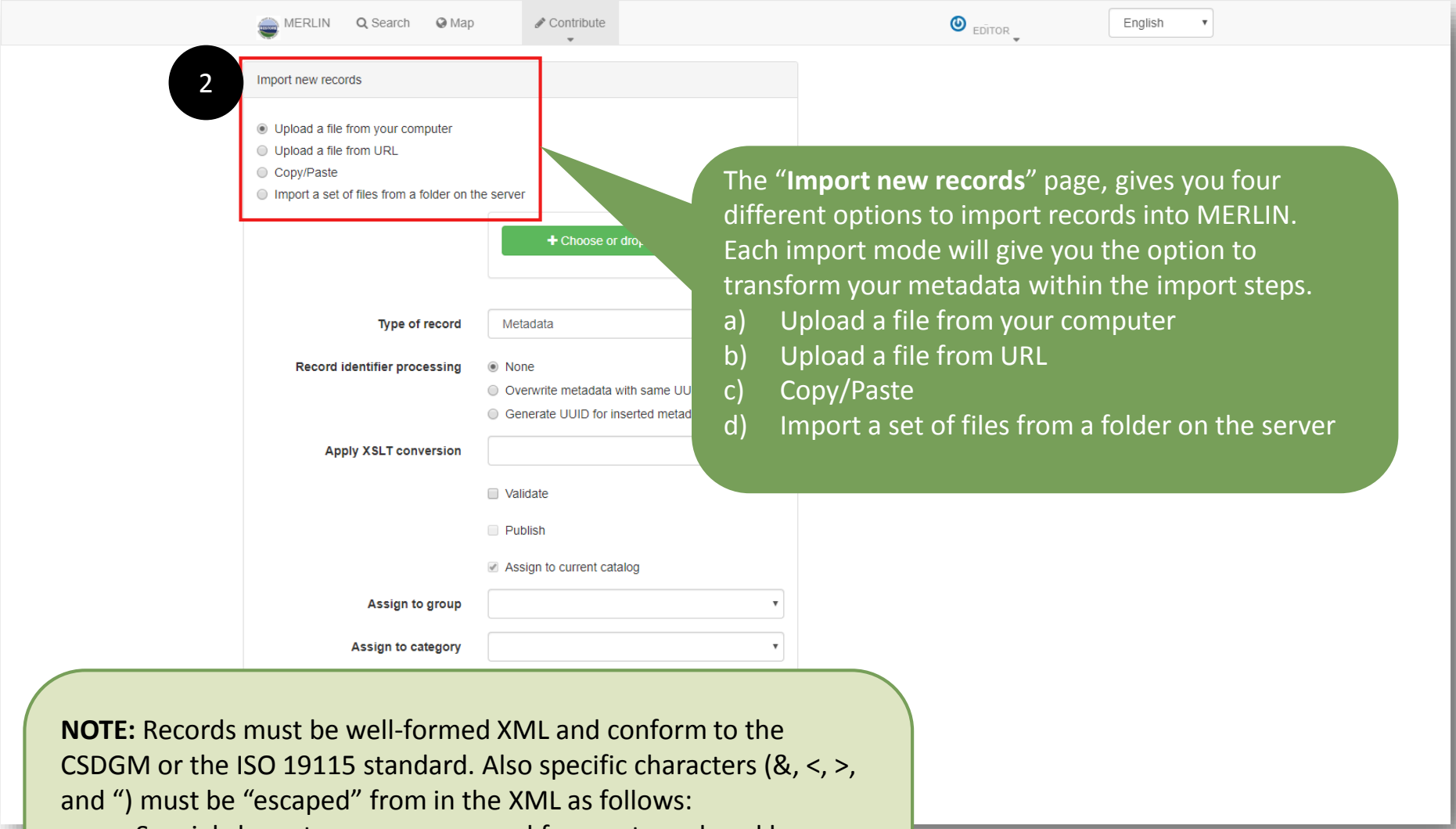
# Import/Transform Records




The "**Import New Records**" feature can be found under the "**Contribute**" drop-down box, and allows Users to upload or copy and paste existing metadata records into MERLIN. Users can import existing ISO Metadata records and can also import existing records that are in the CSDGM standard.

*If you are an EDITOR who has permission to create metadata for more than one Group, you may have access to more than one template. You will have a drop down menu from which to select the RESTORE TEMPLATE and a drop down list to select the associated Group for which you are creating this metadata record.*

# Import/Transform Records



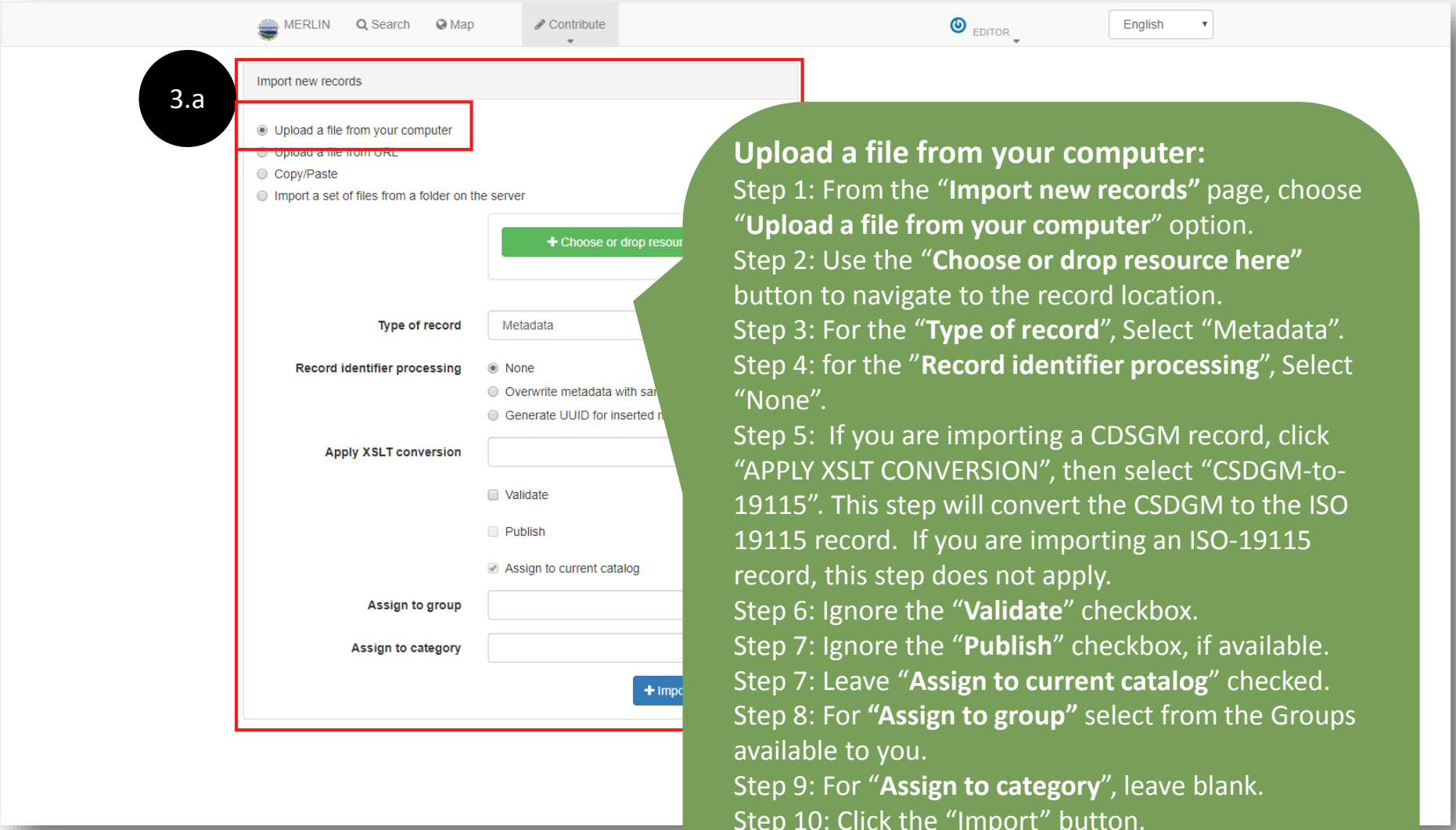

The "**Import new records**" page, gives you four different options to import records into MERLIN. Each import mode will give you the option to transform your metadata within the import steps.

a) Upload a file from your computer
b) Upload a file from URL
c) Copy/Paste
d) Import a set of files from a folder on the server

**NOTE:** Records must be well-formed XML and conform to the CSDGM or the ISO 19115 standard. Also specific characters (&, <, >, and ") must be "escaped" from in the XML as follows:

| Special character | escaped form gets replaced by |
|---|---|
| Ampersand | & & |
| Less-than | < < |
| Greater-than | > > |
| Quotes | " " |

# Import/Transform Records




**Upload a file from your computer:**

Step 1: From the "**Import new records"** page, choose "**Upload a file from your computer**" option.

Step 2: Use the "**Choose or drop resource here"** button to navigate to the record location.

Step 3: For the "**Type of record**", Select "Metadata".

Step 4: for the "**Record identifier processing**", Select "None".

Step 5: If you are importing a CDSGM record, click "APPLY XSLT CONVERSION", then select "CSDGM-to-19115". This step will convert the CSDGM to the ISO 19115 record. If you are importing an ISO-19115 record, this step does not apply.

Step 6: Ignore the "**Validate**" checkbox.

Step 7: Ignore the "**Publish**" checkbox, if available.

Step 7: Leave "**Assign to current catalog**" checked.

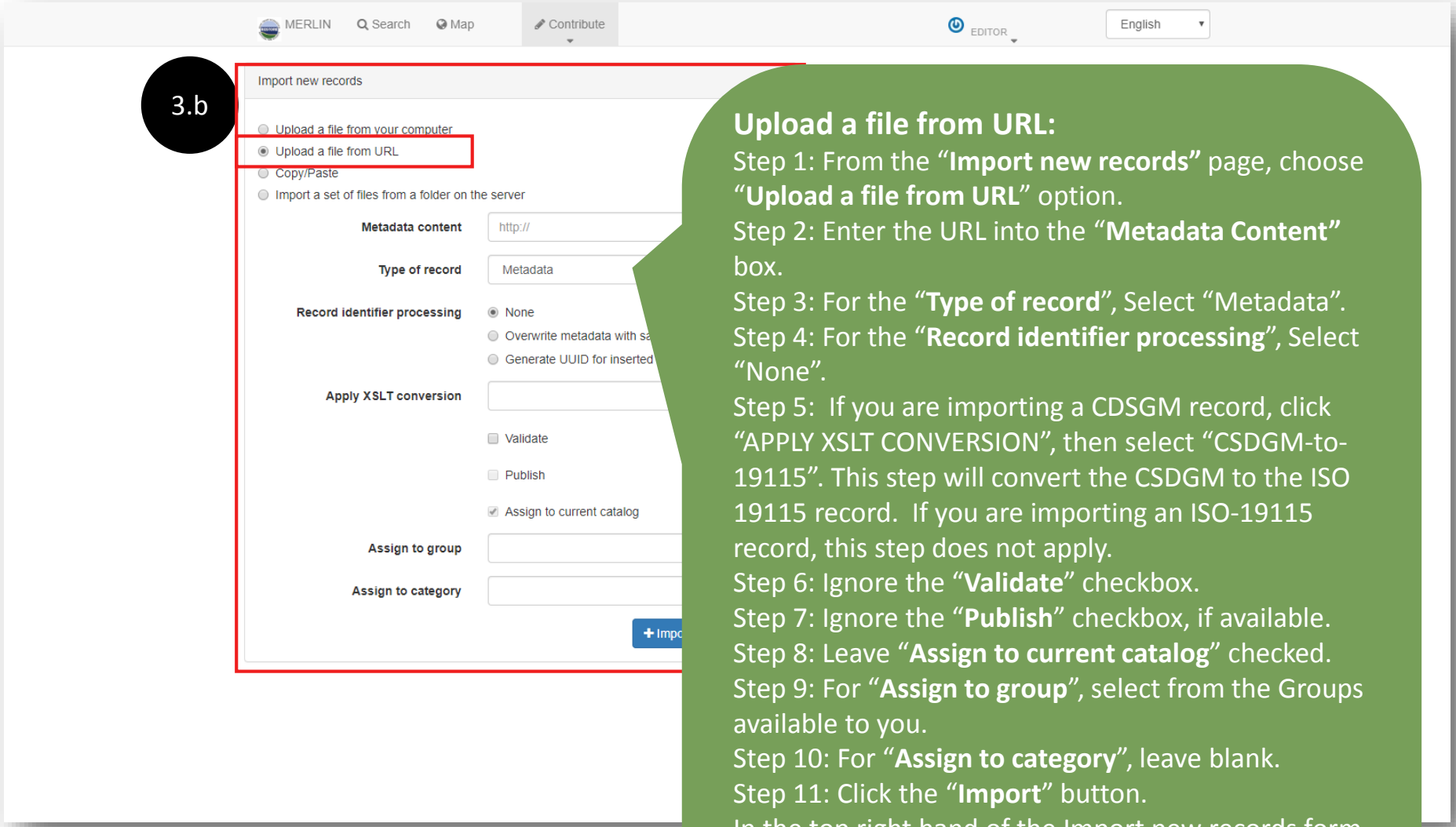
Step 8: For **"Assign to group"** select from the Groups available to you.

Step 9: For "**Assign to category**", leave blank.

Step 10: Click the "Import" button.

In the top right hand of the Import new records form, a message will appear to indicate that the import of the record is successful, with the record UUID. If there is a problem with the import of the record, a message will display.

# Import/Transform Records




**Upload a file from URL:**

Step 1: From the "**Import new records"** page, choose "**Upload a file from URL**" option.

Step 2: Enter the URL into the "**Metadata Content"** box.

Step 3: For the "**Type of record**", Select "Metadata".

Step 4: For the "**Record identifier processing**", Select "None".

Step 5: If you are importing a CDSGM record, click "APPLY XSLT CONVERSION", then select "CSDGM-to-19115". This step will convert the CSDGM to the ISO 19115 record. If you are importing an ISO-19115 record, this step does not apply.

Step 6: Ignore the "**Validate**" checkbox.

Step 7: Ignore the "**Publish**" checkbox, if available.

Step 8: Leave "**Assign to current catalog**" checked.

Step 9: For "**Assign to group**", select from the Groups available to you.

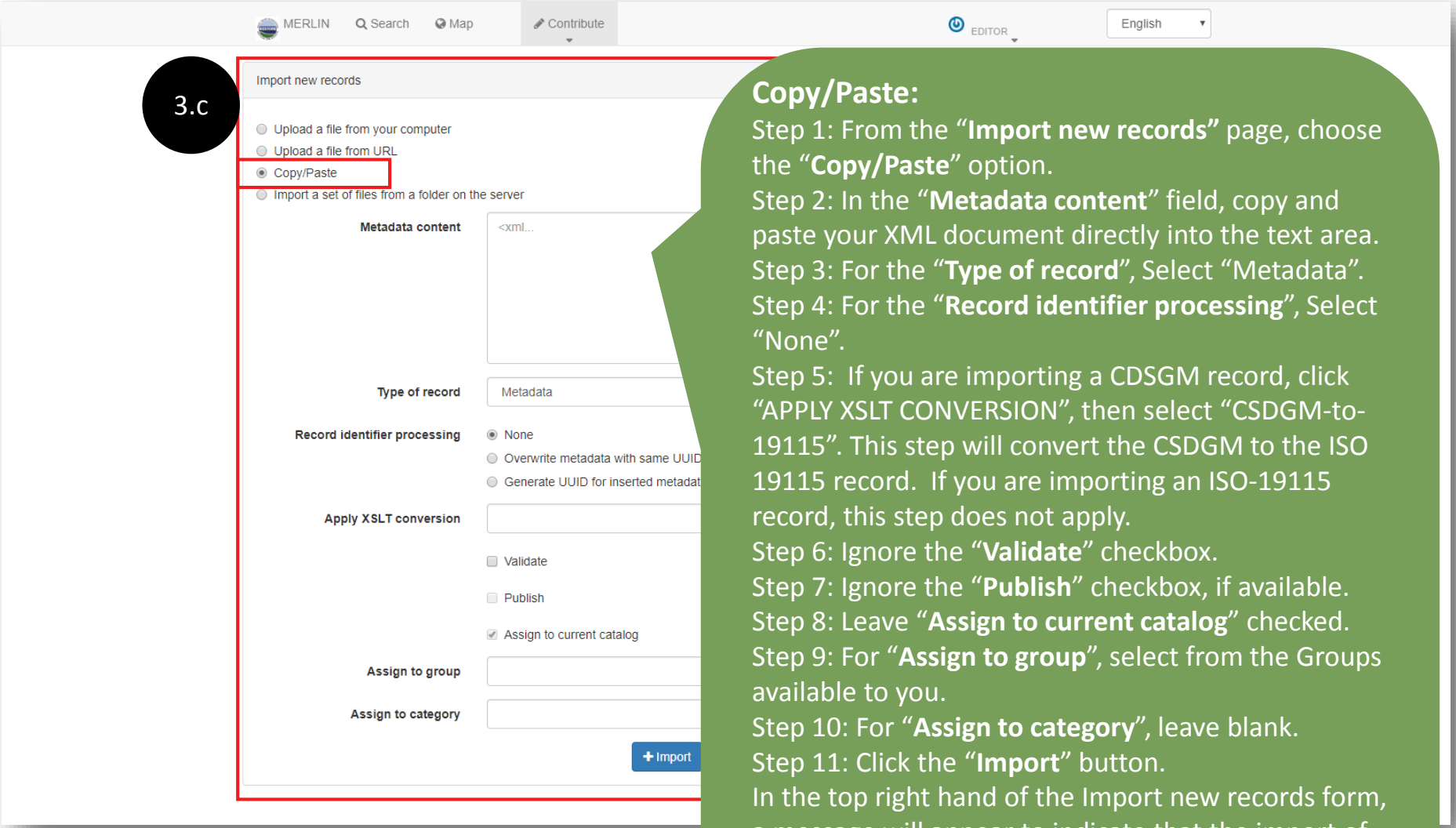
Step 10: For "**Assign to category**", leave blank.

Step 11: Click the "**Import**" button.

In the top right hand of the Import new records form, a message will appear to indicate that the import of the record is successful, with the record UUID. If there is a problem with the import of the record, a message will display.

# Import/Transform Records

3.c




**Copy/Paste:**

Step 1: From the "**Import new records"** page, choose the "**Copy/Paste**" option.

Step 2: In the "**Metadata content**" field, copy and paste your XML document directly into the text area.

Step 3: For the "**Type of record**", Select "Metadata".

Step 4: For the "**Record identifier processing**", Select "None".

Step 5: If you are importing a CDSGM record, click "APPLY XSLT CONVERSION", then select "CSDGM-to-19115". This step will convert the CSDGM to the ISO 19115 record. If you are importing an ISO-19115 record, this step does not apply.

Step 6: Ignore the "**Validate**" checkbox.

Step 7: Ignore the "**Publish**" checkbox, if available.

Step 8: Leave "**Assign to current catalog**" checked.

Step 9: For "**Assign to group**", select from the Groups available to you.

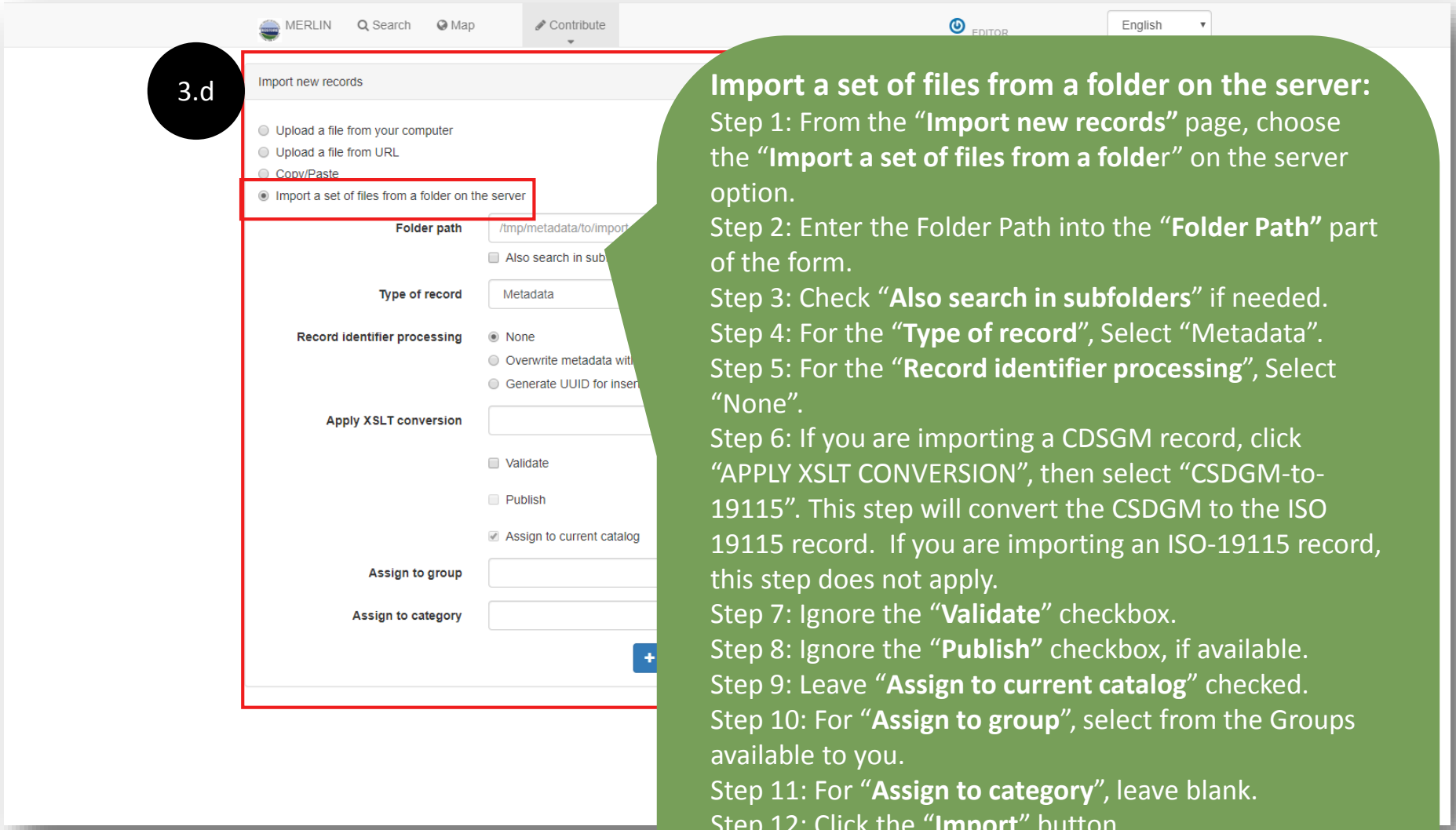
Step 10: For "**Assign to category**", leave blank.

Step 11: Click the "**Import**" button.

In the top right hand of the Import new records form, a message will appear to indicate that the import of the record is successful, with the record UUID. If there is a problem with the import of the record, a message will display.

# Import/Transform Records

3.d




**Import a set of files from a folder on the server:**

Step 1: From the "**Import new records"** page, choose the "**Import a set of files from a folder**" on the server option.

Step 2: Enter the Folder Path into the "**Folder Path"** part of the form.

Step 3: Check "**Also search in subfolders**" if needed.

Step 4: For the "**Type of record**", Select "Metadata".

Step 5: For the "**Record identifier processing**", Select "None".

Step 6: If you are importing a CDSGM record, click "APPLY XSLT CONVERSION", then select "CSDGM-to-19115". This step will convert the CSDGM to the ISO 19115 record. If you are importing an ISO-19115 record, this step does not apply.

Step 7: Ignore the "**Validate**" checkbox.

Step 8: Ignore the "**Publish"** checkbox, if available.

Step 9: Leave "**Assign to current catalog**" checked.

Step 10: For "**Assign to group**", select from the Groups available to you.

Step 11: For "**Assign to category**", leave blank.

Step 12: Click the "**Import**" button.

In the top right hand of the Import new records form, a message will appear to indicate that the import of the record is successful, with the record UUID. If there is a problem with the import of the record, a message will display.

# Validating Records

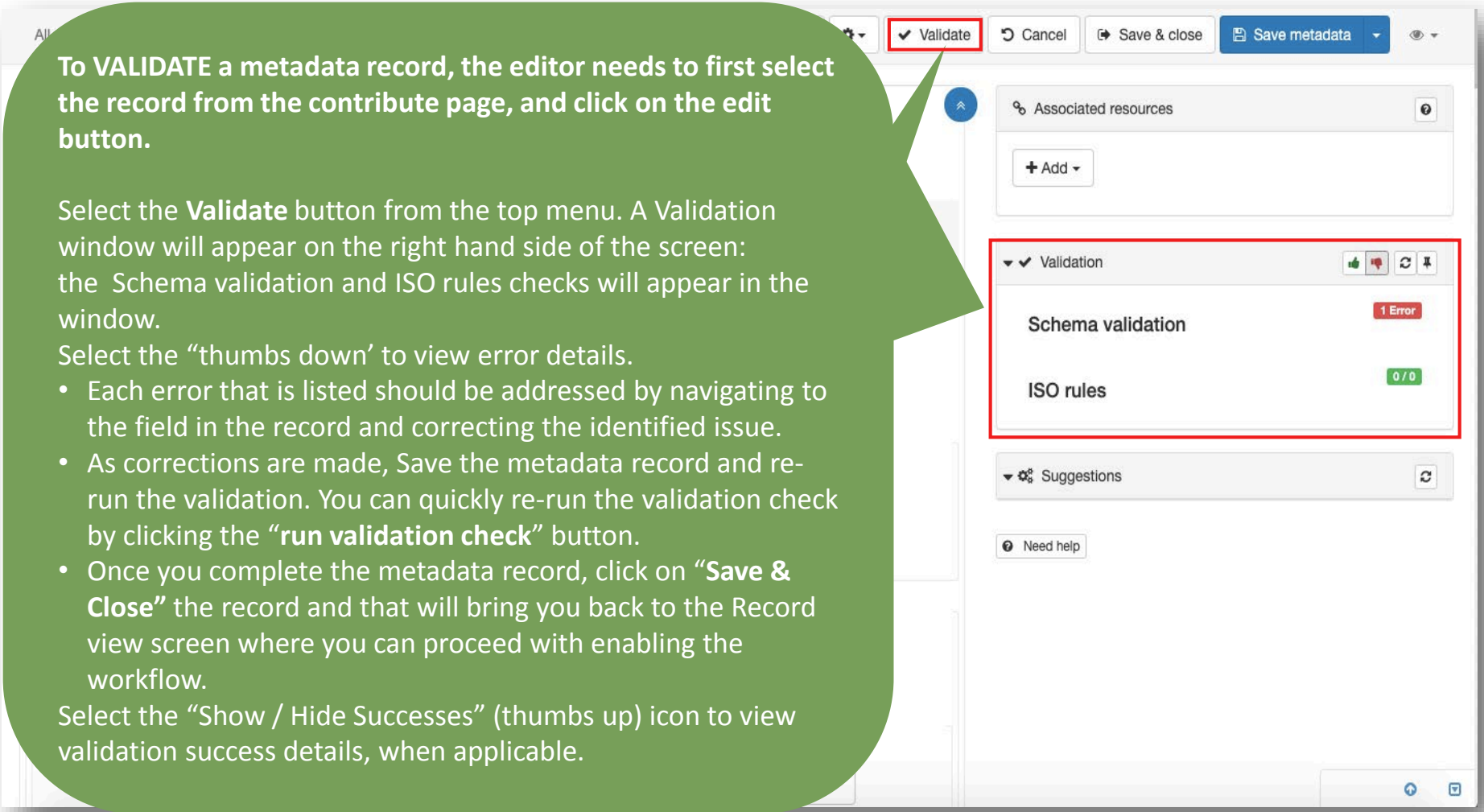
**To VALIDATE a metadata record, the editor needs to first select the record from the contribute page, and click on the edit button.**

Select the **Validate** button from the top menu. A Validation window will appear on the right hand side of the screen: the Schema validation and ISO rules checks will appear in the window.

Select the "thumbs down' to view error details.

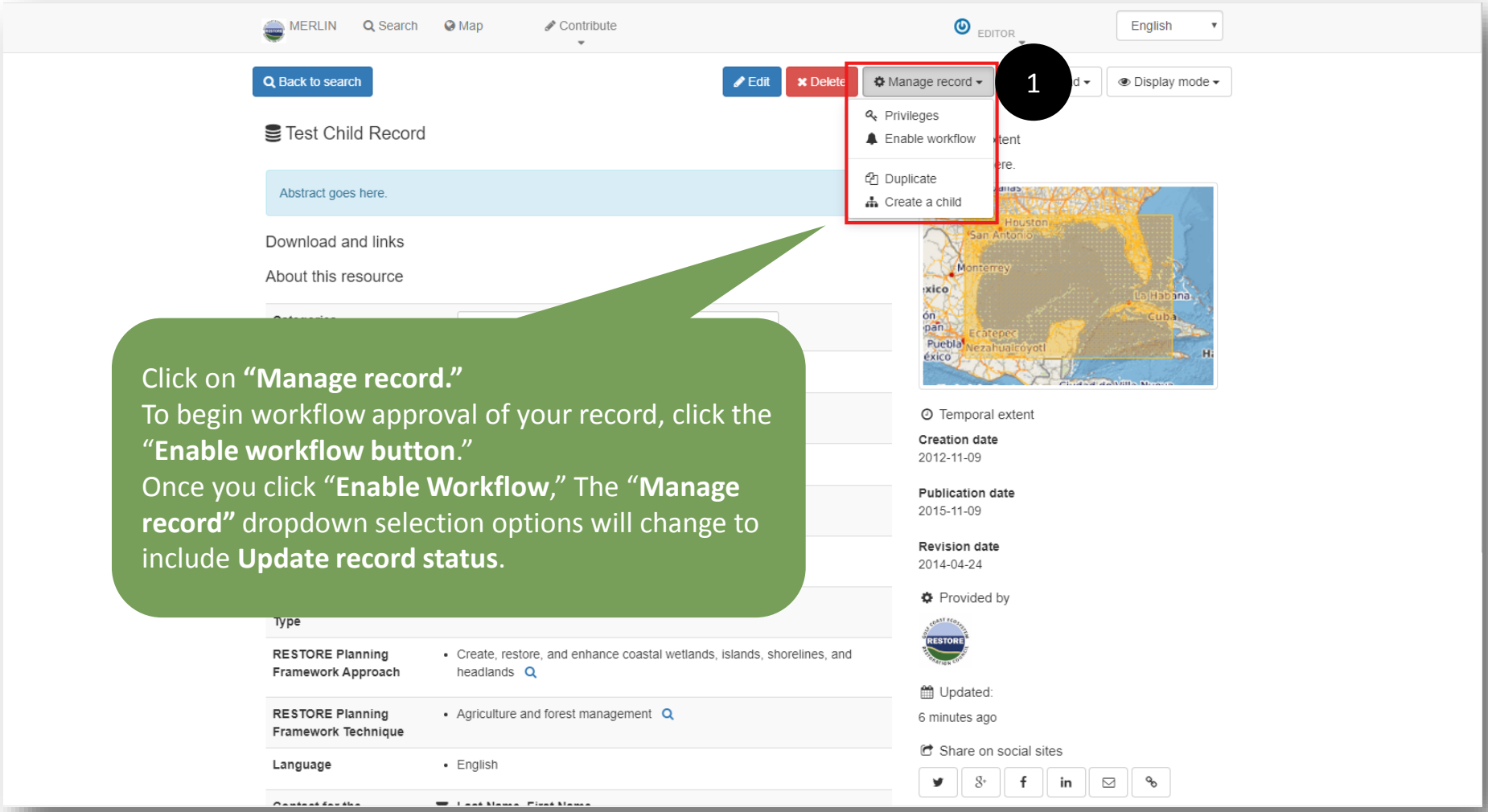
- Each error that is listed should be addressed by navigating to the field in the record and correcting the identified issue.
- As corrections are made, Save the metadata record and re-run the validation. You can quickly re-run the validation check by clicking the "**run validation check**" button.
- Once you complete the metadata record, click on "**Save & Close"** the record and that will bring you back to the Record view screen where you can proceed with enabling the workflow.

Select the "Show / Hide Successes" (thumbs up) icon to view validation success details, when applicable.




*MERLIN has an integrated validation tool that will validate your record against the standard in place. The "**Validate"** button allows you to validate the current record according to the schema of the metadata standard that it complies with. For the purpose of validating metadata for RESTORE Council datasets, CSDGM records will validate against CSDGM schema, and ISO 19115-1 records will validate against the ISO 19115-1 (or ISO 19139) schema within the tool.*

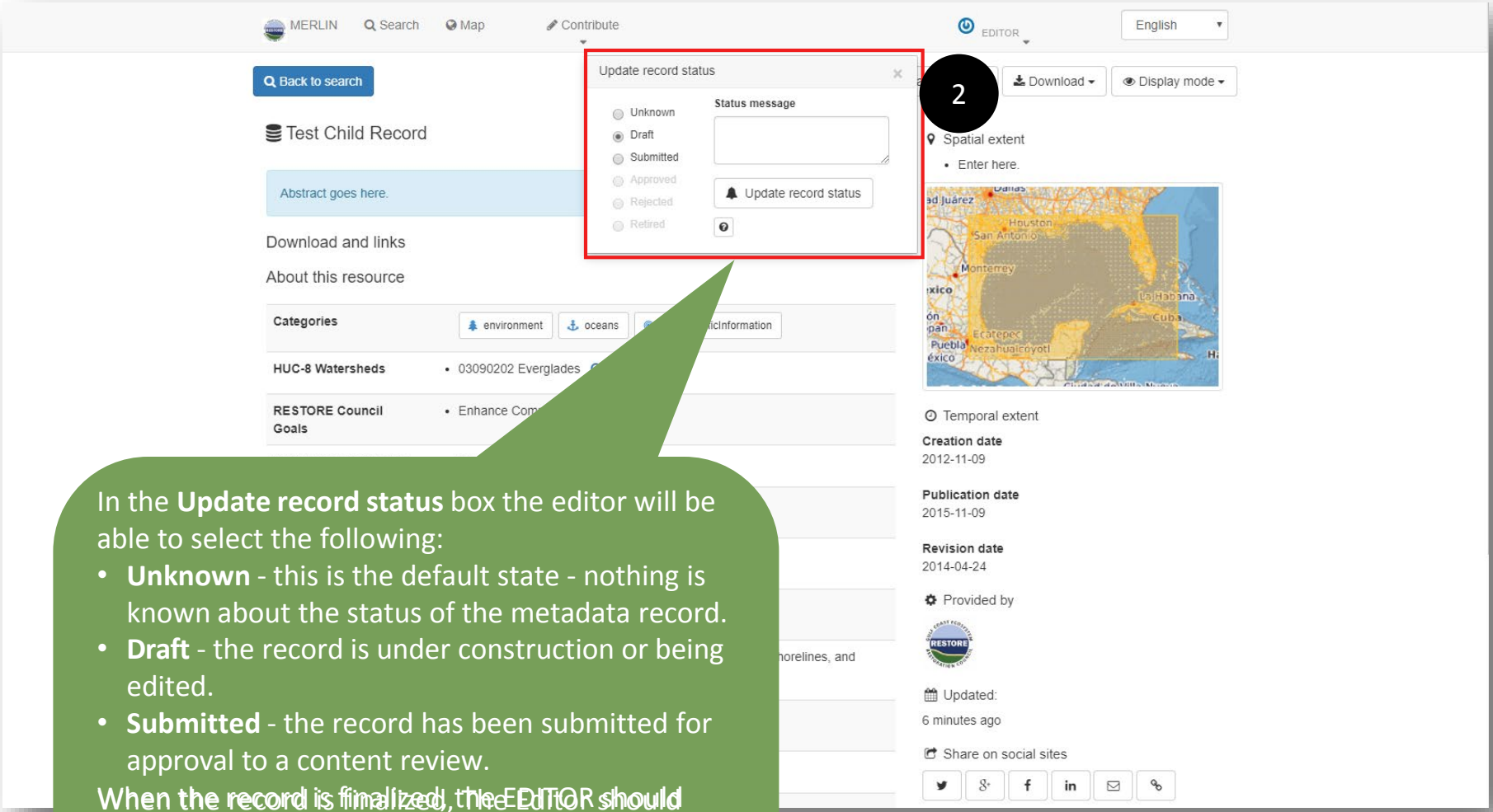
# Submitting Records




Click on **"Manage record."**
To begin workflow approval of your record, click the "**Enable workflow button**."
Once you click "**Enable Workflow**," The "**Manage record"** dropdown selection options will change to include **Update record status**.

***When the EDITOR completes a metadata record, it can be submitted to a Content Reviewer.***
***To do this, the EDITOR must be at the Record view to initiate the Workflow.***
*The Contribute page provides access to the directory view of the record. Select the desired record from the list, and then click on the title of the record to enable the Record view. After you select the record, the record will display in the default HTML view.*

# Submitting Records



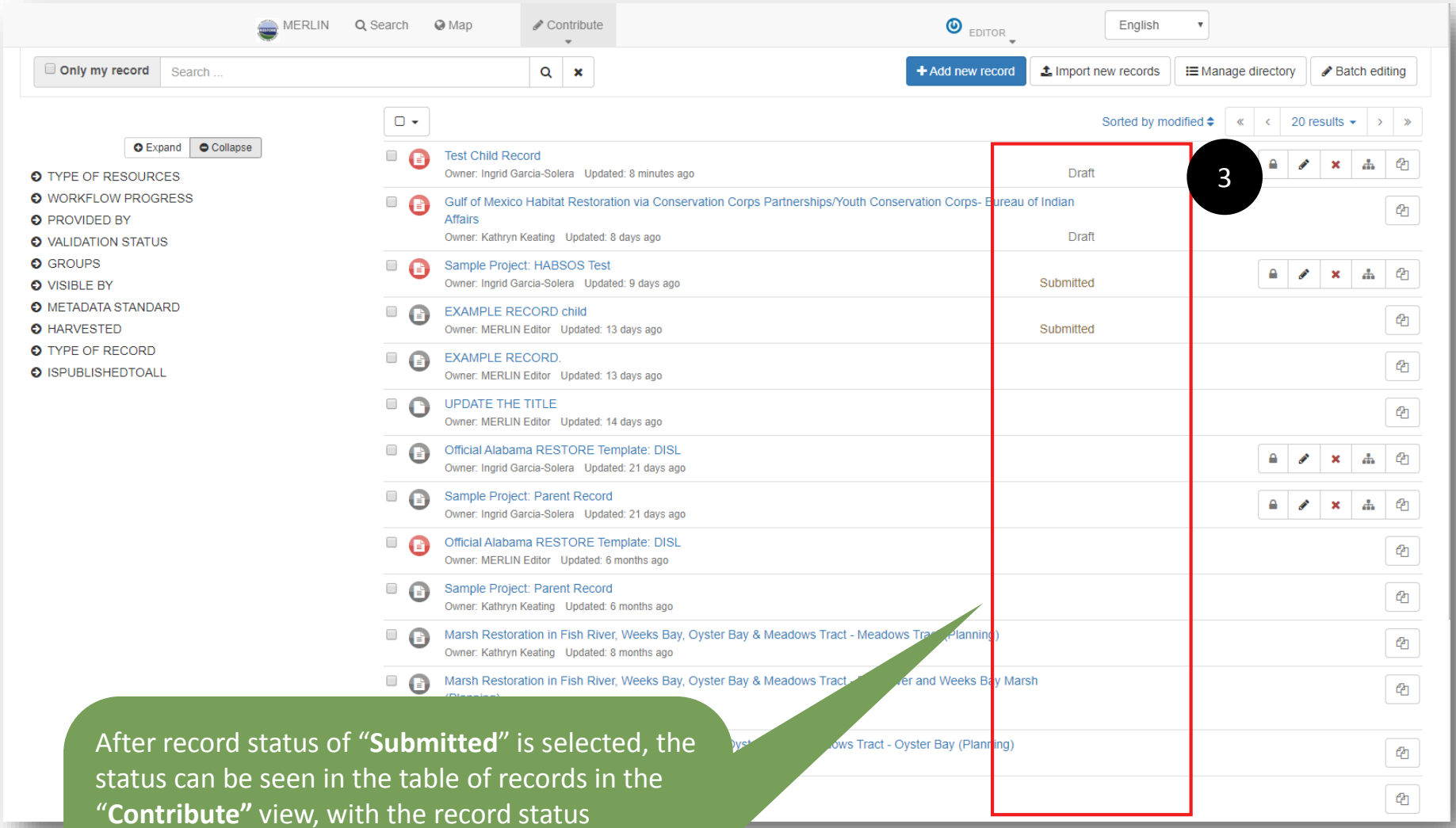

In the **Update record status** box the editor will be able to select the following:

- **Unknown** - this is the default state - nothing is known about the status of the metadata record.
- **Draft** - the record is under construction or being edited.
- **Submitted** - the record has been submitted for approval to a content review.

When the record is finalized, the EDITOR should select the "**Submitted**" button and then click on "**Update record status.**" This will submit your record for review.

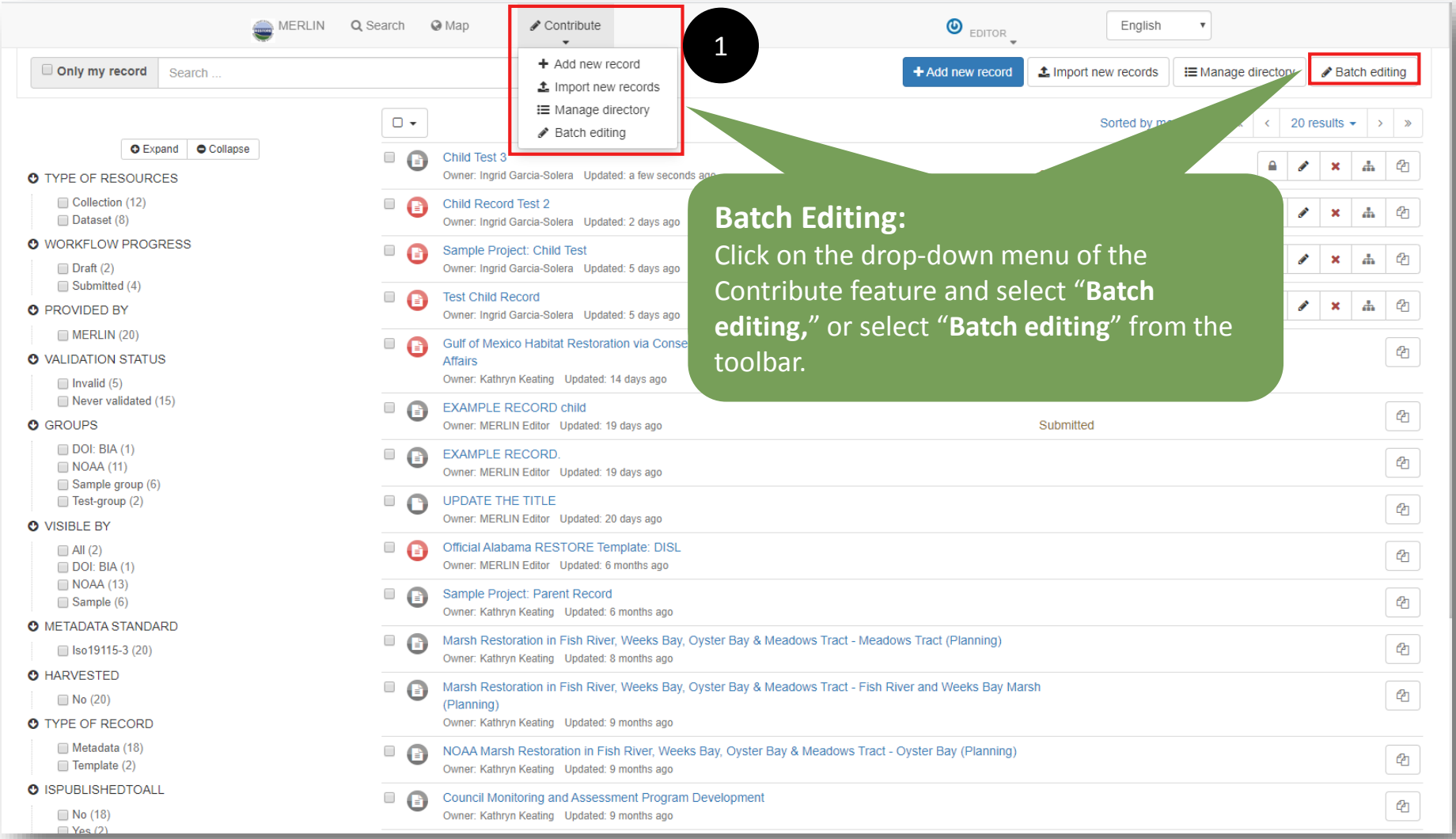
You will get a message on the top of the screen that the worklof has been updated.

# Submitting Records




After record status of "**Submitted**" is selected, the status can be seen in the table of records in the "**Contribute**" view, with the record status displayed to the right of the metadata record name. Records do not display any status until the Workflow is enabled. On the "**Contribute**" page, completed records can have one of three status designations: Draft, Submitted, or Approved.

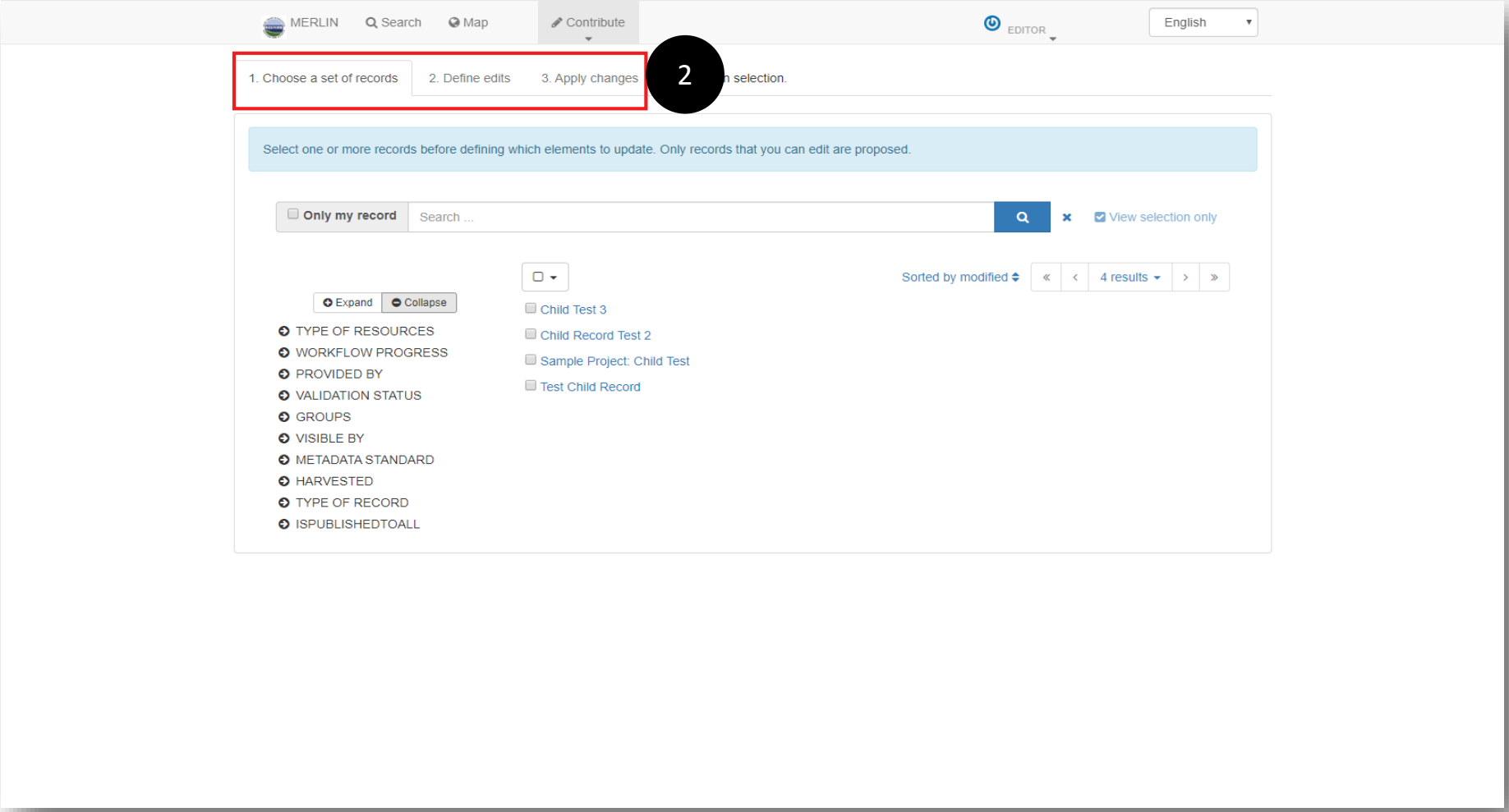
# Other Tool Options




**Batch Editing:**
Click on the drop-down menu of the Contribute feature and select "**Batch editing,**" or select "**Batch editing**" from the toolbar.

***"Batch editing"*** *is a way to make the same edits to multiple records in MERLIN. Although the RESTORE template contains repeat content to facilitate consistency across records, Batch editing is useful in cases where agency or project information has changed, necessitating an update to the same field across multiple records.*

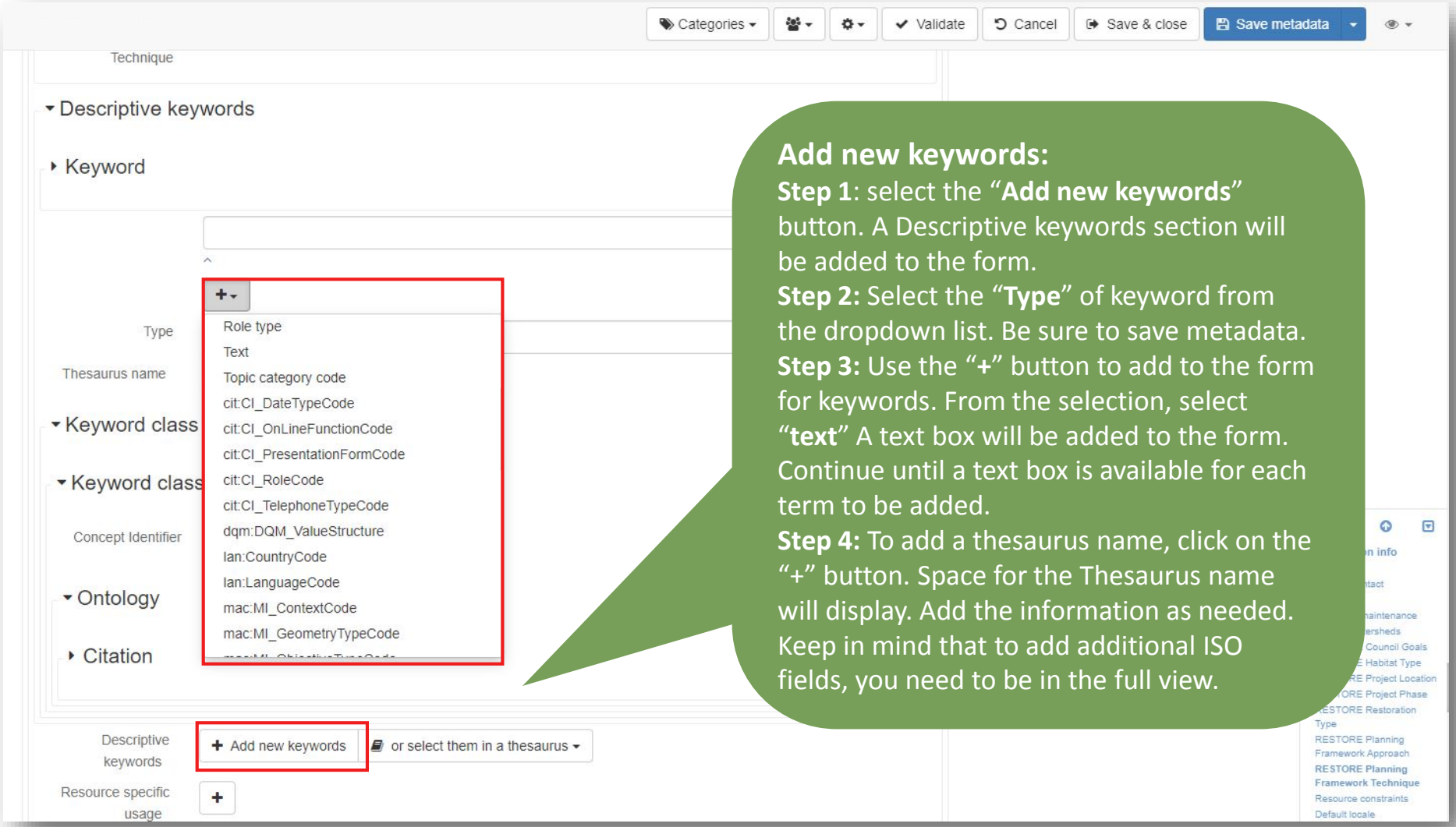
# Other Tool Options




*Follow the numbered steps at the top of the screen to complete "**Batch Editing**".*

*To exit "**Batch Editing**," navigate back to the "**Contribute**" page, where you can view changes to the selected records.*

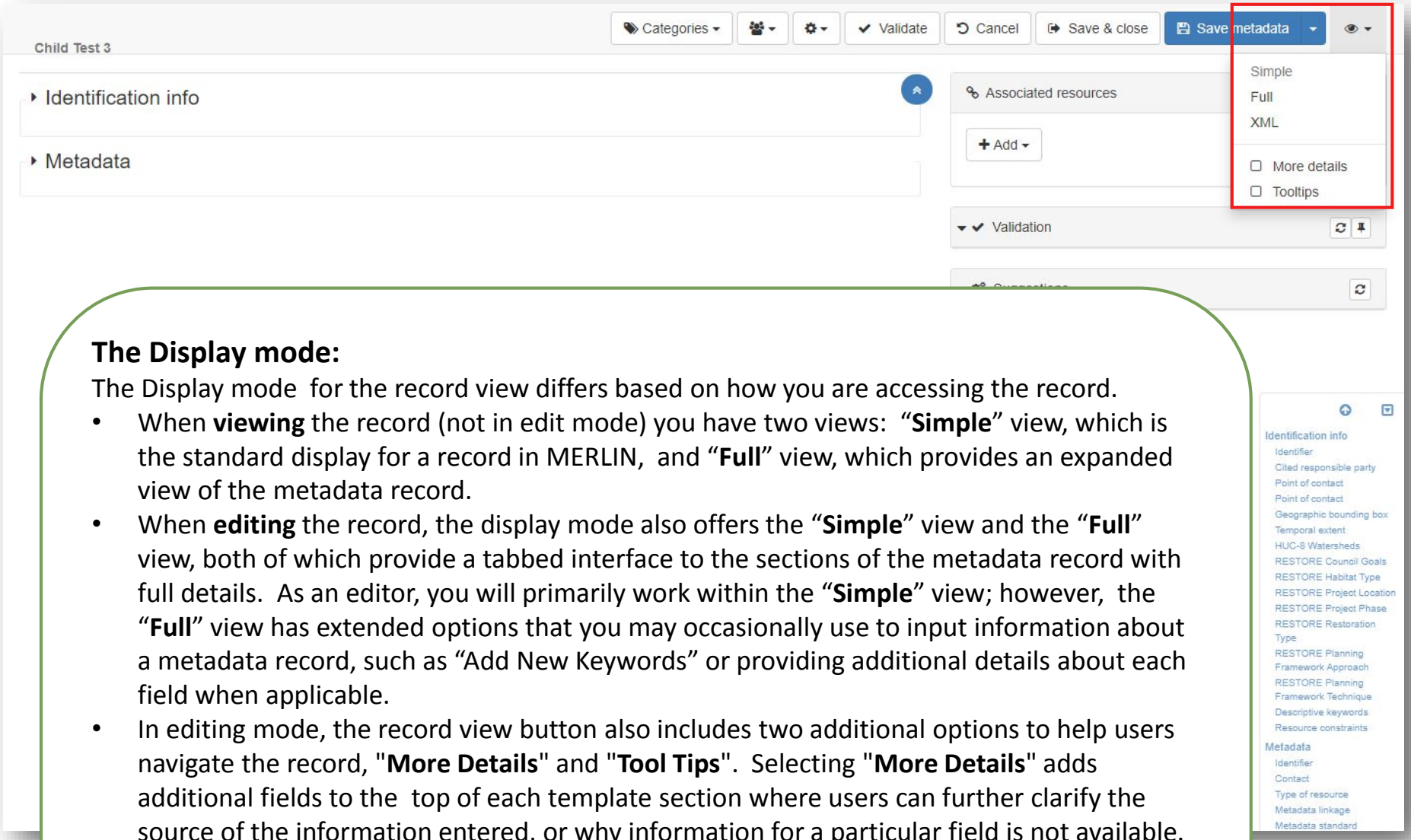
# Other Tool Options




**Add new keywords:**
**Step 1**: select the "**Add new keywords**" button. A Descriptive keywords section will be added to the form.
**Step 2:** Select the "**Type**" of keyword from the dropdown list. Be sure to save metadata.
**Step 3:** Use the "**+**" button to add to the form for keywords. From the selection, select "**text**" A text box will be added to the form. Continue until a text box is available for each term to be added.
**Step 4:** To add a thesaurus name, click on the "+" button. Space for the Thesaurus name will display. Add the information as needed. Keep in mind that to add additional ISO fields, you need to be in the full view.

***Add new keywords:***
*At the bottom of the required keyword lists, there is an option to provide additional keywords if desired. For child records, this information does not need to be edited. However, if you review the keywords that pre-populate from the parent record and would like to add an additional keyword that is specific to the dataset described by the child record metadata, y**ou will need to make these edits while in the "Full" view of the record.***

# Other Tool Options

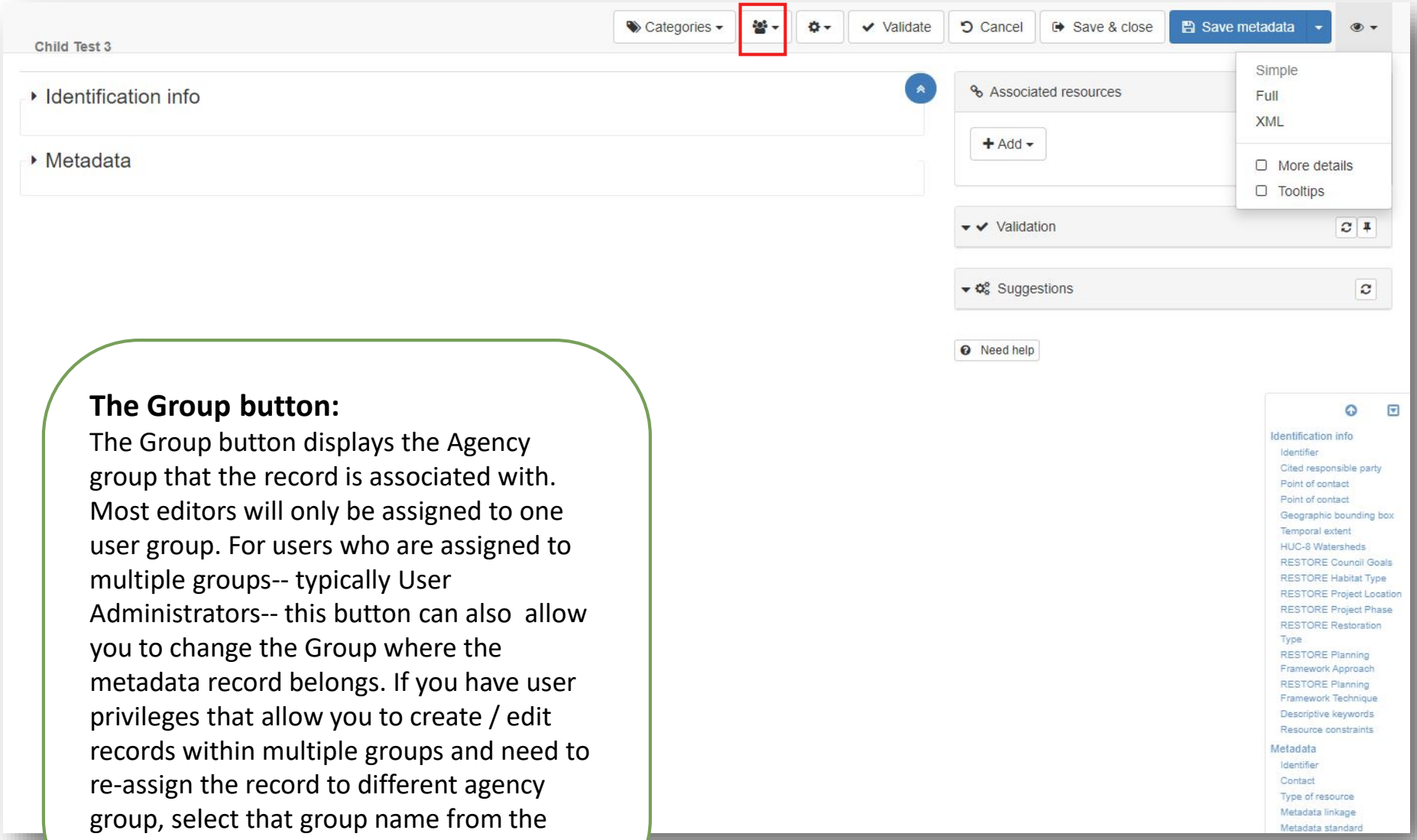



**The Display mode:**

The Display mode for the record view differs based on how you are accessing the record.

- When **viewing** the record (not in edit mode) you have two views: "**Simple**" view, which is the standard display for a record in MERLIN, and "**Full**" view, which provides an expanded view of the metadata record.
- When **editing** the record, the display mode also offers the "**Simple**" view and the "**Full**" view, both of which provide a tabbed interface to the sections of the metadata record with full details. As an editor, you will primarily work within the "**Simple**" view; however, the "**Full**" view has extended options that you may occasionally use to input information about a metadata record, such as "Add New Keywords" or providing additional details about each field when applicable.
- In editing mode, the record view button also includes two additional options to help users navigate the record, "**More Details**" and "**Tool Tips**". Selecting "**More Details**" adds additional fields to the top of each template section where users can further clarify the source of the information entered, or why information for a particular field is not available. Selecting "**Tooltips**" will display brief tips when a user hovers over certain fields within the template.

# Other Tool Options




**The Group button:**
The Group button displays the Agency group that the record is associated with. Most editors will only be assigned to one user group. For users who are assigned to multiple groups-- typically User Administrators-- this button can also allow you to change the Group where the metadata record belongs. If you have user privileges that allow you to create / edit records within multiple groups and need to re-assign the record to different agency group, select that group name from the dropdown list.

# Using MERLIN: Reviewer

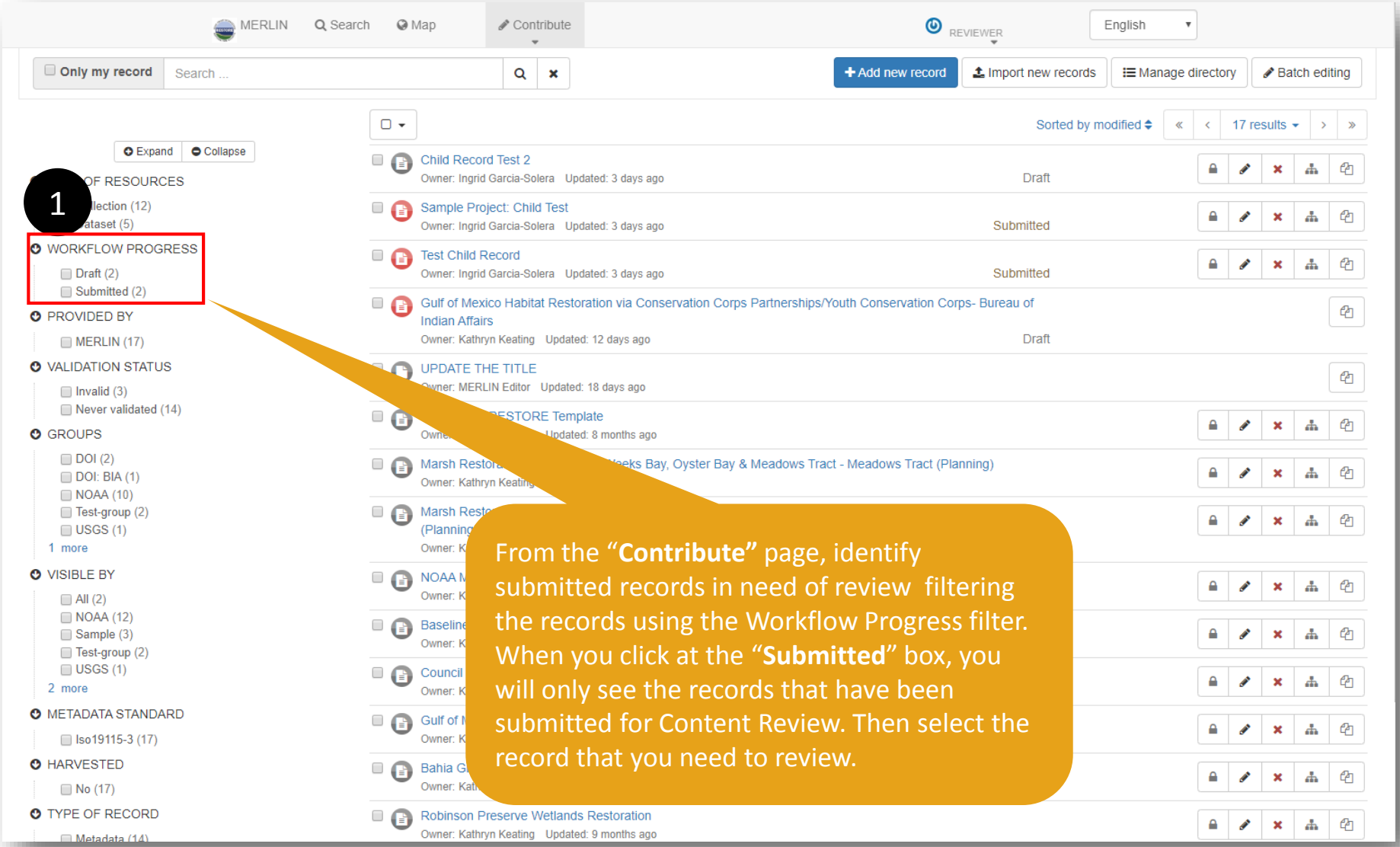
## The Reviewer

The Content REVIEWER gives final clearance on the metadata publication. The Content REVIEWER has rights on reviewing metadata content within their own Group and authorizing its publication. In addition to all of the functions available to the EDITOR, the REVIEWER has access to MERLIN functions that facilitate review and approval of record content.

After records are submitted by the editors, the Content REVIEWER will review the records to ensure that the content is appropriate. If a metadata record requires some revision, the Content Reviewer can edit the record directly from the Edit page. After the Content REVIEWER completes the review of the Submitted record, they will update the record status. Once the Content Reviewer approves a record, they can send it to the User Administrator for final review, or they may publish it themselves. Publish is the function that makes the metadata records publicly available in the MERLIN catalog. Records may be published by Reviewers and by User Administrators. Records published to the MERLIN catalog can be discovered, viewed, and accessed through the **Home screen**.

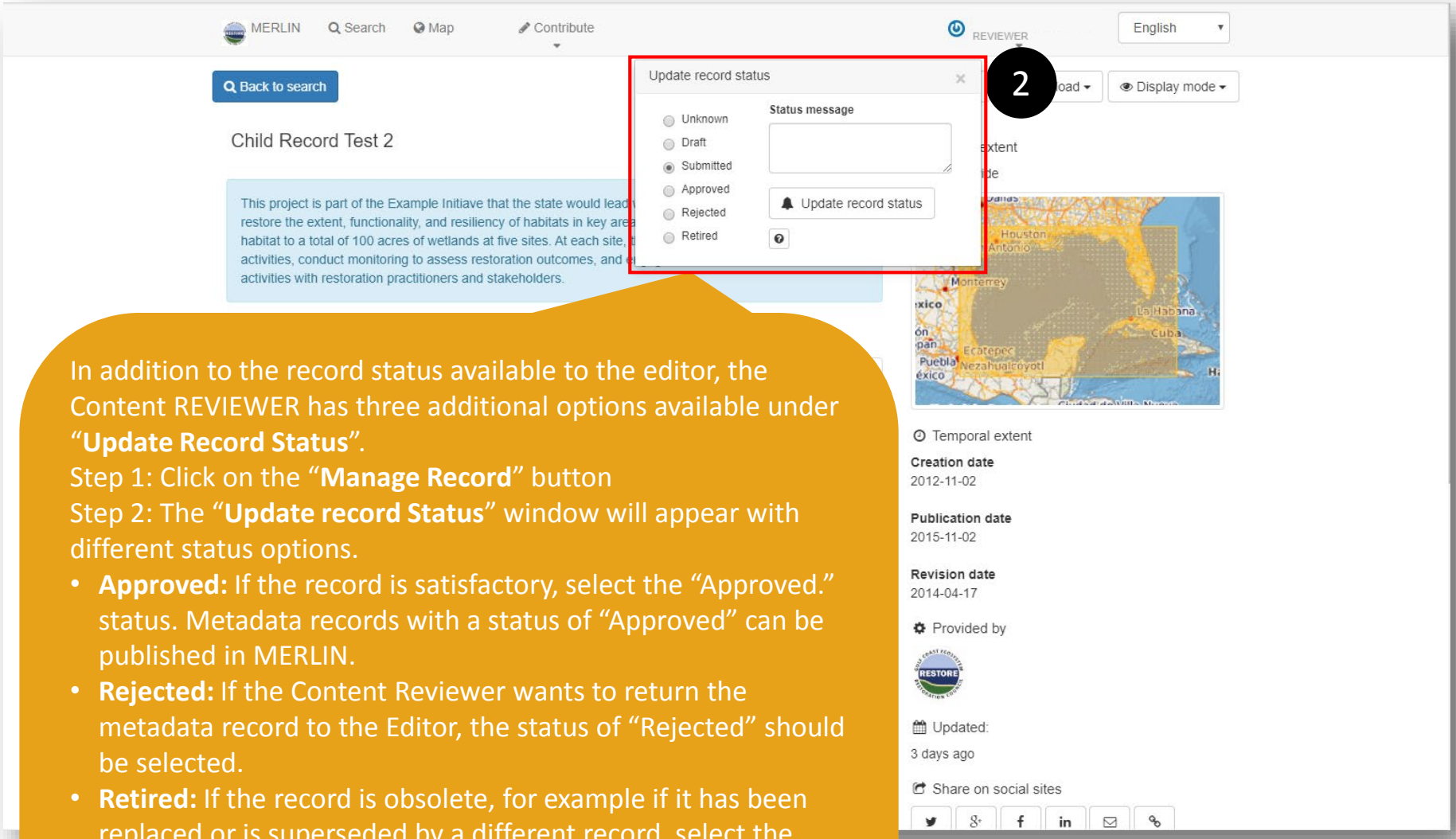
**Warning:** Reviewers should not modify the parent record without first contacting your group's User Administrator!

# Reviewing and Publishing a record




From the "**Contribute**" page, identify submitted records in need of review filtering the records using the Workflow Progress filter. When you click at the "**Submitted**" box, you will only see the records that have been submitted for Content Review. Then select the record that you need to review.

# Reviewing and Publishing a record




In addition to the record status available to the editor, the Content REVIEWER has three additional options available under "**Update Record Status**".

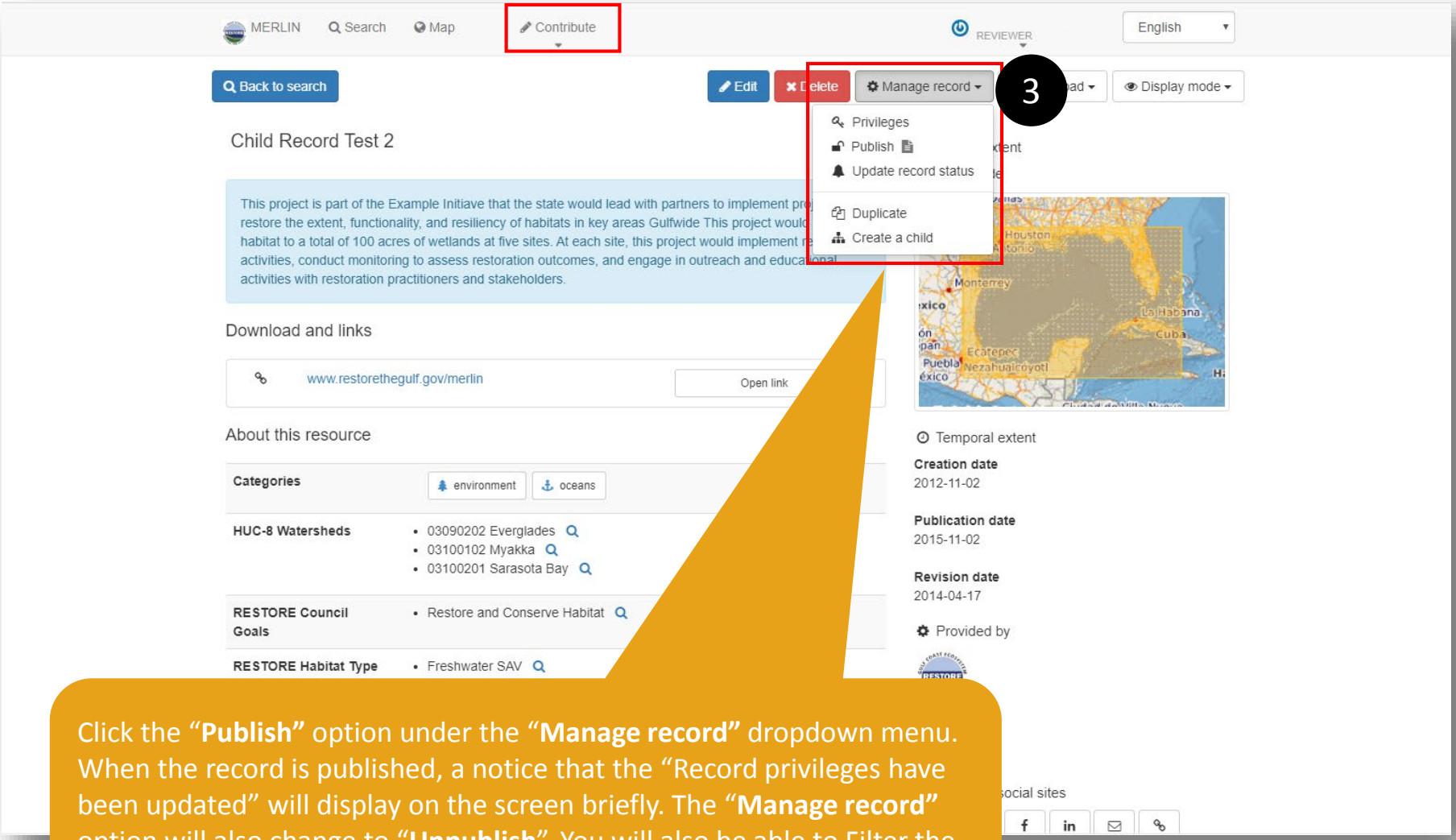
Step 1: Click on the "**Manage Record**" button

Step 2: The "**Update record Status**" window will appear with different status options.

- **Approved:** If the record is satisfactory, select the "Approved." status. Metadata records with a status of "Approved" can be published in MERLIN.
- **Rejected:** If the Content Reviewer wants to return the metadata record to the Editor, the status of "Rejected" should be selected.
- **Retired:** If the record is obsolete, for example if it has been replaced or is superseded by a different record, select the "Retired" status.

Step 3: Once the Content REVIEWER approves a record, they can send it to the User Administrator for final review, or they may publish it themselves.

# Reviewing and Publishing a record




Click the "**Publish**" option under the "**Manage record**" dropdown menu. When the record is published, a notice that the "Record privileges have been updated" will display on the screen briefly. The "**Manage record**" option will also change to "**Unpublish**". You will also be able to Filter the records by "**ISPUBLISHEDTOALL**" in the Contribute view.

# Using MERLIN: User Administrator

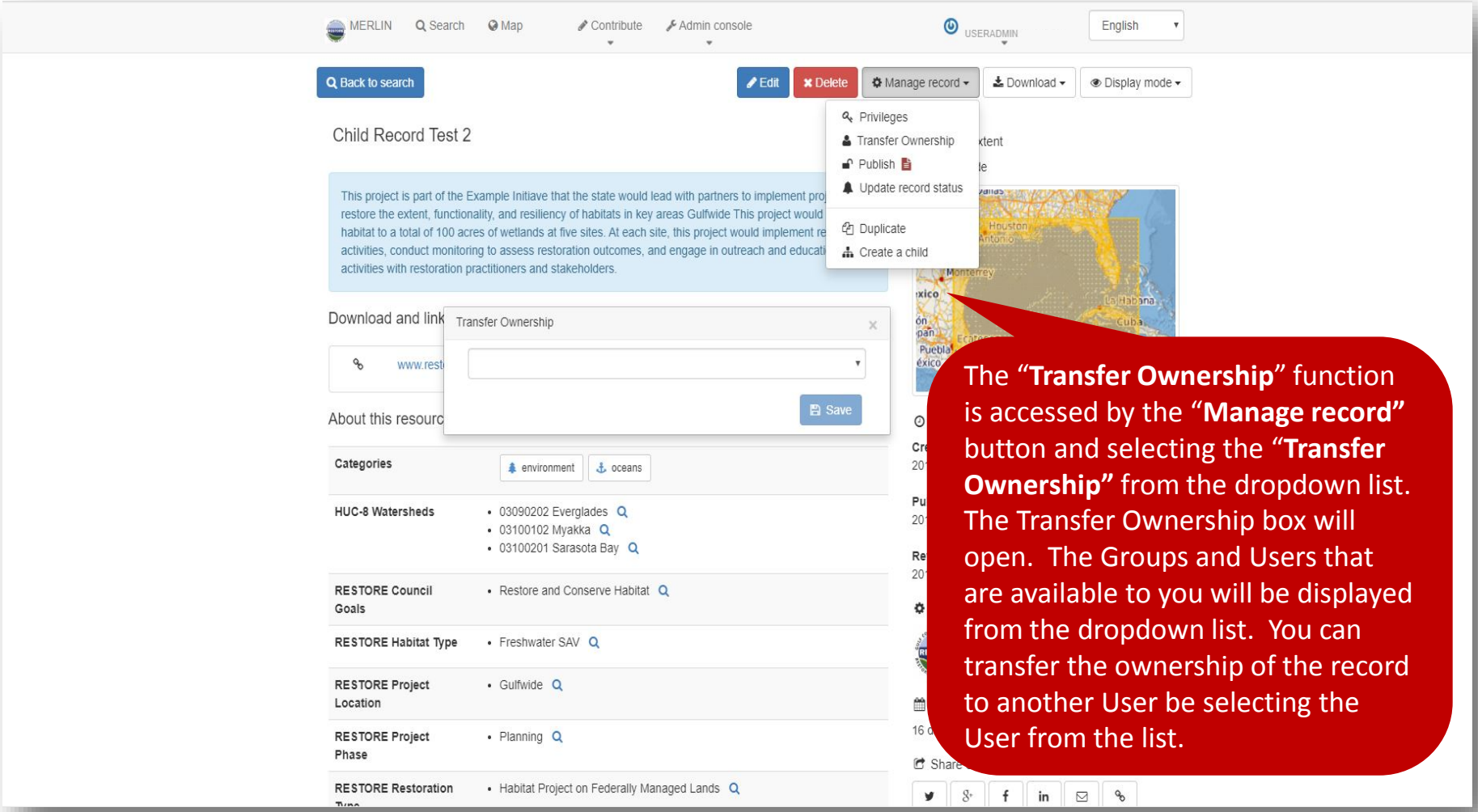
## The User Administrator

MERLIN Users with a USERADMIN (User Administrator) role for their Agency have additional permissions to do things such as create and manage Users and Groups, and access statistics and reports in the MERLIN tool. In addition to all of the functions available to both EDITOR and REVIEWER, a USERADMIN also has access to functions related to the day-to-day management of groups and users in MERLIN.

MERLIN functions related to the management of Groups and users are expected to be used more frequently by USERADMIN in the day to day management of metadata in the MERLIN.

In order to access and utilize the User Administrator functions in MERLIN, a User must be assigned a USERADMIN role. User Administrators will be assigned to manage groups and subgroups within their own Agency, and to manage related users and permissions. Once logged in to MERLIN with your USERADMIN account, you have access to these User Administrator functions through the Admin console button in the top menu bar. As a User Administrator, you should see the title USERADMIN under your name when logged into MERLIN.

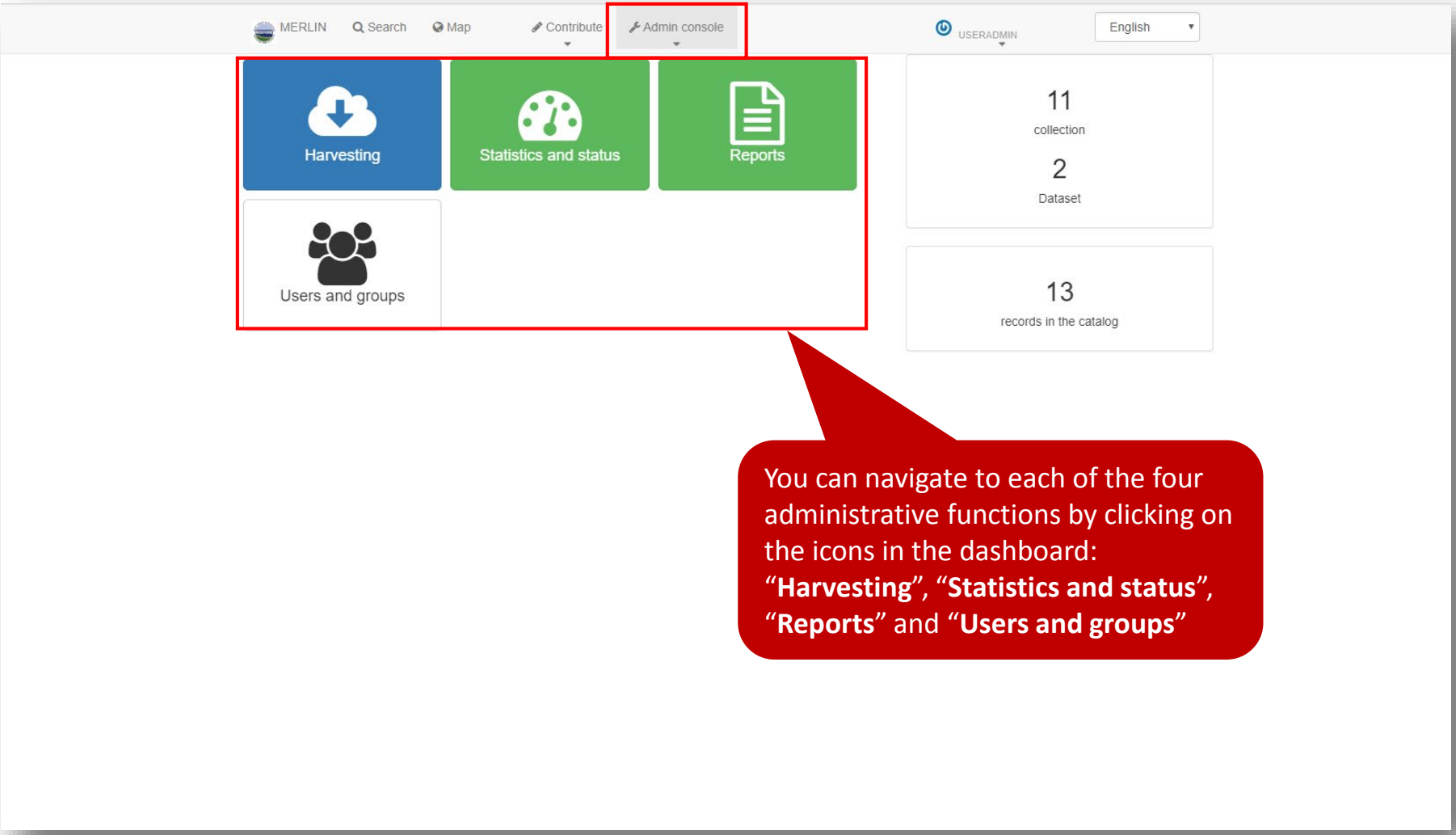
# Record Management




The "**Transfer Ownership**" function is accessed by the "**Manage record**" button and selecting the "**Transfer Ownership**" from the dropdown list. The Transfer Ownership box will open. The Groups and Users that are available to you will be displayed from the dropdown list. You can transfer the ownership of the record to another User be selecting the User from the list.

*USERADMIN can view and manage all of the metadata records for their group under the "Manage record" button. The "Manage record" has all of the functions available to the REVIEWER with an additional function to transfer a draft record. On occasion, Users may leave, when this happens, it is best to Transfer Ownership of the User's draft records to another User.*

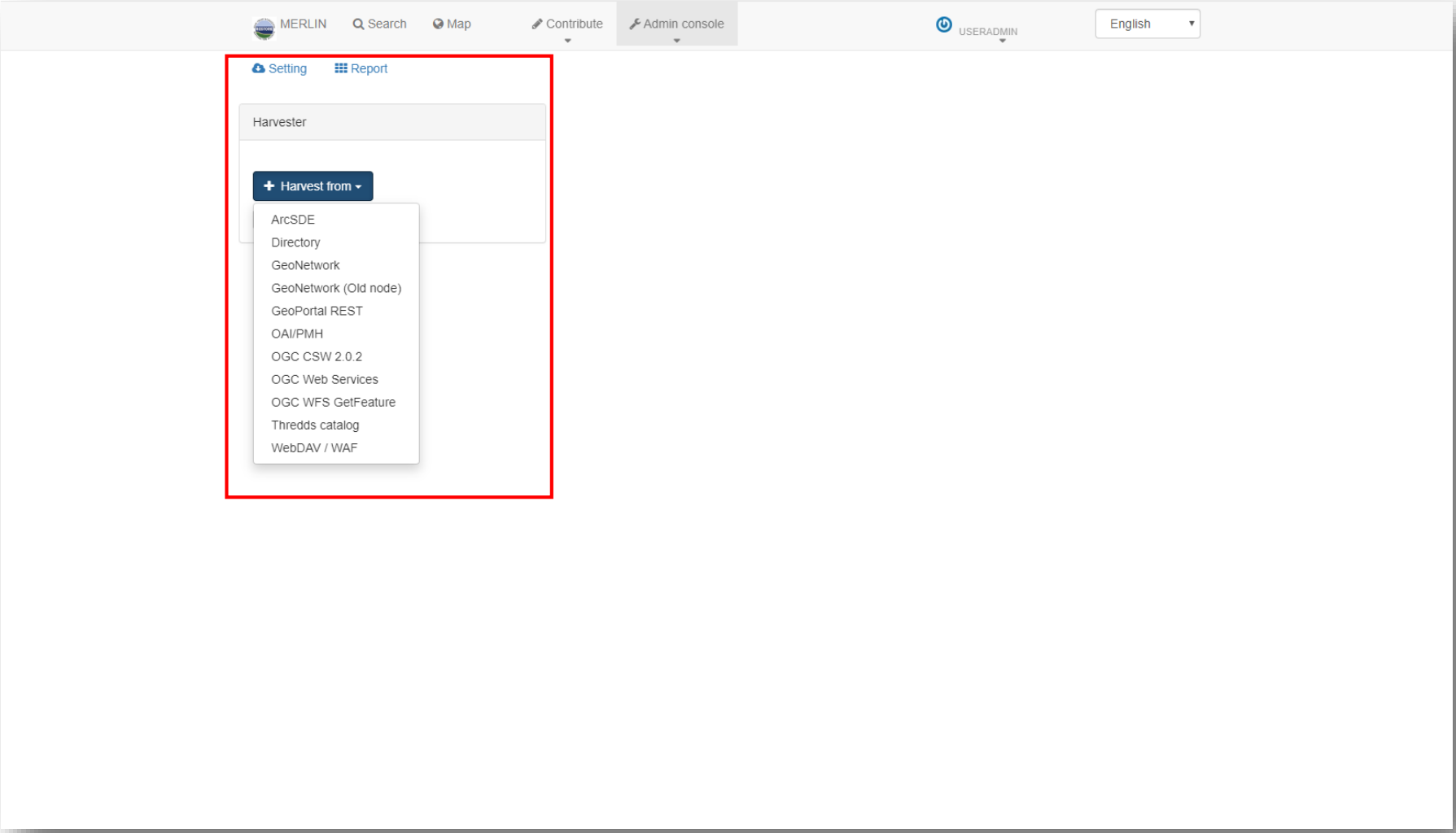
# The Admin console




You can navigate to each of the four administrative functions by clicking on the icons in the dashboard: "**Harvesting**", "**Statistics and status**", "**Reports**" and "**Users and groups**"

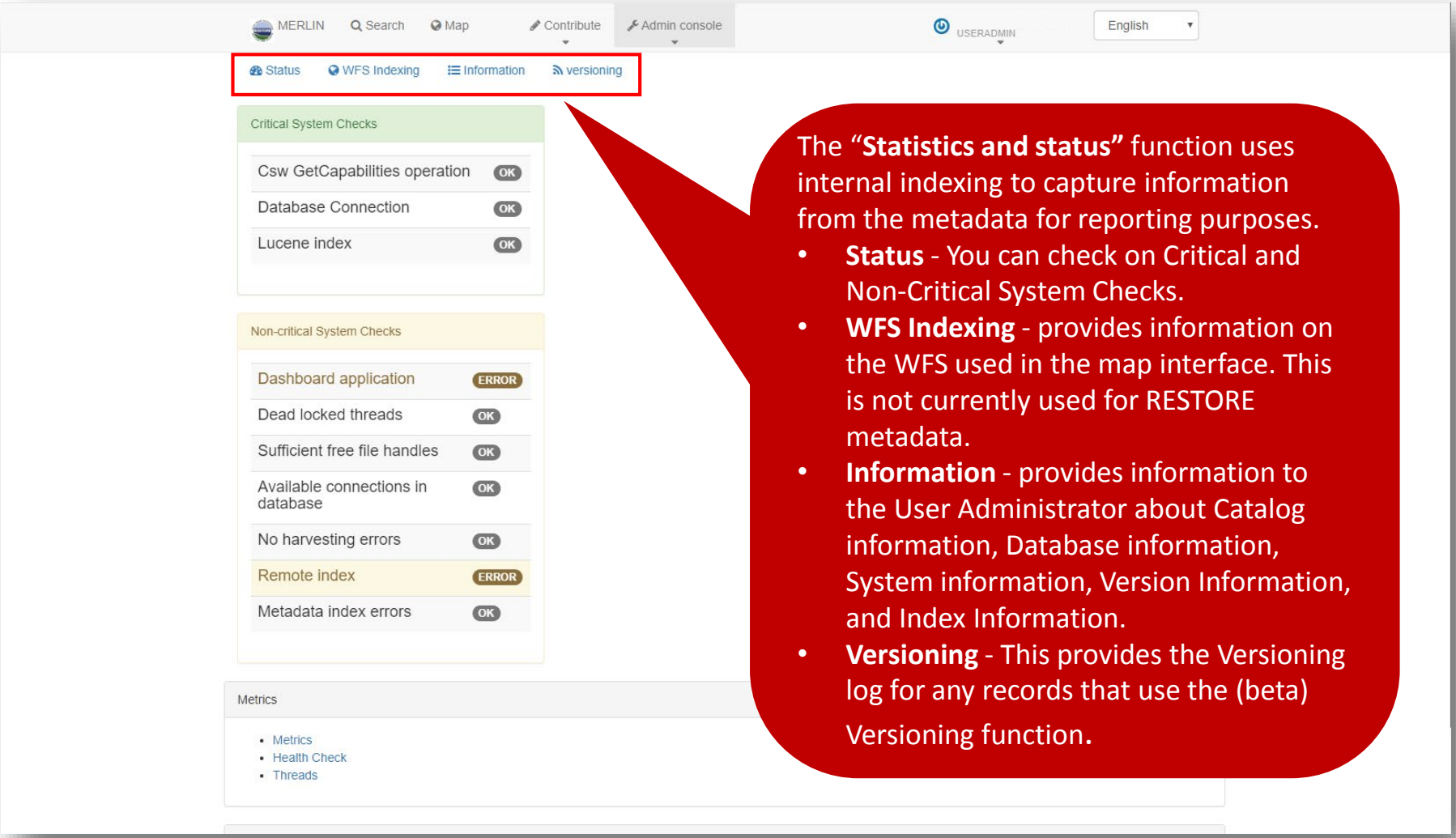
*Selecting the "**Admin console**" button in the top menu bar of MERLIN opens the "**Admin console**" page, with dashboard access to administrative functions. If you hover over the "**Admin console**" button in the top menu bar, the functions will appear in a dropdown list. You can select any of the User Administrator functions from either the dropdown list or the "**Admin console**" dashboard.*

# The Admin console: Harvesting




*Because the primary purpose of MERLIN is to provide a form for Editors to use to collect information about RESTORE datasets, MERLIN is not configured to support harvesting from remote sources.*
***This function is for internal use only.***

# The Admin console: Statistics and status

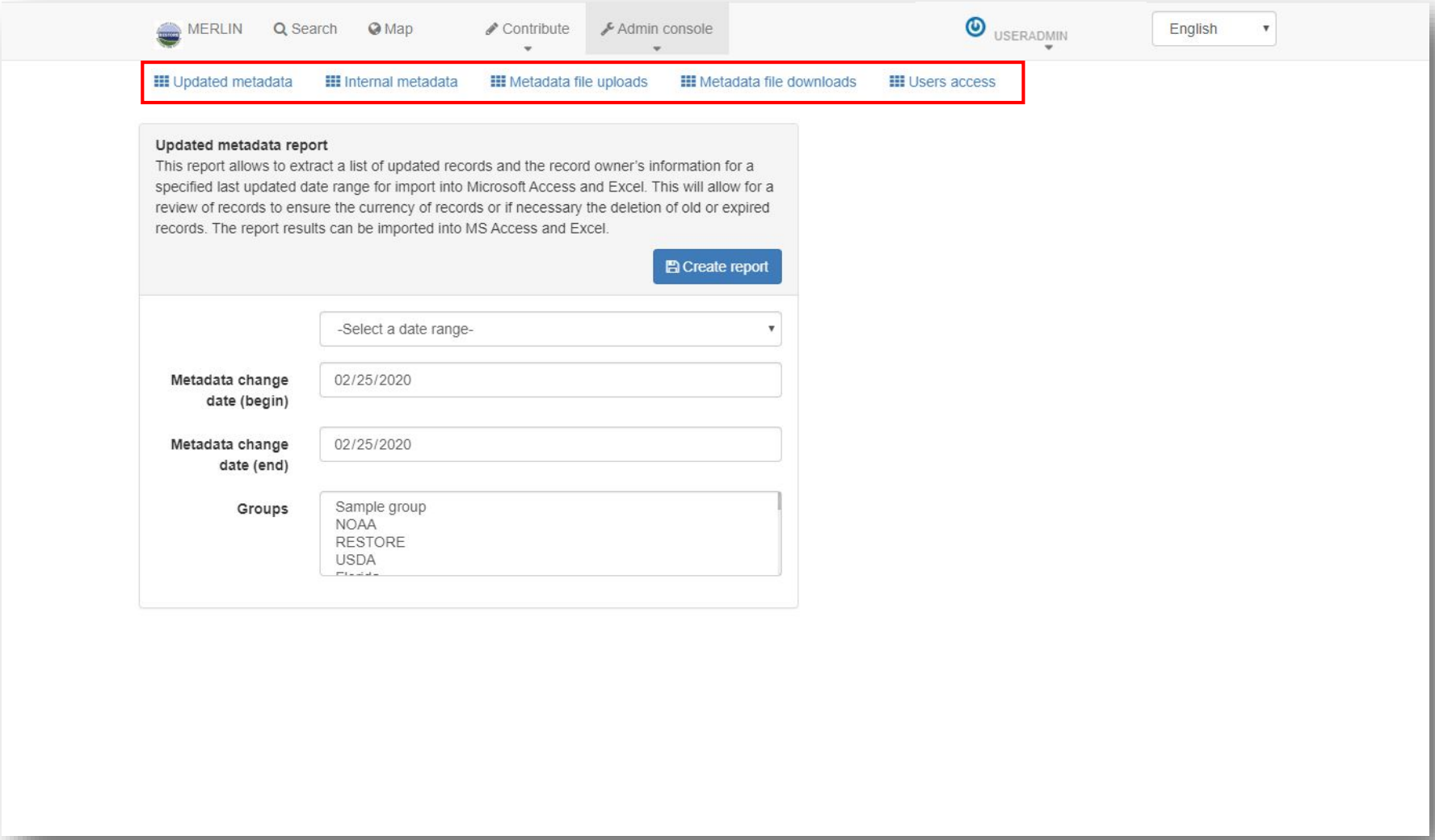



The "**Statistics and status"** function uses internal indexing to capture information from the metadata for reporting purposes.

- **Status** - You can check on Critical and Non-Critical System Checks.
- **WFS Indexing** - provides information on the WFS used in the map interface. This is not currently used for RESTORE metadata.
- **Information** - provides information to the User Administrator about Catalog information, Database information, System information, Version Information, and Index Information.
- **Versioning** - This provides the Versioning log for any records that use the (beta) Versioning function.

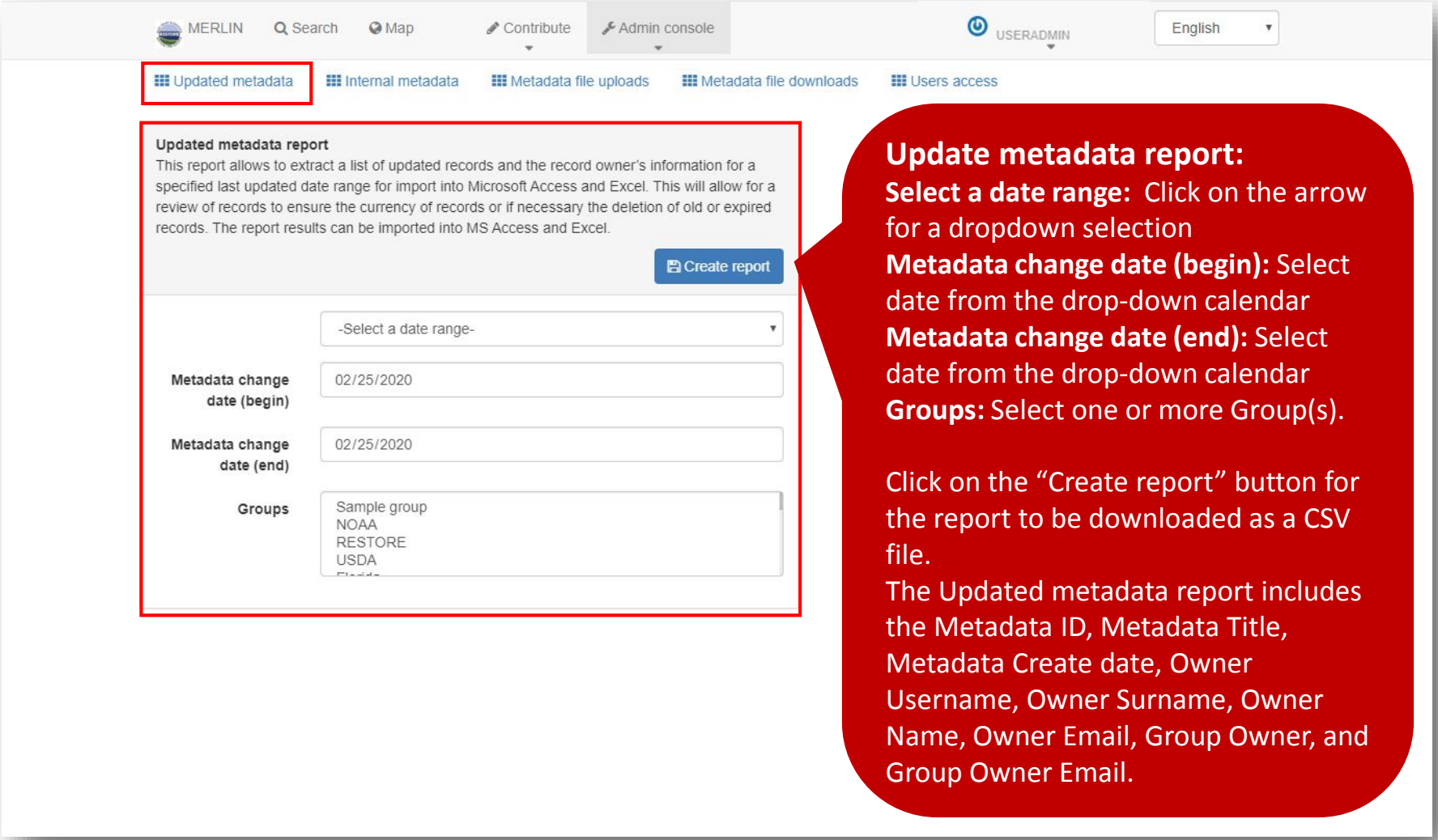
*The **Statistics and status** function has the ability to use internal indexing to capture information from the metadata for reporting purposes. MERLIN will be able to support this function once the index has been updated to a different indexing tool. (Note, this update is currently planned.)*

# The Admin console: Reports




***MERLIN*** *can generate reports on metadata management and Users.* ***Reports*** *can be generated on various information such as access and updates to metadata records. Reports export in .csv format for import in Access or Excel.*

# The Admin console: Reports

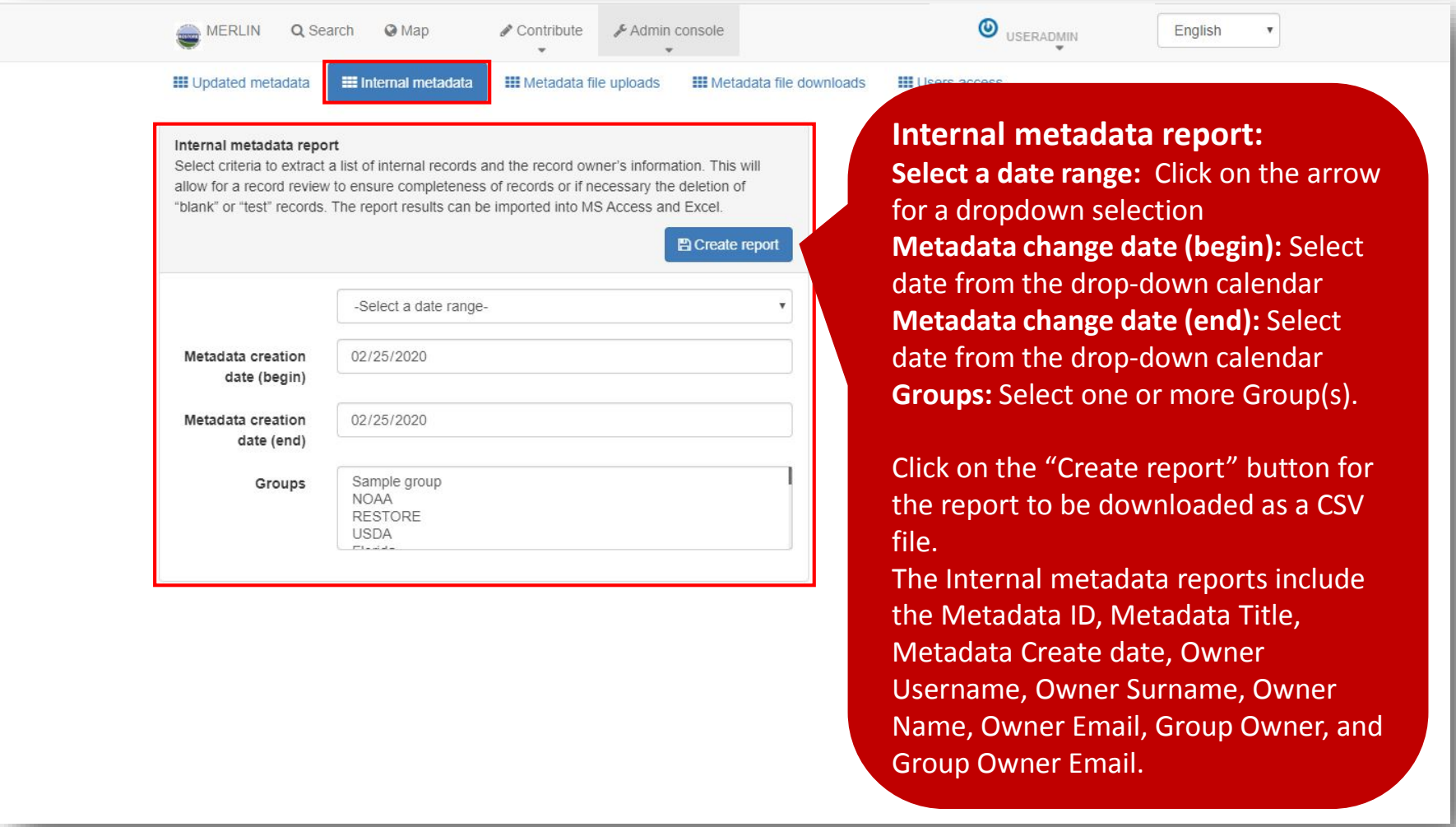



**Update metadata report:**
**Select a date range:** Click on the arrow for a dropdown selection
**Metadata change date (begin):** Select date from the drop-down calendar
**Metadata change date (end):** Select date from the drop-down calendar
**Groups:** Select one or more Group(s).

Click on the "Create report" button for the report to be downloaded as a CSV file.
The Updated metadata report includes the Metadata ID, Metadata Title, Metadata Create date, Owner Username, Owner Surname, Owner Name, Owner Email, Group Owner, and Group Owner Email.

*The Updated metadata report allows the USERADMIN to extract a list of updated records and the record owner's information for a specified last updated date range for import into Microsoft Access and Excel.*
*This will allow for a review of records to ensure the currency of records or if necessary the deletion of old or expired records. The report results can be imported into MS Access and Excel.*

# The Admin console: Reports

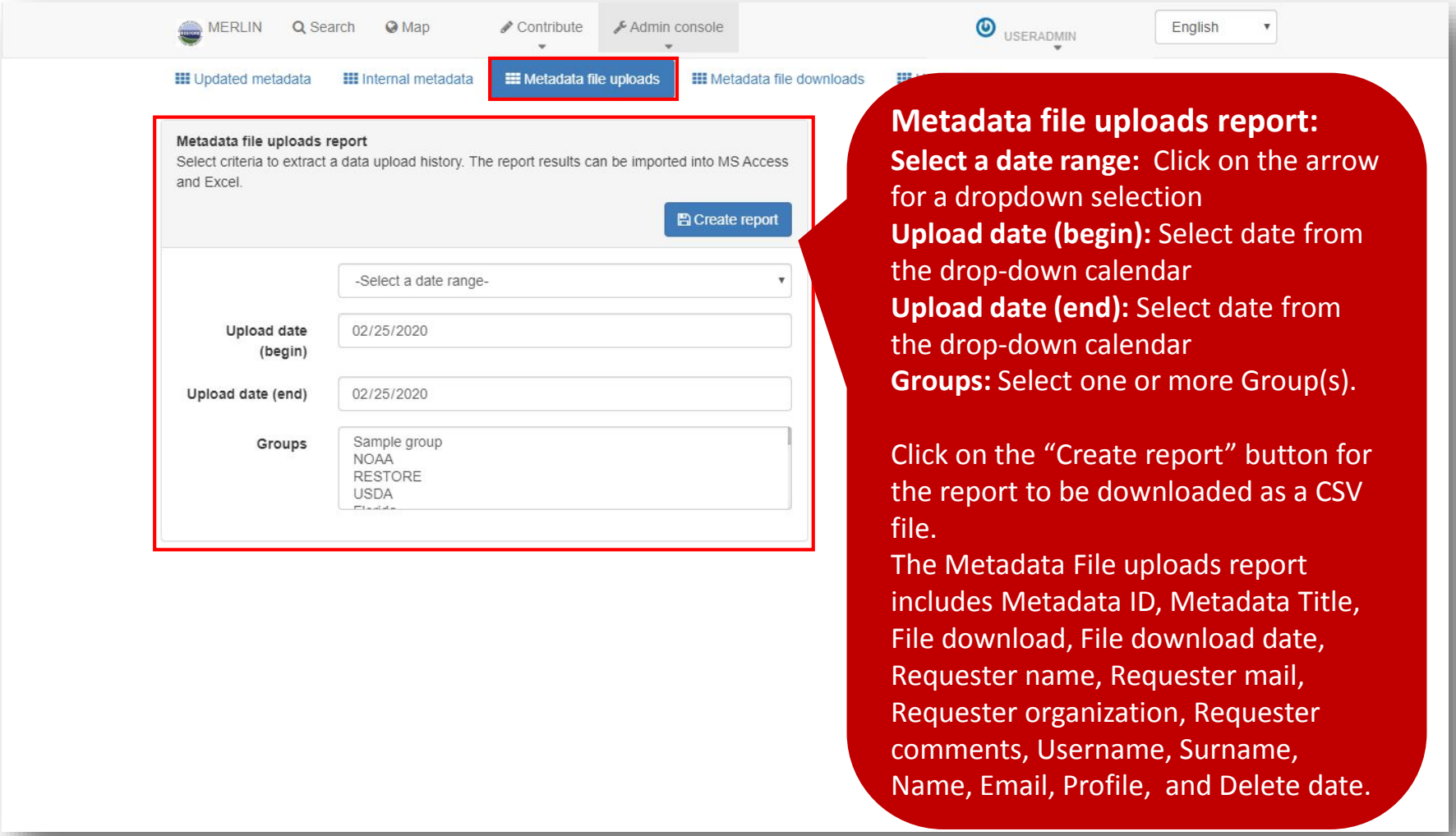



**Internal metadata report:**
**Select a date range:** Click on the arrow for a dropdown selection
**Metadata change date (begin):** Select date from the drop-down calendar
**Metadata change date (end):** Select date from the drop-down calendar
**Groups:** Select one or more Group(s).

Click on the "Create report" button for the report to be downloaded as a CSV file.
The Internal metadata reports include the Metadata ID, Metadata Title, Metadata Create date, Owner Username, Owner Surname, Owner Name, Owner Email, Group Owner, and Group Owner Email.

*Select criteria to extract a list of internal records and the record owner's information. This will allow for a record review to ensure completeness of records or if necessary the deletion of "blank" or "test" records. The report results can be imported into MS Access and Excel.*

# The Admin console: Reports

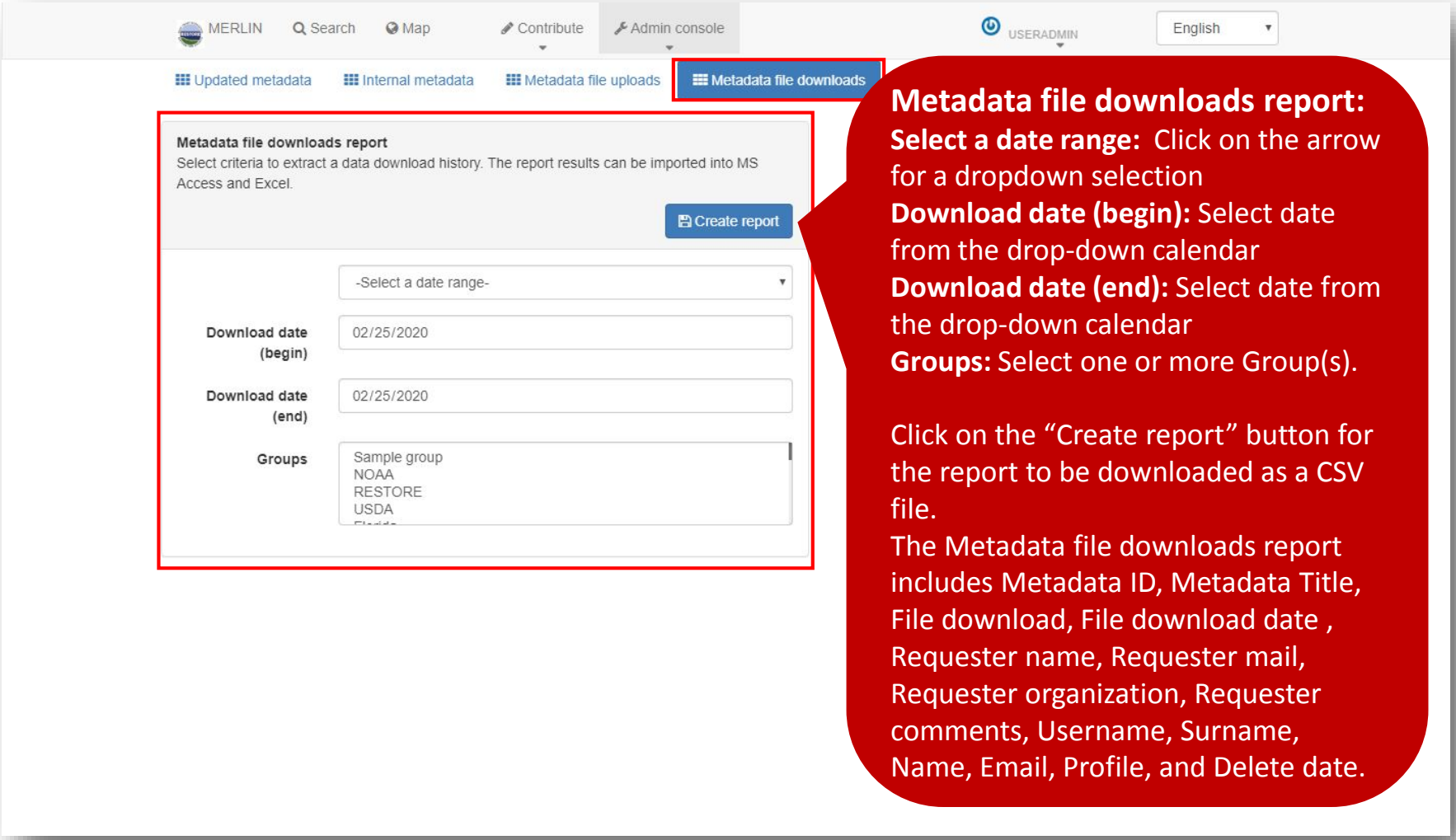



**Metadata file uploads report:**
**Select a date range:** Click on the arrow for a dropdown selection
**Upload date (begin):** Select date from the drop-down calendar
**Upload date (end):** Select date from the drop-down calendar
**Groups:** Select one or more Group(s).

Click on the "Create report" button for the report to be downloaded as a CSV file.
The Metadata File uploads report includes Metadata ID, Metadata Title, File download, File download date, Requester name, Requester mail, Requester organization, Requester comments, Username, Surname, Name, Email, Profile, and Delete date.

*Select criteria to extract a Metadata file upload history. The report results can be imported into MS Access and Excel.*

# The Admin console: Reports

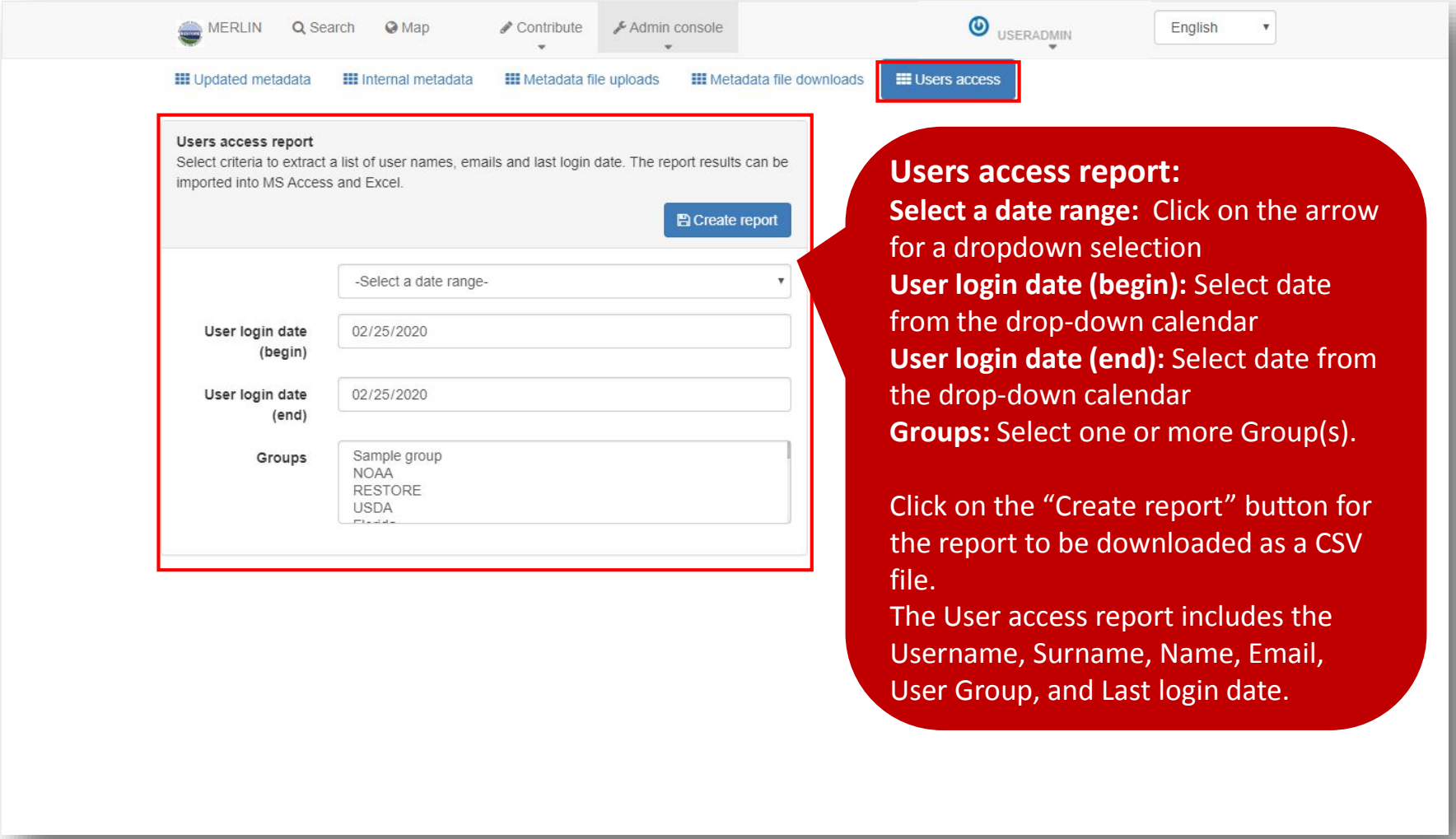



**Metadata file downloads report:**
**Select a date range:** Click on the arrow for a dropdown selection
**Download date (begin):** Select date from the drop-down calendar
**Download date (end):** Select date from the drop-down calendar
**Groups:** Select one or more Group(s).

Click on the "Create report" button for the report to be downloaded as a CSV file.
The Metadata file downloads report includes Metadata ID, Metadata Title, File download, File download date , Requester name, Requester mail, Requester organization, Requester comments, Username, Surname, Name, Email, Profile, and Delete date.

*Select criteria to extract a Metadata File download history. The report results can be imported into MS Access and Excel.*

# The Admin console: Reports

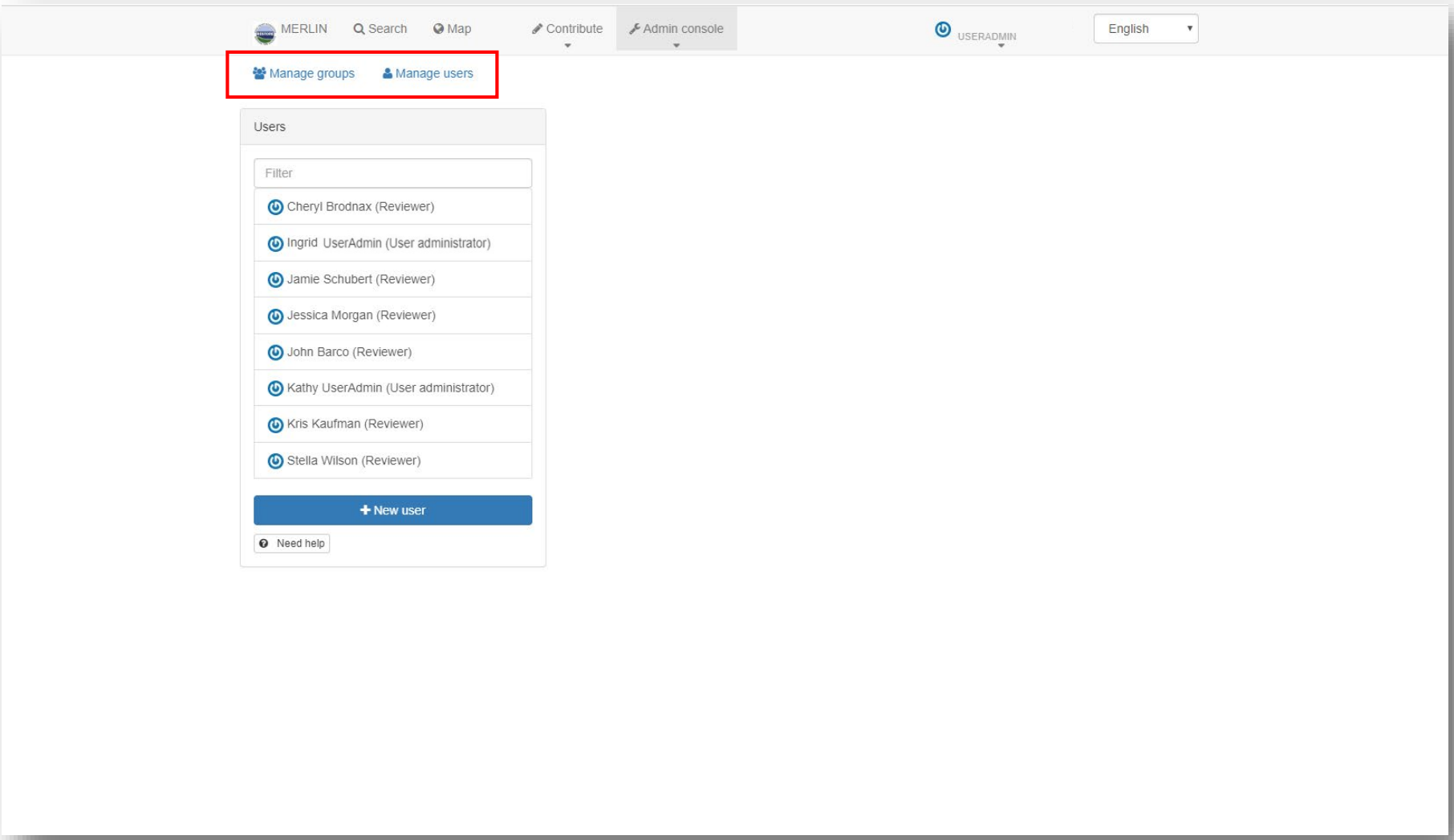



**Users access report:**
**Select a date range:** Click on the arrow for a dropdown selection
**User login date (begin):** Select date from the drop-down calendar
**User login date (end):** Select date from the drop-down calendar
**Groups:** Select one or more Group(s).

Click on the "Create report" button for the report to be downloaded as a CSV file.
The User access report includes the Username, Surname, Name, Email, User Group, and Last login date.

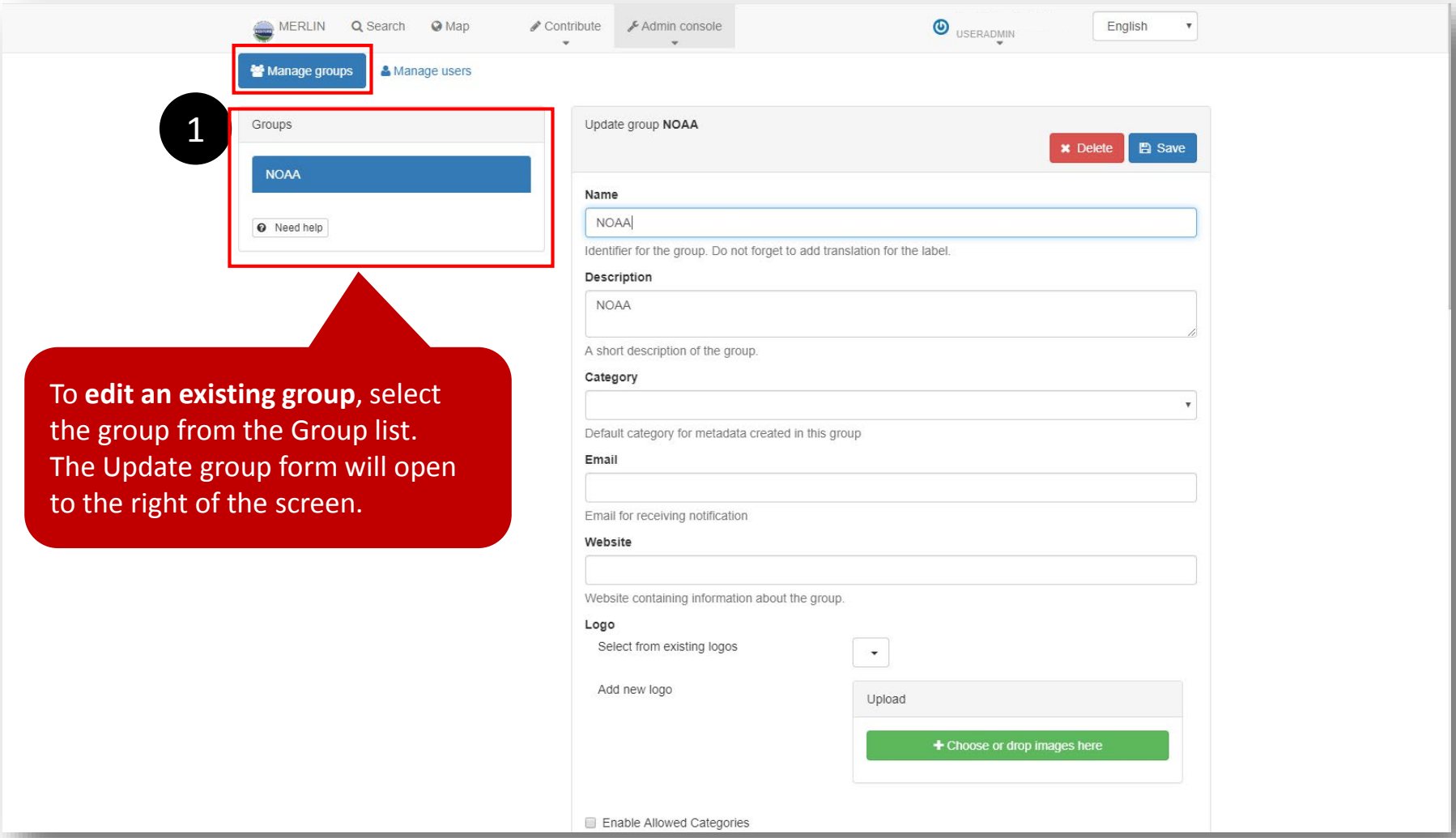
*Select criteria to extract a list of user names, emails and last login date. The report results can be imported into MS Access and Excel.*

# The Admin console: Users and groups




*The USERADMIN manages Groups for each of the different RESTORE organizations, and will add Users to the Group as appropriate. An administrator begins with administrative access to groups and users that are associated with their own agency. Current User Groups in MERLIN include the federal and state organizations that comprise the RESTORE Council or partner agencies.*

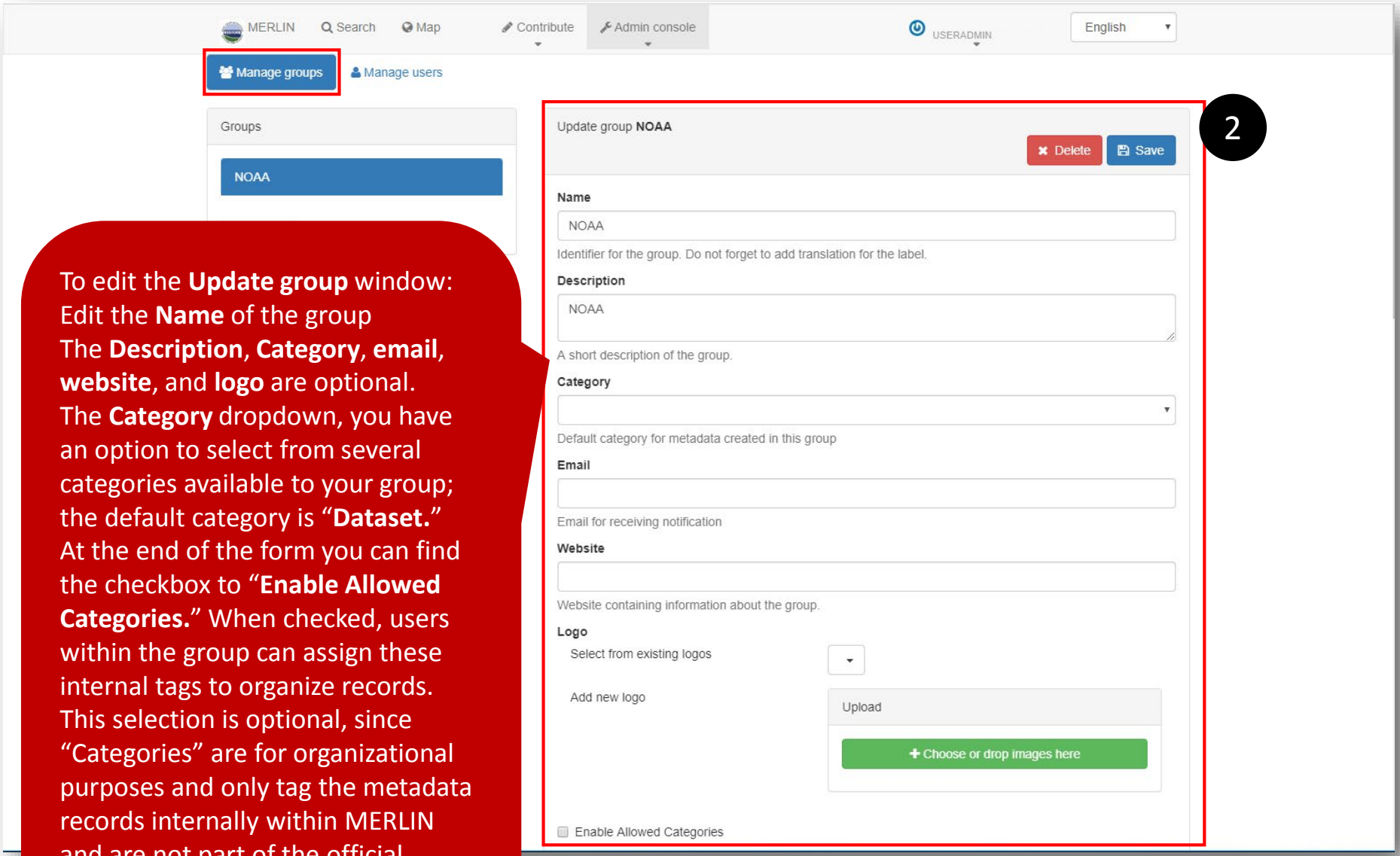
# The Admin console: Users and groups




To **edit an existing group**, select the group from the Group list. The Update group form will open to the right of the screen.

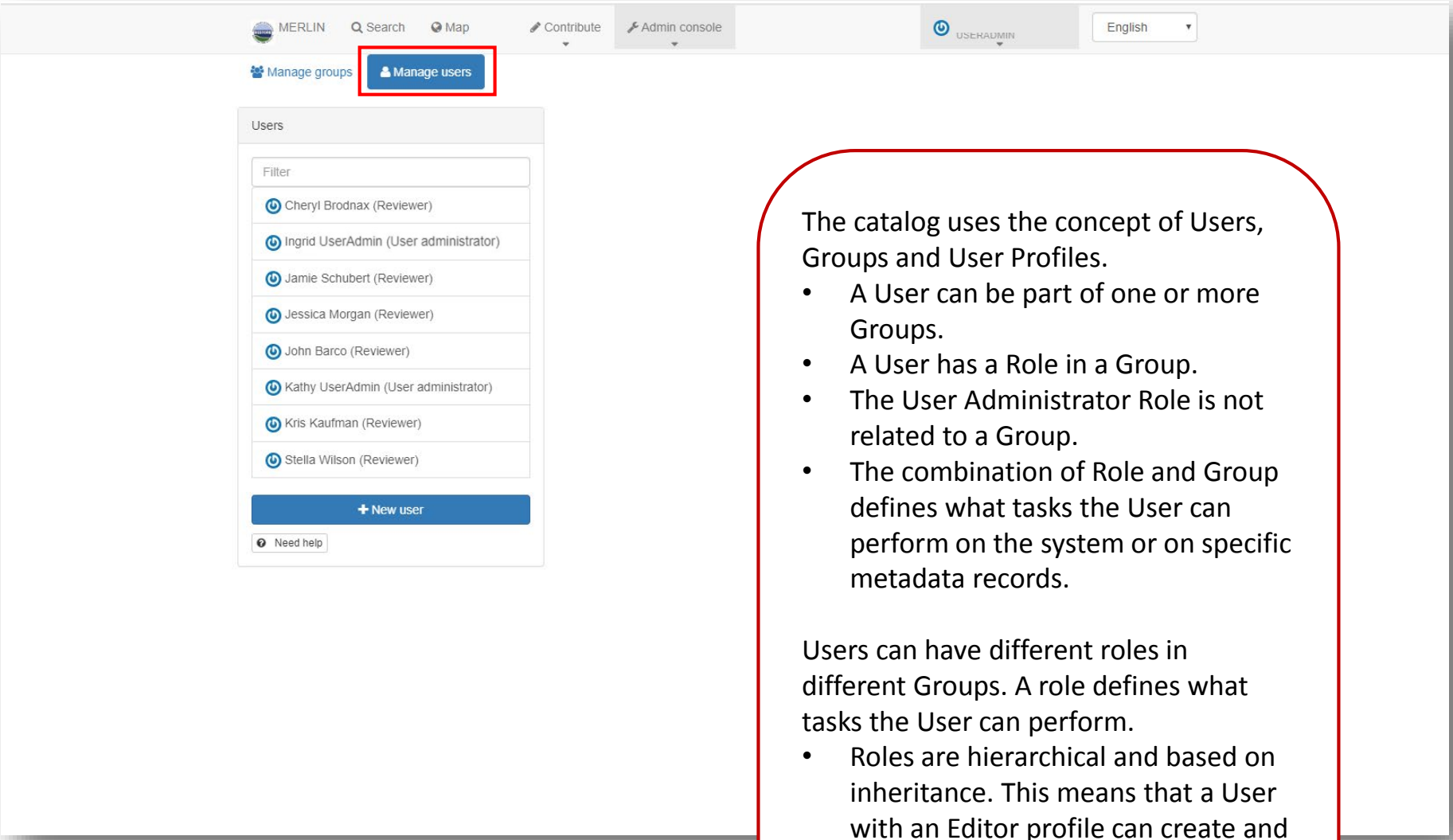
*To view Groups assigned to you as a USERADMIN, select the "**Manage Groups**" button. Several User Groups have already been set up. To add a new User Group for your agency, please contact a MERLIN system administrator by email at: **merlin.metadata@restorethegulf.gov***

# The Admin console: Users and groups




To edit the **Update group** window:
Edit the **Name** of the group
The **Description**, **Category**, **email**, **website**, and **logo** are optional.
The **Category** dropdown, you have an option to select from several categories available to your group; the default category is "**Dataset.**"
At the end of the form you can find the checkbox to "**Enable Allowed Categories.**" When checked, users within the group can assign these internal tags to organize records. This selection is optional, since "Categories" are for organizational purposes and only tag the metadata records internally within MERLIN and are not part of the official metadata record.

# The Admin console: Users and groups



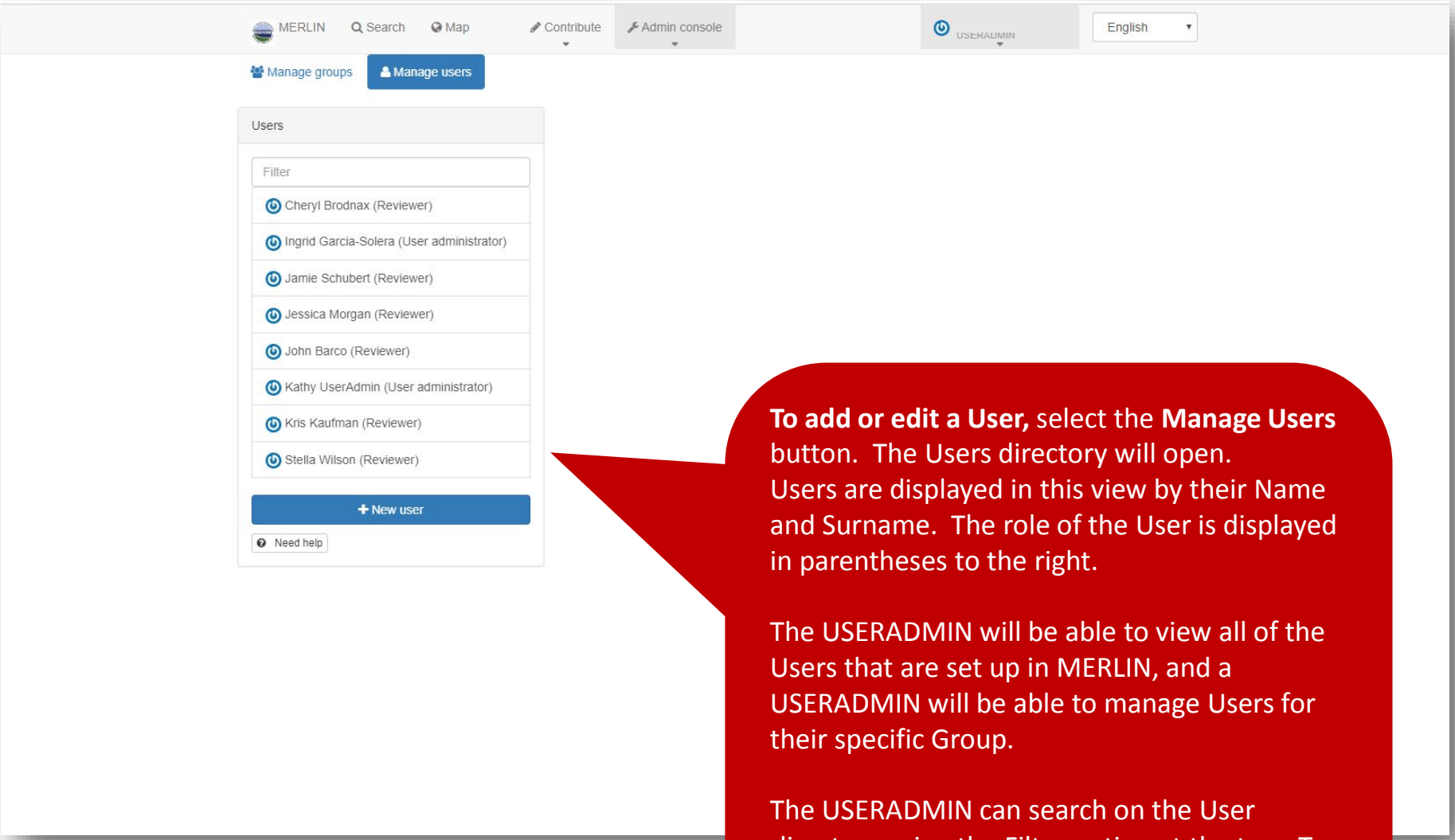

The catalog uses the concept of Users, Groups and User Profiles.

- A User can be part of one or more Groups.
- A User has a Role in a Group.
- The User Administrator Role is not related to a Group.
- The combination of Role and Group defines what tasks the User can perform on the system or on specific metadata records.

Users can have different roles in different Groups. A role defines what tasks the User can perform.

- Roles are hierarchical and based on inheritance. This means that a User with an Editor profile can create and modify new metadata records, but can also use all functions a Registered User can use.

# The Admin console: Users and groups

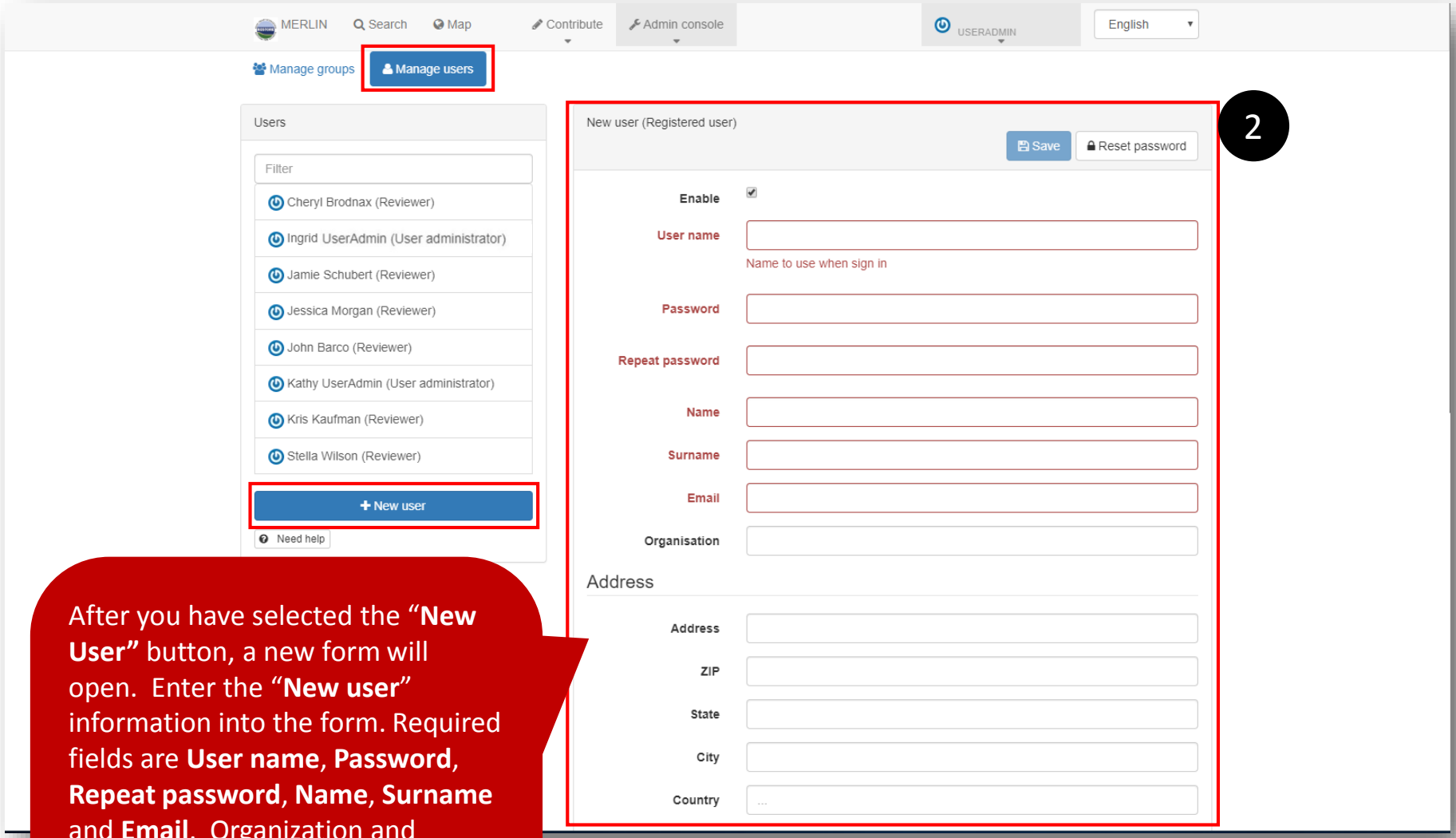



**To add or edit a User,** select the **Manage Users** button. The Users directory will open. Users are displayed in this view by their Name and Surname. The role of the User is displayed in parentheses to the right.

The USERADMIN will be able to view all of the Users that are set up in MERLIN, and a USERADMIN will be able to manage Users for their specific Group.

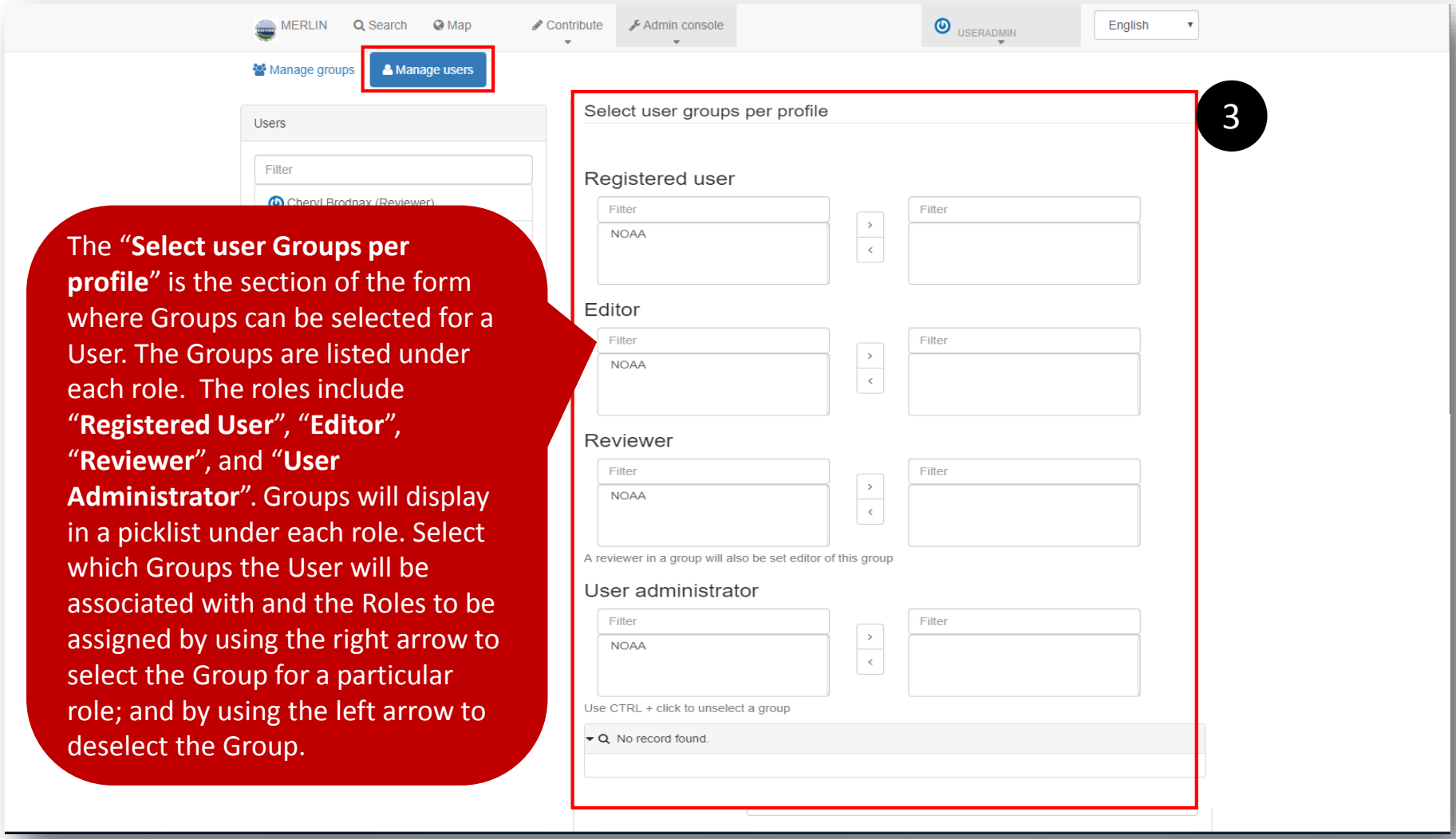
The USERADMIN can search on the User directory using the Filter option at the top. To add a User, use the **"New user"** button at the bottom.

# The Admin console: Users and groups




After you have selected the "**New User"** button, a new form will open. Enter the "**New user**" information into the form. Required fields are **User name**, **Password**, **Repeat password**, **Name**, **Surname** and **Email**. Organization and Address (Address, ZIP, State, City, Country) are optional.
Check the "**Enable"** checkbox at the top of the form.

# The Admin console: Users and groups




The "**Select user Groups per profile**" is the section of the form where Groups can be selected for a User. The Groups are listed under each role. The roles include "**Registered User**", "**Editor**", "**Reviewer**", and "**User Administrator**". Groups will display in a picklist under each role. Select which Groups the User will be associated with and the Roles to be assigned by using the right arrow to select the Group for a particular role; and by using the left arrow to deselect the Group.

This User Guide has covered key tasks for MERLIN Editors, Reviewers, and User Administrators who work on metadata records for RESTORE-funded datasets. Beyond this guide, there is extensive documentation available online for Geonetwork, the online cataloging platform that supports the MERLIN tool. While MERLIN has been developed specifically for use with RESTORE-council-funded metadata, the larger Geonetwork platform has been widely used as the basis of spatial data infrastructures all around the world.

MERLIN users can access detailed Geonetwork user manual at:
**https://geonetwork-opensource.org/manuals/3.10.x/en/**

Users with questions about any of the functions described in this manual, or who encounter an error while working in MERLIN, can also contact the MERLIN team at **merlin.metadata@restorethegulf.gov**.