


# Tutorial

This tutorial is meant to be a general guide to functionality within the Arizona Environmental Review Tool - the intention is not to cover all functionality but expose the user to various tools for further exploration. Additional documentation can be found by navigating the Contents. Clicking a link will navigate you directly to the help topic, which provides detailed information on the use and functionality of the components of the application.

1. If you are new to the system, **Create new account**, otherwise, **log in**.
  - If you have forgotten your password, **Request new password**.
  - To update your account settings, including Password, edit **My Account**.
2. Click the **Map** menu to navigate to the map.
3. Familiarize yourself with the **Map Navigation**.

a. Use the **Find address or place** tool  Find address or place to find **Canyon del Muerto**.

b. Using the **Zoom to Coordinates or Scale** tool , zoom in to a **Scale** of **1:36,112**.

c. Add a **Spatial Bookmark**  for **Canyon del Muerto**.

d. Zoom to the Default Extent of the map.

e. Perform a **Feature Search** using the *Resource*: **Milepost** to find *Road Name*: **U 191** with *Milepost Number*: **M448** and **Zoom** to it.

f. Add a **Spatial Bookmark**  for **Milepost**.

g. Using the newly created **Spatial Bookmark** , zoom to **Canyon del Muerto**.



4. Alter the content of the map:

- **Switch Basemap** to Imagery to see the great topography of the Canyon del Muerto area.
- Work with the **Layers** to make them visible/invisible, view their symbology, alter the layer transparency,...
- Use the **Add Resource** tool to add a map service to the map via URL: **[http://-gis.landscape.org/arcgis/rest/services/LandScope/LS1\\_Protected\\_Areas/MapServer](http://-gis.landscape.org/arcgis/rest/services/LandScope/LS1_Protected_Areas/MapServer)** and name it **Protected Lands**.


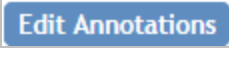


5. **Identify** the **Protected Lands** resource, added in Step 4, to determine **Owner** of the area surrounding the Canyon del Muerto.

6. **Make a Map** by adding **Points**, **Lines**, **Polygons** and/or **Text** to the map.

a. Add a **Point** by:

- digitizing a point using the default **Draw Shape** tool .
- entering **Coordinates** via the **Additional Mapping Options** tool .

b. Add a **Polygon** by:

- digitizing a polygon using the default **Draw Shape** tool<sup>1</sup>.
  - uploading a shape from a file (shapefile, KML, GML) using the **Upload Shapes**  tool.
- c. Add a **Line** by:
- digitizing a line after selecting the **Use Freehand** option from **Draw Settings**<sup>1</sup>.
- d. Add **Text** to the map of various colors, sizes, and styles.
- e. **Edit Annotations**  to edit the **Line** to change the **Line Style**, **Line Color**, and **Line Thickness**.
7. Try out various Map Tools:
- a. Make the **Tribal Lands** layer visible and **Identify**<sup>1</sup> that surrounding the Canyon. What is it?
  - b. After **Making a map** by adding various annotations, **Print**  the map.
8. **Create Project** to submit for environmental review. Consider doing so via one of the following multiple options:
- **Draw shape**
  - **Upload shape** from a (zipped) shapefile
  - **Additional Mapping Options**, including:
    - **Map Layers**:
      - Selecting the **Milepost** marker identified by the **Feature Search** performed in Step 3
      - Selecting the *Resource*: **Protected Lands** (previously loaded in Step 4) and *Layer*: **44: Protected Areas Database** surrounding the Milepost marker.
    - **Make a Map** drawn in Step 6
    - **Coordinates - Latitude/Longitude (Decimal)** with Latitude (Northing) of **36.1686** and Longitude (Easting) of **-109.4896**
    - **Drawing** a point or line feature(s)
9. **Edit Project**:
- j. Edit the project **details**.
  - k. Edit the **spatial boundary** of the project. Note that this enables the user to edit the project details as well.
10. **Clear All Annotations**  from the map.
11. **View Project** for the project created to download and review the **Report File** and Boundary **Shapefile**, in the case where the *Review Status* reflects **Report Generated**.
11. **Log out** to close your session.

[back to top](#)

## Administrative Functionality

The following functionality requires administrative privileges.

1. **List All Projects** to view the Projects submitted and their details.
  - **E-mail** the Contact of a project with questions/comments.
2. **Find Users** to view registered Users and assign Roles within the system, as appropriate.

[back to top](#)

## How To...

### Log In

- **Log In**
- **Log Out**
- Edit **My Account**
- **Request new password**

### Map

#### Alter the map display

- **Switch Basemap**
- **Add Resources** (a.k.a. add map service)
- **Layers** - make visible/invisible
- **Make A Map** - add features and labels to the map
  - **Draw/Edit**

#### Navigation and map tools

- **Identify** a feature
- **Feature Search** (a.k.a. find something on the map)
- **Find Address or Place**
- **Map Navigation**
- **Measure**
- **Overview Map**
- **Print**
- **Spatial Bookmarks** - create, use and edit
- **Zoom To Coordinates or Scale**

#### Create Project

- **Create Project** for environmental review
  - **Draw/Edit**

### My Projects

- **My Projects**

### Users

Allows users assigned the Administrator Role the ability to find, sort, and view Users registered within the system and designate User Roles.

## Steps:

1. From the *Admin* menu, select **Users**.
2. Within the *Users* page, all Users are listed.
  - Filter the Users by **First name**, **Last name** and/or **Organization** by selecting a comparison type from the dropdown menu and typing in search text within the corresponding box. Click **Apply**



. **NOTE:** To remove the filter, delete the filter criteria from the text box and click

**Apply.**

## Users

**First name**

Contains ▼

**Last name**

Contains ▼

**Organization**

Contains

Arizona

- Sort users in ascending order by clicking on the desired heading (i.e. **Organization**).

User ID	Organization ▲	Registration date	Last login
asmith_24	AGFD	6/9/2014 07:08:07 PM	06/09/2014 - 19:33
sschuetze_47	AGFD	8/5/2014 06:12:43 PM	08/08/2014 - 15:52
jmikolajczyk_53	AGFD	9/3/2014 02:57:36 PM	09/03/2014 - 15:00
tbuhr_54	AGFD	9/3/2014 04:21:31 PM	09/03/2014 - 16:29
kwolff-krauter_57	AGFD	9/10/2014 04:41:55 PM	09/10/2014 - 16:43
neiden_55	Arizona Game and Fish	9/4/2014 12:47:28 AM	09/04/2014 - 00:48
gritter	Arizona Game and Fish Department	4/23/2014 12:50:05 PM	09/18/2014 - 17:29
stonn	Arizona Game and Fish Department	4/23/2014 12:13:14 PM	09/17/2014 - 16:06
jkuzek_44	Arizona Game and Fish Department	8/1/2014 10:36:21 AM	08/26/2014 - 11:11
awood_58	Arizona Game and Fish Department	9/11/2014 07:35:09 PM	09/12/2014 - 14:01
rlawrence	Arizona Game and Fish Dept.	4/22/2014 07:19:57 PM	07/08/2014 - 17:11
jdimiceli_33	AZGFD	7/9/2014 01:05:22 PM	08/14/2014 - 17:29
hgriscom_59	AZGFD	9/13/2014 06:44:50 PM	09/22/2014 - 13:37
c.ndewar	DCNR	4/22/2014 02:39:23 PM	09/18/2014 - 12:28

- Click on the same heading (i.e. **Organization**), a second time, to sort in descending order.

User ID	Organization	Registration date	Last login
<a href="#">cheriboucher_34</a>	Unaffiliated user	7/11/2014 06:02:02 PM	07/11/2014 - 18
<a href="#">Robert_M_Anderson_41</a>	U.S. Fish and Wildlife Service	7/24/2014 11:58:24 AM	07/24/2014 - 15
<a href="#">sabratoonn</a>	Tonn Ventures	4/23/2014 12:21:51 PM	09/24/2014 - 13
<a href="#">tbommarito_56</a>	Reclamation	9/4/2014 03:01:59 PM	09/19/2014 - 13
<a href="#">sabraschwartz_51</a>	private	8/28/2014 01:12:16 PM	09/24/2014 - 13
<a href="#">gpodnieszin</a>	PNHP	4/22/2014 08:25:08 AM	07/14/2014 - 14
<a href="#">whitney_weber_40</a>	NatureServe	7/21/2014 09:32:11 AM	07/28/2014 - 09

- Click the **User ID** of a user to view the User Details.

## Users

**First name**  **Last name**  **Orga**

User ID	Organization	Registration date
<a href="#">asmith_24</a>	AGFD	6/9/2014 07:08:07 F
<a href="#">awood_58</a>	Arizona Game and Fish Department	9/11/2014 07:35:09

- Within the *User Details* page, click **Edit**  to edit the user's Roles within the application.

5. Within the *Edit User* page, designate the pertinent role by clicking the corresponding checkbox.

## User Details: asmith\_24

**View** **Edit**

Display name \*

Spaces are allowed; punctuation is not allowed except for periods, hyphens, apostrophes, and underscores.

E-mail address \*

Password

Password strength:

Confirm password

To change the current user password, enter the new password in both fields.

Roles

authenticated user

Customer

Advanced Customer

**Evaluator**

AZ Administrator

**Save** **Cancel account**



6. Click **Save** at the bottom of the page to save the changes to the User account.

[back to top](#)

Related Topics:

- [Projects](#)

## Projects

Allows administrative users (Evaluators and Administrators) the ability to find, view, and sort all projects submitted to the system.

### Steps:

1. From the Admin menu, select **Projects**.
2. Within the *Projects* page, all projects are listed.
  - Filter the Projects by **Project ID** and/or **Contact Name** by selecting a comparison type from the drop-



down menu and typing in search text within the corresponding box. Click **Apply**.

**NOTE:** To remove the filter, delete the filter criteria from the text box and click **Apply**.

### Projects

**Project Title**

**Project ID**

**Primary Project Type**

- Sort Projects in ascending order by clicking on the desired heading (i.e. **Project ID**).

Project Title	Project ID ▲	Primary Project Type	Contact Name	Orga
test	27	Forest, Woodland, Vegetation Management	Austin	agfd
test 2	5	Communication	Zoey Tonn	Tonn
Test Rayo	AGFD-000029-HGIS	Energy Storage/Production /Transfer	Sabra Tonn	Arizon Fish L
Patagonia	AGFD-000039-HGIS	Mining	Michele Bottiaux	Natur
Copied multiple	AGFD-000040-HGIS	Agricultural Operations	ERT	Natur



- Click on the same heading (i.e. **Project ID**), a second time, to sort in descending order.

Project Title	Project ID	Primary Project Type	Contact Name	Organ
test 1	M14-04234334	Energy Storage/Production /Transfer	Rocky Ray	Torch
Make a Map	AGFD-000113-HGIS	Agricultural Operations	ERT Support	Nature
Cook's Lake	AGFD-000112-HGIS	Habitat Conservation and Restoration	Tab Bommarito	Reclam
Chiricahua new	AGFD-000111-HGIS	Recreation Areas	Sabra Tonn	Arizona

- Click a **Project Title** to find additional information pertaining to the Project.

Project Title	Project ID	Primary Project Type	Contact Name	Organizati
Upload shapes from shapefile	AGFD-000054-HGIS	Agricultural Operations	ERT Support	NatureServ
Make a Map	AGFD-000113-HGIS	Agricultural Operations	ERT Support	NatureServ
Cook's Lake	AGFD-000112-HGIS	Habitat Conservation and Restoration	Tab Bommarito	Reclamatio
Blanco Wash	AGFD-000096-HGIS	Habitat Conservation and	Michele	NatureServ

- Within the *Project Details* page:
  - click the **Project Type** hyperlink to view more information regarding the **Project Type**.
  - click the Report **File attachment** to view the report generated as a result of the Project analysis.
  - click the Boundary Shapefile to save the project boundary.
  - Edit** the project details or **Map** to edit the project boundary.
  - Add pertinent **Notes** regarding the project.
  - Email** the Contact.

### back to top

### Related Topics:

- Edit Project**
- Email**
- Users**

## Dynamic Analysis

This functionality allows users assigned the Administrator Role the ability to find, sort, view, and create **Dynamic Analysis** report text within the system.

**Dynamic Analysis** report text are displayed within the project report only when a feature within the layer is identified during the project analysis. Dynamic Analysis Report Text is linked to a specific layer used in the project analysis. In contrast, **Static Structure** report text is always displayed in the report, regardless of the results of the analysis. The **Project Type** report text included in the project report corresponds to that identified by the client when creating the project.

- **View**
- **Create**
- **Edit**
- **Delete**

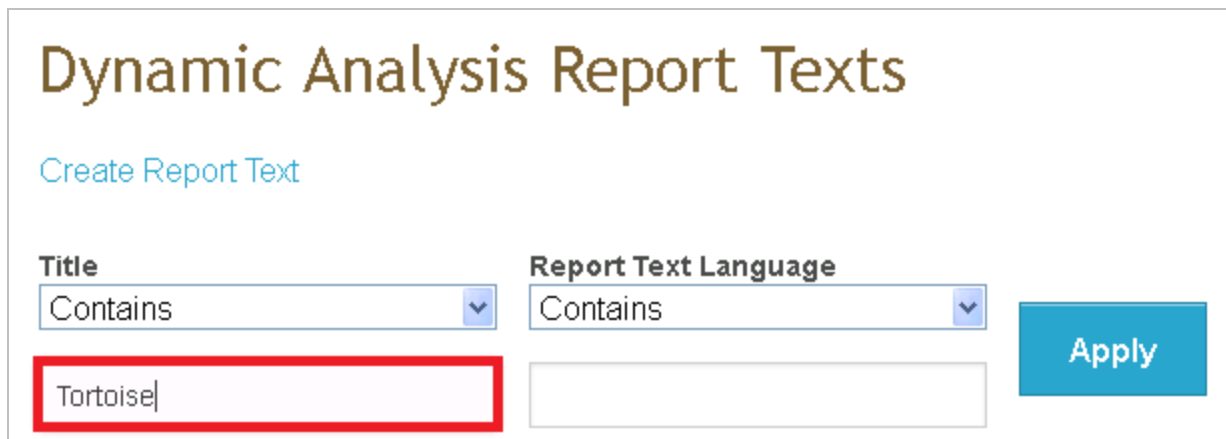
### Steps:

1. From the *Admin* menu, within the *Report Texts* section, select **Dynamic Analysis**.
2. Within the *Dynamic Analysis Report Text* page, all Dynamic Analysis report texts are listed.
  - Filter the report texts by **Title** or **Report Text Language** by selecting a comparison type from the



dropdown menu and typing in search text within the corresponding box. Click **Apply**.

**NOTE:** To remove the filter, delete the filter criteria from the text box and click **Apply**.



- Sort Dynamic Analysis report text in ascending order by clicking on the desired heading (i.e. **Title**).
- Click on the same heading (i.e. **Title**), a second time, to sort in descending order.


[back to top](#)

### View

Within the *Dynamic Analysis Report Text* page, click the **Title** of the text to view.

[back to top](#)

### Create

1. Within the *Dynamic Analysis Report Text* page, click **Create Report Text**  to create new text for inclusion in the project report.
2. Within the *Create Report Text* page, enter:

- **Title:** create a meaningful title for yourself. This title will not be displayed within the report
- **Type:** from the dropdown menu, select the type of report text this applies to - in this case **Dynamic Analysis:**
  - **Dynamic Analysis:** only displayed within the project report when a feature within the given layer detects a conflict during the project analysis. Dynamic Analysis Report Text is linked to a specific layer used in the project analysis.
  - **Static Structure:** always displayed in the report, regardless of the results of the analysis.
  - **Project Type:** text displayed within the project report is dependent on the Project Type defined within the Project.
- **Project Type:** this only applies when **Project Type** is selected from the *Type* dropdown. Indicate all Project Types to which the text should apply.
- **Body:** indicate the text to display in the project report

## Create Report Text

Title \*  
*Enter a title that is most meaningful to you.*

Type \*  
*Select the relevant category.*

Body

Source | 🔗 📄 📁 📁 ↶ ↷ 🔗 🔗 🔗 ABC ABC

**B** *I* U abx x<sub>2</sub> x<sup>2</sup> 📄 ☰ ☰ ☰ ☰ ☰ ☰ ☰ ☰ ☰ ☰ ☰

Styles Normal Font Size 🌐 🌐 🚩 🔗 📄

A conflict has been found with one or more Important Bird Areas.

body p

[Switch to plain text editor](#)

Save

3. Click **Save** at the bottom of the page to save the changes.

4. At the top of the page, a message is displayed indicating that the Layer has been created successfully.

**Report Text *New Dynamic Analysis* text has been created.**

[back to top](#)

## Edit

1. Within the *Dynamic Analysis Report Text* page, click the **Title** of the text to view.

A rectangular button with a light gray background and the word "Edit" in black text.

2. Within the *Dynamic Analysis Report Text Details* page, click the **Edit** menu.

A rectangular button with a light gray background and the word "Save" in black text.

3. Make the desired edits and click **Save** at the bottom of the page to save the changes.
4. At the top of the page, a message is displayed indicating that the Report Text has been successfully updated.

**Report Text *Important Bird Areas* has been updated.**

[back to top](#)

## Delete

1. Within the *Dynamic Analysis Report Text* page, click the **Title** of the text to view.

A rectangular button with a light gray background and the word "Edit" in black text.

2. Within the *Dynamic Analysis Report Text Details* page, click the **Edit** menu.

A rectangular button with a blue background and the word "Delete" in white text.

3. Within the *Edit Report Text* page, click the **Delete** button at the bottom of the page to delete the Layer.
4. A prompt appears confirming that the layer should be deleted. Click **Delete** to confirm or **Cancel** to cancel the deletion.

Are you sure you want to delete *New Dynamic A*

A rectangular button with a light gray background and the word "View" in black text.A rectangular button with a light gray background and the word "Edit" in black text.

This action cannot be undone.

A rectangular button with a light gray background and the word "Delete" in black text.A rectangular button with a light blue background and the word "Cancel" in black text.

- At the top of the page, a message is displayed indicating that the Layer has been successfully deleted.

Report Text *New Dynamic Analysis* text has been deleted.

[back to top](#)

### Related Topics:

- [Analysis Layer](#)
- [Analysis Layer Attributes](#)
- [Analysis Layer Triggers](#)
- [Project Type](#)
- [Static Structure](#)

## Static Structure

This functionality allows users assigned the Administrator Role the ability to find, sort, view, and create **Static Structure** report text within the system. After creating the Static Structure, submit a ticket to the **ERT Help Desk** indicating the Title of the Static Structure report text and where it should be included in the project report.

**Static Structure** report text is always displayed in the report, regardless of the results of the analysis. In contrast, **Dynamic Analysis** report text are displayed within the project report only when a feature within the layer is identified during the project analysis. Dynamic Analysis Report Text is linked to a specific layer used in the project analysis. The **Project Type** report text included in the project report corresponds to that identified by the client when creating the project.

- [View](#)
- [Create](#)
- [Edit](#)
- [Delete](#)

### Steps:

- From the *Admin* menu, within the *Report Texts* section, select **Static Structure**.
- Within the *Static Structure Report Texts* page, all Static Structure report texts are listed.
  - Filter the report texts by **Title** or **Report Text Language** by selecting a comparison type from the

dropdown menu and typing in search text within the corresponding box. Click **Apply**.


 A blue rectangular button with the word "Apply" written in white text.

**NOTE:** To remove the filter, delete the filter criteria from the text box and click **Apply**.

**Static Structure Report Texts**

[Create Report Text](#)

**Title**  
Contains

**Report Text Language**  
Contains

disclaimer

**Apply**

Title	Report Text Language
<a href="#">analysis-results-</a>	No special status species were documented as occurring within the pro.

- Sort Static Structure report text in ascending order by clicking on the desired heading (i.e. **Title**).
- Click on the same heading (i.e. **Title**), a second time, to sort in descending order.

[back to top](#)

## View

Within the *Static Structure Report Texts* page, click the **Title** of the text to view.

[back to top](#)

## Create

1. Within the *Static Structure Report Texts* page, click **Create Report Text** [Create Report Text](#) to create new text for inclusion in the project report.
2. Within the *Create Report Text* page, enter:
  - **Title:** create a meaningful title for yourself. This title will not be displayed within the report
  - **Type:** from the dropdown menu, select the type of report text this applies to:
    - **Dynamic Analysis:** only displayed within the project report when a feature within the given layer detects a conflict during the project analysis. Dynamic Analysis Report Text is linked to a specific layer used in the project analysis.
    - **Static Structure:** always displayed in the report, regardless of the results of the analysis.
    - **Project Type:** text displayed within the project report is dependent on the Project Type defined within the Project.
  - **Project Type:** this only applies when **Project Type** is selected from the *Type* dropdown. Indicate all Project Types to which the text should apply.

- **Body:** indicate the text to display in the project report

## Create Report Text

**Title \***  
*Enter a title that is most meaningful to you.*

**Type \***  
*Select the relevant category.*

**Body**

Source |

Styles | Format | Font | Size |

changes.

2. This is a preliminary environmental screening tool. It is not a substitute for the potential knowledge gained by having a professional environmental review. This review is also not intended to replace environmental consultation (including federal consultation under the Endangered Species Act) or the Department's review of site-specific projects.
3. The Department's Heritage Data Management System (HDMS) data is not intended to include potential distribution models for species of special concern with plants, animals, and environmental conditions that are ever changing. Consequently, many areas may contain species of special concern previously noted in a particular area may no longer occur there. HDMS data contains information about species of special concern in the Department. Not all of Arizona has been surveyed for special status species, and surveys that have been conducted may reveal previously undocumented population of species of special concern.
4. HabiMap™ Arizona data, specifically Species of Greatest Conservation Need (SGCN) under our State Wildlife Action Plan, and Recreational Importance (SERI), represent potential species distribution models for the State of Arizona which are based on historical data. The status of a wildlife resource can change quickly, and the availability of new data will necessitate a refined assessment.

body ol li

[Switch to plain text editor](#)

**Save**

3. Click **Save** at the bottom of the page to save the changes.
4. At the top of the page, a message is displayed indicating that the Layer has been created successfully.

**Report Text Disclaimer has been created.**


5. Submit a ticket to the **ERT Help Desk** indicating the Title of the Static Structure report text and where it should be included in the project report.

[back to top](#)

## Edit

1. Within the *Static Structure Report Texts* page, click the **Title** of the text to view.

2. Within the *Static Structure Report Text Details* page, click the **Edit**  menu.

3. Make the desired edits and click **Save**  at the bottom of the page to save the changes.
4. At the top of the page, a message is displayed indicating that the Report Text has been successfully updated.


**Report Text *disclaimer-indemnification* has been updated.**

[back to top](#)

## Delete

1. Within the *Static Structure Report Texts* page, click the **Title** of the text to view.

2. Within the *Static Structure Report Text Details* page, click the **Edit**  menu.

2. Within the *Edit Report Text* page, click the **Delete** button  at the bottom of the page to delete the Layer.
3. A prompt appears confirming that the layer should be deleted. Click **Delete** to confirm or **Cancel** to cancel the deletion.

**Are you sure you want to delete *Disclaimer*?**

**View** **Edit**

This action cannot be undone.

**Delete** **Cancel**

4. At the top of the page, a message is displayed indicating that the Layer has been successfully deleted.

**Report Text *Disclaimer* has been deleted.**



[back to top](#)

## Related Topics:

- [Dynamic Analysis](#)
- [Project Type](#)

## Project Type Recommendations

This functionality allows users assigned the Administrator Role the ability to find, sort, view, and create **Project Type Recommendations**.

**Project Type Recommendations** included in the project report corresponds to that identified by the client when creating the project. **Static Structure** report text is always displayed in the report, regardless of the results of the analysis. In contrast, **Dynamic Analysis** report text are displayed within the project report only when a feature within the layer is identified during the project analysis. Dynamic Analysis Report Text is linked to a specific layer used in the project analysis.

- [View](#)
- [Create](#)
- [Edit](#)
- [Delete](#)

## Steps:

1. From the *Admin* menu, within the *Report Texts* section, select **Project Type**.
2. Within the *Project Type Report Texts* page, all Project Type report texts are listed.
  - Filter the report texts by **Title**, **Nickname** or **Report Text Language** by selecting a comparison type from the dropdown menu and typing in search text within the corresponding box. Click **Apply**



. **NOTE:** To remove the filter, delete the filter criteria from the text box and click

**Apply.**

**Project Type Report Texts**

[Create Report Text](#)

**Title**  
Contains

**Nickname**  
Contains

**Report Text Language**  
Contains

Aquaculture|

Title	Report Text Language
analysis-results-	<b>No Documented Occurrences of Special Status Species</b> No special status species were documented as occurring within the proj

- Sort Project Type report text in ascending order by clicking on the desired heading (i.e. **Nickname**).
- Click on the same heading (i.e. **Nickname**), a second time, to sort in descending order.

[back to top](#)

## View

Within the *Project Type Report Texts* page, click the **Title** of the text to view.

[back to top](#)

## Create

1. Within the *Project Type Report Texts* page, click **Create Report Text** to create new text for inclusion in the project report.
2. Within the *Create Report Text* page, enter:
  - **Title**: create a meaningful title for yourself. This title will not be displayed within the report
  - **Type**: from the dropdown menu, select the type of report text this applies to:
    - **Dynamic Analysis**: only displayed within the project report when a feature within the given layer detects a conflict during the project analysis. Dynamic Analysis Report Text is linked to a specific layer used in the project analysis.
    - **Project Type**: always displayed in the report, regardless of the results of the analysis.
    - **Project Type**: text displayed within the project report is dependent on the Project Type defined within the Project.
  - **Project Type**: this only applies when **Project Type** is selected from the *Type* dropdown. Indicate all Project Types to which the text should apply.

- **Body:** indicate the text to display in the project report

## Create Report Text

Title \*  
*Enter a title that is most meaningful to you.*

Type \*  
*Select the relevant category.*

Project Type  
*Select as many project types as are applicable.*

- Agricultural Operations**
  - Aquaculture**
    - Construction of new facilities or hatchery
    - Maintenance or expansion of existing facilities or hatcheries
  - Farming Operations (crops)**
  - Livestock Operations/Management**
- Communication**
- Development Outside Municipalities (Rural Development)**
- Development Within Municipalities (Urban Growth)**
- Energy Storage/Production/Transfer**
- Forest, Woodland, Vegetation Management**
- Habitat Conservation and Restoration**
  - Conservation easement
  - Dam removal
  - Disease research and monitoring (pathogens/parasites)
  - Exotic tree/shrub removal



3. Click **Save** at the bottom of the page to save the changes.
4. At the top of the page, a message is displayed indicating that the Layer has been created successfully.


**Report Text PT-10101 has been created.**

[back to top](#)

## Edit

1. Within the *Project Type Report Texts* page, click the **Title** of the text to view.

2. Within the *Project Type Report Text Details* page, click the **Edit**  menu.

3. Make the desired edits and click **Save**  at the bottom of the page to save the changes.
4. At the top of the page, a message is displayed indicating that the Report Text has been successfully updated.

**Report Text PT-1 has been updated.**

[back to top](#)

## Delete

1. Within the *Project Type Report Texts* page, click the **Title** of the text to view.

2. Within the *Project Type Report Text Details* page, click the **Edit**  menu.

3. Within the *Edit Report Text* page, click the **Delete** button  at the bottom of the page to delete the Layer.
4. A prompt appears confirming that the layer should be deleted. Click **Delete** to confirm or **Cancel** to cancel the deletion.

**Are you sure you want to delete PT-10101?**

**View** **Edit**

This action cannot be undone.

**Delete** **Cancel**

5. At the top of the page, a message is displayed indicating that the Layer has been successfully deleted.

**Report Text PT-10101 has been deleted.**

[back to top](#)

## Related Topics:

- [Dynamic Analysis](#)
- [Static Structure](#)

# Analysis Layers

This functionality allows users assigned the Administrator Role the ability to find, sort, view, and create **Analysis Layers** within the system. Analysis Layers are used within the spatial analysis to detect conflicts between a project boundary and the analysis layer. Unlike **Layers**, Analysis Layers are not displayed within the Map.

- **View**
- **Create**
- **Edit**
- **Delete**

## Steps:

1. From the *Admin* menu, within the *Analysis Layer Rules* section, select **Analysis Layers**.
2. Within the *Analysis Layers* page, all Analysis Layers are listed.
  - Filter the Analysis Layers by **Title** by selecting a comparison type from the dropdown menu and typing



in search text within the corresponding box. Click **Apply**. **NOTE:** To remove the filter, delete the filter criteria from the text box and click **Apply**.

- Sort Layers in ascending order by clicking on the desired heading (i.e. **Report Text**).
- Click on the same heading (i.e. **Report Text**), a second time, to sort in descending order.

[back to top](#)

## View

Within the *Analysis Layers* page, click the **Title** to view the Analysis Layer Details.

[back to top](#)

## Create

1. Within the *Analysis Layers* page, click **Create Analysis Layer** to create a new Analysis Layer for inclusion in the analysis.
2. Within the *Create Analysis Layer* page, enter:
  - **Title**
  - **Analysis Layer Name:** the name of the Analysis Layer;

- **Report Text Link:** select the **Dynamic Analysis** report text to be included in the report when a conflict is detected with this analysis layer.

## Create Analysis Layer

Title \*  
*Enter a title that is most meaningful to you.*

Analysis Layer Name \*  
*The layer name **must** be the same name as the output layer name as defined by the Review Analysis GIS g*

Report Text Link  
*(optional) Select the name of the Report Text to be related to this layer.*

**Save**



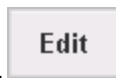
3. Click **Save** at the bottom of the page to save the changes.
4. At the top of the page, a message is displayed indicating that the Layer has been created successfully.

**Analysis Layer Important Bird Areas has been created.**

**back to top**

## Edit

1. Within the *Analysis Layers* page, click the **Title** of the layer to edit.



2. Within the *Analysis Layer Details* page, click the **Edit** menu.



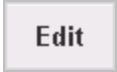
3. Make the desired edits and click **Save** at the bottom of the page to save the changes.
4. At the top of the page, a message is displayed indicating that the Layer has been successfully updated.

**Analysis Layer Important Bird Areas has been updated.**

[back to top](#)

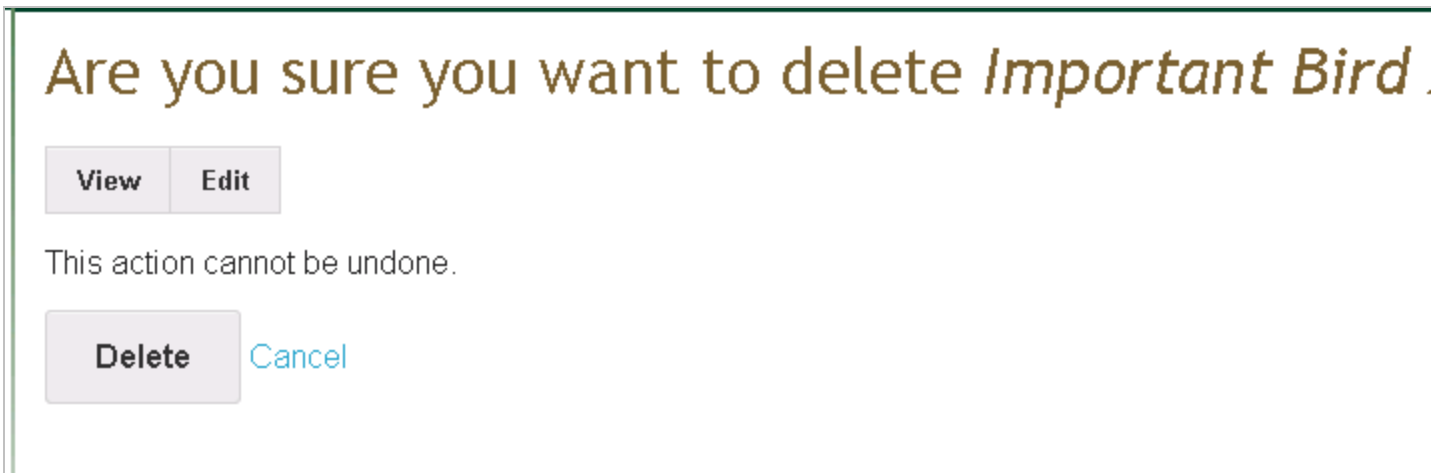
## Delete

1. Within the *Analysis Layers* page, click the **Title** of the appropriate analysis layer.

2. Within the *Analysis Layer Details* page, click the **Edit**  menu.

3. Within the *Edit Analysis Layer* page, click the **Delete** button  at the bottom of the page to delete the Layer.

4. A prompt appears confirming that the layer should be deleted. Click **Delete** to confirm or **Cancel** to cancel the deletion.



5. At the top of the page, a message is displayed indicating that the Layer has been successfully deleted.

**Analysis Layer *Important Bird* Areas has been deleted.**

[back to top](#)

### Related Topics:

- [Analysis Layer Attribute](#)
- [Dynamic Analysis](#)
- [Layer Group](#)
- [Layers](#)

## Analysis Layer Attribute

This functionality allows users assigned the Administrator Role the ability to find, sort, view, and create **Analysis Layer Attributes** within the system. One or more **Analysis Layer Attribute** is defined for each **Analysis Layer**. The Analysis Layer Attribute value(s) is reported when the spatial analysis detects conflicts between a project boundary and the Analysis Layer.

**NOTE:** The Analysis Layer has to currently exist in the system. If not, then prior to creating an Analysis Layer Attribute, **Create Analysis Layer**.

- **View**
- **Create**
- **Edit**
- **Delete**

## View

1. From the *Admin* menu, within the *Analysis Layer Rules* section, select **Analysis Layer Attributes**.
2. Within the *Analysis Layer Attributes* page, all configured Analysis Layer Attributes are listed.
3. Filter the Analysis Layer Attributes by **Title** or **Intersection Attribute** by selecting a comparison type from the dropdown menu and typing in search text within the corresponding box. Click **Apply**



**NOTE:** To remove the filter, delete the filter criteria from the text box and click **Apply**.

**Title**

**Intersection Attribute**

4. Click the **Title** to view the Analysis Layer Attribute Details.

Title	Intersection Attribute	Analysis Layer
ERLayer AGENCY_ID	Agency_ID	ERLayer
ERLayer INSTRUCTION_ID	Instruction_ID	ERLayer

**back to top**

## Create

1. From the *Admin* menu, within the *Analysis Layer Rules* section, select **Analysis Layer Attributes**.
2. Within the *Analysis Layer Attributes* page, click **Create Analysis Layer Attribute**

[Create Analysis Layer Attribute](#)

to create a new Analysis Layer Attribute for inclusion in the analysis.

3. Within the *Create Analysis Layer Attribute* page, enter:
  - **Title**
  - **Analysis Layer Link:** from the dropdown menu, select the Analysis Layer with which the attribute is associated; **NOTE:** If the attribute is associated with a new Analysis layer, **Create Analysis Layer** first.



- **Intersection Attribute:** enter the exact layer attribute name (case sensitive!) to be used in the analysis, as defined within the layer's table. The attribute value will be included in the report when a conflict is detected with this analysis layer. **NOTE:** Within the map service details, the various attributes associated with a layer can be found within the **Fields** section of the **layer page**.

## Create Analysis Layer Attribute

Title \*

*Enter a title that is most meaningful to you.*

Analysis Layer Link \*

*Select the name of the Analysis Layer related to this attribute.*

Intersection Attribute \*

*Define the **exact** layer attribute name to be used in the analysis.*

**Save**



4. Click **Save** at the bottom of the page to save the changes.
5. At the top of the page, a message is displayed indicating that the Layer has been created successfully.

**Analysis Layer Attribute *Critical Habitat* has been created.**

[back to top](#)

## Edit

1. From the *Admin* menu, within the *Analysis Layer Rules* section, select **Analysis Layer Attributes**.
2. Within the *Analysis Layer Attributes* page, click the **Title** of the layer to edit.

3. Within the *Analysis Layer Attributes Details* page, click the **Edit**  menu.

4. Make the desired edits and click **Save**  at the bottom of the page to save the changes.

5. At the top of the page, a message is displayed indicating that the Layer has been successfully updated.


**Analysis Layer Attribute *Critical Habitat* has been updated.**

[back to top](#)

## Delete

1. From the *Admin* menu, within the *Analysis Layer Rules* section, select **Analysis Layer Attributes**.
2. Within the *Analysis Layer Attributes* page, click the **Title** of the layer to edit.

3. Within the *Analysis Layer Attributes Details* page, click the **Edit**  menu.

4. Within the *Edit Analysis Layer Attribute* page, click the **Delete**  button at the bottom of the page to delete the Layer.

5. A prompt appears confirming that the attribute should be deleted. Click **Delete** to confirm or **Cancel** to cancel the deletion.

Are you sure you want to delete *Critical Habitat*?

[View](#)

[Edit](#)

This action cannot be undone.

**Delete**

[Cancel](#)

6. At the top of the page, a message is displayed indicating that the Attribute has been successfully deleted.

**Analysis Layer Attribute *Critical Habitat* has been deleted.**

[back to top](#)

## Related Topics:

- **Analysis Layer**
- **Layer Group**
- **Layers**

## Analysis Layer Triggers

This functionality allows users assigned the Administrator Role the ability to find, sort, view, and create **Analysis Layer Triggers** within the system. One or more **Analysis Layer Triggers** can be defined for each **Analysis Layer Attribute**. The Report Text associated with the Analysis Layer Trigger is included in the Project Report when the specified Intersection Attribute Value defined within the Trigger is returned by the spatial analysis upon detecting a conflict between a project boundary and the **Analysis Layer** for which the Analysis Layer Attribute is defined.

**NOTE:** Both the **Analysis Layer** and the **Analysis Layer Attribute** have to currently exist in the system in order to configure an Analysis Layer Trigger. If not, then prior to creating an Analysis Layer Trigger, **Create Analysis Layer** and **Create Analysis Layer Attribute**.

- **View**
- **Create**
- **Edit**
- **Delete**

### View

1. From the *Admin* menu, within the *Analysis Layer Rules* section, select **Analysis Layer Triggers**.
2. Within the *Analysis Layer Triggers* page, all configured Analysis Layer Triggers are listed.
3. Filter the Analysis Layer Attributes by **Title** or **Intersection Attribute Value** by selecting a comparison type from the dropdown menu and typing in search text within the corresponding box. Click **Apply**



. **NOTE:** To remove the filter, delete the filter criteria from the text box and click **Apply**.

Title	Intersection Attribute Value	
Contains	Contains	Apply

4. Click the **Title** to view the Analysis Layer Trigger Details.

Title	Intersection Attribute Value	Analysis Layer Attribute	Report Text
ERLayer ADA	ADA	ERLayer AGENCY_ID	AZ Department of Agriculture
ERLayer BUOW	BUOW	ERLayer INSTRUCTION_ID	Western Burrowing Owl
ERLayer TORT	TORT	ERLayer INSTRUCTION_ID	Sonoran Desert Tortoise
ERLayer USFWS	USFWS	ERLayer AGENCY_ID	US Fish and Wildlife Service

## Create

1. From the *Admin* menu, within the *Analysis Layer Rules* section, select **Analysis Layer Attributes**.
2. Within the *Analysis Layer Attributes* page, click **Create Analysis Layer Trigger**

[Create Analysis Layer Trigger](#)

to create a new Analysis Layer Trigger for inclusion in the analysis.

3. Within the *Create Analysis Layer Trigger* page, enter:
  - o **Title**
  - o **Analysis Layer Attribute Link:** from the dropdown menu, select the Analysis Layer Attribute with which the trigger is associated; **NOTE:** If the attribute is associated with a new Analysis Layer Attribute, **Create Analysis Layer Attribute** first.
  - o **Intersection Attribute Value:** enter the exact layer attribute value (case sensitive!) to be used in the analysis, as defined within the layer's table. When this attribute value is encountered during analysis, the Report
  - o **Report Text Link:** from the dropdown menu, select the **Dynamic Analysis Report Text** to be included in the report when the Intersection Attribute Value is encountered during the analysis. **NOTE:** If the desired Dynamic Analysis Report Text doesn't yet exist, **Create Report Text**.

## Create Analysis Layer Trigger

Title \*

*Enter a title that is most meaningful to you.*

Analysis Layer Attribute Link \*

*Select the name of the Analysis Layer Attribute for this trigger.*

Intersection Attribute Value \*

*Define the **exact** trigger value related to the layer attribute.*

Report Text Link \*

*Select the name of the Report Text to be related to this trigger.*

**Save**

**Save**

4. Click **Save** at the bottom of the page to save the changes.

5. At the top of the page, a message is displayed indicating that the Layer has been created successfully.

Analysis Layer Trigger *ERLayer WOLF* has been created.

[back to top](#)

## Edit

1. From the *Admin* menu, within the *Analysis Layer Rules* section, select **Analysis Layer Triggers**.
2. Within the *Analysis Layer Triggers* page, click the **Title** of the layer to edit.

3. Within the *Analysis Layer Triggers Details* page, click the **Edit**  menu.

4. Make the desired edits and click **Save**  at the bottom of the page to save the changes.

5. At the top of the page, a message is displayed indicating that the Layer has been successfully updated.

Analysis Layer Trigger *ERLayer WOLF* has been updated.

[back to top](#)

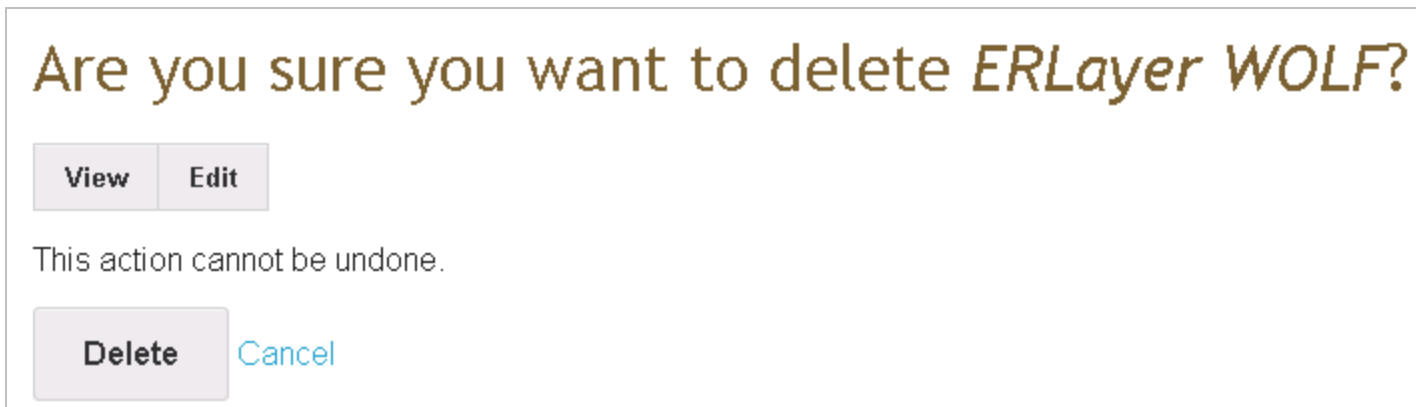
## Delete

1. From the *Admin* menu, within the *Analysis Layer Rules* section, select **Analysis Layer Triggers**.
2. Within the *Analysis Layer Triggers* page, click the **Title** of the layer to edit.

3. Within the *Analysis Layer Triggers Details* page, click the **Edit**  menu.

4. Within the *Edit Analysis Layer Trigger* page, click the **Delete**  button at the bottom of the page to delete the Layer.

5. A prompt appears confirming that the trigger should be deleted. Click **Delete** to confirm or **Cancel** to cancel the deletion.



6. At the top of the page, a message is displayed indicating that the Trigger has been successfully deleted.

Analysis Layer Trigger *ERLayer WOLF* has been deleted.

[back to top](#)

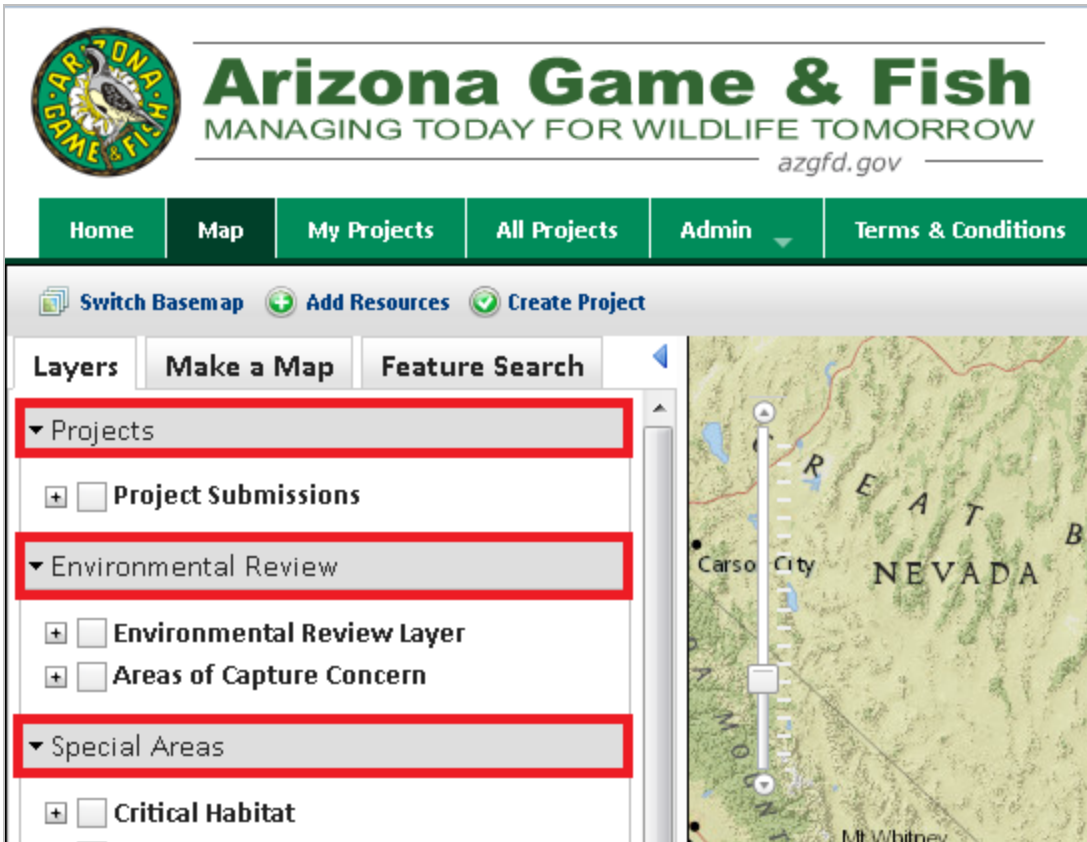
### Related Topics:

- [Analysis Layer](#)
- [Analysis Layer Attribute](#)
- [Layer Group](#)
- [Layers](#)

## Layer Group

This functionality allows users assigned the Administrator Role the ability to find, sort, view, and create **Layer Groups** within the system.

As displayed in the screenshot below, **Layer Groups** are used within the *Layers* tab of the **Map** to segregate different layer types.



- **View**
- **Create**
- **Edit**
- **Delete**

### Steps:

1. From the *Admin* menu, within the *Visualization Layers* section, select **Layer Group**.
2. Within the *Layer Group* page, all Layer Groups are listed.
  - Filter the Layer Groups by **Layer Group Title** by selecting a comparison type from the dropdown

Apply

menu and typing in search text within the corresponding box. Click **Apply**. **NOTE:** To

remove the filter, delete the filter criteria from the text box and click **Apply**.

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Home | Map | My Projects | All Projects | Admin

## Layer Group Administration

[Add New Layer Group](#)

**Layer Group Title**

Layer Group Title	Display Order
<a href="#">Environmental Review</a>	2
<a href="#">HabiMap</a>	5

- Sort Layer Groups in ascending order by clicking on the desired heading (i.e. **Display Order**).
- Click on the same heading (i.e. **Display Order**), a second time, to sort in descending order.

## View

To view the Layer Group Details, click the **Layer Group Title**.

## Create

1. Within the *Layer Group* page, click **Create Layer Group** to create a new Layer Group for inclusion in the Map.
2. Within the *Create Layer Group* page, enter the **Layer Group Title**, as it should be displayed in the *Layers* tab.
3. Indicate where the Layer Group should be displayed within the *Layers* tab by indicating the **Display Order**.



4. Click **Save** at the bottom of the page to save the changes.




- At the top of the page, a message is displayed indicating that the Layer Group has been created successfully.



[back to top](#)

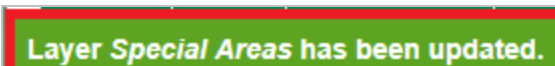
## Edit

- Within the *Layer* page, click the **Layer Group Title** of the layer to edit.

- Within the *Layer Details* page, click the **Edit**  menu.

- Make the desired edits and click **Save**  at the bottom of the page to save the changes.


- At the top of the page, a message is displayed indicating that the Layer Group has been successfully updated.



[back to top](#)

## Delete

- Within the *Layer* page, click the **Layer Title** for the appropriate layer.

- Within the *Layer Details* page, click the **Edit**  menu.

- Within the *Edit Layer Group* page, click the **Delete** button  at the bottom of the page to delete the Layer.

- A prompt appears confirming that the layer group should be deleted. Click **Delete** to confirm or **Cancel** to cancel the deletion.

- At the top of the page, a message is displayed indicating that the Layer has been successfully deleted.



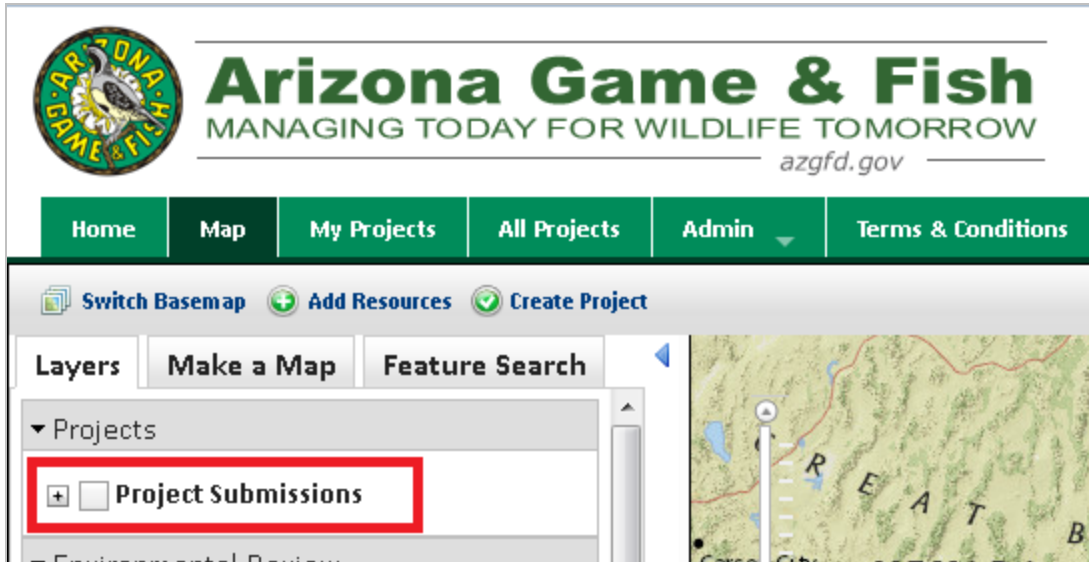
[back to top](#)

## Related Topics:

- Layer**

## Layers

This functionality allows users assigned the Administrator Role the ability to find, sort, view, and create **Layers** for display within the *Layers* tab of the **Map**, as shown below. Unlike Analysis Layers, Layers are used only for display, not within the spatial analysis to detect conflicts with a project boundary.



- **View**
- **Create**
- **Edit**
- **Delete**

### Steps:

1. From the *Admin* menu, within the *Visualization Layers* section, select **Layers**.
2. Within the *Layers* page, all Layers are listed.
  - Filter the Layers by **Layer Title** by selecting a comparison type from the dropdown menu and typing in



search text within the corresponding box. Click **Apply**. **NOTE:** To remove the filter,

delete the filter criteria from the text box and click **Apply**.

- Sort Layers in ascending order by clicking on the desired heading (i.e. **Layer Group**).
- Click on the same heading (i.e. **Layer Group**), a second time, to sort in descending order.

[back to top](#)

## View

Within the *Layers* page, click the **Layer Title** to view the Layer Details.

[back to top](#)

## Create

1. Within the *Layers* page, click **Create Layer** to create a new Layer for inclusion in the Map.
2. Within the *Create Layer* page, enter:
  - **Layer Title**: as it should be displayed in the *Layers* tab;
  - **Layer Group**: from the dropdown menu, select the Layer Group in which the Layer should be included;
  - **Display Order**: indicate where the Layer should be displayed within the Layer Group;
  - **URL**: of the published map service
  - **Default Visible**: mark the checkbox if the Layer should be visible in the Map by default.
  - **Use Filter**: mark the checkbox if the **Filter** tool should be enabled for the Layer;
  - **Find JSON**: code which defines the configuration of the Layer for use by the Feature Search tool. By default all visible fields will be available via a text search. Customization requires this field to be con-

figured accordingly.

## Create Layer

Layer Title \*  
*Enter the name to display in the layer catalog.*

Layer Group \*  
*Select the Layer Catalog group within which this layer should be placed.*


Display Order \*  
*Used to sort the Layer for display (ascending numerical order)*

URL \*  
*Web map service URL*

Default Visible  
*Whether the layer is turned on by default when the map is loaded*

Use Filter  
*Warning! Use caution when setting this field.*

Find JSON  
*Warning! This field provides for very powerful customization of the functionality present in the map layer catalog are very well understood.*

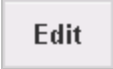
3. Click **Save** at the bottom of the page to save the changes.
4. At the top of the page, a message is displayed indicating that the Layer has been created successfully.


**Layer Important Bird Areas has been created.**

[back to top](#)

## Edit

1. Within the *Layers* page, click the **Layer Title** of the layer to edit.

2. Within the *Layer Details* page, click the **Edit**  menu.

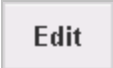
3. Make the desired edits and click **Save**  at the bottom of the page to save the changes.
4. At the top of the page, a message is displayed indicating that the Layer has been successfully updated.


**Layer Special Areas has been updated.**

[back to top](#)

## Delete

1. Within the *Layers* page, click the **Layer Title** for the appropriate layer.

2. Within the *Layer Details* page, click the **Edit**  menu.

3. Within the *Edit Layer* page, click the **Delete** button  at the bottom of the page to delete the Layer.
4. A prompt appears confirming that the layer should be deleted. Click **Delete** to confirm or **Cancel** to cancel the deletion.

Are you sure you want to delete *Another Test*?

**View** **Edit**

This action cannot be undone.

**Delete** **Cancel**

5. At the top of the page, a message is displayed indicating that the Layer has been successfully deleted.

**Layer Another Test has been deleted.**

## Related Topics:

- [Layer Group](#)

# Email Templates

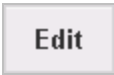
This functionality allows users assigned the Administrator Role the ability to view and edit the Email Templates used by the system to **email** Users regarding a specific project and upon completion of the review process.

## Steps:

1. From the *Admin* menu, select **Email Templates**.
2. Within the *Email Templates* page, the two templates are listed.
  - **project-email-template**: email text sent to client upon submitting a project, including the project details;
  - review-complete-external: email text sent to client upon completion of project analysis;
5. Click the **Title** to view the template.

Title	Body
<a href="#">project-email-template</a>	Dear [node:field_ertcore_contact_name], <b>Project:</b> [node:title] <b>Project ID:</b> [node:field_ertcore_project_id] <b>Date Submitted:</b> [node:created:short] <b>On Behalf Of:</b> [node:field_ertcore_on_behalf_of] <b>Organization:</b> [node:field_ertcore_organization] <b>Project Description:</b> [node:field_ertcore_project_desc] <b>Project Status:</b> [node:field_ertcore_project_status] (insert text...
<a href="#">review-complete-external</a>	Dear [user:name], An initial review of your project, entitled [node:title], has been completed. The resu If natural...

6. The template is displayed within the *Email Templates Details* page.



7. To edit the template, click the *Edit* menu.

- a. Edit the **Subject** and/or **Body** of the email template as desired. **NOTE:** [node:... ] denotes a **Token Replacement** which will be autopopulated with the appropriate value. A list of the **Token Replacements** available for use can be found by clicking the link above the **Subject**.

Title \*

project-email-template

[Token Replacements](#) Please refer to site administration help for token usage.

Subject \*



- Click **View Changes** to view the edits made to the project.

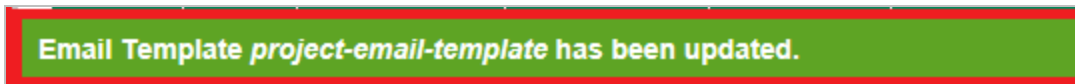
Original	Changes
<b>Changes to Body</b>	
<strong>Project Description:</strong> [node:field_ertcore_project_desc] 	<strong>Project
<strong>Project Status:</strong> [node:field_ertcore_project_status]</p>	<strong>Project
- <p><strong>(insert message here)</strong></p>	+ <p><strong>Bol
	+ <ol>
	+ <li>
	+ One</li>
	+ <li>
	+ Two</li>
	+ </ol>
	+ <ul>
	+ <li>
	+ Bullet</li>
	+ </ul>
<p>Sincerely,</p>	<p>Sincerely,</p>
<p>[user:field_ertcore_first_name] [user:field_ertcore_last_name] 	<p>[user:field_e



- Click **Preview** to preview the changes.



- b. Click the **Save** button to save the edits.
- c. At the top of the *Email Template Details* page, a message is displayed indicating that the Layer has been created successfully.



[back to top](#)


## Project Types

This functionality allows users assigned the Administrator Role the ability to configure the list of Project Types available when submitting a Project. After creating a new Project Type, it needs to be associated with a **Project Type Recommendation**. Either edit an existing Project Type Recommendation or create a new one.

- **Search**
- **Add**
- **Re-order**
- **Disable**
- **Go to term page**

## Search

1. From the *Admin* menu, within the *Report Texts* section, select **Project Types**.




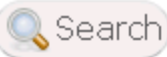
2. Within the *Project Types* page, click the **Search**  button within the *Toolbar*. Search methods include:
  - **Search all Project Types**
  - **Search specific Project Types**

### Search all Project Types

- a. Enter a **Search String** to search throughout all Project Types. Results matching the Search String are automatically displayed.



**Toolbar**

 Up
  Down
  Add
  Search



**Search**


You can search directly for existing terms. If your input doesn't match an existing term, it will be used as a new term (for non-hierarchical vocabularies).

Search String

forest|

Forest Stewardship Plan  
 Forest, Woodland, Vegetation Management  
 Pesticide applications for forest pests (gypsy moth, bark beetle, etc.)

 Search
  Cancel

- b. Select the desired Project Type from the dropdown list and click the **Search**  button within the *Search* section.

### back to top

## Search Specific Project Types

- a. To search within specific Project Types, enter a **Search String** and indicate the Project Types in which to search within the *Project Type* tree.



- b. Mark the checkbox to **Search under selected terms and** click the **Search** button within the *Search* section.

**Search**

You can search directly for existing terms. If your input doesn't match an existing term, it will be used (for non-hierarchical vocabularies).

Search String

Search options

Search under selected terms

**Search**

- c. The results will be displayed within a new page. Within the *Project Type* section, select the Project Type of interest.
- NOTE:** Click **Show unfiltered tree** within the header message to return to the full *Project Types* page.

4. The selected Project Type is displayed within the Project Type tree along with its details.

The screenshot shows a 'Project Type' tree on the left and a details panel on the right. The tree includes categories like 'Agricultural Operations', 'Communication', 'Development Outside Municipalities (Rural Development)', 'Development Within Municipalities (Urban Growth)', 'Energy Storage/Production/Transfer', and 'Forest, Woodland, Vegetation Management'. Under the last category, 'Forest Stewardship Plan' is selected and highlighted. The details panel for 'Forest Stewardship Plan' includes a 'Name' field with the value 'Forest Stewardship P...', a 'Buffer Value' field with the value '5', a 'Buffer Unit' dropdown menu set to 'Miles', a 'Disabled' checkbox which is unchecked, a blue 'Save changes' button, and a 'Go to the term page' link with an external icon.

5. The details of the Project Type are editable, including **Name**, **Buffer Value**, and **Buffer Unit**. The Project Type can also be **Disabled** such that it will no longer be a Project Type option when a User submits a Project.

Save changes

6. If edits are made, **Save Changes**.
7. A message will be displayed indicating that the term data has been updated.

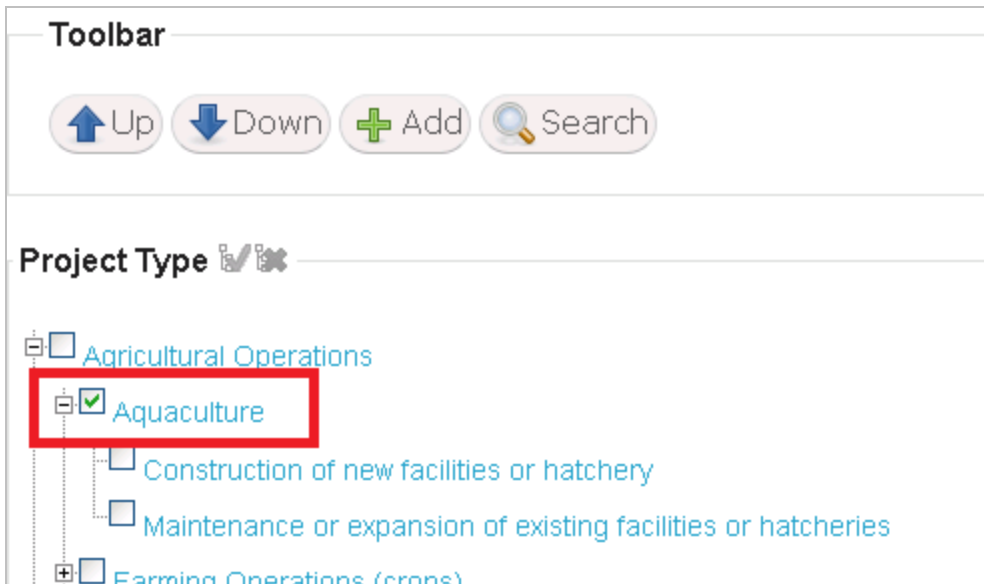
Updated term data

**back to top**

## Add Project Type

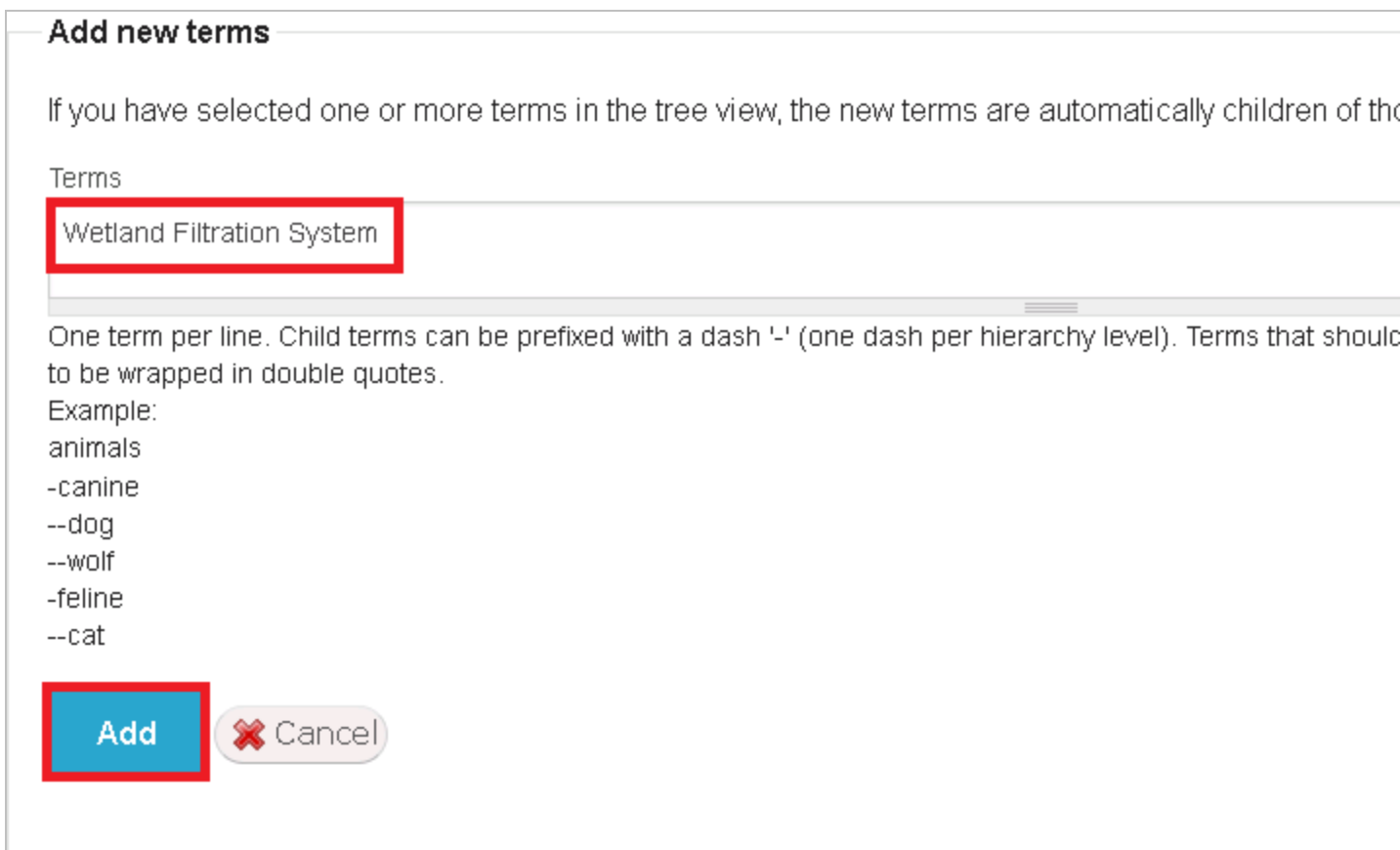
1. From the *Admin* menu, within the *Report Texts* section, select **Project Types**.

2. Within the *Project Types* page, navigate to the section within the Project Type tree to add the new Project Type. Mark the level under which the Project Type should be added.



3. Click **Add**  within the *Toolbar* section.

4. Within the *Add new terms* section, enter the name of the new Project Type under **Terms**. Click **Add**.



5. A message will be displayed indicating that the term has been added.

Terms added: *Wetland Filtration System*

6. By default, the Buffer distance for the Project Type is set to **1 Mile**. To edit this, select the Project Type within the tree to display its details.
7. The details of the Project Type are editable, including **Name**, **Buffer Value**, and **Buffer Unit**. The Project Type can also be **Disabled** such that it will no longer be a Project Type option when a User submits a Project.

Save changes





8. If edits are made, **Save Changes**.
9. A message will be displayed indicating that the term data has been updated.

Updated term data

**back to top**

## Re-order Project Types

1. From the *Admin* menu, within the *Report Texts* section, select **Project Types**.
2. Within the *Project Types* page, **search** for the desired Project type or navigate to the section within the Project Type tree.
3. There are two ways to re-order the entries within the Project Type tree:

- Mark the checkbox of the term within the tree to re-order and click the Up  and Down  buttons within the *Toolbar* section, as appropriate.
- Hover over the desired Project Type within the tree to access the controls to re-order the term within the tree (move up  or move down ).



**back to top**

## Disable Project Type

1. From the *Admin* menu, within the *Report Texts* section, select **Project Types**.
2. Within the *Project Types* page, **search** for the desired Project type or navigate to the section within the Project Type tree.
3. Click the desired Project Type to display its details.
4. Within the details section, indicate that it should be **Disabled**.

### Wetland Filtration System (280) ✖

Name \*

Buffer Value

Buffer Unit

Disabled

[Save changes](#)

[Go to the term page](#)



5. **Save Changes**
6. A message will be displayed indicating that the term data has been updated.



## back to top

## Go to Term Page

1. From the *Admin* menu, within the *Report Texts* section, select **Project Types**.
2. Within the *Project Types* page, **search** for the desired Project type or navigate to the section within the Project Type tree.
  - Hover over the desired Project Type within the tree to access the controls and click the Go to term page



icon.

The screenshot shows a tree view titled "Project Type" with several categories. The "Wetland Filtration System" category is selected, and a red box highlights a "Go to term page" button next to it. Other categories include Agricultural Operations, Aquaculture, Farming Operations (crops), and Livestock Operations/Management.

- Alternatively, click the desired Project Type to display its details.
  - Within the details, click **Go to the term page**.

The screenshot shows the details page for "Wetland Filtration System (280)". The page includes a "Name" field with the value "Wetland Filtration System", a "Buffer Value" field with the value "1", and a "Buffer Unit" dropdown menu set to "Miles". There is a "Disabled" checkbox which is checked. A blue "Save changes" button is visible. At the bottom, a red box highlights the "Go to the term page" button.

[back to top](#)

Related Topics:

- [Project Type Recommendations](#)

## Terms & Conditions

This functionality allows users assigned the Administrator Role the ability to:

- **Edit** the Terms & Conditions
- View the **Version History**
- View **Accept Dates** which indicates when Users have accepted the various versions of the Terms & Conditions

### Edit

1. From the *Admin* menu, select **Terms & Conditions**.
2. Within the *Terms & Conditions* page, edit as desired.

3. Click **Preview**  to preview the changes.

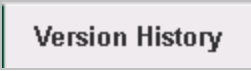
4. Click the **Save** button  to save the edits.

5. At the top of the *Terms & Conditions* page, a message is displayed indicating that the changes have been saved successfully.

[back to top](#)

### Version History

1. From the *Admin* menu, select **Terms & Conditions**.

2. Within the *Terms & Conditions* page, click the **Version History**  button.

3. The text of each version of the Terms & Conditions is displayed along with the **Version** number and **Date Added**.




---

[back to top](#)

## Accept Dates

1. From the *Admin* menu, select **Terms & Conditions**.

2. Within the *Terms & Conditions* page, click the **Accept Dates**  button.

3. The **User ID**, **Version** accepted by the user, and **Date Accepted** is displayed.

[back to top](#)

## View Site Reports

Delete this text and replace it with your own content.

## Create New Account

### Steps:

1. Within the *Home* page, click **Create New Account**. Alternatively, click **Register** in the top right corner of any page.

2. Within the *User account* page, supply the required information (denoted by red asterisks \*).

Home > User account

## User account

Create new account Log in Request new password

**E-mail \***  
whitney\_weber@natureserve.org  
A valid e-mail address. All e-mails from the system will be sent to this address. The e-mail address is not made public and will only be used for

**Salutation**  
Good day, matey!

**First name \***  
Whitney

**Last name \***  
Weber


- a. Once the form is filled out, read and **Accept** Terms & Conditions of Use

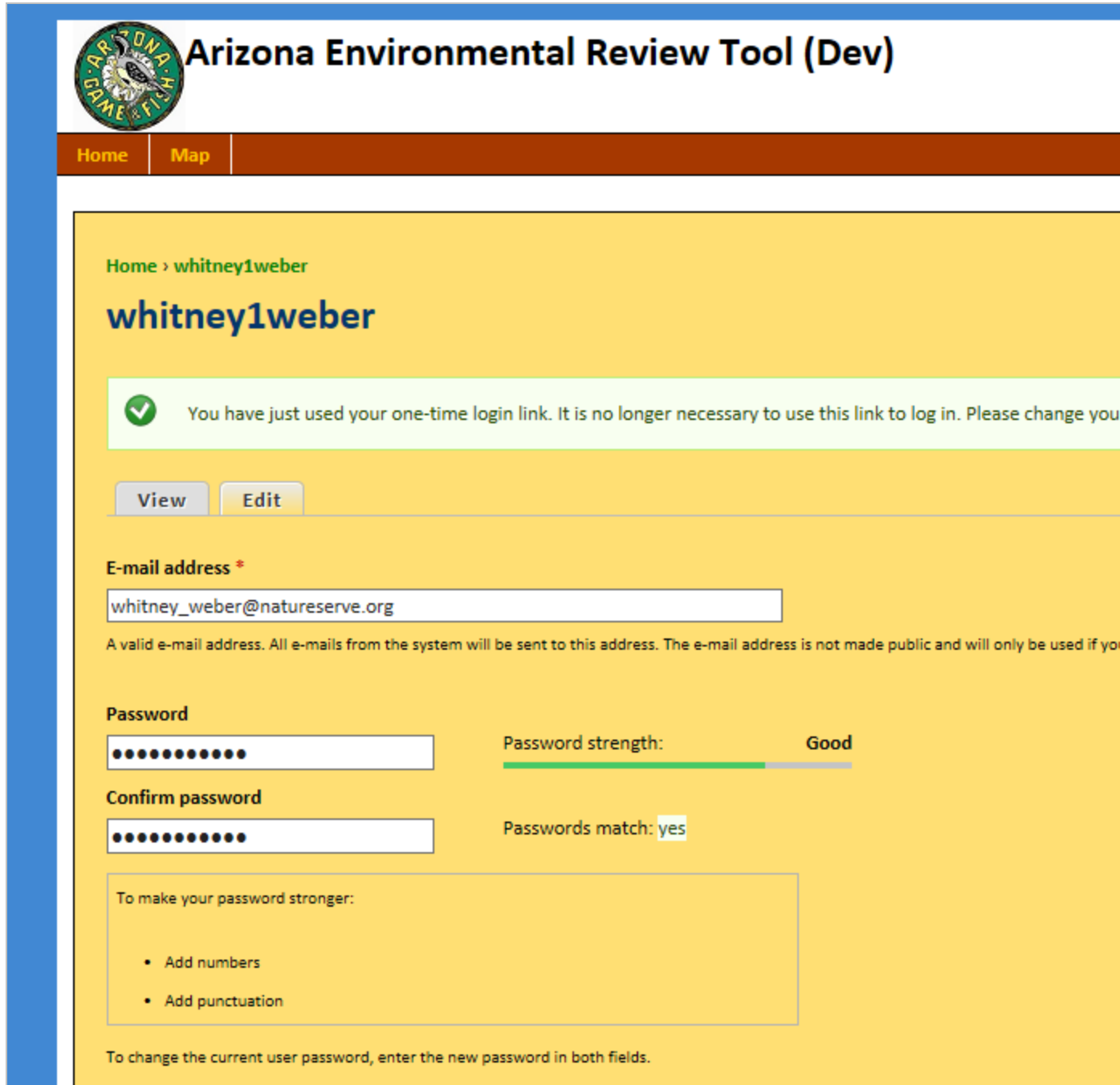
**Accept** Terms & Conditions of Use \*


Create new account

- b. Click **Create new account** at the bottom of the page.
- b. A message is displayed on the *Home* page, indicating that further instructions have been sent to the email address entered during account creation. This verifies that the email address is valid and minimizes spam submissions.

A welcome message with further instructions has been sent to your e-mail address.

3. Open the email and click on the link provided to activate the new account.
4. Within the *Reset password* page, click the **Log in**  button.
  - a. Create a new password and confirm it.




 **Arizona Environmental Review Tool (Dev)**

[Home](#) | [Map](#)

Home > whitney1weber

## whitney1weber

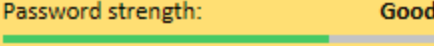
 You have just used your one-time login link. It is no longer necessary to use this link to log in. Please change your password.

[View](#) [Edit](#)

**E-mail address \***

A valid e-mail address. All e-mails from the system will be sent to this address. The e-mail address is not made public and will only be used if you have opted to receive such messages.

**Password**

Password strength:  **Good**


**Confirm password**

Passwords match: **yes**

To make your password stronger:

- Add numbers
- Add punctuation

To change the current user password, enter the new password in both fields.

- a. If desired, upload a picture and set the locale **Time zone**.
- b. Click **Save**  at the bottom of the form.
- c. A message will appear at the top of the page indicating the changes have been saved; the new account is now enabled.



The changes have been saved.

5. Proceed to the desired menu to begin working.

**back to top**

## Related Topics


- **Log In**
- **Log Out**
- **My account**
- **Request new password**

## Log In

### Steps:

1. Within the *Home* page, enter your **E-mail** and **Password**.

The screenshot shows a web interface with a navigation bar at the top containing 'Home' and 'Map' buttons. Below the navigation bar is a 'User login' form. The form has two input fields: 'E-mail \*' with the value 'ber@naturereserve.org' and 'Password \*' with masked characters and a visibility toggle icon. Below the password field are two links: 'Create new account' and 'Request new password'. At the bottom of the form is a 'Log in' button.

2. Click the **Log in**  button.
3. Once logged in, proceed to the desired menu to begin working.

---

[back to top](#)

## Related Topics

- [Create new account](#)
- [Log Out](#)
- [My account](#)
- [Request new password](#)

# Log Out

## Steps:

1. From any page, click **Log out** in the upper right corner.
2. You will be returned to the *Home* page.

## Related Topics

- [Create new account](#)
- [Log In](#)
- [My account](#)
- [Request new password](#)

# My Account

Allows user to update account settings, including **Password**.

## Steps:

1. From any page, click **My account** in the upper right corner.

2. Within your account page, click the **Edit**  button to modify your user settings.

- To change the **E-mail address** or **Password** associated with the account, enter the **Current Password**.

**NOTE:** If you have forgotten your password, click [Request new password](#) under the **Current password** text box.

3. Click **Save**  at the bottom of the form.

4. A message will appear at the top of the page indicating the changes have been saved; the new account is now enabled.



The changes have been saved.

5. Proceed to the desired menu to begin working.

**back to top**

## Related Topics

- **Create new account**
- **Log in**
- **Log out**
- **Request new password**

# Request new password

## Steps:

1. Within the *Home* page, click **Request new password**.
2. In the *User account* page, enter the **E-mail** associated with your account and click **E-mail new pass-**

**word**

### User Details: User account

E-mail \*

3. A message will be displayed indicating that further instructions have been sent to the e-mail address entered.

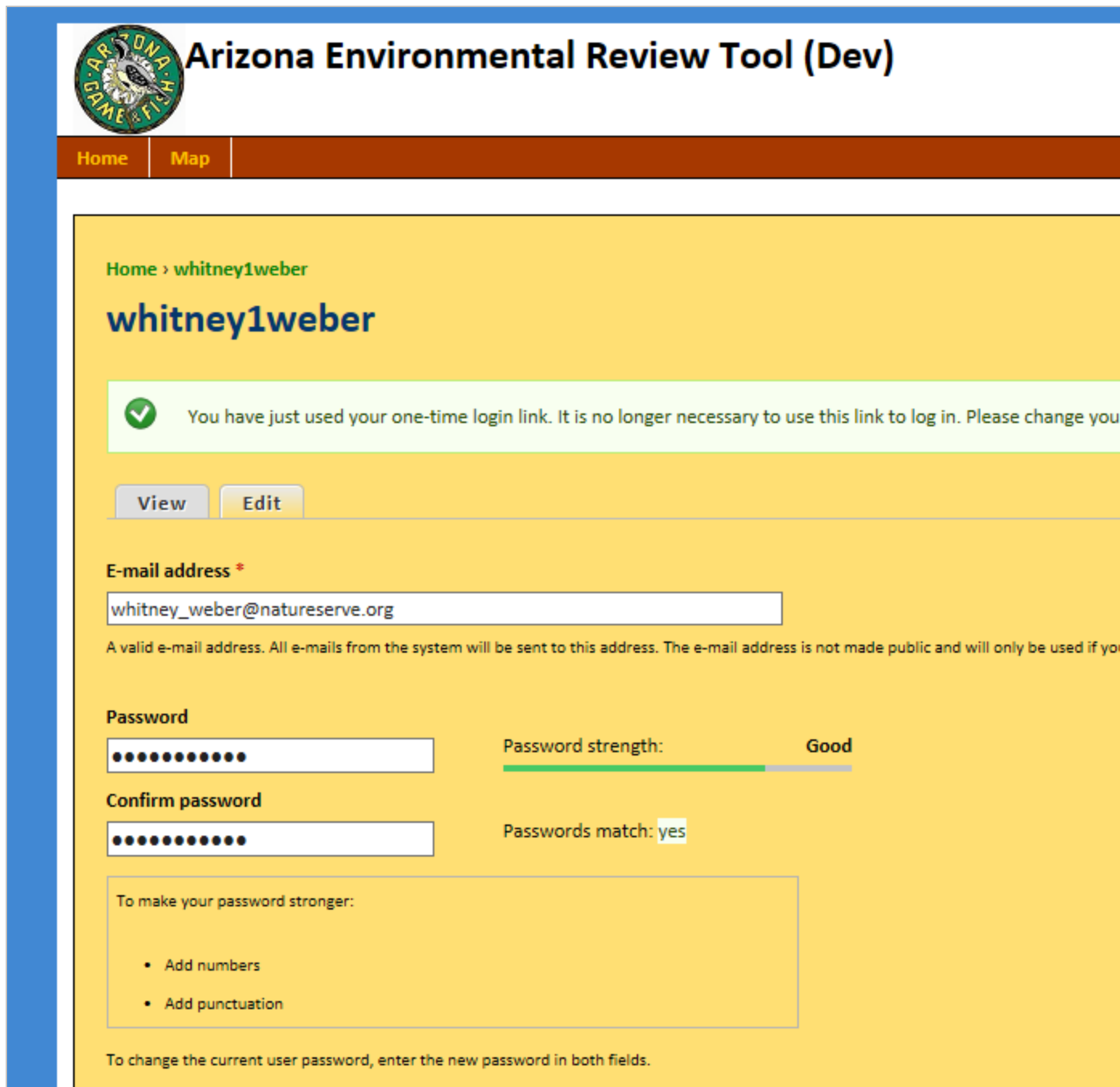



Further instructions have been sent to your e-mail address.

4. Open the email and click on the link provided to activate the new account.

5. Within the *Reset password* page, click the **Log in**  button.

- a. Create a new password and confirm it.




 **Arizona Environmental Review Tool (Dev)**

[Home](#) [Map](#)

[Home](#) > whitney1weber

## whitney1weber

 You have just used your one-time login link. It is no longer necessary to use this link to log in. Please change your password.

[View](#) [Edit](#)

**E-mail address \***

A valid e-mail address. All e-mails from the system will be sent to this address. The e-mail address is not made public and will only be used if you have a public profile.

**Password**

Password strength: ■■■■■ ■■■■■ **Good**

**Confirm password**

Passwords match: **yes**

To make your password stronger:


- Add numbers
- Add punctuation

To change the current user password, enter the new password in both fields.

- b. If desired, upload a picture and set the locale **Time zone**.

- c. Click **Save**  at the bottom of the form.

- d. A message will appear at the top of the page indicating the changes have been saved; the new account is now enabled.

 The changes have been saved.

6. Proceed to the desired menu to begin working.



**[back to top](#)**

## Related Topics

- **[Create new account](#)**
- **[Log In](#)**
- **[Log out](#)**
- **[My account](#)**



## Map

The tabs within the Map can be minimized by clicking the Close Pane  icon to the right of the tabs. To display the tabs, click the Open Pane  icon. The active tab, or the tab currently in use at any given time, is shown in white.

The Map includes options to:

- **Switch Basemap**
- **Add Resources**
- **Create a Project**
- Alter **Layers**
- **Make a Map**
- Perform a **Feature Search**

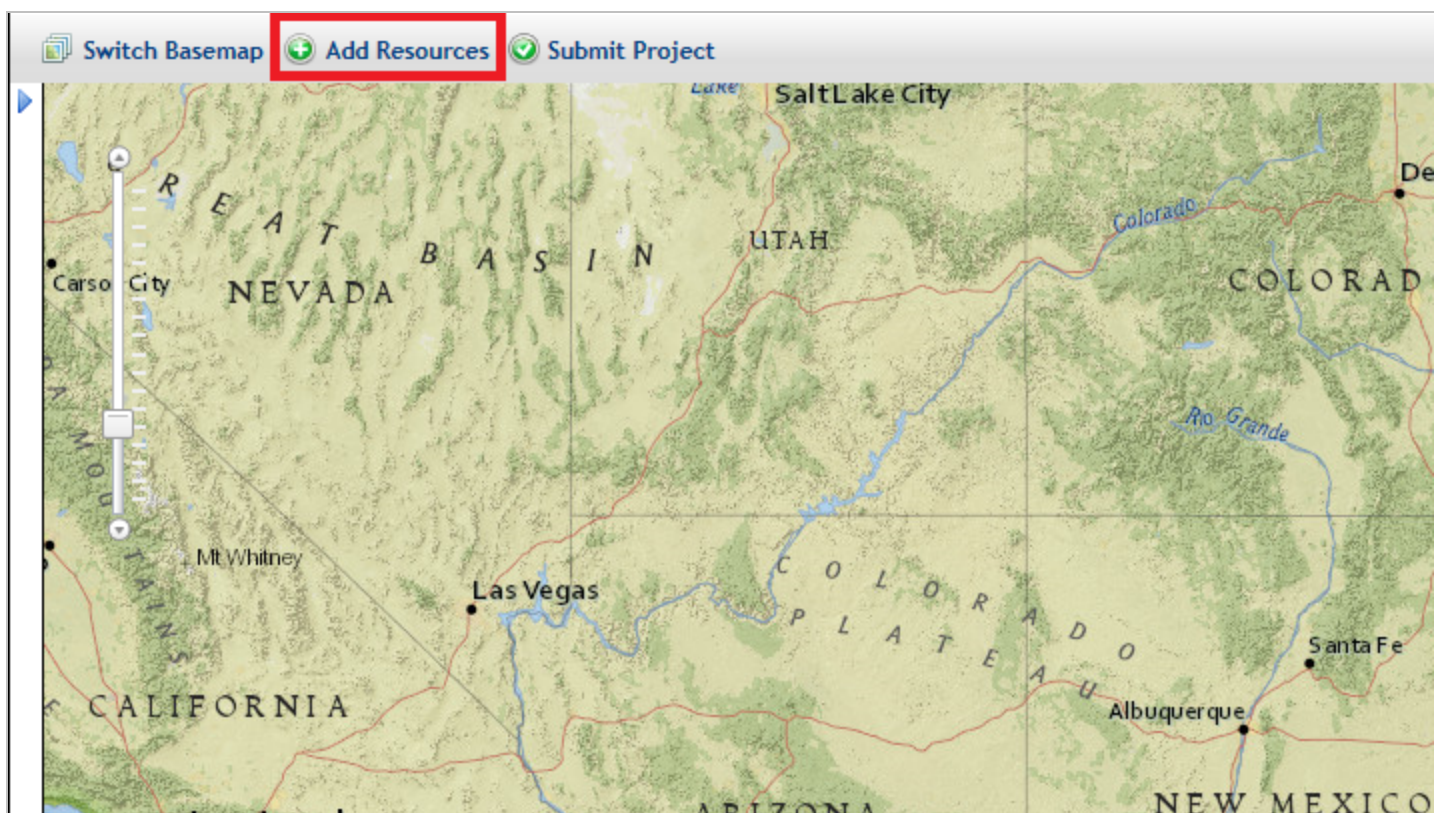
## Add Resources

Content can be added to the map viewer from:

- a map service (via its **URL**)
- **File** (current file type only includes shapefile)

## Steps:

1. Within the map, click the **Add Resources** button, located in the upper left corner of the map title bar.



2. The resulting *Add Resource* dialog provides options to add resources to the map, either a map service via its **URL** or a shape**File**.

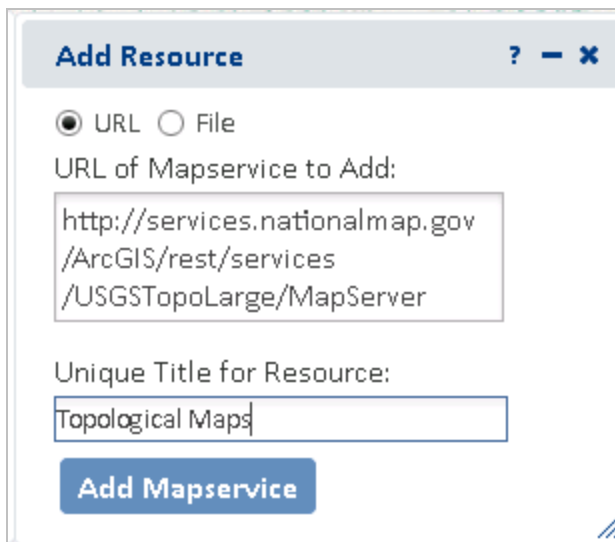
**back to top**

## URL:

Both Map Services and Image Services published on ArcGIS Online, on GIS servers that are available on a local machine or network, or from servers publicly available on the Internet are available for use. Cached services must be in the WGS 84 Web Mercator (Auxiliary Sphere) projection, because ArcGIS Server cannot reproject cached services, and use the standard scale levels supported by Google, Bing, and ESRI's arcgis.com. To test the map service prior to adding it to the map viewer, see the **Test Map Service** help topic.

**NOTE:** Cached map services published through ArcGIS Online do not support all of the capabilities of cached map services published through ArcGIS Server. Since the underlying data is not retained, the Identify tool is not supported.

- a. On the *Add Resource* dialog, select the **URL** radio button, if not already selected.
- b. Enter the **URL of Mapservice to Add** (i.e., **<http://services.nationalmap.gov/ArcGIS/rest/services/USGSTopoLarge/MapServer>**).
- c. Enter a **Unique Title for Resource**.



The screenshot shows the 'Add Resource' dialog box with the following details:

- Radio buttons:  URL,  File
- Label: URL of Mapservice to Add:
- Text input field: `http://services.nationalmap.gov/ArcGIS/rest/services/USGSTopoLarge/MapServer`
- Label: Unique Title for Resource:
- Text input field: `Topological Maps`
- Button: **Add Mapservice**

- d. Click **Add Mapservice**  button to add the service to the map.

**NOTE:** If the map service is not protected, the following prompt will be displayed. Click **Yes** to continue.

|

**NOTE:** If the map service does not successfully add to the map (i.e. the spinner spins endlessly and the map service is not added to the map viewer or a **Register Layer Failed: RequestTimeout** error is

received, consult the **Test Map Service** help topic.

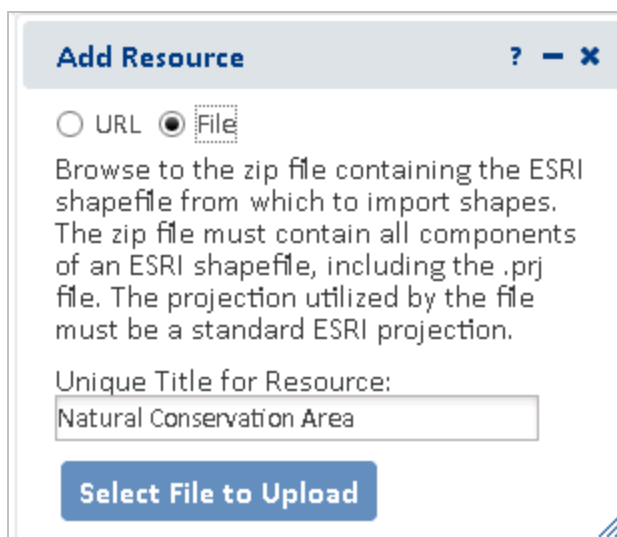



**back to top**

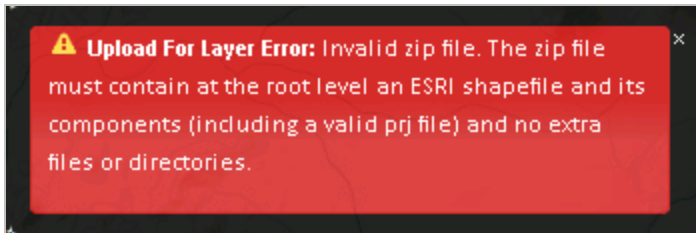
## File:

Current functionality only allows for shapefiles to be added. The shapefile, including all component files, must be zipped into a zip file with no additional directories or files. A valid .prj file must be included in the zip file. Maximum file size not to exceed 2 GB.

- On the *Add Resource* dialog select the **File** radio button, if not already selected.
- Enter a **Unique Title for Resource**.



- c. Click **Select File to Upload** button  and navigate to the file containing the layer to add to the map viewer.
- d. If the uploaded zip file does not contain all components of the shapefile, including a valid .prj file, the following error will be displayed:



**back to top**

3. To remove a map service from the map, click on the dropdown icon to the right of the resource in the *Map Resources* dialog and choose **Remove**.



**back to top**

Related Topics:

- **Feature Search**
- **Map Resources**
- **Map Services**
- **Test Map Service**
- **Using Insecure Map Services**

## Map Services

The following overview of map services includes some things to keep in mind when investigating map services published by you or others, that you may wish to add.

- **Projection**
- **Cached Map Services**
- **Dynamic Map Services**
- **Comparison: Cached vs. Dynamic Map Services**

### Projection

The Map displays data using the WGS\_1984\_Web\_Mercator\_Auxiliary\_Sphere (EPSG code/spatial reference ID 3857) projection, which is the map projection used by most online basemap services, including ArcGIS, Bing,

and Google. Any map services that will be displayed as reference layers must be capable of being displayed in this projection. Dynamic ArcGIS map services can be reprojected on-the-fly; however, this does negatively impact performance. Performance will be best if you use map services published in the Web Mercator projection. Cached map services are typically only available in the projection in which they were cached.

[back to top](#)

## Cached Map Services

The best way to create fast map services is to cache them. With a cached map service, the server draws the map at a set of predefined scale levels and saves the images. When the server receives a request for a map, it's much quicker to return one of these cached images than to draw the map again. Caching is appropriate for basemaps and maps that don't change often.

- Benefit:
  - improved performance
- Limitation:
  - does not allow filtering
  - does not allow layer visibility to be altered (ie. can't be turned on or off)
  - Cached map services published from ArcGIS Online will not be available with the Filter, Identify, or Feature Search tools.
- Projection: Must use same projection as basemaps – ArcGIS Server cannot reproject cached services.
  - WGS 84 Web Mercator (Auxiliary Sphere) projection enables the map services to be used in conjunction with any of the major online base maps (Esri, Bing, Google).
  - Cached services in the WGS 84 Web Mercator (Auxiliary Sphere) projection will provide the best performance
  - Cached maps must use the standard scale levels supported by Google, Bing, and ESRI's arcgis.com.
  - If cached services are in a different projection, they can be created as dynamic services, which will allow them to be reprojected; however, we don't know enough about the underlying data sets to know what performance will be like. It's possible that this won't be sufficient, and you'll still need to provide cached services in the target projection.
- It is not necessary to reproject all of the individual layers but just alter the projection of the map documents. Then republish the map documents as a second service (second to what you're using for your purposes), and build the cache.

[back to top](#)

## Dynamic map services

Layers published as dynamic map services can be rescaled and re-projected on the fly.

- Benefit:
  - Allows filtering
  - Allows layer visibility to be altered (ie. can be turned on or off)
- Limitation:
  - Decreased performance because needs to draw map on the fly
- Projection: any projection for which there is a built-in Esri transformation from the source projection to the target projection. This can be verified through ArcMap - if ArcMap can handle it, it should be fine. Performance will be better, though, if the source projection already matches the target projection.
- Operations Allowed: when publishing the map service, indicate **Map**, **Query**, and **Data** as *Operations Allowed* or not all the tools indicated below will be available for use with the map service.

## Comparison: Cached vs. Dynamic map services

	Cached	Dynamic
<b>Application</b>	Base maps	Reference Layers
<b>Performance</b>	✓ Improved performance	✗ Decreased performance because needs to draw map on the fly
<b>Projection</b>	✗ Typically cannot be <u>reprojected</u>	✓ Can be <u>reprojected</u> on the fly ✗ <u>Reprojection</u> negatively affects performance
<b>Limitations</b>	✗ Alter visibility of layers ✗ Filter ✗ Copy	✓ Alter visibility of layers ✓ Filter ✓ Copy

### Related Topics:

- [Add Resources](#)
- [Test Map Service](#)
- [Using Insecure Map Services](#)

## Test Map Service

Prior to adding a map service, test the map service to verify it functions. If the map service is not functioning, it will not work in Arizona Environmental Review Tool.

Indications that the map service may not be functioning include:

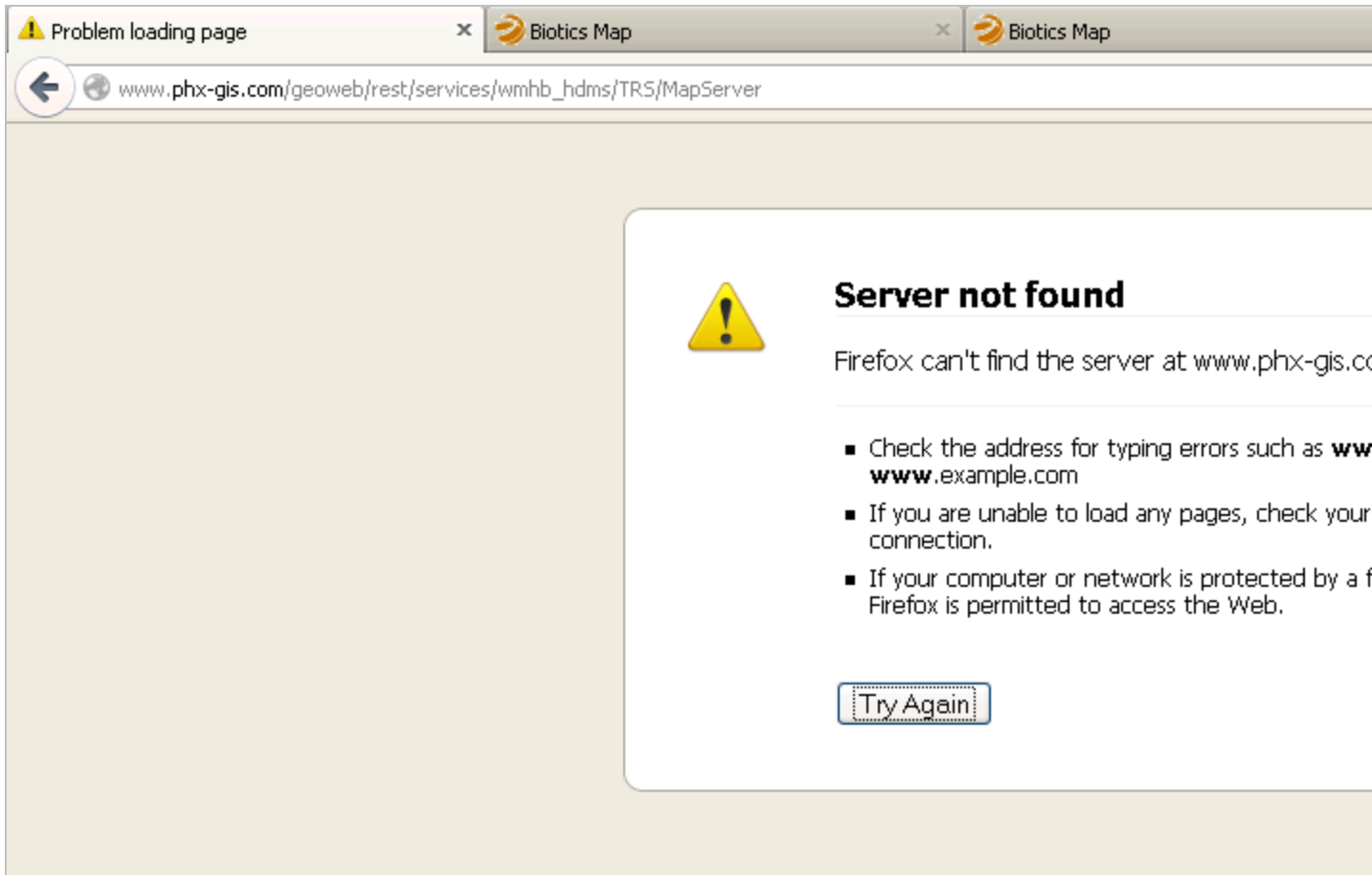
- the spinner spinning non-stop and the map service never adding to the map viewer
- the following type of error is received: **Register Layer Failed: RequestTimeoutError...** This error indic-

ates that the map service is not available.



## Steps:

1. Copy the URL of the map service into a web browser. If an error, such as that shown below, is received the map service is not functioning correctly - contact the host of the map service to resolve it. In this state, the map service will not work within Arizona Environmental Review Tool.



2. If you connect to the map service details successfully (as shown below), then the map service exists.



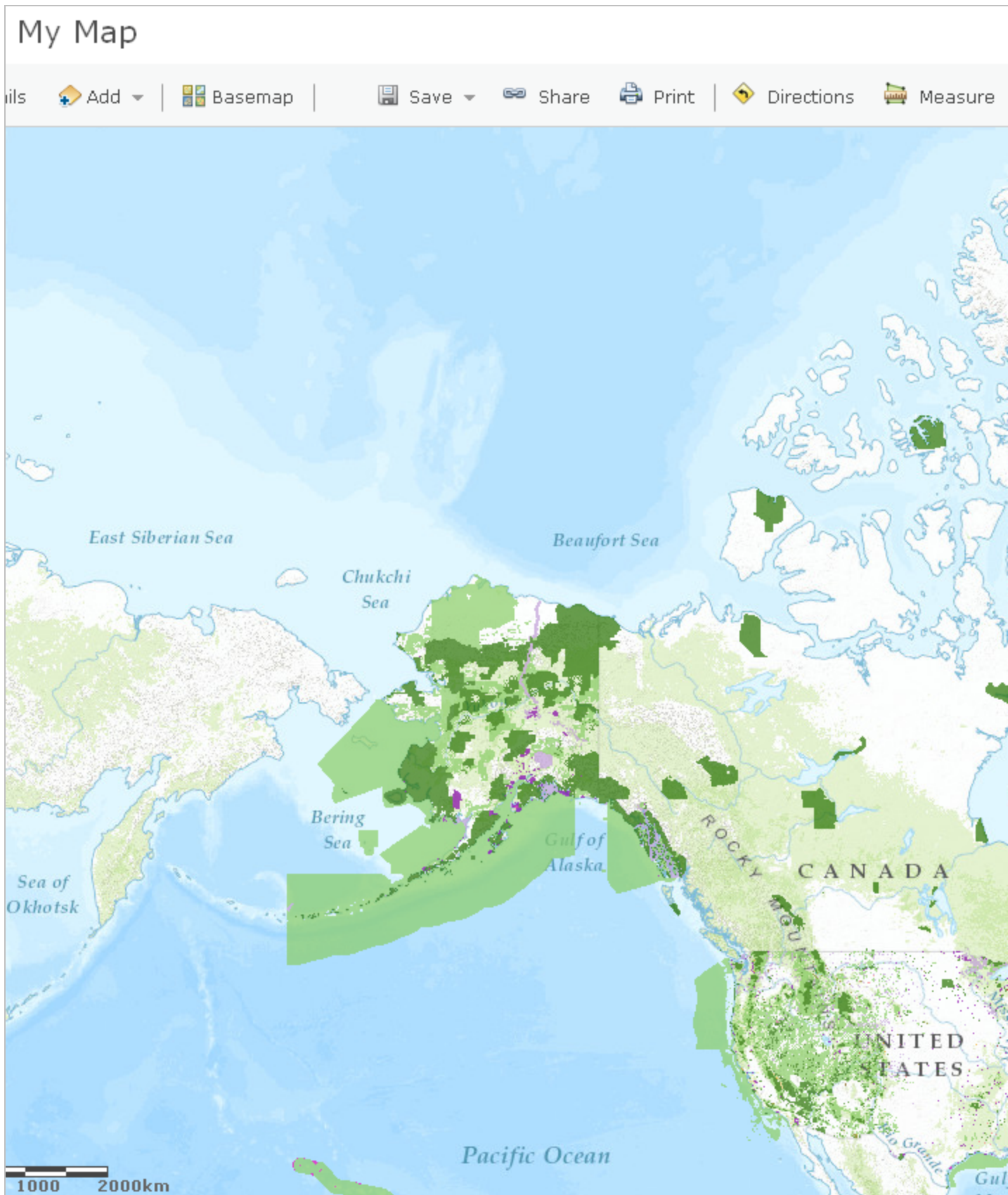


The screenshot shows a web browser window with the URL [gis.landscape.org/arcgis/rest/services/LandScope/LS1\\_Protected\\_Areas/MapServer](https://gis.landscape.org/arcgis/rest/services/LandScope/LS1_Protected_Areas/MapServer). The page title is "ArcGIS REST Services Directory". The breadcrumb navigation is "Home > services > LandScope > LS1 Protected Areas (MapServer)". There are links for "JSON", "SOAP", and "WMTS". The main heading is "LandScope/LS1\_Protected\_Areas (MapServer)". Under "View In:", there are links for "ArcGIS JavaScript", "ArcGIS.com Map" (highlighted with a red box), "Google Earth", "ArcMap", and "ArcGIS Explorer". Under "View Footprint In:", there is a link for "ArcGIS.com Map". The "Service Description:" section is empty. The "Map Name:" is "Layers". There is a "Legend" link and an "All Layers and Tables" link. The "Layers:" section contains a list of layers with counts in parentheses:

- [Alberta Protected Areas](#) (0)
  - [Alberta Protected Areas](#) (1)
- [British Columbia Protected Areas](#) (2)
  - [British Columbia Protected Areas](#) (3)
- [Colorado Protected Areas](#) (4)
  - [CO: Colorado Ownership, Management & Protection \(COMaP\)](#) (5)
- [Delaware Protected Areas](#) (6)
  - [DE: Protected Lands \(DNREC\)](#) (7)
  - [DE: Agricultural Easements \(DAI PE\)](#) (8)

3. Within the map service details window (shown above) of the *ArcGIS Rest Services Directory*, click the **ArcGIS.com Map** link to verify that the map service is functional in the ArcGIS.com Map. If it does not work in the ArcGIS.com Map, it will not work in Arizona Environmental Review Tool.

**NOTE:** You may need to log in to ArcGIS.com to view the map service.



4. Once successfully tested in the ArcGIS.com Map, as shown above, add the map service to the Biotics 5 map viewer via the **Add Resource** tool.

[back to top](#)

## Related Topics:

- [Add Resources](#)
- [Map Services](#)
- [Using Insecure Map Services](#)

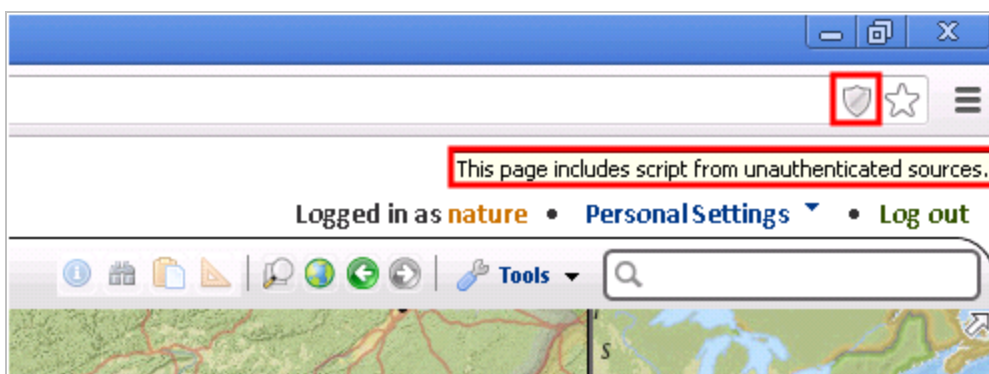
## Using Insecure Map Services


The URL you have provided is to a map service not protected by SSL and you should first try adding this URL with the 'https:' prefix instead of 'http:'. If you continue to add an insecure service, it may be blocked by the browser. If not blocked, the browser will treat this page as insecure, and give a warning.

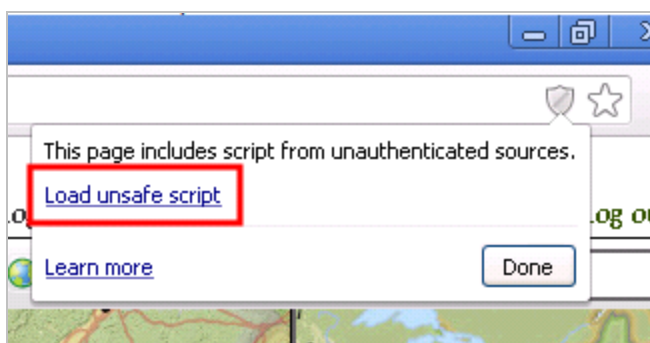
- [Google Chrome](#)
- [Firefox](#)
- [Internet Explorer](#)

### Google Chrome

Chrome opens a very subtle shield icon, shown in the screenshot below, when attempting to add a map service to the map. At first glance the user may mistake this for the map viewer not working properly when it's the actually due to the way the browser treats insecure map services.

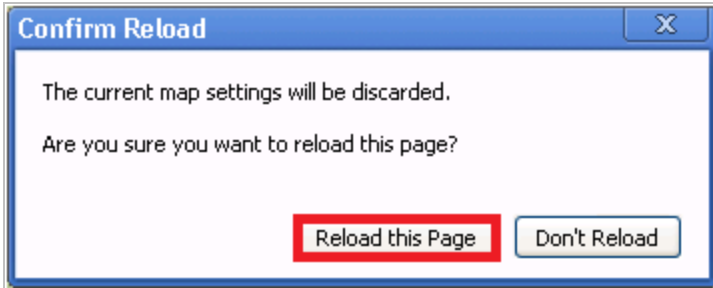


1. To load the map service, click the shield  icon, which displays a second message.
2. Within the message indicating that the page includes scrip from unauthenticated sources. click the link to **Load unsafe script**.



3. In the subsequent *Confirm Reload* dialog, click **Reload this Page**. This will reload the map viewer page in a mode that allows mixed content to be used. This has the unfortunate side effect of clearing out what has

been previously done in the map viewer, so the map service will need to be added again.



This time the map service is added, but the URL bar shows a warning that the page contains insecure content. This warning continues to be present if the user navigates away from the map viewer to other pages or open up the full record pages in new windows.

The browser only performs these behaviors for the first map service that's added insecurely, and the warning message will indicate what needs to be done. No further warnings or prompts will be given upon adding subsequent insecure map services.

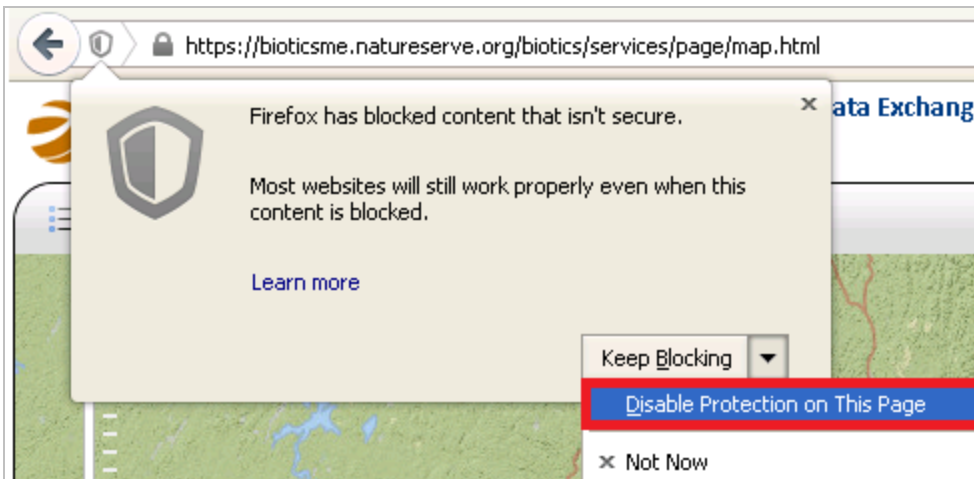
[back to top](#)

## Firefox

1. Click the small gray and white shield icon at the far left of the URL box near the top of the browser window.



2. Within the dialog which opens upon clicking the shield, select **Disable Protection on This Page**.



3. Then, click **Leave Page** to allow the page to load again with the map resources enabled.

**NOTE:** You will have to do this every time you open the Map Viewer, even in the same Biotics session.

[back to top](#)

## Internet Explorer

1. From the *Tools* menu, select **Internet Options**.
2. Within the *Internet Options* dialog, on the *Security* tab, select the **Trusted sites** zone and click the **Sites** button.
3. Add all web domains generating this error message to the **Trusted Sites** list, including **\*.nature-serve.org**. **WARNING**: don't do this with domains you don't trust or are not sure about.
4. Close the *Trusted sites* dialog.
5. Back in the *Internet Options* dialog, still in the *Security* tab, with the **Trusted sites** zone selected, click the **Custom Level** button.
6. Within the *Security Settings - Trusted Sites Zone* dialog, scroll down to the *Miscellaneous* options (almost half way down), and set the *Display mixed content* to **Enable**.
7. Click **OK** to save changes within the *Security Settings - Trusted Sites Zone* dialog.
8. Click **OK** to save changes within the *Internet Options* dialog.
9. Exit and re-start Internet Explorer.

**NOTE:** this setting allows IE to display content using both https and http protocols in a mixed environment, and should only be used with trusted web domains. Malicious content from unsecured (http) domains could potentially compromise data from secure (https) domains with which it is mixed

[back to top](#)

### Related Topics:

- [Add Resources](#)

## Create Project

Create Project can be initiated on its own or after adding features to the map within the **Make a Map** section.

- use the **Draw/Edit** toolbar
- use features drawn via **Make a Map**


## Draw/Edit toolbar

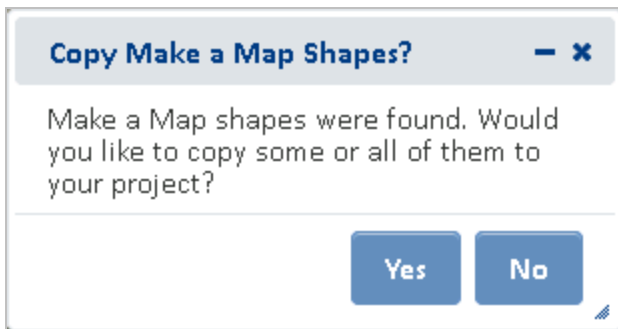


1. Within the *Map*, click **Create Project**.
2. The *Draw/Edit* toolbar opens.
3. Use the various tools available within the **Draw/Edit** toolbar to define the spatial parameters of the project area.
4. **Continue to the *Create Project* dialog.**

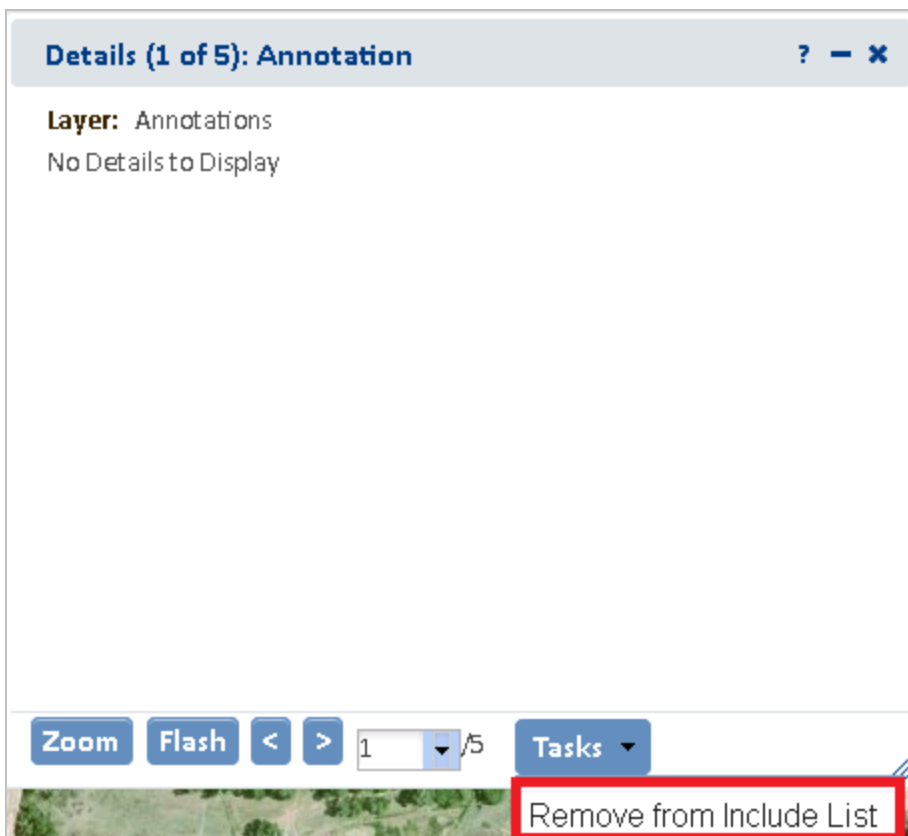
**back to top**


## Make a Map

1. Within the *Map*, click **Create Project** .
2. A prompt will ask if you would like to copy some or all of the shapes to create the project boundary. Click **Yes** to use the shapes previously drawn or **No** to utilize the **Draw/Edit toolbar**.




3. The *Details* dialog of the Make a Map feature(s) are displayed. To remove a feature from the selection, from the *Tasks* menu, select **Remove from Include List**. Once removed, the option to **Add to Include List** becomes available in the *Tasks* menu.





4. After completing the selection of which features to include, close the *Details* dialog using the  in the upper right corner.

5. Within the *Additional Mapping Options* dialog, the number of features selected is displayed to the right of

the **Select From Resource**  button.

a. **View**  button: allows the user access to the *Details* dialog again to add/remove additional features to/from the selection.

b. **Select from Resource** : allows the user to create a new selection (return to Step 4 for instructions).

c. Click **Next**  to use the features as they exist or **Modify**  to further modify the selected features.

6. In the *Draw/Edit* toolbar click **Accept** unless further edits are needed.

7. **Continue to the *Create Project* dialog.**

[back to top](#)

## Create Project

1. After clicking **Accept** in the *Draw/Edit* toolbar, the *Create Project* dialog opens.

### Create Project

Project Title \*

User Project Number  
*An (optional) organization-specific project number for user tracking purposes.*

Project Type \*  
*Select only one Project Type per project*

- Agricultural Operations
- Communication
- Development Outside Municipalities (Rural Development)
- Development Within Municipalities (Urban Growth)
- Energy Storage/Production/Transfer
- Forest, Woodland, Vegetation Management
- Habitat Conservation and Restoration
- Hazardous Waste Cleanup, site remediation, and reclamation
- Law Enforcement Activities Associated with the Border
- Military Activities
- Mining
- Pest Control
- Recreation Areas

2. Within the *Create Project* dialog, enter the following information to describe the project. **NOTE:** required fields are labeled with a red asterisk \*.
  - **Project Title\*** - title which will help to distinguish it from other project submissions
  - **Project Type\***
  - **Project Description\*** - succinctly describe the proposed work within the project area (i.e. residential subdivision)
  - **On Behalf Of**

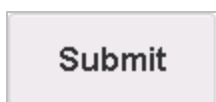


- Contact information - this data will be auto-populated according to the information associated with the logged in user. Change as appropriate. The e-mail will be used to notify the logged in user once the review has been completed.
- **File attachments** such as photographs, survey documents, site plans, etc. can be uploaded and

attached to the project form. **Browse**  to the desired file(s) and then click **Upload**



. **NOTE:** Files must be less than 2 MB in size. Only files with the following extensions may be uploaded: jpg, jpeg, gif, png, txt, docx, xlsx.



5. Click **Submit** to submit the project for review.
6. A message will be displayed indicating that the project has been successfully submitted and that the results will be e-mailed to the address provided.

Thank you for submitting your project for review. A notification email will be sent once the automated review is complete. Depending on system this may take up to 10 minutes.

7. Navigate to the *My Projects* menu to view the **Submission Status** of each of your projects.
8. After the initial review of the project has been completed, an e-mail containing a link to the project report is sent. Click on the link within the e-mail to view the project report. Alternatively, access the project report via **My Projects**.

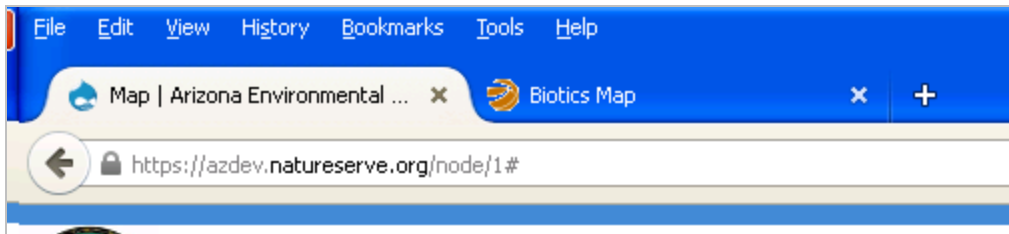
**back to top**

## Related Topics:

- **Draw/Edit toolbar**
- **Edit Project**
- **Make a Map**
- **My Projects**
- **View Project**

## Draw/Edit

The *Draw/Edit* toolbar opens automatically upon choosing to **Create a Project** or add a spatial feature via **Make a Map**.



If accessed via **Create a Project** and the map is not zoomed in closer than 1:72,224, only the **Upload Shapes** tool will be available. To access the other draw tools, zoom in to 1:72,224 or closer using the **Scale Bar** or **Zoom to Coordinates or Scale** tool.



A number of different tools are provided on the *Draw/Edit* toolbar, enabling various actions ranging from digitizing a shape, to moving boundaries, to removing an area from within feature, to buffering a polygon. Some of these tasks require different modes, which are displayed on the lower left of the toolbar.

- **Draw Shape**
- Edit Shape:
  - **Edit Geometries**
  - **Erase Inside Drawn Area**
  - **Crop Outside Drawn Area**
- **Upload Shapes**
- **Buffer Shape**
- **Additional Mapping Options:**
  - **Map Layers**
  - **Make a Map**
  - **Coordinates**
  - **Drawing** a point or line feature(s)
- Other Draw/Edit Tools:
  - **Undo**
  - **Redo**
  - **Clear Shape**
  - **Draw Settings**
    - **Use Freehand**
    - **Disable Navigation while Drawing**

## Draw Shape

The default tool within the *Draw/Edit* toolbar, **Draw Shape**, is limited to drawing polygonal features. To digitize a point or line feature(s), utilize the **Drawing** option within the **Additional Mapping Options** tool.

1. Features can be digitized using either the default drawing tool, which utilizes vertices, or a freehand tool.

### Use default Draw Shape tool:

- a. If not already in Draw mode, click the **Draw Shape** icon.
- b. Single click to draw a point.
- c. For lines and polygons, click every location a vertex is to be placed and double-click to complete feature.

|

[back to top](#)

### Use Freehand drawing tool:

- a. From the *Draw Settings* dropdown, select **Use Freehand**.



- b. Holding down the mouse button, draw the feature.
- c. Release the mouse button to finish digitizing the feature.

|

2. Click **Accept** to complete the feature.

Alternatively, use the edit tools described in the following sections to make changes to the feature before clicking **Accept** to save.

[back to top](#)

## Edit Shape

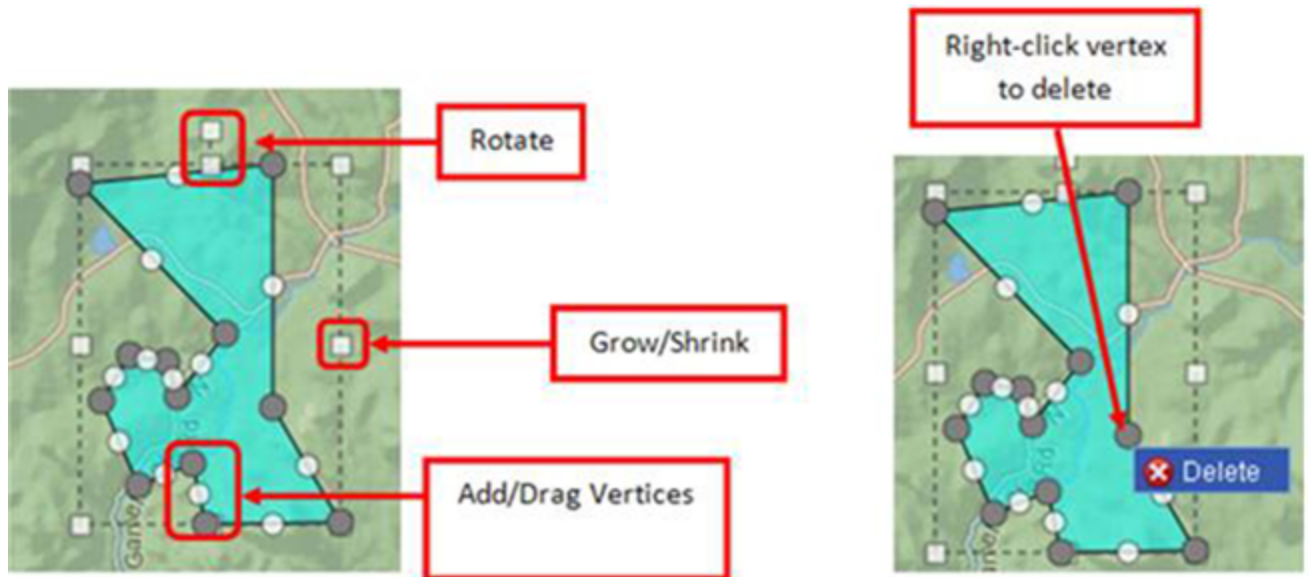
### Edit Entire Shape and/or Vertices

1. Enter Edit mode by clicking the **Edit Shape** icon.

The vertices and extent of the feature will be displayed.

2. Edit feature by:
  - Dragging, rotating, expanding, or shrinking the entire feature; and/or by

- Adding, deleting, or dragging vertices.



[back to top](#)

## Erase Inside Drawn Area

1. Enter Erase mode by clicking the **Erase Inside Drawn Area** icon.
2. Digitize a polygon circumscribing the area to be cut from the feature by single-clicking to add each vertex, and double-clicking to complete the polygon.

The area circumscribed by the polygon will be clipped from the original feature.

|

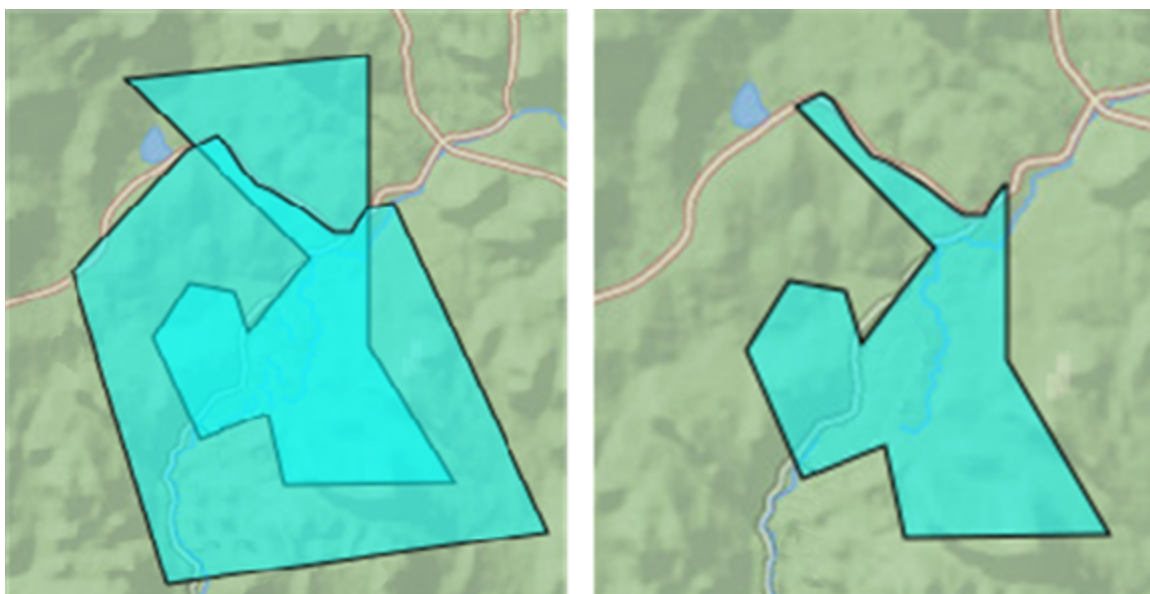
[back to top](#)

## Crop Outside Drawn Area

1. Enter Crop mode by clicking the **Crop Outside Drawn Area** icon.
2. Digitize a polygon that contains the portion of the feature to be retained, by single-clicking to add each vertex, and double-clicking to complete the polygon.

The area within the polygon drawn in Crop mode will be retained, while that portion of the feature outside the polygon will be deleted.

Polygon drawn overlapping feature... area of feature within polygon remains after cropping.




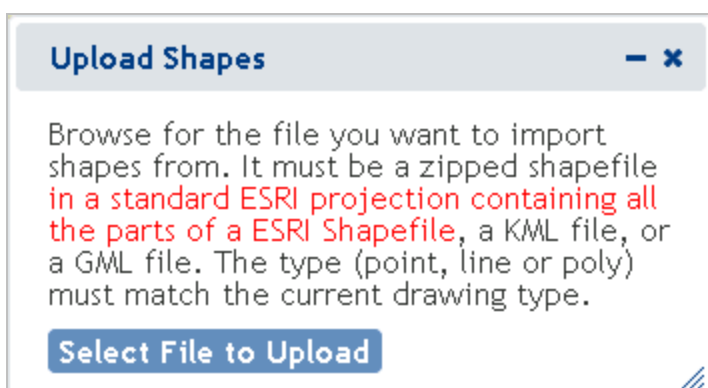
[back to top](#)

## Upload Shapes

Current functionality allows for ESRI shapefiles to be added. To upload a shapefile, all component files must be zipped into a zip file with no additional directories or files. A valid .prj file must be included in the zip file. Maximum file size not to exceed 2 GB.

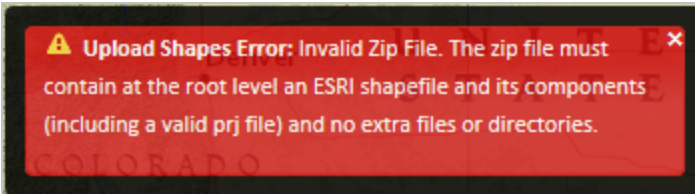
1. Enter *Upload Shapes* mode by clicking the Upload Shapes  icon.

2. Within the *Upload Shapes* dialog, click Select File to Upload .

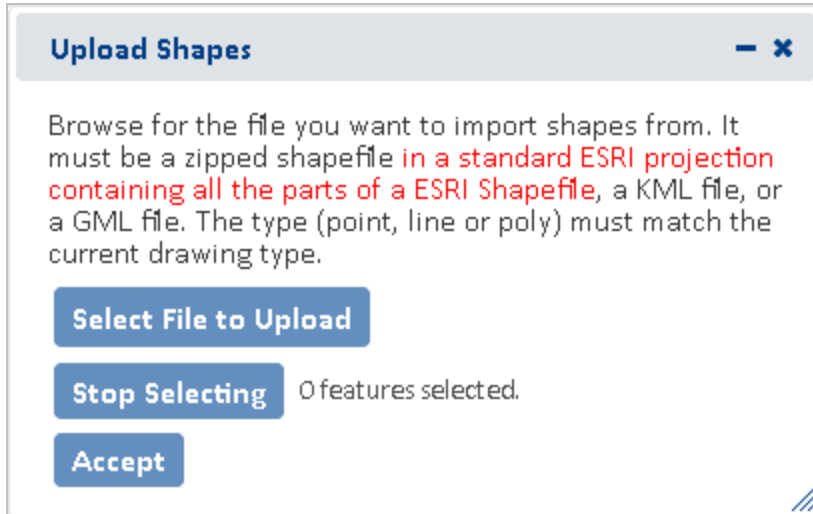


3. Navigate to and select the shapefile to add.

**NOTE:** The following message will appear if a projection file (.prj) is not included in the zip file.

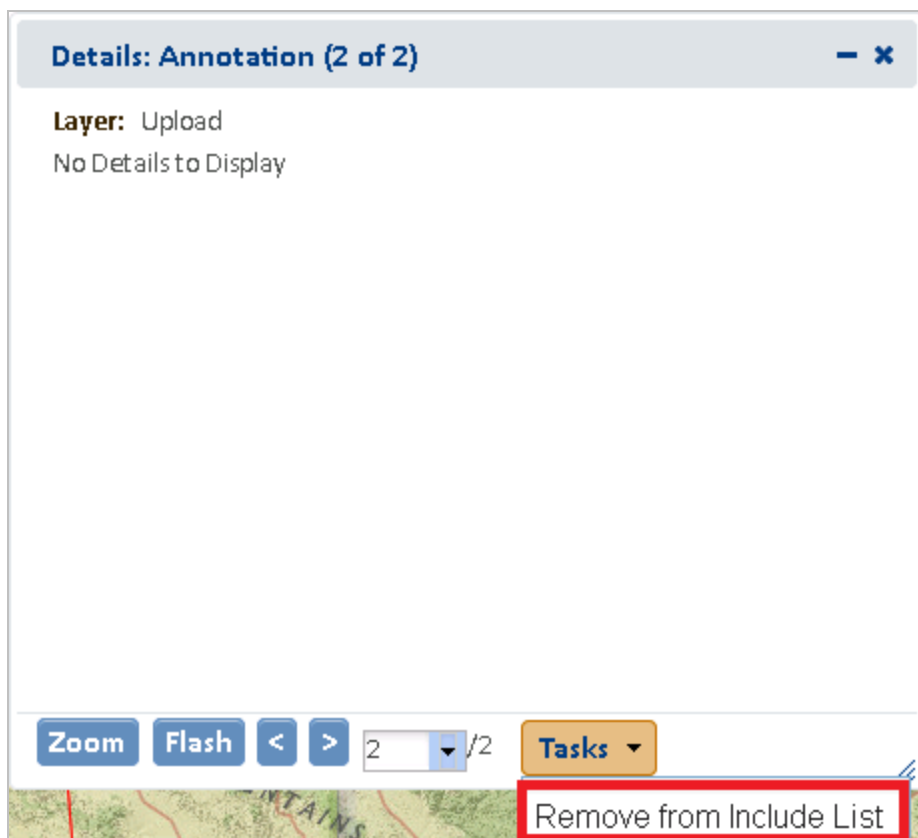


4. The map will zoom to the extent of the spatial feature(s) within the uploaded file.
  - a. If a file with multiple shapes has been selected, draw a box on the map to select the desired feature(s) within the uploaded layer.

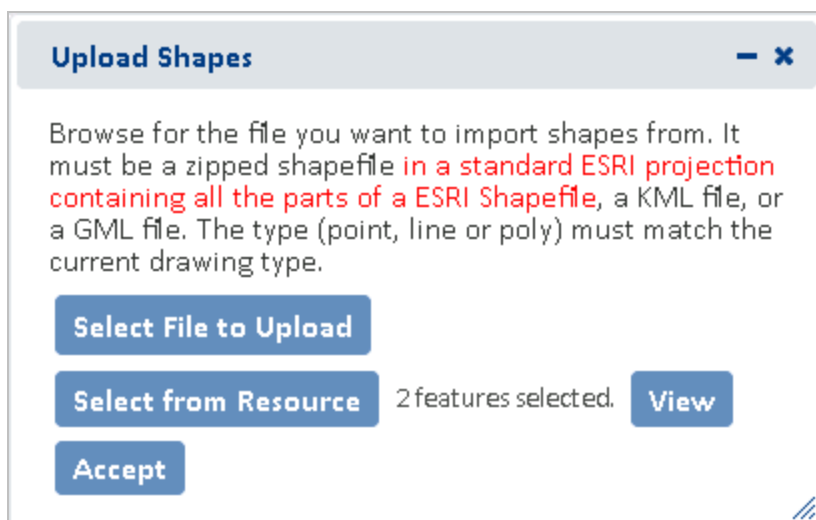


- b. The *Details* dialog of the selected feature(s) will be displayed. To remove a feature from the selection, from the *Tasks* menu, select **Remove from Include List**. Once removed, the option to **Add to**

**Include List** becomes available in the *Tasks* menu.



- c. The number of features selected will be displayed in the section to the right of the *Select From Resource* button along with a **View** button, which allows the user access to the *Details* dialog again if they need to remove additional features from the selection. Alternatively, create a new selection by clicking the **Select from Resource** button again (return to Step 4a for instructions).



- d. Click **Accept** within the *Upload Shapes* dialog.
5. In the *Draw/Edit* toolbar click **Accept**.

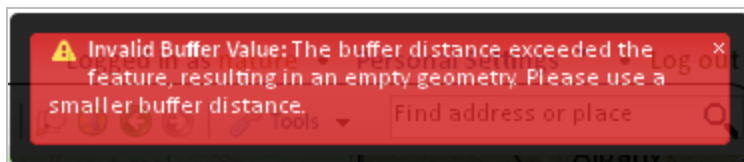
## Buffer Shape

The Buffer Shape tool can be used in conjunction with the **Draw Shape** tool or **Additional Mapping Options**.

1. Either draw a shape using the **Draw Shape** tool or create a shape using the **Additional Mapping Options** tool.
2. Enter Buffer mode by clicking the **Buffer Shape** icon.
3. In the *Buffer* dialog, enter a buffer *Distance* and select the desired distance unit from the dropdown. Click **Buffer**.

### Use of Buffers

- A positive distance will buffer outside the feature whereas a negative distance will buffer within the feature. Negative distances cannot exceed the size of the shape, nor can they be used with Point or Line features. The following error will be displayed when the negative distance exceeds the size of the shape.



- Buffers are additive. Thus, if one distance is used to buffer a polygon and then another distance is entered, the second buffer will be added to the first buffer rather than to the original feature. For example, if a feature is first buffered by 5000 m, and then a second buffer distance of 2500 m is specified, the original feature ends up being buffered by 7500 m; the second distance does not replace the first.
  - To apply different buffers to a polygon without combining them, **Undo Last Drawing Change** must be used before specifying the second buffer distance. This will cause the original buffer to be removed prior to applying the second.
4. The buffer will be applied and the user is returned to the *Draw/Edit* toolbar to further modify the feature, if desired. Click **Next** to continue the process.

## Additional Mapping Options

The **Additional Mapping Options** dialog allows the user to:

- copy a shape from **Map Layers**
- copy shapes created via **Make a Map**
- enter **Coordinates**
- create a **Drawing**

This tool can be used reiteratively for multiple edits and use of various tools within a given editing session. As such, the *Additional Mapping Options To:* is used to indicate how to use the new shape:

- **Add to original drawing**




- **Replace original drawing**
- **Erase areas of overlap**
- **Crop to copied feature**

Following are the instances when this dialog will be displayed:

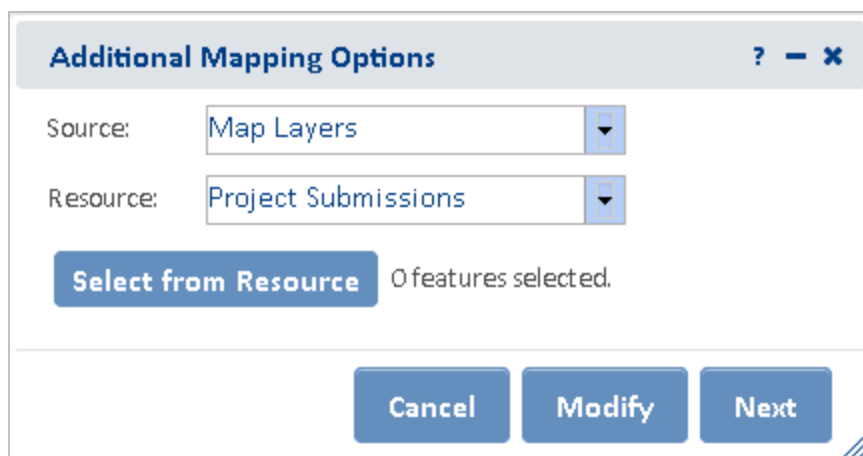
- If there is a drawing in the primary draw toolbar whose feature type (point, line, polygon) is the same as the current shape, then the **Add to original drawing** and **Replace original drawing** options will be available.
- If there is a drawing in the primary draw toolbar and the feature type of the current shape is a polygon, then the **Erase areas of overlap** and **Crop to copied feature** options will be available.
- If the feature type of the drawing in the primary draw toolbar is polygon, as is that of the current shape, then all 4 options will be available.

[back to top](#)

## Map Layers

1. Click the **Additional Mapping Options**  icon.
2. In the *Additional Mapping Options* dialog, from the *Source* dropdown menu, select **Map Layers**.
3. From the *Resource* dropdown menu, select the map resource from which to copy the shape(s). The options depend on the layers available within the **Layers** section of the map.

**NOTE:** If the chosen Resource is comprised of multiple layers, an additional *Layer* dropdown list will be displayed from which to select the given layer to copy the shape(s).



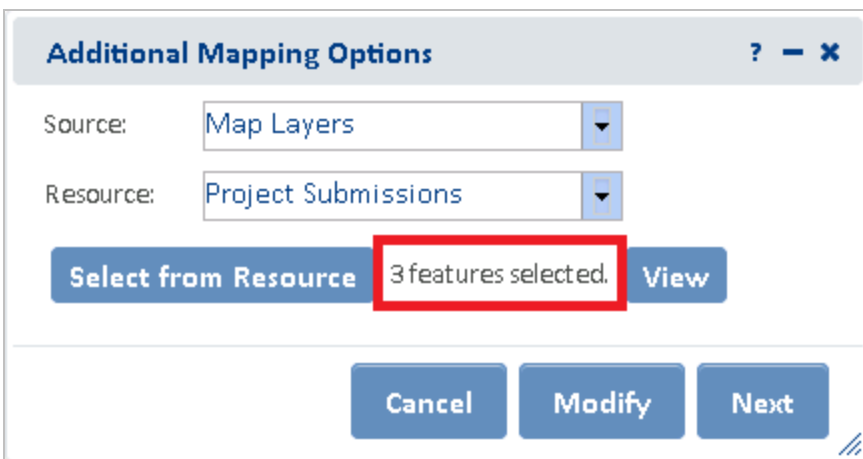
4. Click the **Select from Resource** button and holding the mouse button down, draw a box on the map to select the desired feature(s) within the Resource/Layer.
5. The *Details* dialog of the selected feature(s) will be displayed. To remove a feature from the selection, from the *Tasks* menu, select **Remove from Include List**. Once removed, the option to **Add to Include List**

becomes available in the *Tasks* menu.



- The number of features selected will be displayed to the right of the *Select From Resource* button along


with a **View** button, which allows the user access to the *Details* dialog again if they need to remove additional features from the selection. Alternatively, create a new selection by clicking the **Select from Resource** button again (return to Step 4 for instructions).

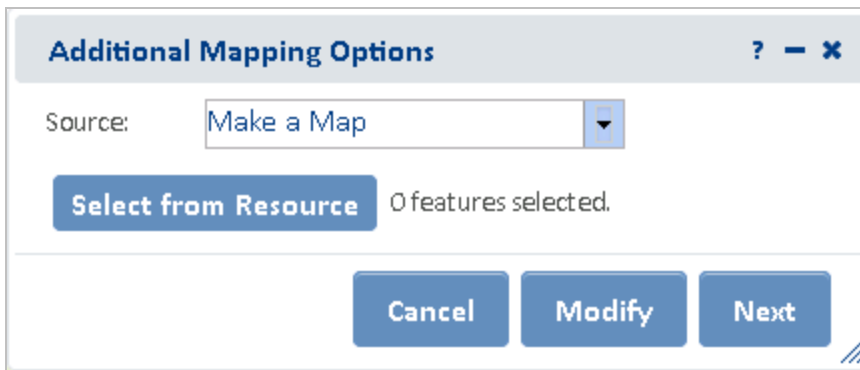


- To further modify the selected features, click **Modify** or **Next** to use the features as they exist.
- In the *Draw/Edit* toolbar click **Accept** unless further edits are needed.

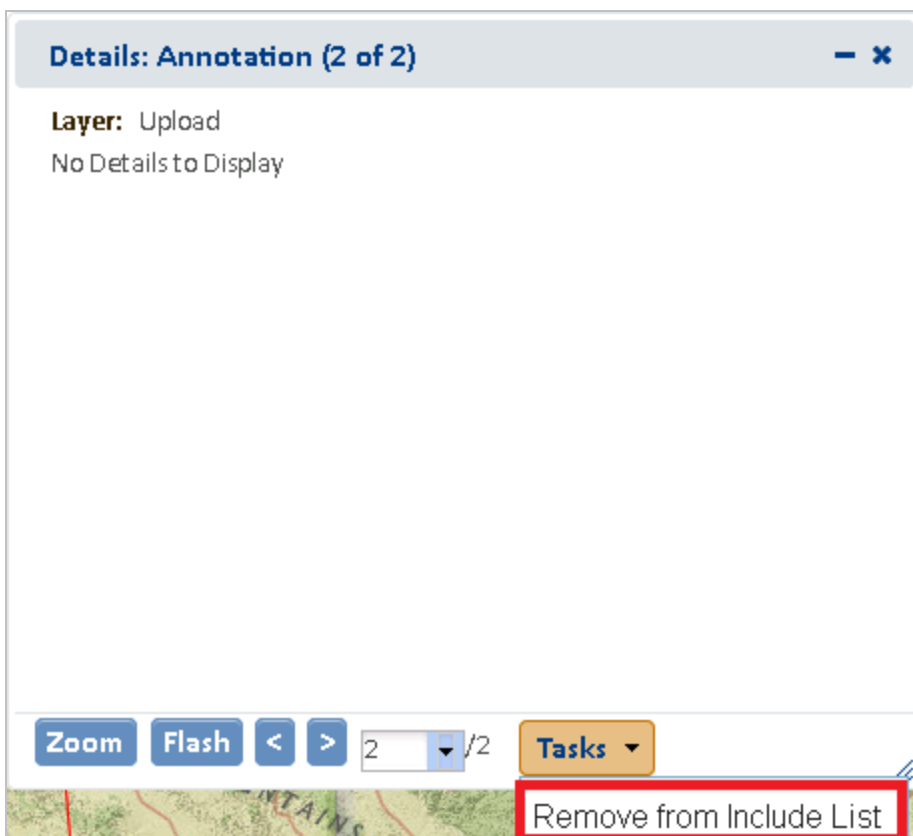
[back to top](#)

## Make a Map

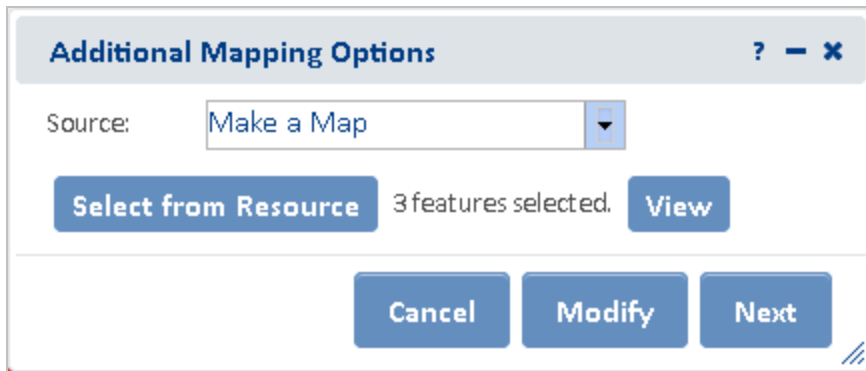
1. Click the **Additional Mapping Options**  icon.
2. In the *Additional Mapping Options* dialog, from the *Source* dropdown menu, select **Make a Map**.
3. Click the **Select from Resource** button and click on the desired feature(s).



4. The number of features selected will be displayed in the Spatial Search section to the right of the *Select From Resource* button along with a **View** button, which allows the user access to the *Details* dialog again if they need to remove additional features from the selection. Alternatively, create a new selection by clicking the **Select from Resource** button again (return to Step 2 for instructions).




5. To further modify the selected features, click **Modify** or **Next** to use the features as they exist.



6. In the *Draw/Edit* toolbar click **Accept** unless further edits are needed.

[back to top](#)

## Coordinates

1. Click the **Additional Mapping Options**  icon.
2. In the *Additional Mapping Options* dialog, from the *Source* dropdown menu, select **Coordinates**.
3. Select the desired **Projection** and enter in the formats shown:
  - **Latitude/Longitude (DMS)**
    - Latitude (Northing): 42d 42' 44"
    - Longitude (Easting): -75d 38' 38"
  - **Latitude/Longitude (Decimal)**
    - Latitude (Northing): 42.712326430204115
    - Longitude (Easting): -75.64402639639827
  - **Subnational Projection** - the projection used by your HP/CDC within the Biotics application. Contact your Biotics Administrator for further information.
  - **Define Projection**

**NOTE:** WKID and WKT values can be found at <http://www.spatialreference.org>

- **By Well Known ID (WKID):** 3857

- Latitude (Northing): 5268287
- Longitude (Easting): -8420654.5

- **By Well Known Text (WKT):**

The WKT can be copied directly from a projection file (.prj). Below is an example.

```
PROJCS["WGS_1984_Web_Mercator_Auxiliary_Sphere",GEOGCS["GCS_WGS_1984",DATUM
["D_WGS_1984",SPHEROID["WGS_1984",6378137.0,298.257223563]],PRIMEM["Green-
wich",0.0],UNIT["Degree",0.0174532925199433]],PROJECTION["Mercator_Auxiliary_
Sphere"],PARAMETER["False_Easting",0.0],PARAMETER["False_Northing",0.0],PARAMETER
["Central_Meridian",0.0],PARAMETER["Standard_Parallel_1",0.0],PARAMETER["Auxiliary_
Sphere_Type",0.0],UNIT["Meter",1.0],AUTHORITY["ESRI","102100"]]
```

- Latitude (Northing): 5268287

- Longitude (Easting): -8420654.5

**Additional Mapping Options** ? - x

Source:

Projection:

Define By:

Well-Known String:

```
PROJCS["WGS_1984_Web_Mercator_Auxiliary_Sphere",GEOGCS["GCS_WGS_1984",DATUM["D_WGS_1984",SPHEROID["WGS_1984",6378137.0,298.257223563]],PRIMEM["Greenwich",0.0],UNIT["Degree",0.0174532925199433]],PROJECTION["Mercator_Auxiliary_Sphere"],PARAMETER["False_Easting",0.0],PARAMETER["False_Northing",0.0],PARAMETER["Central_Meridian",0.0],PARAMETER["Standard_Parallel_1",0.0],PARAMETER["Auxiliary_Sphere_Type",0.0],UNIT["Meter",1.0],AUTHORITY["ESRI","102100"]]
```

Latitude (Northing):

Longitude (Easting):

Click the Map for Coordinates

**Zoom and Preview**

4. Click **Zoom and Preview**.
5. To further modify the selected features click, **Modify** or **Next** to use the features as they exist.
6. In the *Draw/Edit* toolbar click **Next** unless further edits are needed.

[back to top](#)

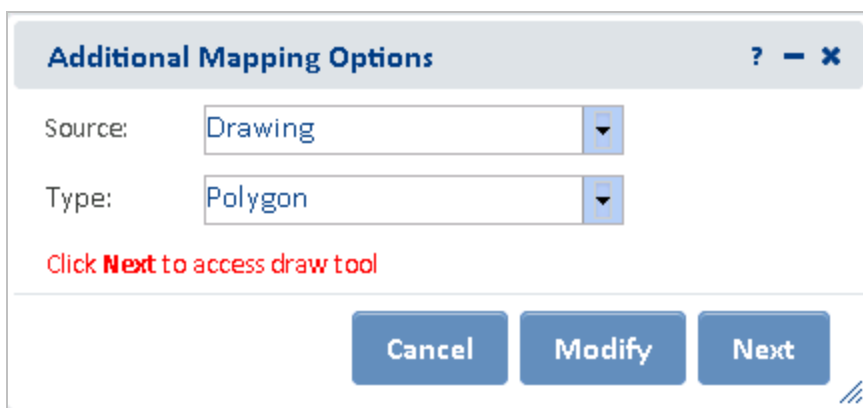
## Drawing

This option enables drawing of any feature type (Point, Line, Polygon) whereas the default **Draw Shape** tool within the Draw/Edit toolbar is limited to polygonal features.



1. Click the **Additional Mapping Options** icon.
2. In the *Additional Mapping Options* dialog, from the *Source* dropdown menu, select **Drawing**.

- From the *Type* dropdown menu, select the type of spatial feature (**Point**, **Line**, or **Polygon**) to draw and click **Next**.



- The *Draw shape to use as other Source* dialog will be displayed. Draw the desired shape and click **Next**.
  - Single click to draw a point.
  - For lines and polygons, click every location a vertex is to be placed (unless the **Use Freehand** option is selected) and double-click to complete feature.
- In the case of a line or polygon feature, the *Draw/Edit* toolbar will be displayed, allowing the user to edit the feature further. Click **Next** to continue.

[back to top](#)

## Other Draw/Edit Tools

- **Undo**
- **Redo**
- **Clear Shape**
- **Draw Settings**

The *Draw Settings* dropdown menu includes two options:

- **Use Freehand** provides the ability to digitize a feature freehand rather than by clicking to add individual vertices.
- **Disable Navigation while Drawing** - a setting that is on by default - improves drawing performance by switching map navigation (i.e., pan and zoom functionality) off once the first vertex of a shape has been placed, and re-enabling navigation when the shape is closed. Leaving this draw setting enabled prevents the application from interpreting a longer touch on the cursor while digitizing as an attempt to pan, which would cause the map to be refreshed and any vertices digitized to be lost.

[back to top](#)

## Related Topics:

- **Create a Project**
- **Make a Map**
- **Scale Bar**
- **Zoom to Coordinates or Scale**

## Feature Search

The **Feature Search** tool provides the ability to identify features in a layer, including those added to the Map via the **Add Resources** tool, according to criteria specified by a query.

Once a search has been completed, the search criteria is saved for your convenience. Therefore, the next time the *Feature Search* tab is opened, the previously used search criteria still applies. If you want to define a new

search, click **Reset** .

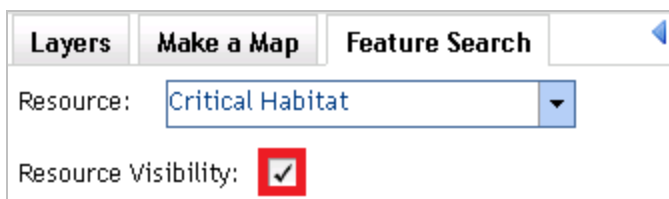
**NOTE:** The Feature Search option is not available for cached map services published from ArcGIS Online because such services do not support all of the capabilities of those published through ArcGIS Server.

Search for a feature based on:


- **Attribute Search**
- **Spatial Search**
- or a combination thereof

### Steps:

1. Within the Map, navigate to the **Feature Search** tab.
2. In the *Feature Search* tab, select the **Resource**, the layer on which the search is to be performed, from the dropdown menu.
3. The layer will automatically be displayed and the **Resource Visibility** checkbox indicated. **NOTE:** If the default **Resource** is the desired layer, manually indicate the **Resource Visibility** checkbox to display the layer.



3. Define search criteria according to an **Attribute Search** and/or designating a location in which to perform a **Spatial Search**.

4. To clear the defined expression, click the **Reset**  button.

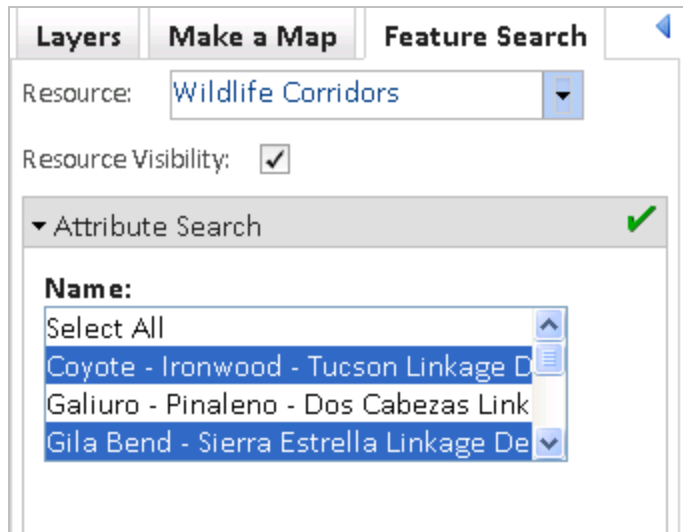
**NOTE:** A green check mark icon on a section indicates that criteria have been defined within that section of the *Feature Search* tab.

### Attribute Search:

The fields in the Attributes section differ according to the layer specified in **Resource** dropdown.


- a. If not already expanded, click the **Attributes** label to expand the section.
- b. Define the search criteria by selecting a value(s) from the various field dropdown menus.
  - Select multiple values by holding down the **SHIFT** key and selecting the values

- Select specific values by depressing the **CTRL** key and selecting the values.



## Spatial Search:

The **Spatial Search** enables selection of *Resource* features based on their location in relation to the selected features defined within *Search By*; in an ad-hoc manner.

- Click **Spatial Search** to expand the accordion section.
- From the **Search By** dropdown, select how the search area will be defined.
  - **Box, Polygon, Point, or Line** - digitize the search area according to the tooltip instructions.
  - ii. To re-define the search area, click the **Select by Drawing**  button to digitize the search area.
- **Features from map resource:**
  - From the *Resource* dropdown menu, select the layer from which to copy the shape(s).

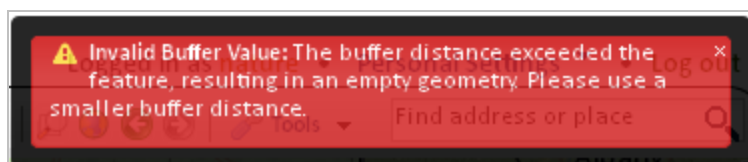
**NOTE:** If the chosen *Resource* is comprised of multiple layers, an additional *Layer* dropdown list will be displayed from which to select the given layer to copy the shape(s).



- ii. Click the **Select From Resource** button.

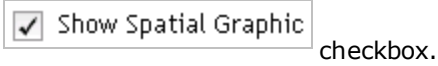
- iii. Holding the mouse button down, draw a box on the map to select the features within the layer.
- iv. The *Details* dialog of the selected features will be displayed. To remove a feature from the selection, within the *Details* dialog, from the *Tasks* menu select **Remove from Include List**.
- v. The number of features selected will display in the Spatial Search section to the right of **Select From Resource**.
- vi. To display the *Details* dialog of the selected features again, click the **View** button.
- c. Indicate **Use Buffer** to buffer the selected spatial feature(s). Enter the desired buffer distance and select the distance unit from the dropdown. A graphic will display the buffered area.

**NOTE:** A positive distance will buffer outside the feature whereas a negative distance will buffer within the feature. Negative distances cannot exceed the size of the shape, nor can they be used with Point or Line features. The following error will be displayed when the negative distance exceeds the size of the shape.




- d. From the **Search Type** dropdown, define how features within the **Resource** will be selected by the shape(s) specified within the Spatial Search:
- **Intersects** - selects features from the **Resource** which are crossed by or are contained within the search selection
  - **Contains** - selects features from the **Resource** which are completely contained by the search selection (nothing outside the search selection).
  - **Within** - selects features from the **Resource** which the search selection falls entirely within (nothing outside the Resource shape).

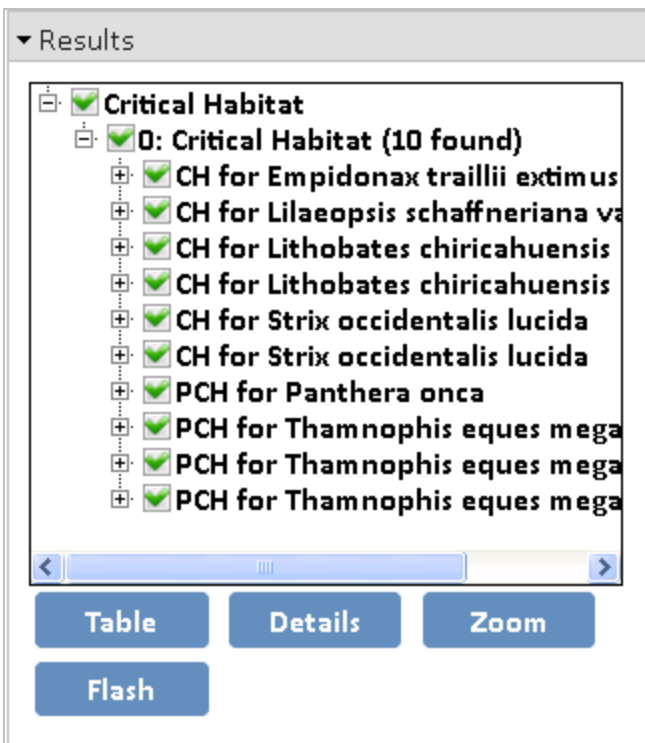
- **Touches** - selects features from the **Resource** which the search selection touches, even by sharing a border or vertex.
- e. To clear the spatial graphic representing the search area, uncheck the **Show Spatial Graphic**



## Results

7. Click **Search**  to run the search based on the defined criteria.
8. The search results will be displayed within the **Results** accordion section at the bottom of the *Feature Search* tab.

The **Results** section provides the following functionality, which will be applied to selected records. Select/deselect records by checking/unchecking individual records. Alternatively, select/deselect all records within a level of the tree by checking/unchecking the higher level entry.




- a. **Table** - displays the results within a table format. In addition to the same **Zoom** and **Flash** functionality below, the table format also enables the user to **Print to PDF**.

**Attribute Table: Critical Habitat**

<input type="checkbox"/>	Name	Common Name
<input type="checkbox"/>	CH for Empidonax traillii extimus	Designated Critical Habitat for Southwestern willow flycatcher
<input type="checkbox"/>	CH for Lilaeopsis schaffneriana var. recurva	Designated Critical Habitat for Huachuca water umbel
<input type="checkbox"/>	CH for Lithobates chiricahuensis	Designated Critical Habitat for Chiricahua leopard frog
<input type="checkbox"/>	CH for Lithobates chiricahuensis	Designated Critical Habitat for Chiricahua leopard frog
<input type="checkbox"/>	CH for Strix occidentalis lucida	Designated Critical Habitat for Mexican spotted owl
<input type="checkbox"/>	CH for Strix occidentalis lucida	Designated Critical Habitat for Mexican spotted owl
<input type="checkbox"/>	PCH for Panthera onca	Proposed Critical Habitat for Jaguar
<input type="checkbox"/>	PCH for Thamnophis eques megalops	Proposed Critical Habitat for Northern Mexican gartersnake

Close Zoom Flash Print to PDF

- a. **Details** – to view the *Details* dialog of the indicated feature(s).
- b. **Zoom** to indicated feature(s) 
- c. **Flash** indicated feature(s)

**NOTE:** The search criteria is saved, for your convenience. Therefore, the next time the *Feature Search* tab is

opened, the previously used search criteria still applies. If you want to define a new search, click **Reset** 

**back to top**

Related Topics:


- **Add Resources**
- **Details**

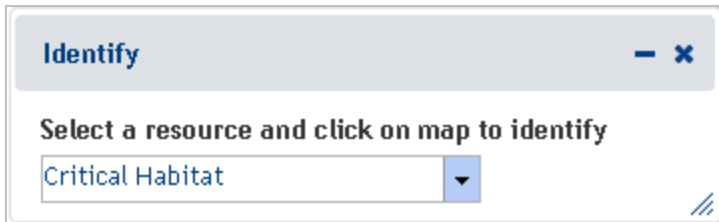
## Identify

The Identify tool is used to display the details of the geographic feature(s) or place(s) selected in the Map.

**NOTE:** The Identify tool cannot be used with cached map services published from ArcGIS Online because such services do not support all of the capabilities of those published through ArcGIS Server.

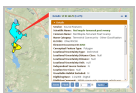
## Steps:

1. Within the Map, click the  icon located in the upper right corner of the map title bar.
2. Select the desired layer from the dropdown list on the *Identify* dialog. The layer will be displayed on the map.



**NOTE:** Cached map services published from ArcGIS Online will not be available within the dropdown list because such services do not support all of the capabilities of those published through ArcGIS Server.

3. Click on the feature to be identified.
4. The *Details* dialog displays attributes of the target feature, and uses a red callout to point to the feature, which is highlighted.





[back to top](#)

## Related Topics:

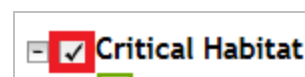
- [Details](#)

## Layers

Within the *Layers* tab of the map, layers are segregated into accordion sections. These accordion sections can be contracted by clicking the  button or expanded by clicking the  button. Individual layers can be made visible/invisible, their symbology displayed, transparency altered, zoomed to, and details viewed.


## Steps:

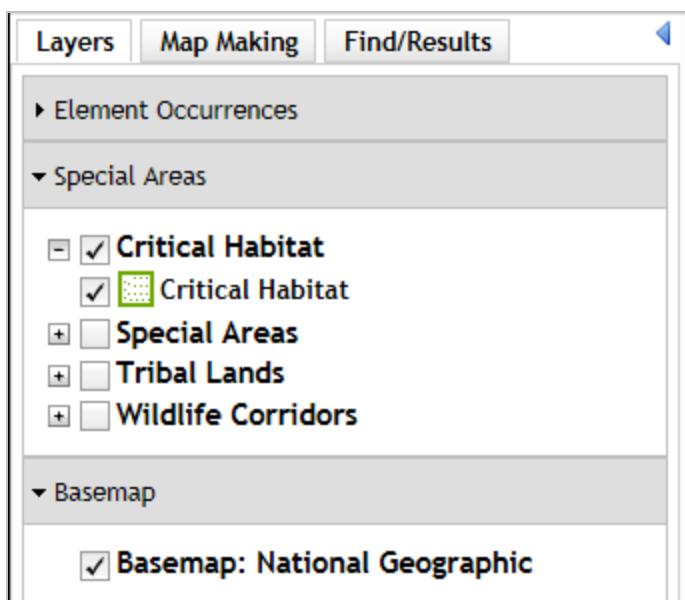
1. Within the *Map*, navigate to the *Layers* tab, if not already there.





2. Make a layer visible/invisible by clicking the checkbox left of its name.

**NOTE:** Certain layers are only visible at certain map scales. If a map is not available at a given map scale, the layer will be grayed out. To determine the minimum and maximum scale at which a scale will be displayed, **View Details**.

2. Click the  icon to expand a layer to view its symbology.



3. Collapse the layer by clicking the  icon.
4. Hover over a layer name and click the dropdown  icon to the right to view the tasks available for the layer.
- **Transparency** – allows the transparency of the layer to be adjusted by sliding the indicator along the bar.
  - **Zoom To** – zooms to the full extent of the layer.
  - **Remove** - removes the layer from the map. **NOTE:** this option is only available for layers added by the user.
  - **View Details** – opens the details for the layer within the ArcGIS Services Directory. If a secured service, a user name and password will be required to view the information. See the **Min Scale** and **Max Scale** values to determine a layers scale dependency.

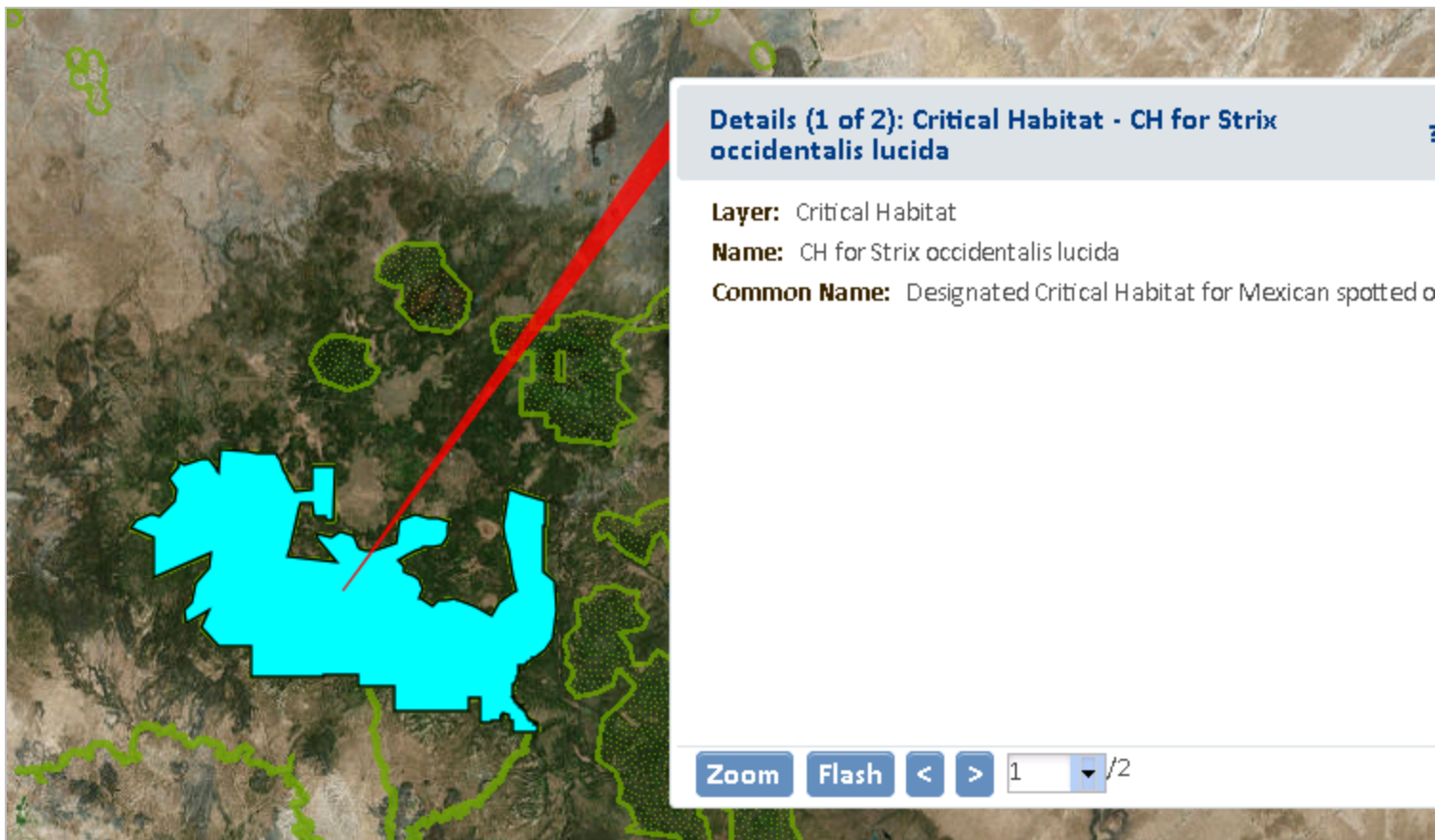
## back to top

### Related Topics:

- [Add Resources](#)
- [Switch Basemaps](#)

## Details

The *Details* dialog displays the results of the **Identify** and **Feature Search** tools, and indicates the feature associated with each dialog by highlighting and pointing with a red call-out.



- **Zoom** to feature -
- **Flash** feature -
- **Navigate** between features using *Details* dialogs, if more than one, by:
  - Stepping backward or forward through the set of dialogs
  - Selecting the desired feature dialog from the dropdown list
- **Tasks** menu option displays from the Feature Search
  - **Remove from Include List** - removes the selected feature from the list.

[back to top](#)

## Related Topics:

- **Feature Search**
- **Identify**

## Filter

The Filter tool is available for specific layers. A filter can be applied to individual layers (with the exception of cached map services published from ArcGIS Online) in order to limit the features displayed on the map to those that meet the filter definition/criteria. More specific details on how to develop queries that define filter criteria (e.g., querying numbers, combining expressions, using nulls), are provided in the **Build a Query** topic.

- **Create Filter**
- **Modify or Remove Filter**

**NOTE:** The Filter option is not available for cached map services published from ArcGIS Online because such services do not support all of the capabilities of those published through ArcGIS Server.

## Create a Filter

1. Within the *Layers* tab of the **Map**, click the dropdown icon to the right of the service to be filtered and choose **Filter** from the available options.

**NOTE:** The Filter option is not available with cached map services, only dynamic services.

The screenshot shows a 'Filter' dialog box with the following elements:

- Resource:** Project Submissions
- Attribute:** OBJECTID (with a dropdown arrow and a 'Select' button)
- Operators:** A grid of buttons including '=', '<>', '>', '>=', '<', '<=', '()', 'And', 'Or', 'Not', 'Like', and 'Is'.
- Value Field:** An empty text input field with a vertical scrollbar.
- Buttons:** 'Get Unique Values' and a red 'X' icon.
- SQL Preview:** A text area containing the SQL query: 'SELECT \* FROM Project Submissions/O WHERE:'. Below it is an empty text input field.
- Bottom Buttons:** 'OK' and 'Apply'.

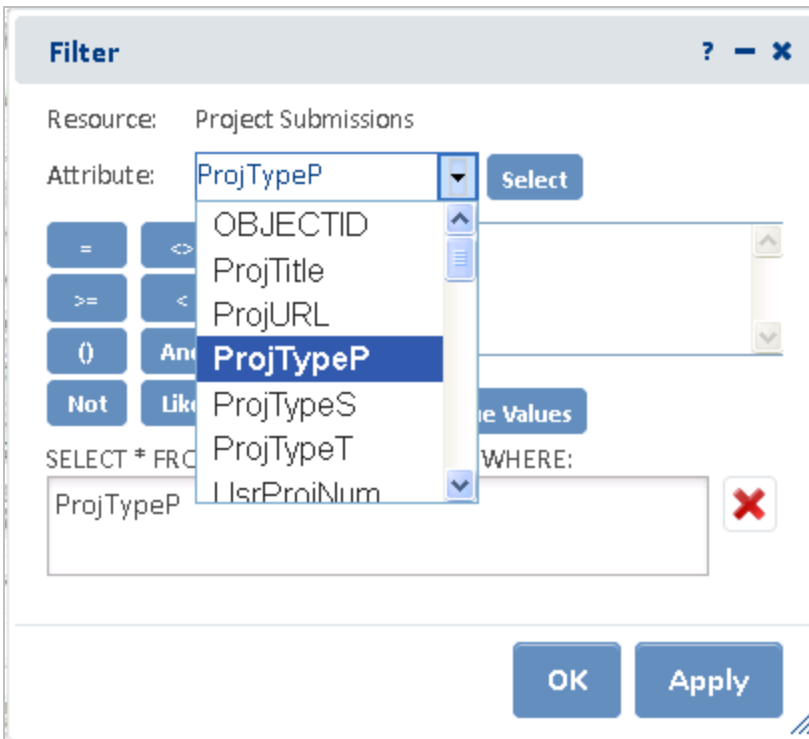
3. If the Resource contains multiple layers, a dropdown identifying the layers will be displayed. Select the layer to be filtered from the *Layer* dropdown list.

**NOTE:** If the Resource contains only a single layer, the *Layer* dropdown will not be displayed.

The screenshot shows a 'Filter' dialog box with the following elements:

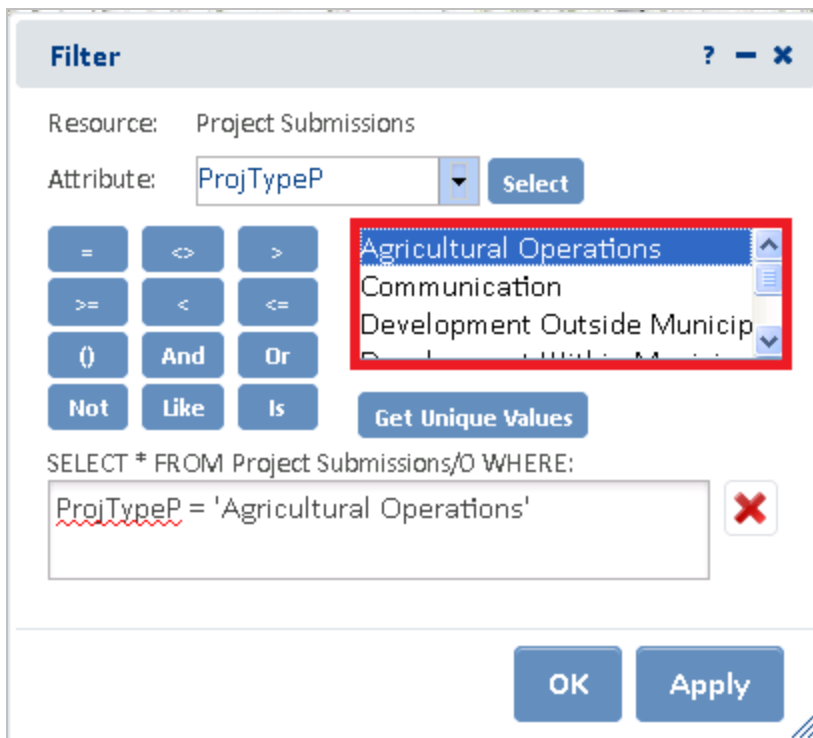
- Resource:** Protected Lands
- Layer:** 0: NY: State Lands (DEC) (highlighted with a red box)

1. Select the attribute to use in the query from the *Attribute* dropdown, and then click **Select**.



- b. Click an operator (=, <>, ...)

- c. To see a list of values for the attribute, click **Get Unique Values**. Double-click one of the values or alternatively, type an expression directly into the query field.

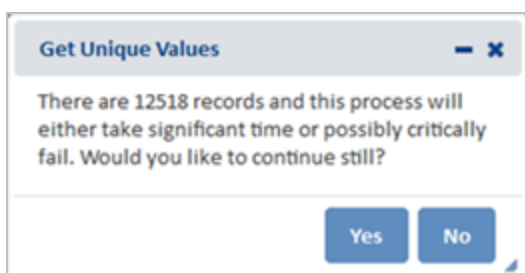




**NOTE:** If Get Unique Values returns no records for lack of data in the attribute, a message will be displayed to indicate that **No unique values were found for this attribute.**



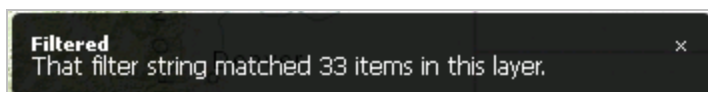
**NOTE:** If **Get Unique Values** is used on a layer with many records, the following message is likely to be displayed. Respond **Yes** to continue or **No** to cancel the search for unique values.



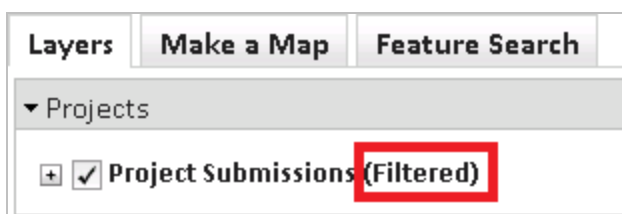
- Click **Apply** to apply the filter and keep the *Filter* dialog open or click **OK** to apply the filter and close the *Filter* dialog.

**NOTE:** If there is a typographical error, or the filter has been improperly defined (i.e., 'Vascular plant' instead of 'Vascular Plant'), no records will be displayed.

The number of records resulting from the Filter will be reported.




Within the *Map Resources* dialog, **(Filtered)** will be displayed next to the service name to indicate that the service has been filtered.



[back to top](#)

## Modify or Remove Filter

To change or remove a filter, in the *Layers* tab, click the dropdown icon to the right of the layer that is filtered, and choose **Filter** from the available options.

- To remove the filter, click the **Clear Attribute Filter Parameters**  icon in the *Filter* dialog.
- To modify any part of the filter expression:
  - Place the cursor within the sequence and use either the **<Delete>** or **<Backspace>** keys to remove the desired part(s).

- Click **Apply** to apply the revised filter and keep the *Filter* dialog open, or click **OK** to apply the filter and close the *Filter* dialog.

[back to top](#)

## Related Topics:

- [Build a Query](#)

## Build a Query

A query enables the identification of records that meet criteria specified for selected attribute(s) of a resource (layer).

- [Strings](#)
- [Wildcard Characters](#)
- [Null values](#)
- [Querying numbers](#)
- [Calculations](#)
- [Operator precedence](#)
- [Combining expressions](#)
- [Querying dates](#)

## Strings

Strings must always be enclosed within single quotes. For example:

```
PC_NAME_EN = 'Ivvavik National Park of Canada'
```

Strings in expressions are case sensitive. To make a case insensitive SQL search, an UPPER or LOWER function can be used to convert all values to the same case. For example, the following expression will select managed area names stored as either BIRD ISLANDS SANCTUARY or Bird Islands Sanctuary.

```
UPPER(MANAGED_AR) = 'Bird Islands Sanctuary'
```

The LIKE operator (instead of the = operator) is used to build a partial string search. For example, the following expression would select both New Brunswick, and Newfoundland and Labrador among CA province names:

```
NAME Like 'Ne%'
```

Greater than (>), less than (<), greater than or equal (>=), less than or equal (<=), and BETWEEN operators can be used to select string values based on sorting order. For example, the expression below will select all provinces in a resource that have names starting with the letters R to Z:

```
NAME >= 'R'
```

The not equal (<>) operator can also be used in query strings.

[back to top](#)

## Wildcard Characters

A wildcard character is a symbol that stands for one or more unknown characters.

When searching file-based data, a '%' wildcard is used to indicate that anything is acceptable in its place: one character, multiple characters, or no character. Alternatively, a '\_' wildcard is used to represent a single character in a search. For example, the expression below would select any National Park name starting with the letters Au, such as Aulavik and Auyuittuq:

```
PC_NAME_EN Like 'Au%'
```

[back to top](#)

## Null Values

If a column (attribute) of a type that supports null values is selected, and if that column contains any null values in the records displayed in the **Values** list of the *Feature Search* dialog, the second entry from the top of the list will be ''. Double-clicking this value will add it to the expression and, by using the = operator, the query on the column will select all records with a null value for the attribute. For example, Element Occurrence records with a null value for ELCODE would be returned with the following expression.

```
ELCODE = ''
```

To select all records for which an attribute is not null, the <> (not equal) operator is used. The query shown below would return all occurrences that have ELCODE values, that is, where the ELCODE attribute is not null.

```
ELCODE <> ''
```

[back to top](#)

## Querying numbers

Numbers can be included in a query using the equal (=), not equal (<>), greater than (>), less than (<), greater than or equal to (>=), and less than or equal to (<=) operators. The example below would return the provinces having 2001 populations that were greater than 100,000.

```
POP_2001 > 100000
```

A point is always used as the decimal delimiter regardless of regional settings. However, the comma cannot be used as a decimal or thousands delimiter in a query.

[back to top](#)

## Calculations

Calculations can be included in queries using the arithmetic operators for addition (+), subtraction (-), multiplication (\*), and division (/).

Calculations can be performed between fields and numbers. In the example below, any feature having an area greater than or equal to its length multiplied by 100 would be returned by the query.

```
SHAPE_AREA >= SHAPE_LEN * 100
```

Calculations can also be performed between fields. For example, to find the provinces with a population density of less than or equal to 25 people per square kilometer, the following expression could be used:

```
POP_2001 / AREA_KM <= 25
```

[back to top](#)

## Operator precedence

Expressions are evaluated according to standard operator precedence rules. For example, the part of an expression enclosed in parentheses is evaluated before the part that is not enclosed.

This example:

```
HOUSEHOLDS > MALES * POP90_SQMI + AREA
```

is evaluated differently, and thus produces different results, than:

```
HOUSEHOLDS > MALES * (POP90_SQMI + AREA)
```

To use parentheses in a query expression, either click to add the parentheses and then enter the expression to be enclosed, or highlight the existing expression to be enclosed and then press the Parentheses button to enclose it.

[back to top](#)

## Combining expressions

Expressions can be combined together with the AND and OR operators. When the AND operator is used, both of the expressions separated by the AND operator must be true for a record to be selected.

```
AREA_KM > 100000 AND DWELL_2001 < 50000
```

When the OR operator is used, at least one of the two expressions separated by the OR operator must be true for a record to be selected.

```
AREA_KM > 100000 OR POP_2001 > 750000
```

Use the NOT operator at the beginning of an expression to find features or records that do not match the specified expression. NOT expressions can be combined with AND and OR.

```
AREA_KM > 100000 AND NOT POP_2001 < 750000
```

[back to top](#)

## Querying dates

The syntax required for querying dates depends on the data type. True DATE fields will be stored in the format: 'yyyy-mm-dd hh:mm:ss'. Specify the format within your query as shown below.

Given the format, even a single date requires querying for a range, due to the inclusion of time. Utilize the following query to return data mapped on July 1, 2013:

```
DIGITAL_MAPPING_DATE >= DATE '2013-07-01 00:00:00' AND DIGITAL_MAPPING_DATE <= DATE '2013-07-01 23:59:59'
```

Similarly, to find data mapped anytime in July 2013:

```
DIGITAL_MAPPING_DATE >= DATE '2013-07-01 00:00:00' AND DIGITAL_MAPPING_DATE <= DATE '2013-07-31 23:59:59'
```

[back to top](#)

### Related Topics:

- [Feature Search](#)
- [Filter](#)

## Make A Map


The *Make a Map* tab within the map enables the addition of annotation (graphics and text) to the map. These annotations can be used to **Create Project**. The contents of the tab are segregated into accordion sections

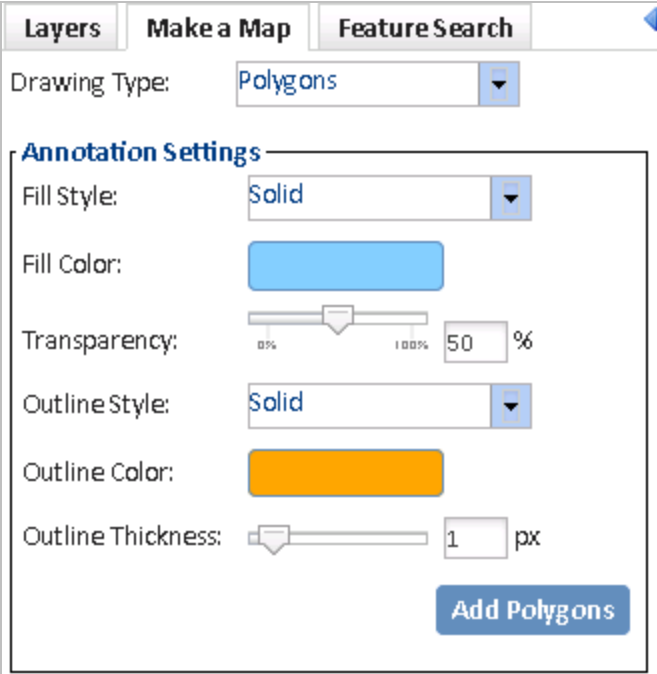
which can be contracted by clicking the  button or expanded by clicking the  button.

- [Polygons](#)
- [Lines](#)
- [Points](#)

- **Text**
- **Annotation Layer Settings**

## Polygons

1. Zoom to the area of interest.
2. From the **Drawing Type** dropdown, select **Polygons**.
3. Click **Add**  to start drawing. The *Draw/Edit* toolbar and *Annotation Settings* section will appear.
4. Within the *Annotation Settings* section, select the desired **Fill Style**, **Fill Color**, **Transparency**, **Outline Style**, **Outline Color** and **Outline Thickness**.




Layers Make a Map Feature Search

Drawing Type: Polygons


**Annotation Settings**

Fill Style: Solid

Fill Color: 

Transparency: 0% 100% 50 %

Outline Style: Solid

Outline Color: 

Outline Thickness: 1 px

Add Polygons

5. Draw a polygon(s) or use the **Additional Mapping Options** tool to copy a polygon(s) from an existing **Map resource**.

6. Within the *Draw/Edit* toolbar, click **Accept**.




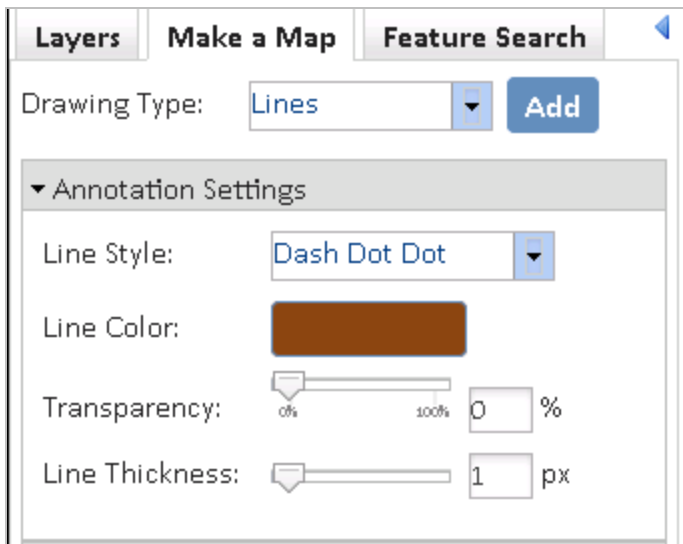
7. To change the annotation, click the **Edit Annotations** button within the *Annotation Layer Settings* section and click the annotation to edit.

**Edit Annotations**

[back to top](#)

## Lines

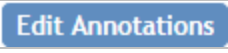
1. Zoom to the area of interest.
2. From the **Drawing Type** dropdown, select **Lines**.
3. Click **Add**  to start drawing. The *Draw/Edit* toolbar and *Annotation Settings* section will appear.
4. Within the *Annotation Settings* section, select the desired **Line Style**, **Line Color**, **Transparency**, and **Line Thickness**.



5. Draw a line(s) or use the **Additional Mapping Options** tool to copy a line(s) from an existing **Map resource**.

6. Within the *Draw/Edit* toolbar, click **Accept**.




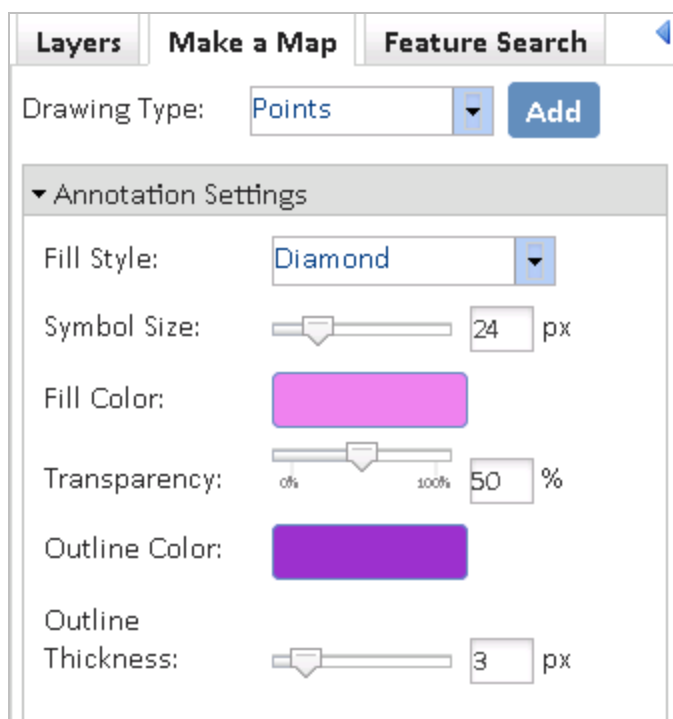
7. To change the annotation, click the **Edit Annotations**  button within the *Annotation Layer Settings* section and click the annotation to edit.



[back to top](#)

## Points

1. Zoom to the area of interest.
2. From the **Drawing Type** dropdown, select **Points**.
3. Click **Add**  to start drawing. The *Draw/Edit* toolbar and *Annotation Settings* section will appear.
4. Within the *Annotation Settings* section, select the desired **Fill Style**, **Symbol Size**, **Fill Color**, **Transparency**, **Outline Color** and **Outline Thickness**.



5. Click the map to place the point(s) on the map or use the **Additional Mapping Options** tool to copy a point(s) from an existing **Map resource**.
6. Within the *Draw/Edit* toolbar, click **Accept**.



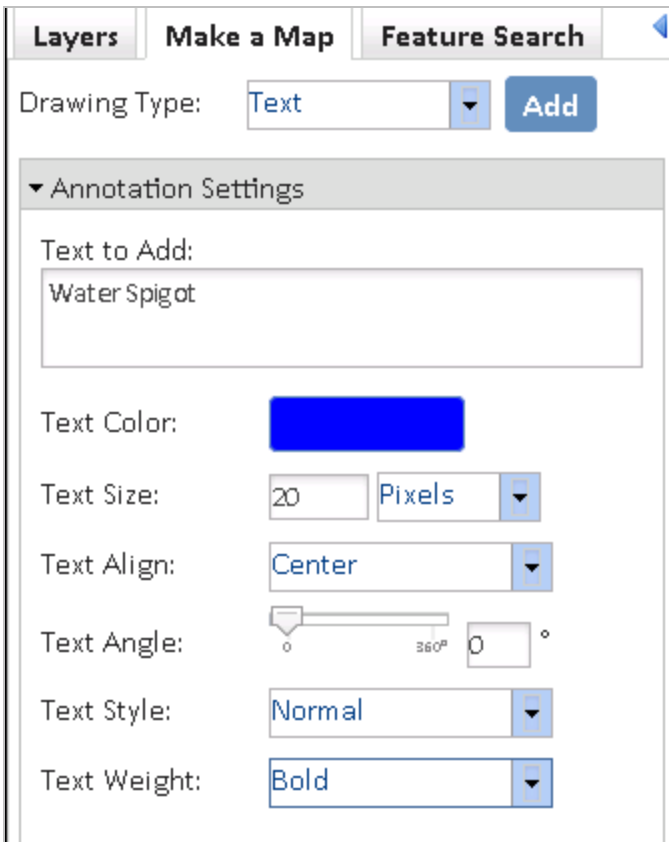
7. To change the annotation, click the **Edit Annotations** button within the *Annotation Layer Settings* section and click the annotation to edit.

**back to top**

## Text

1. Zoom to the area of interest.
2. From the **Drawing Type** dropdown, select **Text**.

3. Within the *Annotation Settings* section, enter the **Text to Add** within the text box and then select the desired **Text Color**, **Text Size**, **Text Align**, **Text Angle**, **Text Style**, and **Text Weight**.



The screenshot shows a software interface with three tabs: 'Layers', 'Make a Map', and 'Feature Search'. The 'Make a Map' tab is active. Below the tabs, there is a 'Drawing Type' dropdown menu set to 'Text' and an 'Add' button. A section titled 'Annotation Settings' is expanded, containing a text input field with the text 'Water Spigot'. Below this are several configuration options: 'Text Color' with a blue color swatch, 'Text Size' with a value of 20 and a unit dropdown set to 'Pixels', 'Text Align' with a dropdown set to 'Center', 'Text Angle' with a slider and a value of 0 degrees, 'Text Style' with a dropdown set to 'Normal', and 'Text Weight' with a dropdown set to 'Bold'.

4. Click **Add** and then click on the map where you would like the text placed.



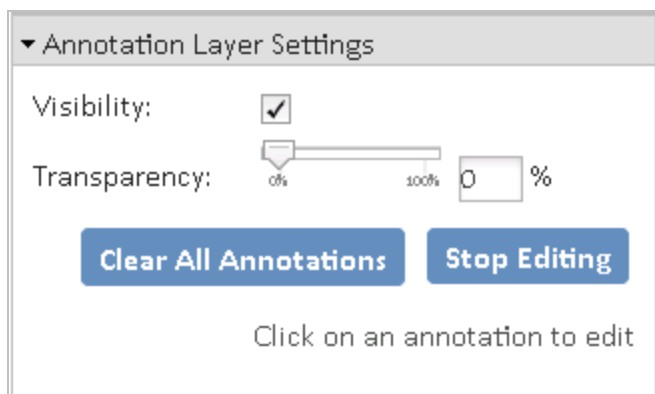
5. Repeat steps 3 & 4 to add the same text in multiple locations or enter different text.

6. To change the annotation, click the **Edit Annotations**  button within the *Annotation Layer Settings* section and click the annotation to edit.

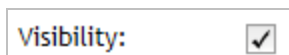
[back to top](#)

## Annotation Layer Settings

The configurations within the *Annotation Layer Settings* section apply to all annotations added to the map.




- **Visibility** - set to display annotation by default. Uncheck the Visibility checkbox to turn off all annotation.



- **Transparency** - allows the transparency of the layer to be adjusted by sliding the indicator along the bar.



- **Clear All Annotations** -  removes all annotations from the map.

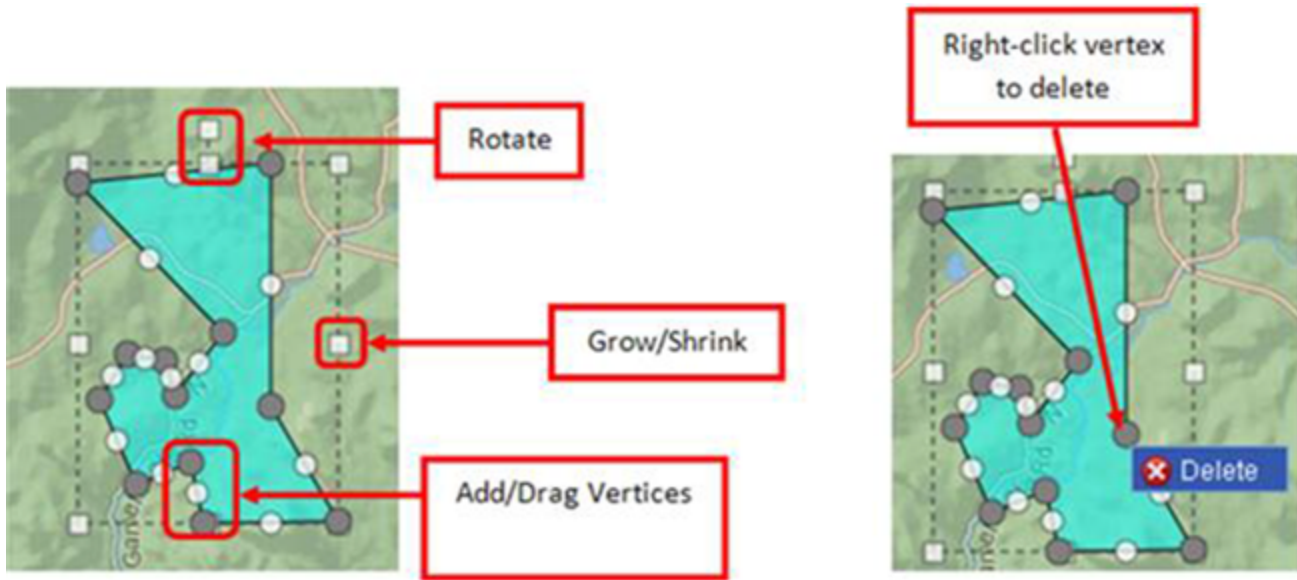
- **Edit Annotations** -  allows for editing of individual annotations:

- Click the **Edit Annotations** button
- Select the desired annotation to edit - the accordion section for the annotation type will be expanded to provide access to the appropriate settings.
  - **Point** - change the settings of the Point or change its location by clicking on it and dragging the point to the desired location.
  - **Line** - change the settings of the Line or change its location by clicking on it and editing the spatial feature.
  - **Polygon** - change the settings of the Line or change its location by clicking on it and editing the spatial feature.

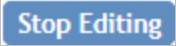
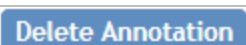
**Edit spatial feature** by:

Dragging, rotating, expanding, or shrinking the entire feature; and/or by

Adding, deleting, or dragging vertices.



- **Text** - change the Alignment or Color of the Text or change its location/angle by clicking and dragging the text to the desired location.

- iii. Click Stop Editing  after making the desired changes or the Delete Annotation  button to delete the feature.

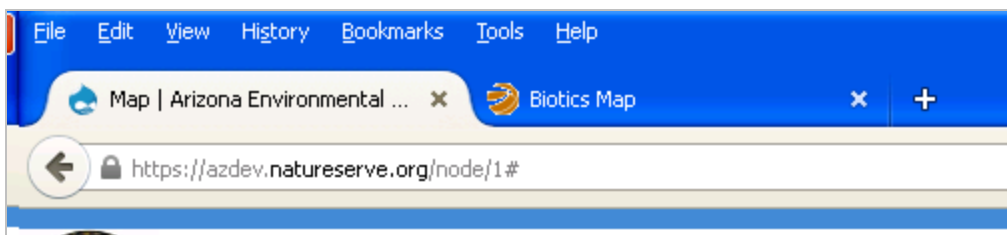
**back to top**

### Related Topics:

- **Draw/Edit Toolbar**
- **Additional Mapping Options**
- **Print**

## Draw/Edit

The *Draw/Edit* toolbar opens automatically upon choosing to **Create a Project** or add a spatial feature via **Make a Map**.



If accessed via **Create a Project** and the map is not zoomed in closer than 1:72,224, only the **Upload Shapes** tool will be available. To access the other draw tools, zoom in to 1:72,224 or closer using the **Scale Bar** or

**Zoom to Coordinates or Scale** tool.



A number of different tools are provided on the *Draw/Edit* toolbar, enabling various actions ranging from digitizing a shape, to moving boundaries, to removing an area from within feature, to buffering a polygon. Some of these tasks require different modes, which are displayed on the lower left of the toolbar.

- **Draw Shape**
- Edit Shape:
  - **Edit Geometries**
  - **Erase Inside Drawn Area**
  - **Crop Outside Drawn Area**
- **Upload Shapes**
- **Buffer Shape**
- **Additional Mapping Options:**
  - **Map Layers**
  - **Make a Map**
  - **Coordinates**
  - **Drawing** a point or line feature(s)
- Other Draw/Edit Tools:
  - **Undo**
  - **Redo**
  - **Clear Shape**
  - **Draw Settings**
    - **Use Freehand**
    - **Disable Navigation while Drawing**

## Draw Shape

The default tool within the *Draw/Edit* toolbar, **Draw Shape**, is limited to drawing polygonal features. To digitize a point or line feature(s), utilize the **Drawing** option within the **Additional Mapping Options** tool.

1. Features can be digitized using either the default drawing tool, which utilizes vertices, or a freehand tool.

Use default Draw Shape tool:

- a. If not already in Draw mode, click the **Draw Shape** icon.
- b. Single click to draw a point.
- c. For lines and polygons, click every location a vertex is to be placed and double-click to complete feature.

### Use Freehand drawing tool:

- a. From the *Draw Settings* dropdown, select **Use Freehand**.



- b. Holding down the mouse button, draw the feature.
- c. Release the mouse button to finish digitizing the feature.



2. Click **Accept** to complete the feature.

Alternatively, use the edit tools described in the following sections to make changes to the feature before clicking **Accept** to save.

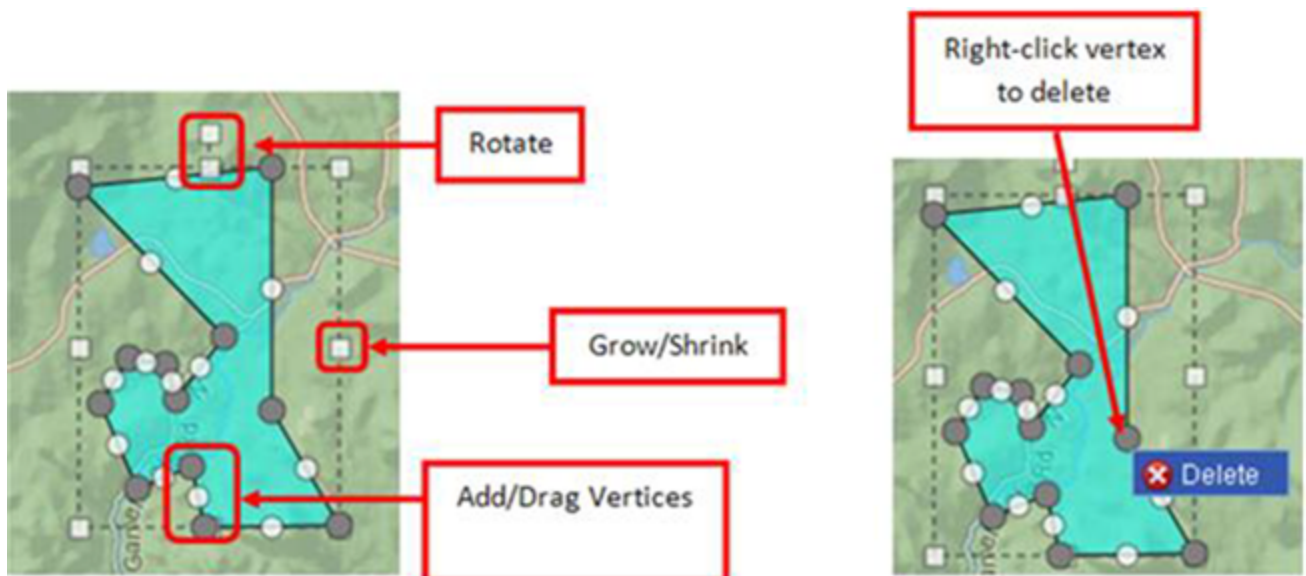
## Edit Shape

### Edit Entire Shape and/or Vertices

1. Enter Edit mode by clicking the **Edit Shape** icon.

The vertices and extent of the feature will be displayed.

2. Edit feature by:
  - Dragging, rotating, expanding, or shrinking the entire feature; and/or by
  - Adding, deleting, or dragging vertices.





[back to top](#)

## Erase Inside Drawn Area

1. Enter Erase mode by clicking the **Erase Inside Drawn Area** icon.
2. Digitize a polygon circumscribing the area to be cut from the feature by single-clicking to add each vertex, and double-clicking to complete the polygon.

The area circumscribed by the polygon will be clipped from the original feature.

|

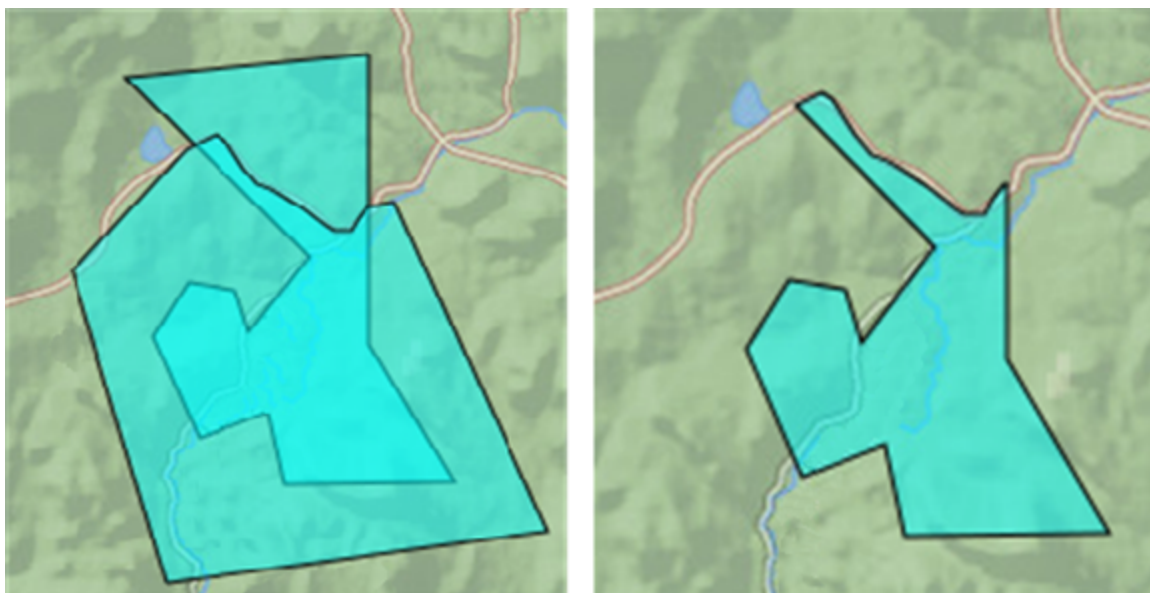
[back to top](#)

## Crop Outside Drawn Area

1. Enter Crop mode by clicking the **Crop Outside Drawn Area** icon.
2. Digitize a polygon that contains the portion of the feature to be retained, by single-clicking to add each vertex, and double-clicking to complete the polygon.

The area within the polygon drawn in Crop mode will be retained, while that portion of the feature outside the polygon will be deleted.

Polygon drawn overlapping feature... area of feature within polygon remains after cropping.

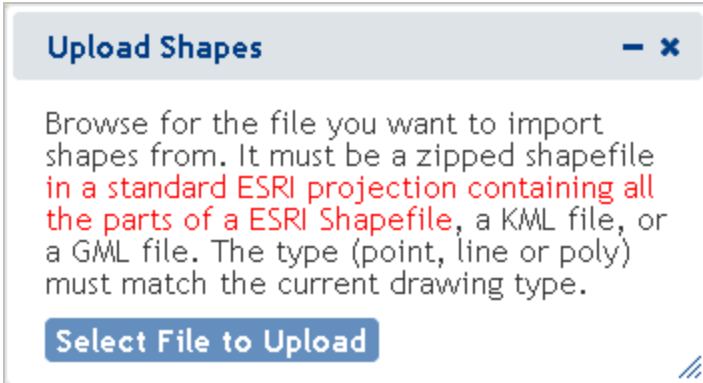
[back to top](#)

## Upload Shapes

Current functionality allows for ESRI shapefiles to be added. To upload a shapefile, all component files must be zipped into a zip file with no additional directories or files. A valid .prj file must be included in the zip file. Maximum file size not to exceed 2 GB.

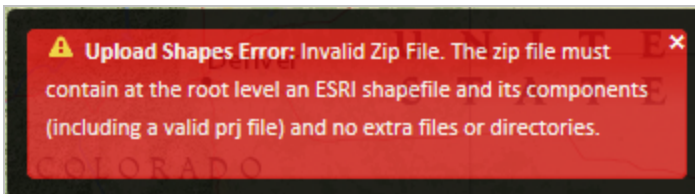
1. Enter *Upload Shapes* mode by clicking the Upload Shapes  icon.

2. Within the *Upload Shapes* dialog, click Select File to Upload



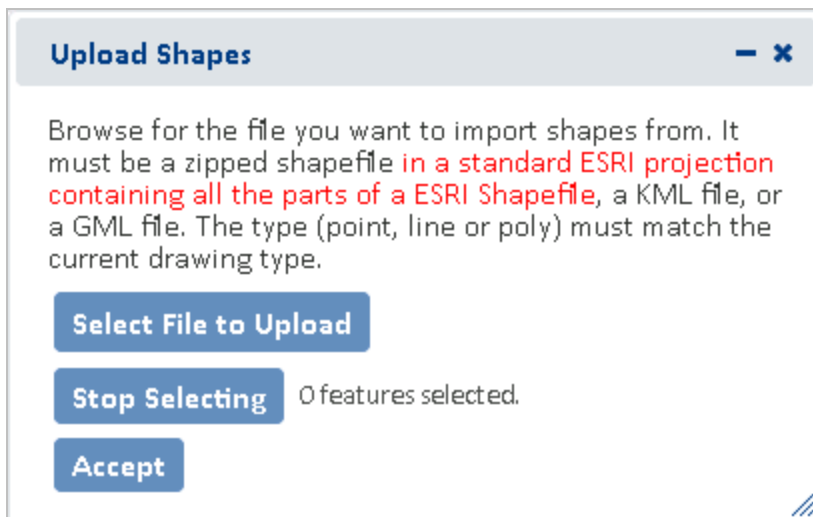
3. Navigate to and select the shapefile to add.

**NOTE:** The following message will appear if a projection file (.prj) is not included in the zip file.



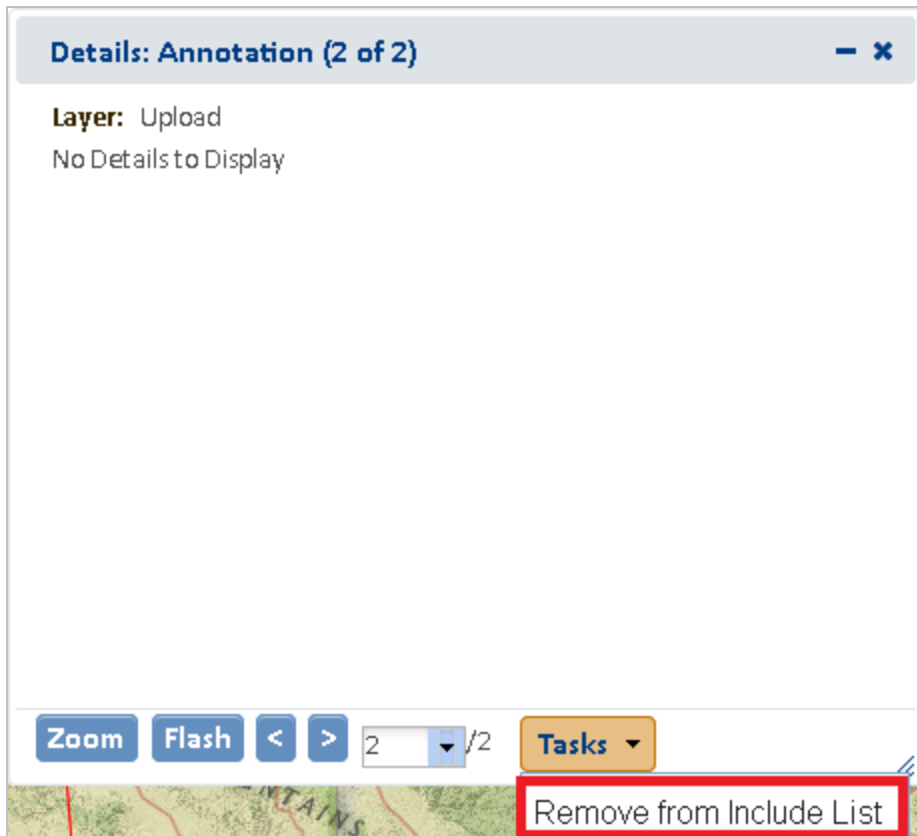
4. The map will zoom to the extent of the spatial feature(s) within the uploaded file.

a. If a file with multiple shapes has been selected, draw a box on the map to select the desired feature(s) within the uploaded layer.

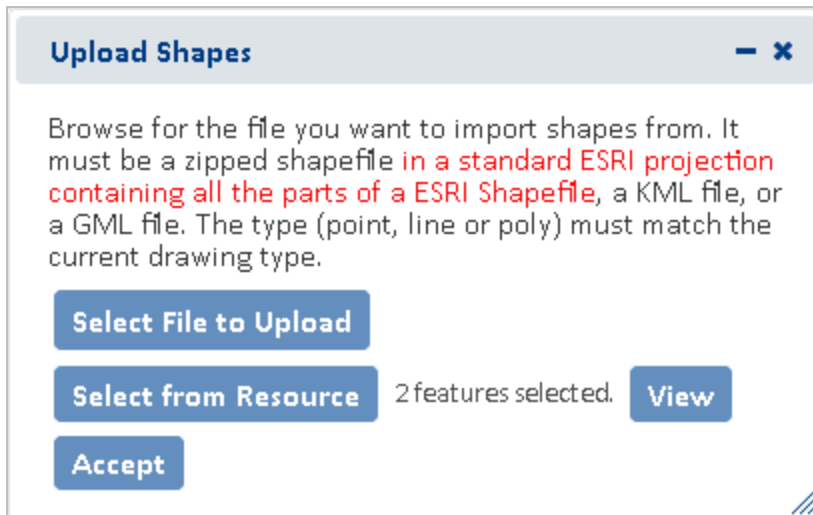


b. The *Details* dialog of the selected feature(s) will be displayed. To remove a feature from the selection, from the *Tasks* menu, select **Remove from Include List**. Once removed, the option to **Add to**

**Include List** becomes available in the *Tasks* menu.



- c. The number of features selected will be displayed in the section to the right of the *Select From Resource* button along with a **View** button, which allows the user access to the *Details* dialog again if they need to remove additional features from the selection. Alternatively, create a new selection by clicking the **Select from Resource** button again (return to Step 4a for instructions).



- d. Click **Accept** within the *Upload Shapes* dialog.
5. In the *Draw/Edit* toolbar click **Accept**.

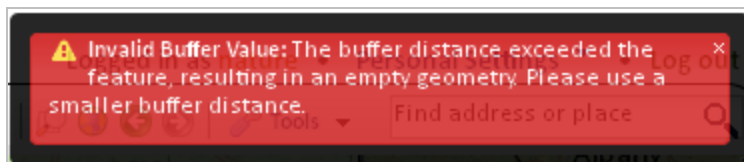
## Buffer Shape

The Buffer Shape tool can be used in conjunction with the **Draw Shape** tool or **Additional Mapping Options**.

1. Either draw a shape using the **Draw Shape** tool or create a shape using the **Additional Mapping Options** tool.
2. Enter Buffer mode by clicking the **Buffer Shape** icon.
3. In the *Buffer* dialog, enter a buffer *Distance* and select the desired distance unit from the dropdown. Click **Buffer**.

### Use of Buffers

- A positive distance will buffer outside the feature whereas a negative distance will buffer within the feature. Negative distances cannot exceed the size of the shape, nor can they be used with Point or Line features. The following error will be displayed when the negative distance exceeds the size of the shape.



- Buffers are additive. Thus, if one distance is used to buffer a polygon and then another distance is entered, the second buffer will be added to the first buffer rather than to the original feature. For example, if a feature is first buffered by 5000 m, and then a second buffer distance of 2500 m is specified, the original feature ends up being buffered by 7500 m; the second distance does not replace the first.
  - To apply different buffers to a polygon without combining them, **Undo Last Drawing Change** must be used before specifying the second buffer distance. This will cause the original buffer to be removed prior to applying the second.
4. The buffer will be applied and the user is returned to the *Draw/Edit* toolbar to further modify the feature, if desired. Click **Next** to continue the process.

## Additional Mapping Options

The **Additional Mapping Options** dialog allows the user to:

- copy a shape from **Map Layers**
- copy shapes created via **Make a Map**
- enter **Coordinates**
- create a **Drawing**

This tool can be used reiteratively for multiple edits and use of various tools within a given editing session. As such, the *Additional Mapping Options To:* is used to indicate how to use the new shape:

- **Add to original drawing**


- **Replace original drawing**
- **Erase areas of overlap**
- **Crop to copied feature**

Following are the instances when this dialog will be displayed:

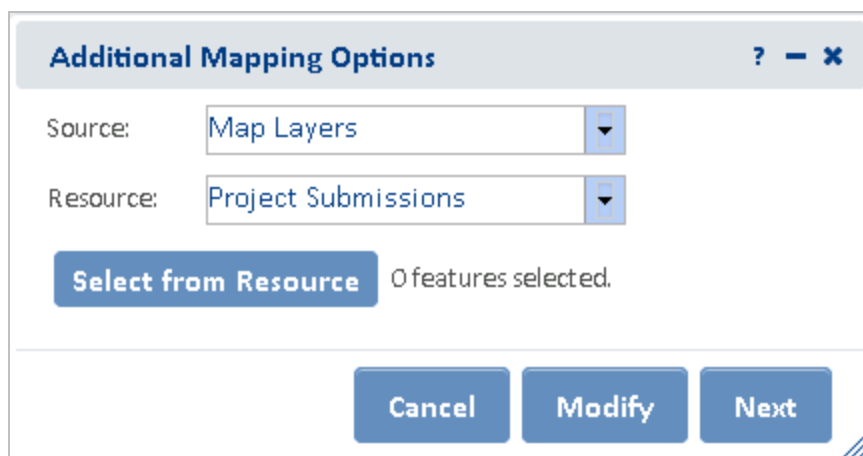
- If there is a drawing in the primary draw toolbar whose feature type (point, line, polygon) is the same as the current shape, then the **Add to original drawing** and **Replace original drawing** options will be available.
- If there is a drawing in the primary draw toolbar and the feature type of the current shape is a polygon, then the **Erase areas of overlap** and **Crop to copied feature** options will be available.
- If the feature type of the drawing in the primary draw toolbar is polygon, as is that of the current shape, then all 4 options will be available.

[back to top](#)

## Map Layers

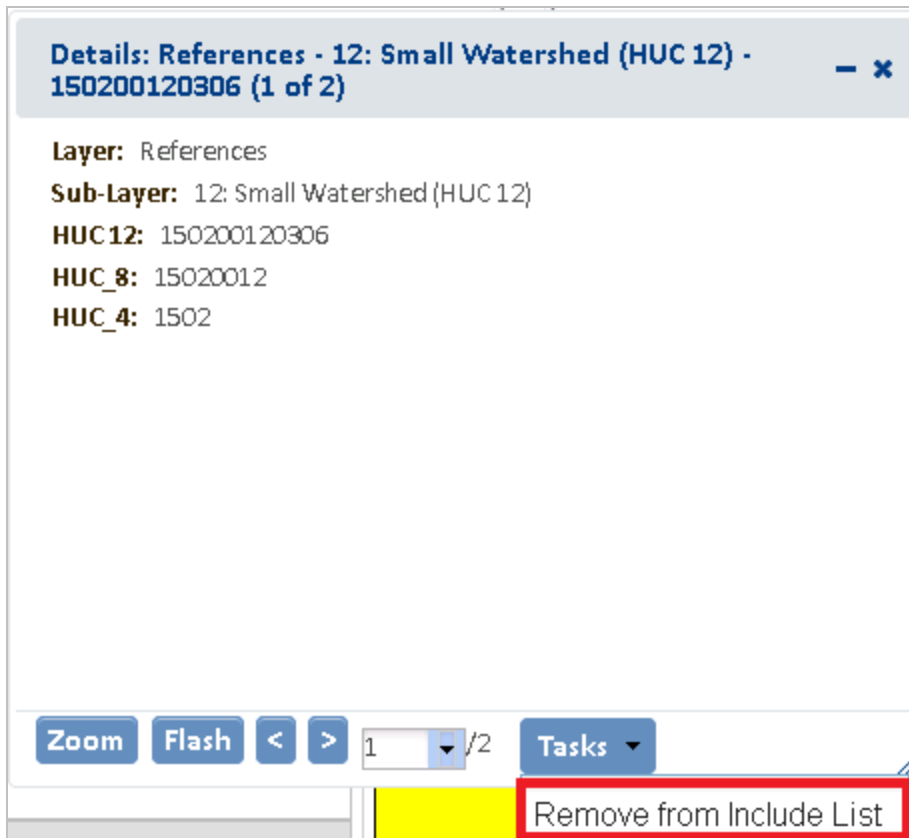
1. Click the **Additional Mapping Options**  icon.
2. In the *Additional Mapping Options* dialog, from the *Source* dropdown menu, select **Map Layers**.
3. From the *Resource* dropdown menu, select the map resource from which to copy the shape(s). The options depend on the layers available within the **Layers** section of the map.

**NOTE:** If the chosen Resource is comprised of multiple layers, an additional *Layer* dropdown list will be displayed from which to select the given layer to copy the shape(s).



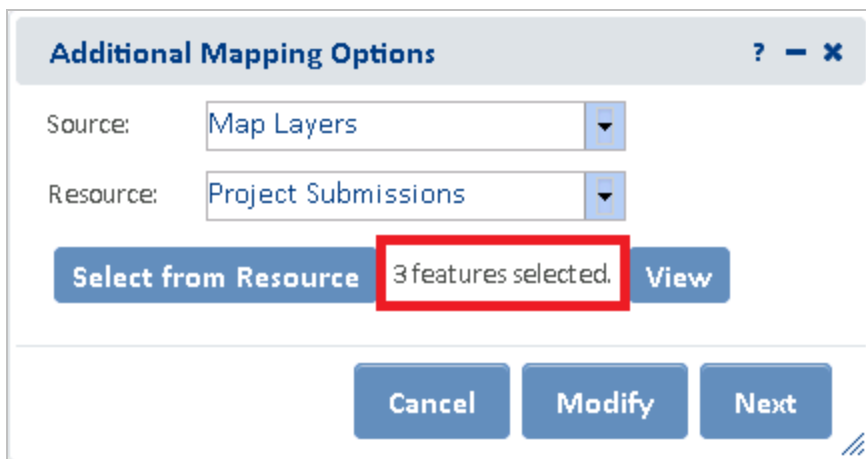
4. Click the **Select from Resource** button and holding the mouse button down, draw a box on the map to select the desired feature(s) within the Resource/Layer.
5. The *Details* dialog of the selected feature(s) will be displayed. To remove a feature from the selection, from the *Tasks* menu, select **Remove from Include List**. Once removed, the option to **Add to Include List**

becomes available in the *Tasks* menu.



6. The number of features selected will be displayed to the right of the *Select From Resource* button along


with a **View** button, which allows the user access to the *Details* dialog again if they need to remove additional features from the selection. Alternatively, create a new selection by clicking the **Select from Resource** button again (return to Step 4 for instructions).

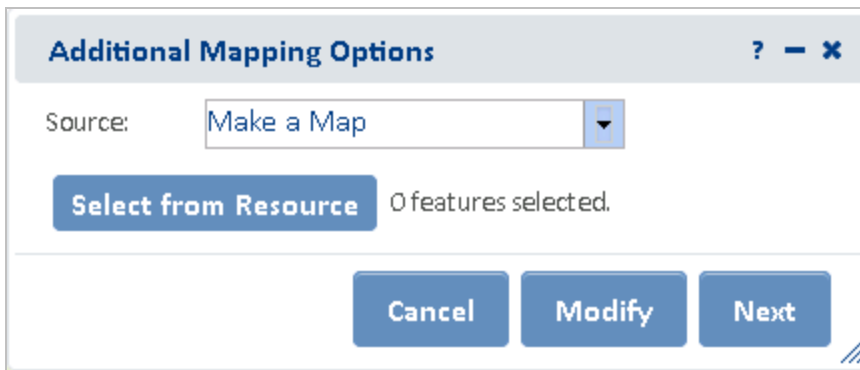


7. To further modify the selected features, click **Modify** or **Next** to use the features as they exist.  
 8. In the *Draw/Edit* toolbar click **Accept** unless further edits are needed.

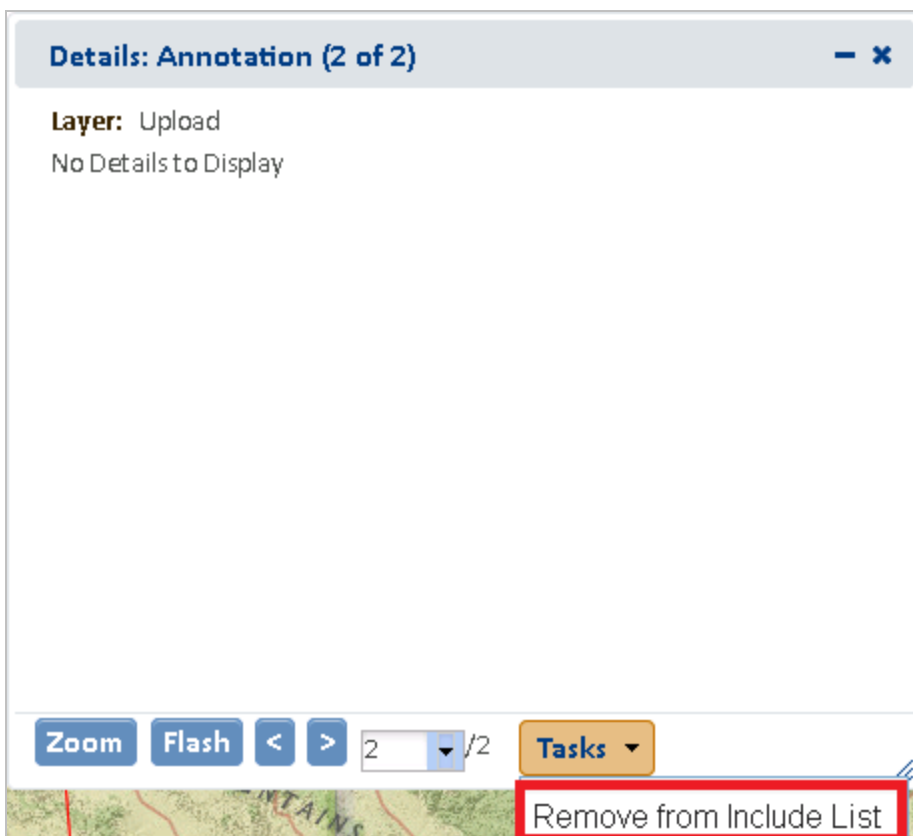
[back to top](#)

## Make a Map

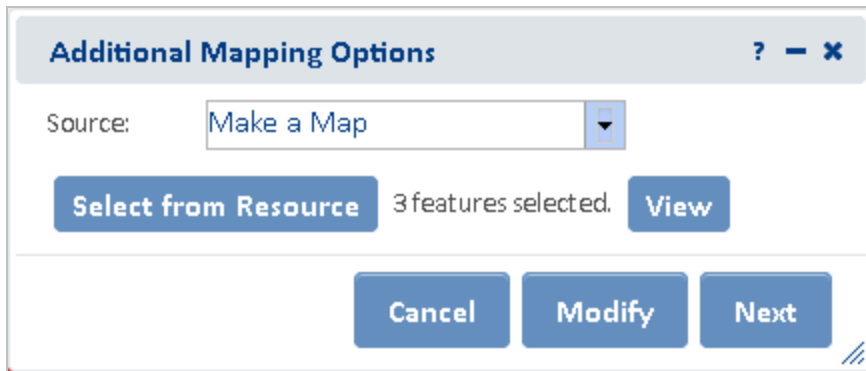
1. Click the **Additional Mapping Options**  icon.
2. In the *Additional Mapping Options* dialog, from the *Source* dropdown menu, select **Make a Map**.
3. Click the **Select from Resource** button and click on the desired feature(s).



4. The number of features selected will be displayed in the Spatial Search section to the right of the *Select From Resource* button along with a **View** button, which allows the user access to the *Details* dialog again if they need to remove additional features from the selection. Alternatively, create a new selection by clicking the **Select from Resource** button again (return to Step 2 for instructions).




5. To further modify the selected features, click **Modify** or **Next** to use the features as they exist.



6. In the *Draw/Edit* toolbar click **Accept** unless further edits are needed.

[back to top](#)

## Coordinates

1. Click the **Additional Mapping Options**  icon.
2. In the *Additional Mapping Options* dialog, from the *Source* dropdown menu, select **Coordinates**.
3. Select the desired **Projection** and enter in the formats shown:
  - **Latitude/Longitude (DMS)**
    - Latitude (Northing): 42d 42' 44"
    - Longitude (Easting): -75d 38' 38"
  - **Latitude/Longitude (Decimal)**
    - Latitude (Northing): 42.712326430204115
    - Longitude (Easting): -75.64402639639827
  - **Subnational Projection** - the projection used by your HP/CDC within the Biotics application. Contact your Biotics Administrator for further information.
  - **Define Projection**

**NOTE:** WKID and WKT values can be found at <http://www.spatialreference.org>

- **By Well Known ID (WKID):** 3857

- Latitude (Northing): 5268287
- Longitude (Easting): -8420654.5

- **By Well Known Text (WKT):**

The WKT can be copied directly from a projection file (.prj). Below is an example.

```
PROJCS["WGS_1984_Web_Mercator_Auxiliary_Sphere",GEOGCS["GCS_WGS_1984",DATUM
["D_WGS_1984",SPHEROID["WGS_1984",6378137.0,298.257223563]],PRIMEM["Green-
wich",0.0],UNIT["Degree",0.0174532925199433]],PROJECTION["Mercator_Auxiliary_
Sphere"],PARAMETER["False_Easting",0.0],PARAMETER["False_Northing",0.0],PARAMETER
["Central_Meridian",0.0],PARAMETER["Standard_Parallel_1",0.0],PARAMETER["Auxiliary_
Sphere_Type",0.0],UNIT["Meter",1.0],AUTHORITY["ESRI",102100]]
```

- Latitude (Northing): 5268287



- Longitude (Easting): -8420654.5

**Additional Mapping Options** ? - x

Source:

Projection:

Define By:

Well-Known String:

```
PROJCS["WGS_1984_Web_Mercator_Auxiliary_Sphere",GEOGCS["GCS_WGS_1984",DATUM["D_WGS_1984",SPHEROID["WGS_1984",6378137.0,298.257223563]],PRIMEM["Greenwich",0.0],UNIT["Degree",0.0174532925199433]],PROJECTION["Mercator_Auxiliary_Sphere"],PARAMETER["False_Easting",0.0],PARAMETER["False_Northing",0.0],PARAMETER["Central_Meridian",0.0],PARAMETER["Standard_Parallel_1",0.0],PARAMETER["Auxiliary_Sphere_Type",0.0],UNIT["Meter",1.0],AUTHORITY["ESRI","102100"]]
```

Latitude (Northing):

Longitude (Easting):

Click the Map for Coordinates

**Zoom and Preview**

4. Click **Zoom and Preview**.
5. To further modify the selected features click, **Modify** or **Next** to use the features as they exist.
6. In the *Draw/Edit* toolbar click **Next** unless further edits are needed.

[back to top](#)

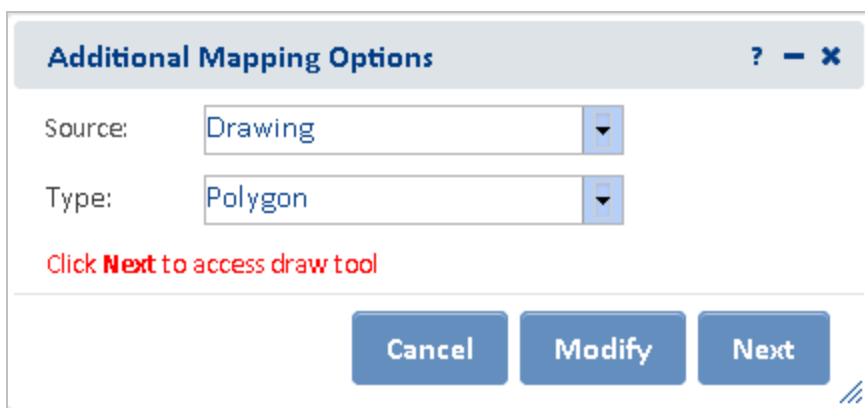
## Drawing

This option enables drawing of any feature type (Point, Line, Polygon) whereas the default **Draw Shape** tool within the Draw/Edit toolbar is limited to polygonal features.



1. Click the **Additional Mapping Options** icon.
2. In the *Additional Mapping Options* dialog, from the *Source* dropdown menu, select **Drawing**.

- From the *Type* dropdown menu, select the type of spatial feature (**Point**, **Line**, or **Polygon**) to draw and click **Next**.



- The *Draw shape to use as other Source* dialog will be displayed. Draw the desired shape and click **Next**.
  - Single click to draw a point.
  - For lines and polygons, click every location a vertex is to be placed (unless the **Use Freehand** option is selected) and double-click to complete feature.
- In the case of a line or polygon feature, the *Draw/Edit* toolbar will be displayed, allowing the user to edit the feature further. Click **Next** to continue.

[back to top](#)

## Other Draw/Edit Tools

- **Undo**
- **Redo**
- **Clear Shape**
- **Draw Settings**

The *Draw Settings* dropdown menu includes two options:

- **Use Freehand** provides the ability to digitize a feature freehand rather than by clicking to add individual vertices.
- **Disable Navigation while Drawing** - a setting that is on by default - improves drawing performance by switching map navigation (i.e., pan and zoom functionality) off once the first vertex of a shape has been placed, and re-enabling navigation when the shape is closed. Leaving this draw setting enabled prevents the application from interpreting a longer touch on the cursor while digitizing as an attempt to pan, which would cause the map to be refreshed and any vertices digitized to be lost.

[back to top](#)

## Related Topics:

- **Create a Project**
- **Make a Map**
- **Scale Bar**
- **Zoom to Coordinates or Scale**

---

# Map Navigation

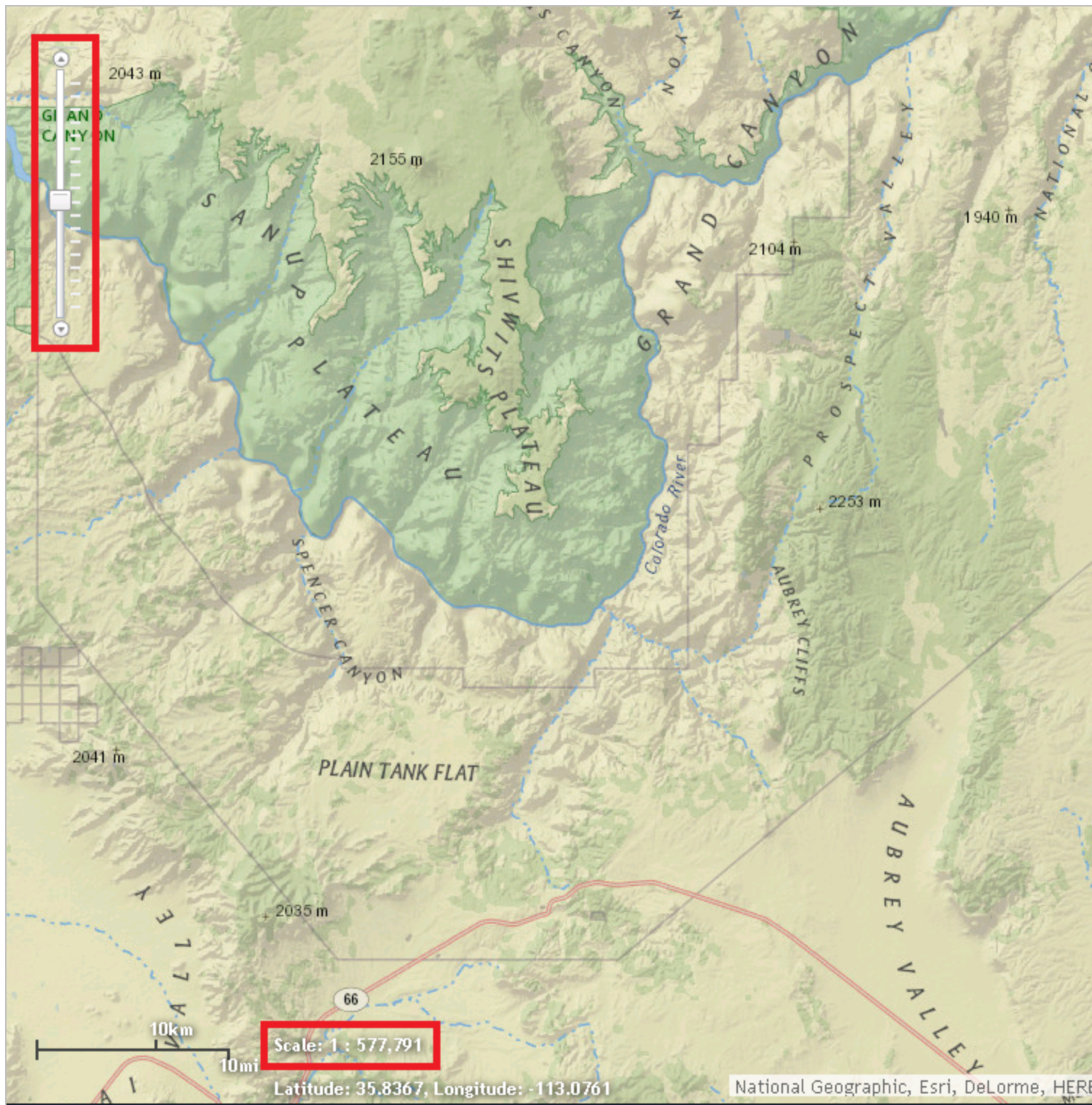
Several categories of tools are available for efficiently moving to specific locations and changing the display in the map viewer.

- Navigation Tools:
  - **Find Address or Place**
  - **Scale bar**
  - **Zoom to Coordinates or Scale**
  - **Overview map**
  - **Spatial Bookmarks**
- Extent tools:
  - **Default Extent**
  - **Previous Extent**
  - **Next Extent tools**
- Shortcuts:
  - **Zoom In**
  - **Zoom Out**

## Scale Bar

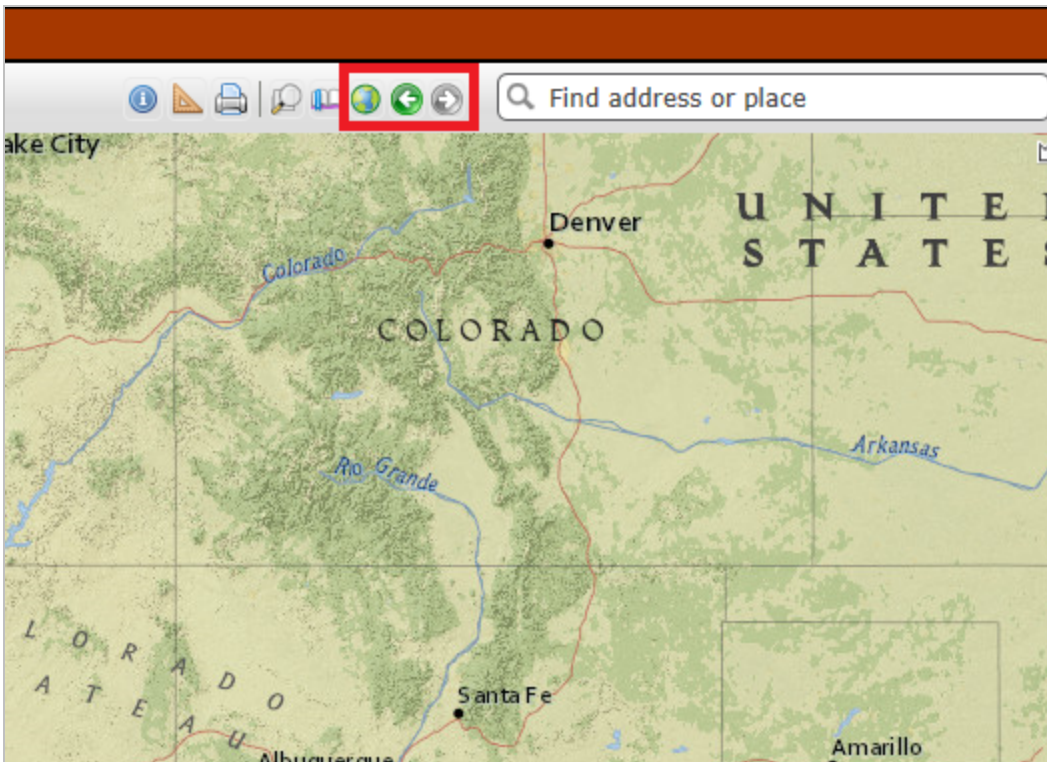
Slide the scale bar up and down to zoom in and out respectively, changing the map extent.

**NOTE:** the map scale and coordinates are visible in the bottom left hand corner of the map viewer (example below) and change accordingly when the scale bar or any other navigation tools are used.



[back to top](#)

## Extent tools



### Default Extent

To zoom to the initial extent of the map, click the **Default Extent** icon located in the upper right corner of the map title bar.

### Previous Extent

To zoom to the previous extent of the map, click the **Previous Extent** icon located in the upper right corner of the map title bar.

### Next Extent

To zoom to the next extent of the map, click the **Next Extent** icon located in the upper right corner of the map title bar.

**back to top**

## Shortcut Tricks

**Zoom in** - Hold the SHIFT key while dragging a box on the map.

**Zoom out** - Hold SHIFT and CTRL keys while dragging a box on the map.

**back to top**

Related Topics:

- **Find Address or Place**
- **Overview Map**
- **Zoom to Coordinates or Scale**

## Find Address or Place

This tool navigates to locations on the map using the **ArcGIS Geocoder** as the source of the data.

Steps:

1. Found in the upper right corner of the Map, the **Find address or place** tool uses the ArcGIS Geocoder as the source of the search, by default.




Switch Basemap Add Resources Create Project

2. Enter the desired location (i.e., **Strawberry, AZ**) in the *Find address or place* text box

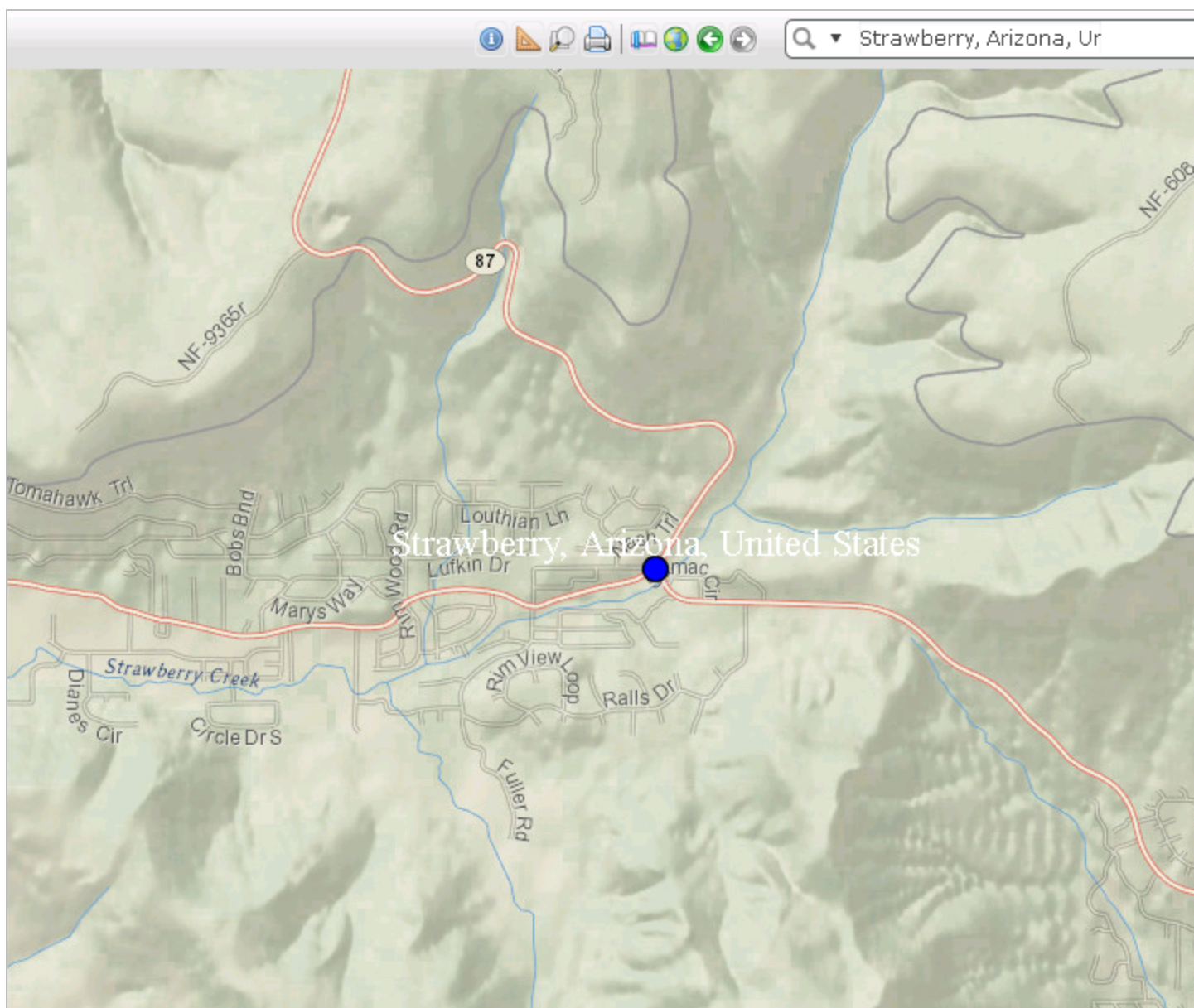


Find address or place

3. Click **<Enter>** or click the **Find**  icon to zoom to the specified location on the map.

**NOTE:** An alternate mode of zooming to a specific location, in cases when the desired location is not found,

is to use the **Feature Search** tool to find the location within one of the map layers, and then zoom to it.



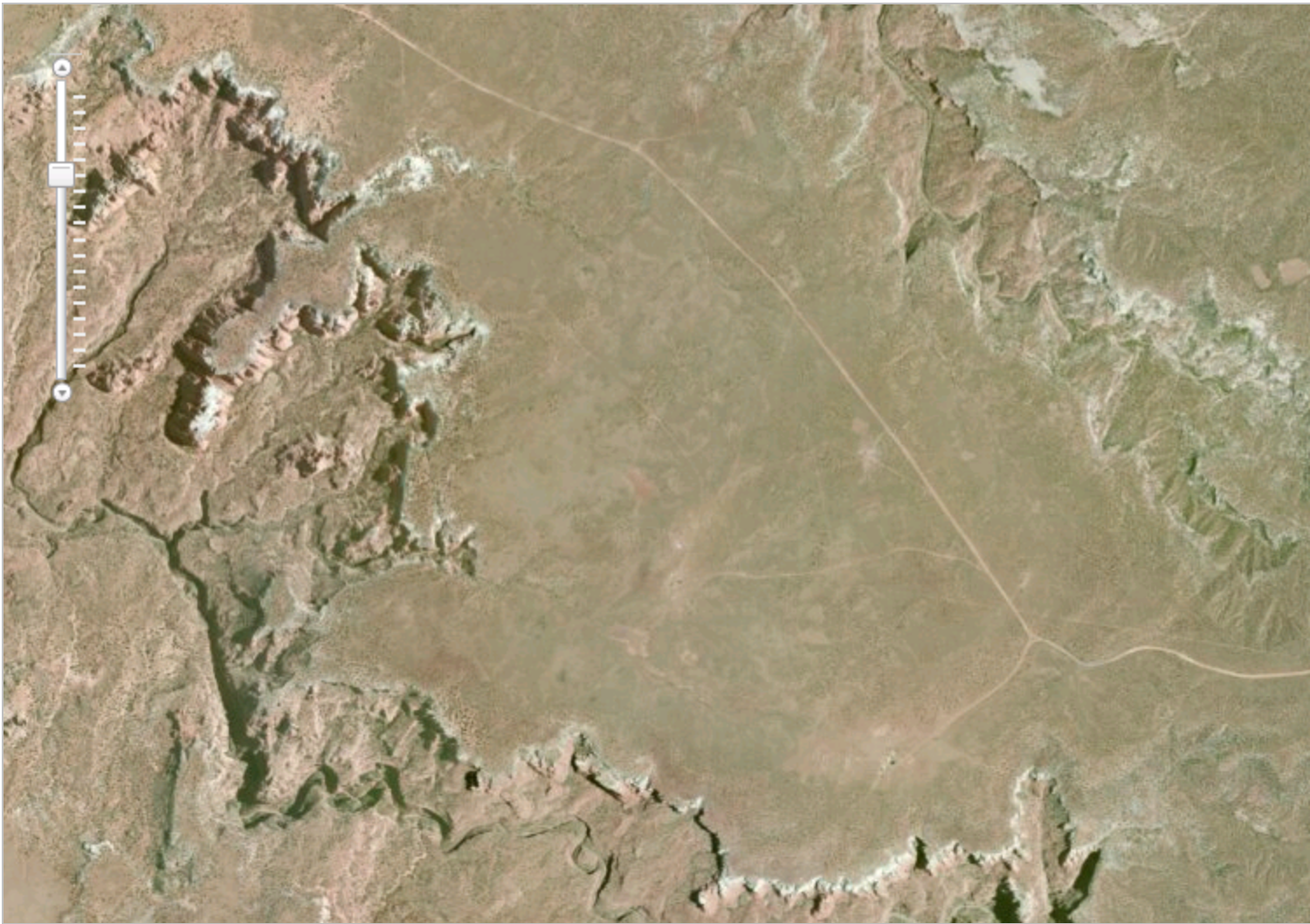
[back to top](#)

### Related Topics:

- [Feature Search](#)
- [Map Navigation](#)

## Overview Map

The Overview Map, located in the upper right corner of the map, is useful for keeping track of your location within the state when zoomed into an area on the main map.



- Show the Overview Map by clicking the arrow icon.
- Hide the Overview Map by clicking the arrow icon in the upper right corner.
- Change the map extent by dragging the gray box within the Overview Map. The main map adjusts when the mouse button is released.



[back to top](#)

### Related Topics:


- **Map Navigation**

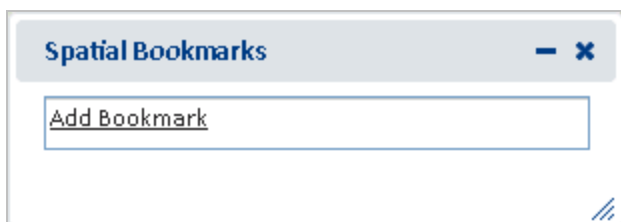




## Spatial Bookmarks

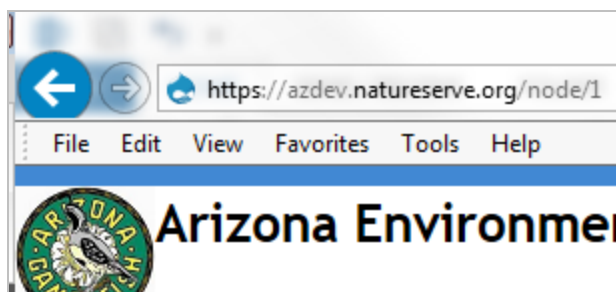
Bookmark the map at a particular extent and location to return to for later use during the same logged in session.

### Steps:

1. Within the *Map* menu, navigate to the desired location.
2. Click the **Spatial Bookmarks**  icon located in the upper right corner of the map title bar.
3. Within the *Spatial Bookmark* dialog:



- **Add** a bookmark by clicking **Add Bookmark** to enter a name for the bookmark. Hit the *TAB* or *ENTER* key on the keyboard to save the bookmark.
- **Edit** a bookmark name by clicking the Edit icon  and editing the name of the bookmark. Hit the *TAB* or *ENTER* key on the keyboard to save the bookmark.
- **Remove** a bookmark by clicking the Remove icon 



- **Zoom to** an existing spatial bookmark by clicking its name.

[back to top](#)

### Related Topics:

- [Map Navigation](#)

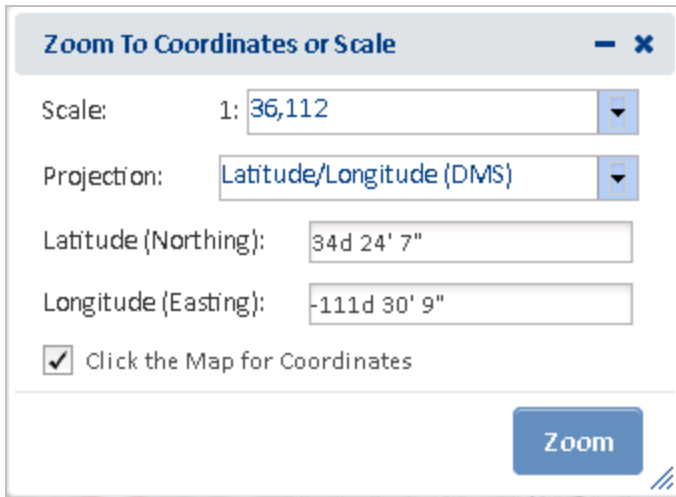
## Zoom to Coordinates or Scale

This navigation tool is used to quickly adjust the map display according to either the coordinates or map scale specified by the user.

## Steps:

1. Within the *Map*, click the **Zoom To Coordinates or Scale**  icon located in the upper right corner of the map title bar.

The *Zoom To Coordinates or Scale* dialog opens, displaying the current map scale and coordinates, as indicated on the map by a red diamond.



2. Select the desired **Scale**.
3. To zoom to a different location, select the **Projection** and enter the desired **Latitude (Northing)** and **Longitude (Easting)**. Alternatively, with the **Click for the Map for Coordinates**

Click the Map for Coordinates

checkbox indicated, click anywhere on the map to view the coordinates of that location, in the selected **Projection**. Coordinates can be entered in the following projections in the formats shown:

- **Latitude/Longitude (DMS)**
  - Latitude (Northing): 42d 42' 44"
  - Longitude (Easting): -75d 38' 38"
- **Latitude/Longitude (Decimal)**
  - Latitude (Northing): 42.712326430204115
  - Longitude (Easting): -75.64402639639827
- **UTM Zone 17** or **UTM Zone 18**
  - Latitude (Northing): 4254911.012366921
  - Longitude (Easting): -2346228.775082956
- **Define Projection**

**NOTE:** WKID and WKT values can be found at <http://www.spatialreference.org>

- **By Well Known ID (WKID):**3857
  - Latitude (Northing): 5268287
  - Longitude (Easting): -8420654.5
- **By Well Known Text (WKT):**

The WKT can be copied directly from a projection file (.prj). Below is an example.

- PROJCS["WGS\_1984\_Web\_Mercator\_Auxiliary\_Sphere",GEOGCS["GCS\_WGS\_1984",DATUM["D\_WGS\_1984",SPHEROID["WGS\_1984",6378137.0,298.257223563]],PRIMEM["Greenwich",0.0],UNIT["Degree",0.0174532925199433]],PROJECTION["Mercator\_Auxiliary\_

```
Sphere"],PARAMETER["False_Easting",0.0],PARAMETER["False_Northing",0.0],PARAMETER["Central_Meridian",0.0],PARAMETER["Standard_Parallel_1",0.0],PARAMETER["Auxiliary_Sphere_Type",0.0],UNIT["Meter",1.0],AUTHORITY["ESRI","102100"]]
```

- Latitude (Northing): 5268287
- Longitude (Easting): -8420654.5

**Zoom To Coordinates or Scale** - x

Scale: 1:

Projection:

Define By:

Well-Known String:

```
PROJCS["WGS_1984_Web_Mercator_Auxiliary_Sphere",GEOGCS["GCS_WGS_1984",DATUM["D_WGS_1984",SPHEROID["WGS_1984",6378137.0,298.257223563]],PRIMEM["Greenwich",0.0],UNIT["Degree",0.0174532925199433]],PROJECTION["Mercator_Auxiliary_Sphere"],PARAMETER["False_Easting",0.0],PARAMETER["False_Northing",0.0],PARAMETER["Central_Meridian",0.0],PARAMETER["Standard_Parallel_1",0.0],PARAMETER["Auxiliary_Sphere_Type",0.0],UNIT["Meter",1.0],AUTHORITY["ESRI","102100"]]
```

Latitude (Northing):

Longitude (Easting):

Click the Map for Coordinates

4. Click **Zoom**. A red diamond indicates the location on the map. This is removed when the dialog is closed.
  - If only a new map scale is selected, the map viewer will automatically zoom in or out to the selected scale, while remaining in the same location.
  - If only coordinates are edited (regardless of a change in projection), the map viewer will zoom to the location defined by the coordinates but remain at the same scale.
  - If both map scale and coordinates were changed, the map viewer adjusts location and scale accordingly.

[back to top](#)

## Related Topics:

- [Map Navigation](#)

# Measure

The measure tool is used to determine the size of a designated area, the distance of a digitized line, and the coordinates of a specific location.

## Steps:

1. Within the map, click the **Measure** icon, located in the upper right corner of the map title bar.
2. Select the desired measurement tool and the appropriate unit of measure from the dropdown list.
  - Area
  - Distance
  - Location
3. Digitize the feature to be measured:
  - Point - click the desired location
  - Line - digitize a line, double-clicking to complete the feature
  - Polygon - digitize a polygon, double-clicking to complete the feature
4. The *Measurement Result* is reported in the specified units once the line/polygon has been completed.

**NOTE:** The measurement unit can be changed after the feature has been digitized and the measurement result will be displayed in the newly selected unit.

**back to top**


## Related Topics:


- **Find address or place**
- **Identify**
- **Map Navigation**
- **Zoom to Coordinates or Scale**


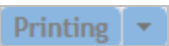
# Print

Allows the user to create a printable version of the map view.

## Steps:

1. Within the *Map* menu, click the  icon located in the upper right corner of the map title bar.
2. Within the *Print Map* dialog, enter pertinent information within the **Title**, **Author**, and **Copyright** text boxes only if intending to print to **Landscape Layout**. This information is not utilized by the **Map Only** print options and hence need not be included if printing the Map Only.



3. From the **Print** dropdown menu , select the desired print option:
  - **Landscape Layout (PDF)** - provides a PDF of the map including the Title, Author, and Copyright information provided.
  - **Map Only (PDF)** - provides a PDF just of the map itself. Neither Title, Author, nor Copyright information is utilized.
  - **Map Only (PNG)** - provides a PNG just of the map itself. Neither Title, Author, nor Copyright information is utilized.
  - **Map Only (JPG)** - provides a JPG just of the map itself. Neither Title, Author, nor Copyright information is utilized.
4. The Print dropdown reflects **Printing**  while the map is being generated.
5. The map opens in a separate tab within the web browser. **NOTE:** The printed map cannot be opened in a new tab unless the pop-up blocker is turned off. If prompted, choose to **Always allow** pop-ups from this site.

Title



May 7, 2014

6. From the *File* menu of the web browser, select **Save As** and indicate where (and with what name the map document should be saved.

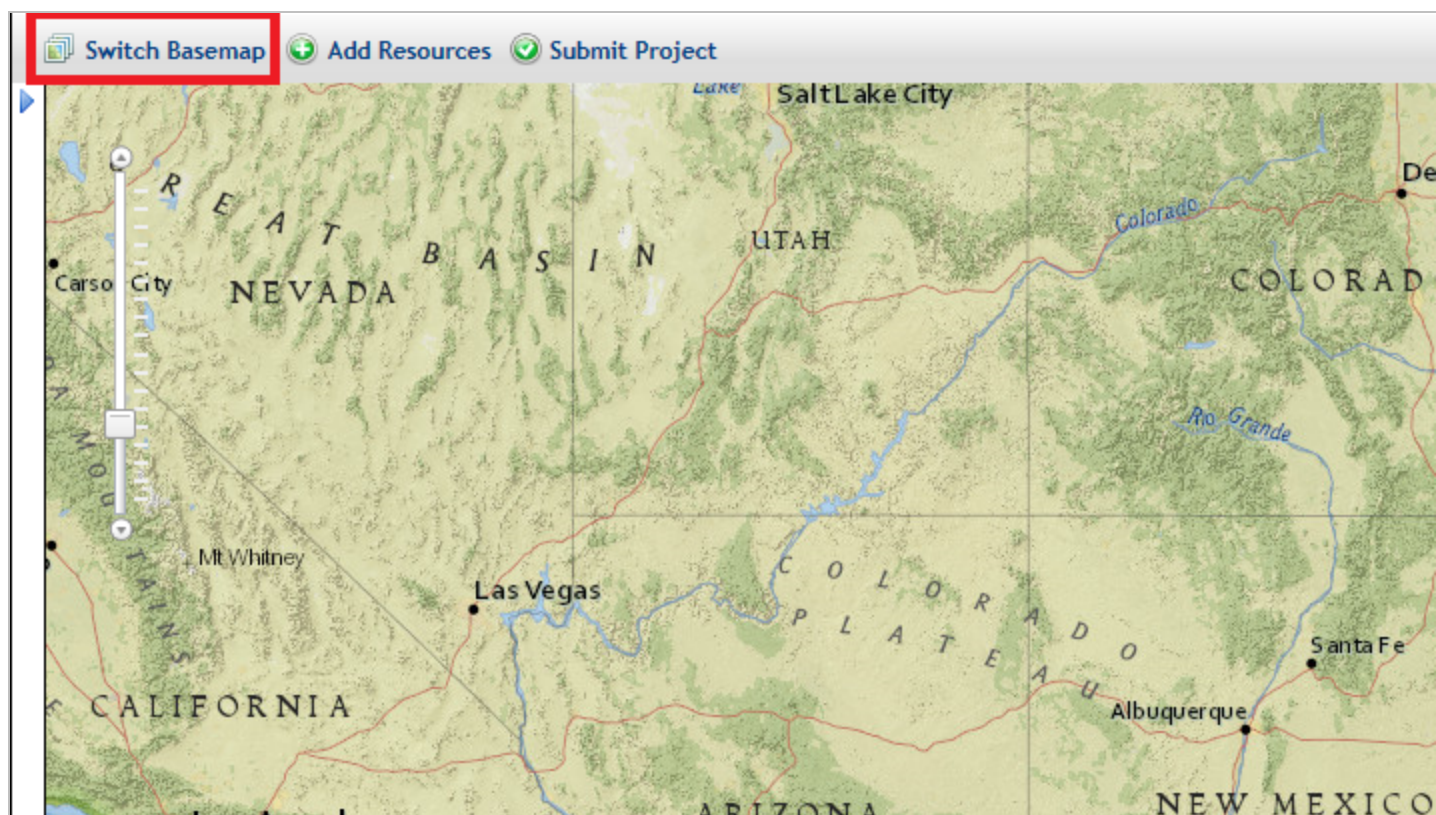
[back to top](#)

## Switch Basemap

A basemap provides a background geographical context for the content displayed on a map. Within the map viewer, the basemap can be changed at any time by choosing a layer from the basemap gallery (e.g., topography, imagery, streets) or made invisible.

### Steps:

1. Within the Map, click the **Switch Basemap** button, located in the upper left corner of the map title bar.



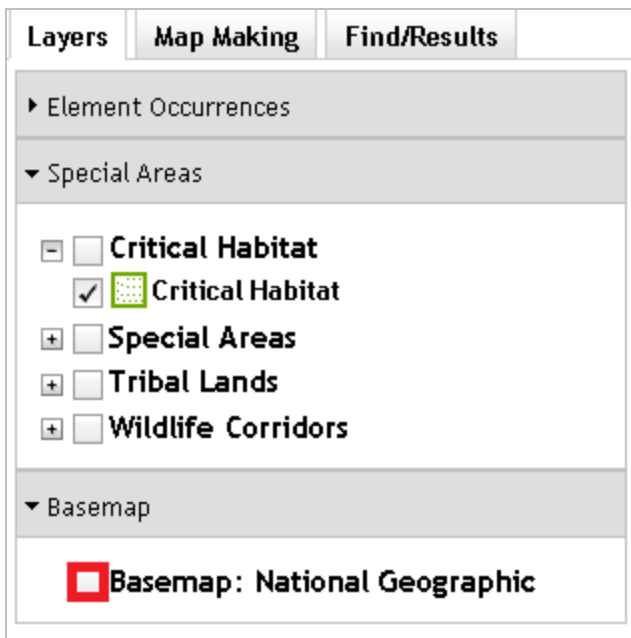
2. Within the *Switch Basemap* dialog, click the thumbnail of the basemap to be used in the map.

3. The basemap in the main map will change accordingly.

**NOTE:** The overview map retains the National Geographic basemap in order to ensure that there is always a geographic context, which may not be so evident using the other basemaps.

4. To turn off or make the base map invisible, uncheck the toggle box associated with the **Basemap** layer

within the *Basemap* accordion section of the *Layers* tab.



**back to top**

Related Topics:

- **Add Resources**
- **Test Map Service**
- **Map Services**



## My Projects

The *My Projects* page reflects each of the projects a user has submitted along with basic information pertaining to the project, including **Title**, **Date Submitted**, **Project Description**, **Edit Status**, and **Project Status**.

Title	Date Submitted	Project Description
<a href="#">Make a Map</a>	9/24/2014 10:00 AM	Selected features from Make a Map using Creating Project
<a href="#">IBA intersection</a>	8/6/2014 02:46 PM	testing IBA dynamic analysis text and PT-
<a href="#">PT-10101 &amp; IBA</a>	8/6/2014 01:09 PM	testing IBA, PT-10101 & annotations in pr with IBA_Out
<a href="#">Big Box - HGIS-212</a>	8/5/2014 02:27 PM	Testing HGIS-212 - repeat table header
<a href="#">Long title name to test 40 character limit and that shapefile still generating successfully</a>	7/28/2014 09:00 AM	Long title name to test 40 character limit a generating successfully. Testing

### Related Topics:

- [Create Project](#)
- [Edit Project](#)
- [Email](#)
- [View Project](#)

## Create Project

Create Project can be initiated on its own or after adding features to the map within the **Make a Map** section.

- use the **Draw/Edit** toolbar
- use features drawn via **Make a Map**


### Draw/Edit toolbar

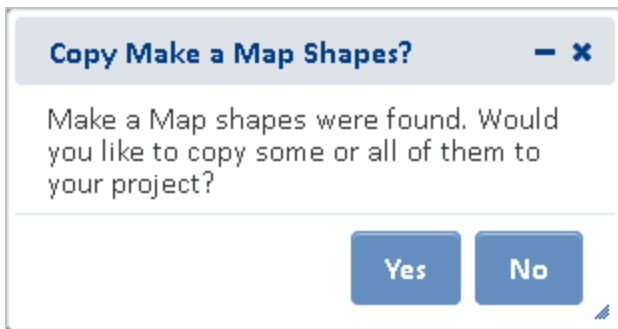


1. Within the *Map*, click **Create Project**.
2. The *Draw/Edit* toolbar opens.
3. Use the various tools available within the **Draw/Edit** toolbar to define the spatial parameters of the project area.
4. **Continue to the *Create Project* dialog.**

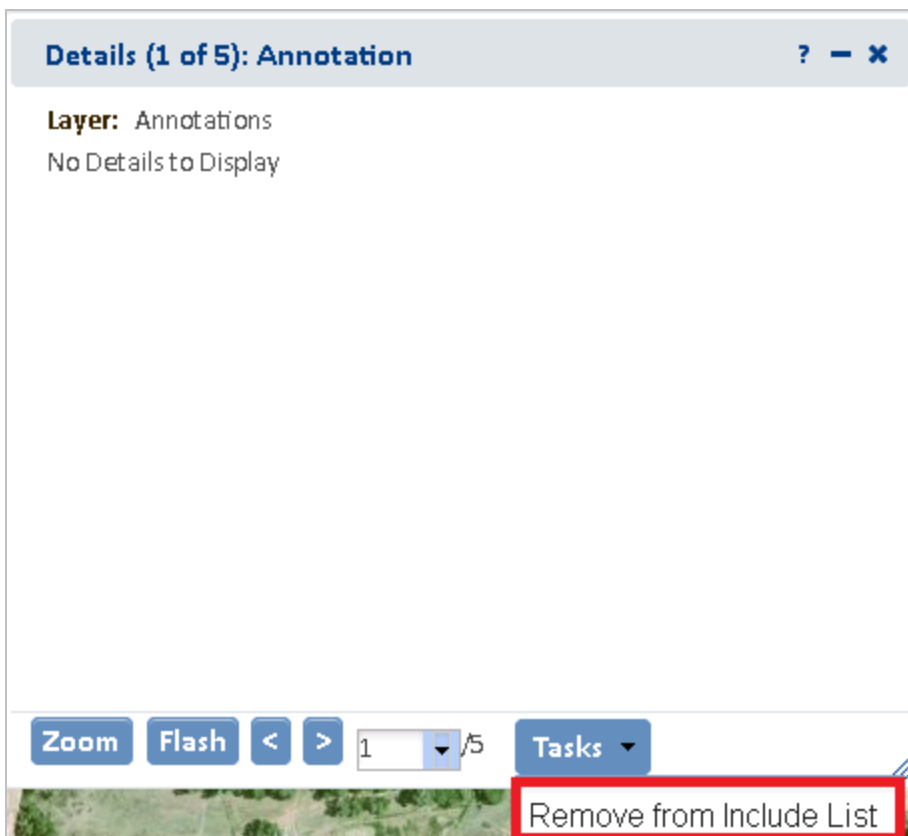
**back to top**


## Make a Map

1. Within the *Map*, click **Create Project** .
2. A prompt will ask if you would like to copy some or all of the shapes to create the project boundary. Click **Yes** to use the shapes previously drawn or **No** to utilize the **Draw/Edit toolbar**.




3. The *Details* dialog of the Make a Map feature(s) are displayed. To remove a feature from the selection, from the *Tasks* menu, select **Remove from Include List**. Once removed, the option to **Add to Include List** becomes available in the *Tasks* menu.





4. After completing the selection of which features to include, close the *Details* dialog using the  in the upper right corner.

5. Within the *Additional Mapping Options* dialog, the number of features selected is displayed to the right of

the **Select From Resource**  button.

a. **View**  button: allows the user access to the *Details* dialog again to add/remove additional features to/from the selection.

b. **Select from Resource** : allows the user to create a new selection (return to Step 4 for instructions).

c. Click **Next**  to use the features as they exist or **Modify**  to further modify the selected features.

6. In the *Draw/Edit* toolbar click **Accept** unless further edits are needed.

7. **Continue to the *Create Project* dialog.**

[back to top](#)

## Create Project

1. After clicking **Accept** in the *Draw/Edit* toolbar, the *Create Project* dialog opens.

### Create Project

Project Title \*

User Project Number  
*An (optional) organization-specific project number for user tracking purposes.*

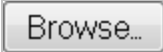
  
  

Project Type \*  
*Select only one Project Type per project*

- Agricultural Operations
- Communication
- Development Outside Municipalities (Rural Development)
- Development Within Municipalities (Urban Growth)
- Energy Storage/Production/Transfer
- Forest, Woodland, Vegetation Management
- Habitat Conservation and Restoration
- Hazardous Waste Cleanup, site remediation, and reclamation
- Law Enforcement Activities Associated with the Border
- Military Activities
- Mining
- Pest Control
- Recreation Areas

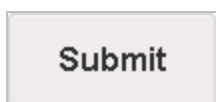
2. Within the *Create Project* dialog, enter the following information to describe the project. **NOTE:** required fields are labeled with a red asterisk \*.
  - **Project Title\*** - title which will help to distinguish it from other project submissions
  - **Project Type\***
  - **Project Description\*** - succinctly describe the proposed work within the project area (i.e. residential subdivision)
  - **On Behalf Of**

- Contact information - this data will be auto-populated according to the information associated with the logged in user. Change as appropriate. The e-mail will be used to notify the logged in user once the review has been completed.
- **File attachments** such as photographs, survey documents, site plans, etc. can be uploaded and

attached to the project form. **Browse**  to the desired file(s) and then click **Upload**



. **NOTE:** Files must be less than 2 MB in size. Only files with the following extensions may be uploaded: jpg, jpeg, gif, png, txt, docx, xlsx.



5. Click **Submit** to submit the project for review.
6. A message will be displayed indicating that the project has been successfully submitted and that the results will be e-mailed to the address provided.

Thank you for submitting your project for review. A notification email will be sent once the automated review is complete. Depending on system this may take up to 10 minutes.

7. Navigate to the *My Projects* menu to view the **Submission Status** of each of your projects.
8. After the initial review of the project has been completed, an e-mail containing a link to the project report is sent. Click on the link within the e-mail to view the project report. Alternatively, access the project report via **My Projects**.

**back to top**

## Related Topics:

- **Draw/Edit toolbar**
- **Edit Project**
- **Make a Map**
- **My Projects**
- **View Project**

## Edit Project


Project edits are limited to projects with *Project Edit Status* of **Saved** (not **Final**). **NOTE:** Evaluators and Administrators of the system have additional privileges which allow them to edit Final projects.

There are two means for editing the Project - by editing the **details** associated with the project and by editing the project's **spatial boundary**. Project edits trigger a new project review to be initiated. Each edition will be reflected within the *Project Details* page, available via **View Project**.

## Steps:

1. Navigate to the *My Projects* tab.
2. Within *My Projects*, click on the **Title** of the project to be edited.
3. Edit the **details** or **spatial boundary** of the project.

### Details

- a. Within the *Project Details* page, click the **Edit** button  at the top of the page.
- b. Edit the desired content. **NOTE:** *Project Type* is only editable by users with **Evaluator** or **Administrator** privileges.




- Click **View Changes**  to view the edits made to the project.

Original	Changes
<b>Changes to <i>On Behalf Of</i></b>	
-	+ <b>AZGFD</b>
<b>Changes to <i>Edit Status</i></b>	
- <b>Saved</b>	+ <b>Final</b>

- d. Click the **Save** button  to save the edits.

### back to top

### Spatial Boundary

- a. Within the *Project Details* page, click the **Map** button  at the top of the page.
- b. Within the *Map*, click the **Edit Project** button  in the toolbar. **NOTE:** To cancel the edit and return to the main **Map**, click the **Cancel Edit Project**  button in the toolbar.
- c. Use the various tools available within the **Draw/Edit toolbar** to edit the spatial boundary of the Project and click **Accept**.

- d. A message will be displayed indicating that the updates have been made.

Your project has been updated. A notification email will be sent once the automated review is complete. Depending on system load, this may take up to 10 minutes.

**back to top**

### Related Topics:

- **Create Project**
- **My Projects**
- **View Project**

## Email

Evaluators and Administrators of the system have additional privileges which enable them to Email the project Contact with relevant questions.

### Steps:

1. Using **List All Projects**, navigate to the desired project.
2. Click the **Email** tab to send an email to the **Contact** person for the project.
3. The email form will be autopopulated with the email address of the contact (*To*) as well as the title of the project in the *Subject* line. Within the body of the email, replace **(insert message here)** with the per-

minent message.

**Submitting this form will send an email to the contact person for this project.**

To:

whitney1weber@gmail.com

Subject: \*

AZGFD HGIS 2.0 : Upload shapes from shapefile

Message: \*

Dear ERT Support,

**(insert message here)**

If you have questions or need further assistance, please contact me at your earliest convenience.

Sincerely,

ERT Support  
NatureServe  
703-908-1800

Arizona Game and Fish Department  
<https://azgfd.natureserve.org/>

body p

[Switch to plain text editor](#)

Text format

Filtered HTML

- Web page addresses and e-mail addresses turn into links automatically.
  - Allowed HTML tags: <a> <em> <strong> <cite> <blockquote> <code> <ul> <ol> <li> <dl> <dt> <dd>
- Lines and paragraphs break automatically.

Send

Cancel

Send

4. Click Send to send the email.



[back to top](#)

Related Topics:

- [List All Projects](#)


## View Project

From within the *Project Details* page, users can view the details of their project as well as open associated project report(s) and project boundary shapefile(s), upon completion of the project analysis.

- **Edit Project:** From the *Project Details* page the user can choose to edit (**Edit**) the project and/or project boundary (**Map**) of projects with *Project Edit Status* of **Saved** (not Final).
- **Email:** Evaluators and Administrators of the system have additional privileges which enable them to Email the project Contact with relevant questions.

## Steps:

1. Navigate to the *My Projects* tab.
2. Within the *My Projects* window, click the project **Title** to view the project details.



The screenshot shows the Arizona Game & Fish website interface. At the top left is the logo for the Arizona Game & Fish Department, featuring a bird and a fish. To the right of the logo is the text "Arizona Game & Fish" in a large green font, with the tagline "MANAGING TODAY FOR WILDLIFE TOMORROW" and the website address "azgfd.gov" below it. A navigation menu consists of several green buttons: "Home", "Map", "My Projects", "Help", "Admin", and "Terms & Conditions". Below the navigation menu is a breadcrumb trail: "HOME / MY PROJECTS". The main heading "My Projects" is displayed in a large, bold, brown font. Below the heading is a table with a dark brown header. The header row contains three columns: "Title", "Date Submitted", and "Project Description".





3. Within the *Project Details* page:
  - The *Project Review Results* section reflects the *Review Status* of the project. Once the *Review Status* indicates **Report Generated**, links to the **Report File** and **Boundary Shapefile** are provided. Click

the links to open/save the files.

## Project Details: Copied multiple Annotations

[View](#) [Edit](#) [Map](#) [Notes](#) [Email](#)

### Project Review Results

Revision date	Review Status	Report File	Bo
6/25/2014 06:45:00 AM	Report Generated	 <a href="#">project_report_copied_multiple_annotations_133_147.pdf</a>	 pr
6/24/2014 01:01:00 PM	Report Generated	 <a href="#">project_report_copied_multiple_annotations_133_145.pdf</a>	 pr

- Projects which have been edited will include a separate entry within the *Project Review Results* table, reflecting the results of each project submission.
- click the **Project Type** link(s) for a full description of the Project Type(s).

**back to top**

#### Related Topics:

- **Create Project**
- **Edit Project**
- **Email**
- **My Projects**

## About AZGFD

The **Arizona Game and Fish Department's** (AZGFD) mission is to conserve, enhance, and restore Arizona's diverse wildlife resources and habitats through aggressive protection and management programs, and to provide wildlife resources and safe watercraft and off-highway vehicle recreation for the enjoyment, appreciation, and use by present and future generations.



# Index

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## A

Account 53  
Add Resource 57  
Address 126  
Analysis Layer Attribute 23  
Analysis Layer Triggers 27

## B

Bookmarks 129  
Build a Query 98

## C

Coordinates 129  
Create Project 69, 137

## D

Details 93  
Draw/Edit 73, 110  
Dynamic Analysis 9

## F

Feature Search 61, 87  
Filter 94  
Find 126

## I

Identify 61, 91  
Insecure 67

## L

Layers 60, 92  
Log In 52

**M**

Make A Map 100  
Map 57, 100  
Map Navigation 123  
Map Services 67  
Measure 132  
My Projects 137

**P**

password 51, 54  
Print 132  
Project Type 17  
Projects 137

**S**

Scale 129  
Spatial 129  
Static Structure 13  
Switch Basemap 135

**T**

Test Map Service 62  
Tutorial 1

**Z**

Zoom 129  
Zoom to Coordinates or Scale 129