



ArcGIS Online

Visualizing Data: Tutorial 1 of 4

2014

**Created by:
Julianna Kelly**

Contents of This Tutorial

The Goal of This Tutorial

In this tutorial we will get you setup to use ArcGIS Online and teach you some of the basics. What is ArcGIS Online you may ask? Well it is a mapping software that is used over the internet. This is great because it means that the portability and compatibility options are endless. You will be able to create, edit, contribute, analyze, and share information and data using a device of your choosing. ArcGIS Online was developed by a company called ESRI, which has a high influence in the world of mapping software and is the home of something called GIS (Geographic Information Systems). GIS is a term you will likely hear more and more, as it is growing in fields of work that you would least expect it, including yours. For now, let's get you signed in and acquainted with ArcGIS Online.

The layout of this tutorial is a step by step walkthrough focusing on different subjects such as signing up, managing your account and so on. There is also a bonus section if you wish to reach ahead and try something interesting.

By doing this tutorial, you will learn the basics of ArcGIS Online, what it is, how it works and how to explore it.

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Getting Started: Creating an Account

Step 1

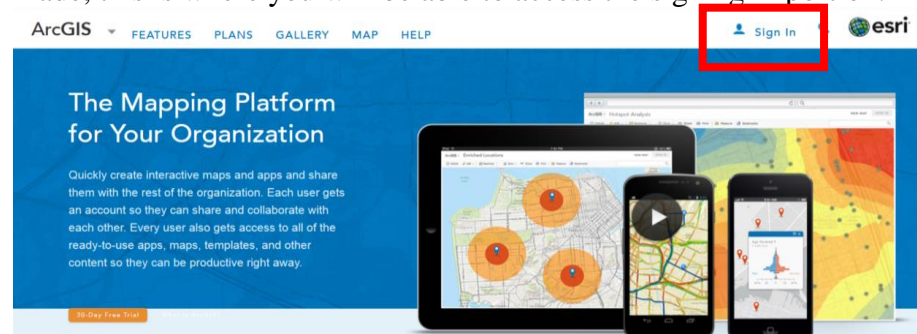
In order for you to use ArcGIS Online, you must have an account. Now there are two ways in which this is accomplished. A public account and a paid organization account. As a student in this class, you will be using a paid organization account. First I will give you an overview of making a public account, one that is free for the public and gives you access to most of what ArcGIS Online is capable of (you can create this type of account even after you have completed this course). Then we will discuss the other way to create an account that gives you access to **all** features (see Step 7).

Step 2

Go to <http://www.arcgis.com/features/>

Step 3

In the top right corner you will click 'Sign In'. Once you have an account made, this is where you will be able to access the signing in portion.



Step 4

We will now go through making a public account. You will click on 'Create a Public Account'. This page also has the section for you to sign in once you have your username and password.

Step 5

Now all you have to do is fill in **all** of the information, review and accept the terms and conditions, and create your account.

ArcGIS FEATURES PLANS GALLERY MAP HELP

Create Your Account

Complete the form below to create an account.

Username	<input type="text"/>
Password	<input type="password"/>
Confirm Password	<input type="password"/>
First Name	<input type="text"/>
Last Name	<input type="text"/>
Organization	<input type="text"/>
E-mail	<input type="text"/>
Confirm E-mail	<input type="text"/>
Phone Number	<input type="text"/>

Username must be between 6 to 24 characters long. May contain letters, numbers and only the following special characters: @ . _

Password must be between 4 to 28 characters long. May contain letters and/or numbers. May not contain special characters.

Organization means your employer, agency or school. In this case you are a student so you would input your school's name.

The following question and answer will help validate your identity in the event you forget your password.

Identity Question	<input type="text" value="Select a question for password recovery."/>
Answer	<input type="text"/>

Terms of Use

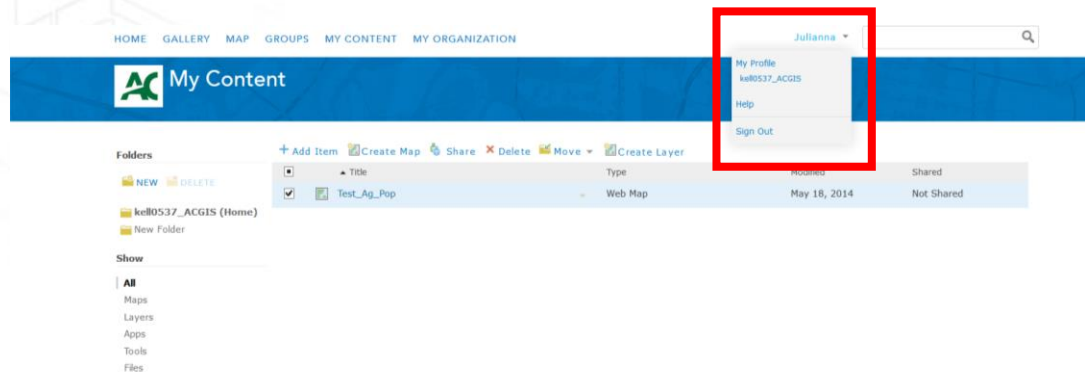
REVIEW AND ACCEPT THE TERMS OF USE

CREATE MY ACCOUNT

CANCEL

Step 6

Now that you have created your account, you will be able to access ArcGIS Online. To sign out you will see your name in the top right corner. If you click on your name, you will find three options as follows: Help, My Profile, and Sign Out. By clicking 'Help' you get access to ArcGIS Online help, by clicking 'My Profile' you can see your profile (we will discuss this later), and 'Sign Out' signs you out.



Step 7

Everyone is entitled to a free public account, however the public account does not include the use of the analysis tools. To use these tools you must have a licensed subscription that includes a certain number of credits per user. These credits are what you can use to 'pay for' your use of the analysis tools. As a student of Algonquin and a student of this course, you will be able to have access to the Algonquin Organization's allotted credits. These credits are shared between your classmates as well as with students in other classes here at Algonquin. With this being said, it is important to note that you will have enough credits to do these tutorials only two times. For more information on credits, click this link:

<http://www.esri.com/software/arcgis/arcgisonline/credits>

You will receive an email from ESRI notifying you that you have been invited to join, a similar email to the one below. You will follow the link in this email and follow the instructions they give you. If you have any questions or concerns, please send an email to me. My information is on the last page of this tutorial. Once you have successfully created your account, logout and then try logging back in again. Please email me confirmation that your account works or if it is not working

██████████ has invited you to join an ArcGIS Online Organization, Algonquin College ArcGIS Online Organization Account. PLEASE TEST AND CONFIRM THAT YOU CAN LOGIN TO THIS ARCGIS ONLINE ACCOUNT by sending an email to ██████████

Please click this link to finish setting up your account and establish your password:
<https://www.arcgis.com/home/newuser.html?invitation=A86bf353af861435c829ebdab2bc1caf2>

Note that your account has already been created for you with the username, **kell0537_ACGIS** and that usernames are case sensitive.

If you have difficulty signing in, please email us at arcgisonline_accounts@esri.com. Be sure to include a description of the problem, the error message, and a screenshot.

For your reference, you can access the home page of the organization here:
<https://ACGIS.maps.arcgis.com/home/>

Manage Your Account

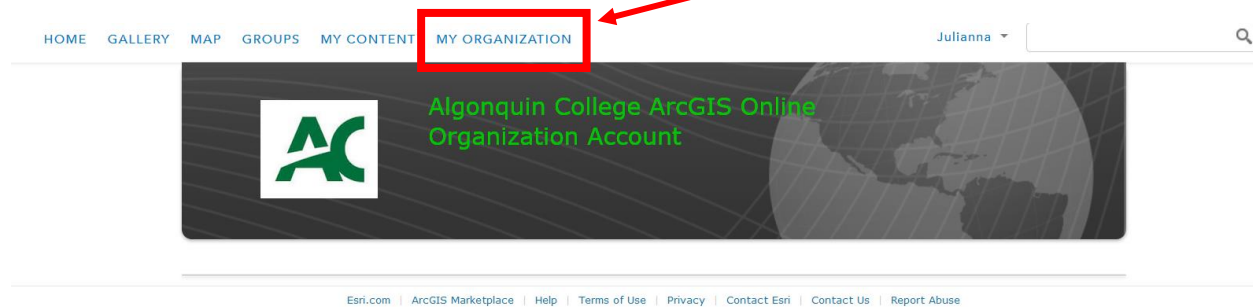
Step 1

Now that you have an account you can manage it. So first, sign in (follow steps 1-3 on page 3 to see where the sign in area is). When you sign in you will be brought to the page as displayed below, the Home page.



Step 2

Throughout this tutorial we will explore all the options on this Home page. First let's go to 'My Organization'.



Step 3

Here you can see your classmates, i.e. anyone in your 'organization'. By clicking on their respective icon in the Action column you can choose to see their items or groups (the ones they let you see).



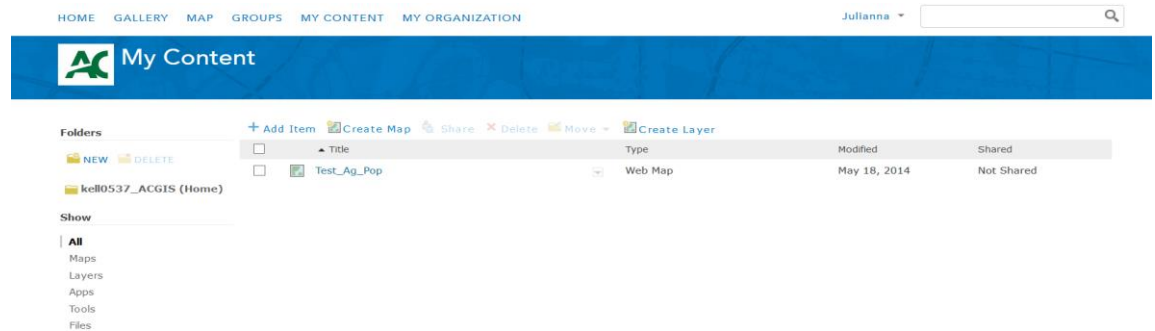
Step 4

Now we will go to 'My Content'.



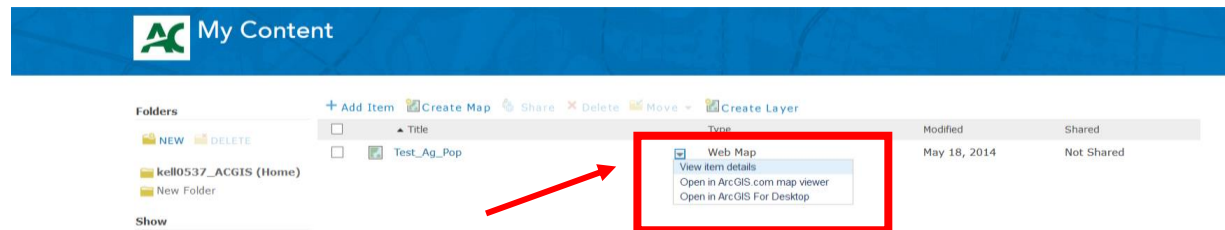
Step 5

Listed here are any layers, maps, tools, apps, and files you have made or added to your account. In this case I have a map I created called Test_Ag_Pop. Right now you may not have anything listed, but soon you will. This section of ArcGIS will allow you to keep track of and manage your content. Now let's explore what everything does.



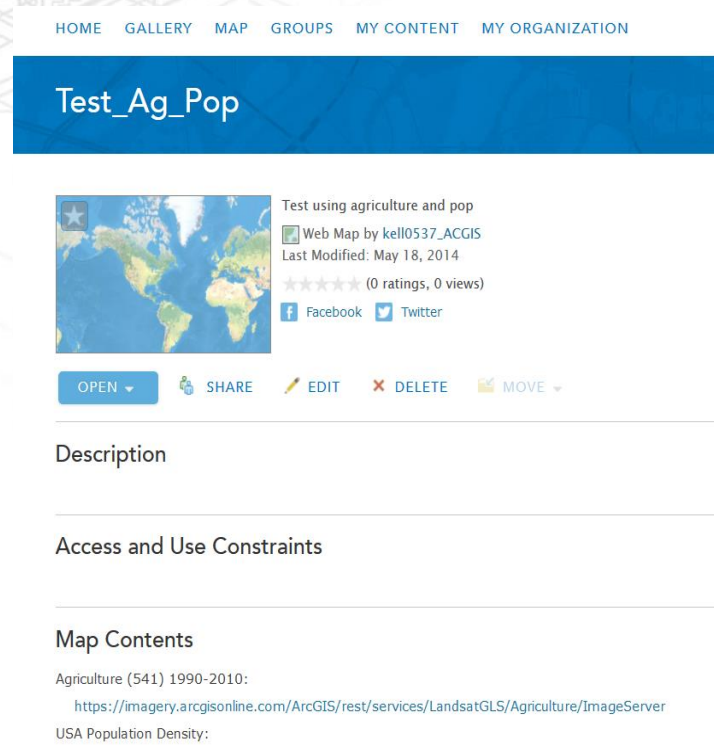
Step 6

In the drop down of your content, there are 3 options: view item details, open in ArcGIS for desktop (which uses the ESRI desktop software) or open in arcgis.com map viewer.



Step 7

Below is what appears when you choose 'View Item Details'.



HOME GALLERY MAP GROUPS MY CONTENT MY ORGANIZATION

Test_Ag_Pop

Test using agriculture and pop
Web Map by kell0537_ACGIS
Last Modified: May 18, 2014
★★★★★ (0 ratings, 0 views)
Facebook Twitter

OPEN SHARE EDIT DELETE MOVE

Description

Access and Use Constraints

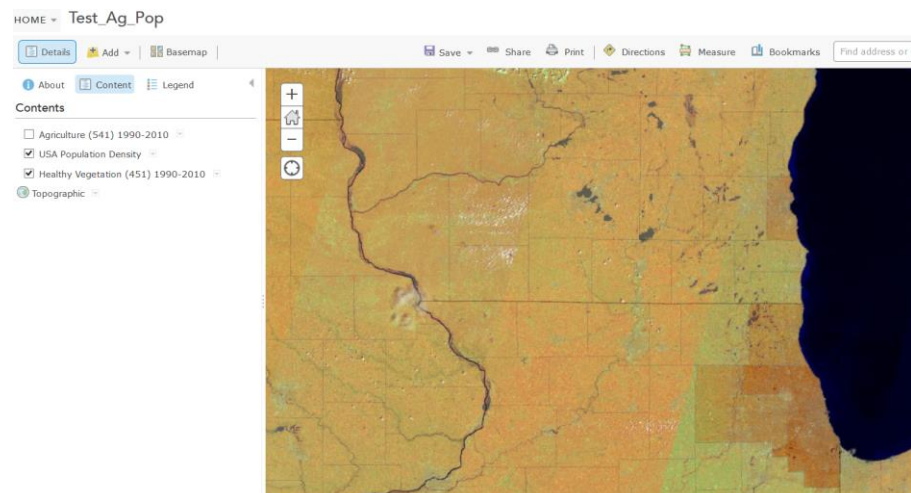
Map Contents

Agriculture (541) 1990-2010:
<https://imagery.arcgisonline.com/ArcGIS/rest/services/LandsatGLS/Agriculture/ImageServer>

USA Population Density:

Step 8

Below is what appears when you choose 'Open in ArcGIS.com Map Viewer'. We will become more familiar with this later on in this tutorial.



HOME - Test_Ag_Pop

Details Add Basemap Save Share Print Directions Measure Bookmarks Find address or p

About Content Legend

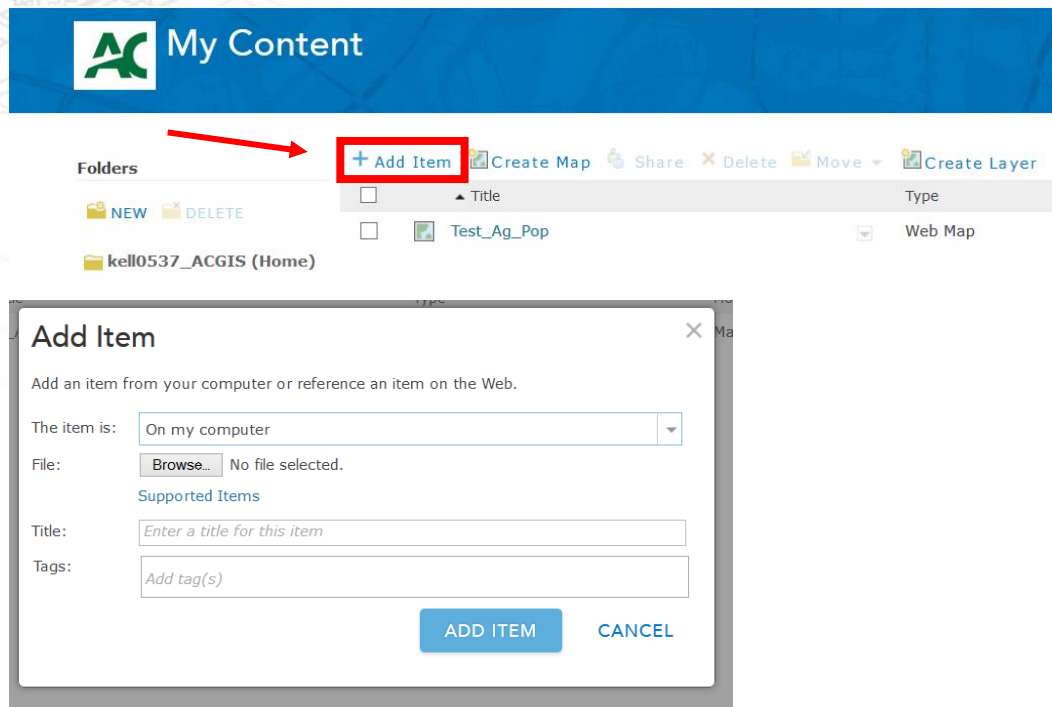
Contents

- Agriculture (541) 1990-2010
- USA Population Density
- Healthy Vegetation (451) 1990-2010
- Topographic

The screenshot shows the ArcGIS.com Map Viewer interface. The main map area displays a satellite-style map of the United States with a grid overlay. The left sidebar shows the 'Contents' panel with a list of layers: 'Agriculture (541) 1990-2010', 'USA Population Density', 'Healthy Vegetation (451) 1990-2010', and 'Topographic'. The 'USA Population Density' and 'Healthy Vegetation' layers are checked. The top navigation bar includes 'HOME - Test_Ag_Pop', 'Details', 'Add', 'Basemap', 'Save', 'Share', 'Print', 'Directions', 'Measure', 'Bookmarks', and a search box for 'Find address or p'.

Step 9

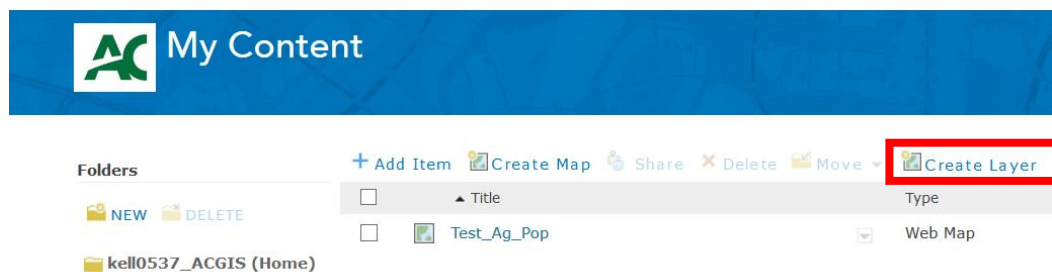
You can add items from the web, your computer or other applications



The screenshot shows the 'My Content' interface. At the top, there is a blue header with the 'AC' logo and the text 'My Content'. Below the header, there is a toolbar with several icons: '+ Add Item', 'Create Map', 'Share', 'Delete', 'Move', and 'Create Layer'. The '+ Add Item' button is highlighted with a red box, and a red arrow points to it from the left. Below the toolbar, there is a 'Folders' section with a search bar and a list of folders: 'NEW', 'DELETE', and 'kell0537_ACGIS (Home)'. To the right of the folders, there is a table with columns for 'Title' and 'Type'. The table contains one row with the title 'Test_Ag_Pop' and the type 'Web Map'. Below the table, there is a modal window titled 'Add Item'. The modal has a close button (X) in the top right corner. The text inside the modal says 'Add an item from your computer or reference an item on the Web.' Below this text, there is a dropdown menu for 'The item is:' with 'On my computer' selected. There is a 'Browse...' button and the text 'No file selected.' Below this, there is a section titled 'Supported Items' with a blue link. There are input fields for 'Title:' (with placeholder text 'Enter a title for this item') and 'Tags:' (with placeholder text 'Add tag(s)'). At the bottom of the modal, there are two buttons: 'ADD ITEM' and 'CANCEL'.

Step 10

You can create a layer from an existing layer or a template; you can choose the layer from your items you added or by using a URL.



The screenshot shows the 'My Content' interface. At the top, there is a blue header with the 'AC' logo and the text 'My Content'. Below the header, there is a toolbar with several icons: '+ Add Item', 'Create Map', 'Share', 'Delete', 'Move', and 'Create Layer'. The 'Create Layer' button is highlighted with a red box, and a red arrow points to it from the right. Below the toolbar, there is a 'Folders' section with a search bar and a list of folders: 'NEW', 'DELETE', and 'kell0537_ACGIS (Home)'. To the right of the folders, there is a table with columns for 'Title' and 'Type'. The table contains one row with the title 'Test_Ag_Pop' and the type 'Web Map'.

Create Layer

Create a new, empty feature layer. A feature layer lets you create, edit, query, and display data.

Create feature layer from:

Choose a feature layer from my items Enter a URL to a feature layer

Item:


Include items in my organization

Select the layers to include. Click a layer name to edit it.

[NEXT](#) [CANCEL](#)

Step 11

‘Create a Map’ will bring you to the ‘My Map’ section where you can create your own map. We will get to this in Tutorial 2.



My Content

Folders

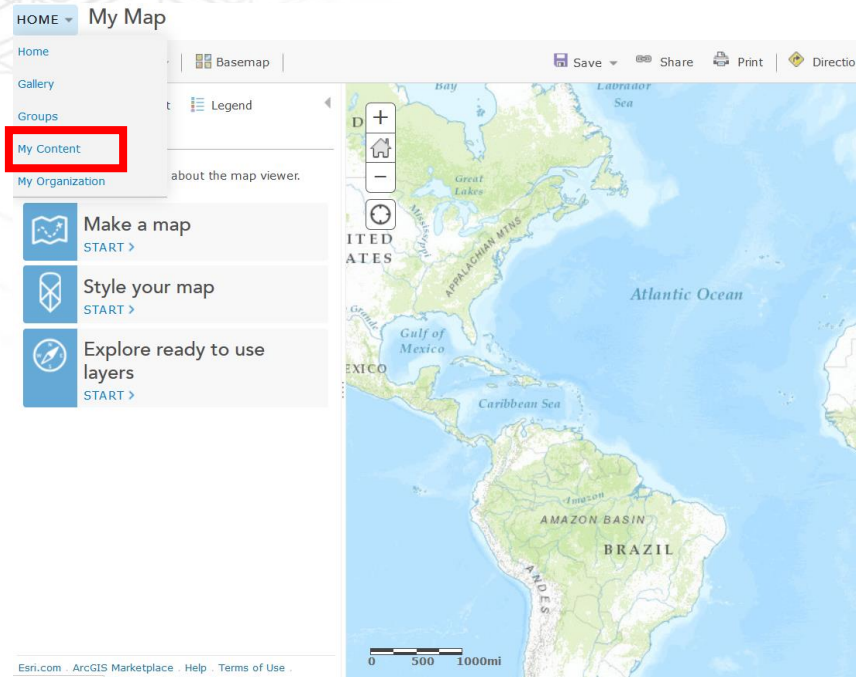
- NEW
- DELETE
- kell0537_ACGIS (Home)

+ Add Item **Create Map** Share Delete Move Create Layer

	Title	Type
<input type="checkbox"/>	Test_Ag_Pop	Web Map

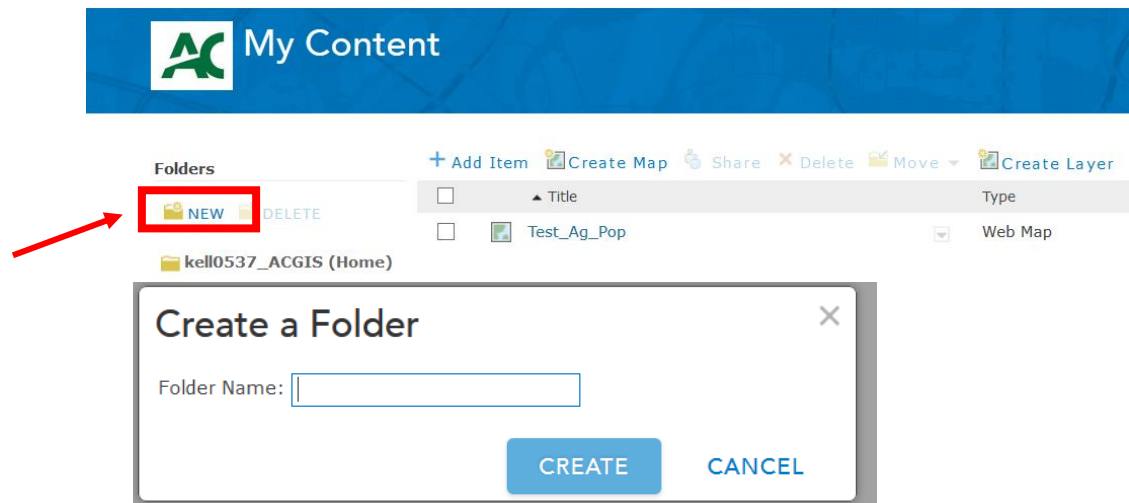
Step 12

To get back to the content, go to 'Home' in the top left corner and choose 'My Content'.



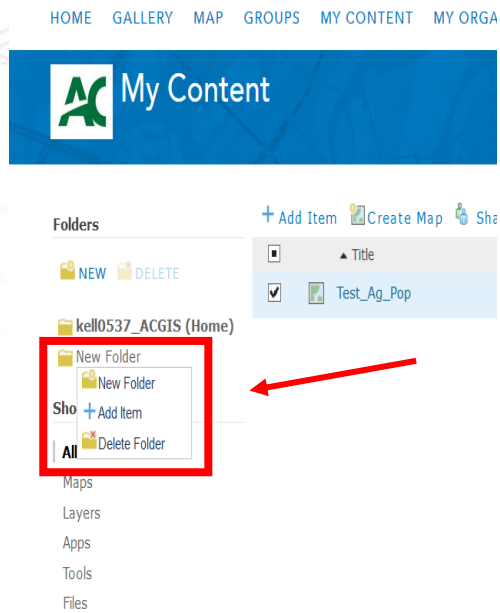
Step 13

You can create a new folder if you want certain layers or maps kept together. The folder with your username is your default folder.



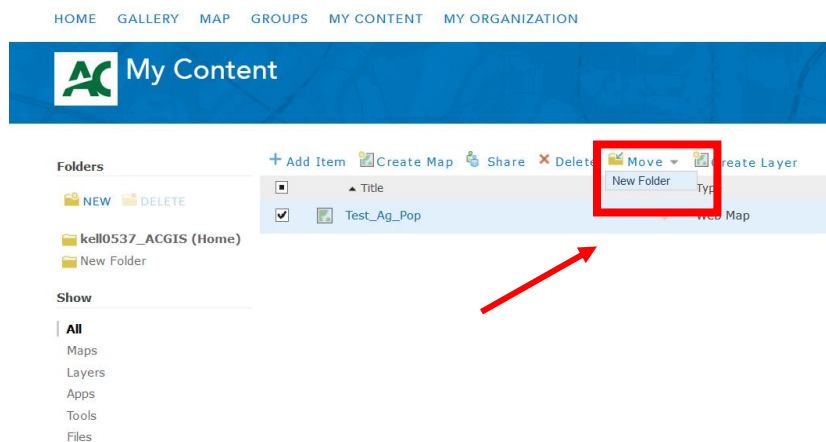
Step 14

You can add things to this folder, or delete it by right clicking on it and choosing one of the options.



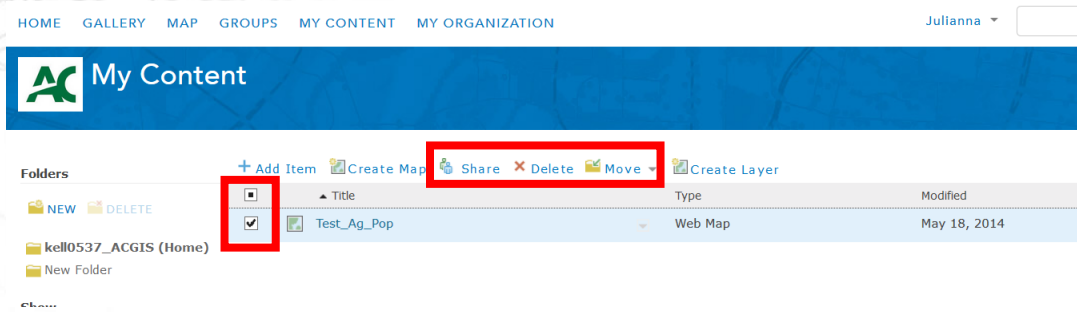
Step 15

You can move your item to a folder by clicking on 'Move' and choosing the folder you would like to move it to.



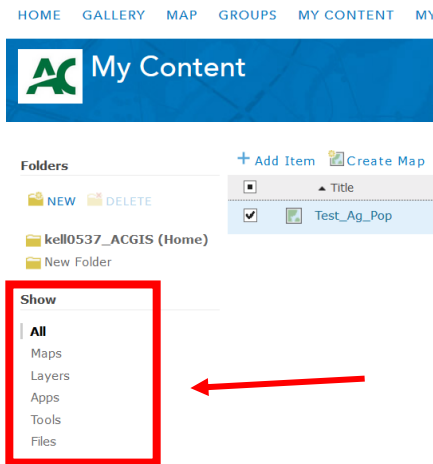
Step 16

If you select a layer, you will have more options enabled such as Share (We will get to this in Tutorial 2), Delete, and Move



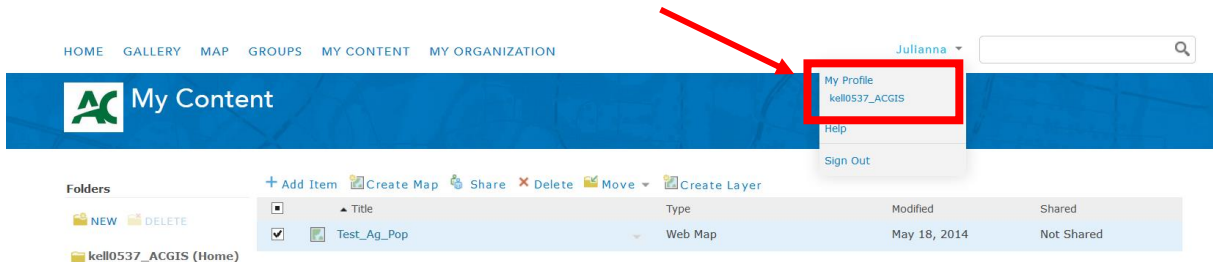
Step 17

You can filter your items by clicking on the options under 'Show'.



Step 18

Now to look at your account. Your name is on the top right hand side, click on it and you will get a drop down; here you can access your profile, access help and sign out just as described earlier



Step 19

By clicking on 'My Profile' you can view your profile and choose 'Edit My Profile' to make any changes.

HOME GALLERY MAP GROUPS MY CONTENT MY ORGANIZATION Julianna

Julianna Kelly

[EDIT MY PROFILE](#)

Julianna Kelly
Write something about yourself. You might include things like:

- Your organization
- Contact information
- Areas of expertise
- Interests
- Any other information you'd like others to know

Who can see your profile? Organization

Username: kell0537_ACGIS

Language: English-English

Region: Canada

Units: US Standard

Role: Publisher

Organization: Algonquin College ArcGIS Online Organization Account

Organization Home Page URL: <https://ACGIS.maps.arcgis.com>

Step 20

By selecting 'Groups' you can access the groups page where you can create and manage groups. This is similar to an organization, but less formal and you have the control. Groups are very useful for sharing content. A group enables you to share content to specific people so that they can use or add to the information that you are collecting. It can be a great tool if you take the opportunity to use it. This is mostly used within businesses that need to share their data with specific co-workers in order to do their work. For you as a student, using this groups page is something that you would not need to use.

HOME GALLERY MAP **GROUPS** MY CONTENT MY ORGANIZATION

Julianna Kelly

Step 21

This is what appears after you choose 'Groups'. This is your home page for your groups.

Step 22

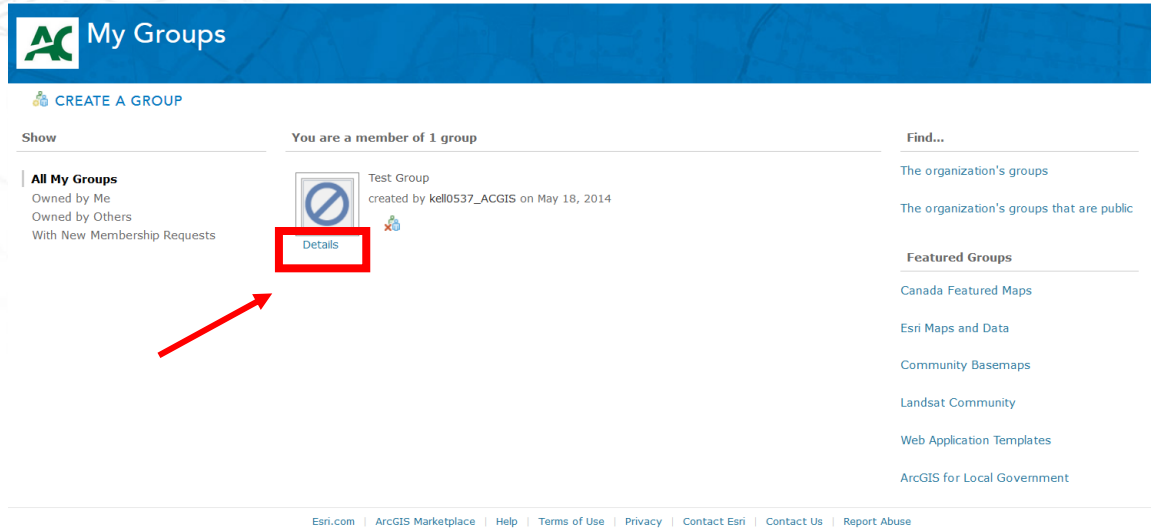
Now let's create a new group.

Step 23

This is what appears after you select 'Create a Group'. Add your details and save your group.

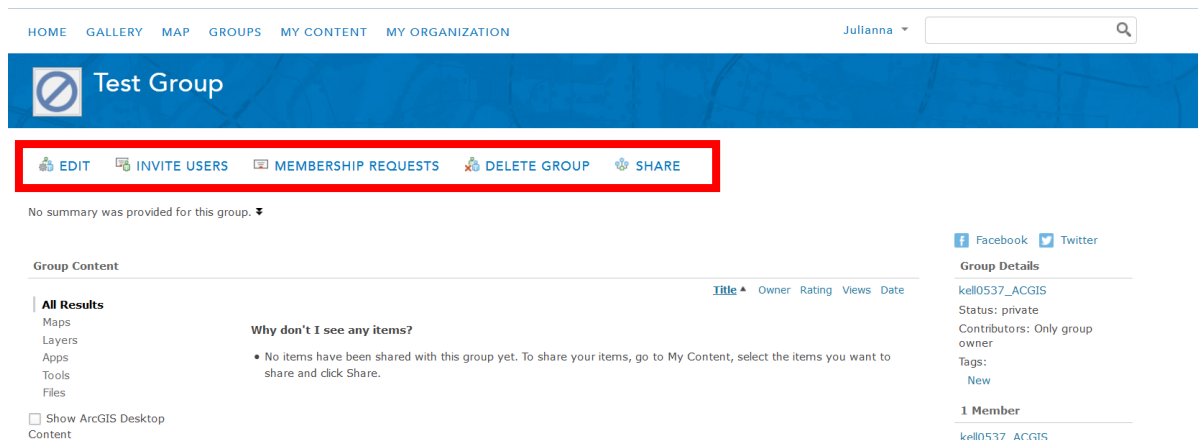
Step 24

So if you have a group, when in 'My Groups' you can view your groups and filter the ones you would like to see. You can also access their details by clicking 'Details'.



Step 25

Here you can edit your group, invite users, manage membership requests, share, or delete groups. You can also access all content that your group members have shared



Step 26

Now let's go back to the Home page.

[HOME](#) [GALLERY](#) [MAP](#) [GROUPS](#) [MY CONTENT](#) [MY ORGANIZATION](#)



 Test Group

[HOME](#) [GALLERY](#) [MAP](#) [GROUPS](#) [MY CONTENT](#) [MY ORGANIZATION](#)

 Algonquin College ArcGIS Online Organization Account

Overview of the ArcGIS Layout and Tools

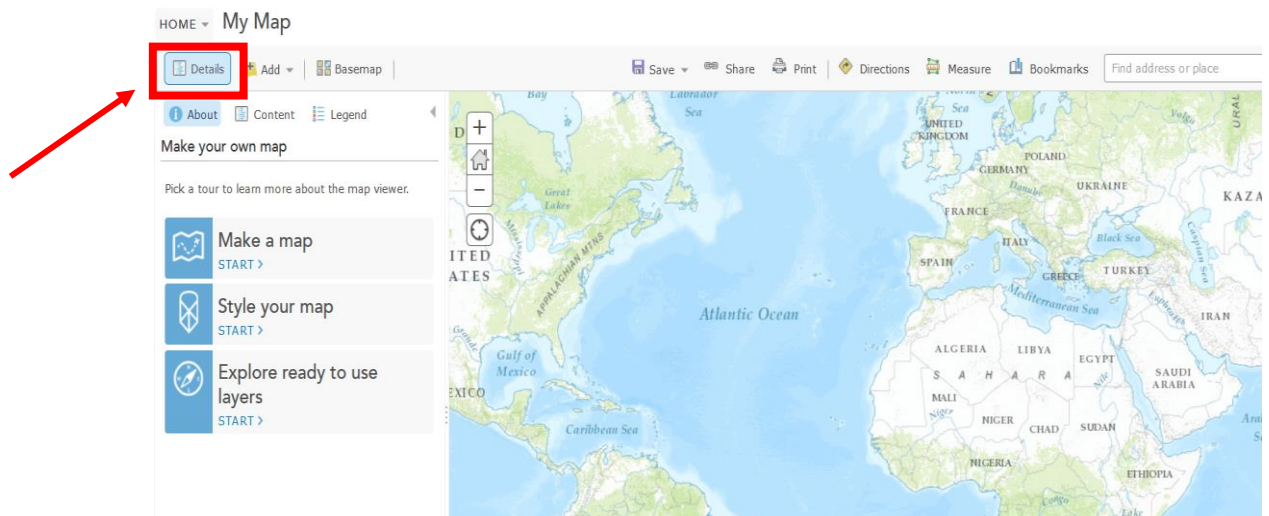
Step 1

Now we will explore the layout and tools of the 'Map' section of ArcGIS Online. From the top click on 'Map'. I will be using the map I created to give you an idea what the tools show, but you can still follow along without this map.



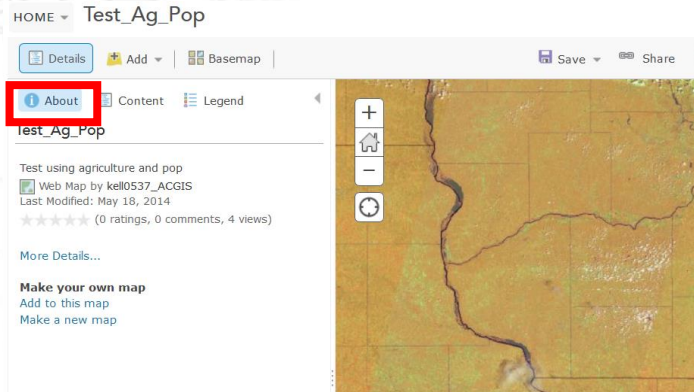
Step 2

Details: Shows details of the map. This includes a snippet about the map, the content (data or layers) of the map and the legend.



Step 3

About: Shows information about the map. In this case, the map is called 'Test_Ag_Pop' and information such as creator, modification date, and the option for more details can be seen.



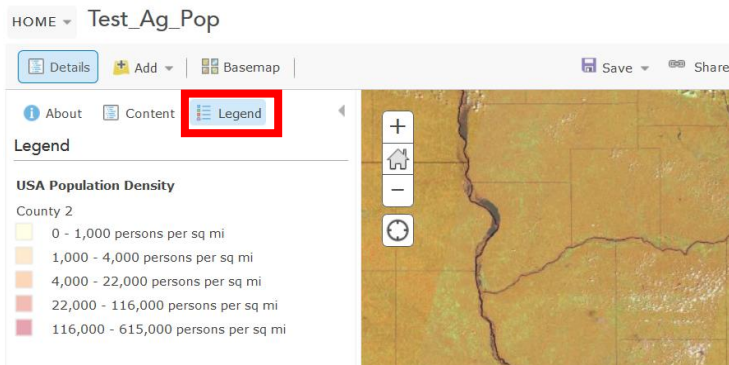
Step 4

Content: This is where your layers in your map are listed. Here you can edit transparency, visibility range, perform analysis, and a few others (discussed later in this tutorial)



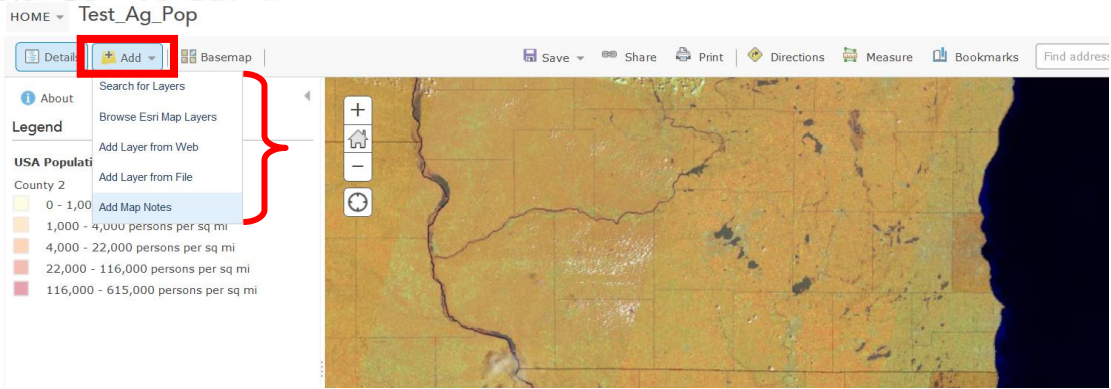
Step 5

Legend: The legend of the map. ArcGIS Online creates this for you.



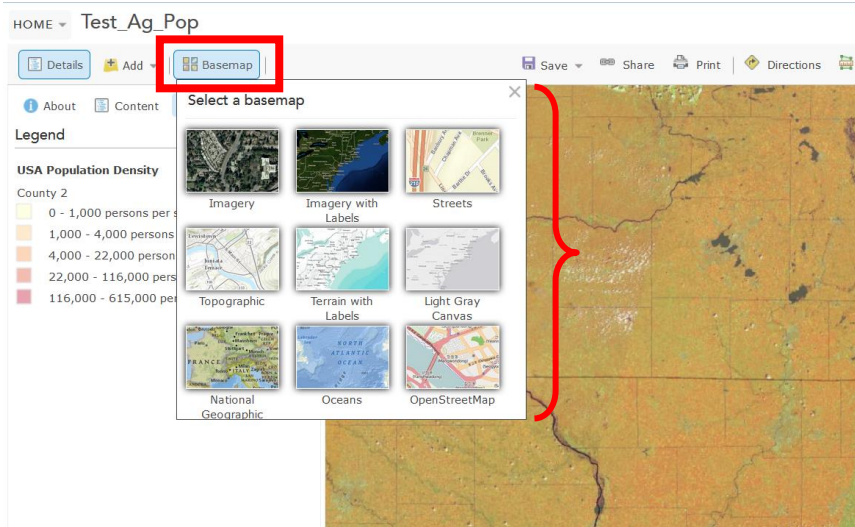
Step 6

Add: Add content to the map. You can add your own content, or content from online or in the ESRI gallery.



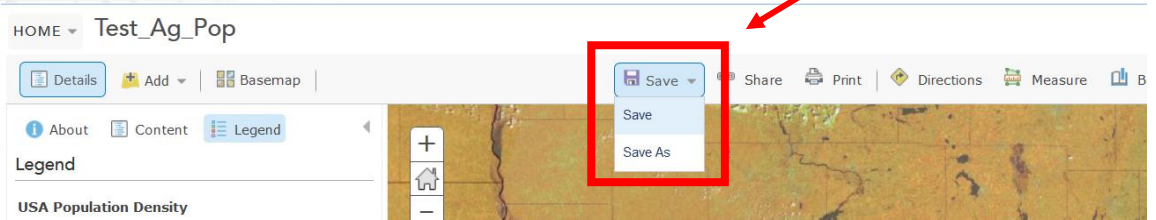
Step 7

Base-map: Select a base-map from the Gallery. A base-map is a basic map that you can use a basis for your layers of data. They are helpful in giving the user a reference as to what region they are looking at when deciphering your map.



Step 8

Save: Save the map to your account. You will be able to save it your default folder, or if you have another folder, you will be able to choose the destination. You can manage the maps you have saved in the ‘My Content’ section that we looked at earlier.



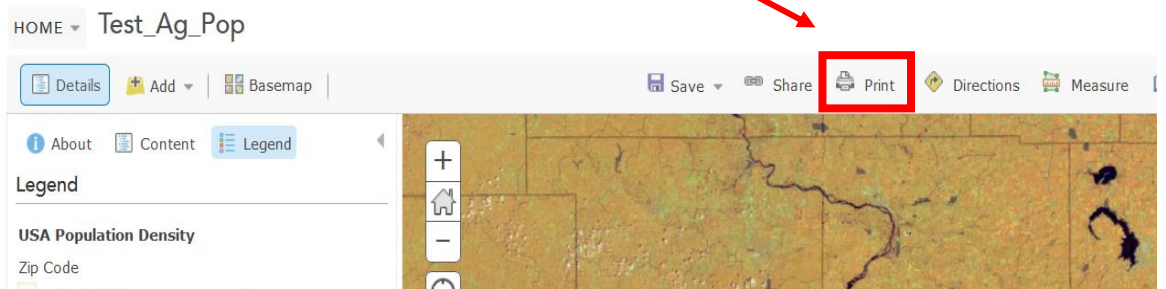
Step 9

Share: By sharing you can let everyone on ArcGIS Online, your organization, your groups, Facebook, twitter and a website view your map. You can also make a web application with your map (will not be covered, see Resources on pg. 33 if interested).



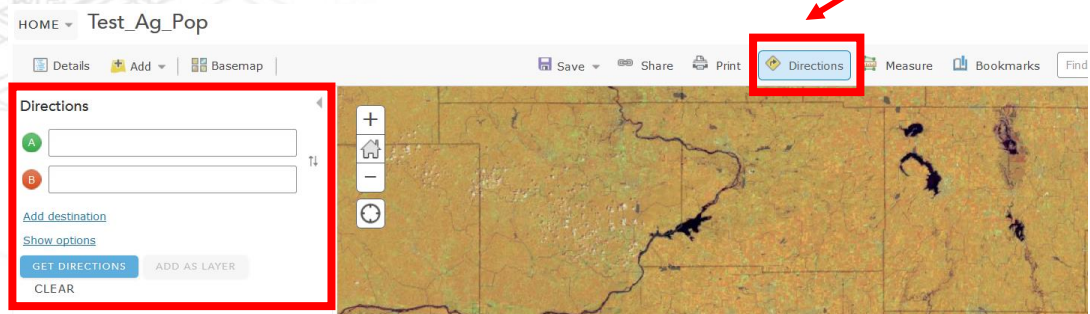
Step 10

Print: Opens a new tab with the map so you can print it.



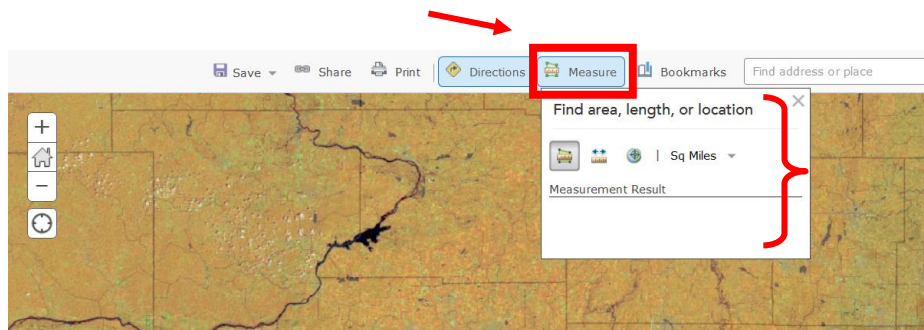
Step 11

Directions: Find directions. This is similar to google maps.



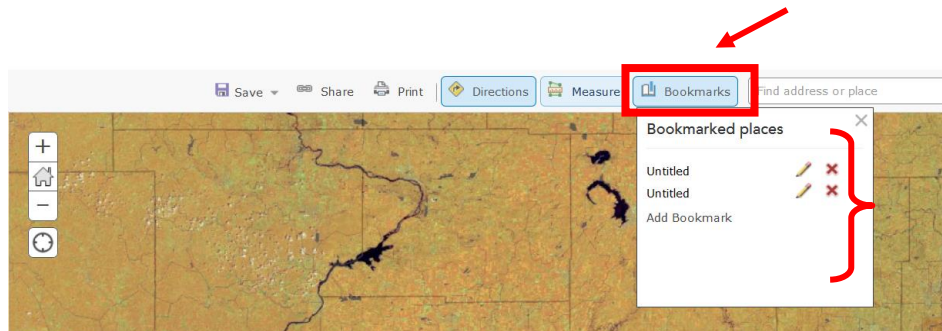
Step 12

Measure: Find area, length or location.



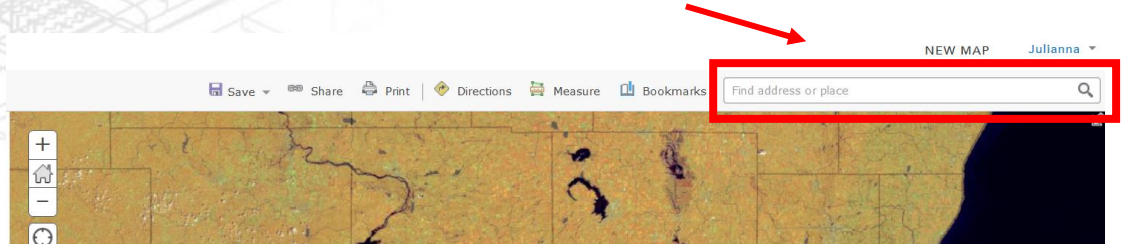
Step 13

Bookmarks: Bookmark places. You can save a place of interest by bookmarking it. You can use this later, edit it, or delete it.



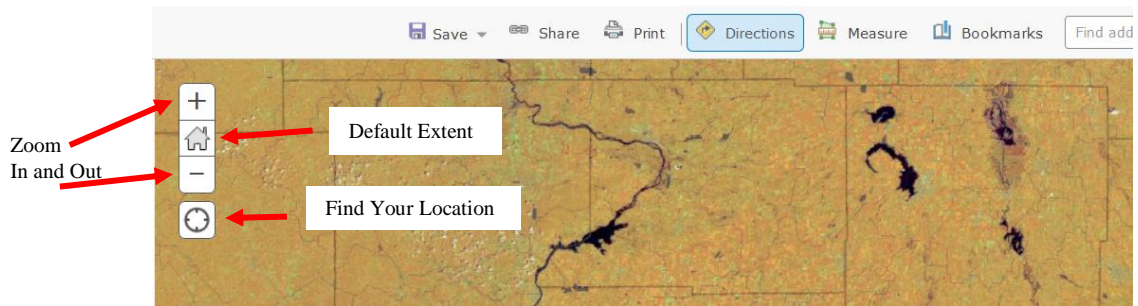
Step 14

Search Bar: Search for addresses or places within the map.



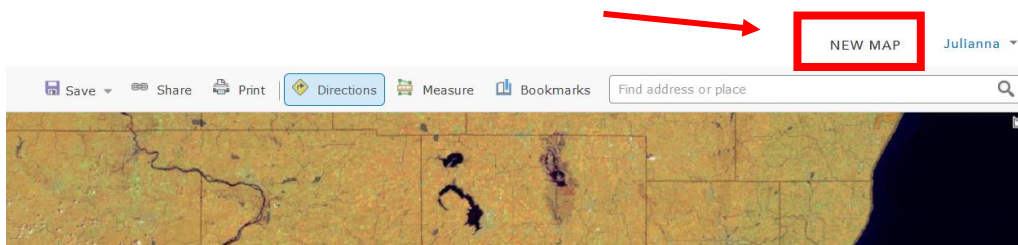
Step 15

Zoom, Default extent (default zoom setting), Find your current location (if your device you are using allows)



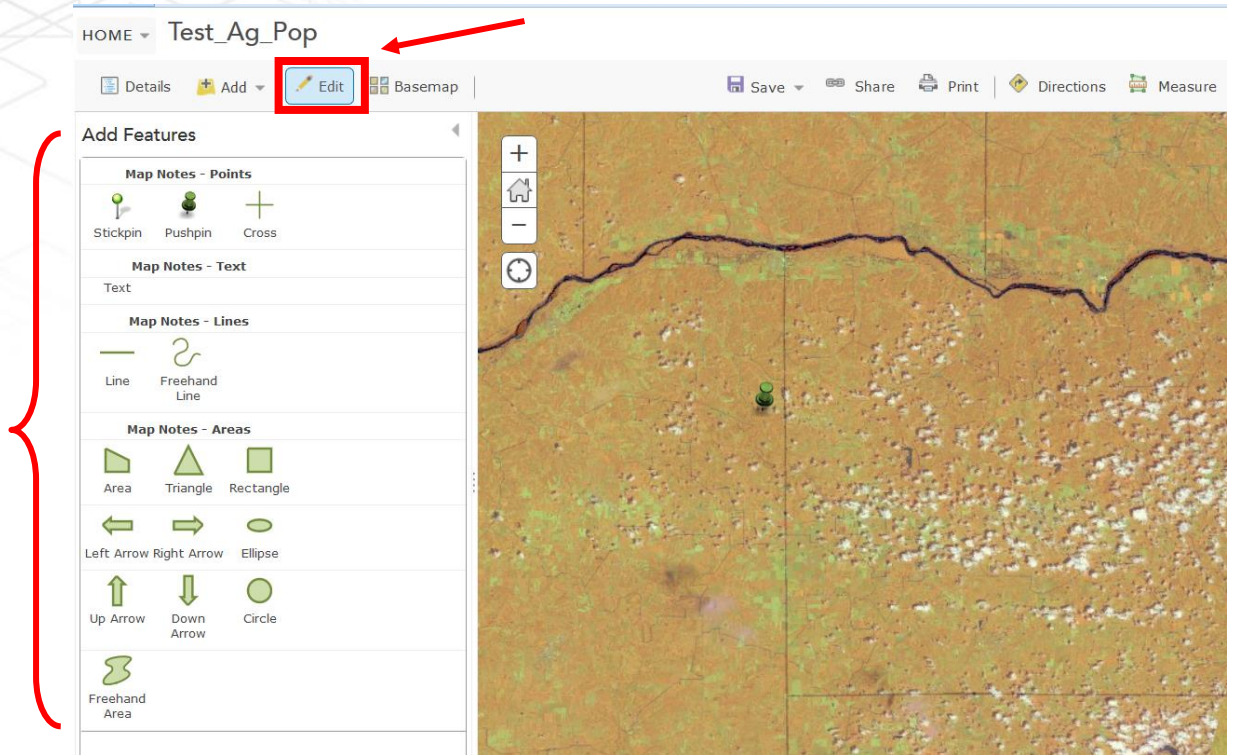
Step 16

New Map: Creates a new map.



Step 17

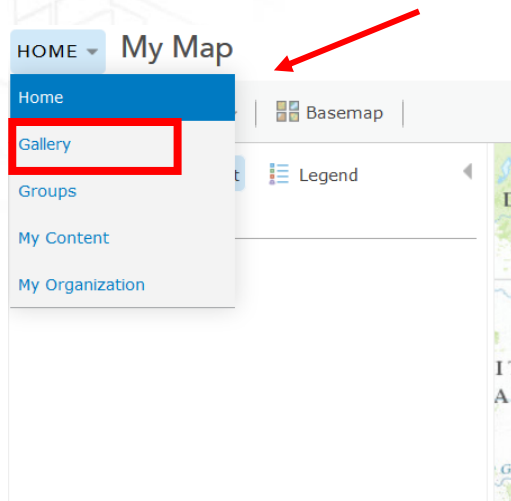
Edit: Appears after adding features (or map notes which will be discussed in Tutorial 2). You can add new features to your map using any of the icons below. You can also edit these features.



Time to Explore: Exploring a Web Map

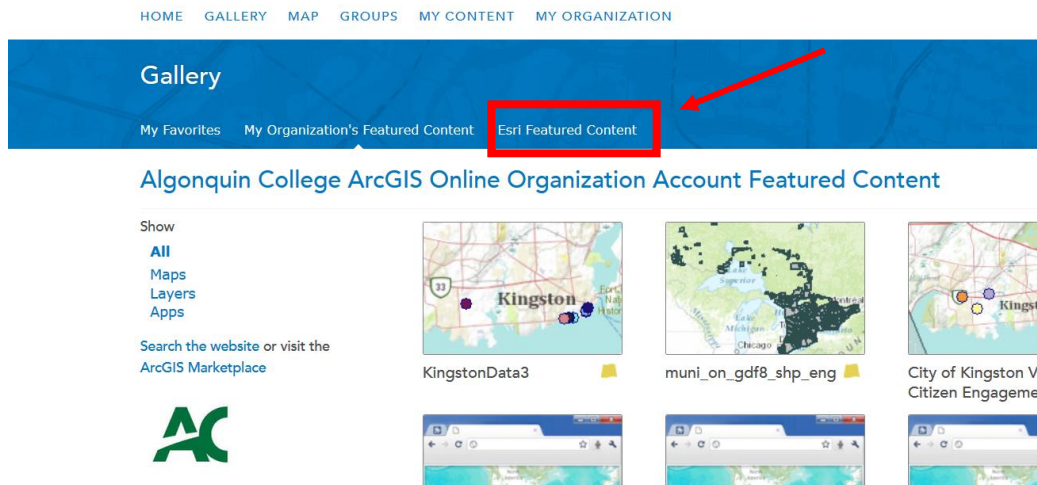
Step 1

Time to explore a map, go to 'Gallery'. 'Gallery' is an archive full of maps and layers that you can use and view.



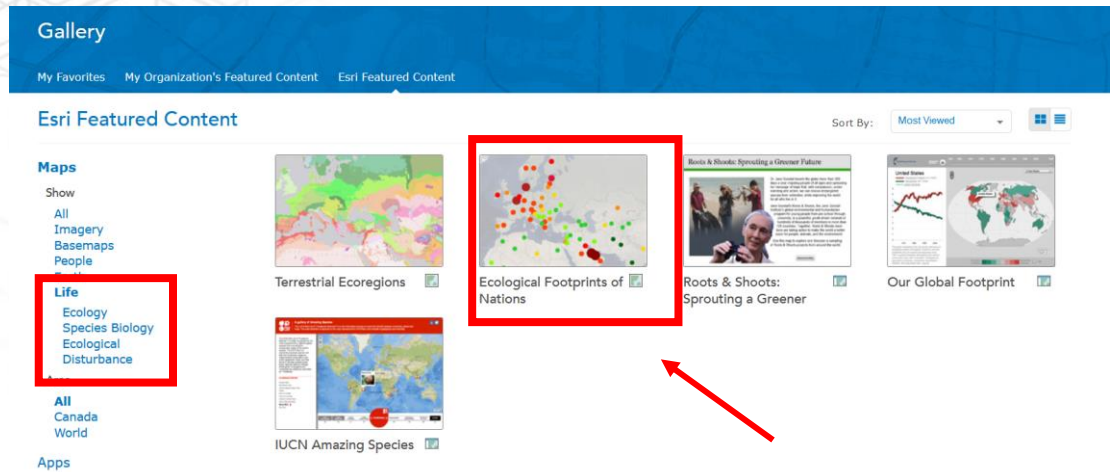
Step 2

Here is what is displayed. You will have a few options of where to choose maps from. The map we will explore is in 'ESRI Featured Content'.



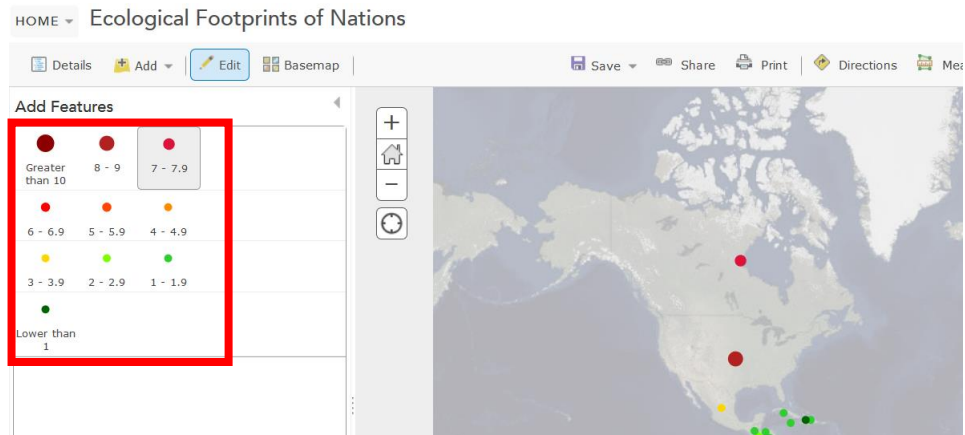
Step 3

Then you will go to 'Life' and Choose the map entitled 'Ecological Footprints of Nations'.



Step 4

As mentioned earlier, you can edit features in a map by using 'Edit'. You can add a feature by selecting the symbol you desire.



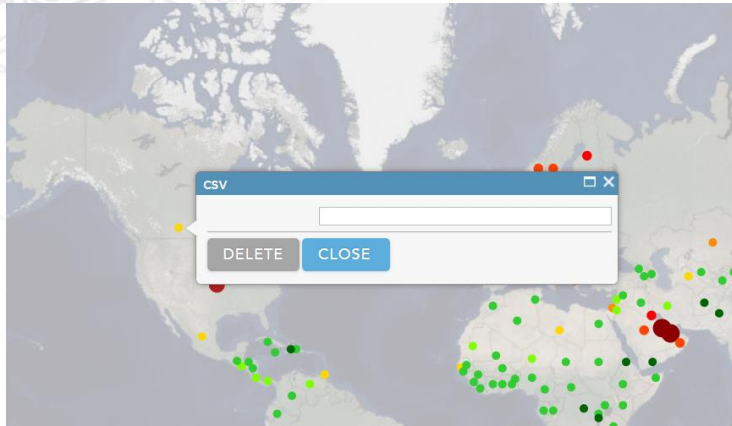
Step 5

Then you click on the map where you want the feature to appear on the map.

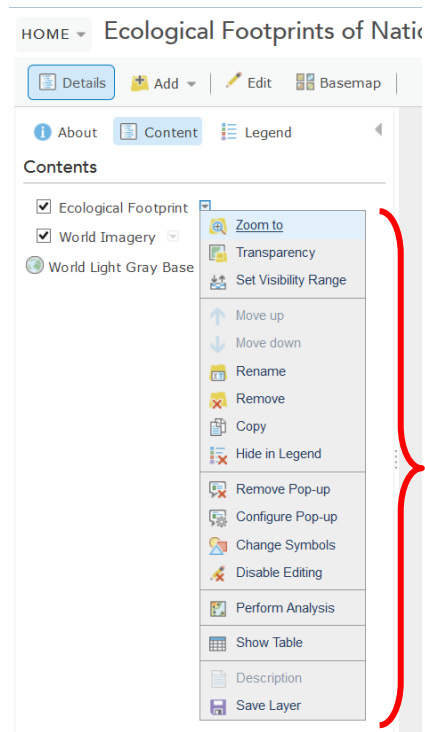


Step 6

You can enter a name for this feature and it will be saved into the csv file of the data that is already composed.

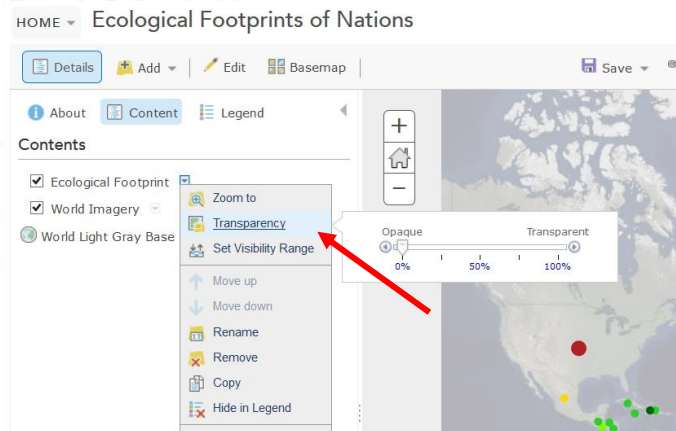
**Step 7**

Now, if you go to the 'Content' of the map you will see the layers that are in the map. If you right-click on a layer you will see the many options you can choose in terms of your layer.



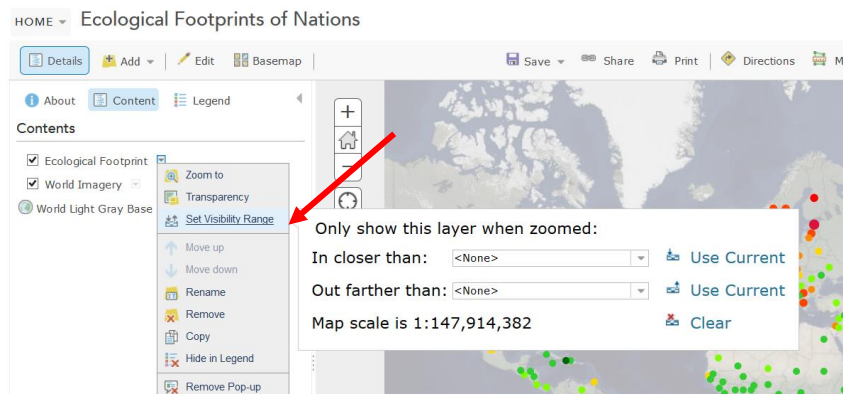
Step 8

You can change the transparency of the layer, making it varying degrees of visible.



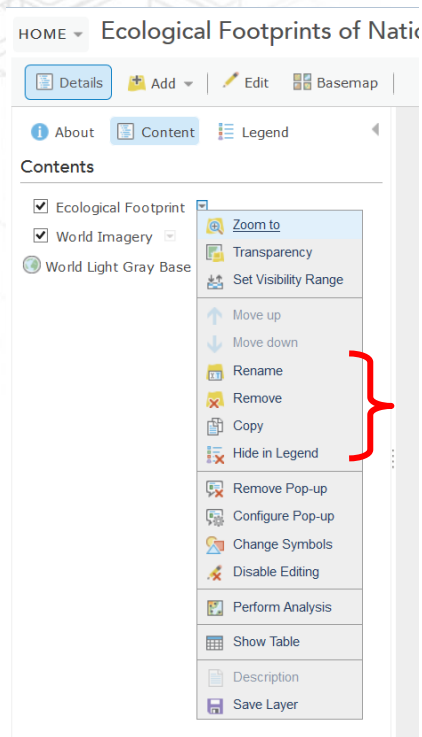
Step 9

You can also set the visibility range, only showing a layer at specific scales.



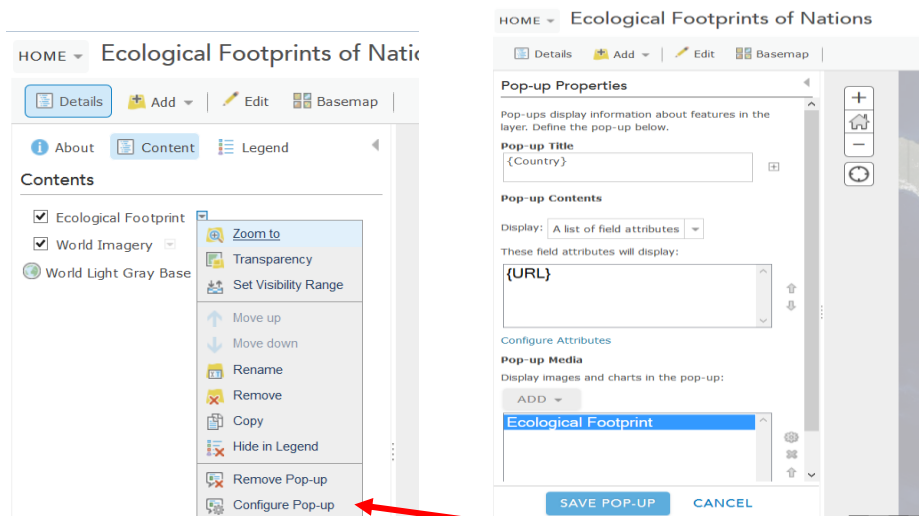
Step 10

You can also rename the layer, remove the layer from your map, copy the layer, or hide it from the legend.



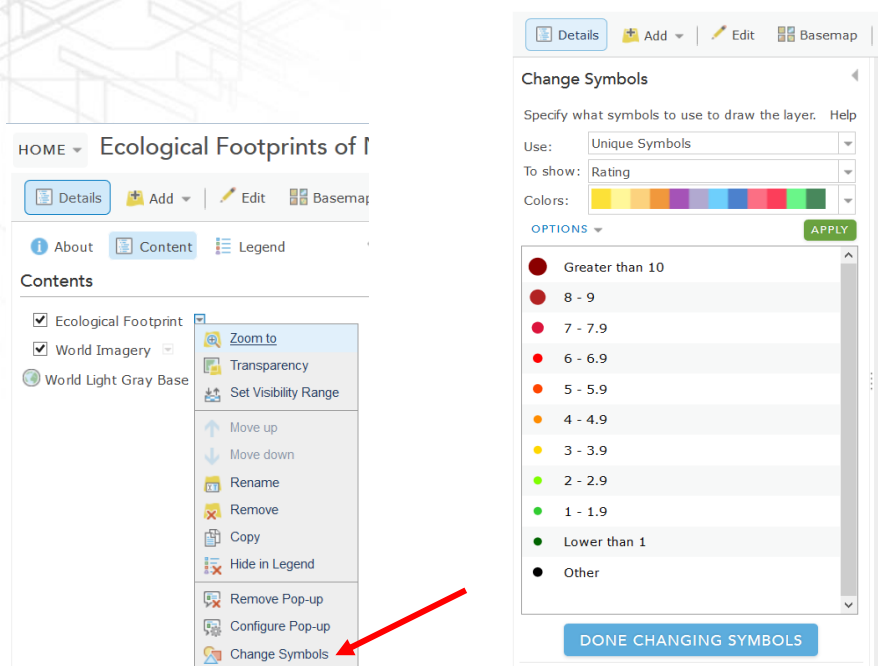
Step 11

By choosing 'Configure Pop-up' you can create or edit the dialogue box that appears after you select a data point on the map.



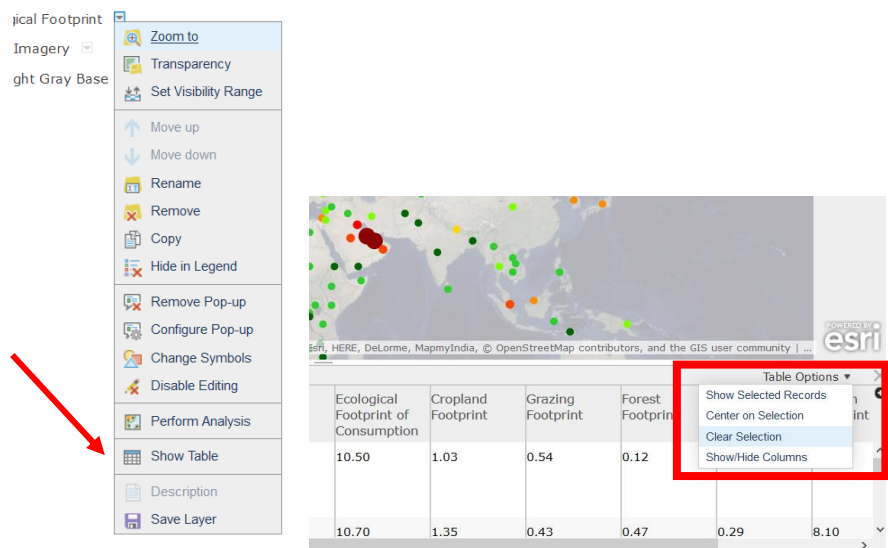
Step 12

You can edit the symbology of the layer, changing how the data is viewed, by selecting 'Change Symbols'.



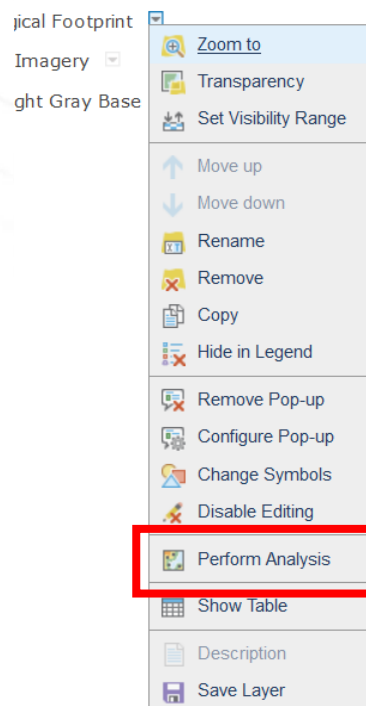
Step 13

By Choosing 'Show Table', the table holding the data appears on the page. You can choose how you view this table by going to 'Table Options'.



Step 14

Now you know the basics of ArcGIS Online. It would be wise to continue onto the Bonus and explore ArcGIS Online further on your own. Just remember that 'Performing Analysis' costs credits, so it would be wise to experiment with it after Tutorial 3.



Bonus:

Using Your Skills to Explore on Your Own

This has been just a brief introduction on ArcGIS Online. There is so much more to learn and so much that you can do using this platform.

Using what you have learned so far, explore ArcGIS Online. Go into the 'Gallery' and research various maps. Discover the different ways you can make a map.

Then, create your own map. Explore the platform, and save all maps and layers to your account. Create a new folder in your account called 'Tutorial 1' and move all of the maps and layers you used or created into this folder for future reference.

Resources:

ESRI Website:

www.esri.com

ArcGIS Online Help:

<http://doc.arcgis.com/en/arcgis-online/create-maps/make-your-first-map.htm>

ArcGIS for Professionals:

<http://pro.arcgis.com/en/get-started/organizations/introduction.htm>

Questions?

Don't hesitate to ask.

Julianna Kelly

Geographic Information Systems – Algonquin College
Bmath Major in Statistics – Carleton University

kell0537@algonquinlive.com

