Introduction to ArcGIS Online

SCHOLARS' LAB

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Links

Presentation
https://storymaps.arcgis.com/stories/ee4e7faae7d04813b3f59202d1f9cace

Class Page
http://guides.lib.virginia.edu/gis
Click Teaching Resources > Spring 2022 Workshops

ArcGIS Online
https://uvalibrary.maps.arcgis.com/home/

Collector for ArcGIS
http://doc.arcgis.com/en/collector/

ESRI Configurable Apps
http://www.esri.com/software/configurable-apps

ESRI Story Maps
https://storymaps.arcgis.com

Create or Login to ArcGIS Online Account

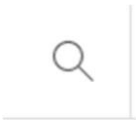
***If you're not a UVA affiliate, or don't have an Eservices login, please contact us for a temporary login.

Go to:
ff
https://uvalibrary.maps.arcgis.com/home/signin.html
Click University of Virginia

Sign in using your NetBadge credentials.

Data

From the above ArcGIS Online link, click the search icon on the top of the page. In the search bar, type "Intro_AGOL" and hit Enter.



Click the result, IntroAGOL_Workshop_CSV. Click Download to download Volcanoes.csv. Navigate to the directory where the file was downloaded, and open the file. Take a look at the attributes, noting the lat and long fields. Close the CSV.

Create a new map

Log on to ArcGIS.com
Click Map in the header ribbon.

The new map opens to the United States. This is the new map viewer. However for today's exercise, we will be using the "classic" map viewer. At the top of the page, click Open in Map Viewer Classic.

On the ribbon, in the Find address or place box, type "Island of Hawai'i". In the list of suggested locations, choose Island of Hawaii, United States.
The map zooms to Hawaii.

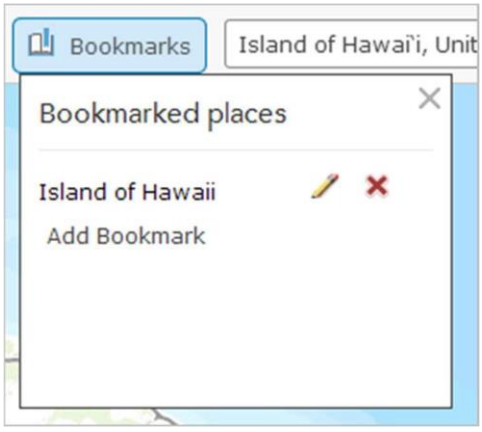
Close the Location pop-up.

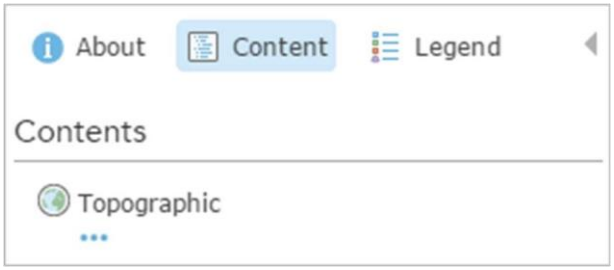
Zoom in on the island. If necessary, pan (drag) the map to center Hawaii in the view.
When you save the map later in this lesson, the map extent at the time of saving will become the extent used by the Default extent button. It can also be useful to add spatial bookmarks to navigate to particular map locations.

On the ribbon, click the Bookmarks button. In the Bookmarked places list, click Add Bookmark.

Type "Island of Hawaii" and press Enter

Close the list of Bookmarked places.

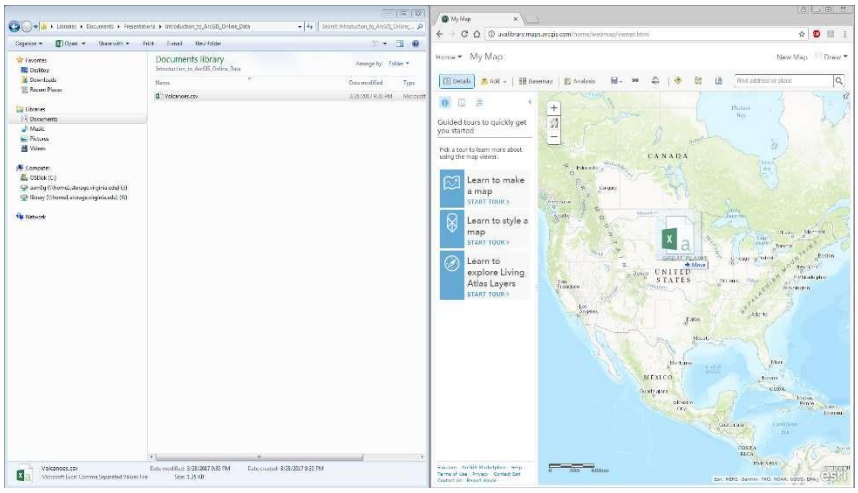


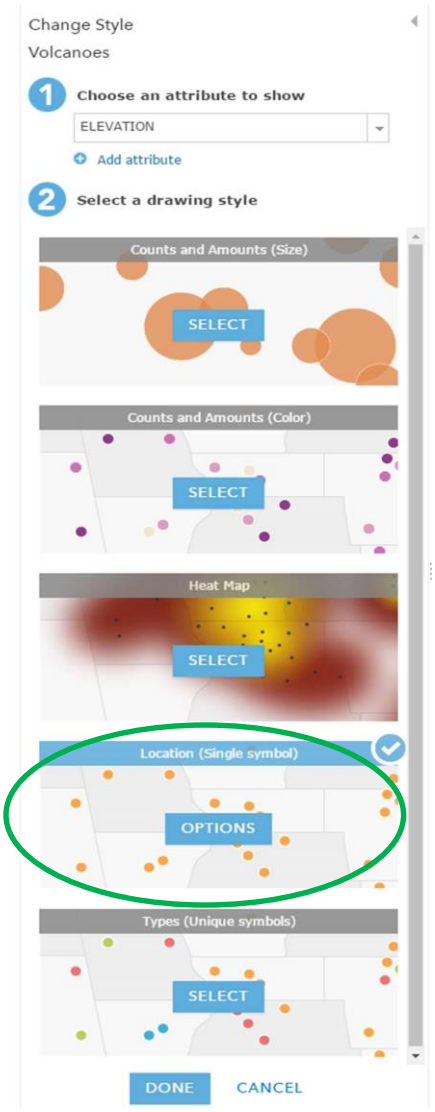


9 At the top of the Details pane, click the Content button.

Drag Data on Your Map

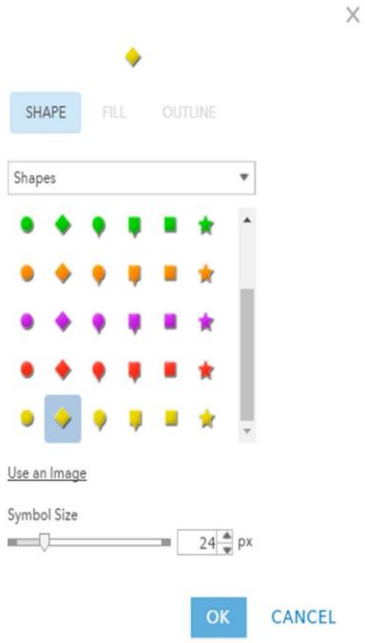
ArcGIS Online's classic map provides the ability to drop and drag text data directly into your map. This is useful for large lists of lat/lon values or addresses.





1. Grab the Volcanoes.csv file and drag it on to your new map.

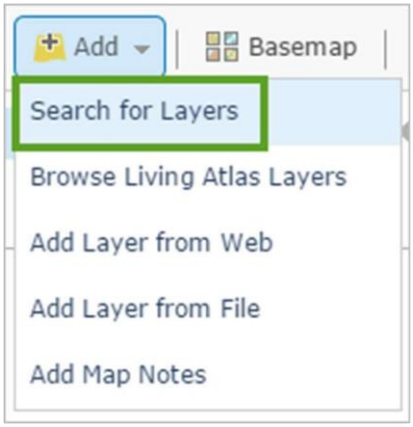
You're given the option to choose how to display the volcano points. Notice that you can symbolize the size and color of the points based on attributes, and you also have the ability to create a heat map based on the point density.



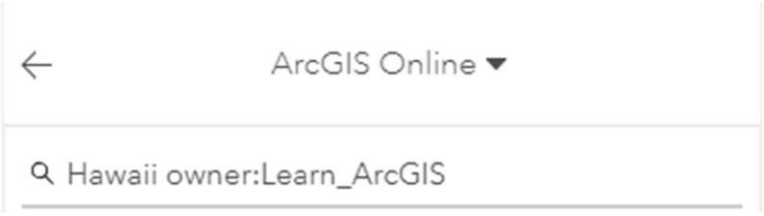
2. In our case, we're just going to display the volcanoes as simple points. Click the Select button on the Locations (Single Symbol) option.
3. If you want to change the default symbol, click the Options button, then click Symbols and choose the appropriate symbol, increase size to 24px and click OK.4. Click done.

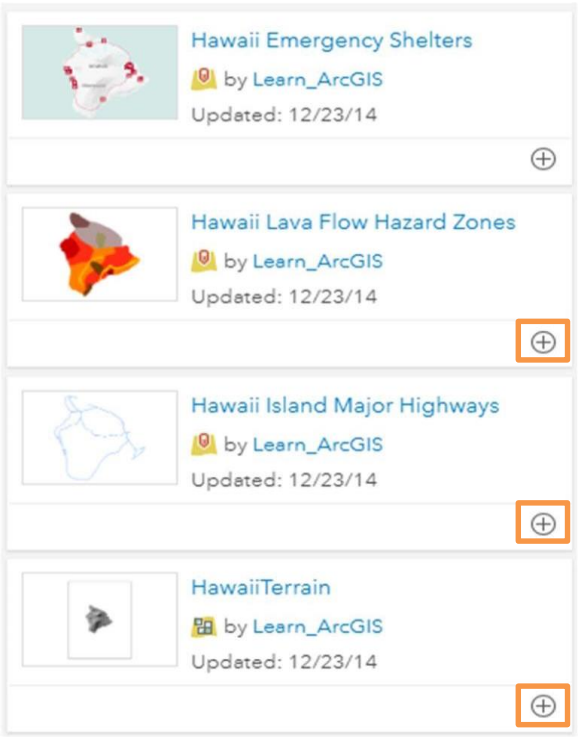
Add layers to the map

You're ready to start adding ArcGIS Online layers to the basemap. On the ribbon, click the Add button and choose Search for Layers.
In the Search for Layers pane, a default list of search results appears.



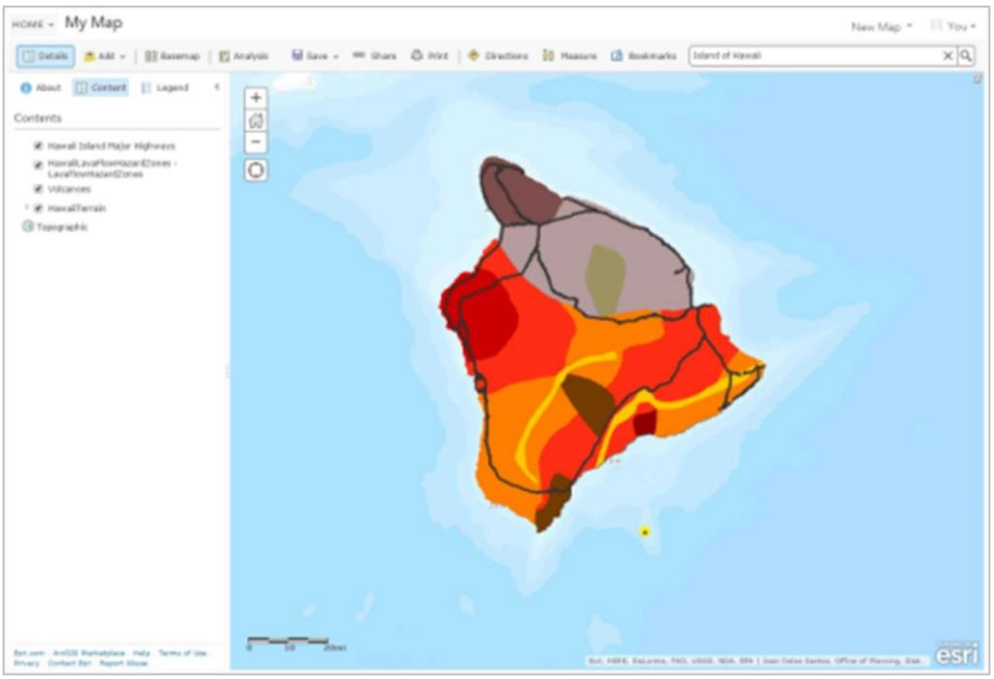
Click the down arrow next to My Content, choose ArcGIS Online. In the Search for
layers box, type "Hawaii." To limit the search results to layers owned by the Learn ArcGIS administrator account, add "owner:Learn_ArcGIS" to the Find box and click Go.





The search results are narrowed to a more relevant list.
In the list of results, locate HawaiiTerrain by Learn_ArcGIS. Click the plus to add the layer to the map.
Note

The layers available in the organization are subject to change, so your search results may look different than those shown.
In the same way, add the following layers from the search results to the map (all layers are by Learn_ArcGIS): o Hawaii Lava Flow Hazard Zones o Hawaii Island Major Highways

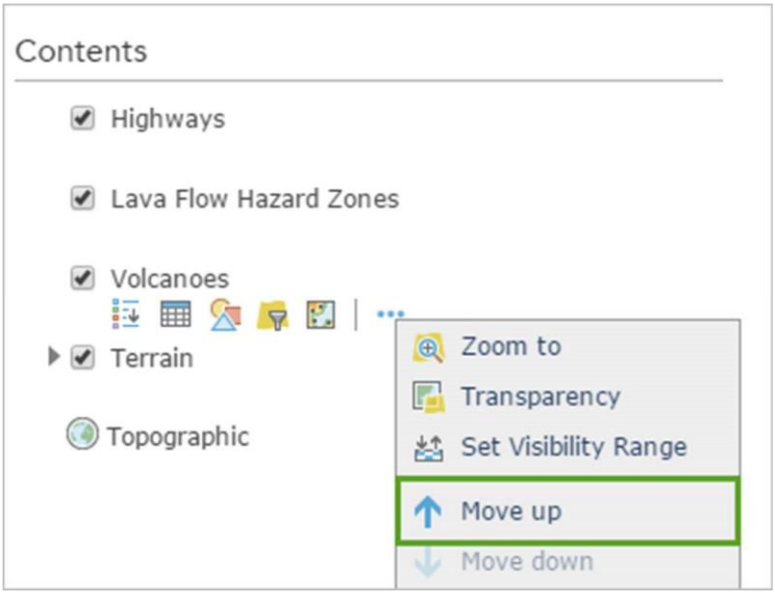


At the top-left of the Search for Layers pane, click the left arrow to go back to the map content.

The layers are drawn, with their default symbols, in the order in which they were loaded into the map. (This is usually, but not always, the same order in which you add them.) You may not see the volcanoes on the map because they are underneath the lava flow hazard zones.

Set layer properties

In this section, you'll change some of the properties of the layers. You'll change their position in the list of layers, add labels, and adjust transparency. Layer properties are always accessed in the same way: by pointing to the layer name and clicking an appropriate button or clicking the More Options button and choosing the property you want to change.



In the Contents pane, point to the Volcanoes layer. Click the More Options button and click Move up.

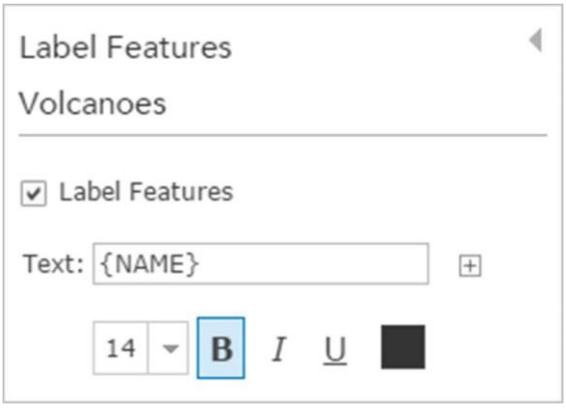
The layer moves up one position, above the Lava Flow Hazard Zones layer. The volcanoes are now visible on the map.

Move the Volcanoes layer up again. Now the Volcanoes layer is at the top of the list.

The usual practice is to put points (such as volcanoes) above lines, and lines (such as highways) above polygons. Points, lines, and polygons are all feature layers: they usually represent discrete geographic objects that have more or less precise locations and boundaries. The Terrain layer, like the Topographic basemap, is a tile layer. Tile layers are images and cannot be manipulated in the same ways as feature layers. They typically represent large, continuous surfaces rather than discrete objects. Tile layers cannot be moved above feature layers in a map.

In the Contents pane, point to the Volcanoes layer. Click the More Options button and choose

Create Labels.



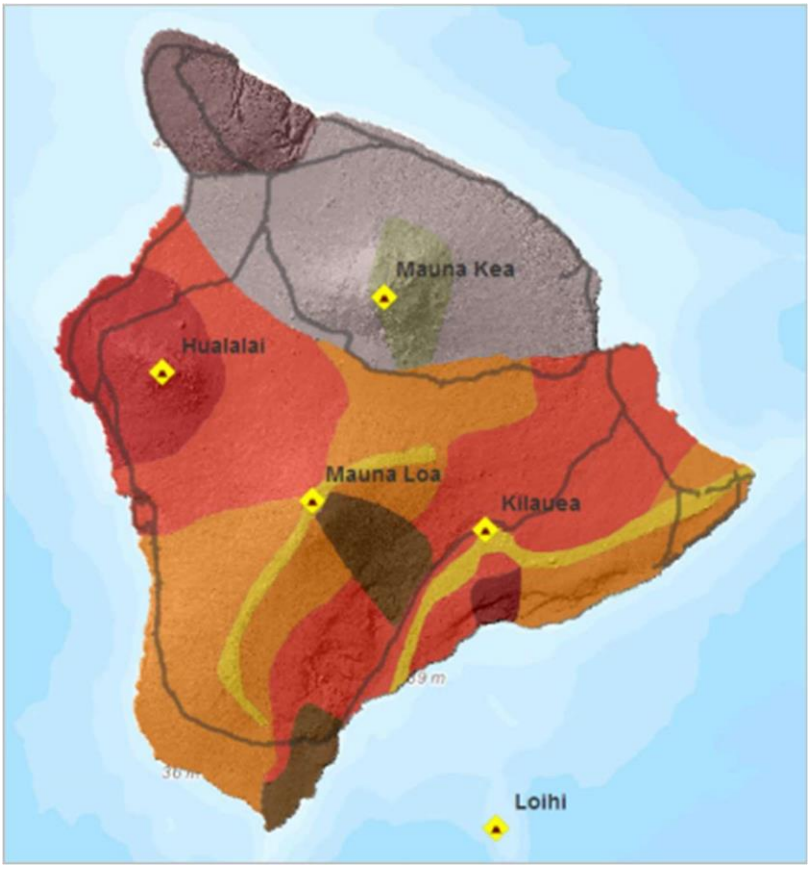
In the Label Features pane, change the label size from 13 to 14, and check the box next to Halo. Click OK.

Open More Options for the Lava Flow Hazard Zones layer and choose Transparency. Make the layer about 40 percent transparent, or whatever looks good to you.

In the same way, make the Highways layer about 50 percent transparent.

Define the map legend

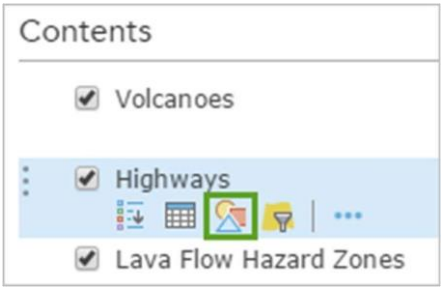
When you start a new map, or open a saved map of your own, it opens with the Contents pane showing. When anyone else opens your map, however, it opens with the Legend pane showing. You should think about how you want the legend to look.



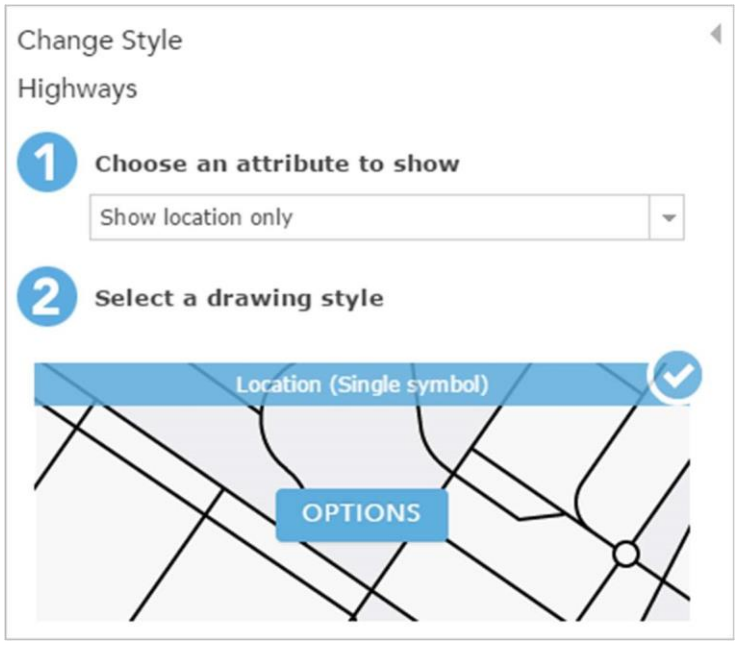
At the top of the Contents pane, click the Legend button.
Legend entries are created for all layers except the basemap. The entry for the Terrain layer (which shows grayscale values) is not useful for interpreting the map.
At the top of the Legend pane, click the Content button.
Open More Options for the Terrain layer and choose Hide in Legend.
View the legend again to see the effect, and then go back to the Contents pane.

Change a symbol

You were able to create the map without too much effort because the symbols, such as shades of red and orange for hazard zones, were already set when you added the layers. A layer's default display settings, including its style and pop-up configuration, are made by its owner. Once you add a layer to your own map, however, you're free to change those settings.

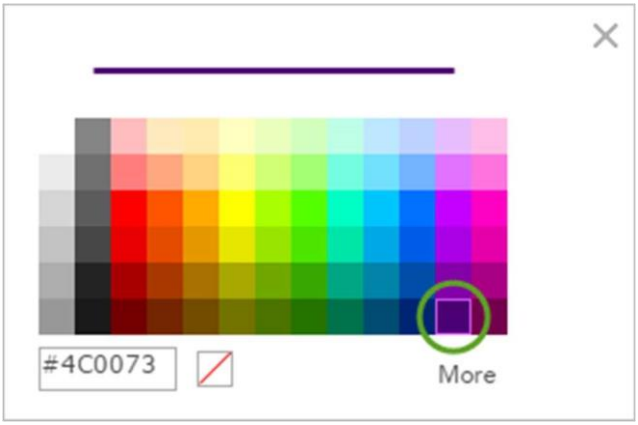


In the Contents pane, point to the Highways layer and click the Change Style button.



In the Change Style pane, notice that the currently selected style is Location (Single symbol), which is indicated by the check mark.

In this style, all features in the layer are drawn with the same symbol. The Location style is appropriate when you want to see the features on the map but you're not interested in their particular characteristics, such as names or speed limits.
For a drawing style, under Location (Single symbol), click Options.



Under Showing Location Only, click Symbols to change the symbol.
On the color palette, choose a color that you think will look good and click OK.

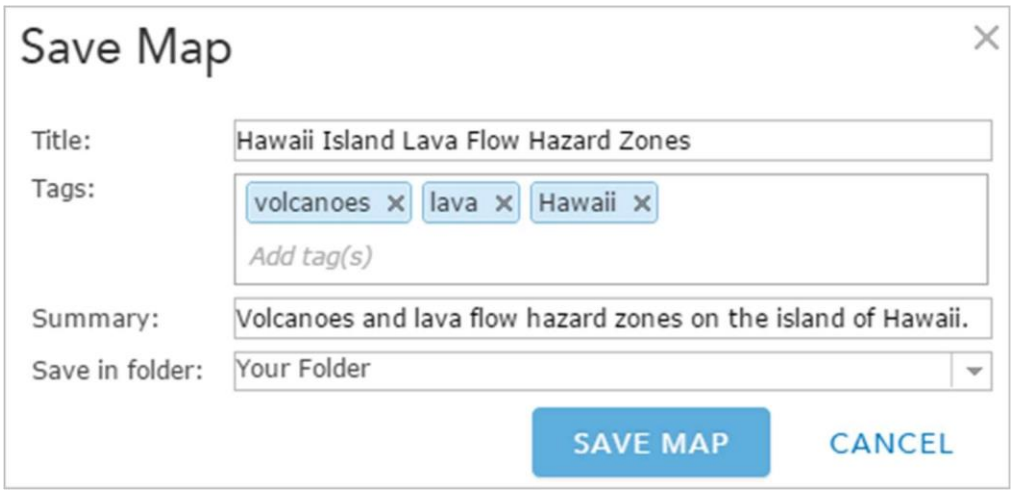
The new color is applied to the map. (If you don't like it, click Symbols again to open the color palette and choose a different color.)

At the bottom of the Change Style pane, click OK and click Done.
Save the map
On the ribbon, click the Save button and choose Save.

In the Save Map window, type "Hawaii Island Lava Flow Hazard Zones" in the Title box.

For the tags, type words that will help people find the map through searches. After each tag, press Enter.

For the Summary, type a brief description of the map's content.



Click Save Map.

The map is saved to your My Content page.

Edit item details

Finally, you'll look at the map on your My Content page and add a description to it.

In the upper left corner of the page, click Home and choose Content.

On your My Content page, the map is listed by its name and other details.

Click the map title to go to the Item Details page

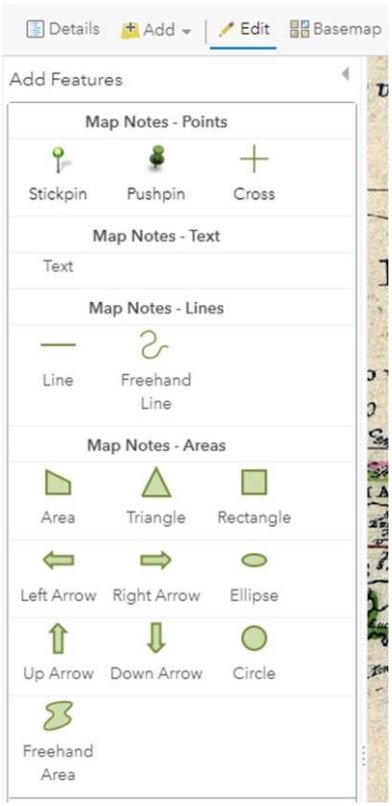
The item details page contains information about your map. It also lets you share the map with others.

Click Edit next to the Description box. Type (or copy and paste) the following text:
"The classification of lava flow hazard zones on the island of Hawaii was made by the United States Geological Survey in 1974. The risk levels are based on the location and frequency of historic eruptions."

Tip
If you copy and paste the text, it may be boldfaced in the description box. You can remove the formatting by highlighting the text and clicking the Bold button on the Description toolbar.
Click Save.
Bonus: Creating Features

Sometimes the need arises to create new layers and data in ArcGIS Online. The easiest way to do this is with Map Notes.

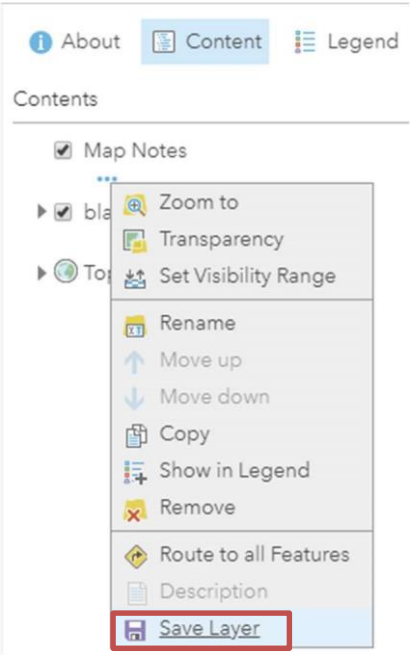
Add a Map Notes layer by clicking Add > Add Map Notes. Give your Map Notes a meaningful name. Leave the Template as Map Notes and click Create.



You should now have the Edit pane open. If not, click the Edit button.

Choose a feature type (point, line, area, or text) and a symbol, and begin creating data. If you don't like the symbols you see, don't worry, you can change that after you've created your feature.

Save Your Layer



Your Map Notes layer is only stored in your map. Let's save it as a layer in your Content so that it can be shared with others.

Close the edit pane by clicking the arrow on the top right or clicking the Edit button.

In your map Content, hover over the Map Notes layer, click the ellipses below the layer title, and click Save Layer. Be sure to include some meaningful tags.

To continue adding features, click the Edit button.