

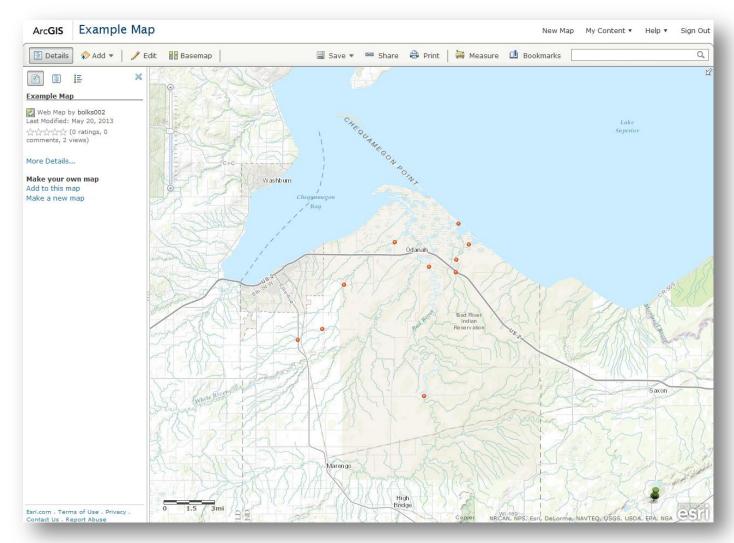
# ArcGIS Explorer: Creating a Site Locations Map

*To get an ArcGIS online account (free Public Account) go to: <u>https://www.arcqis.com/home/siqnin.html</u> Watch Video Tutorial at: <u>http://www.youtube.com/watch?v=vsz79pKqnpQ&feature=youtu.be</u>* 

Don't have an Esri Global Account to register?

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This guide is meant to help create a map of sample site locations for local watershed groups to use as a graphic (that can be used for input into the Data2Maps tool) and as a map that can shared online. With ArcGIS Online you can create maps to view, share, and present GIS data. ArcGIS Online, however, does not have the capabilities of ArcMap but is a good place to start using GIS and may suite the needs of your group.



## 1. Log into ArcGIS Online

Once you have created an account sign into ArcGIS Online: https://www.arcgis.com/home/signin.html?

## 2. Open a blank map

On the top of the website you will see a ribbon that allows you to go into your content, see your groups etc. Click "Map" to open a blank online map.



## 3. Add Sampling Locations:

Add sampling Locations by either:

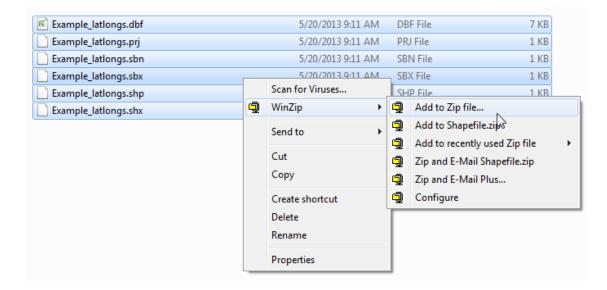
A) Adding a shapefile of your sampling locations (a shapefile that was already created in a GIS program such as ArcMap)

B) Adding sites with a text file of x,y locations (that can be created using excel or another spreadsheet tool)

C) Drawing point "notes" in Explorer

A) Adding sampling locations shapefile:

A shapefile is made up of 6 separate files. In order to upload a shapefile to ArcGIS Online you need to create a zip file with all of these files. To do this, highlight the 6 files and right click on the highlighted area. Click "Add to Zip File."



At the end of the "Add to archive" line of text add the name of the zip file you want to create and click "Add."

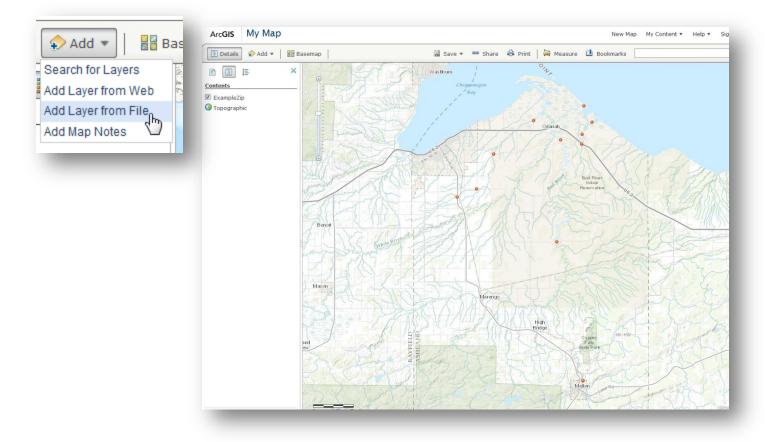
E:\Watershed_Leadership_Acade	emy\Group Project\Complete\Example_Data\Shapefile\ExampleZip New Open
Action:	
Add (and replace) files	<ul> <li>Zip: Legacy compression (maximum compatibility)</li> </ul>
Split Zip file:	<ul> <li>Zipx: Best method (smallest size)</li> </ul>
Don't split	Let me choose the specific compression method
•	Zip: No Compression
Other Size 1048576 Bytes	
1048576 Bytes	
- Options	Archive Attributes
Encrypt added files	Include only if archive attribute is set
Save full path info	Reset archive attribute
Include system and hidden file	5
Δ	Add N Cancel Help

In ArcGIS Online choose "Add" and "Add Layer from File." Browse to your zip file and click "Import Layer."

Choose the option for "Keep original features." If you import a larger polygon shapefile you may consider the option "Generalize features for web display, but the polygons will then be generalized and not hold their exact shape (vertices).

Note: The maximum number of features you can add is 1,000. This is smaller for lines and polygons because they contain many vertices. Large files cannot be added to the ArcGIS Online map. If you are interested in adding larger shapefiles to a map, try using the ArcGIS Explorer Desktop Program (which is also free). Note you will not be able to share web maps using the ArcGIS Explorer program.

You should now see your sampling locations.



## *B)* Adding sites with a text file of x,y locations:

1<sup>st</sup> Gather your site's X,Y coordinates. This can be done easily with excel or other spreadsheet programs.

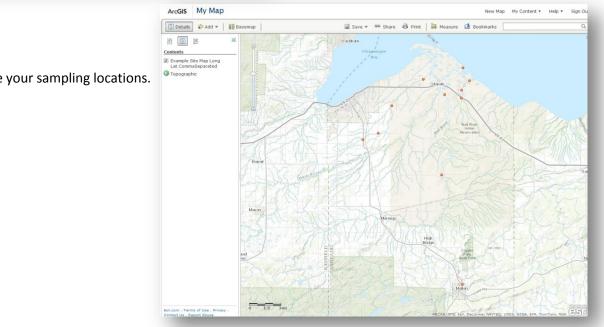
Compile sampling locations with lat and long's in separate 2 columns like shown below. Save the spreadsheet as a tab or comma delaminated file (which are options under "save as").

Site Name         Site ID         Longitude (X)         Latitude (Y)           Bad River: Elmhoist         BR 1         -90.69514         46.48715           Bad River: Govt Rd         BR 2         -90.68916         46.59892
Bad River: Govt Rd BR 2 -90.68910 46.59892 File name:
Bad River: Mouth BR 3 -90.65214 46.63621 Save as type:
Bad River: Highway 169 BR 6 -90.653049 46.33395
Bear Trap: County A BT 1 -90.79641 46.58333 Authors:
Bear Trap: Goslin Rd BT 2 -90.73261 46.62027
Bear Trap: Pearce Rd BT 3 -90.82335 46.54520
Bear Trap: Rte 13 BT 4 -90.85479 46.53587
Denomie Creek: HJ Slough DC 1 -90.63873 46.61842
Denomie Creek SBR DC 2 -90.65490 46.60495
2 Denomie Creek US2 DC 3 -90.65537 46.59414

In ArcG Choose your tab or comma delaminated file and select "Import Layer."

A list of columns in the file will appear. This is where you need to tell ArcGIS online which fields to use as the lat/longs . Click on cell next to the field you want to use as the latitude and select "Latitude." Do the same for the longitude and click "Add Layer."

LongitudeX_	Not used	
LatitudeY_	Not used	
	Not used	
	Add Layer Ca	ncel



Add Layer from File Add Map Notes

b

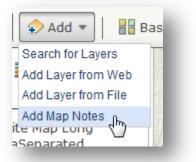
You should now see your sampling locations.

C) Adding Sampling Locations as "Notes":

In Online you can make what are called "notes." They are similar to what is known as a shapefile in GIS programs, but they are not able to be shared with ArcMap). Like a shapefile you can draw points, lines and polygons. For sampling locations a point is used.

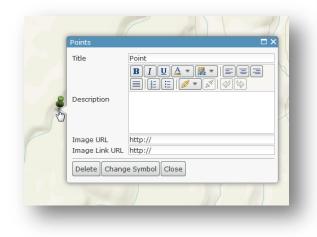
In ArcGIS Online zoom into the area of interest and close enough o your 1<sup>st</sup> sampling point that you can accurately point to the location on the map.

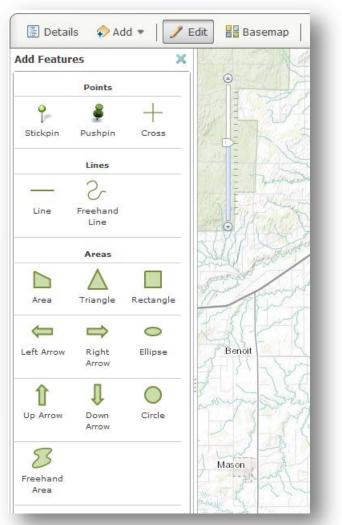
Click the "Add" button and choose "Add Map Notes."



Type in a name for your Notes (such as Sampling Locations) and keep "Map Notes" as the Template. Click "Create."

Now you will see a window that allows you to Add different points, lines and polygons. Choose Once of the "Points" and click on the map Where you would like the point added.





You can now add a title for your sampling location as well as a description. Click "Close when finished."

Repeat for each sampling location you would like to add to the map. When finished click "Details" to get out of the "Edit" mode.

🔄 Details 🔹 Add 🔻 📔 🥒 Edit	Basemap
Show Details of Map 🗶	۲

## 4. Changing the Symbology:

How the points are shown in your map(color, size and style) is called the Symbology. This can easily be changed to better suite what you would like.

A & B) Change the Symbology of Shapefiles or Tables that were added In the ArcGIS Online map, make sure the "Details" button in clicked. Then under the details button choose the button in the center (which is the Contexts.) Hover over the name of the symbols you want to change and an arrow appears. Click on the arrow and choose "Change Symbols." W Example Site Map Long Lat CommaSeparated There are many options for how you cane symbolize your sites.

2 options that would be the most applicable would be the single symbol and the unique symbols.

If you choose "single symbol" click "change Symbol." There are many different types of point symbols that can be selected from. The size can be changed using the "size" sliding bar or typing in a number for the size.

Add an Image	
Symbol size:	20 px
	Done Apply Cancel

If you choose "unique symbols" you need to select a field the "uniqueness" is going to apply to. This could be as simple as the site ID (where every site ID would then have its own color) or your could have a field such as site type (where maybe you have stream, lake and wetlands) in which the streams would be one color, wetlands a  $2^{nd}$  color and lakes a  $3^{rd}$  color.

Click "Done Changing Symbols" when finished.

🔚 Details 🔹 Add 💌 📔 🥒 E
Contents Show Contents of Map
Map Notes
Example Site Map Long Lat CommaSeparated
🔇 Topographic

## C) Change the Symbology of Map Notes

To change the Symbology of a map note click the "edit" button above your map.

Details 🔛 Add 🔻	Edit 🖁 Basemap
	Add, Change or Remove Features

Click on a point and select "Change Symbol." Select from the different symbol choices and change the size as necessary. Click "Apply" when finished. You cannot change more than 1 map note at the same time, but you can type in the value for the size to keep them consistent.

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Preview:			
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Add an Image			
Symbol size: 🔤 🗍		32	рх
	Done	Apply	Cancel

#### 5. Bookmarking a View

Find the best view of the map includes all of your sampling locations by zooming in and out and banning to a location in which all of your sampling points are visible.

Click on the button "bookmarks" above you map and click "Add Bookmark." Add a name for the boomark and click outside of the area you entered the text to see your saved bookmark. Now any time you click on this bookmark the map will go back to this location.

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## 6. Changing the Basemap

Click the basemaps button on the top of the map. There are many options to choose from and you can switch between different basemaps for different purposes .



# 7. Save your Map.

Now, if you have not done so already, is a good time to save your map. Click on the button "Save" and save the map to your account. You need to add at least on "tag" which are words that you would use to search for the map. Such as "\_\_\_Watershed"

# 8. Creating a Map Image and Sharing the Online Map

Map Image:

If you would like to use this map as a mage image (to add to a website, document or to use in a program such as Data2Maps) you will need to take a screenshot. There are different programs that will do this as well as keyboard commands that you can use (which vary by computer type). Try goggling something like "screenshot Windows 7" to get instructions on how to take a screenshot. You probably want to choose just the area of the map and not the entire computer screen. Windows 7 has a built in capturing program under Start > All Programs > Accessories > Snipping Tool.

# **Online Map Sharing**

To share the online map click the "Share" button on the top of the map. You can choose to make the map Everyone (public) or to share with a group (you would need to create a group and have members create accounts and add to your group). To add the map to something like a facebook page or website the map will need to be shared to Everyone (public).



Once you have clicked "Everyone (public) you can then copy and paste the link and send to others to open via email, click the Facebook or Twitter options to add to your social media pages, click "Embed in Webiste" to add to your website or even "Make a Web Application" for advanced options on sharing your map (such as comparing different maps side by side).

# 9. Accessing your Map

The map you saved will be available under My Content in your ArcGIS Online Account. Here you can also create folders to organize maps.

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