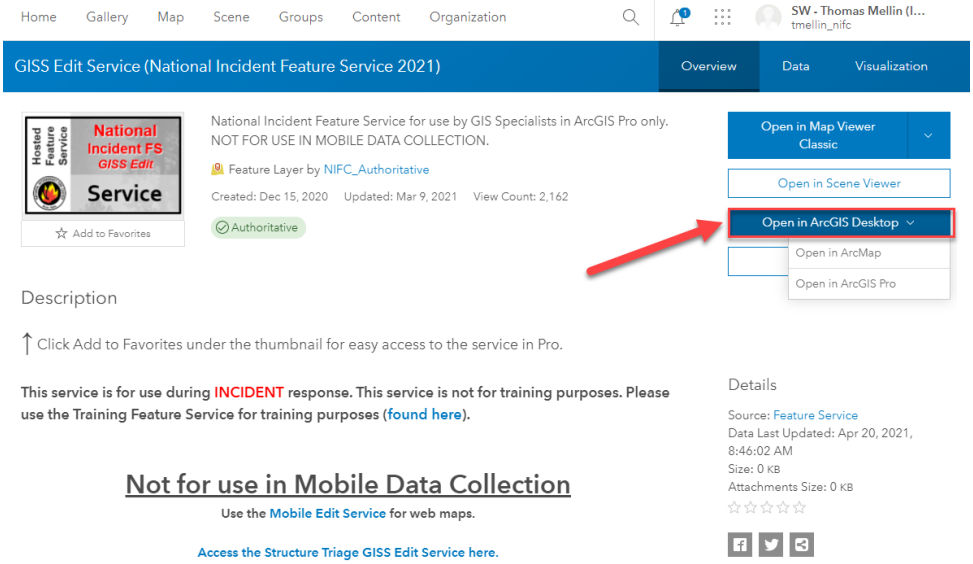
Obtaining Current Fire Perimeters from NIFS (National Incident Feature Service) in AGOL for IRINs

You will need to have a NIFC AGOL account with the GISS user role. If you do not already have one you can request it here Request NIFC AGOL account. When filling out the form be sure to request the GISS user role or you will not be able to access the NIFS. NOTE to Forest Service users: You need a NIFC AGOL account which is different from the standard FS AGOL account. The standard FS account will not work for accessing NIFS.

1. Add the Service to ArcMap

a. Click on this link and log in with your NIFC AGOL account info. HOSTED GISS Edit 2021

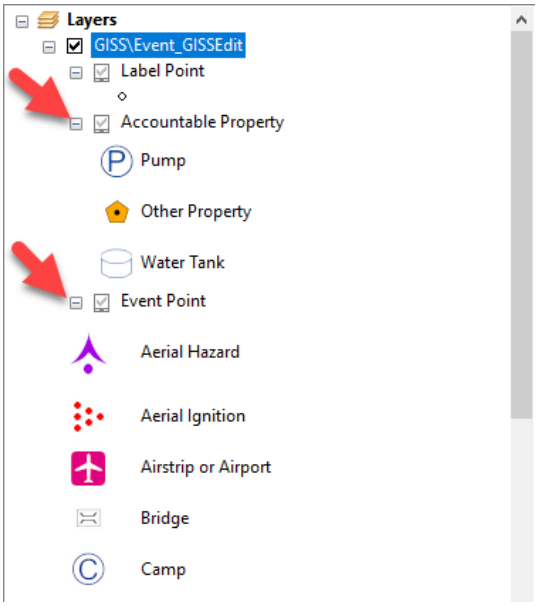
b. On the upper right hand side select Open in ArcGIS Desktop, then choose ArcMap or ArcPro



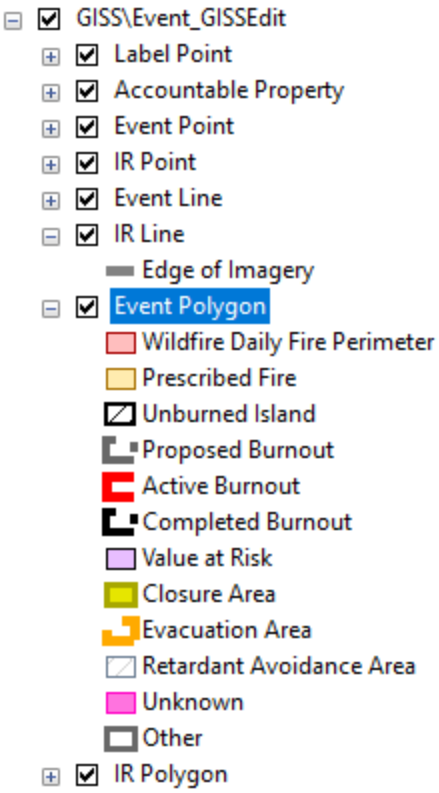
c. A file titled **item.pitem** (ArcMap) or **item.pitemx** (ArcPro) will be downloaded. Click on that file to open ArcMap, sign in with your NIFC AGOL account info, and the service will be added. If you already have an .mxd open it will be added to that map document.

2. Select and export your fire perimeter

a. When the service is first added, all the feature categories are expanded so click on the minus signs to collapse them.

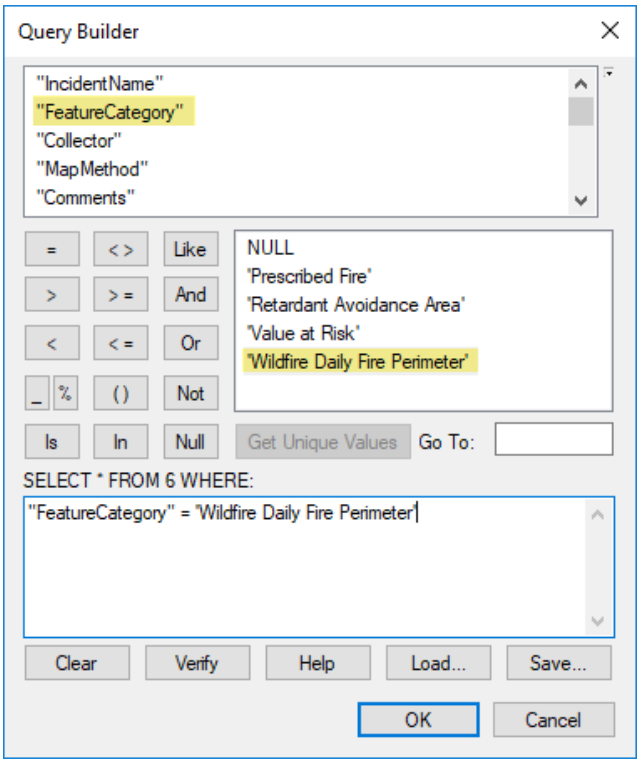


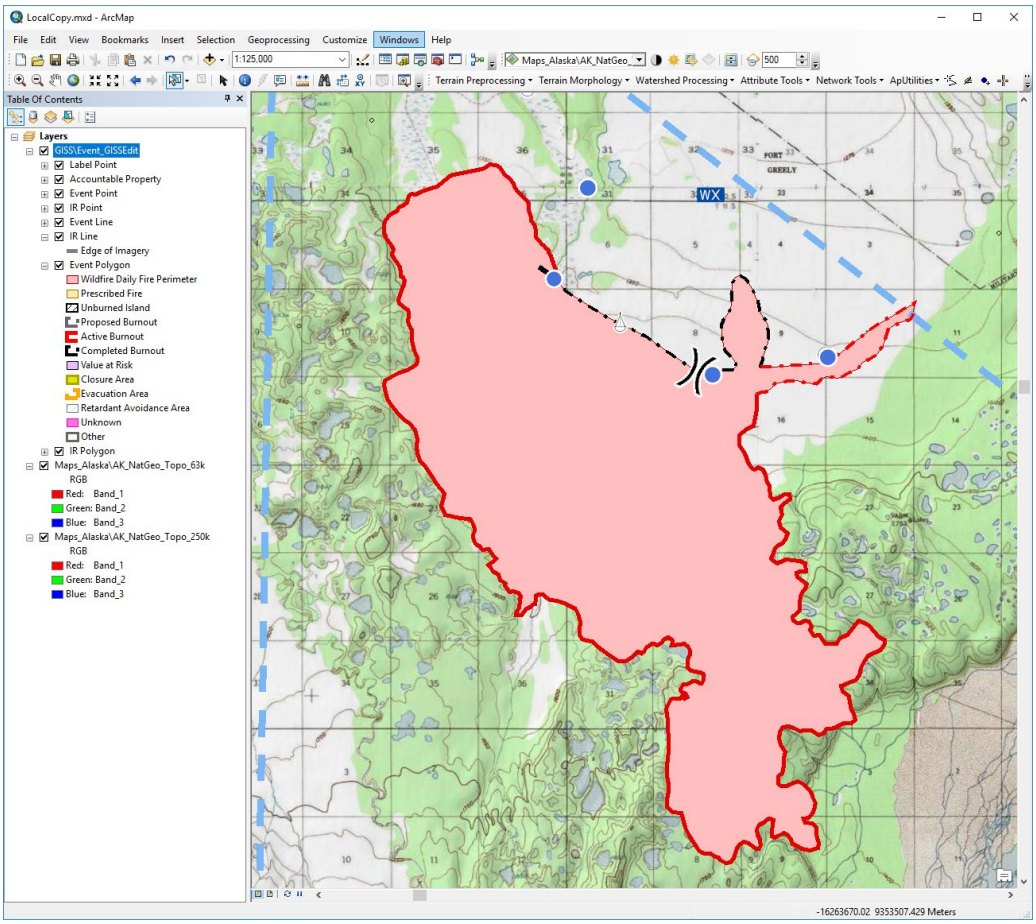
b. There are many feature categories but the one we are interested in is **Event Polygon**. You will also see one called IR Polygon but you can ignore that.



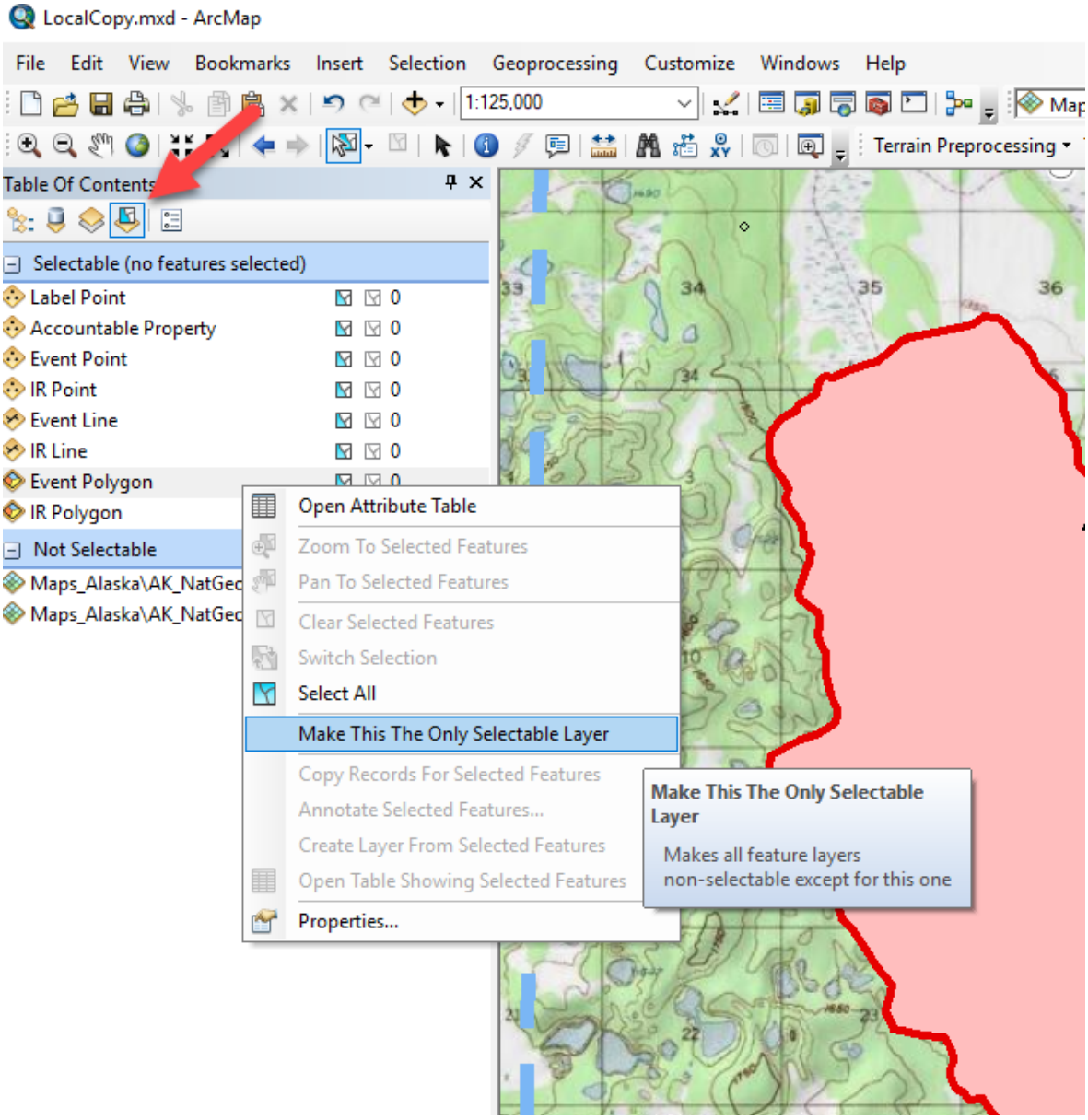
c. Zoom in to the area of your incident. Be sure to include every polygon that is part of the perimeter for your fire. There may be many other polygon features including Closure Areas,

Value at Risk, Retardant Avoidance Areas, etc. To ensure you only download the fire perimeter use a definition query (Definition Query tab under Properties) and set the query for “Feature Category” = “Wildfire Daily Fire Perimeter”.

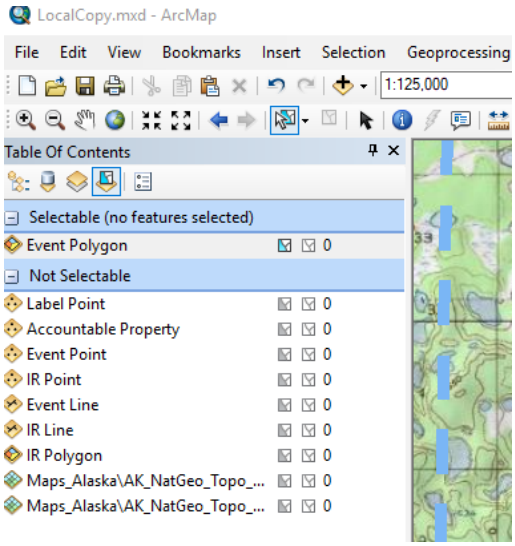




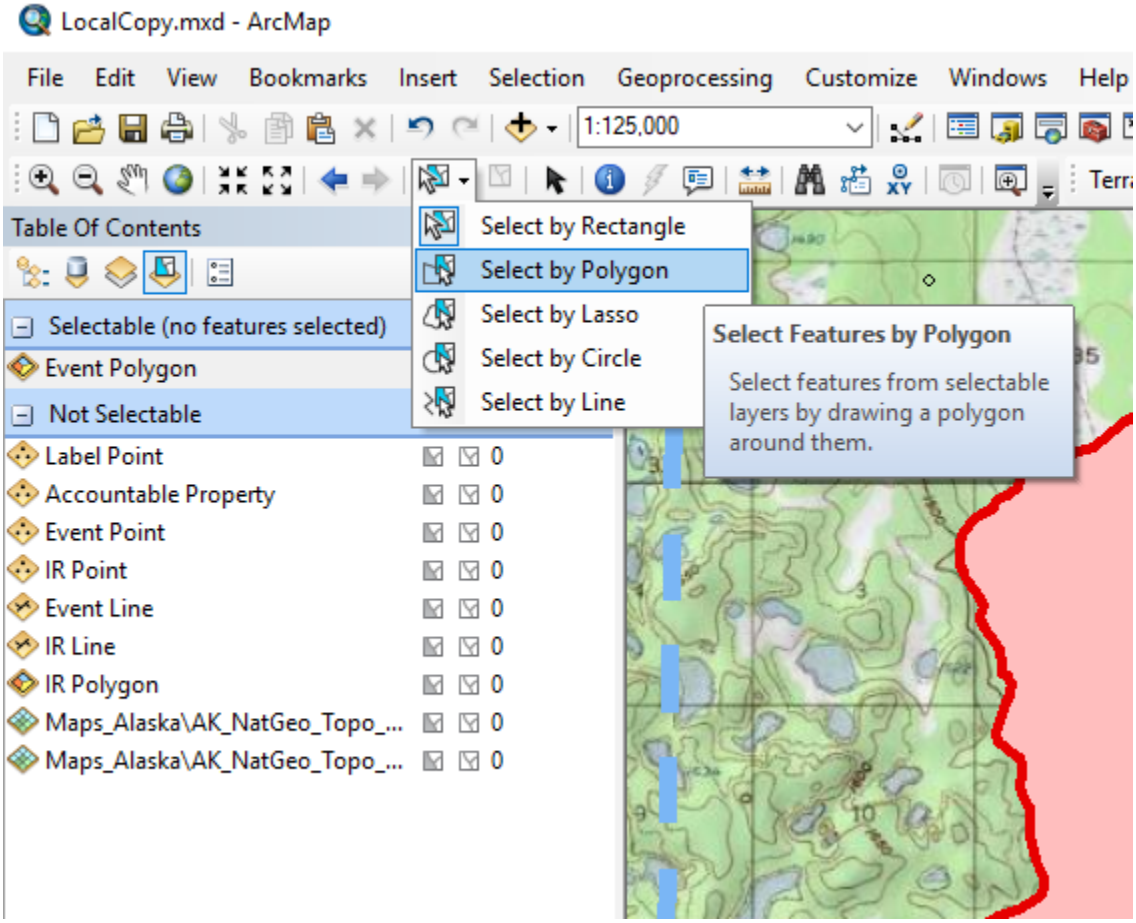
d. Now switch to the List By Selection tab. We want to make Event Polygon the only selectable layer so that we do not select NIFS points or lines or other features in the table of contents. Right click on Event Polygon and select Make This The Only Selectable Layer.



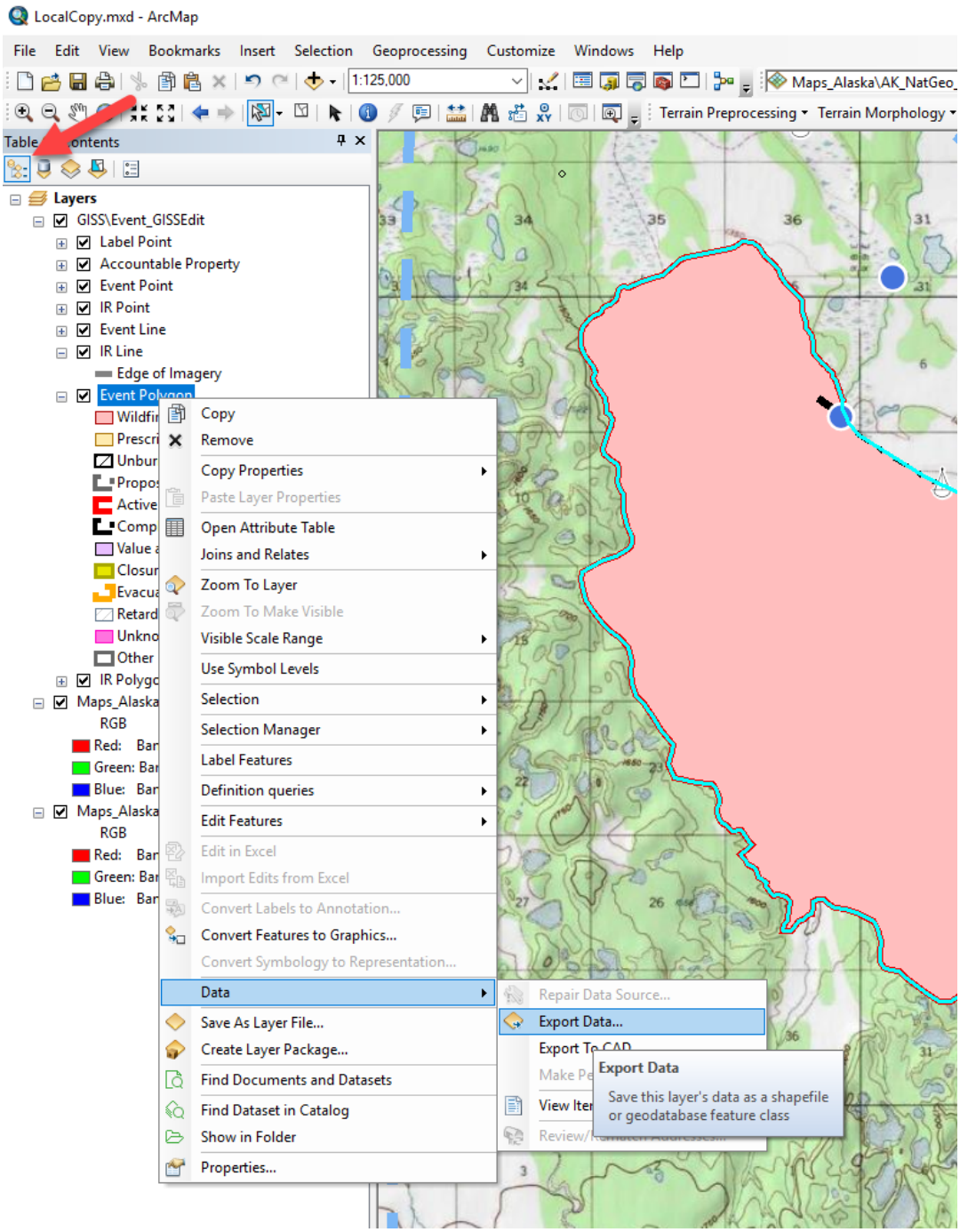
e. The selection area should now look like this.



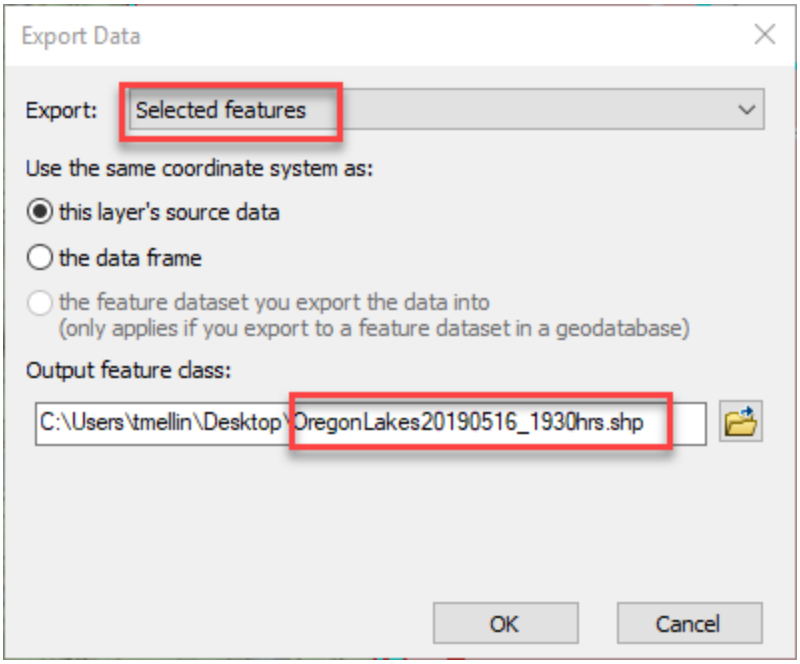
f. Then go to the Select Features button and use either Select by Rectangle or Select by Polygon. Try to avoid including features from other adjacent incidents. If some are present in the current extent you will need to make sure they are not included in the perimeter file you create. (**NOTE**: It's important to make sure all polygons for the most recent perimeter are included but not any previous perimeters.)



g. Once the perimeter is selected, switch back to the List By Drawing Order tab, right click on Event Polygon and select Data→Export Data.



h. Export the selected features to your working directory where you keep incident perimeters. It is highly recommended to include the date and time you downloaded the perimeter to the file name so that you can reference this in your log. Example: “started with incident perimeter from NIFS at 5/16 1930 hrs”.



i. This perimeter is what you will use for your starting point for the night's interpretation using the IR product naming conventions e.g. 20190516_2330_OregonLakes_HeatPerimeter.shp.

Best Practices (an educated guess)

This process is new for this fire season so many issues may arise. Please let me know what you encounter (thomas.mellin@usda.gov) but here are some things to consider.

Don't pull the perimeter from NIFS too early. It is a good idea to communicate the expected flight time so that the GISS has an idea when you will be needing a current perimeter. With multiple fires to map you will not always be able to wait for all the latest updates. Stating the time of download in your log will help document when you pulled the perimeter.

If you have problems with this process, you can still request that the GISS upload the perimeter to the ftp site. It is in their best interest for you to have the latest information. As a fallback you can work from the previous IR perimeter. Just be sure to note in your log what you used for the start of your interpretation.