

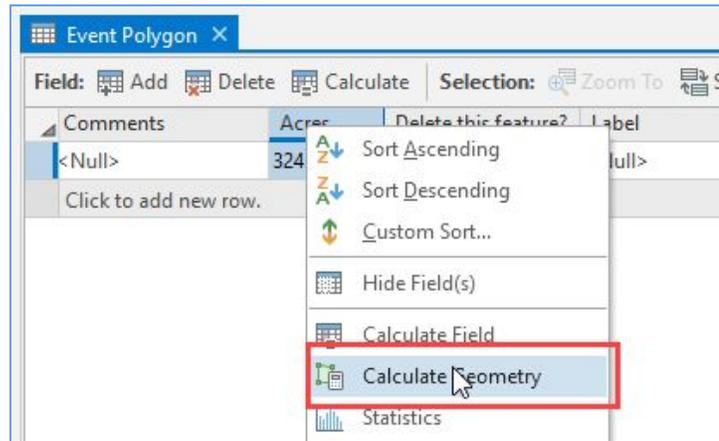
Analysis Products in ArcGIS Pro

Calculate Geometry

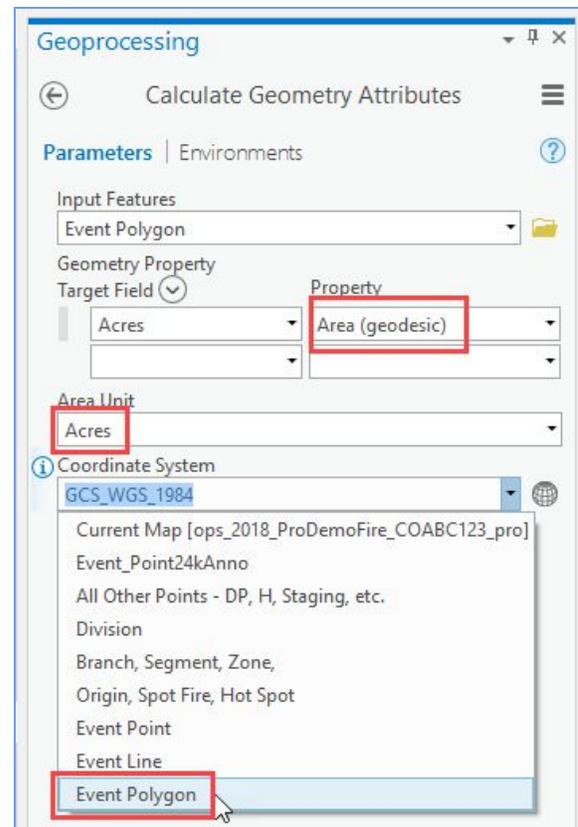
Acres

The Calculate Geometry GP tool was added to ArcGIS Pro in the 2.2 release. If using an older version of Pro, please see the [Calculate Geometry using Python](#) document.

1. From the Event Polygon attribute table, right-click Calculate Geometry.



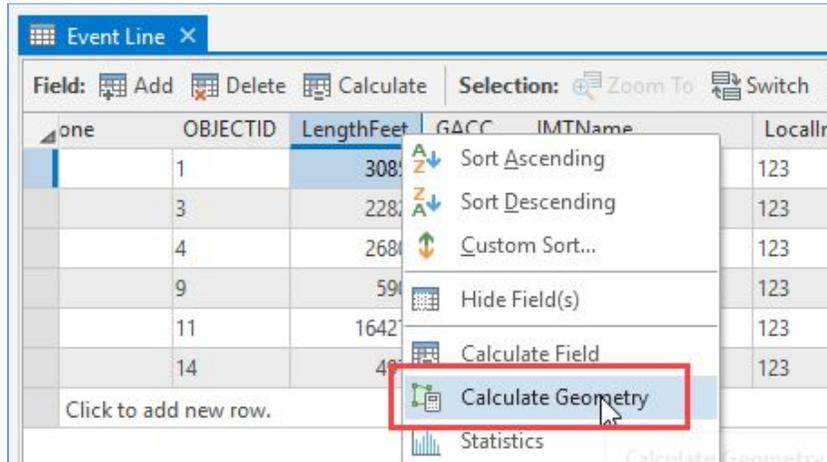
2. The Calculate Geometry Attributes tool will open in the Geoprocessing pane.
3. Enter Area for the Property, Acres as the area unit, and select the Event Polygon layer as the Coordinate System.
4. Click Run.



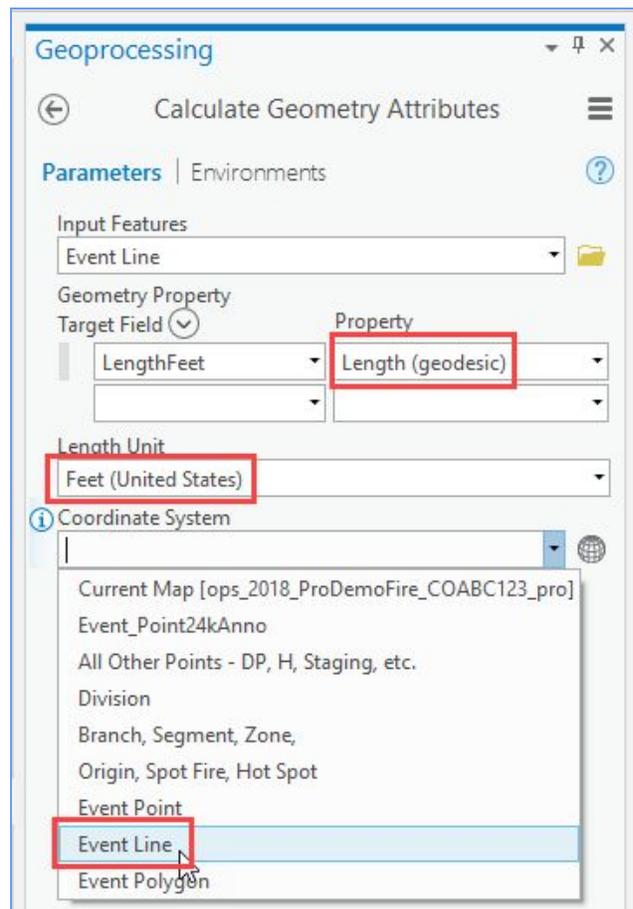
Length

The Calculate Geometry GP tool was added to ArcGIS Pro in the 2.2 release. If using an older version of Pro, please see the [Calculate Geometry using Python](#) document.

1. From the Event Polygon attribute table, right-click Calculate Geometry.



2. The Calculate Geometry Attributes tool will open in the Geoprocessing pane.
3. Enter Length as the Property, Feet as the Length Unit, and Event Line as the Coordinate System.
4. Click Run.



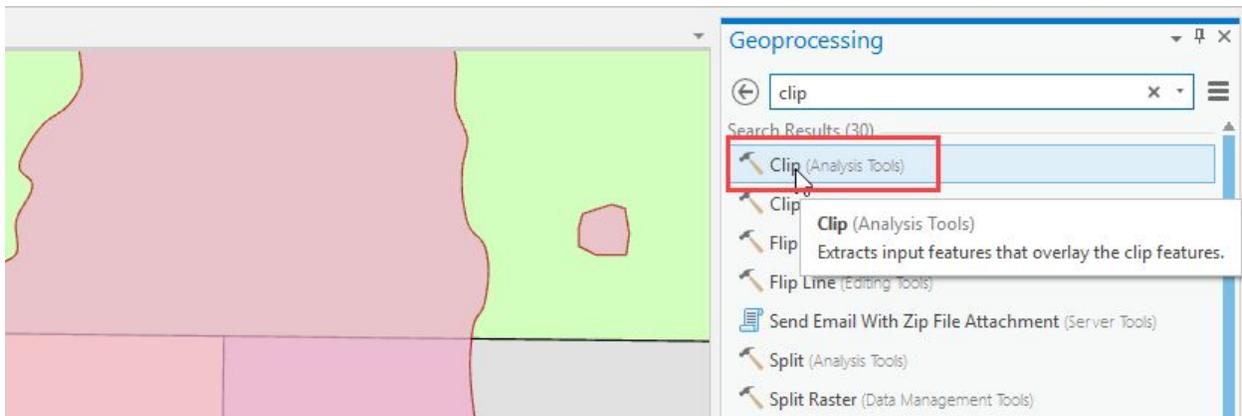
Lat/Long

As of the ArcGIS Pro 2.2 release, Calculate Geometry does not support DDM as an output coordinate format. Please see the [Calculate Geometry using Python](#) document.

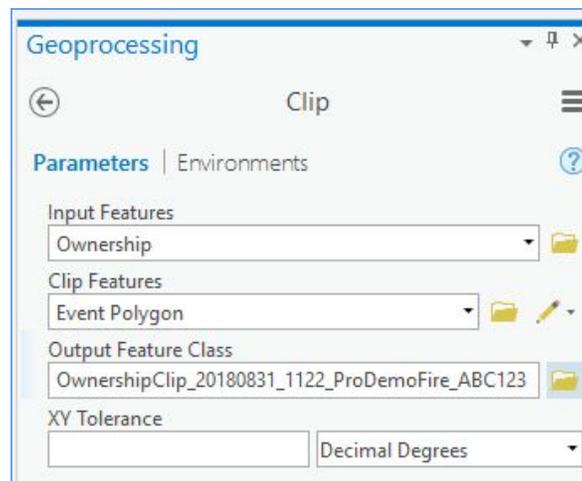
Acreage Burned by Ownership

Prior to calculating the acreage by ownership, a polygon dataset of land ownership will need to be acquired. County level parcel data is often the most accurate; however, national datasets can be used as well. Most common is the “Surface Management Agency” data from the Bureau of Land Management (BLM) (<https://navigator.blm.gov/home>).

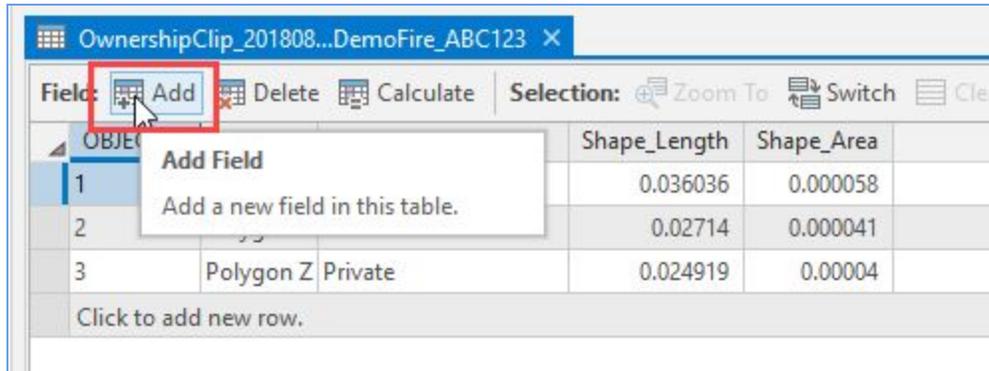
1. With the ownership data added to the map, open the Geoprocessing pane, search for and open the Clip tool.



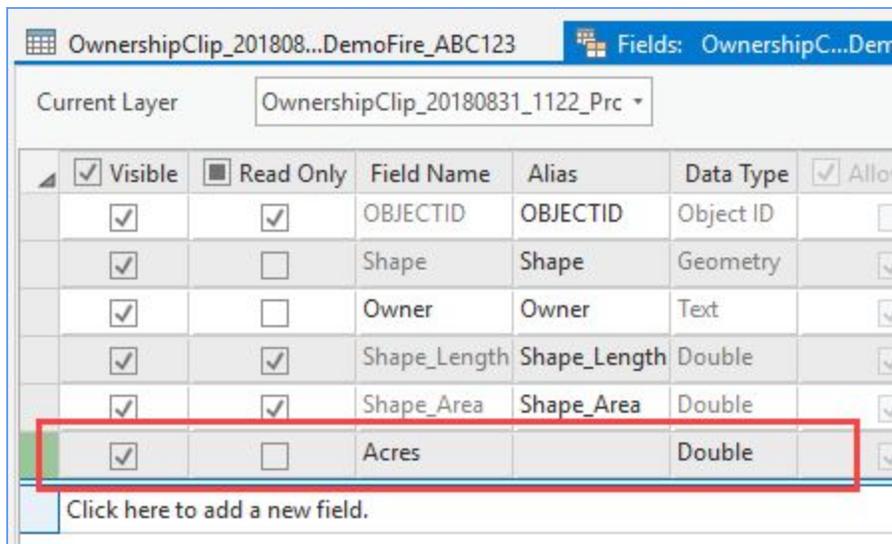
2. Enter the Ownership data as the Input Features, Event Polygon as the Clip Features, and save it to an appropriate location following GSTOP naming.



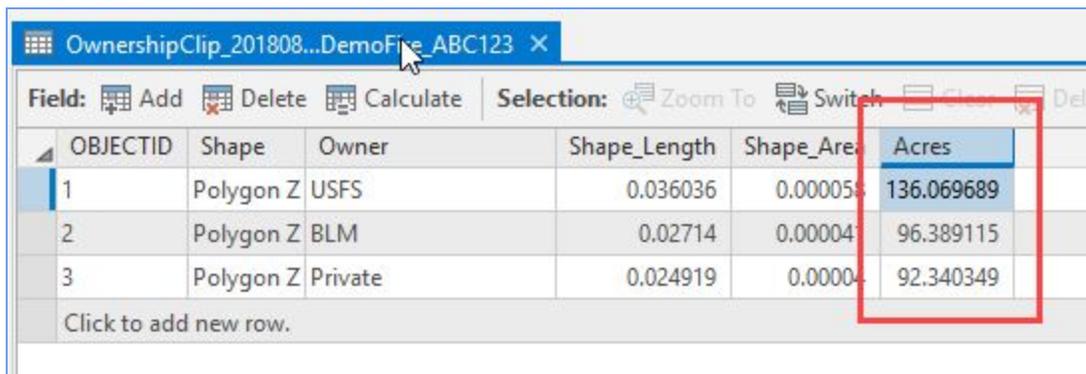
- Open the resulting feature class' attribute table and add a field.



- Name the field Acres and set the Data Type to Double. Click Save on the Ribbon.



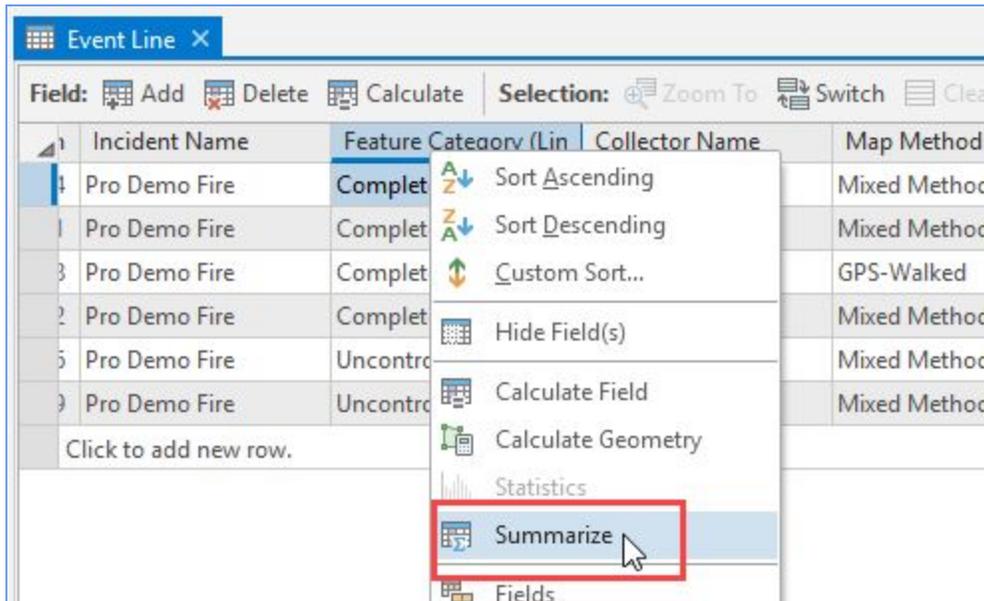
- Calculate the Acres field.



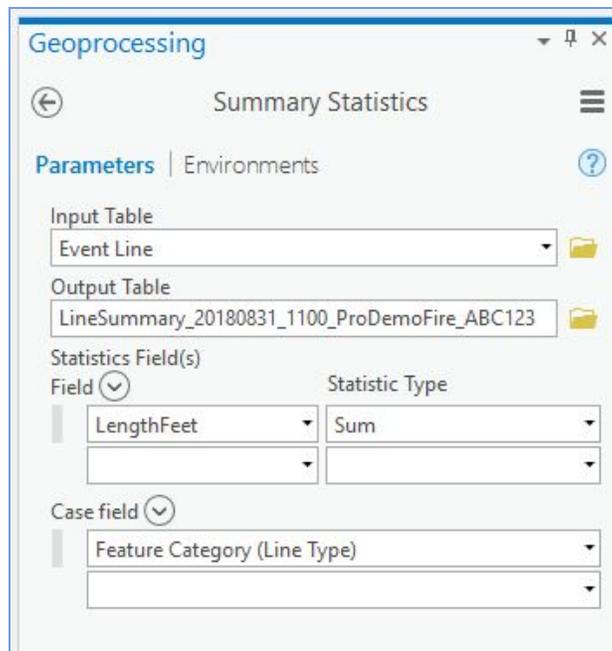
NOTE: If the ownership data has multiple polygons for the same owner, Summary Statistics or Dissolve can be used to combine them.

Line Distance by Feature Category

1. Calculate the LengthFeet field in Event Line.
2. Open the Event Line attribute table and right-click on Feature Category. Select Summarize.



3. The Summary Statistics tool will open in the Geoprocessing pane.
4. Enter LengthFeet and Sum as the Field and Statistic Type. Set the output to the Other Incident Data gdb or an appropriate folder and name following GSTOP. Click Run.



- The resulting table will return the total length in feet for each feature category present.

OBJECTID	Feature Category (Lin)	FREQUENCY	SUM_LengthFeet
1	Completed Dozer Line	1	2282
2	Completed Line	3	6355
3	Uncontrolled Fire Edge	2	16924

Click to add new row.

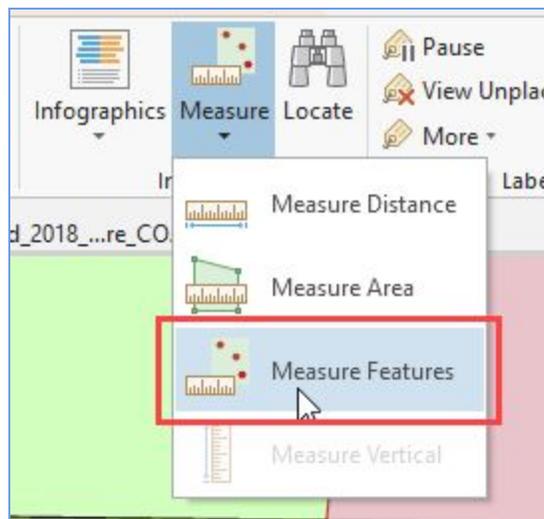
Percent Containment

The percent containment of a fire is generally the percentage of fire edge that is control line.

Always check with the SITL before publishing or printing anything that displays this.

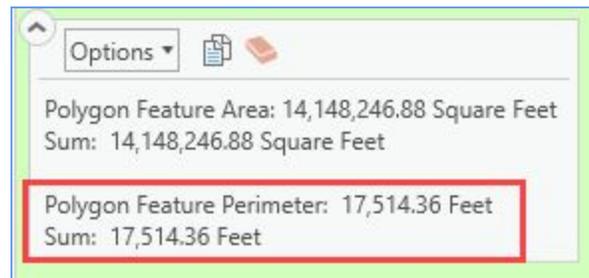
There are many methods and custom tools to calculate containment. This example is one of the simplest ways to do so in Pro.

- On the Map tab of the ribbon, in the Inquiry section, select Measure Features from the Measure dropdown.



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2. Set the Distance Units to Feet under the Options and click on the current Wildfire Daily Perimeter.



3. If there are multiple polygons, click each and the Sum portion will add them together.
4. Take the total length of Uncontrolled Fire Edge from the Line Distance Summary operation described above and divide that by the total Perimeter from the measure tool. Eg. $16,924 / 17,514 = .966$ or 97%.
5. This percentage is *Uncontrolled* fire line, so the remaining percentage is the Percent Containment. This example is 3% contained.