

# Florida Fires 1994 - 2019 Web Application Version 2: User Guide

August 14, 2019

**\*\*DISCLAIMER \*\*** Document is designed to be useful without the use of these decorative images for the purposes of accessibility. All images are classified as decorative and can be used for additional reference.

## Table of Contents

1. Introduction to the Florida Fire Dataset and Web Application	pg. 3
2. Web App Limitations	pg. 3
3. Tool and Mapp Over View	pg.4
3.1.Extent and Zoom	pg.5
3.2.Location Search	pg.6
3.2.1. Search Bar	pg.6
3.2.2. Find Map Coordinates	pg.8
3.3.Add Data	pg.9
3.3.1. Search	pg.9
3.3.2. URL	pg.9
3.3.3. File	pg.10
3.4.Filter	pg.11
3.4.1. Management Lands	pg.11
3.4.2. Custom	pg.12
3.5.Query	pg.13
3.5.1. Attributes	pg.13
3.5.2. Drawn Polygon	pg.14
3.5.3. Layer	pg.14
3.6.Layer List	pg.16
3.7.Print	pg. 17

## **1. Introduction to the Florida Fire Dataset and Web Application**

This web application is designed to give users basic access and functions to explore the Florida Fire data set. The Florida fire dataset was developed using BAECV derived products from USGS partners and a combination of change detection algorithms, spectral indices, and reference areas with LANDSAT Imagery developed by Tall Timbers Research Station for Florida Fish and Wildlife Conservation Commission. The resulting product delineates burned areas at a 30 m pixel resolution for fires occurring between 2006 – 2018. This dataset may not encompass all fires at this resolution, but users are encouraged to provide feed back on accuracy or missing events.

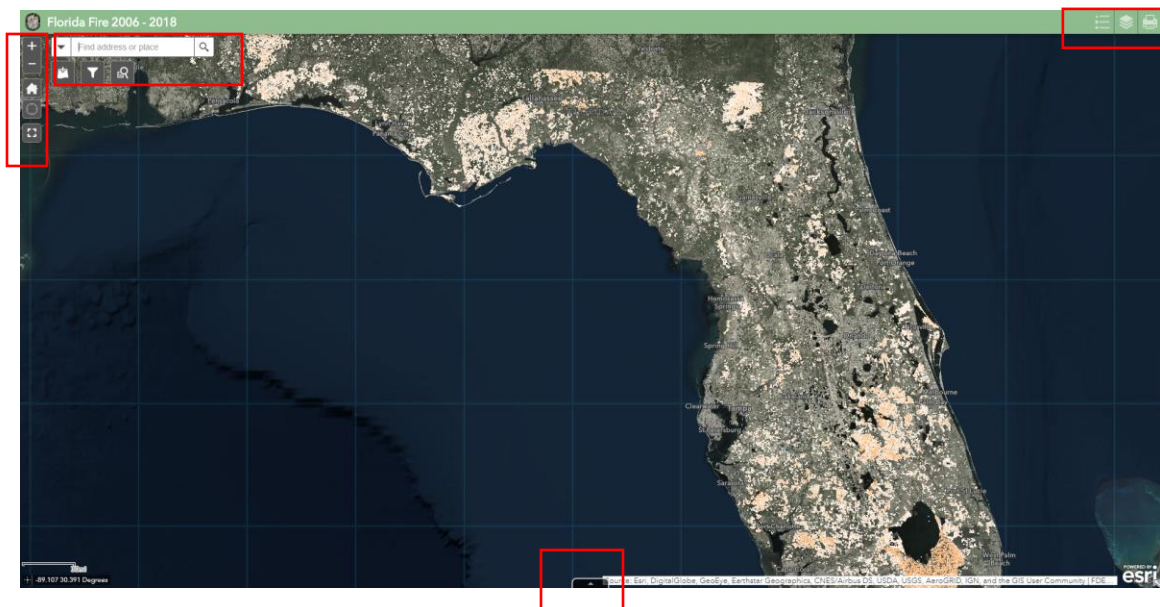
## **2. Web App Limitations**

Due to the size and scale of the datasets included in this web app, drawing scales are enforced, vector tiles were utilized, and attribute return limits were imposed to improve drawing speeds and processing response. Though Management Areas can be searched, filtered, and queried at any scale, the features are not displayed until a 1:600,000 scale is reached. The Florida Fire layer is set to a vector tile layer, prohibiting the display and customization of symbology in the Layer List. Users can still query, filter, and identify features in this layer, but selected features will not be highlighted in the map view. Additionally, feature returns were capped at 100,000; Any query or filter which returns more than 100,000 features will fail.

### 3. Tool and Map Overview

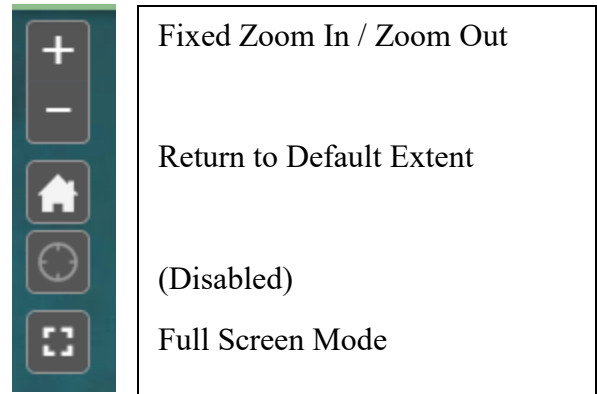
Four locations to find tools:

- Extent, zoom wigits  
Top left of layout, oriented vertically
- Add Data, Filter, Query, and Search wigits  
Top left of layout, oriented horizontally
- Legend, Layers List, Print  
Top right of layout
- View Attribute Tables  
Bottom center of layout



### 3.1 Extent and Zoom

There are four enabled wigits which control the extent and scale of the map. Users can click and drag across the map interface to manually scroll to an area of interest. The + and – symbols indicate a ‘Fixed Zoom In’ and a ‘Fixed zoom out’ respectively. The ‘Home’ button enables the user to ‘Return to Default Extent’. And the last widget will enable a ‘Full Screen Mode’

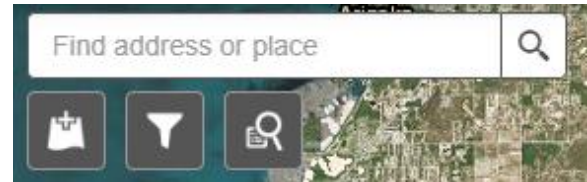


## 3.2.Location Search

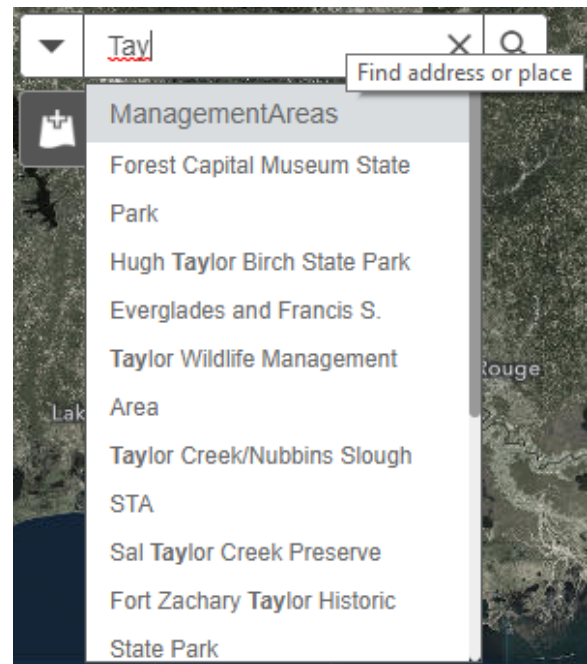
The User has several options for searching locations or area of interests.

### 3.2.1 Search Bar

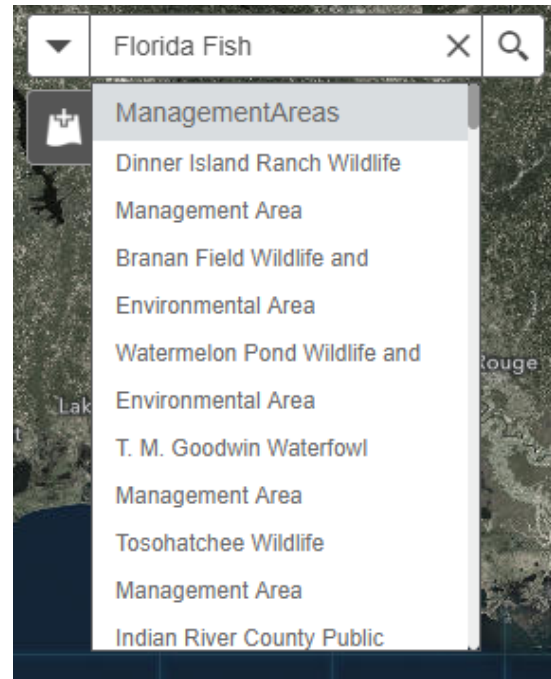
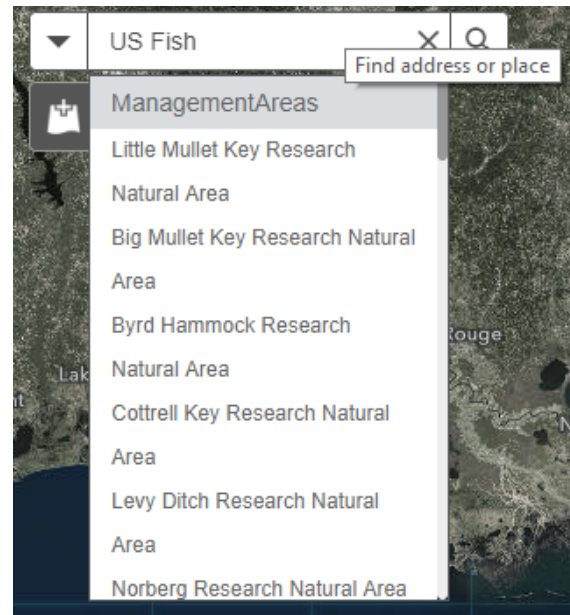
The Search Bar can be used to locate and zoom to a *specific location*, such as an address, or coordinates, *general location*, including city or county, *management area name*, or *managing agency*.



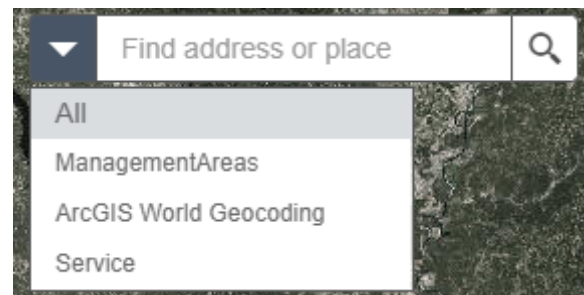
The search entry does not need to be a complete or an exact match; Partial entries will return matched letter combinations.



Users can type in a managing agency, such as US Fish and Wildlife Service, Florida Fish and Wildlife Conservation Commission to view all properties. Only partial entry is required to return results.



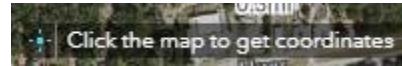
The Down arrow allows you to select which layer is searchable. The default is set to 'All.'



### 3.2.2. Find Map Coordinates

Users can obtain coordinates for a specific location on a map. On the bottom left hand corner of the map, select the icon left of the displayed coordinates. Click on a desired location in the map. This will place an icon; it's coordinates can be viewed on the bottom left hand corner.

These coordinates can be copied and pasted into the Search Bar.





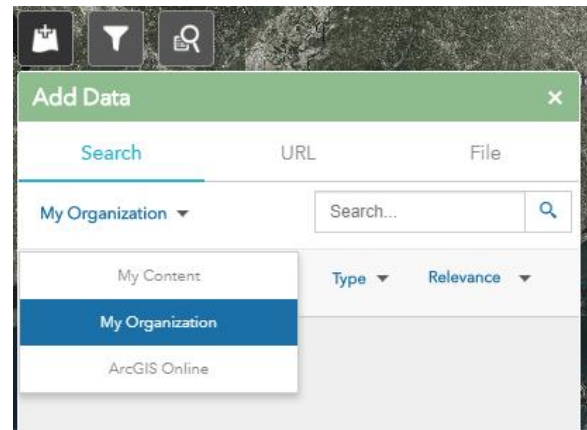
### 3.3.Add Data

The 'Add Data' widget allows a user to add your own data to the map, which can be used for visual or querying purposes

#### 3.3.1. Search

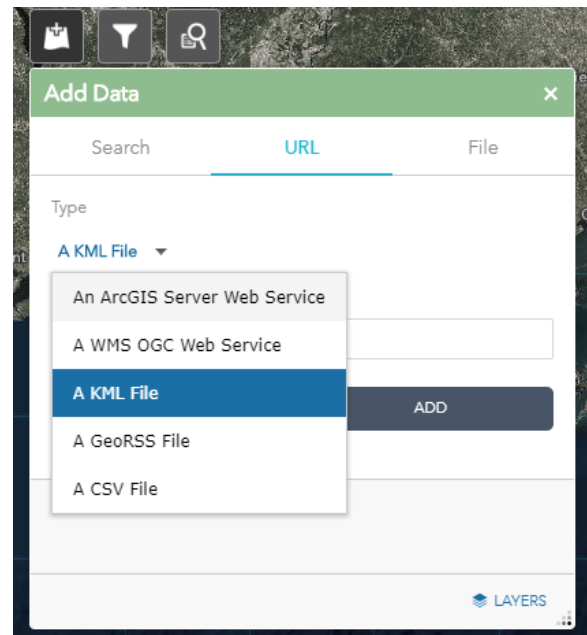
If a user has an ArcGIS Online Account (AGOL), data can include hosted organization layers or individual AGOL content folder.

ESRI hosted layers are also available to the user who has an AGOL account.



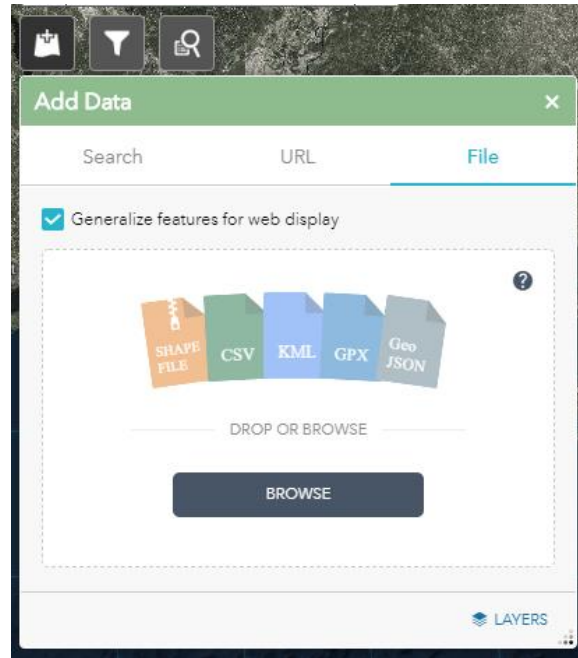
#### 3.3.2. URL

The URL tab allows a user to add data via a known REST service. Several data storage types are supported, including hosted CSV, WMS, KML and GeoRSS.



### 3.3.3. Add File

Users can add files to the map from their local machine.



Several data types are supported

- A Shapefile (.zip, ZIP archive containing all shapefile files)
- A CSV File (.csv, with address or latitude, longitude and comma, semi-colon, or tab delimited)
- A KML File (.kml)
- A GPX File (.gpx, GPS Exchange Format)
- A GeoJSON File (.geo.json or .geojson)

Another limitation to consider

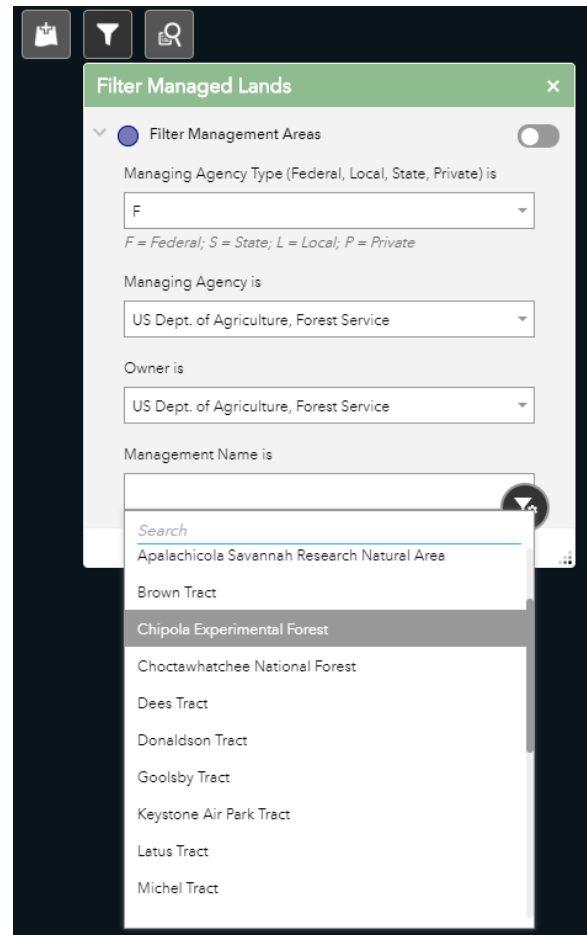
- A maximum of 1000 features is allowed

### 3.4.Filter

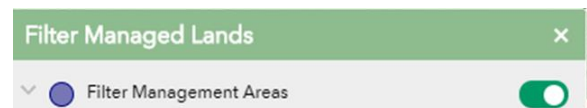
The Filter Tool allows a user to search the Managed Lands layer. Selections made from this tool can be used to query the fire data in specific areas.

#### 3.4.1. Managed Lands

Managed lands can be filtered by type of ownership, specific managing agency, or specific management area. It is not necessary to enter a filter into every field.



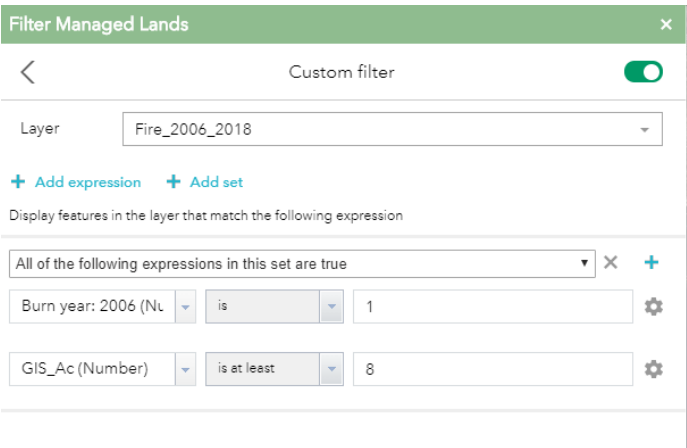
Set the Slider to 'Green' to apply the search. The map extent will zoom to the filtered results.



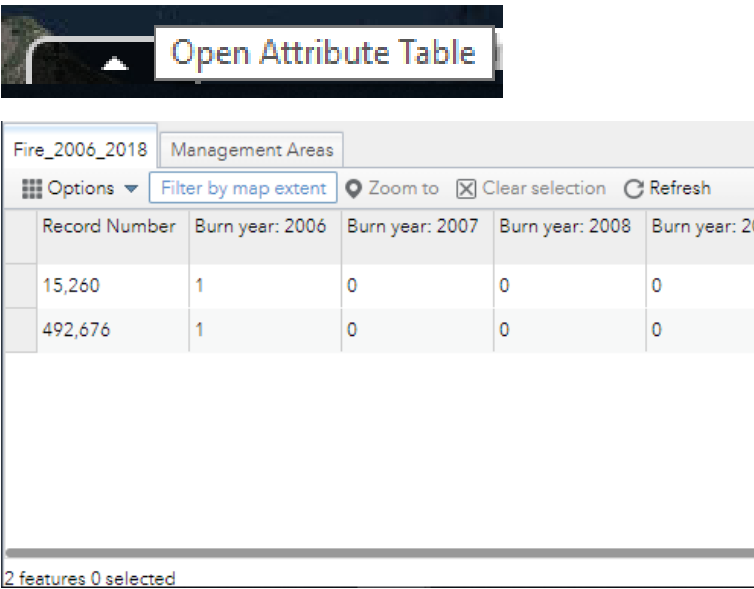
3.4.2. Custom

If a different filter is required that isn't preconfigured in the wigit, a user can create a custom filter. Any layer and attribute in the map can be filtered, including the fire dataset.

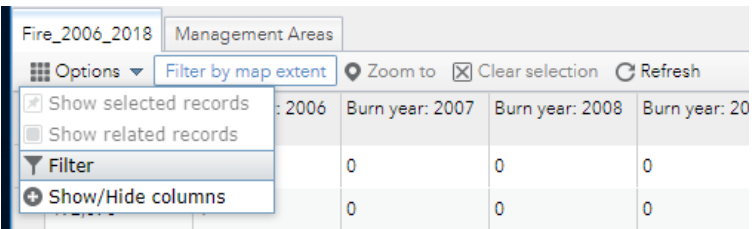
NOTE: For performance functionality, the number of features returned is capped to 100,000. Any filter which returned more than that value will fail and generate an error.



Results of the filter can be found in the attribute table



Alternatively, custom filters can be performed from the attribute table under the 'Options' menu



### 3.5.Query

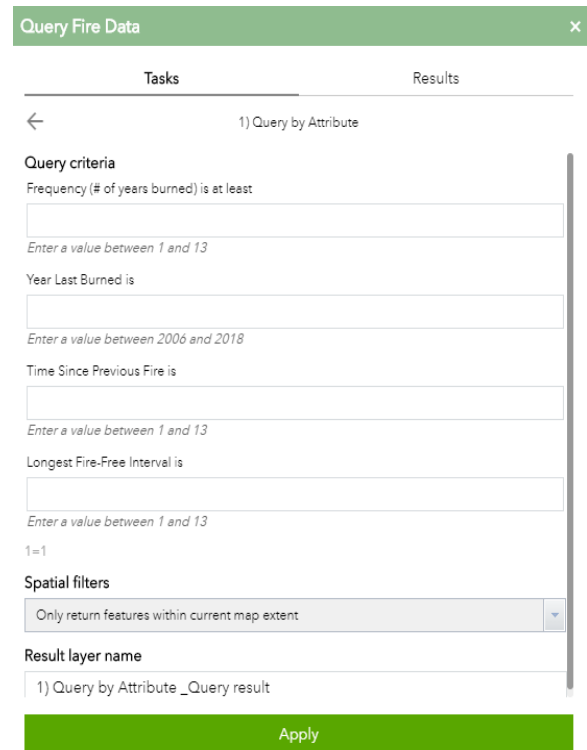
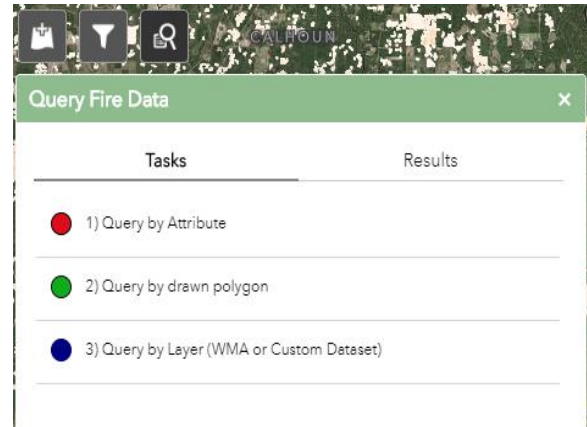
The query tool allows a user to search and subset the fire data. Query results will be added to the map as a new layer, and the user can change symbology if desired in the layer list.

There are three options to query data: by attribute, by drawing a custom shape, or using an existing map layer.

#### 3.5.1. Query by attribute

This option allows a user to query one or multiple attributes in the fire data layer.

NOTE: For performance functionality, the number of features returned is capped to 100,000. Any query which returned more than that value will fail and generate an error. It is highly recommended that broad queries be performed on the current map extent over a local area of interest only. Highly specific queries which do not return more than 100,000 features can be performed at the full map extent.



### 3.5.2. Query by drawn polygon

This query option allows a user to draw a custom shape on the map and return all fire data that intersects that shape.

The 'Query Fire Data' dialog box is shown with the 'Tasks' tab selected. It features a title bar with a close button. Below the title bar are two tabs: 'Tasks' and 'Results'. The 'Tasks' tab contains a back arrow, the text '2) Query by drawn polygon', and a section titled 'Spatial filters' with the instruction 'Only return features that intersect with the shape drawn on the map'. There are seven icons for different shapes: a triangle, a square, a circle, an ellipse, a polygon, a star, and a red square. Below these icons are two checked checkboxes: 'Clear this shape after applying the query.' and 'Apply a search distance'. The search distance is set to '0' meters. At the bottom, there is a 'Result layer name' field containing the text '2) Query by drawn polygon \_Query result' and a large 'Apply' button.

The 'Query Fire Data' dialog box is shown with the 'Results' tab selected. It features a title bar with a close button. Below the title bar are two tabs: 'Tasks' and 'Results'. The 'Results' tab shows a dropdown menu with the text '2) Query by drawn polygon \_Query result' and a three-dot menu icon. Below this is a list of 'Displayed features: 66/66' with a list of burn years from 2000 to 2016. A context menu is open over the list, showing options: 'Zoom to', 'Pan to', 'Flash', 'Export to CSV file', 'Export to feature collection', 'Export to GeoJSON', 'Statistics...', 'Save to My Content', 'View in Attribute Table', 'Remove this result', and 'Change symbol'. The background shows a map with a red polygon drawn on it.

### 3.5.3. Query by Layer (Management Areas or Custom Dataset)

This tool provides a user with the most options for querying and sub-setting data. In put layers used to query the fire data layer can be any from the map document, including layers added by users, and layers created from previous queries.

Users can select from several spatial relationships, including intersect, contain, cross, envelope intersect, index intercept, overlap, touch and within..

Query by Layer Results can be viewed in the Layer List

**Query Fire Data**

Tasks Results

← 3) Query by Layer (WMA or Custom Dataset)

**Spatial filters**  
Only return features that have a spatial relationship with features in another layer

Spatial relationship  
intersect

Related layer  
Management Areas

☒ Apply a search distance to selected features  
0 Meters

**Result layer name**  
3) Appalachicola\_fires

Apply

**Query Fire Data**

Tasks Results

← 3) Query by Layer (WMA or Custom Dataset)

**Spatial filters**  
Only return features that have a spatial relationship with features in another layer

Spatial relationship  
intersect  
intersect  
contain  
cross  
envelope intersect  
index intercept  
overlap  
touch  
within

**Query Fire Data**

Tasks Results

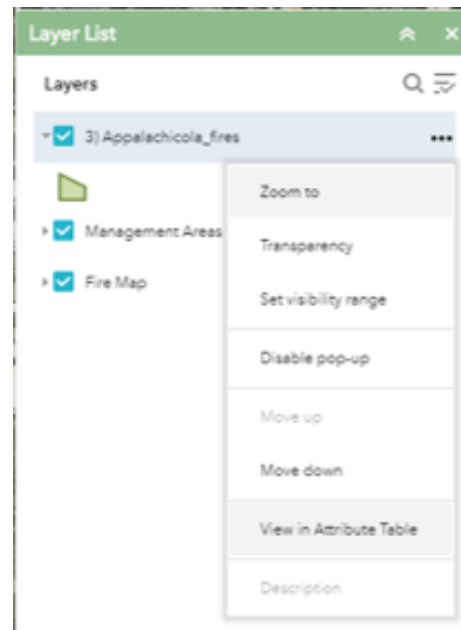
3) Appalachicola\_fires


Displayed features: 1,152/1,152

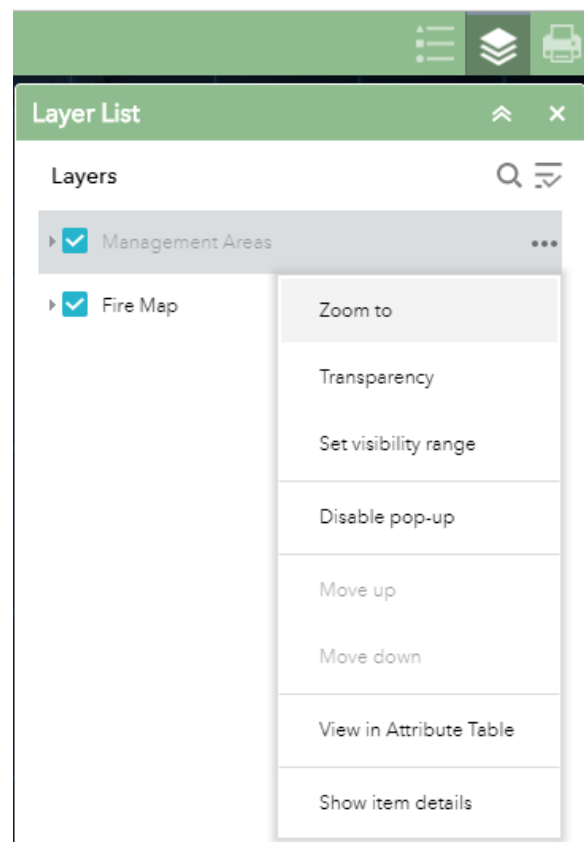
Florida Fires	
Record Number	24,092
Burn year: 2006	1
Burn year: 2007	0
Burn year: 2008	0
Burn year: 2009	0
Burn year: 2010	0
Burn year: 2011	0
Burn year: 2012	0
Burn year: 2013	0
Burn year: 2014	0
Burn year: 2015	0
Burn year: 2016	0
Burn year: 2017	0
Burn year: 2018	0
Displayed features (1/1,152)	1

### 3.6 Layer List

Users can customize transparency, visibility range, and symbology of layers in this widget. A layer's attribute table and metadata is also accessible from this window.



Click on the  to expand the Layer's options.





### 3.7 Print

Users can create digital map documents using the Print widget. The visible map extent serves as the layout view.

