



Introduction to GIS with ArcGIS Pro

Controlling Feature Display and Selection: Selecting Features with Queries

Session 9

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Lecture Outline

- Introduction & Recap (5 minutes)
- Selecting Features with Queries (45 minutes)
- Guided Exercise & Q&A (10 minutes)

Week 3: Coordinate Systems

- **Class 5:** Understanding Coordinate Systems
- **Class 6:** Managing Projections and Transformations

Week 4: Symbolizing Layers

- **Class 7:** Fundamentals of Symbology
- **Class 8:** Applying Different Symbology Methods

Week 5: Controlling Feature Display and Selection

- **Class 9:** Selecting Features with Queries
 - **Class 10:** Managing Feature Visibility
 - **Milestone:** Assignment 1 (Data Creation and Mapping) will be assigned.
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Recap of Season 7 & 8

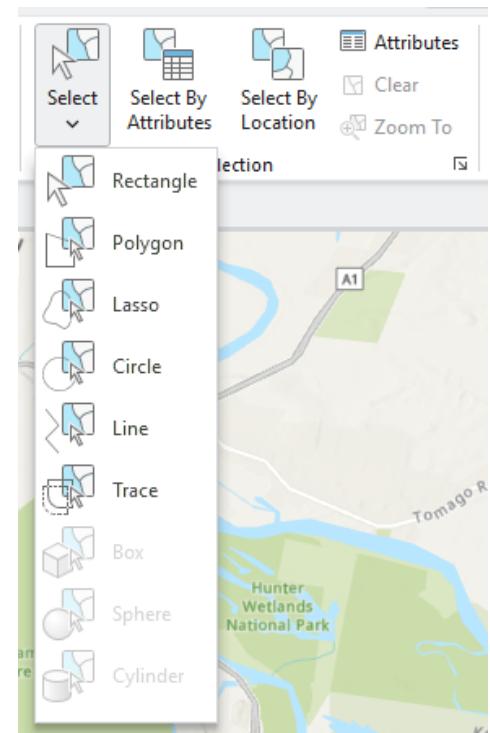
- Symbology in ArcGIS Pro
- Layer Symbology
- Different Symbology Methods

Selecting Features with Queries

in ArcGIS Pro

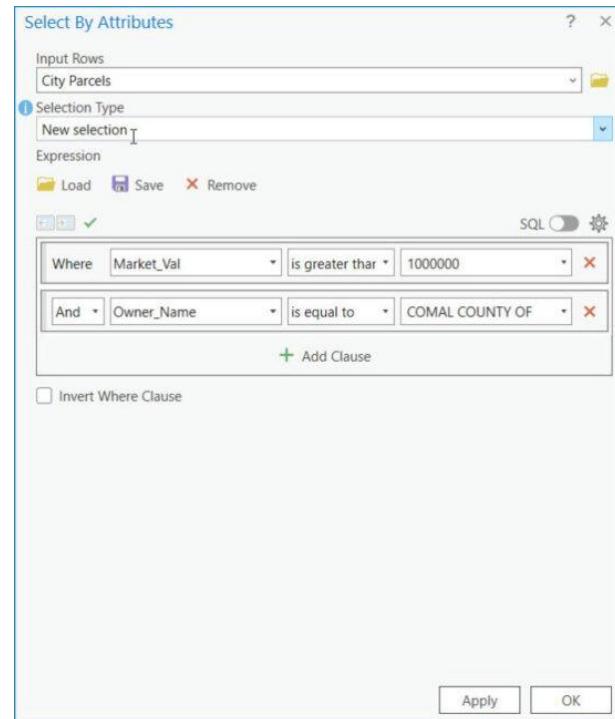
Interactive feature selection

Interactive feature selection involves clicking a single feature in the view or digitizing a shape to select a set of features.



Select features using **attributes**

When you select by attribution, you choose the selection method and write an expression to select an exact subset of features.

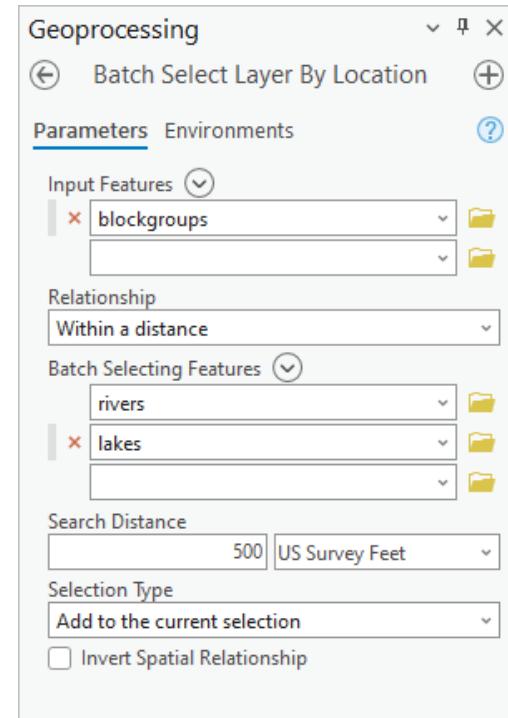


Select features by **location**

Select Layer By Location geoprocessing tool.

Spatial relationship that can be used for selection:

- Intersect
- Within a distance
- Contains
- Have their center in
- etc.



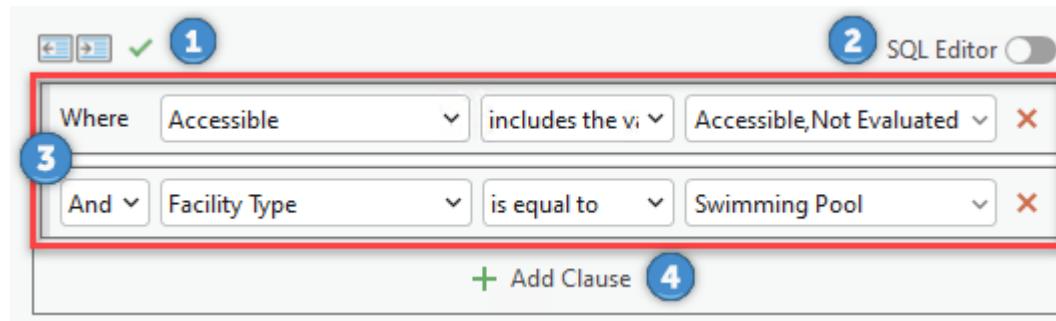
Work with **selected features**

- View attribute values or edit them in the **Attributes** pane.
- Interact with the **attribute table**.
 - View only selected attributes.
 - Switch the selection.
 - Copy the attribute table toolbar to copy the rows of attributes to the clipboard.
 - Manipulate attributes.
- Create a **selection layer**.
- Generate a **definition query**.
- **Zoom** to selected features.
- **Export** selected data.

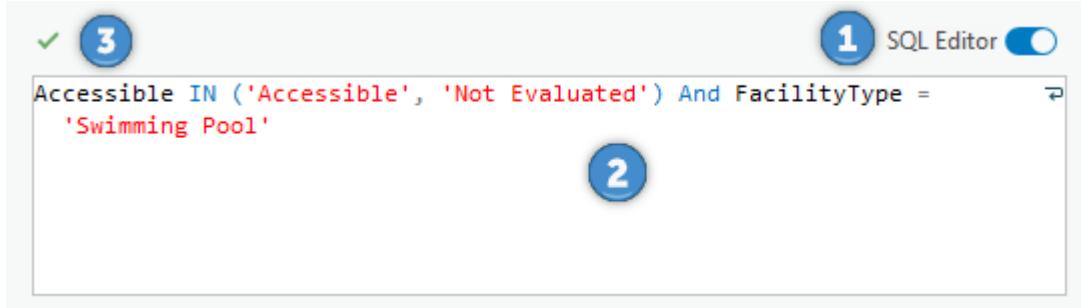
Clear Selection

Clear selected features by clicking  **Clear** from either the ribbon or the **List by Selection** tab of the **Contents** pane, or by clicking the map in a place where there are no features.

Query expressions: Interactive query builder



Query expressions: SQL Editor



The screenshot shows a SQL editor window with the following elements:

- 1**: A blue circular icon containing the number "1" located at the top right, next to the text "SQL Editor" and a toggle switch.
- 2**: A blue circular icon containing the number "2" located in the center of the editor area.
- 3**: A blue circular icon containing the number "3" located in the top left corner, next to a green checkmark icon.

The editor contains the following SQL query:

```
Accessible IN ('Accessible', 'Not Evaluated') And FacilityType =  
'Swimming Pool'
```

Exercise

Exercise

1. Select a few features interactively.
2. Select a few features with attributes.
3. Select a few features using location.

Sample Shapefiles - City of Newcastle, Australia

<https://classroom.google.com/c/NzkxNDA4MzgwOTE3/m/ODAzNjU5NTY0Mzc0/details>

Preview for Season 10

Managing Feature Visibility

References

Selection options in ArcGIS Pro

<https://pro.arcgis.com/en/pro-app/latest/help/mapping/navigation/selection-options.htm>

Introduction to query expressions in ArcGIS Pro

<https://pro.arcgis.com/en/pro-app/latest/help/mapping/navigation/write-a-query-in-the-query-builder.htm>