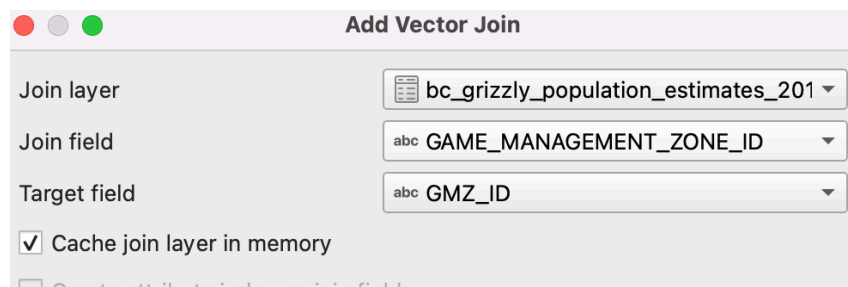


GEOG204 Tutorial 7

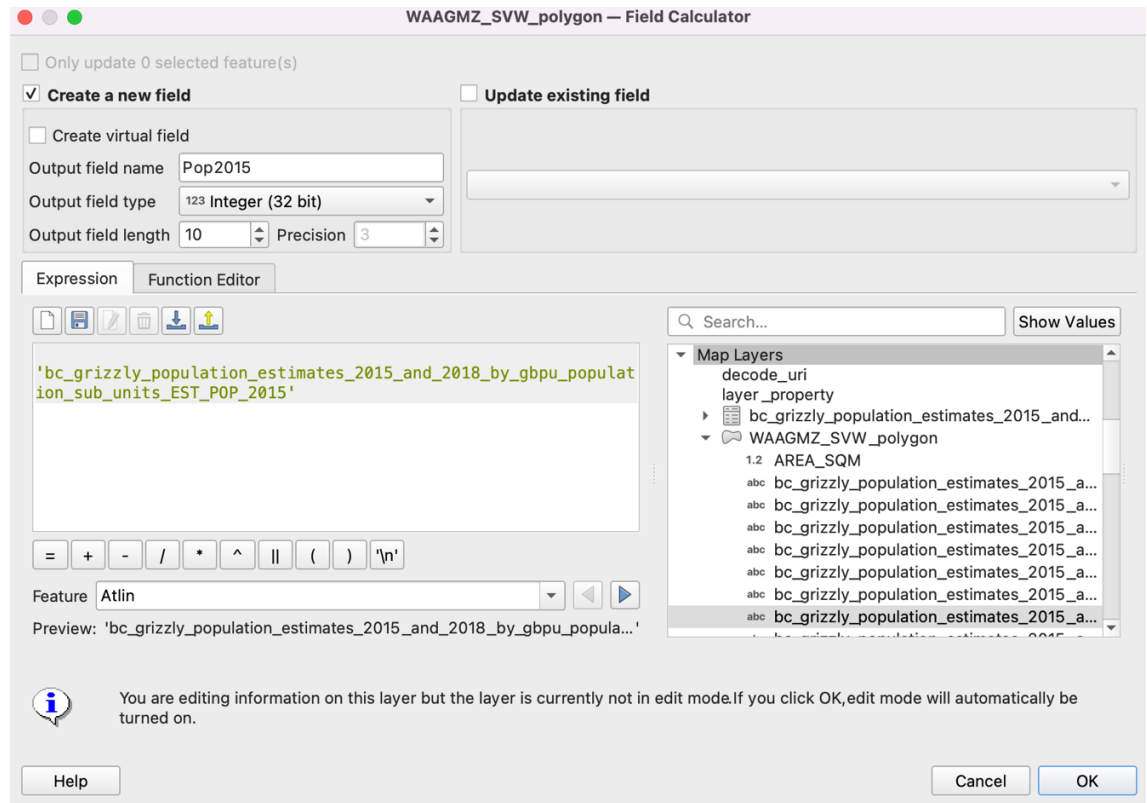
Attribute Data Management

The objective of this exercise to explore some tasks related to the management of the attributes of a GIS dataset. You will also explore the calculation of some descriptive statistics.

1. Open QGIS and add the data in the T7 folder. The csv file has data related to grizzly population forecasts. The shapefile has the corresponding spatial data.
2. Perform a join operation to link the csv file to the shapefile.
 - Right click the on the shapefile(WAAGMZ_SVW_polygon) >> Properties >> Joins
 - Join layer: bc_grizzly_population_estimates...csv
 - Join Field: GAME_MANAGEMENT_ZONE_ID
 - Target Field: GMZ_ID



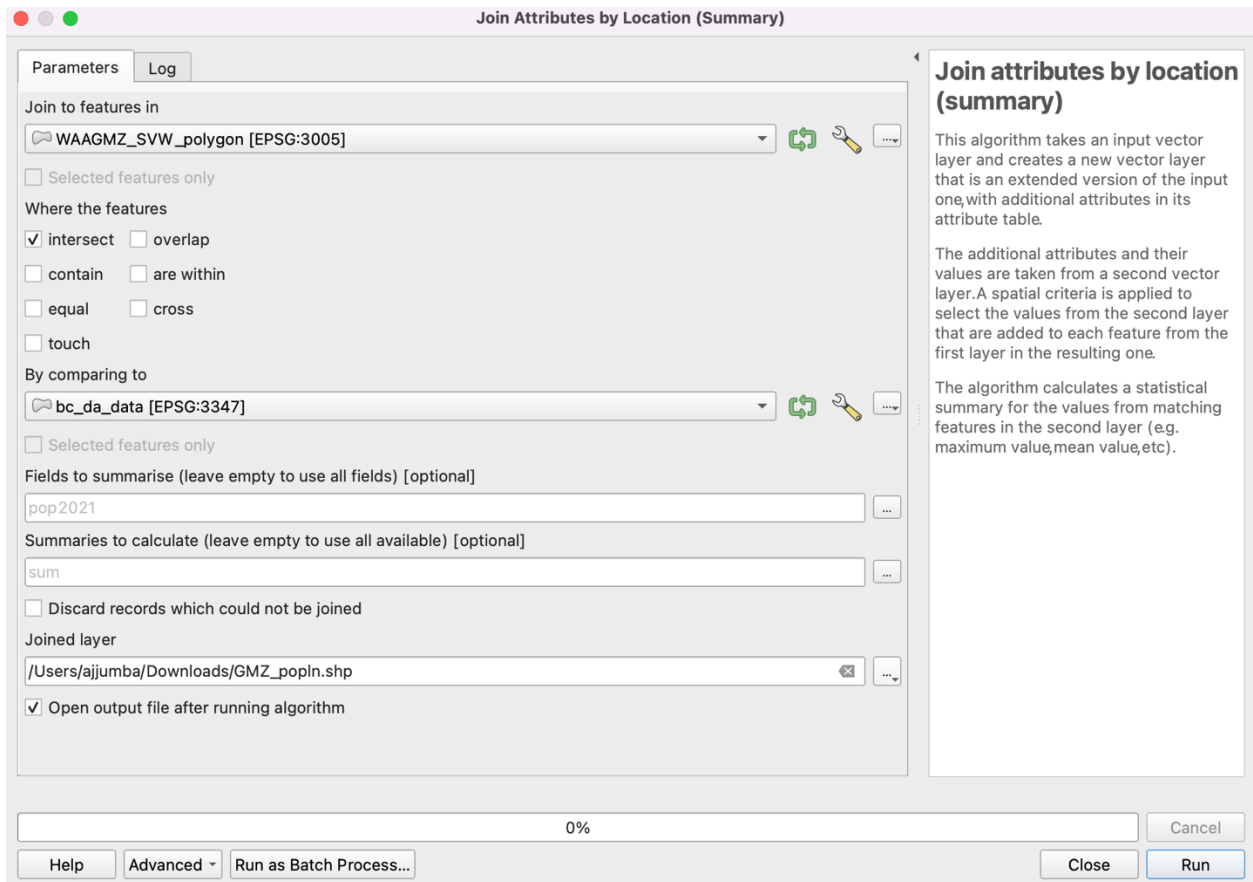
3. Add two new fields to the shapefile for the population estimates for 2015 and 2018.
 - Right click on the shapefile >> Open the Attribute Table
 - On the attribute table open the field calculator
 - Create two new fields of type integer with field names Pop2015 and Pop2018 respectively. Populate them, respectively, with values from the corresponding values from the csv table.
 - *bc_grizzly_population_estimates_2015_and_2018_by_gbpu_population_sub_units_EST_POP_2015*
 - *bc_grizzly_population_estimates_2015_and_2018_by_gbpu_population_sub_units_EST_POP_2018*



4. Save the shapefile. Toggle off the editing mode. Remove the join
5. Create two Choropleth displays for the 2015 and 2018 population estimates. Please show me your work.

Now let's suppose that we want to know the population (i.e people) is in each of these zones. To do this we will use the shapefile (bc_da_data) with the dissemination area population counts for BC to do a join by location. In other words, we want to know the dissemination areas falling within each game zone so as to calculate the population in each zone.

6. Join bc_da_data with WAAGMZ_SVW_polygon by location
 - In the processing toolbox, search for Join attributes by location(Summary) under the Vector General category
 - Choose Intersect as the geometric predicate
 - Fields to summarise: pop2021
 - Summaries to calculate: sum
 - Make sure you assign a name for your output



7. Create a choropleth display of the population numbers in the game zones.

In the past we have calculated descriptive statistics in QGIS using the Basic Statistics for Fields function. In the next step we are going to calculate these statistics using Excel

8. Open the csv file in Excel.

- On the Data ribbon >> Data Analysis >> Descriptive Statistics
- If you don't have the Data Analysis option
 - Go to File >> Options
 - In the lefthand column select Add-ins and at the bottom of the screen click Go on the Manage Excel Add-ins field.
 - Choose Analysis tool pack in the pop up window and click OK.
- Input range: Choose the data in the column for the 2015 estimates
- Check the Summary statistics box