Getting started with QGIS

By Dante Castellanos-Acuna & Andreas Hamann

These screenshots complement the tutorial "Getting started with QGIS" that you can download here:

http://tinyurl.com/QGIS-getting-started

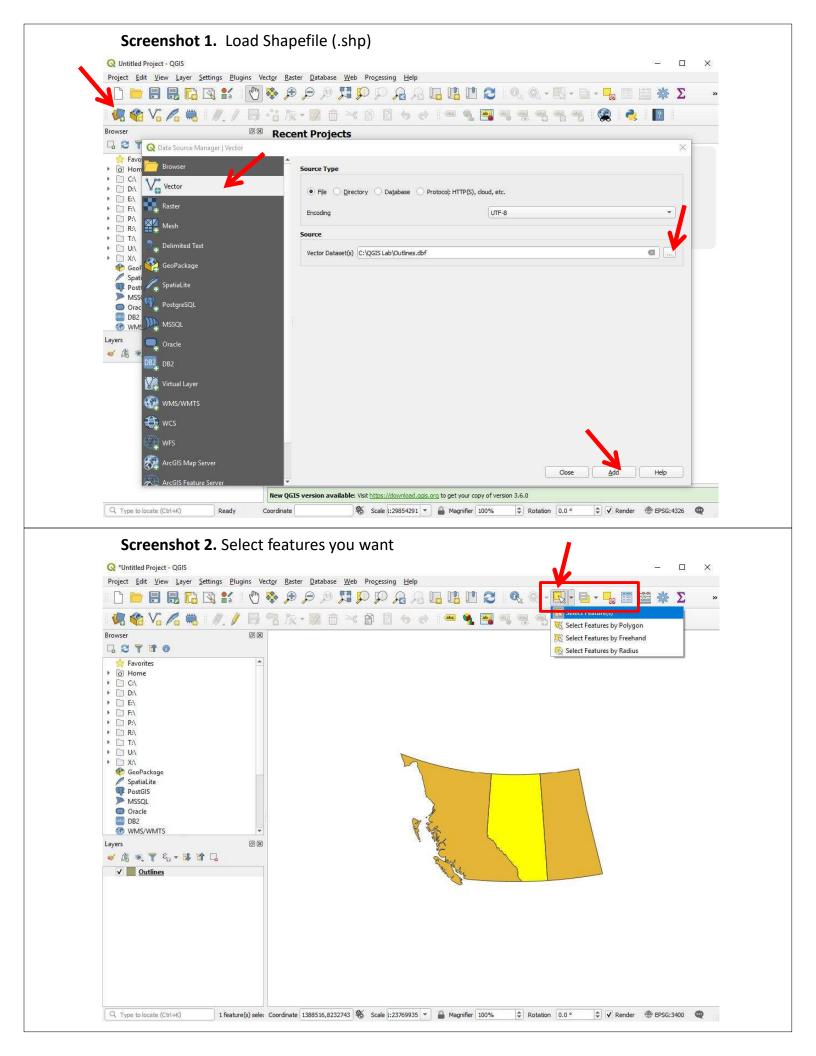
Links to the corresponding dataset and screenshots are here:

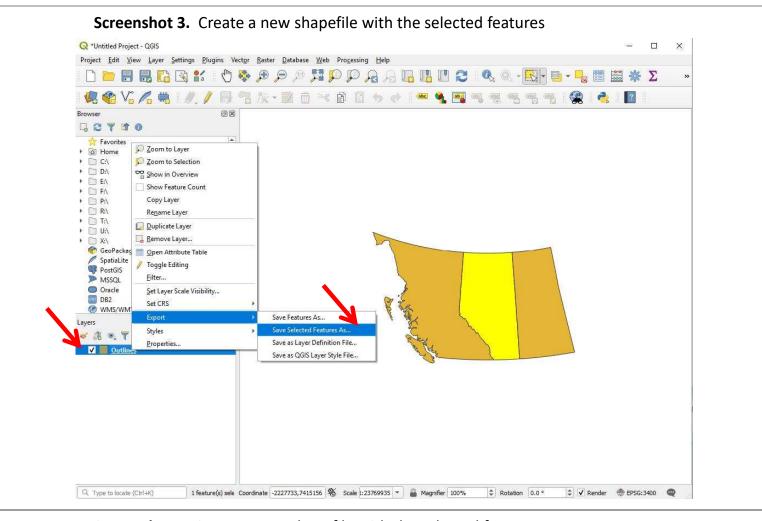
http://tinyurl.com/QGIS-dataset
http://tinyurl.com/QGIS-screenshots

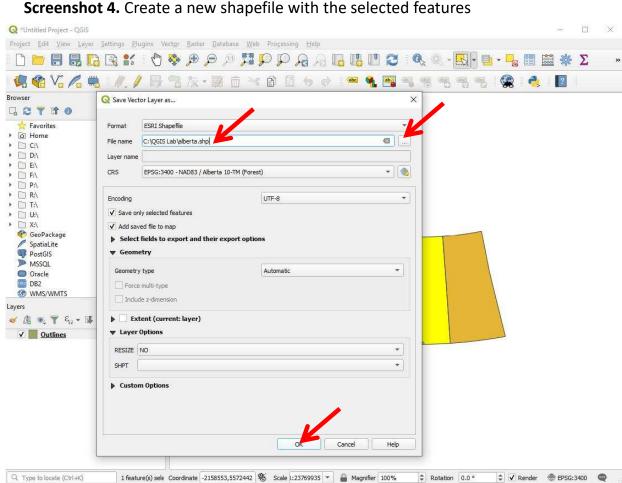
We recommend that you print out the tutorial, and open this PDF of screenshots next to the QGIS program window for reference.

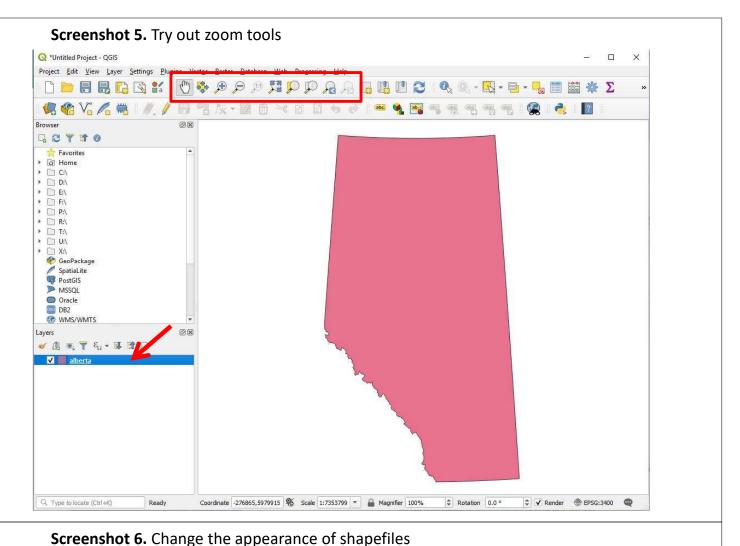
Index to Screenshots

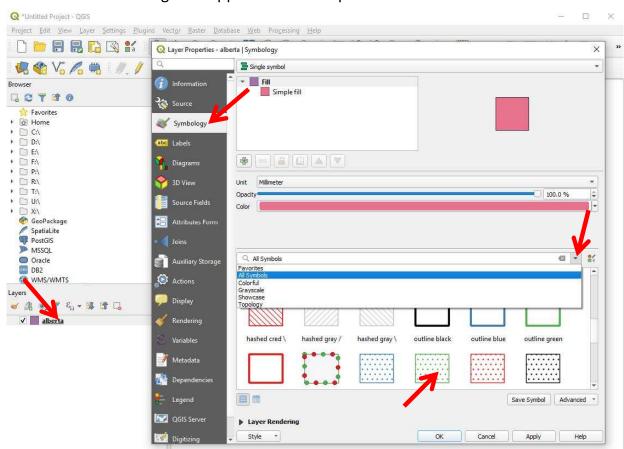
- 1. Working with shapefiles (Screenshots 1-10)
- 2. Dealing with projections (Screenshots 11-14)
- 3. Colors and symbols from attributes (Screenshots 15-19)
- 4. Extract data from shapefiles (Screenshots 20-24)
- 5. General operations, navigation (Screenshots 25-27)
- 6. Working with gridded data (Screenshots 28-42)
- 7. Extract data from grids (Screenshot 43)
- 8. Layout of single and multi-panel maps (Screenshots 45-50)











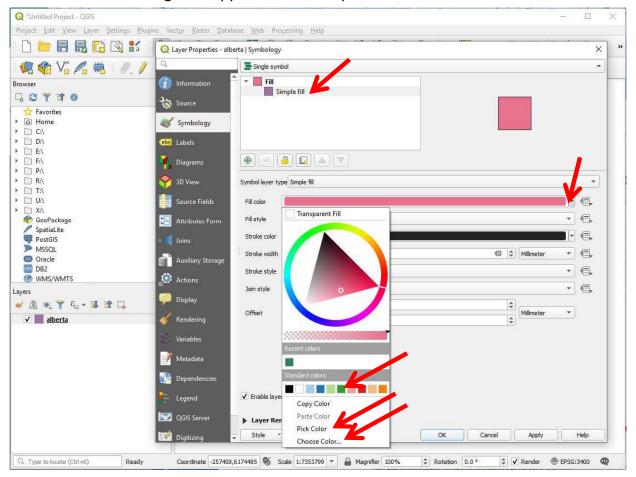
Coordinate -257408,6174485 🛞 Scale 1:7353799 🔻 🔒 Magnifier 100%

\$ Rotation 0.0 °

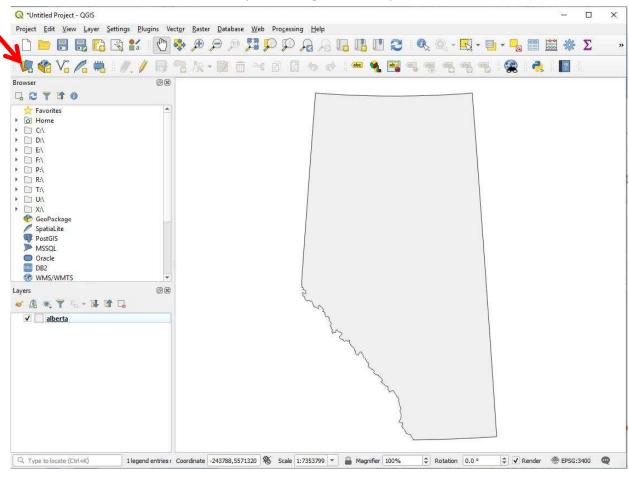
 ♣
 ✓ Render
 ● EPSG:3400

Q. Type to locate (Ctrl+K)

Screenshot 7. Change the appearance of shapefiles



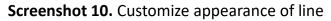
Screenshot 8. Add another shape file, e.g. lines (.shp)



Screenshot 9. Add another shape file, e.g. lines (.shp) Q *Untitled Project - QGIS Project <u>E</u>dit <u>V</u>iew <u>L</u>ayer <u>Settings <u>P</u>lugins Vect<u>or</u> <u>R</u>aster <u>D</u>atabase <u>W</u>eb Pro<u>c</u>essing <u>H</u>elp</u> Browser GOT TO * Favorites ▶ Mome • C:\ • D:\ ▶ 🗀 E:\ ▶ □ F:\ ▶ □ P:\ ▶ 🗀 R:\ ▶ 🗀 U:\ ▶ □ X:\ **GeoPackage** SpatiaLite PostGIS MSSQL Oracle DB2 **WMS/WMTS** ✓ roads115 ✓ alberta

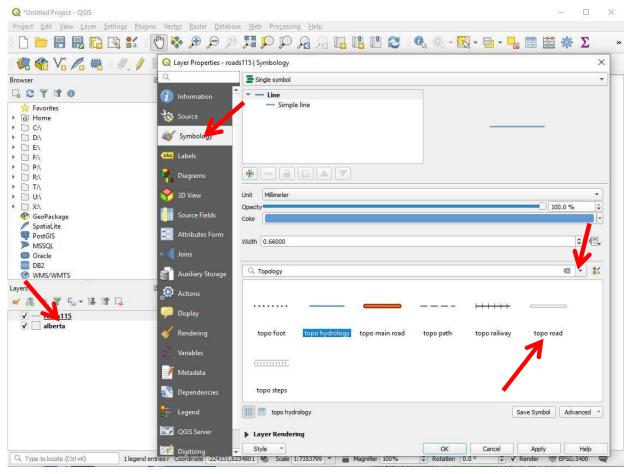
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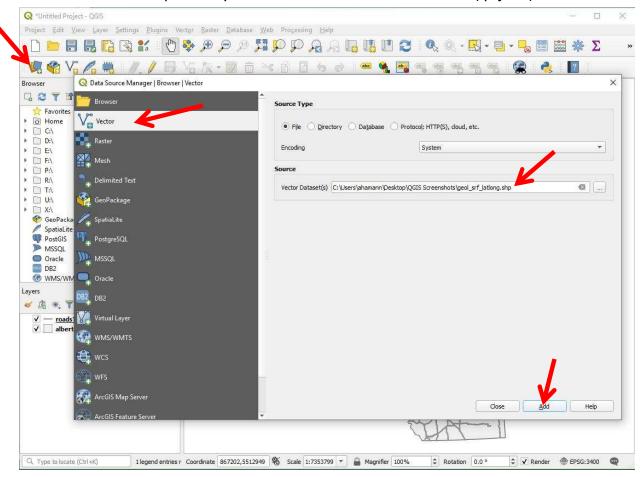


1 legend entries re Coordinate 79197,6627831 👋 Scale 1:7353799 🔻 🔒 Magnifier 100%

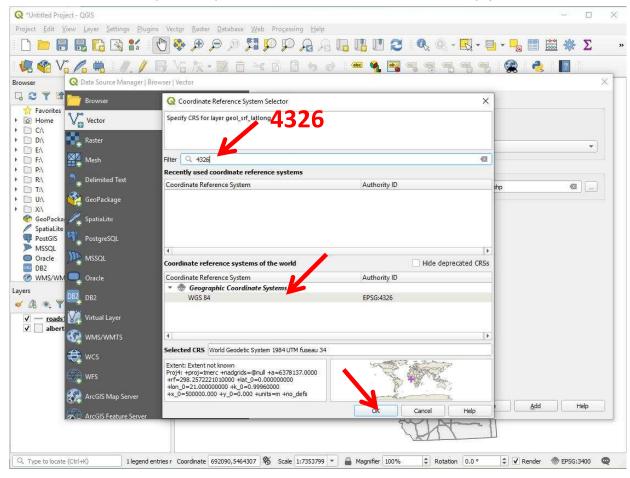
Q. Type to locate (Ctrl+K)



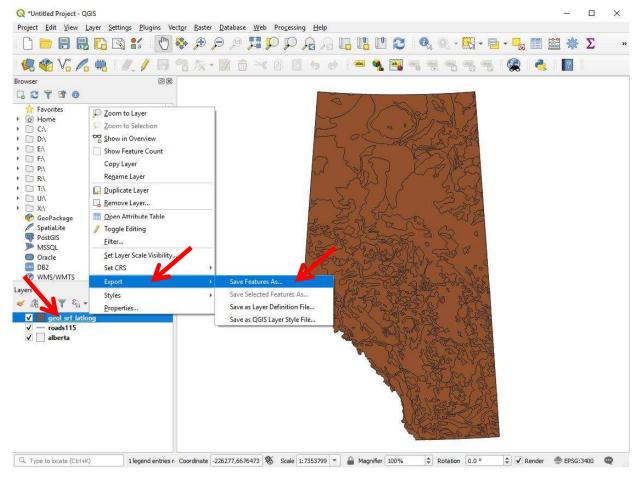
Screenshot 11. Import a layer without coordinate information (.prj file)



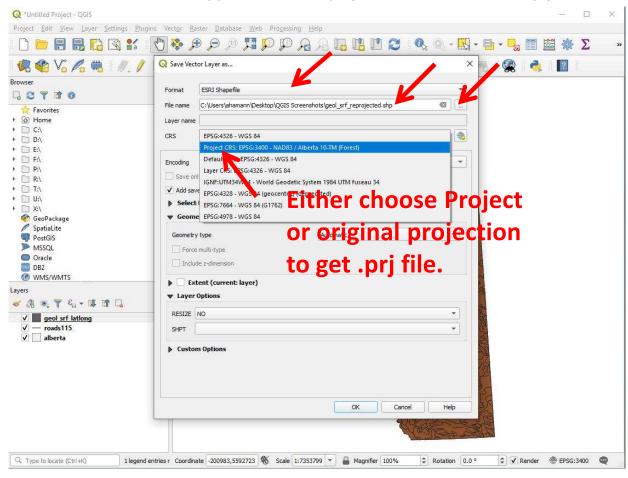
Screenshot 12. Import a layer without coordinate information (.prj file)

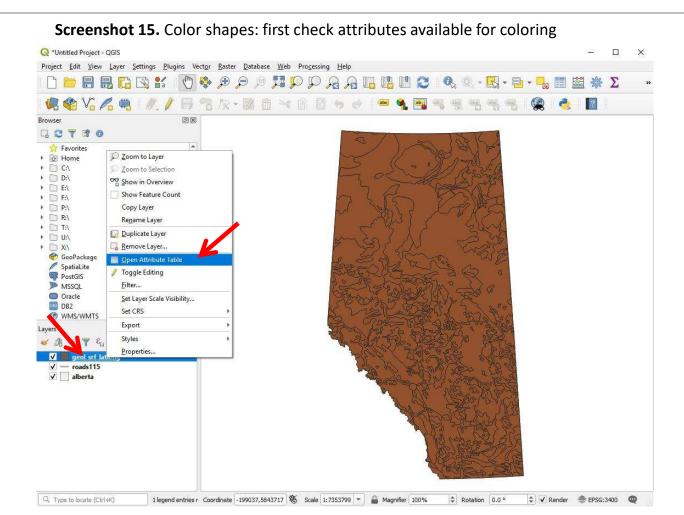


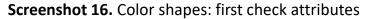
Screenshot 13. Make a copy in the desired projection (or to write out a .prj file)

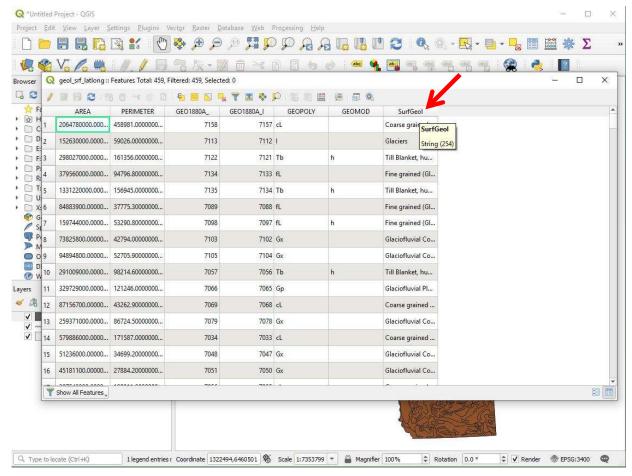


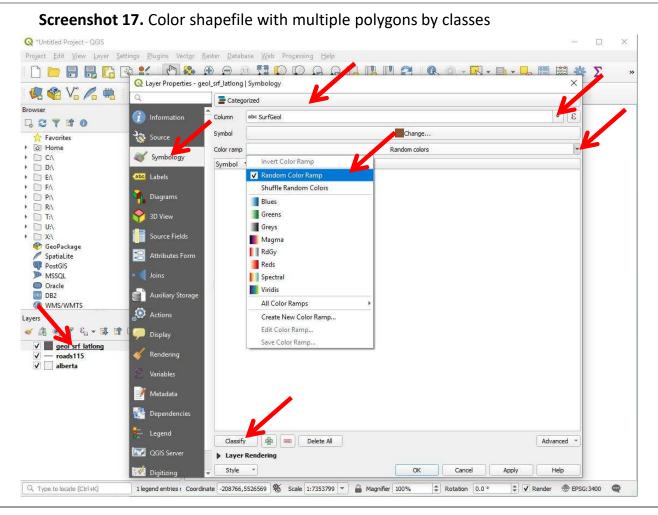
Screenshot 14. Make a copy in the desired projection (or to write out a .prj file)



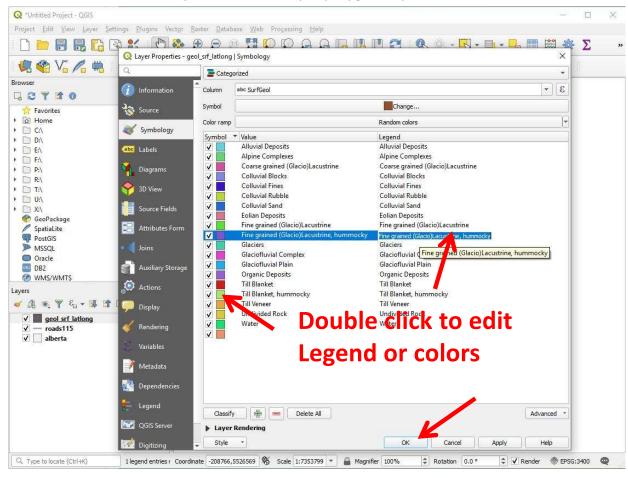


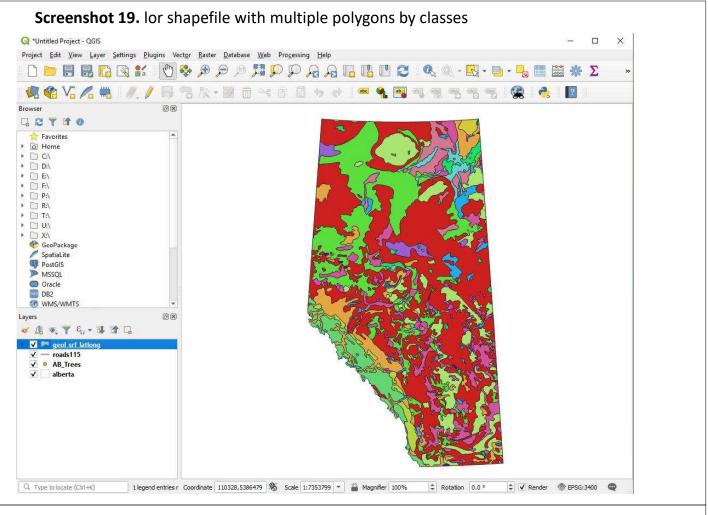


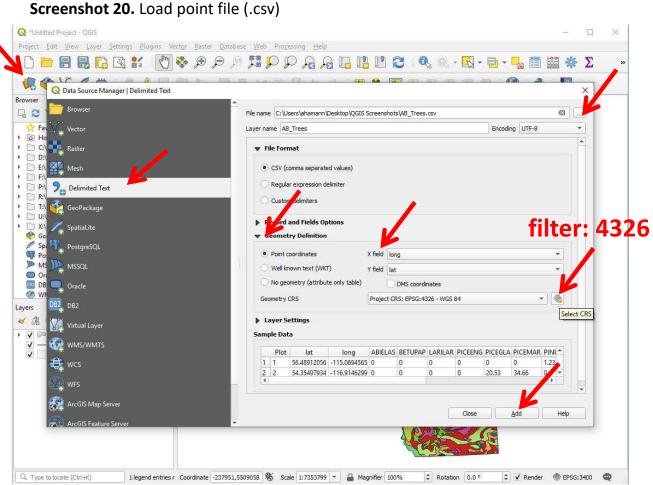


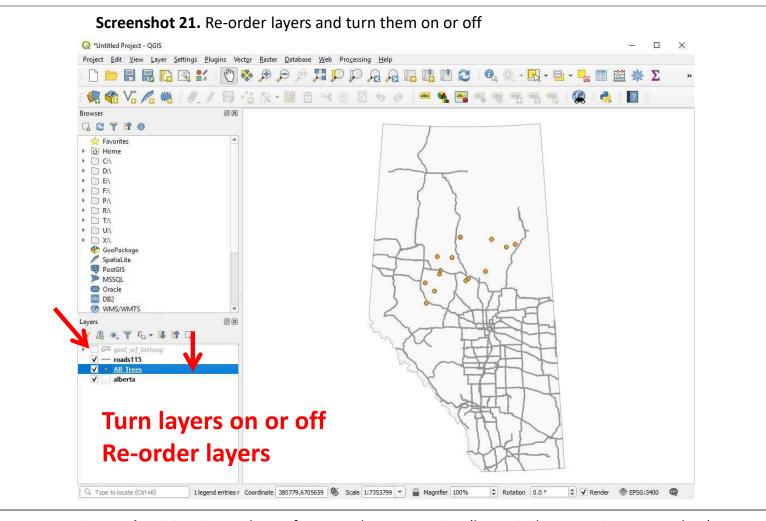


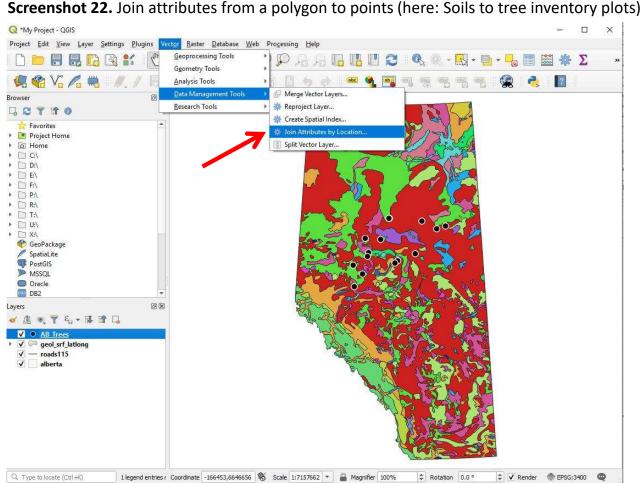
Screenshot 18. lor shapefile with multiple polygons by classes



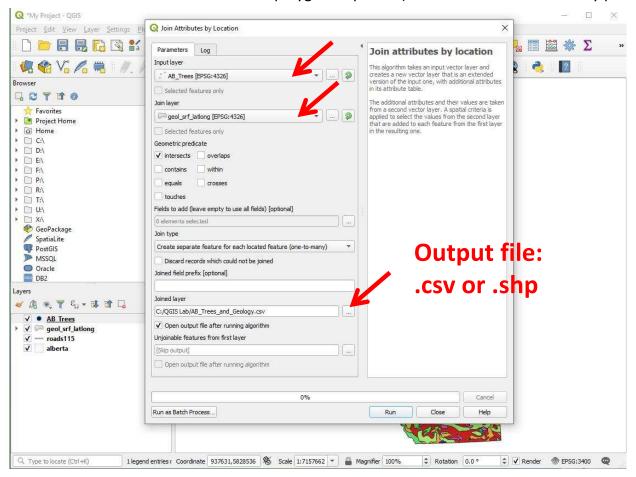




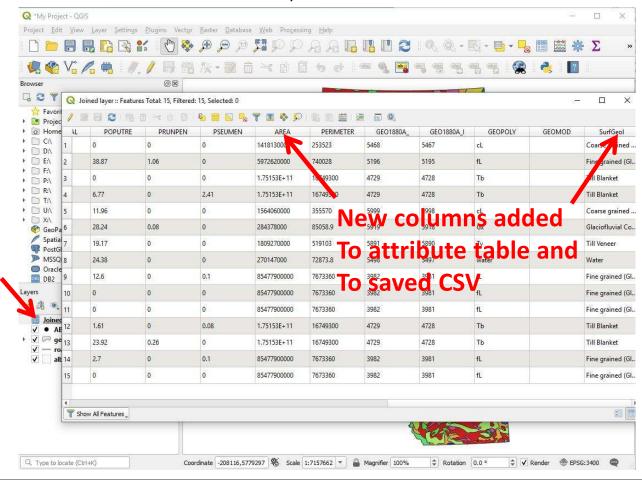


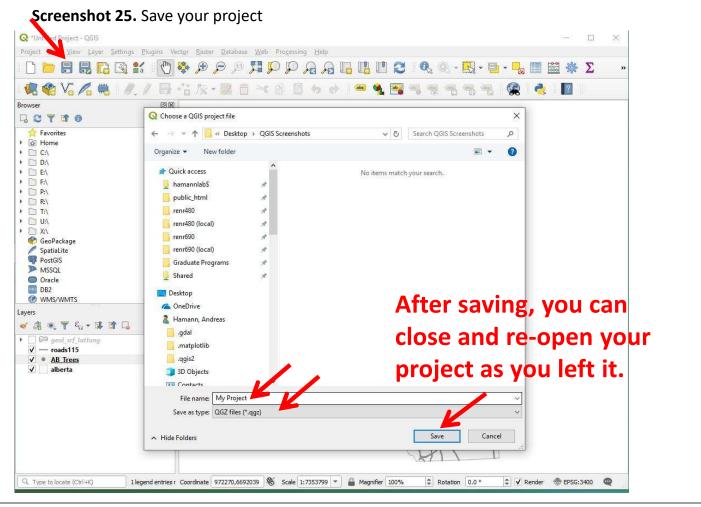


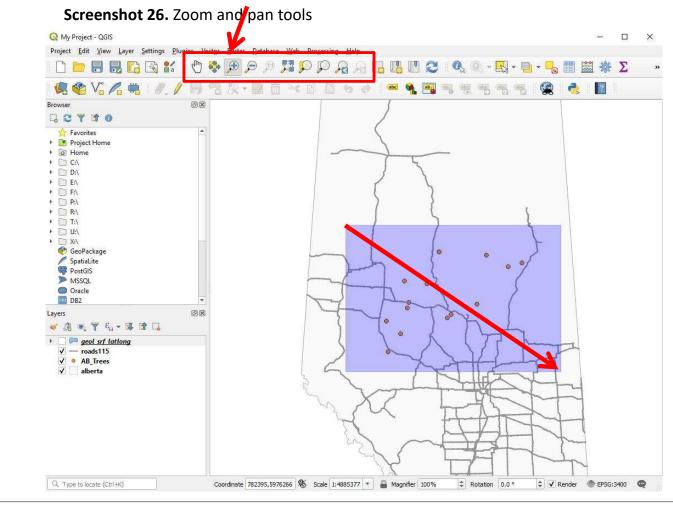
Screenshot 23. Join attributes from a polygon to points (here: Soils to tree inventory plots)

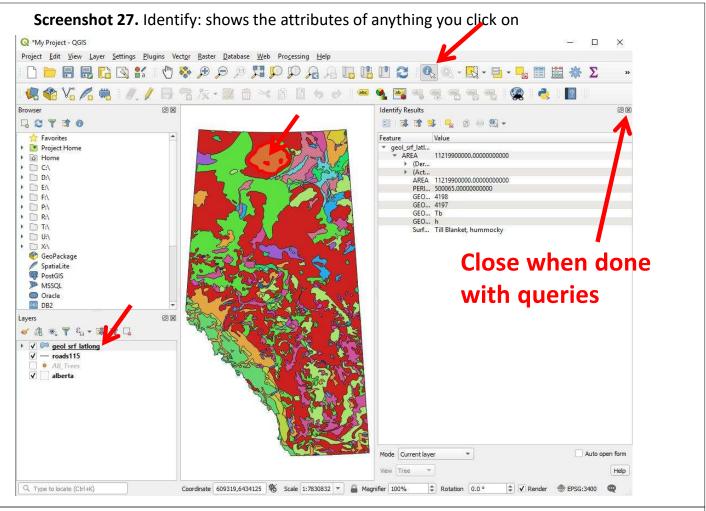


Screenshot 24. Check the results of your data extraction

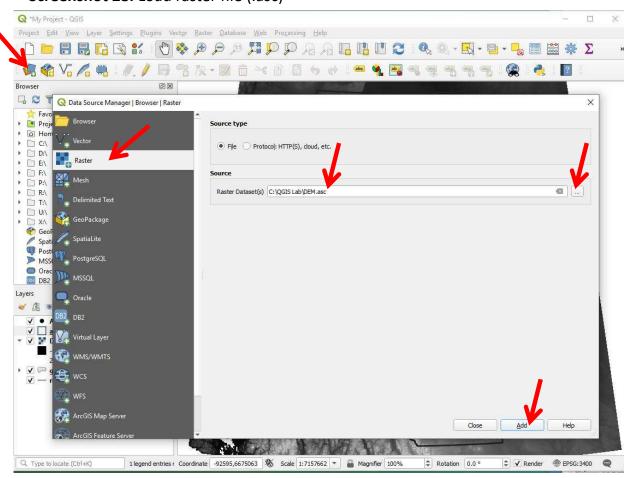




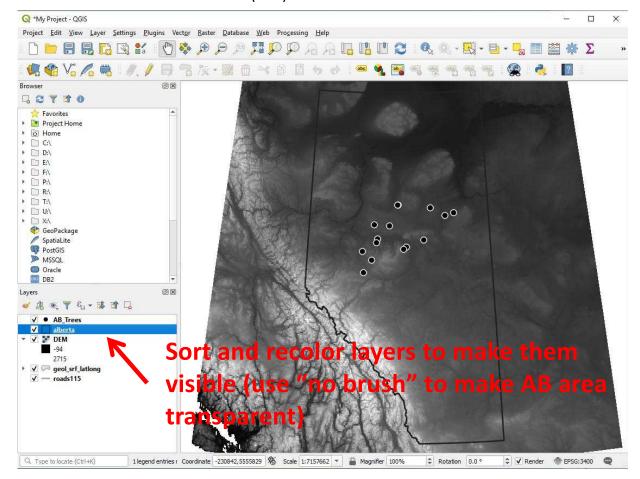




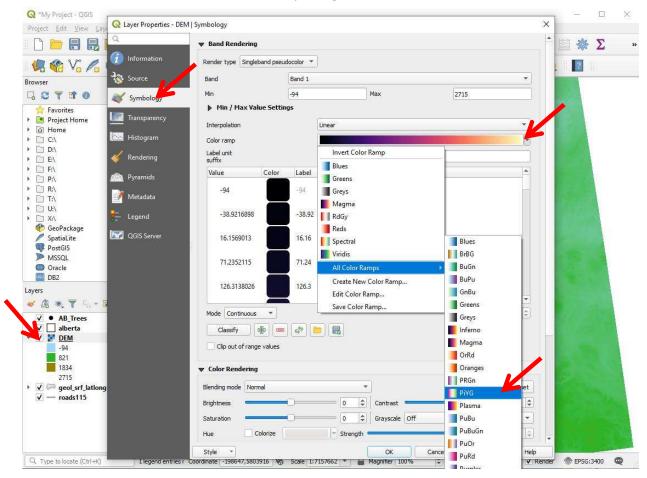
Screenshot 28. Load raster file (.asc)



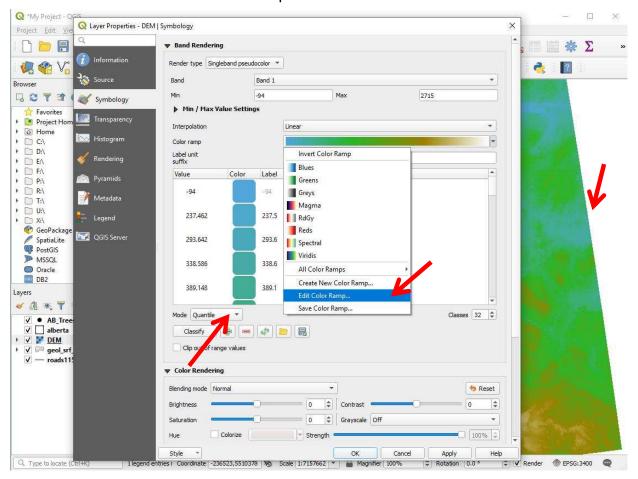
Screenshot 29. Load raster file (.asc)



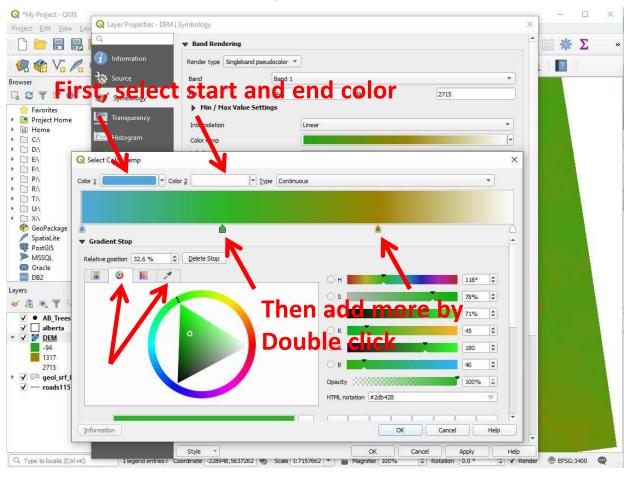
Screenshot 30. Customize color ramp for grids (.asc)



Screenshot 31. Advanced color ramps

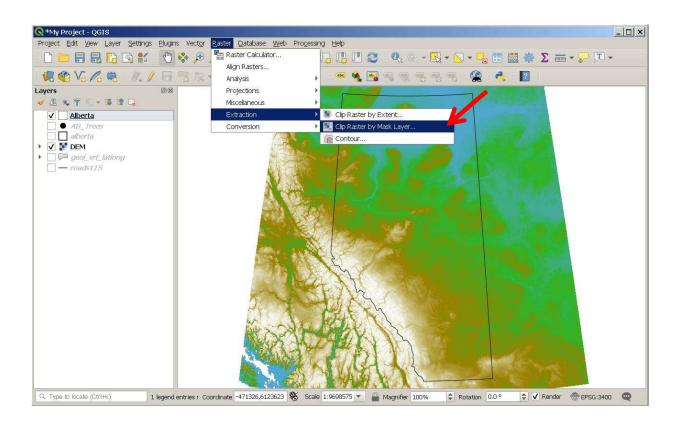


Screenshot 32. Advanced color ramps

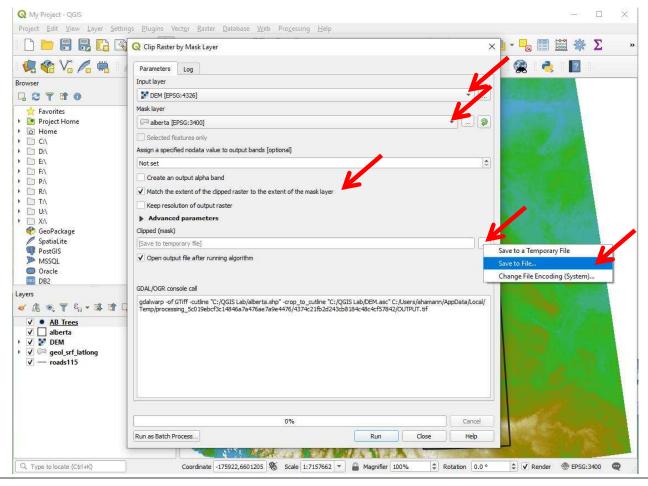


Screenshot 33. Advanced color ramps Q *My Project - QGIS Project <u>E</u>dit <u>V</u>iew <u>L</u>ayer <u>S</u>ettings <u>P</u>lugins Vect<u>o</u>r <u>R</u>aster <u>D</u>atabase <u>W</u>eb Processing <u>H</u>elp 🤹 🏰 🗸 🧠 🖐 🖊 // 😅 🤧 🌾 • 🗷 亩 🤫 🗈 😉 🔸 📲 🤏 📲 🥞 🤏 🥞 🙋 Browser Q C T T O * Favorites Project Home ▶ 🙆 Home ▶ 🗀 C:\ ▶ □ D:\ ▶ □ E:\ ▶ [P:\ ▶ 🗀 R:\ ▶ 🗀 T:\ □ U:\ GeoPackage SpatiaLite PostGIS MSSQL Oracle DB2 0 × Layers ✓ ● AB_Trees ✓ □ alberta ✓ □ DEM √ — roads115 Render ⊕ EPSG:3400 Render ⊕ EPSG:3400 Q. Type to locate (Ctrl+K) 1 legend entries r Coordinate -236523,5510378 👸 Scale 1:7157662 ▼ 🔓 Magnifier 100% \$ Rotation 0.0 °

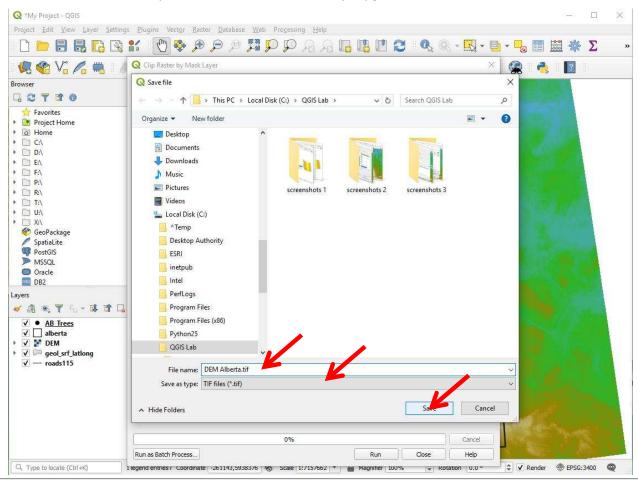
Screenshot 34. Clip raster to the extent of a polygon (here Alberta)



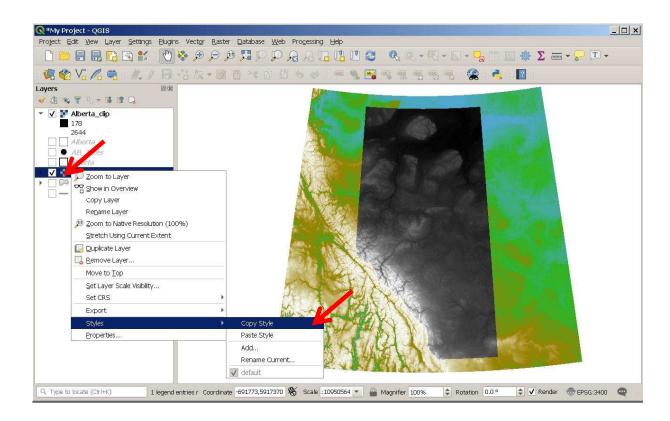
Screenshot 35. Clip raster to the extent of a polygon (here Alberta)



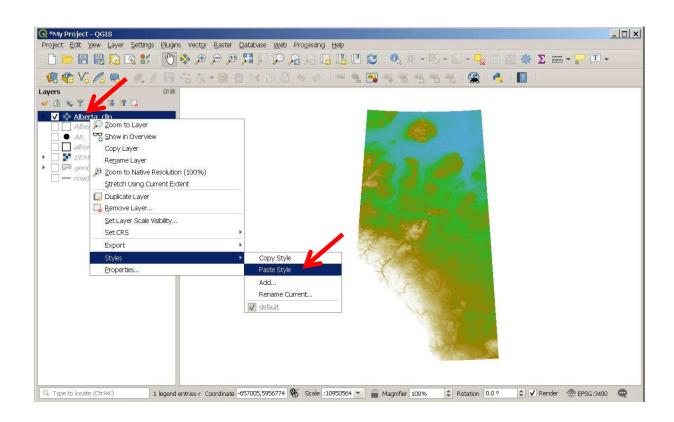
Screenshot 35. Clip raster to the extent of a polygon (here Alberta)

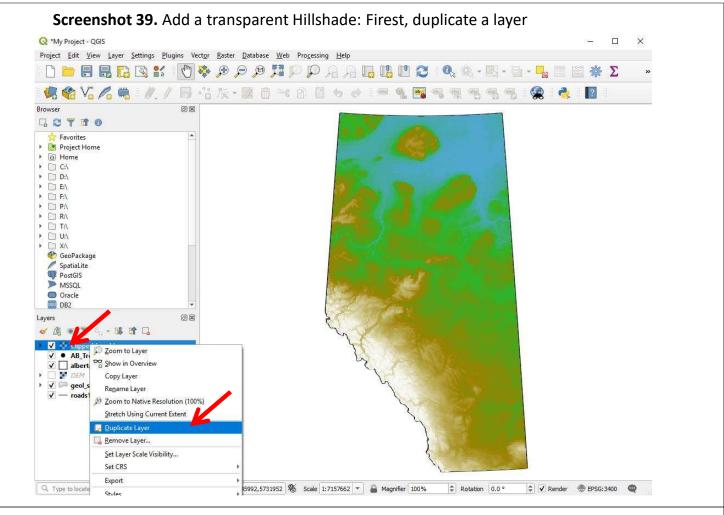


Screenshot 37. Copy symbology from one layer to the other

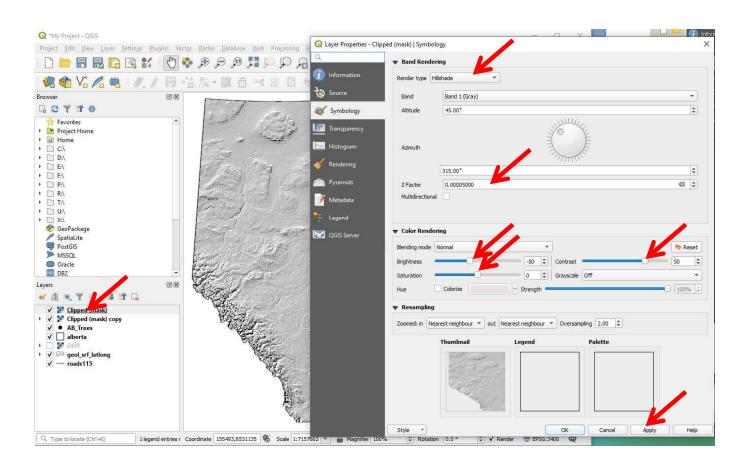


Screenshot 38. Copy symbology from one layer to the other

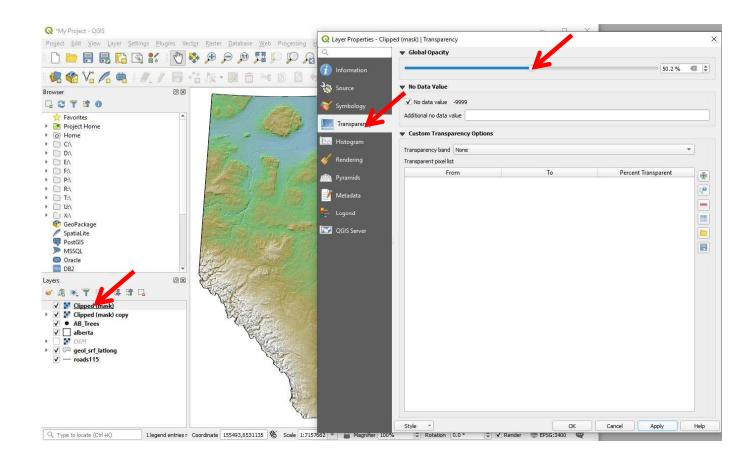




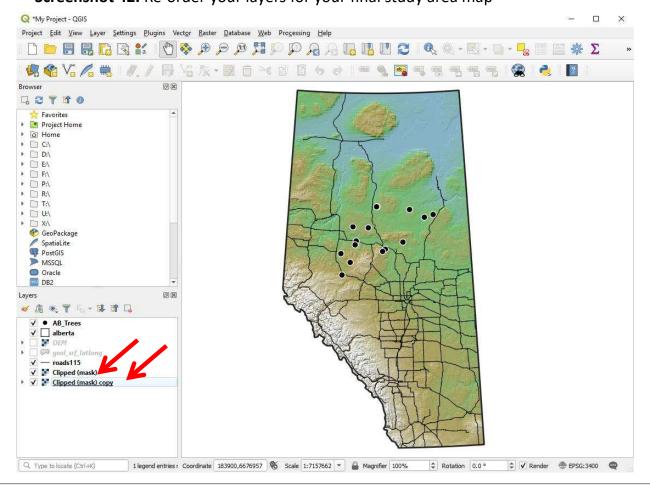
Screenshot 40. Add a transparent Hillshade: Customize contrast and brightness



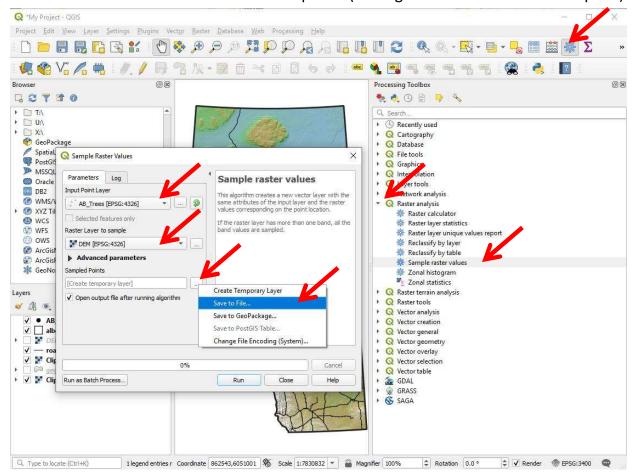
Screenshot 41. Add a transparent Hillshade: Customize transparency



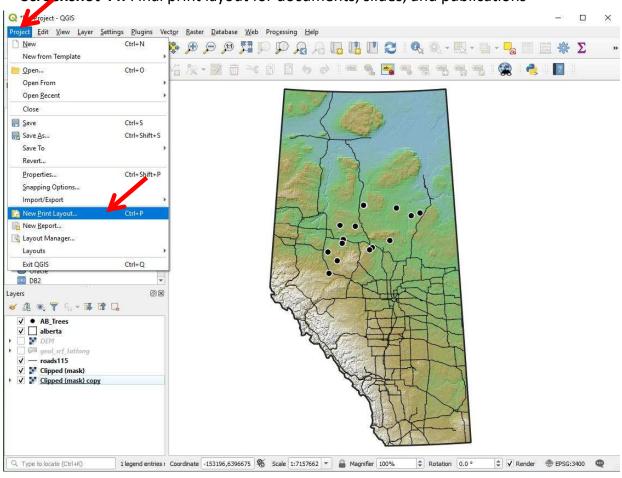
Screenshot 42. Re-order your layers for your final study area map



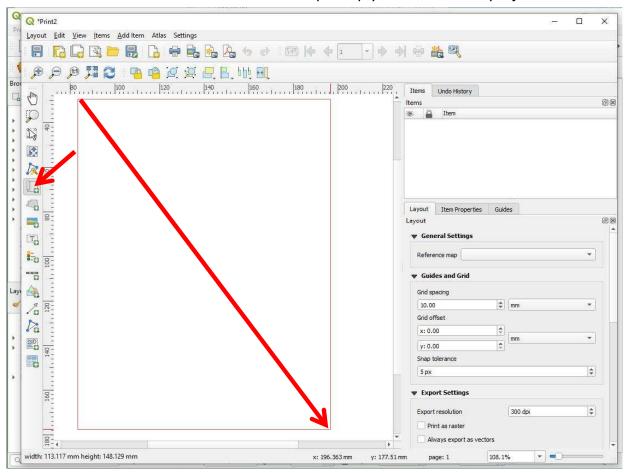
Screenshot 43. Extract raster values to points (here: get DEM elevation for tree plots)



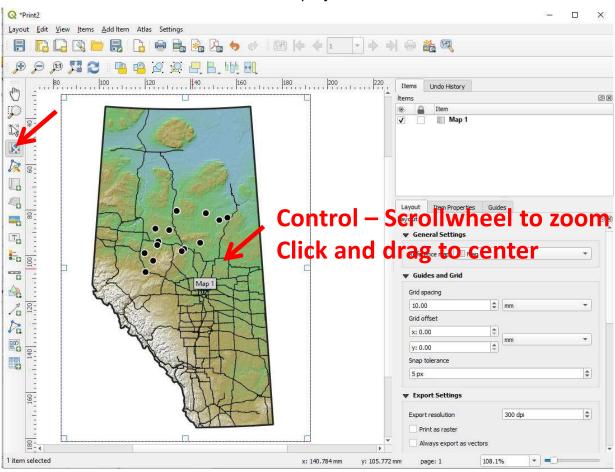
Screenshot 44. Final print layout for documents, slides, and publications



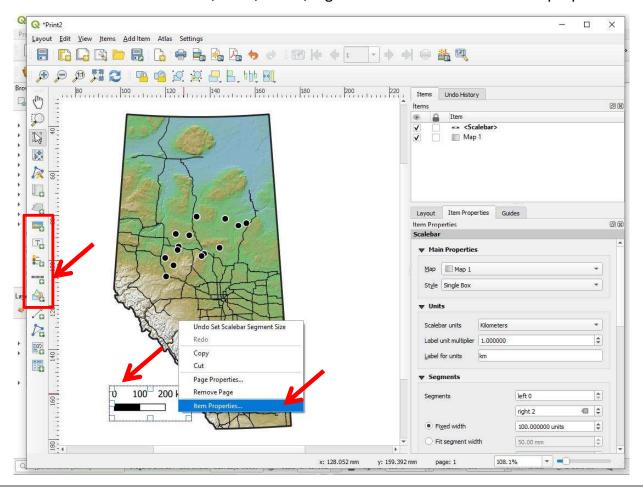
Screenshot 45. Create a window that will pick up your current GIS project



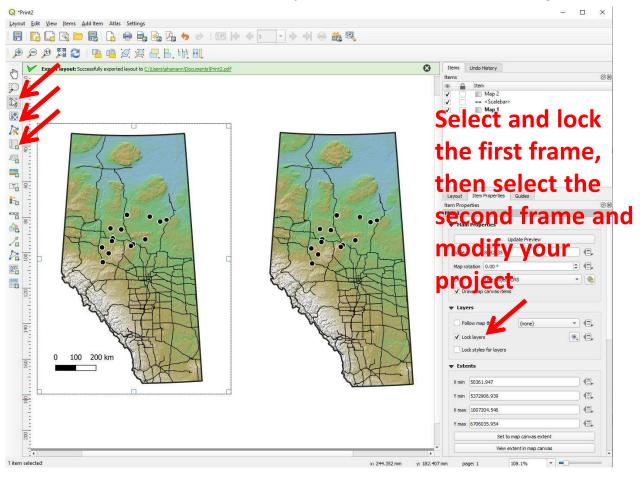
Screenshot 46. Center and scale the GIS project

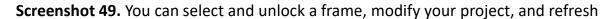


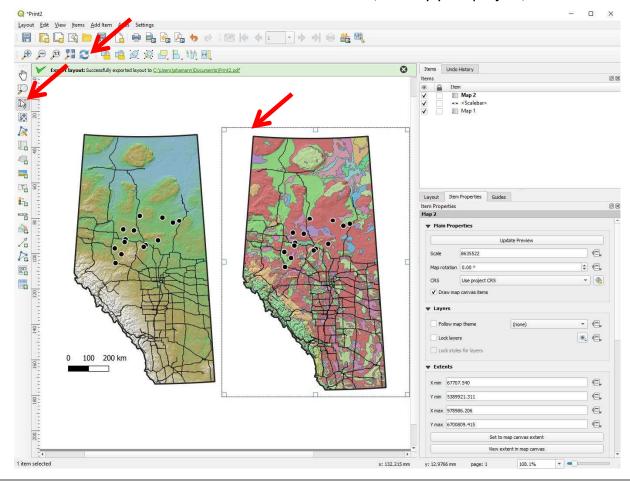
Screenshot 47. Add scale bars, titles, labels, legend and customize with "Item properties"



Screenshot 48. Create a second frame, just like before, for a combination figure







Screenshot 50. Export the final product as image (for PPT) or PDF (for publications)

