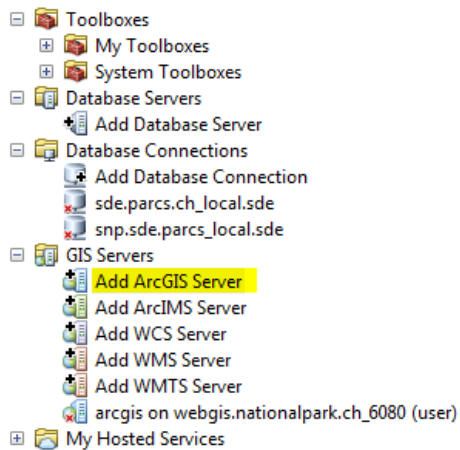


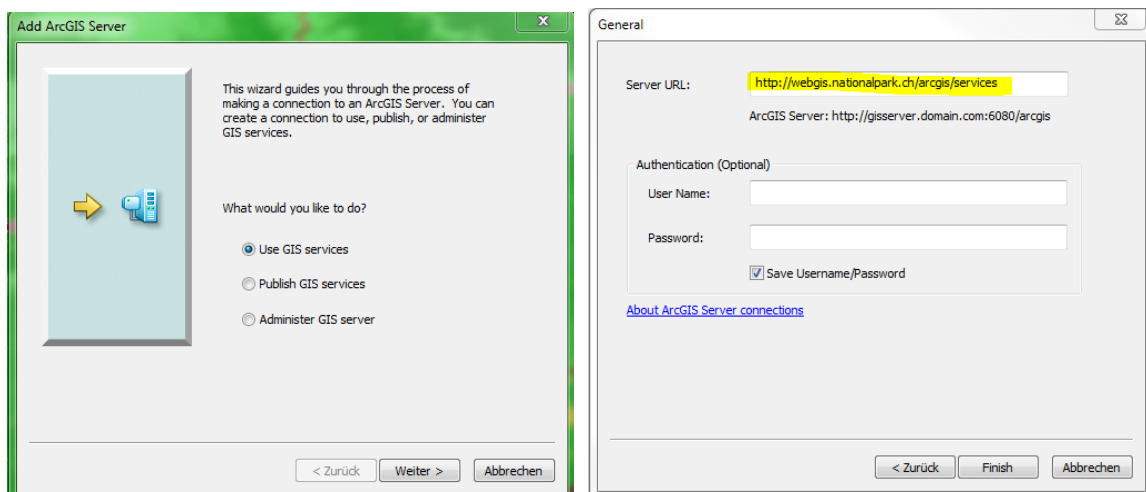
Working with the CSI Tool with ArcGIS Desktop

A. Embedding the data

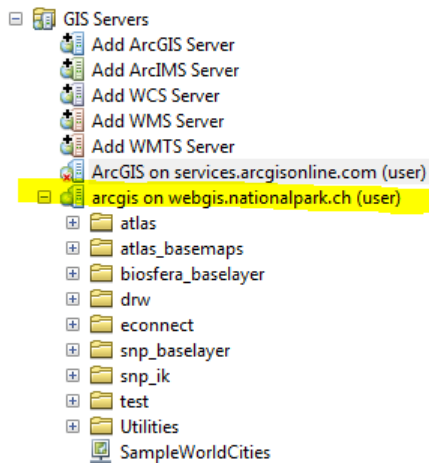
1. Open ArcMap and go to the ArcCatalog window
2. Add ArcGIS Server Connection in ArcCatalog



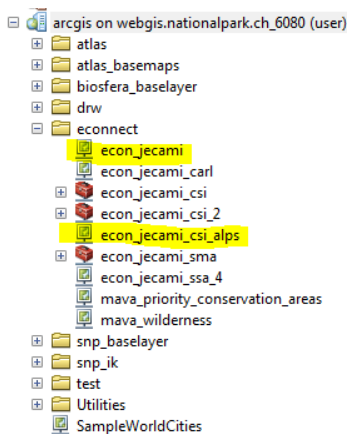
3. Follow the Add ArcGIS Server wizard
 - Use GIS service
 - Server URL: <http://webgis.nationalpark.ch/arcgis/services>
 - Finish



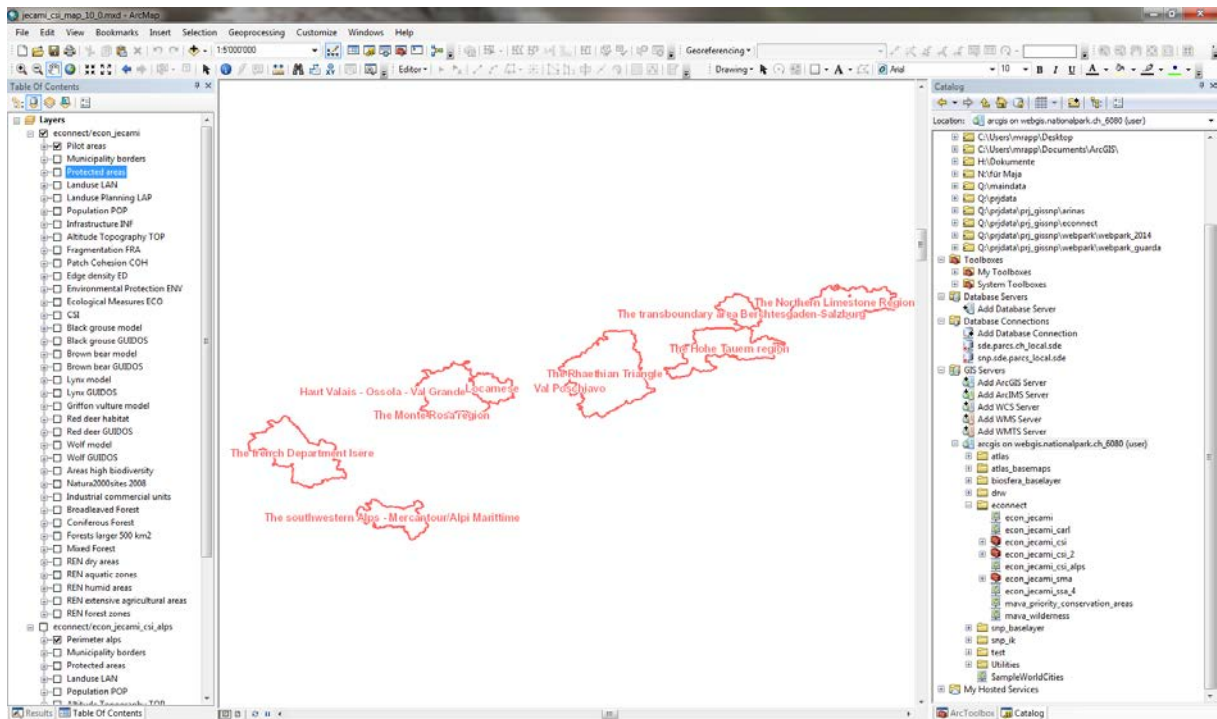
4. The connection to the data is now available in ArcCatalog. Double-click on the plus



- The econnect data is found in the econnect folder. The CSI data of the pilot regions are in the ArcGIS server File econ_jecami. The CSI data for alpine space is the file econ_jecami_csi_alps. Open these two files in an ArcMap window, via drag and drop



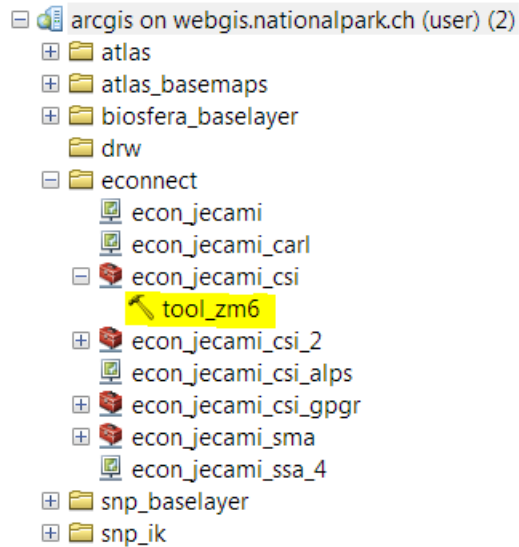
- The data is now available in the table of content and ready to be explored



B. Working with the CSI Tool

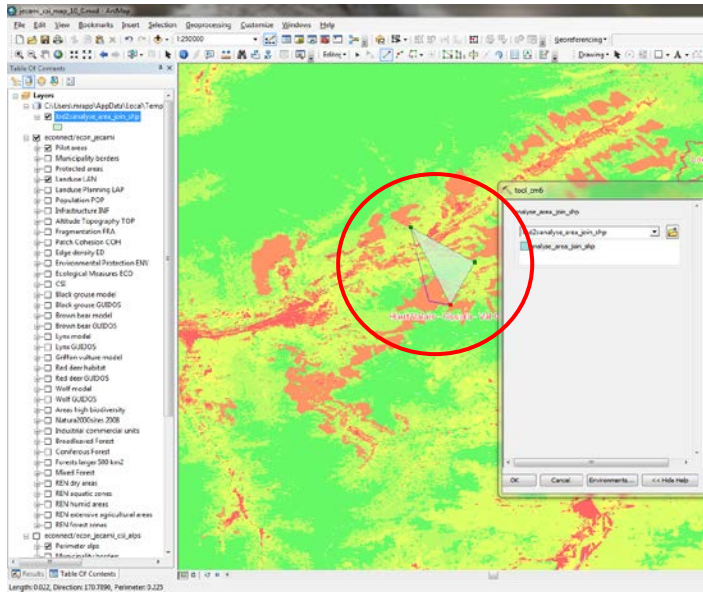
To analyse the CSI result for a specific area, there is a ArcGIS-tool which calculates the mean values of all indicators.

1. Go to the ArcGIS Server Connection in the ArcCatalog window.
2. To calculate the CSI analysis within a pilot region, double click the tool called tool_zm6 in the **econ_jecami_csi** toolbox.

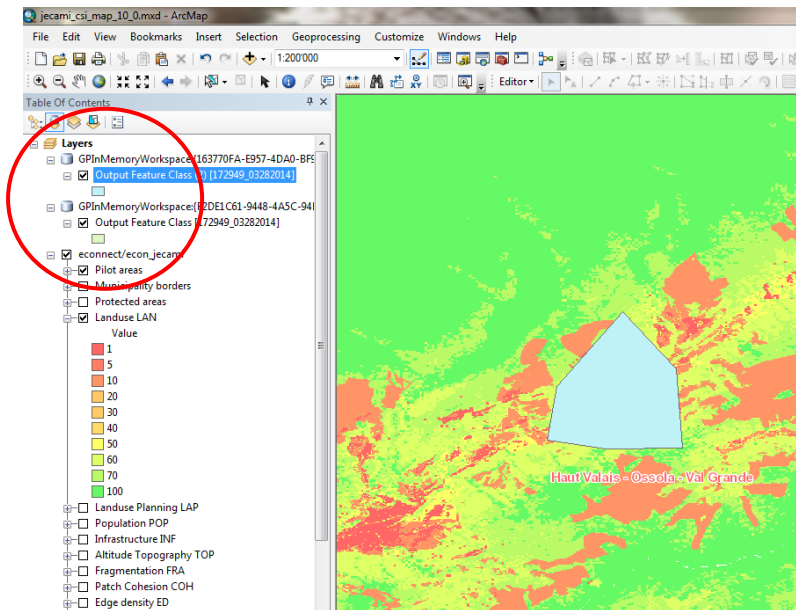


The tool-window opens. There are two possibilities to obtain results from a desired area:

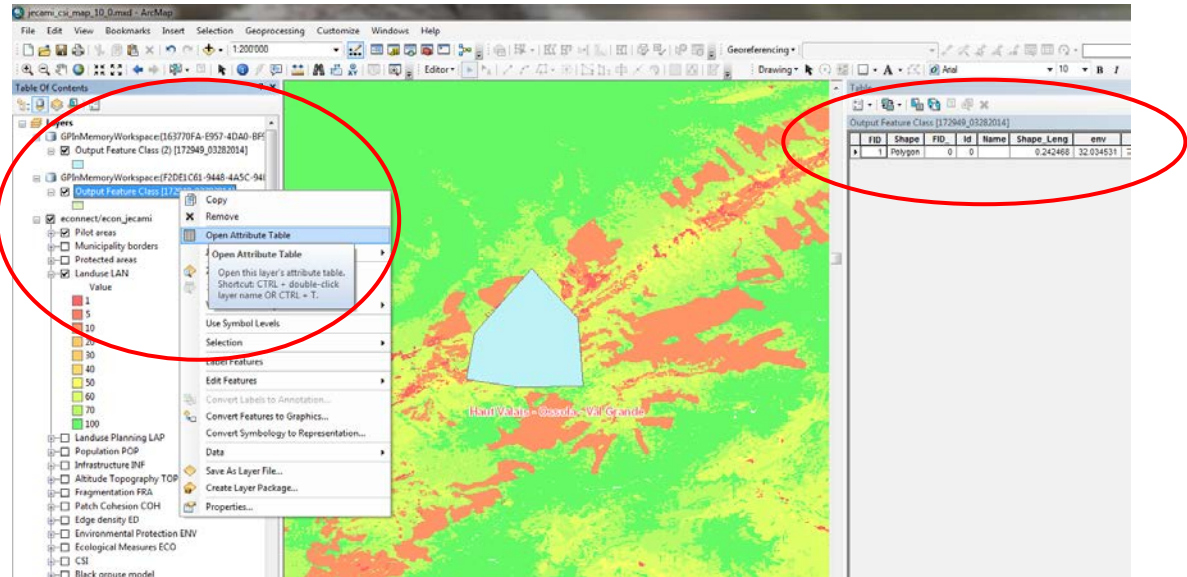
- a. Draw manually a polygon
 - b. Include a polygon from a shape file / featureclass
- a. *Draw manually a polygon:*
- When the tool window is activated (opened), you can draw a polygon directly with the mouse on the map.



- Double-click when drawing the last vertex to finish the polygon
Your polygon is now included in the shapefile *analyse_area_sjoin_shp*
- Start the tool with OK
- When the tool is finished successfully with the calculation, a temporary Geodatabase with an Output Feature Class is opening directly in the table of content.

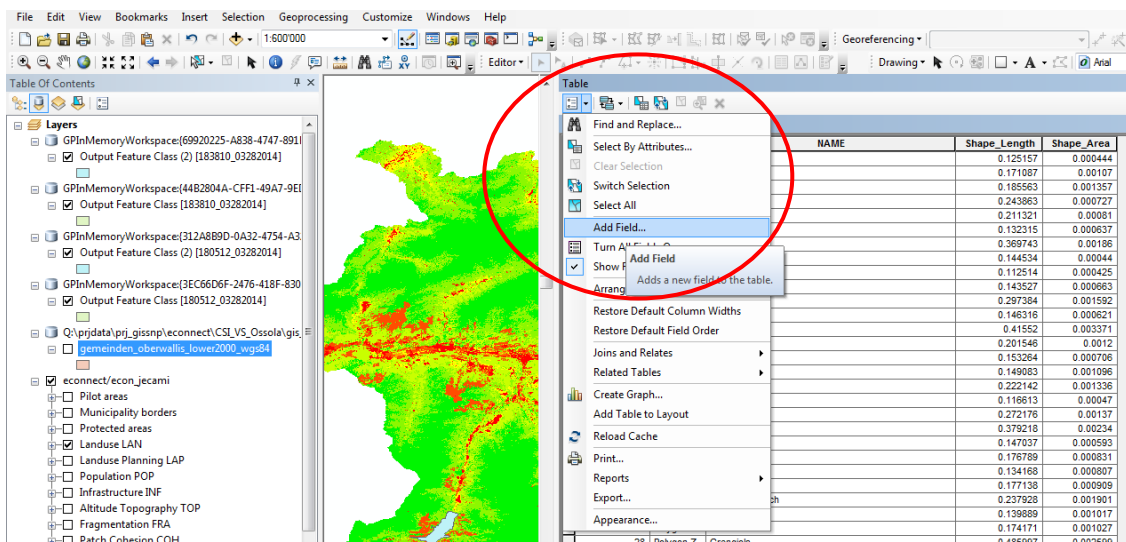


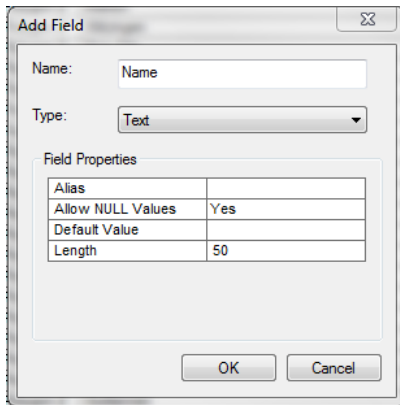
- To see the resulted mean values of the CSI indicators, open the attribute table (right-click on the feature class in the table of content).
The mean CSI values are stored as attributes, separately for each indicator.
In the first Output Feature Class, there are only the calculated values of the indicators. The second contains also the Quality indices.



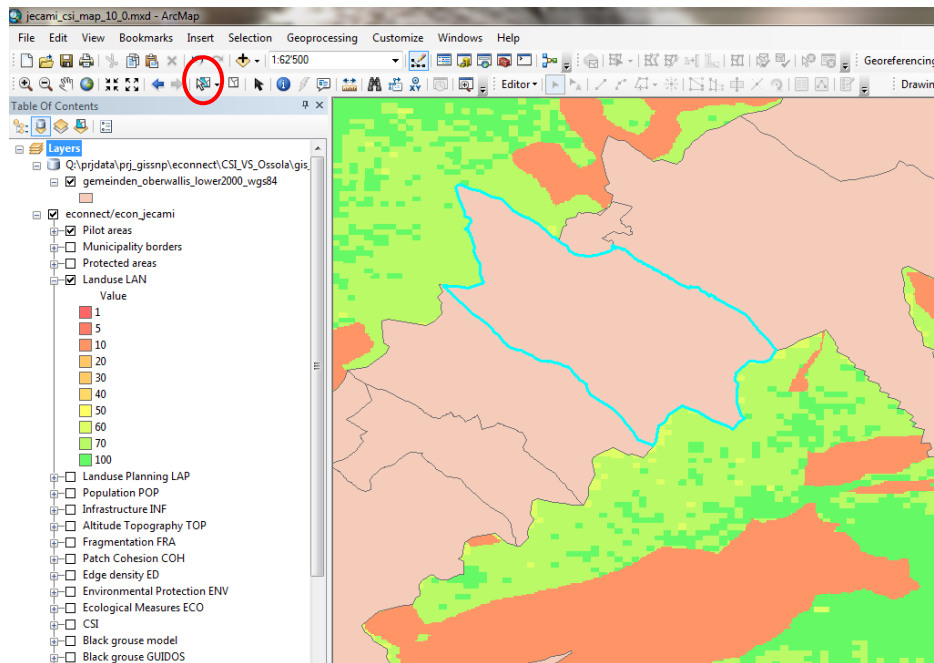
b. Include a polygon from a shape file / featureclass

- Open your Shapefile or your Feature Class in the ArcMap Window via drag & drop from the ArcCatalog window.
- Make sure your Feature is in the geographic coordinate system WGS 84. If not, reproject it via the tool *Project* (Data Management toolbox, Projections and Transformations Toolset / Feature)
- Make sure your Feature contains the attribute **Name** (type text). If it doesn't, add a field in the attribute table.

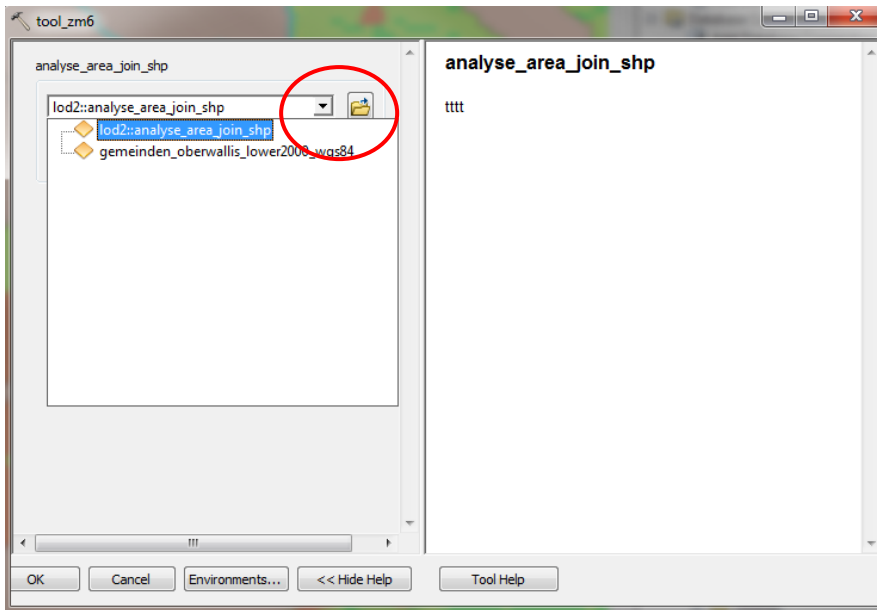




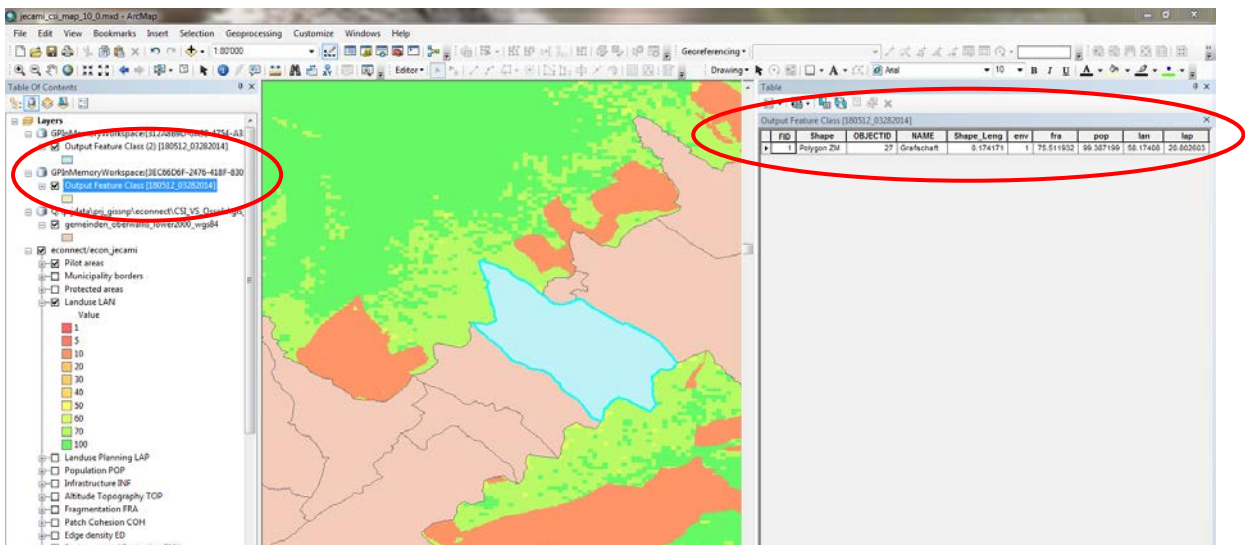
- If your Feature Class / Shapefile contains more than one polygon, select the one you wish to make the calculation with (it is only possible to calculate one polygon at the same time). If more polygons are selected, the CSI result will give the mean of all polygons)



- Open the tool tool_zm6 again via double-click in the ArcCatalog Window
Now it is possible to select your feature class / shape file within the tool window (open it via the arrow or the folder sign)



- Start the tool with OK
- When the tool is finished successfully with the calculation, again a temporary Geodatabase with an Output Feature Class is opening directly in the table of content.
The results of the mean CSI values are again stored as attributes in the attribute table



3. To calculate the CSI analysis within the alpine space perimeter, double click the tool called tool_zm6 in the econ_jecami_csi_2 toolbox.

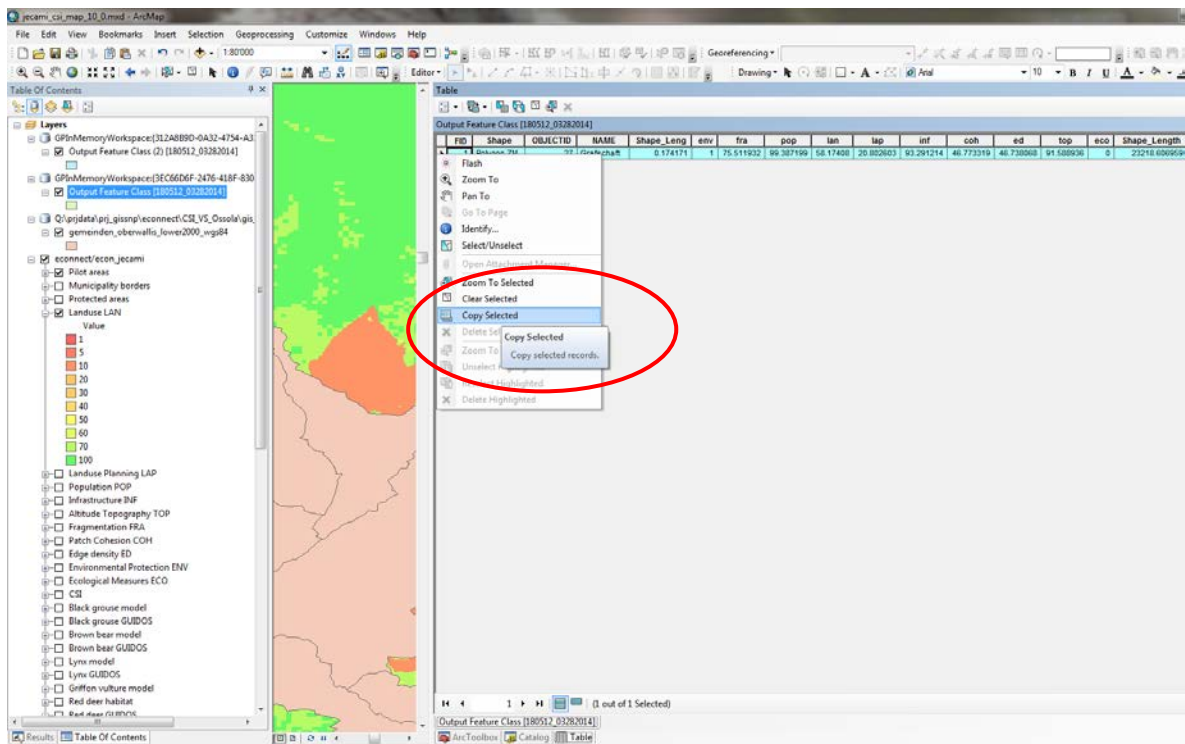
- arcgis on webgis.nationalpark.ch (user)
 - atlas
 - atlas_basemaps
 - biosfera_baselayer
 - drw
 - econnect
 - econ_jecami
 - econ_jecami_carl
 - econ_jecami_csi
 - econ_jecami_csi_2
 - tool_zm6
 - econ_jecami_csi_alps
 - econ_jecami_csi_gpgr
 - econ_jecami_sma
 - econ_jecami_ssa_4
 - snp_baselayer
 - snp_ik
 - test

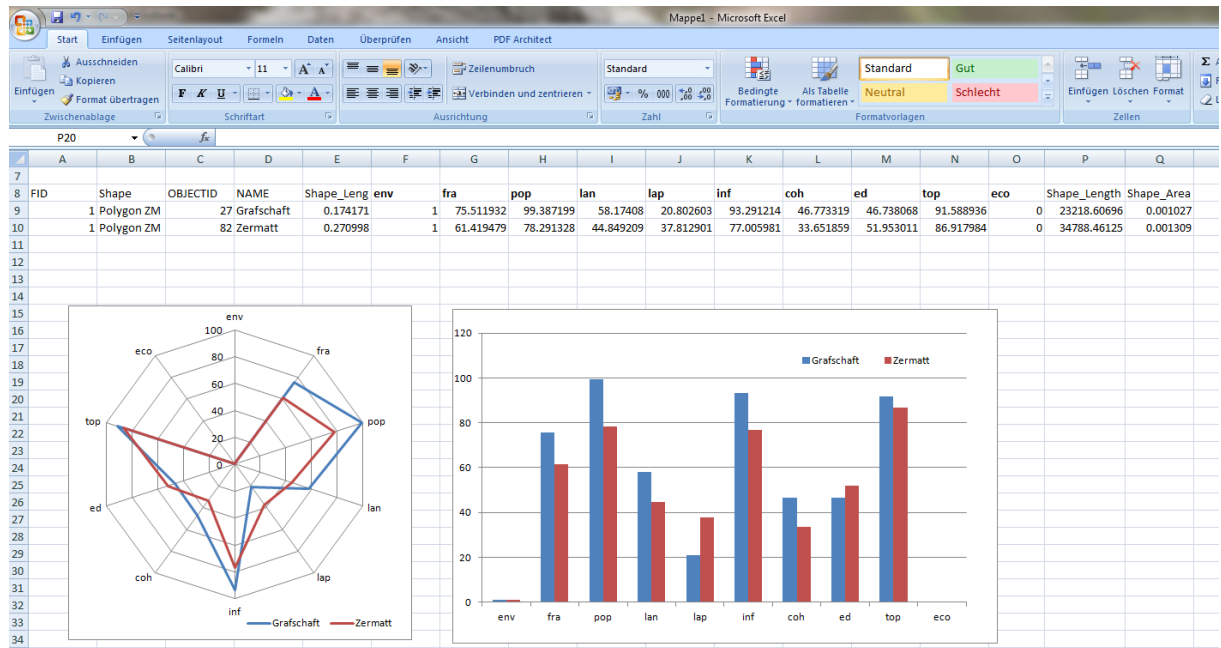
The tool-window opens. There are again two possibilities to obtain results from a desired area:

- a. Draw manually a polygon
- b. Include a polygon from a shape file / featureclass

The tool is working exactly the same way like for the pilot region perimeter (see instructions above)

4. You can now copy the results (values stored in the attribute table) into Excel to make graphs / tables for comparison





Meaning of values regarding indicator

-1	Polygon is outside of perimeter
0	No data is available
1	Minimum value
100	Maximum value