
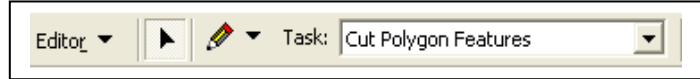



## Helpful hints when digitizing features in ArcMap

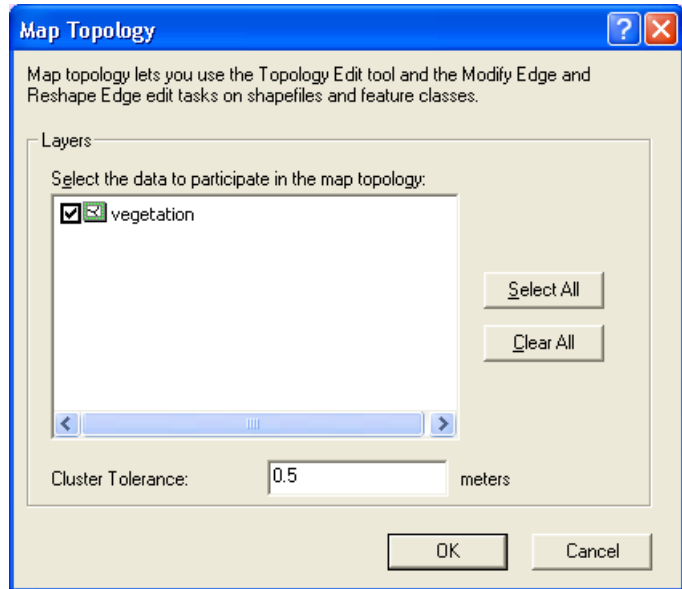
(When you don't have topology explicitly specified in the geodatabase)

- 1) If you are creating a new data layer, (in ArcMap parlance, a feature class), then create it within ArcCatalog – remember to set the coordinate system **and** X/Y extent when you create the empty dataset – changing them later can cause problems.
- 2) After you've loaded a feature class or shapefile and started editing, remember to set snapping; Editor – Snapping, then check vertex, end, and edge for layers, and Editor – Options, and set the snapping tolerance to an appropriate value – a half meter or so for our work.
- 3) Use create polygon to digitize the first or isolated polygons, and auto-complete polygon to digitize adjacent polygons.
- 4) If you make a mistake while digitizing, you may right click and select delete vertex to remove your previous entrie(s).
- 5) If you want to adjust the vertices, use the edit tool to double click on a feature – then hold the edit tool over the displayed vertices, left click and hold to grab, and then move the feature. 
- 6) If two features overlap, select the feature with the shape you want to preserve using the edit tool, then select Editor – Clip to clean up the edge.
- 7) If you've digitized two features, and you want them to be one feature, you may join them by selecting both and then Editor – Union
- 8) You may create a “donut” polygon, nested within a larger polygon by  
First, digitizing the larger polygon  
Then, digitizing the interior polygon  
With the interior polygon selected, select Editor-Clip; make sure you have discard the area that intersects selected
- 9) You may fill a gap between two polygons by drawing a “covering” polygon that fills the gap, and overlaps with the two or more polygons on that bound the gap. Then, select the polygon(s) that define the edges you want to keep, and select Editor-Clip. Make sure you discard the area of intersects. Finally, select the polygons you want to merge with the center polygon, and select Editor-Union



- 10) You may split a polygon by first setting the editor task to Cut Polygon Feature (see box at right), selecting a feature using the edit tool, and the drawing a line where you want the feature split using the sketch tool.



- 11) You may enforce temporary topological editing by activating the Map Topology tool . Note that you have to be in an active editing session to turn on the Map Topology tool. **NOTE THAT THIS IS NOT FULL TOPOLOGICAL EDITING.** Full topological editing is described in other documents for this course. You typically use temporary topological editing when you are working on simple layers, without many intra- and inter-layer constraints on topology.



The Map Topology tool will open a dialog menu asking which layers you wish to have participate. Typically you are working on just one layer, so you check this layer and set the cluster tolerance in map units.

You add features using the Create New Feature and Autocomplete Polygons tasks, and other tasks and tools outlined above. You may use the Topological Editing tool  to move shared edges, and periodically use the Construct Feature tool  to “clean up” overlaps. Note that you can still have slivers using these methods. However, with the judicious use of these tools, and the editing tasks and options above, you may quickly and rather simply develop topologically correct layers.