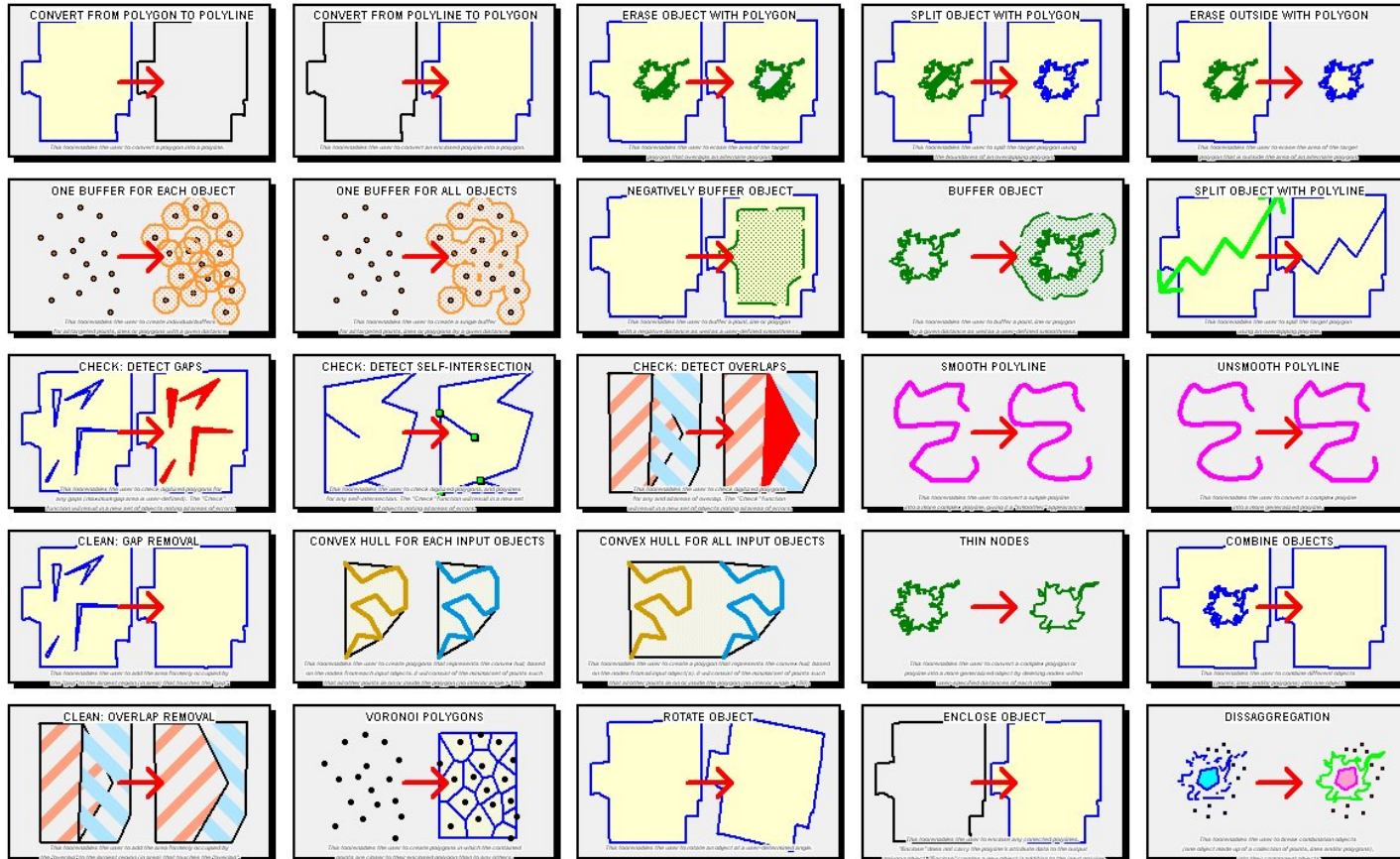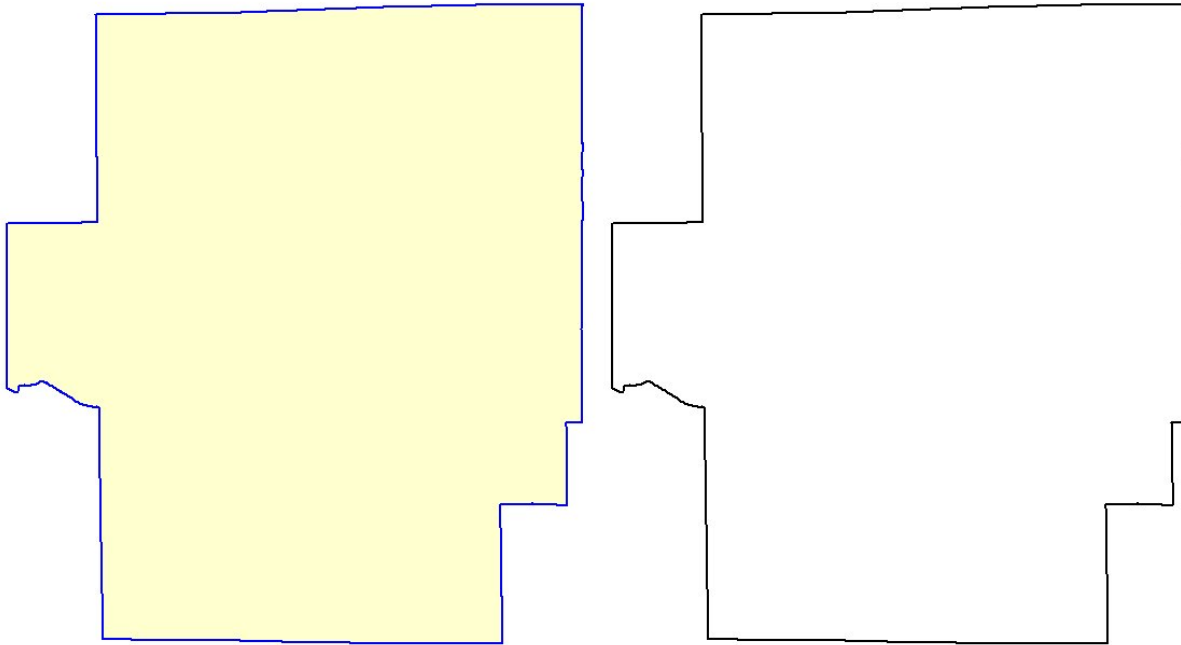# Editing Tools For Use With MapInfo Professional's GIS Software

By John Scott
Salem State College

EDITING TOOLS FOR USE WITH MAPINFO PROFESSIONAL GIS SOFTWARE

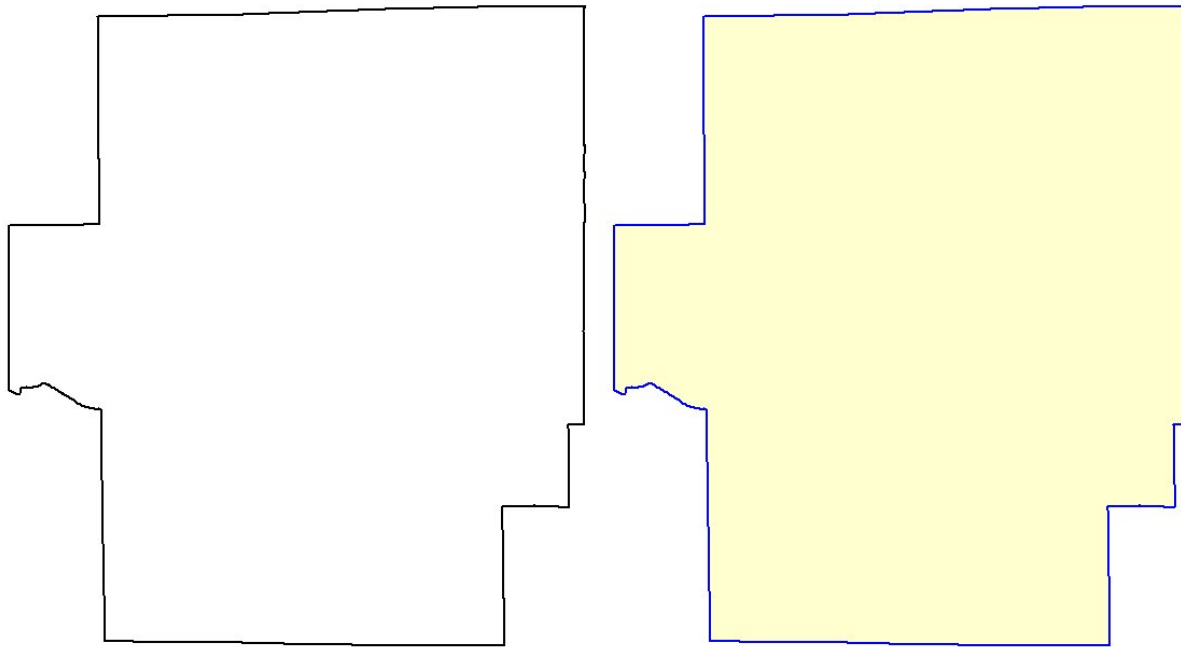John Scott   Salem State College   05/2007

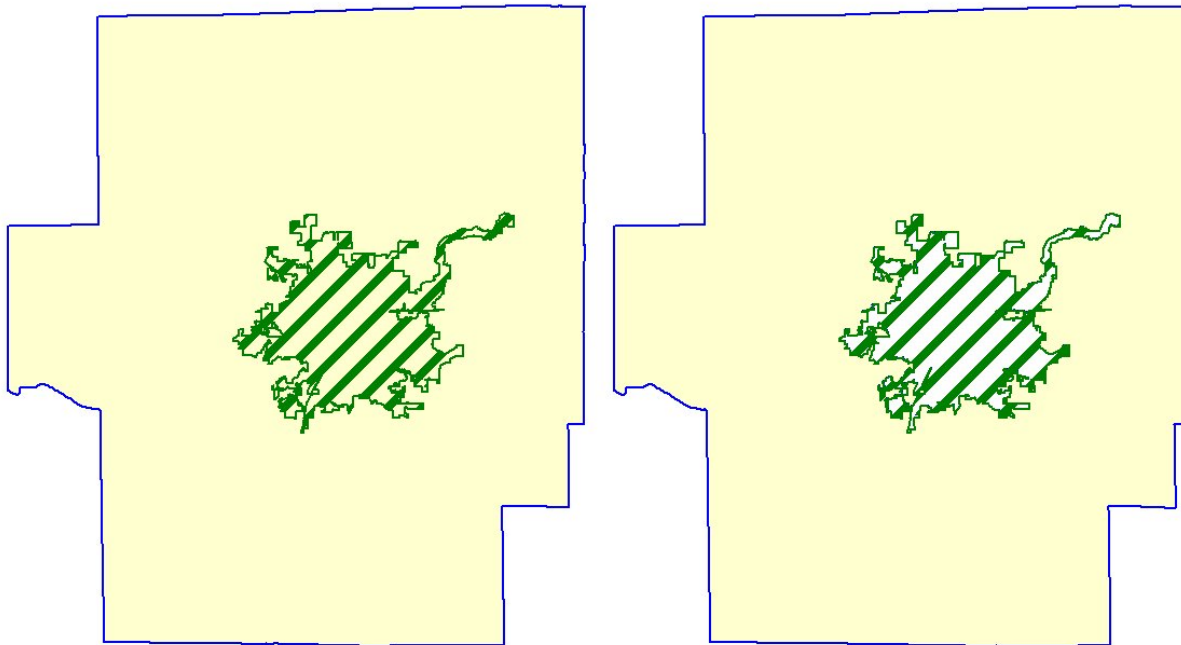# CONVERT FROM POLYGON TO POLYLINE

- *This tool enables the user to convert a polygon into a polyline.*
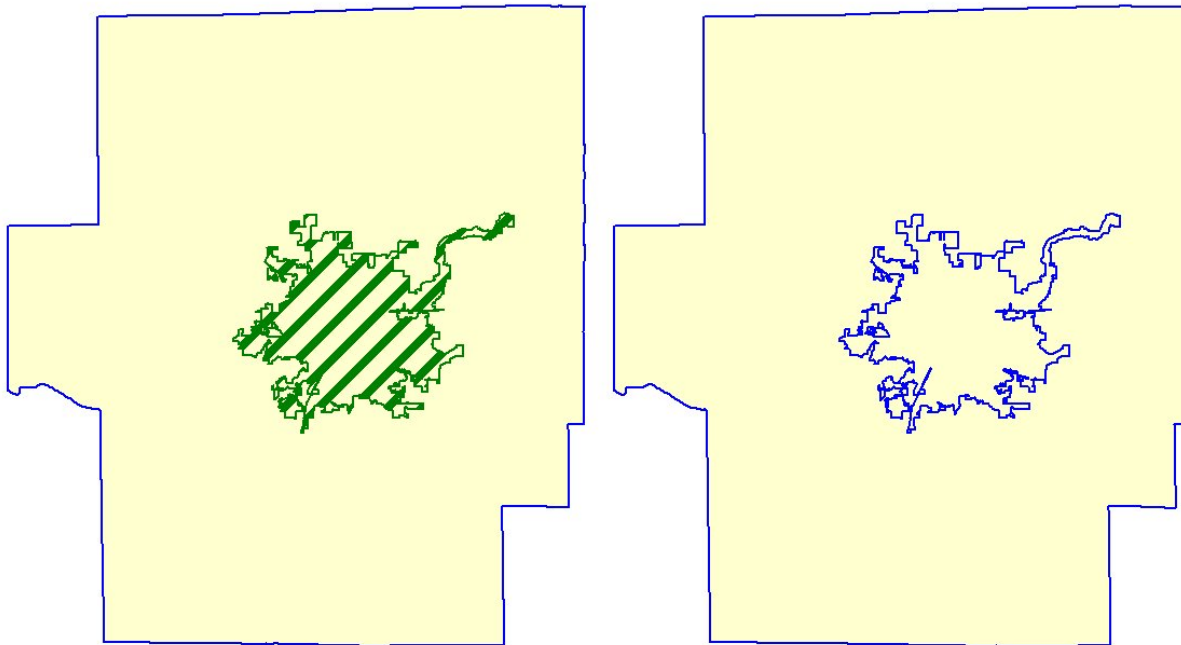
CONVERT FROM POLYLINE TO POLYGON

- *This tool enables the user to convert an enclosed polyline into a polygon.*
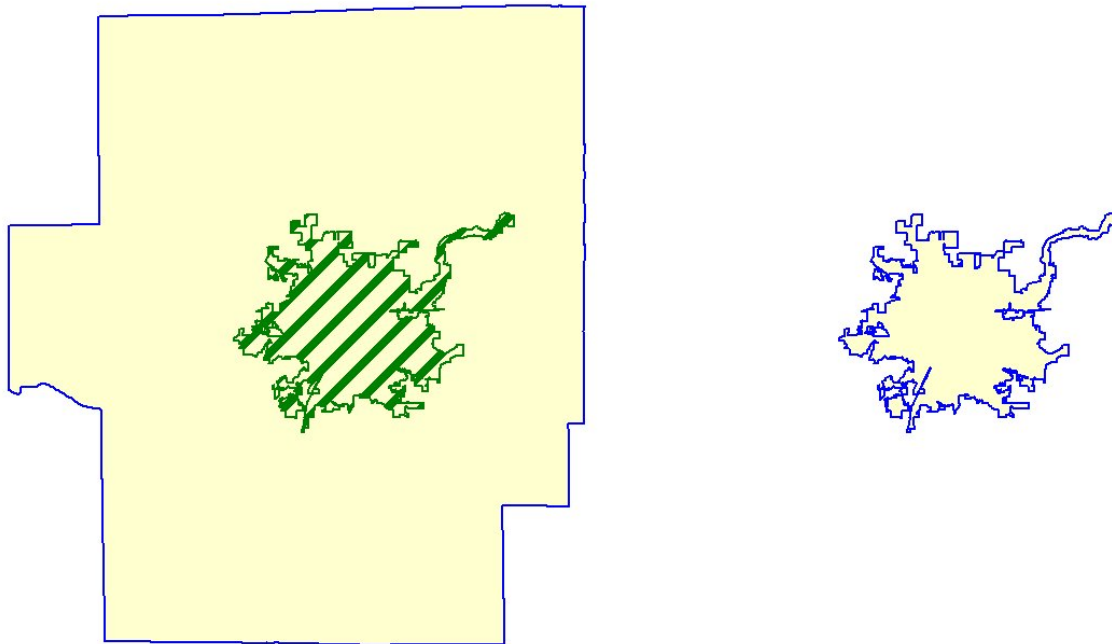
ERASE OBJECT WITH POLYGON

- *This tool enables the user to erase the area of the target polygon that overlaps an alternate polygon.*

SPLIT OBJECT WITH POLYGON

- *This tool enables the user to split the target polygon using the boundaries of an overlapping polygon.*
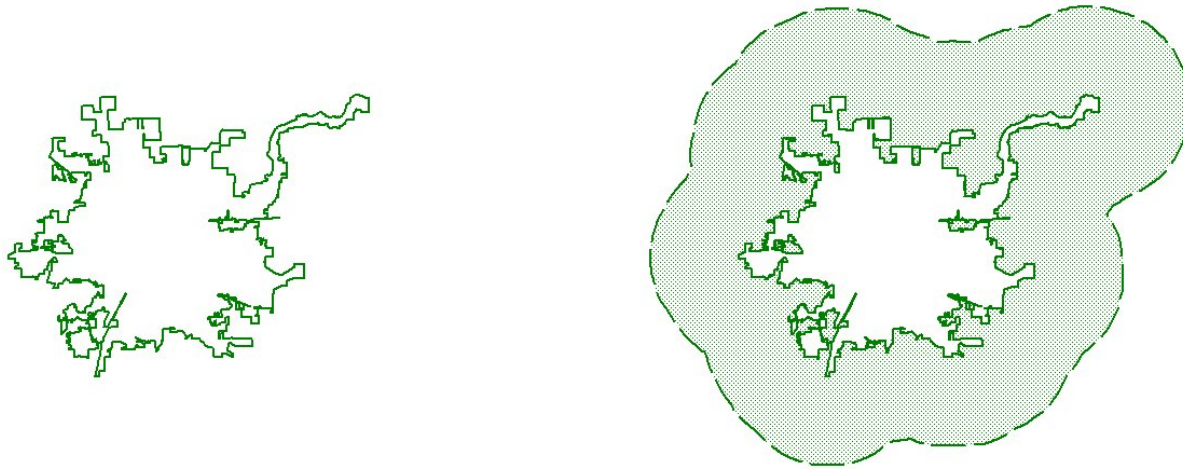
ERASE OUTSIDE WITH POLYGON

This tool enables the user to erase the area of the target polygon that is outside the area of an alternate polygon.
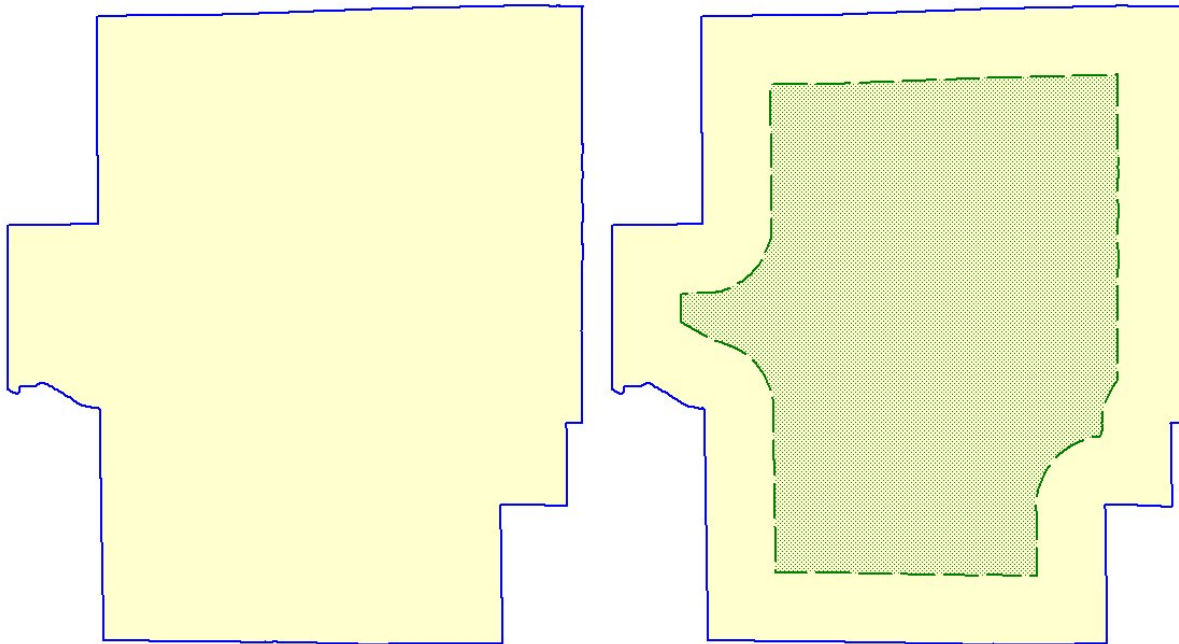
SPLIT OBJECT WITH POLYLINE

• *This tool enables the user to split the target polygon using an overlapping polyline.*
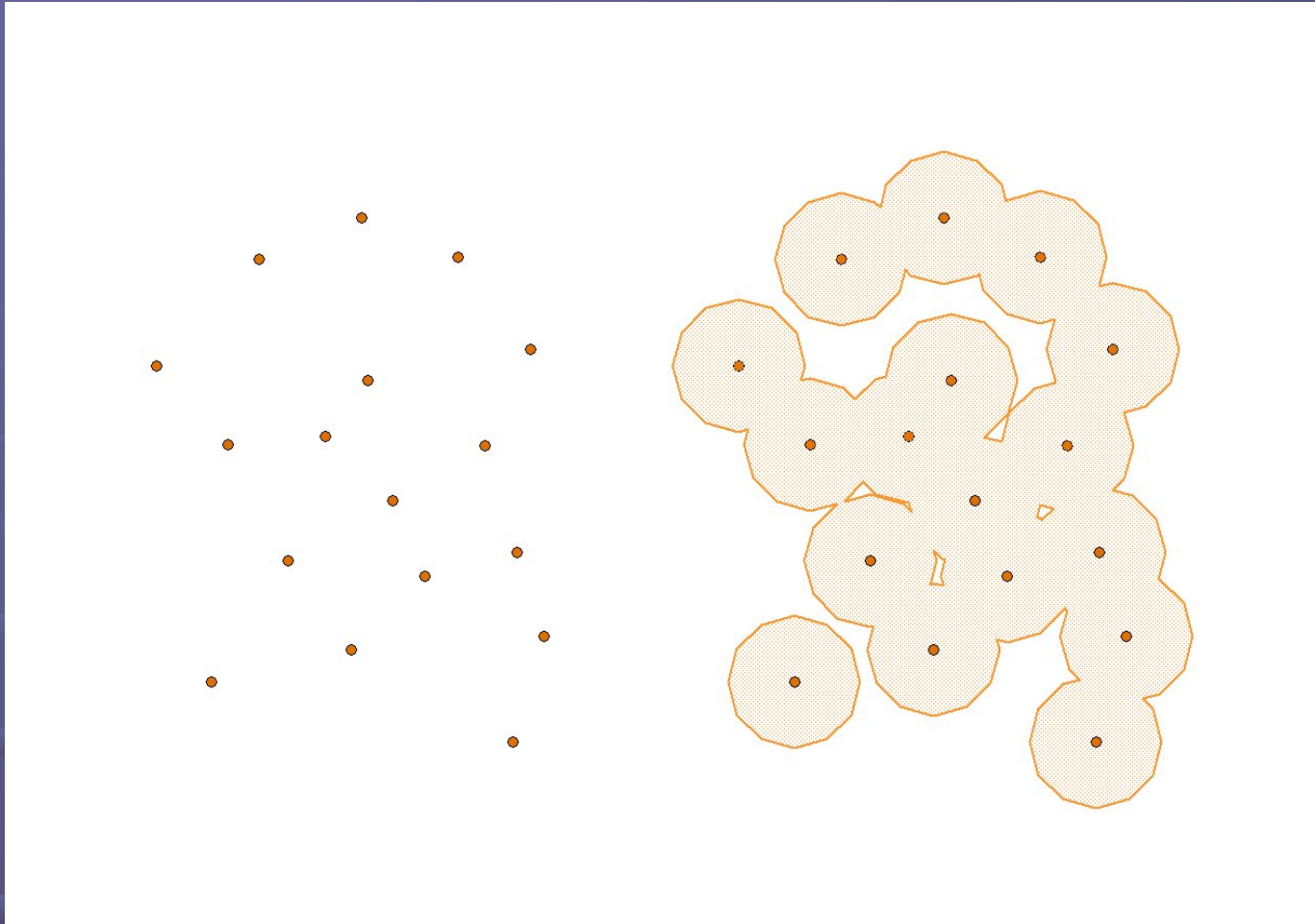
BUFFER OBJECT

This tool enables the user to buffer a point, line or polygon by a given distance as well as a user-defined smoothness.

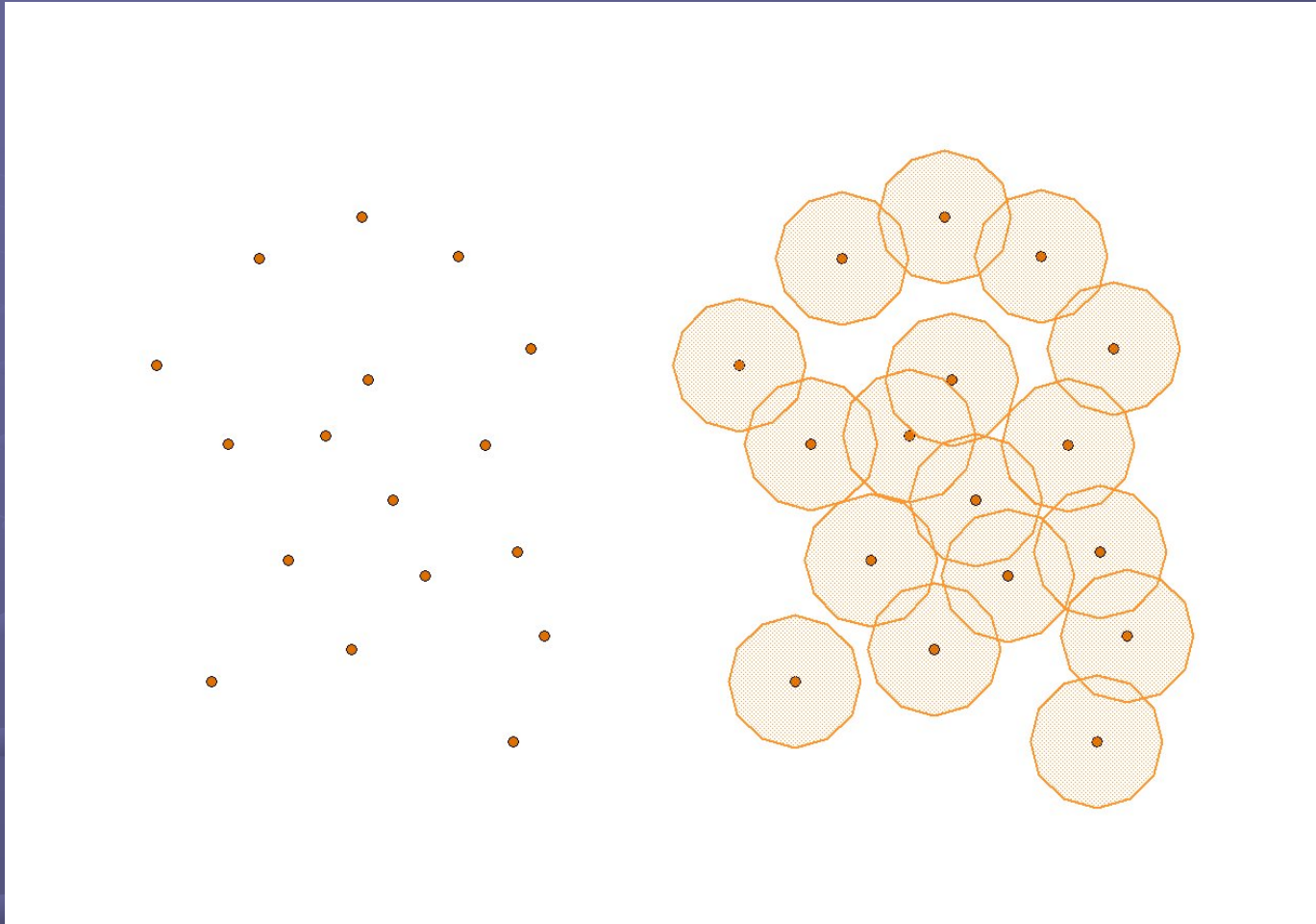# NEGATIVELY BUFFER OBJECT

- *This tool enables the user to buffer a point, line or polygon with a negative distance as well as a user-defined smoothness.*
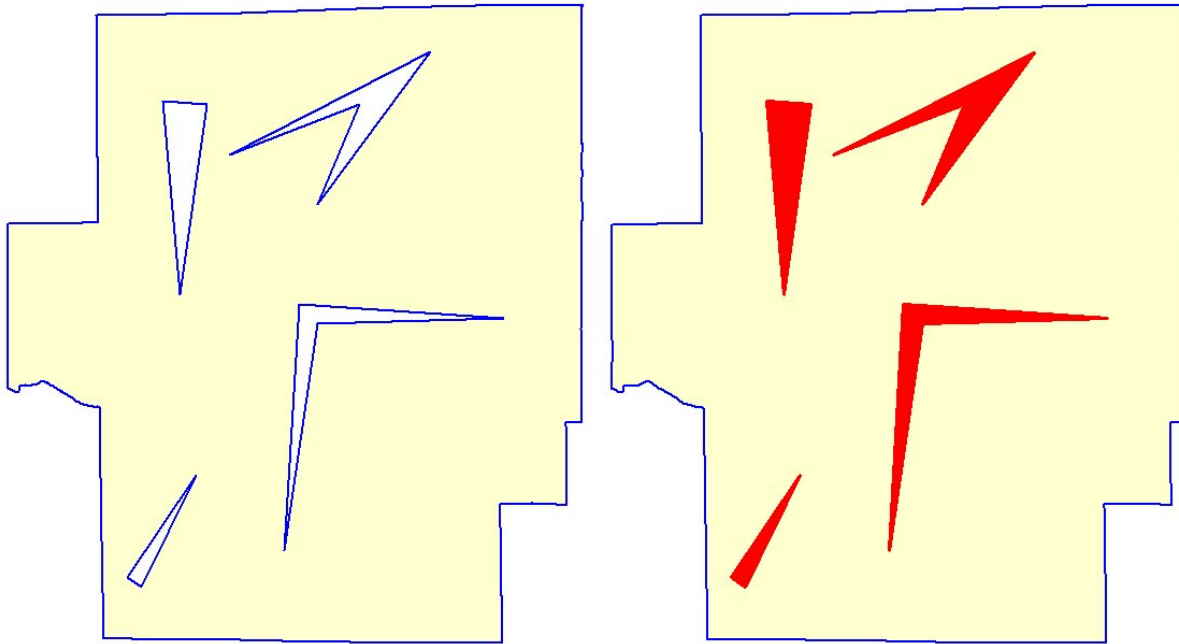
ONE BUFFER FOR ALL OBJECTS

This tool enables the user to create a single buffer for all targeted points, lines or polygons by a given distance.
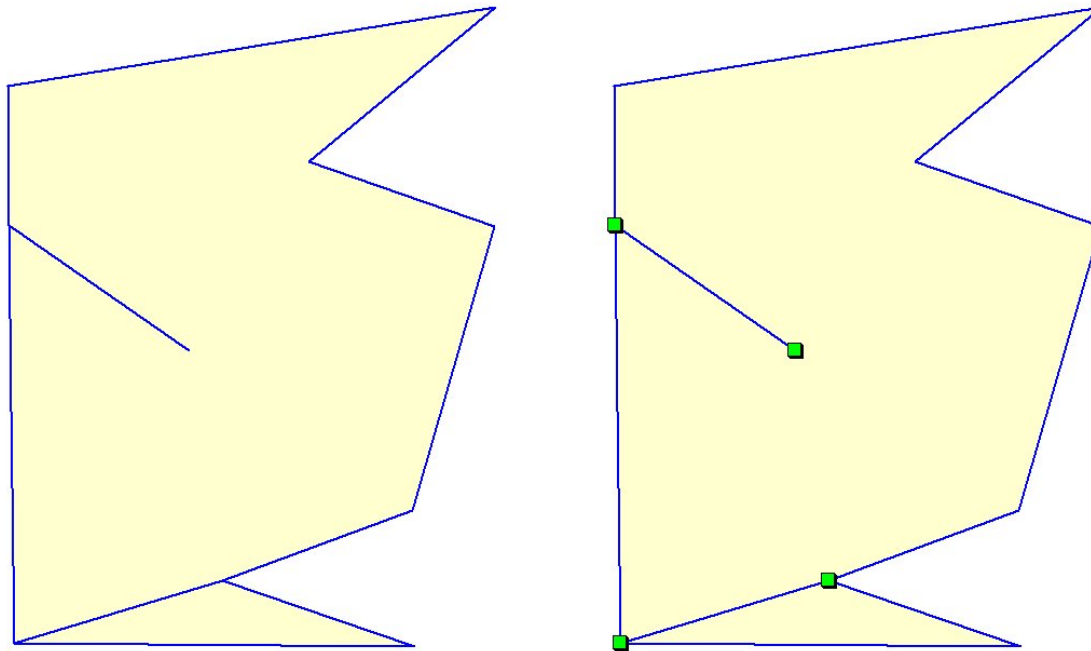
ONE BUFFER FOR EACH OBJECT

This tool enables the user to create individual buffers for all targeted points, lines or polygons with a given distance.
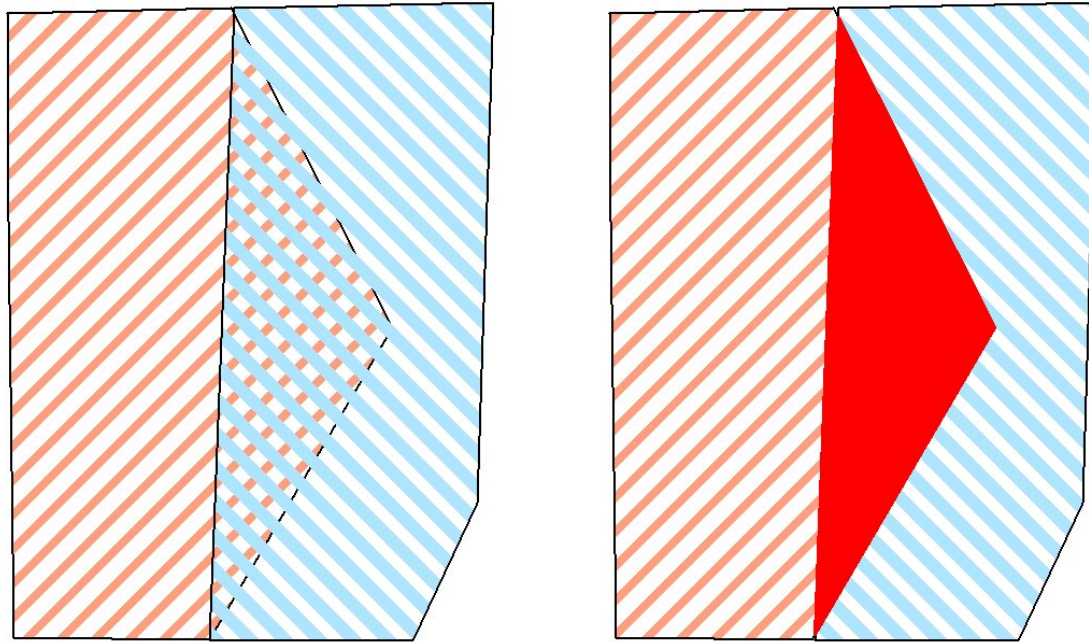
CHECK: DETECT GAPS

This tool enables the user to check digitized polygons for any gaps (maximum gap area is user-defined). The "Check" function will result in a new set of objects noting all areas of errors.
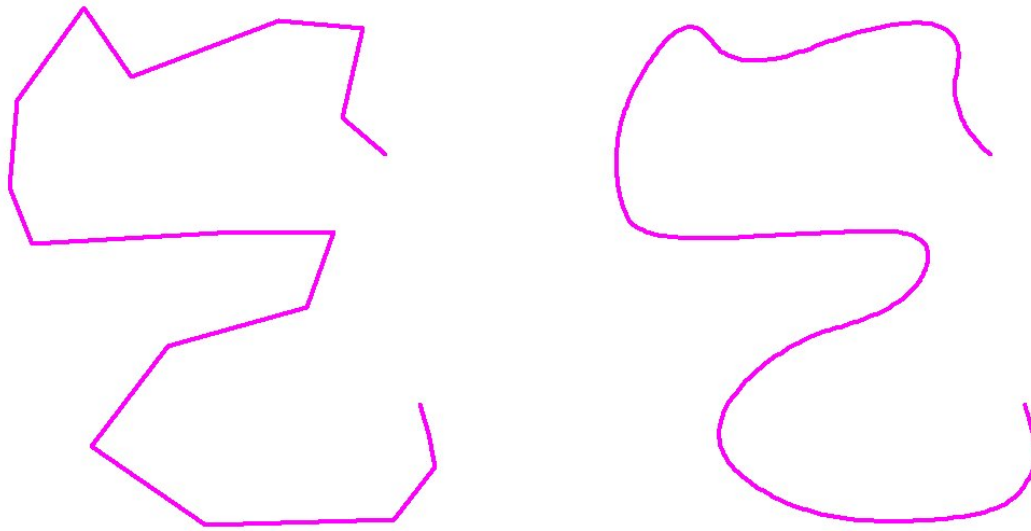
CHECK: DETECT SELF-INTERSECTION

This tool enables the user to check digitized polygons, and polylines for any self-intersection. The "Check" function will result in a new set of objects noting all areas of errors.
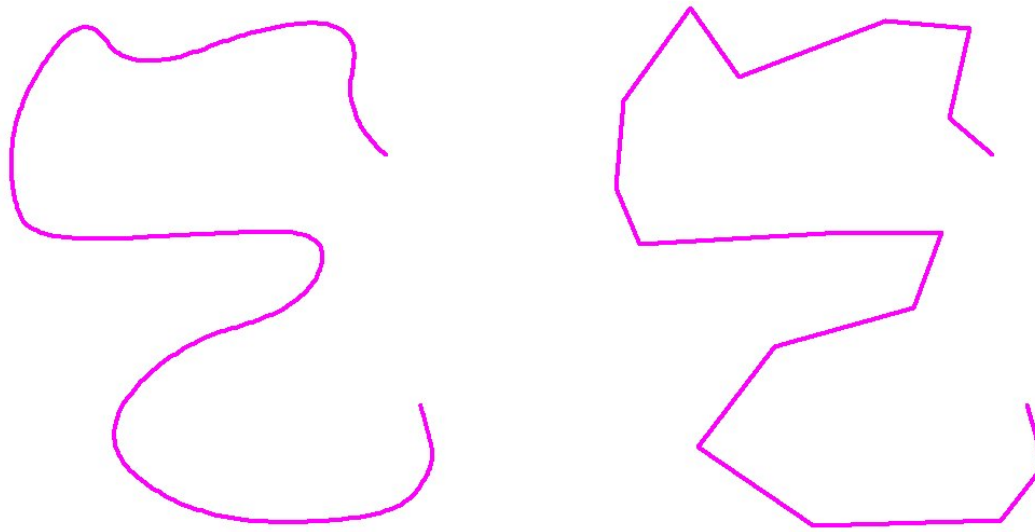
This tool enables the user to check digitized polygons for any and all areas of overlap. The "Check" function will result in a new set of objects noting all areas of errors.
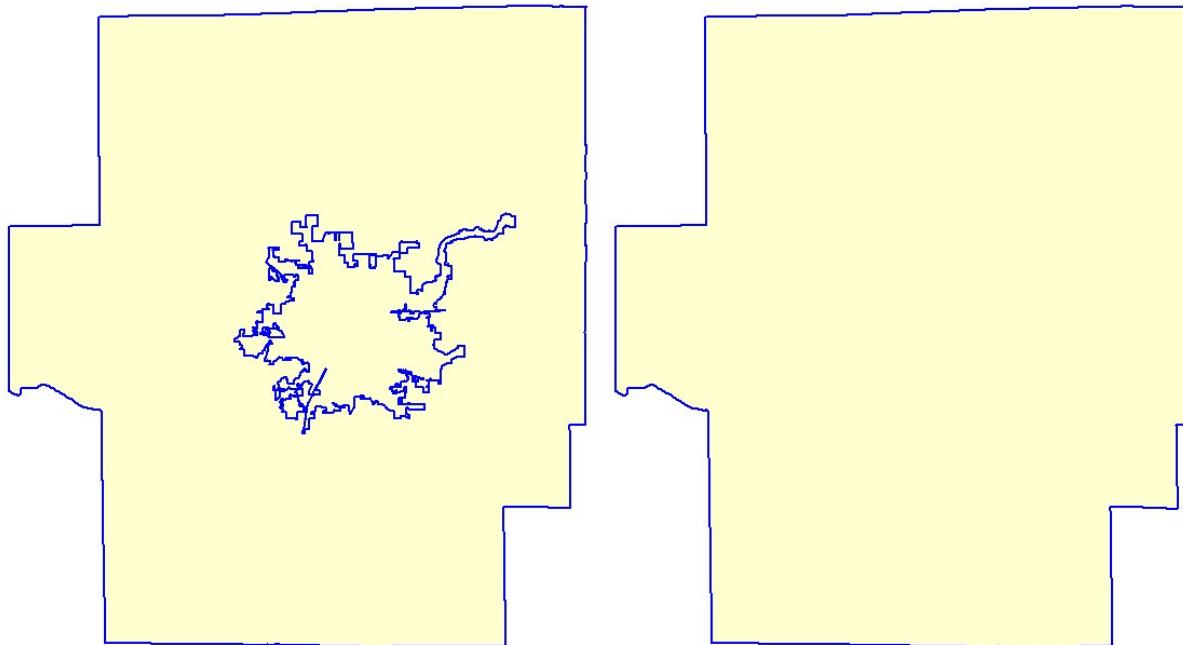
SMOOTH POLYLINE

This tool enables the user to convert a simple polyline into a more complex polyline, giving it a "smoother" appearance.

UNSMOOTH POLYLINE

- *This tool enables the user to convert a complex polyline into a more generalized polyline.*
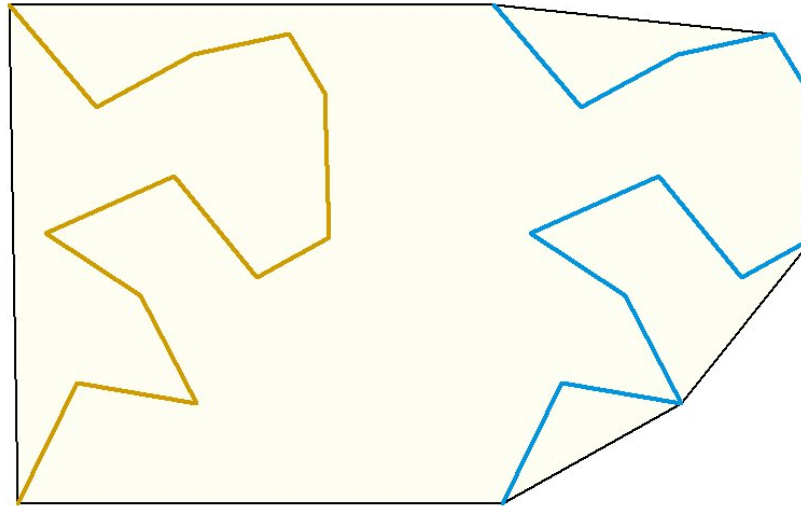
COMBINE OBJECTS

- *This tool enables the user to combine different objects (points, lines, and/or polygons) into one object.*
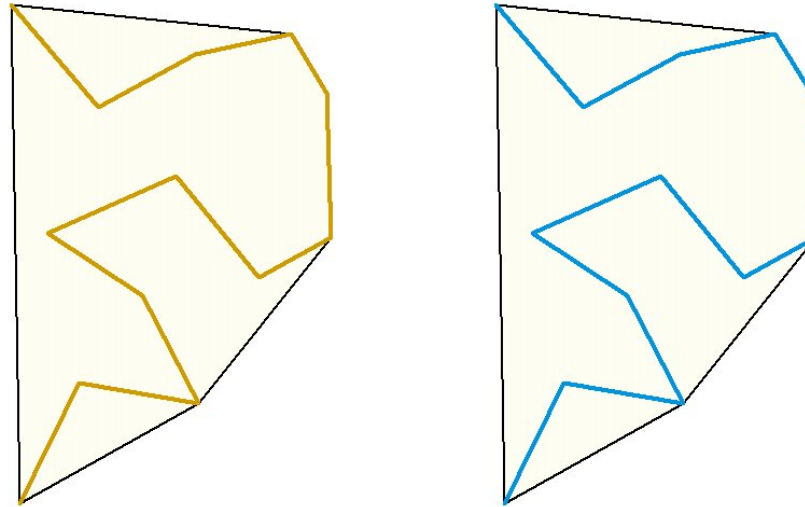
THIN NODES

This tool enables the user to convert a complex polygon or polyline into a more generalized object by deleting nodes within user-specified distances of each other.
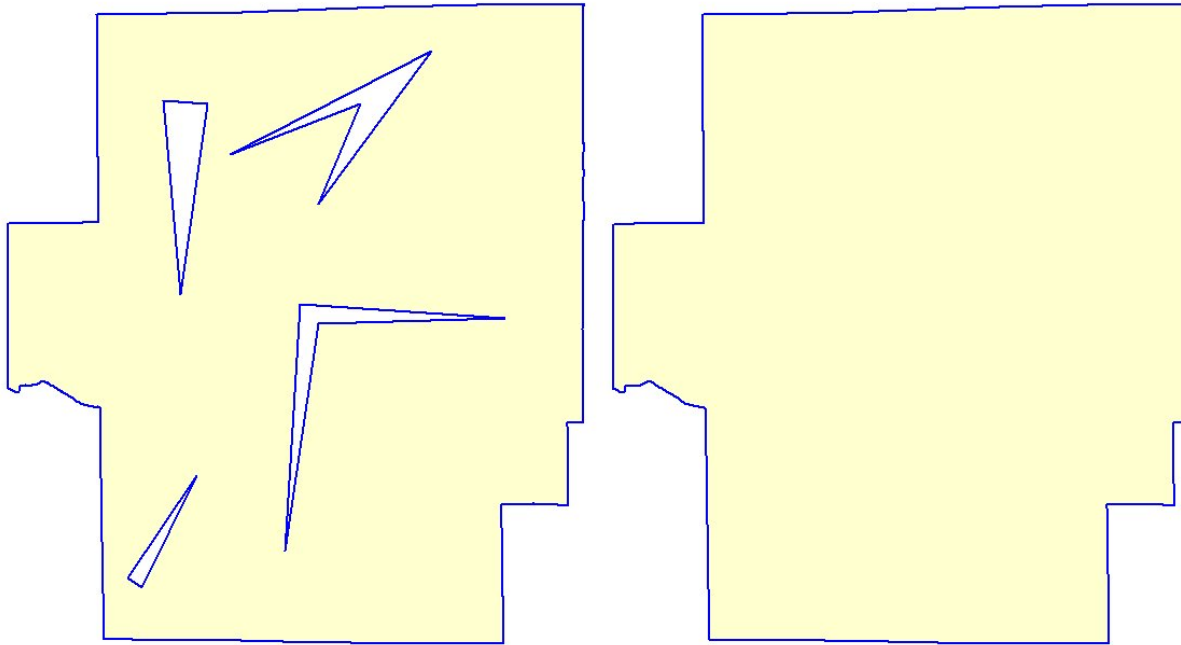
CONVEX HULL FOR ALL INPUT OBJECTS

- *This tool enables the user to create a polygon that represents the convex hull; based on the nodes from all input object(s). It will consist of the minimal set of points such that all other points lie on or inside the polygon (no interior angle > 180).*
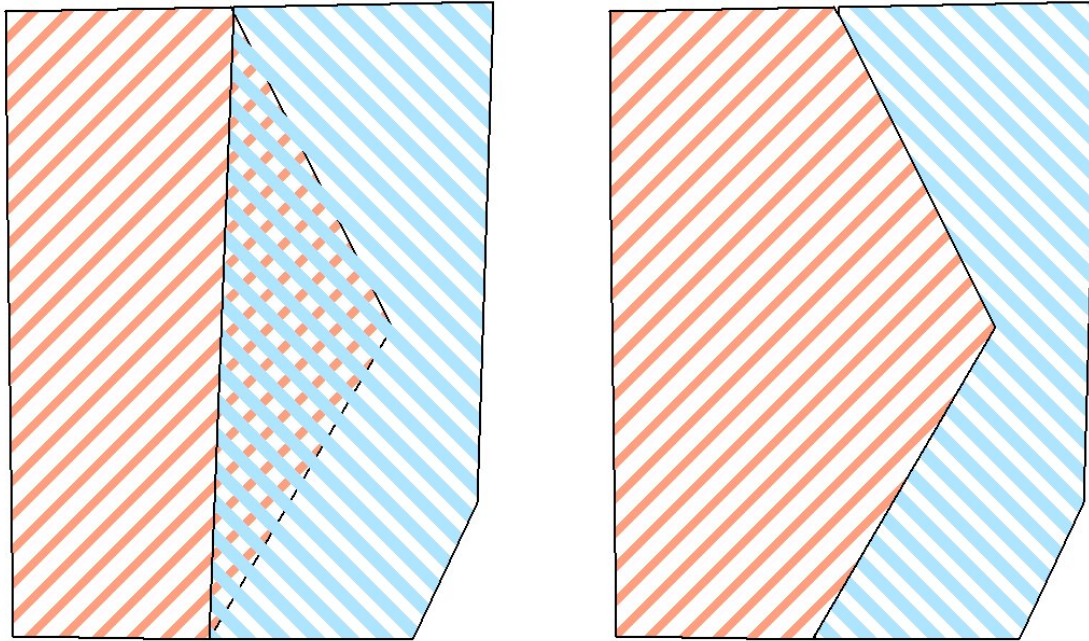
CONVEX HULL FOR EACH INPUT OBJECTS

- *This tool enables the user to create polygons that represents the convex hull; based on the nodes from each input objects. It will consist of the minimal set of points such that all other points lie on or inside the polygon (no interior angle > 180).*
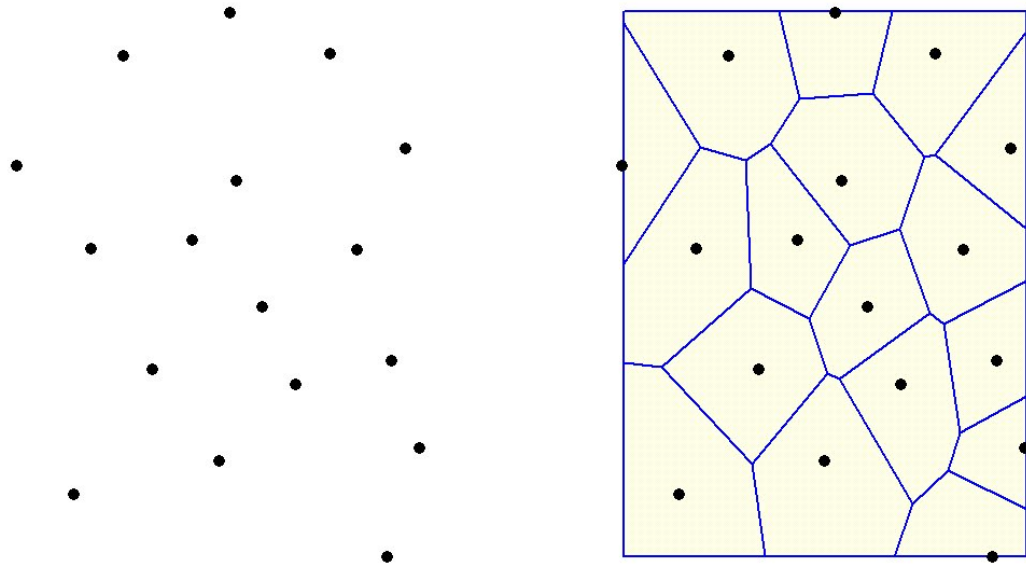
CLEAN: GAP REMOVAL

This tool enables the user to add the area formerly occupied by the "gap" to the largest region (in area) that touches the "gap".
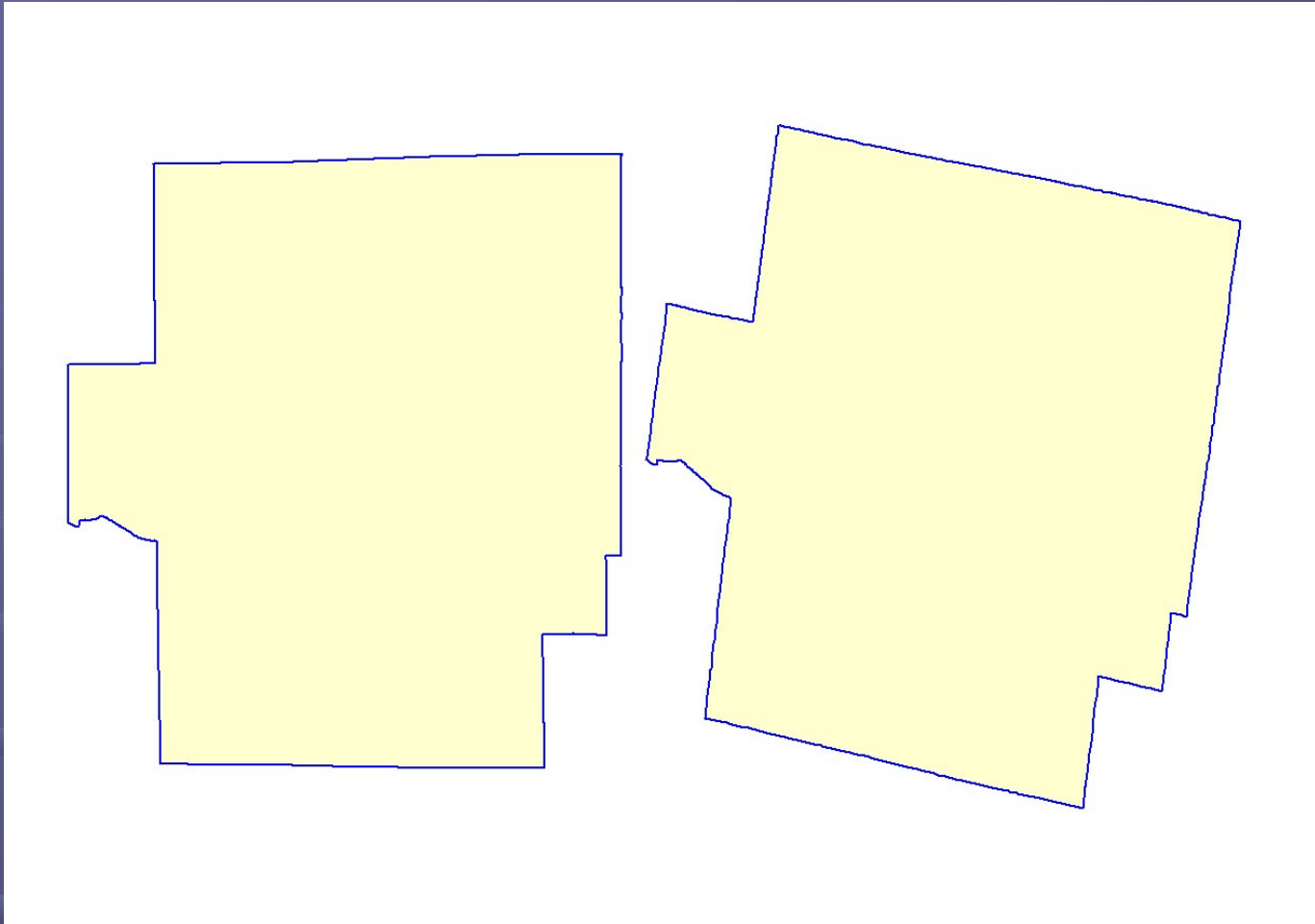
CLEAN: OVERLAP REMOVAL

This tool enables the user to add the area formerly occupied by the "overlap" to the largest region (in area) that touches the "overlap".
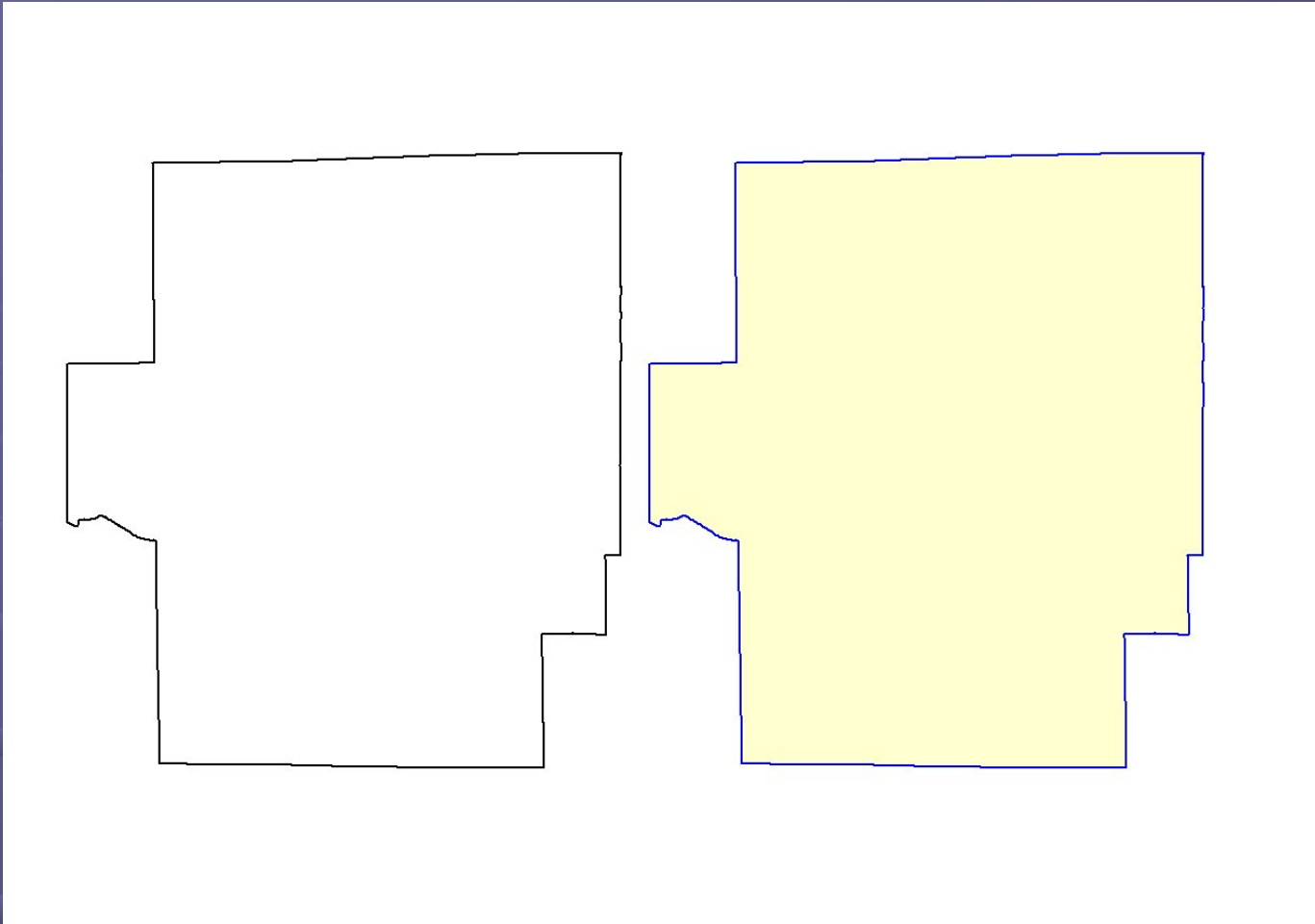
VORONOI POLYGONS

This tool enables the user to create polygons in which the contained points are closer to their enclosed polygon than to any others.
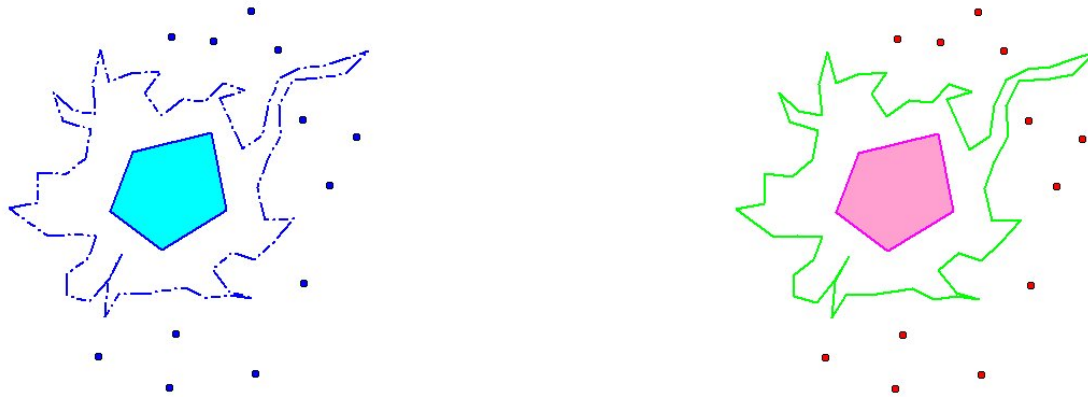
ROTATE OBJECT

- *This tool enables the user to rotate an object at a user-determined angle.*

ENCLOSE OBJECT

This tool enables the user to enclose any connected polyines. "Enclose" does not carry the polyline's attribute data to the output polygon object. "Enclose" creates a new object in addition to the input polyline.

DISSAGGREGATION

● *This tool enables the user to break combination objects (one object made up of a collection of points, lines and/or polygons), into their component objects.*

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