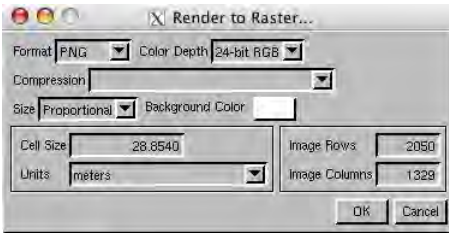# Render to Raster

Render to Raster (Display/Render to/Raster in the Display Manager window) creates a raster using the full extents of all geometric, raster, or pinmap layers that are not hidden in the active display. Layers that are off by map scale at your current display scale are rendered to the raster if they are on at the design scale of the group/layout. Conversely, layers that are on at your current viewing scale that are off at the designated design scale will not be rendered to the raster. You can render the active display to a raster in RVC, GeoJP2, JP2, GeoTIFF, TIFF, JPEG, or PNG format, which are the same formats available for Quick Snapshots. The types of compression available depend on the format chosen (see box at right). Your size options are Proportional, Manual, and TNTlite (the last option picks the largest proportional size that will fit in TNTlite). If specifying size manually or proportionally, you can alter the size of the output raster by entering a desired cell size or the number of rows or columns. If you want less than the full extents of your current display rendered, use the Raster and/or Geometric Extract processes to produce the desired piece or adjust your display to show the desired piece and use Quick Snapshot.

Format	Available Compression Types
RVC	None
	DPCM (lossless)
	Huffman (lossless)
	JPEG2000 (lossless)
	JPEG2000 Best Quality
	JPEG2000 User Defined
	JPEG Best Quality
	JPEG User Defined
JP2	JPEG2000 Lossless
GeoJP2	JPEG2000 Best Quality
	JPEG2000 User Defined
GeoTIFF	None
TIFF	LZW (lossless)
	PackBits (lossless)
JPEG	JPEG Best Quality
	JPEG User Defined
PNG	N/A

The Background Color button lets you choose the color for the background if rendering only geometric layers, geometric layers that extend beyond raster layer extents, or rasters with null areas. If saving to PNG, such areas are 100% transparent, but the selected background color is used in viewers that do not support transparency.

Rasters generated using this feature are georeferenced if the display contains any georeferenced object. If you are saving to Project File format (RVC), the georeference information is in an internal subobject. For other formats a *.prj and a world file are created. If you want to use the results of raster rendering in Google Earth, choose Display/ Render to/Google Earth KML (see the color plate entitled *Spatial Display: Render to KML*).
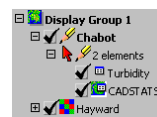
Standard Attributes for Sketch Elements

Standard attributes are automatically calculated for sketch elements as they are added. A standard attributes table is automatically created for older sketches that do not have one when the sketch is opened in the GeoToolbox. Because sketches are in CAD format, there is a single database and, thus, a single standard attributes table. Not all fields in this table apply to all element types. The record illustrated at the right is for a polygon. The statistics that apply to lines have zeros as their values. The units are automatically set to meters or square meters for all appropriate fields when the table is created. You can change the units to those you prefer for viewing in both single record (shown) and tabular views.