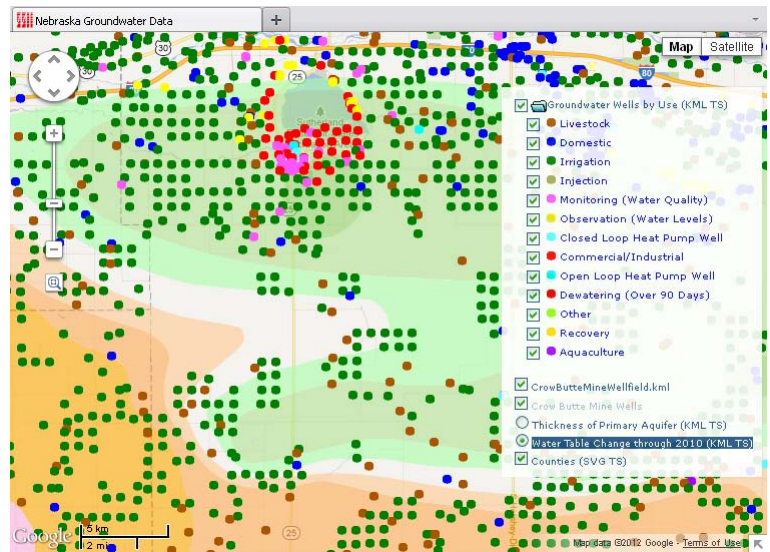


Legends for Geomashup Geometric Layers

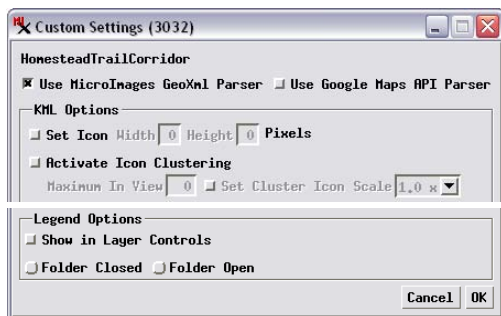
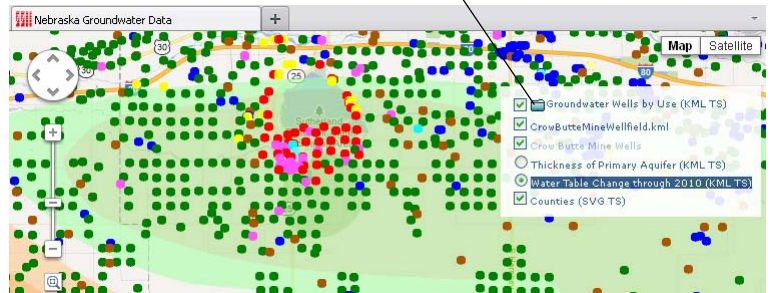
Geomashups that you create in the Assemble Geomashup process in TNTmips can include geometric overlays created from a TNT vector object. Geometric overlays may be SVG geometric tilesets, KML geometric tilesets, or single KML files. When you create a geomashup with geometric overlays, you can choose to include a legend for any geometric layer or layers that have map elements (points, lines, or polygons) with different styles based on their attributes. The resulting legend is part of the geomashup layer controls and shows a style sample for each unique category as well as the corresponding attribute value (see illustrations to the right).

When you add a geometric overlay to a geomashup, a Custom Settings window automatically opens (see illustration below). Turn on the *Show Sub-legend in Layer Controls* toggle in this window to create the legend for this layer. When the geomashup is viewed in the browser, the user can open or close the legend by left-clicking on the folder icon that is next to the layer's name (see illustrations to the right). The Legend Options in the Custom Settings window allow you to choose whether the legend folder is initially open or closed.

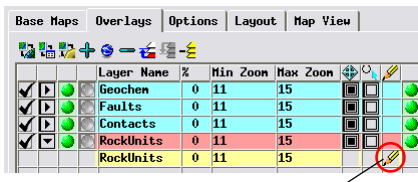
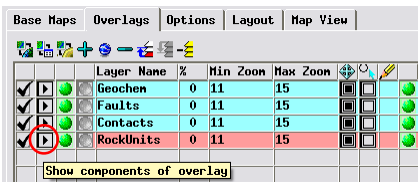


A geomashup that includes a KML geometric tileset layer with points showing groundwater well locations. The point legend in the layer controls shows the water use indicated by the different point symbol colors. When you enable the legend in the Assemble Geomashup process you can set the legend to be initially open (above) or closed (below). Any legend also can be manually opened or closed in the geomashup by clicking on its folder icon.

(over)



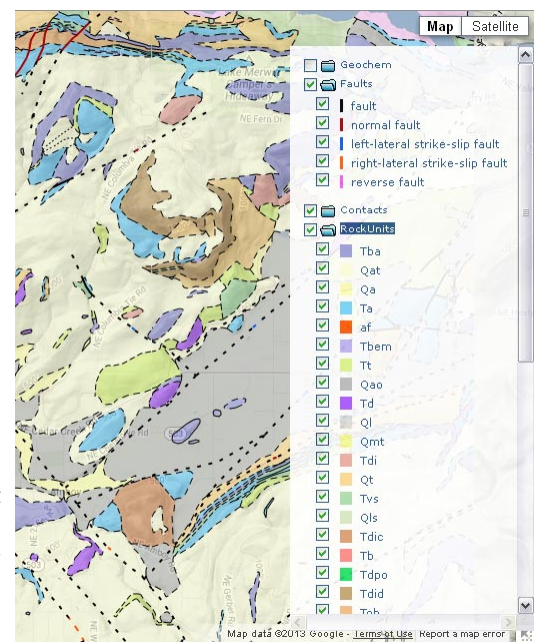
A toggle button in the Custom Settings window for a geometric layer lets you set whether or not to show a legend for that layer in the layer controls. You can also set whether the legend initially should be open or closed. For KML layers these legend controls are only available when you choose to use the MicroImages GeoXML parser for the layer (radio control at top of window).



Custom Settings

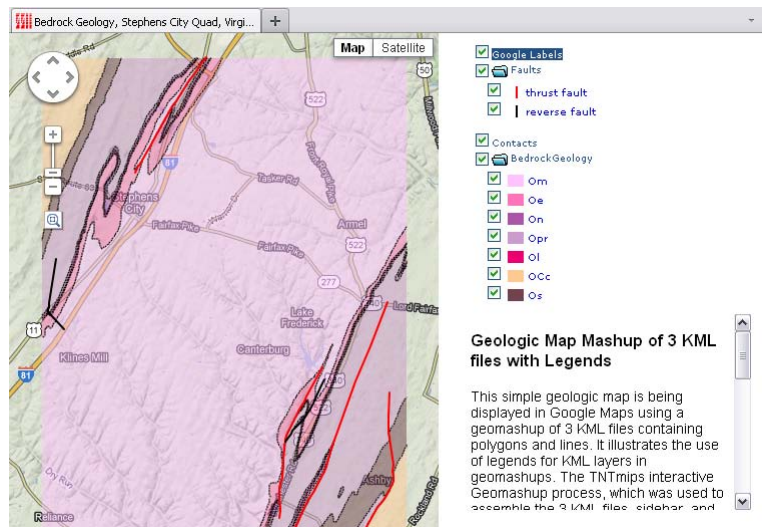
You can reopen the Custom Settings window for a geometric overlay if needed to adjust the legend settings. First, left-click on the Show components of overlay icon button for the layer (circled in red above). In the component row for the layer (with yellow background in illustration above right) click on the Custom Settings icon button.

A geologic map geomashup (right) using SVG geometric tilesets. Legends are shown in the layer controls for both fault lines and map unit polygons. When the legend(s) make the height of the controls too large to fit within the current browser view, a vertical scroll bar is automatically provided for the layer controls.

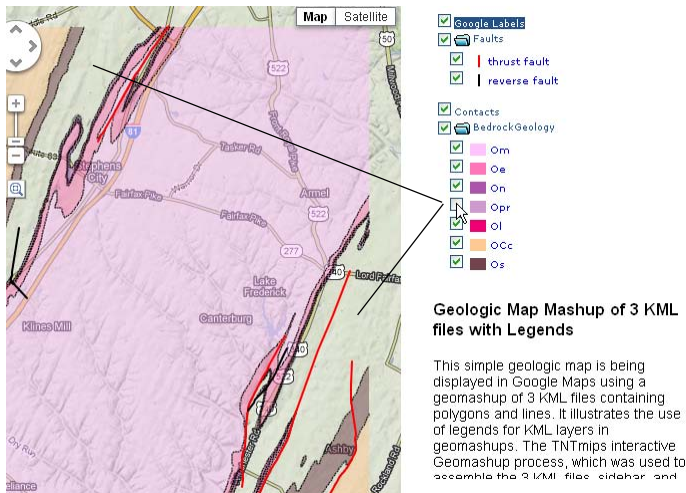


When a geomashup is loaded in the browser, legends are constructed dynamically for those geometric layers that are visible at the current zoom level. As the zoom level is changed, new legends are constructed as needed for geometric layers that become visible. Legends are constructed by analyzing the tiles being viewed to produce the minimal list of attributes and their corresponding styles. As the geomashup is zoomed and panned, the new tiles are examined and any attributes not previously encountered are automatically added to each legend.

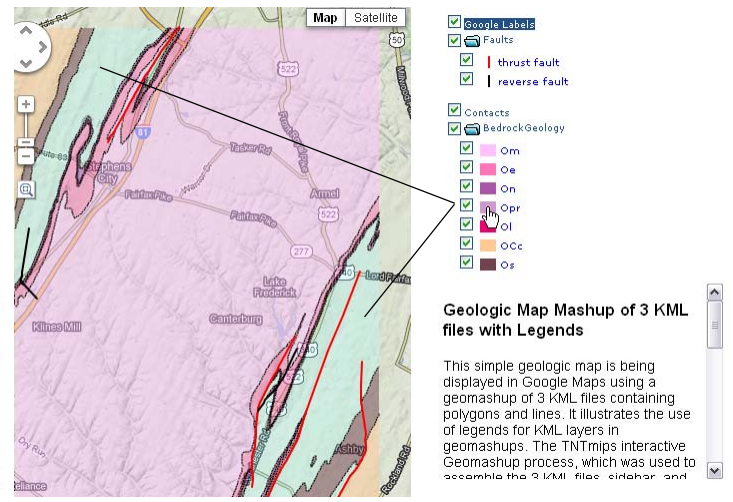
Each legend entry in the layer controls is automatically provided with a checkbox that can be used to show or hide all of the map elements in that category independently from the other element categories, as illustrated below. You can turn any number of legend categories off or on as desired (see the TechGuide entitled *Geomedia Publishing: Use Legend to Query Elements by Style*).



A geologic map geomashup with legends for the map polygon layer and the fault lines layer, each of which is a single KML file. The layer controls and legends are embedded in a sidebar panel in this example.



Left-click on the checkbox next to a legend sample to hide (above) or show in the browser view all of the map elements in that category.



Left-click on a legend sample for a KML or KML tileset layer to highlight in the browser view all of the map elements in that category (pale green areas in this illustration). Click again to turn off the highlighting.

For KML geometric layers only (single and tileset), you can also left-click on the legend sample to temporarily highlight all of the map elements in that category, as illustrated above right.

A geometric layer in a geomashup can be a single KML file produced by the Render to KML operation in the Display process or a KML or SVG geometric tileset created in the Export Geometric Tileset process (see the Technical Guides entitled *Spatial Display: Render Map Layouts to KML* and *Tilesets: Export Geometric Structures*). In each of these operations, the attribute information you have set to display in the DataTip for each vector element is automatically transferred to the corresponding map feature in the geometric tileset or KML file. Typically you would set up the vector DataTip to include the attribute upon which the element styles are based (the *base attribute*); this is required in order to

produce a useful legend for the resulting geometric overlay in a geomashup. If you use a single-line DataTip for the vector elements to show just the base attribute, those attribute values will automatically appear in the legend in the geomashup. If you set up a multiline DataTip for the vector elements using a string expression field as the source for the DataTip, you must list the base attribute first and include HTML formatting to enclose it in a heading tag; the base attribute is then assigned to the *name* property for each feature and the remainder of the DataTip text to the *description* property (a geomashup legend shows the *name* property for each category). See the TechGuide entitled *Geomedia Publishing: DataTip Design for Google Maps/Earth Info Windows* for instructions and examples on how to set up the proper HTML formatting for a multiline DataTip for conversion to KML files and geometric tilesets.