Connecticut LiDAR and Geology Viewer –ArcGIS Online Web Map

https://connecticut.maps.arcgis.com/apps/webappviewer/index.html?id=117591d1079f460280783e40c3e0da6e



About the Interface:

- The layers tab (🖻) lets you turn layers on and off.
- The Legend Tab (😑) gives you legend information for what is turned on visible in the current extent.
- You can change transparency levels by clicking on … to the right of individual layers. Some layers (e.g, Quaternary Geology and the DEM) are already set to be slightly transparent.
- The ^{***} button also has some other layer functionality, such as view attributes, zoom to, changing the viewing order, and set visibility range.
- Users can turn layers on and off, set transparency, and change viewing order etc. but cannot change symbology (symbol colors and raster coloramps, etc.)
- Click on the home icon (
) under the zoom in/out buttons at any point to reset things to full extent.
- When zoomed out, some units are grayed out because their visibility is set to not draw at that scale. As you zoom in, these units will draw.
- Reloading the page will reset things to full extent AND default layer settings
- The DEM min-max range and color range shown changes automatically as you zoom in and out. This is reflected in the colors shown but not in the Legend, which has a fixed Min (-5.31 ft) and Max (2451.569 ft) indicated.
- Then icon 🕥 can be used to zoom to your present location particularly useful when using the Web App in the field or on a hike.
- When you turn on Bedrock Geology or Quaternary Geology, I suggest clicking the DEM OFF and keeping the Hillshade NW ON.

About the Data Layers:

- CT Bedrock Geology (Strike/Dip), CT Bedrock Geology
 - Rodgers, 1985 1:125,000 map units and symbols; GIS layers provided by CT ECO, see: cteco.uconn.edu/metadata/dep/document/bedrock_geology_poly_fgdc_plus.htm
 - Strike/Dip symbols from from Rodgers, 1985, Bedrock Geological Map of Connecticut, digitized at 1:50,000 and 1:24,000 scales from original unpublished Rodgers compilation source maps. Original publication and digital data by the Connecticut Geological Survey, Department of Energy and Environmental Protection. <u>www.ct.gov/deep/geology</u>
- CT Quaternary Geology, CT Surficial Materials
 - Stone et al., 2005 1:125,000 map units and symbols; GIS layers provided by CT ECO, see: <u>http://cteco.uconn.edu/guides/Quaternary_Geology.htm</u> and <u>http://cteco.uconn.edu/guides/Surficial_Material.htm</u>
- CT 2012 Impervious Cover
 - Derived from 2012 Ortholmagery; GIS layers provided by CT ECO, see: <u>https://cteco.uconn.edu/projects/ms4/impervious2012.htm</u>
- CT LIDAR Elevation, CT LiDAR Hillshade NW, CT LiDAR Hillshade NE, CT LiDAR Slope
 - Capitol Region Council of Governments. (2016). 2016 Connecticut Statewide LiDAR, Retrieved from CT ECO (<u>http://cteco.uconn.edu/map_services.htm</u>)
- CT 2016 Orthophotography
 - Capitol Region Council of Governments. (2016). Capitol Region Council of Governments. (2016). 2016 Aerial imagery. Retrieved from CT ECO (<u>http://cteco.uconn.edu/map_services.htm</u>)

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Citations/Literature:

- Stone, J.R., Schafer, J.P., London, E.H., DiGiacomo-Cohen, M., Lewis, R.S. and Thompson, W.B., 2005. Quaternary Geologic Map of Connecticut and Long Island Sound Basin. us Geological Survey Scientific Investigations Map 2784.
- Rodgers, J., 1985. Bedrock Geological Map of Connecticut, scale 1: 125,000. Connecticut Geological and Natural History Survey, Department of Environmental Protection, Hartford, Connecticut.