# SPATIAL DATA RESOURCES TO USE AT HOME

A brief spatial data resource guide, curated by LTWC's Habitat and Water Quality Specialist, Amanda Reinholtz.

1) Historic Topographic Map Viewer

https://livingatlas.arcgis.com/topoexplorer/index.html

Explore historic USGS topographic maps using a modern map interface. Adjust levels of transparency on each map to compare a location through time. This user-friendly resource will walk you through every step as you go!


2) DOGAMI Lidar Viewer
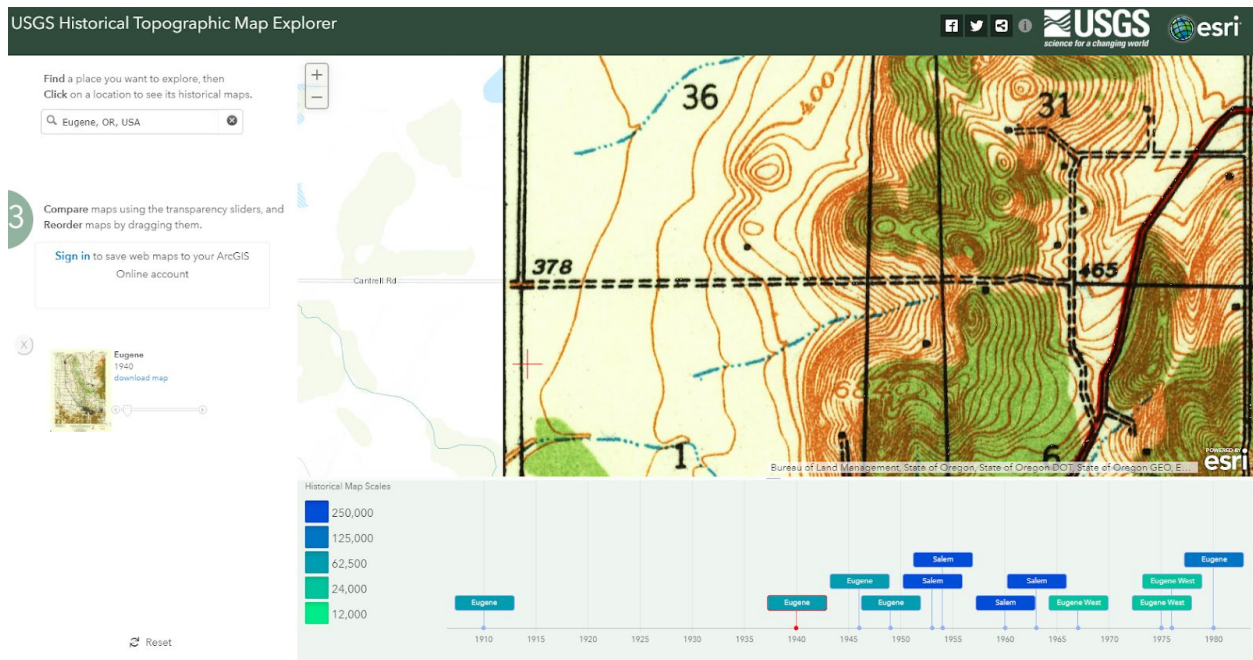
https://gis.dogami.oregon.gov/maps/lidarviewer/

WARNING: Using this tool may cause you to completely lose track of time. It's that cool.

This one is not quite as user-friendly as the other tools, but it is very worth a little effort.

Following the link will lead you to the map below, displaying areas for which you can download LiDAR data. Don't panic; stay with me in the directions below!
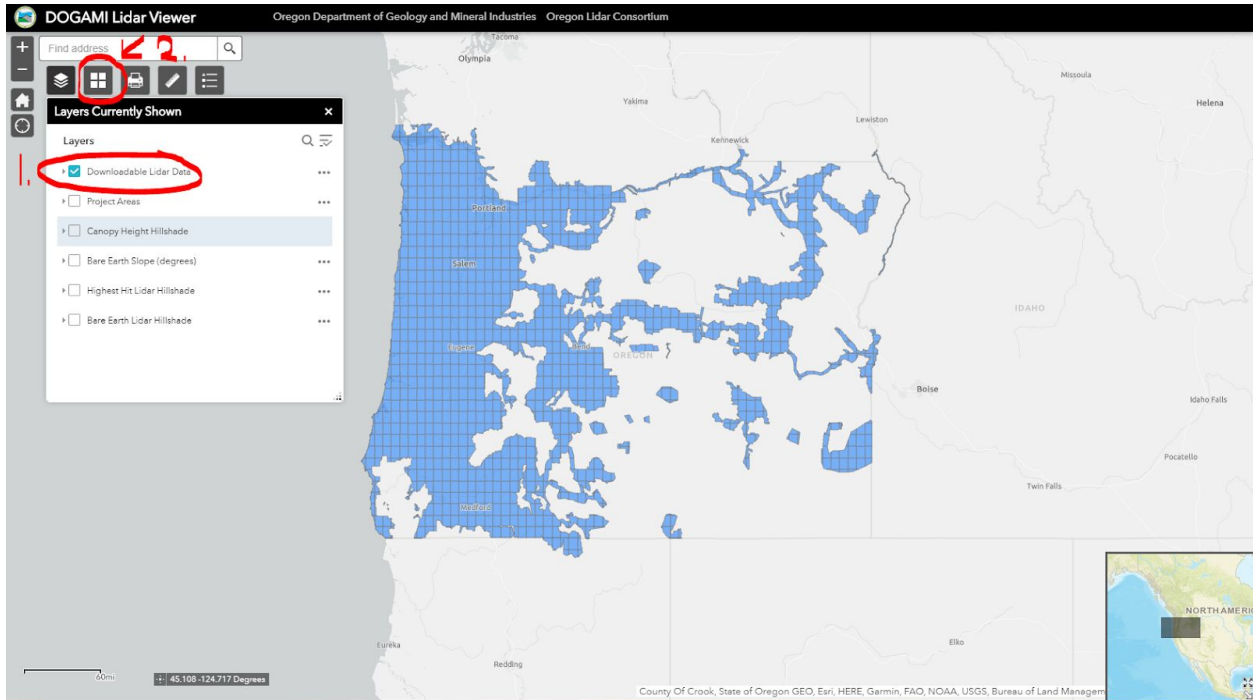
First, go ahead and de-select (by clicking the check mark) the "Downloadable Lidar Data" layer.
Secondly, click on the basemap gallery (circled above) and pick one that is easier to navigate.
"Topographic" is a fine option.
Then, use the map to zoom in to your area of interest. It will look something like this:
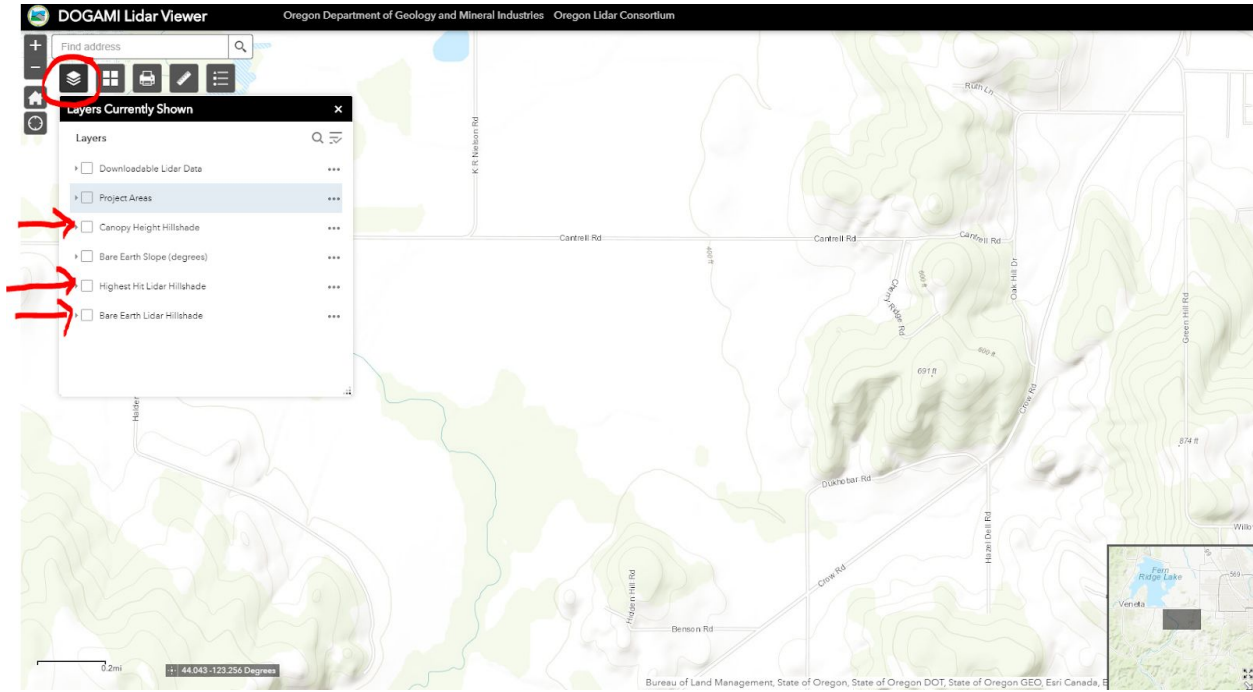
Now click back on the map layers menu (circled above). Congrats! The fun is about to start.

Try clicking on the following layers:

Bare Earth Lidar Hillshade: Displays a visualization of the land surface down to "bare earth," without any structures or vegetation. This is particularly useful for viewing drainages (streams) and geologic features (e.g. old landslide scarps and deposits).

Highest Hit Lidar Hillshade: Displays a visualization of the surface of vegetation, houses, and other structures. This is great for planning for vegetation management, for instance.

Canopy Height Hillshade: This layer just shows a visualization of the height of vegetation with no topography (subtracting the bare earth lidar data from the highest hit). It's obviously great if you are interested in how tall your trees and shrubs are!

Pan, zoom, explore, and enjoy!

3) 1850's Historical ("Pre-Settlement") Vegetation Map

https://ltwc.maps.arcgis.com/apps/Styler/index.html?appid=8256cf9b46c444698110c32f00beb175

Amanda (LTWC) made this very simple web map to show historical vegetation. "Pre-settlement" vegetation is displayed over a current street map. Pan and zoom to find areas of interest, and click on the map to see a description of the vegetation type in that place!
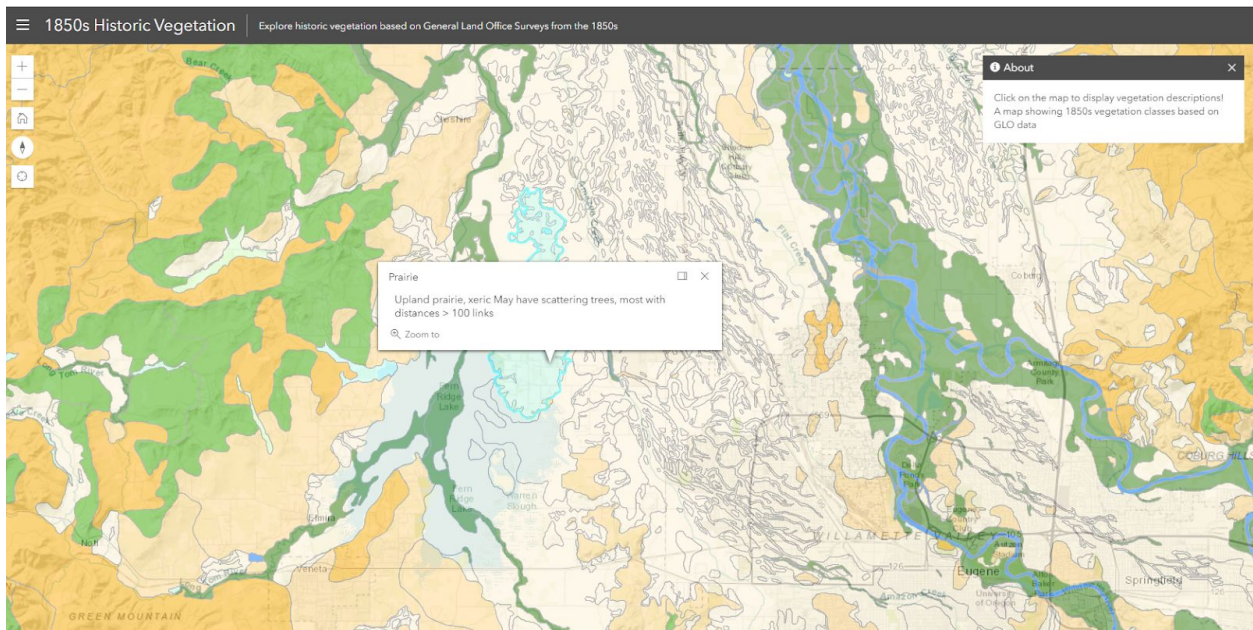
4) Google Earth Pro (Downloadable Free Desktop Application)

https://www.google.com/earth/

This is my favorite resource for viewing recent historical (e.g. 1990s) aerial imagery, although it does require a program download (the in-chrome version of Google Earth sadly does not include the historical imagery tool). Use the historical imagery slider (circled in the screenshot below) to view photos through time. Google Earth Pro will also allow you to mark and save places, take measurements, and save and print basic maps. This is an amazing resource creating management plans!