

Unit 1 Lesson 7 - Landmapper

You will use LandMapper from Ecotrust, a mapping tool, to analyze the conditions of a forest in Washington. LandMapper was designed to help landowners find information in one place and is a helpful mapping resource. For this activity you will choose a forested area in Washington state. It could be your home, favorite park, where you go camping, or a place you'd like to live, as long as it's forested.

From the [LandMapper website](#)

- Enter and address or zoom in on the map to choose a forest
- Click on the map to select a lot (use the control key to select multiple)
- Name it appropriately
- Create maps
- Skip creating a log in, it's not needed for this assignment
- You will scroll through the different maps to answer the questions below.

1. Where is your site located? Part of the state, coastal/inland, what's around it...

2. What is the elevation of your site? How does that compare to your school (258-300ft) or the city you live in?

3. A watershed is an area of land where all the water, whether from rainfall, melting snow, or even underground springs, drains into a common point, usually a river, lake, or ocean. Land Mapper will show you the watershed name at a local level. Find the river your watershed drains into following these steps.
 - a. [Visit this US Geological Survey website](#)
 - b. Click on the Pacific Northwest
 - c. Choose from the drop down menu or by clicking on the map (1711 for King County)
 - d. Choose from the drop down menu or by clicking on the map (17110013 for Tukwila area)

- e. Scroll down and click link below map - Additional Information For This Watershed
- f. At the top it will show you the river name and provide information about the watershed.

What streams are in your lot? What is the name of your watershed locally (LandMapper) and the river it drains into (USGS)?

- 4. Environmental Conditions - What is the average rainfall at your site? (Visit [National Oceanic and Atmospheric Administration \(NOAA\) county level rainfall](#))

- 5. Forest Composition - What are the dominant (most common) tree communities?

6. Tree Diameter Class

A common method used is Diameter at Breast Height (DBH). DBH is crucial in forestry and ecological studies because it provides a consistent and comparable way to assess the size and growth of trees. In forestry and ecology, trees are often classified based on their size.

What is the most common size in your lot? The least common? Is there much variety?

7. Forest Canopy Cover

Measuring canopy cover in forestry is like assessing a forest's umbrella – it tells us how much sunlight reaches the ground. This matters because it affects the health of the trees, the homes of wildlife, and even how well a forest can help fight climate change by storing carbon.

What does the canopy cover look like in your lot? How does your canopy cover impact the sunlight?

8. Tree density

Tree density helps foresters understand how many trees are growing in a given area, influencing the competition for resources like sunlight and nutrients. Managing tree density ensures a balanced and healthy forest, promoting optimal growth, biodiversity, and sustainable timber production.

What is the tree density like at your site? What sort of plants will it favor? Those that like shade, sun or both?