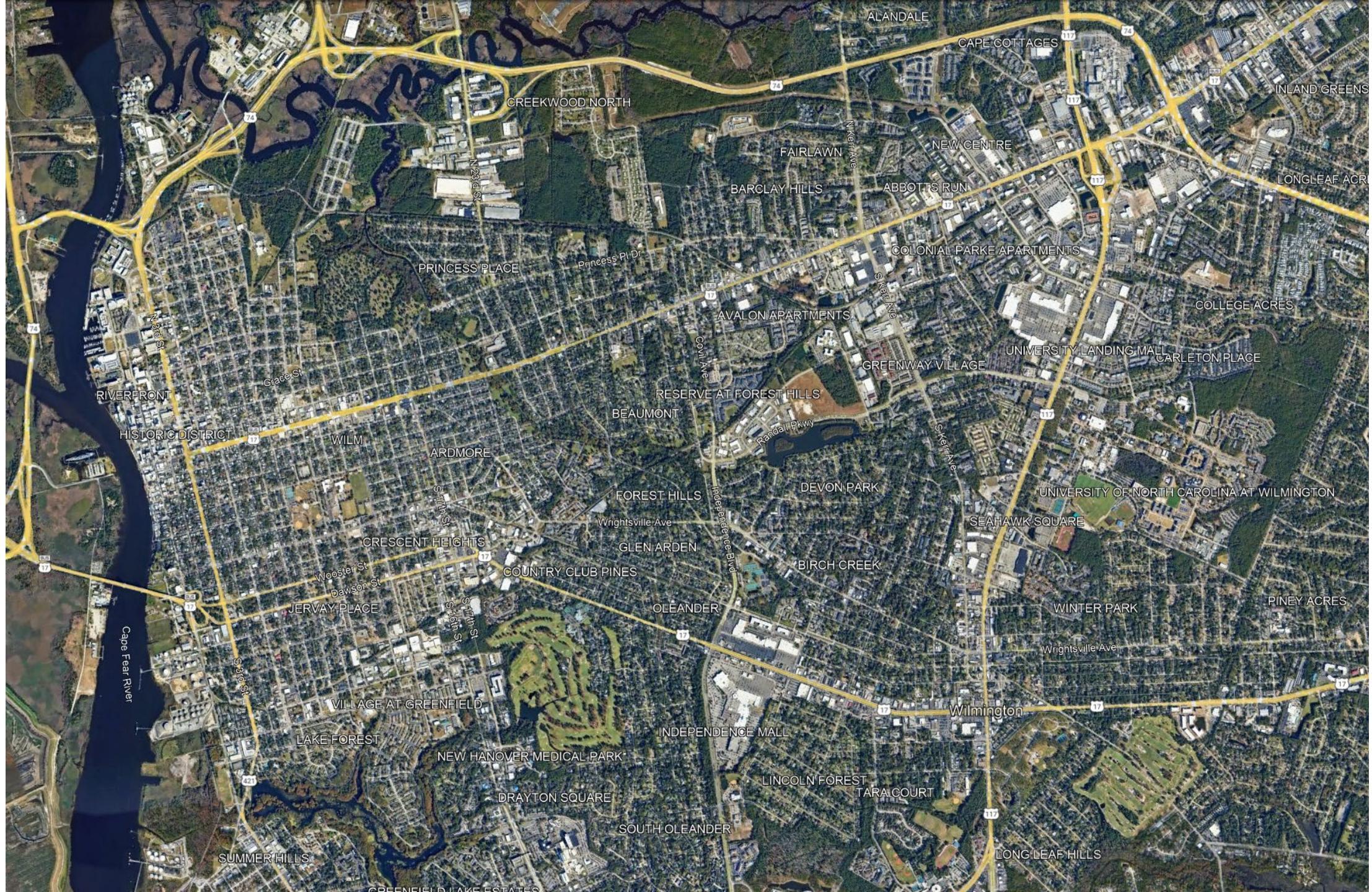
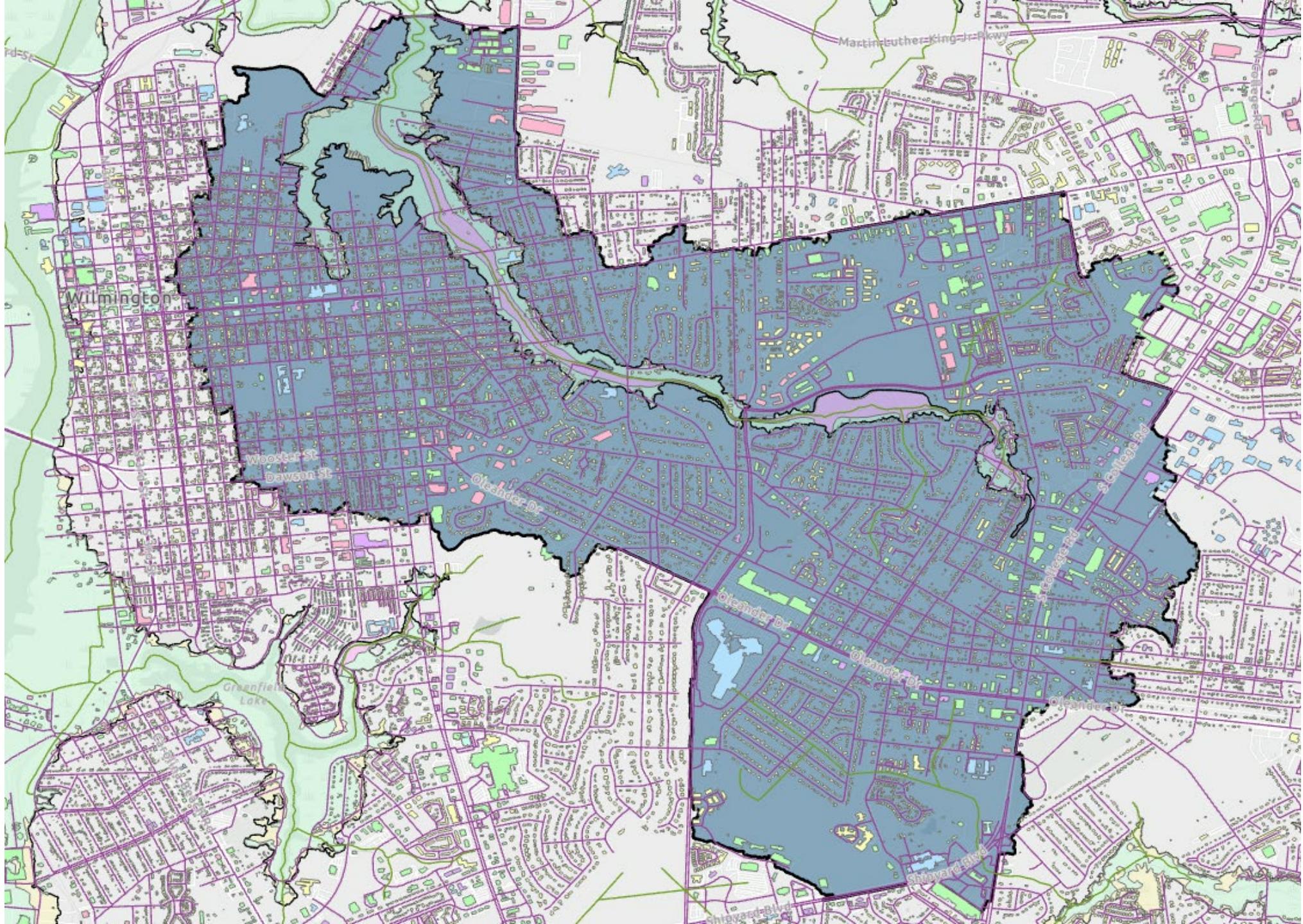


COAST LAB



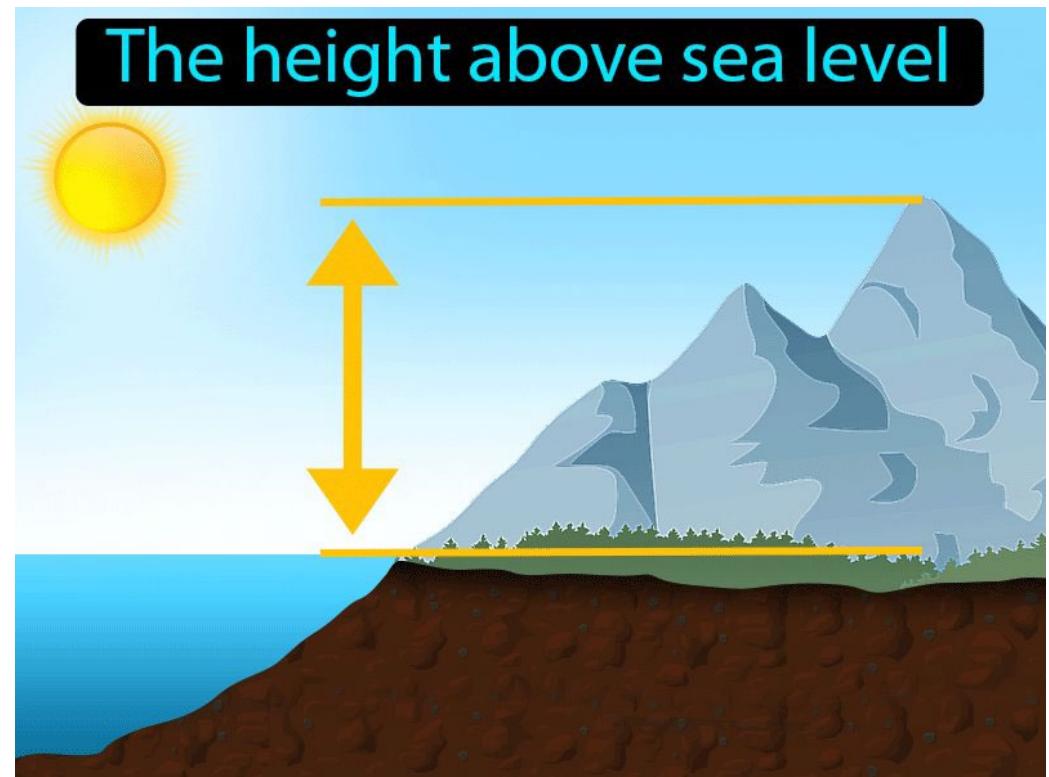


# Elevation

## Elevation

- The height of a location above or below sea level.

Let's find out scientists use maps to communicate elevation.



# Making a topographic map

## Procedure

- Pour water to 2cm
- Trace water-land intersection on lid using a dry erase marker
- Label the line as 2
- Repeat 1 – 3 until you reach 6cm

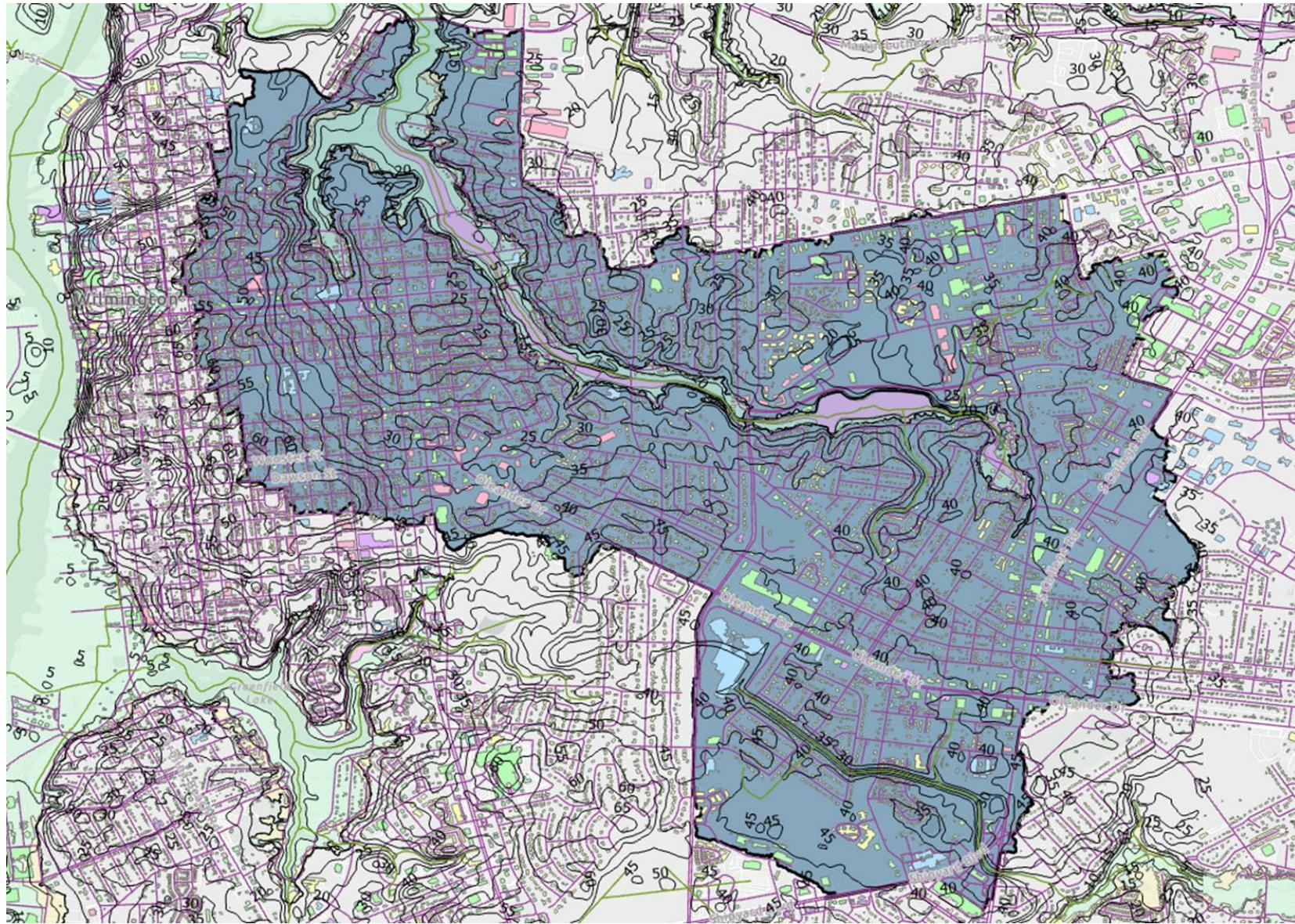
## Contour Box



# Great JOB!

- What do you observe on your topographic map?
- What was a challenge?







# Burnt Mill Creek – let's build a model 2D to 3D

- Use white Legos, topographic map to build a 3D model of a section of the Burnt Mill Creek watershed.
- Procedure:
  - Going lego dot and grid box at a time build up your creek profile.
    - 1 lego high = 5 ft.
    - 2 X 2 lego square =  $1.5 \times 1.5 \text{cm} = 845 \text{ft}$

**5x**

## 5 Times Table

$5 \times 1 = 5$

$5 \times 2 = 10$

$5 \times 3 = 15$

$5 \times 4 = 20$

$5 \times 5 = 25$

$5 \times 6 = 30$

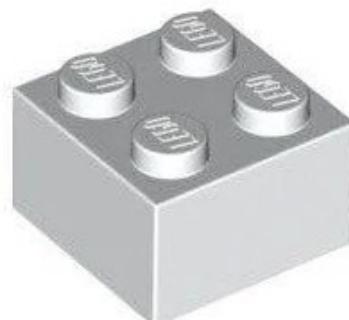
$5 \times 7 = 35$

$5 \times 8 = 40$

$5 \times 9 = 45$

$5 \times 10 = 50$

- Start at a corner of the map section you have.
- What is the elevation?
- Model Scale
  - 2 X 2 X 1 lego brick = 1 grid X 5 ft elevation.



A photograph showing a person walking away from the camera in a heavy downpour. The person is holding a dark umbrella. They are wearing a light-colored jacket and dark pants. To their left is a dark SUV. In front of them is a silver sedan. Further down the street, another vehicle is visible. The street appears wet and reflective. In the background, there are trees and buildings, though they are somewhat obscured by the rain.

# Where will rainwater accumulate and flood?

- Your homework is to observe your neighborhood when it rains!
  - Where does the water collect the most?
  - Where are little rivers created?

# Content Standard of Focus

- ESS.4.2.3. Use models to explain changes in Earth’s surface over time (to include slow changes of erosion and weathering, and fast changes of earthquakes, landslides, and volcanic activity).
  - We will be focusing on how maps are used to identify flooding risks. Students will learn how the “map” model with data layer including topography can be used to predict flooding. We will look at the importance of elevation by engaging students in an augmented reality activity (a second type of model).