Color Me a Watershed: Part 2

1. Choose a color to represent each land use area and note the color on each map key.

2. Lightly color each land use area on each map using the colors your team chose above.

Once coloring is complete:

1. Determine the land area of each map. **Each grid unit = (1) square kilometer (km²).**

2. FOR EACH TIME PERIOD MAP. Calculate the land coverage for each land use type (i.e., forest, agriculture, grasslands, etc.) in square kilometers and percentage of total watershed land area shown on the map. Record in the chart below.

3. Assume an unusual storm dropped 5 cm (0.05 m) of rain evenly across the entire watershed shown on the map. Calculate the amount of water in cubic meters (m³) that fell on the land portion of the watershed.

Chart for Option 2:
Area of Land Coverage

	Map A 100 years ago		Map B 50 years ago		Map C Present	
Land coverage	km²	%	km²	%	km²	%
Forest						
Grasslands						
Wetlands						
Residential						
Agricultural						
Stream						

4. How much water do you think will run-off the land in the watershed?

5. Do you think this volume will increase or decrease with the changes in land coverage over time. Why?