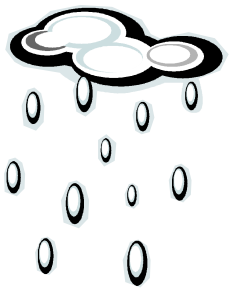

Name _____ Date _____

Water Budget- upper elementary

1. Using the aerial photo provided by your teacher, identify the types of land cover in your city (surfaces) which you think will move water in different ways:

_____ _____

_____ _____

2. Using the photo and the legend, estimate the area of the city that is impermeable and permeable. To figure out how much water falls on each cover type, multiply by 102cm, which is the average precipitation in New York (40 inches/year).

Land Use Type	# squares
Permeable	
Impermeable	

3. Now, think about the fates of that water that falls on each land use type. Water runs off from different surfaces at different rates:

Pavement/buildings: 100 % runoff **Lawn/grass**: 30% runoff

Forest: 25% runoff

Land Use Type	Example surfaces from your city	Where will the water go? (runoff or absorb)	How much of the water will go on this path?
Permeable	1.		
	2.		
	3.		
Impermeable	1.		
	2.		
	3.		

4. Finally, calculate the percent of the land surface that is covered by permeable surface. This is the 'green-ness' of your city; the higher the green-ness rating, the more permeable surfaces your city has.

squares that are permeable _____ / total number of squares _____ = % permeable cover _____

How could we INCREASE the green-ness rating of your city?