**Land Cover Change in the West Branch of Herring Run**

**Lesson 5**

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Class: \_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_

You will now have a chance to simulate different land cover scenarios in the West Branch of

Herring Run. Complete the table below for at least 3 different scenarios, then answer the

Discussion Questions.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Scenario 1 | Scenario 2 | Scenario 3 | Scenario 4 |
| Land Cover 1 |  |  |  |  |
| Land Cover 2 |  |  |  |  |
| Land Cover 3 |  |  |  |  |
| Peak Discharge\* |  |  |  |  |

\* to get peak discharge, place your cursor over the peak of the hydrograph and read the value on the y-axis

1. Which scenario produced the hydrograph with the lowest peak discharge? What was

 the peak discharge of this hydrograph (hint: place your cursor at the peak of the

 hydrograph to read the value on the y-axis)?

1. Which scenario produced the hydrograph with the highest peak discharge? What was

 the peak discharge of this hydrograph (hint: place your cursor at the peak of the

 hydrograph to read the value on the y-axis?

1. Which scenario is most likely to result in less flooding in the West Branch of Herring

 Run? How do you know?

1. Is the scenario you chose for question 3 a realistic land cover scenario for Baltimore City to pursue? Why or why not?

VOCABULARY - Define each in your own words:

● Hydrograph (recall) ● Land Cover ● Hyetograph ● Discharge