Name _____ Date _____

Storms and Streams

After collecting your baseline data, filling in your hypothesis worksheet, and collecting your post-storm data, create a lab report using the following guidelines.

Title: Create a title for your project

Abstract: Summarize your research, what you thought you would find, and your results in a paragraph. A good abstract may follow the following 'formula':

Sentence 1: State the importance of your subject. (Convince your reader that it matters!)

Sentence 2: Describe the problem—what important thing(s) do we not know? i.e. This is why you're doing the research.

Sentence 3: Write your hypothesis. This should directly address the 'problem.'

Sentence 4: Clearly write your results: "We found…"

Sentence 5-6: Briefly describe how your results compare with others and the 'big picture.' Do they agree with your expectations and previous findings? Why should someone care about your results? Can this new knowledge lead to better management decisions?

Introduction: Explain the background of your project. Include the reasons you decided to conduct your research and any research that you conducted prior to beginning.

Methods: Describe your sampling and analysis methods. How did you collect data? How often? What tools did you use and how did you compile your results?

Results: Place any graphs or data tables in this section and briefly describe what you found. Be sure to include titles, legends, and axes labels, and to explain the graphs/tables.

Discussion: Synthesize the information you learned and include answers to the questions below.

Conclusion: Briefly conclude your report.

Questions to answer:

1. What were the major changes in the stream, according to your data?
2. What other changes took place, based on your classmates' data?
3. How much precipitation did you receive during the storm? How does this compare with a typical month in your area? Research online to determine average precipitation amounts.
4. How much precipitation do you think would create a 'break' in the system versus a 'bend'?
5. With the changing climate, the Northeast is expecting 20-30% more winter precipitation in the form of rain, earlier spring peak flows, and extended low-flow periods in the summer as well as an increase in the likelihood and severity of damaging rainstorms. Based on your data, what effects do you think these changes would have on your stream?
6. What are some options to mitigate the effects of future climatic changes on your stream? Research options online.

Reference: Frumhoff, P.C., J.J. McCarthy, J.M. Melillo, S.C.Moser, and D. J. Wuebbles. 2007. "Confronting Climate Change in the U.S. Northeast." A report of the Northeast Climate Impacts Assessment.