



Urban Runoff Part 2: Designing a Plan for Stormwater Runoff

Directions:

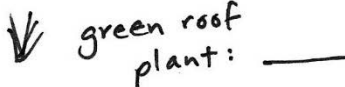
1. With your partner, copy the map section that you focused on during your rainy day tour onto a large piece of paper. Be sure to transfer all of the symbols to the new map.
2. Once you are done, look again at the stormwater map you created. Where do you think the stormwater runoff is the most polluted? **Circle it.** This will be the basis for your stormwater runoff plan.
3. What is the best way to manage the stormwater here? Why? Consider the various options, including rain barrels, stormwater planters, bioswales, rain gardens, and green roofs. Describe your thinking below.
4. Identify opportunities for re-landscaping your site to modify the flow of stormwater and improve water filtration. Will you use special plants? Why or why not?
5. Identify barriers to implementing your improvement. Is there adequate space? How would you go about making space?
6. Draw your improvements on the map. You may use symbols from the legend below to help. Once you are done with your changes, **use different colored arrows** to indicate how stormwater flow will be modified as a result of your design changes.


Stormwater Management Plan Legend:


green roof 

 bioswale

stormwater planter 

 green roof plant: _____

rain garden 

 rain barrel

Assessment:

You will develop a presentation showcasing and defending your stormwater management plan. Answer the following questions thoroughly with your partner. These answers will form the basis for your class presentation. The stormwater plan map will be a visual aid.

1. Where is your runoff management plan located?
2. What is your major change or improvement? Why did you choose this particular area for improvement?
3. Where is the stormwater being routed? What is filtering the stormwater?
4. How is your site used? How did students, teachers and staff use your site before you redesigned it? Is there enough space for the same number of students and teachers to use your redesigned site?
5. What other things might need to be redesigned as a result of your proposed changes in stormwater management (e.g. changes in transportation or parking structures or the use or design of playing fields)?
6. How will the modifications you propose change the way people use and experience your site?
7. If you were selling this plan to the school principal, would you foresee any resistance to the changes you propose?
8. How would you encourage the principal to adopt the changes you propose?