



Problem

Overloading of the sewer system is causing runoff to pollute local areas

Social Dimensions:

- People cannot enjoy the space due to urban runoff contamination

Economic Dimensions:

- Risks and costs associated with increased pollution and flooding

Environmental Dimensions:

- Local bodies of water are being contaminated by pollutants from sewage system overflow and runoff

Research Plan

- Identified possible solutions to urban runoff
- Interviewed experts to determine optimal solution
- Created a plan to design and implement a rain garden on campus

Future Location at WPI



Goals and Objectives

To mitigate the effects of runoff from the WPI Campus

- Understand problems caused by runoff in urban/suburban settings like Worcester
- Design and propose a solution to be implemented in the spring to combat this problem



Flow of Runoff on WPI Campus

Easy to manage and maintain

Prevents direct contamination of nearby bodies of water

Prevents sewer system overflow

Solution: Rain Gardens



Cost effective for a large scale problem

Provides a clean way to release water back into the ground

Contains pollutants picked up from urban infrastructure

Recommendations

- Install a rain garden to reduce WPI's storm water runoff
- Post signs on urban storm water runoff and rain gardens to inform the community of their impacts
- Collaborate with WPI's green team for implementation and up-keep of the rain garden
- Celebrate the implementation of the rain garden to get the WPI community more informed and excited about the rain garden

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