



Hoboken Green Roof Initiative Executive Summary

The City of Hoboken is currently looking into reducing the amount of storm water runoff which is causing the city to flood during every rain storm event. The mission of the Hoboken Green Roof Initiative Team is to help layout a plan to resolve the flooding issue in the city of Hoboken. Currently the city of Hoboken has too many surfaces covered by impervious material, which does not permit water to be absorbed. This as well as Hoboken's low-lying geography and frequent rainfall increase the chances of flooding. The following document will concentrate its focus on rooftops since they are impervious to water and are major contributors to urban surface runoff. In Hoboken, the overwhelming majority of building rooftops are fully or partly flat and mostly unoccupied and unused area, which means they can be used for a minimally disruptive solution: green roofs. By using the flat areas of roofs for vegetation, runoff will be reduced and flooding will be appreciably lessened. The conversion of rooftops will also have numerous additional potential benefits, both environmentally and financially, including reduction in heating and cooling expenses by acting as insulation, filtration of carbon dioxide, heavy metals, and other pollutants from the air and rainwater, encouragement of wildlife and biodiversity, sound insulation, and increases to roof life span and real estate values.

Green roofs are capable of stopping regular flooding events. The team recommends that Hoboken help residents finance their green roofs by following the example of Berkeley, California. General guidelines have been set out in this report and there are more specific details and guides available online. Educating the citizens so that they are aware of the options and know what the benefits are is critical to the success of this program. Because the residents themselves have to take the initiative to apply for and construct the green roof the city should attempt to make the process of financing it as easy and streamlined as possible to remove a potential barrier to completion.

Although green roofs will help to manage storm water, it is not the only solution Hoboken should pursue. To aid green roofs, the city should also look into some of the other recommended solutions such as rain barrels, underground storage, permeable pavements, and a separated sewer system. This team would recommend a combination of green roofs and underground storage systems along with the already installed and functioning pump.