The Stormwater Utility Feasibility Report was issued in July 2007. Presently, the State of New Jersey is working to pass legislation to allow for the creation of stormwater utilities in New Jersey. Stormwater utilities are rapidly becoming a necessity in the State for managing aging infrastructure and minimizing the impact of vast impervious surfaces. The creation of these utilities will result in charging fees to residents and business owners to support better stormwater management that will reduce flooding and improve water quality.

This business plan uses the fee structures outlined in the Stormwater Utility Feasibility Report to evaluate the future of the market available to a small business in the region. There are several fee structures suggested in the flat rates, gross parcel area, impervious coverage area, intensity development factor, runoff coefficient and fixed base amount. While the report suggests all of these fee structures as options for the Stormwater Utility it recommends the impervious coverage or Intensity Development Factor as the two preferred fee structures. The Impervious Coverage structure will base the fee on a flat rate charged to the user by the amount of impervious coverage on their property.

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The proposed design by the Moonachie Group, along with the business plan, will demonstrate to the greater community of the New Jersey Meadowlands Region that proper design of BMPs can have a positive effect on the environment and the lives of the residents in that environment. The business plan helps demonstrates how a Stormwater Utility will maintain and improve the stormwater infrastructure of the New Jersey Meadowlands Region.

This project will address the topic of sustainability environmentally and financially. The creation of the Stormwater Utility will greatly reduce pressures on the environment by eliminating strenuous water inputs of higher quantity and lower quality. In doing so, the Utility will provide funding to restore the environment from years of human damage, and at the same time will provide funding to repair, maintain, and replace failing stormwater infrastructure in a cost-effective manner. The Stormwater Utility will be self sustaining by creating user fee based funds to pay for it’s own projects.

BACKGROUND

Rutgers University was contracted by the Meadowlands Commission to determine the feasibility of a Stormwater Utility.

The New Jersey Meadowlands District is an area of approximately 18,000 acres located in the middle of a natural wetlands system. The constant development of the area for the past 150 years has resulted in the transformation of 10,000 acres of wetlands into a commercial center surrounded by 8,000 acres of wetlands. Due to a combination of the low lying elevation of the area, excessive urbanization, disruption of the natural hydrology of the basin and other factors, a significant amount of the sections of the District are in constant distress from regularly occurring flooding events.

This project will approach sustainability on three fronts, the protection of property and health (people), the protection of industry (prosperity), and the protection of wetlands (planet). Once flooding issues are addressed, the damage to property, as well as the interruption of the daily transit that occurs in this area, can be eased.

SCOPE

This project will approach sustainability in New Jersey; water quality BMPs are designed to control runoff from the water quality storm, which is defined as 1.25 inches of rain over two hours. By designing for the water quality storm, the BMP will treat approximately 90% of New Jersey’s annual storms, since most of the rainfall comes in storms of less than 1.25 inches.

Objectives & Goals

This project was contracted by the Meadowlands Commission to determine the feasibility of a Stormwater Utility.

The Stormwater Utility will be self sustaining by creating user fee based funds to pay for its own projects.

Design Approach

This project will approach sustainability in New Jersey; water quality BMPs are designed to control runoff from the water quality storm, which is defined as 1.25 inches of rain over two hours. By designing for the water quality storm, the BMP will treat approximately 90% of New Jersey’s annual storms, since most of the rainfall comes in storms of less than 1.25 inches.