Green Infrastructure Practices in the City of Atlanta

As cities are hit with strong weather phenomena that can cause major flooding and in some cases drought, there needs to be active and modern infrastructure to handle the increased amounts of precipitation and the decreased amounts of precipitation. The City of Atlanta has some river flood areas pockets from our creeks and rivers throughout the city. Using precipitation and mean temperature data and GIS data that shows areas of potential flooding and land use information, this proposal will begin looking at what green infrastructure practices will be the best fit for a specific location within the City of Atlanta limits. Green Infrastructure has many components ranging from practices to maintain good air quality to urban agriculture, but this proposal will specifically focus on ecological engineering and policy implementation. This focus will provide insight on the ways to manage storm run-off and parts of the city with flooded streets as well as looking at ways to capture storm water that can be used potentially as a reservoir for vegetation and possibly when the City of Atlanta gets another drought in the future. This proposal will studying case studies from around the United States and the world that have similar environmental issues to Atlanta and the strategies that they used to implement and combat storm water run-off, combined sewer overflows (CSOs), and what steps they took to effectively implement them. This proposal will take this aforementioned data and previous practices from other cities and find the best process to implement strategies that best fit Atlanta while recognizing cost-effectiveness, efficiency, and understanding of the stakeholders who would be involved. The results are forthcoming.