Stop the Storm Runoff through Low Impact Development

Storm water runoff accounts for 60% of water pollution within many jurisdictions in the state of Maryland. This storm water flows over the ground picking up various pollutants before it reaches the rivers, streams and the Bay. These pollutants, called non-point source pollutants can have a detrimental impact on the life within those waterways.

Today, many counties are developing Watershed Implementations Plans which will serve as a road map to how they plan to meet their pollution allocations. One of the items within those plans is Low Impact Development measures that will reduce the amount of pollutants from the storm water runoff within their watersheds. Low impact development is a building design technique that allows runoff to infiltrate, filter, store, and evaporate close to its original source. The techniques generate less surface runoff, less pollution, and less erosion therefore reducing the negative impact that runoff has on lakes, stream, and the Bay.

You are a developer who has proposed the development of a new shopping complex near one of the most pristine rivers within your community. Presently the 30 acres of land for this development is 20% agriculture and 80% forested. This development will be 200,000 square feet and will allow for 8 different businesses to be housed there. It will have enough parking places for 1,000 cars.

As the developer of this shopping complex, your job will be to explain to the County Commissioners the various Low Impact Development actions you plan to take at this mall to reduce the storm water runoff and to help meet the Watershed Implementation Plan for your county.

In your presentation you must identify the following items:
1. The kinds of point and non-point source pollutants would be coming from your mall
2. What type of LID actions should be implemented to reduce those pollutants?
3. What type of results do you plan to receive by implementing these actions?
4. How do you plan to monitor the local stream to assess whether your actions are working?
5. How will the implementation of these LID's affect water quality and quantity, wildlife, soil quality and forestry?