

Smart Growth for Streams Working with Nature

Creating A better Built Environment

A healthy stream



A stream connected to its floodplain



Components



Yet our streams often look like this



Why it happened

(Aerial view of Tysons Corner today)



Increase in Stormwater Runoff



Resulting in Degraded Streams Needing Restoration

Dead Run Before and During



Dead Run- After



Old solutions –new resolutions

Adequate Outfall isn't



Outfall Restoration

Dolley Madison Library



- During and After



Tree box Filters and Green Streets



Detention Basin Retrofit

Cinnamon Oaks



Low Impact Development Techniques

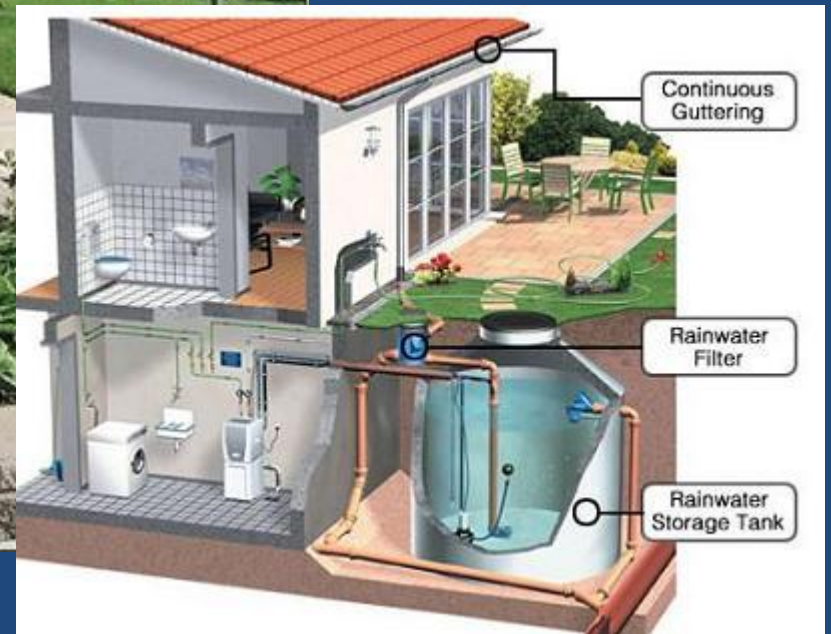
Rain garden



LID-Pervious paving and infiltration techniques for homes and businesses



Cisterns and Rain Barrels



Incorporating stormwater management into the built environment – Green Wall



Recreational Stormwater pond



Green roof/wall



Green Roof

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Components of Green Design

- Green Buildings
- **Stormwater Management as part of Design**
- Stream restoration
- Renewing and enhancing stream buffers
- Parks of various sizes through out the area
- Green streetscapes

Conceptual Green Network









WEST GROUP

SCOTTS RUN

SOM

Working With Nature

- Design stormwater management techniques to replicate rainfall patterns and runoff – replicate *predevelopment hydrology*
- Create green corridors that connect development to the greater environment
- Build green buildings with green components- green walls, green roofs, rain gardens, pervious pavers.