CONGRESS HEIGHTS ENVIRONMENTAL RESTORATION PROJECT

PUBLIC STAKEHOLDER MEETING CONCEPT DESIGNS

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DPR
DC DEPARTMENT OF PARKS AND RECREATION

DEPARTMENT OF ENERGY & ENVIRONMENT

WE ARE WASHINGTON DC
GOVERNMENT OF THE DISTRICT OF COLUMBIA
MURIEL BOWSER, MAYOR

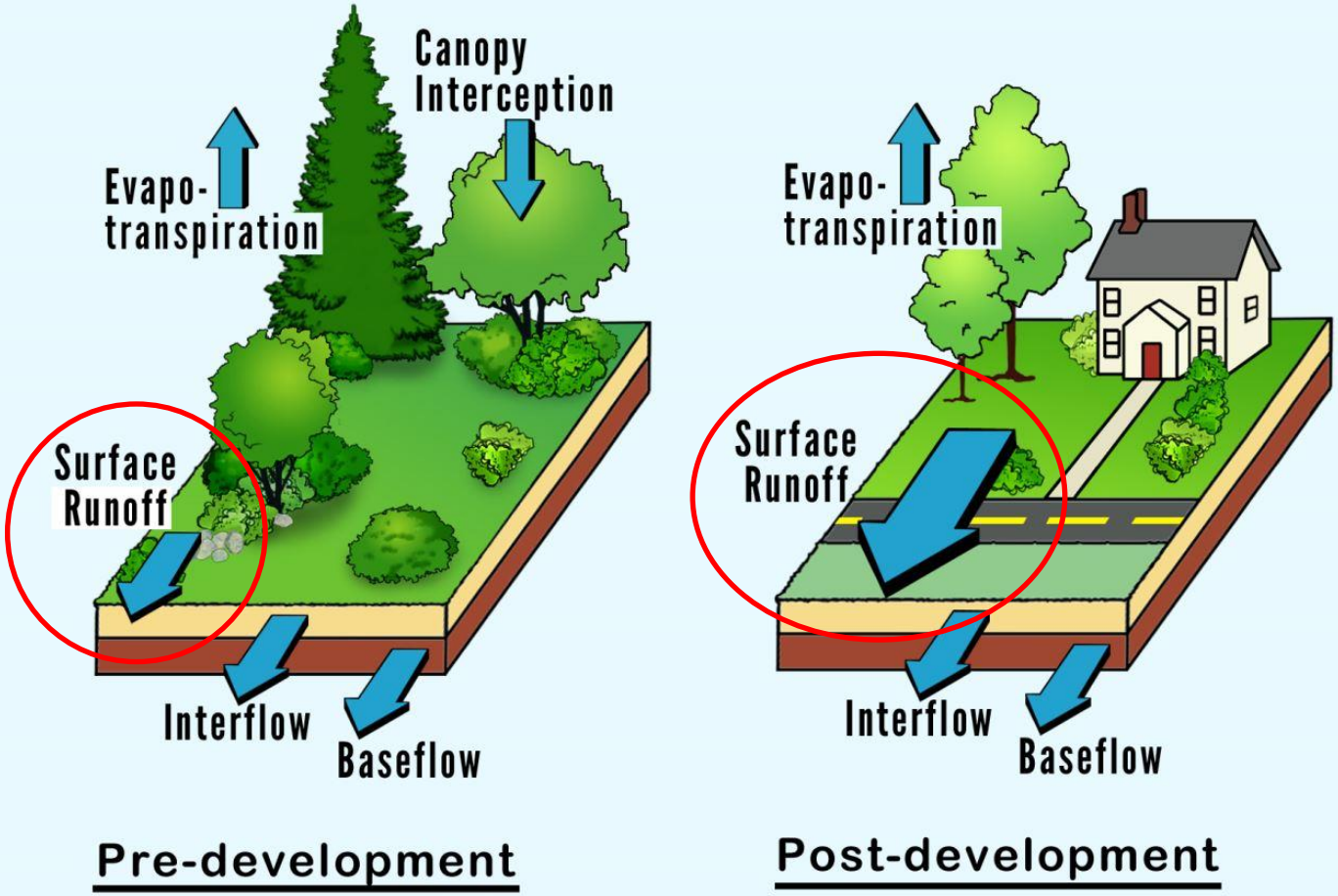
AGENDA

- Project Area & Background
- Existing Conditions
- Project Objectives
- Restoration Approach
- Timeline
- Q&A

PROJECT LOCATION

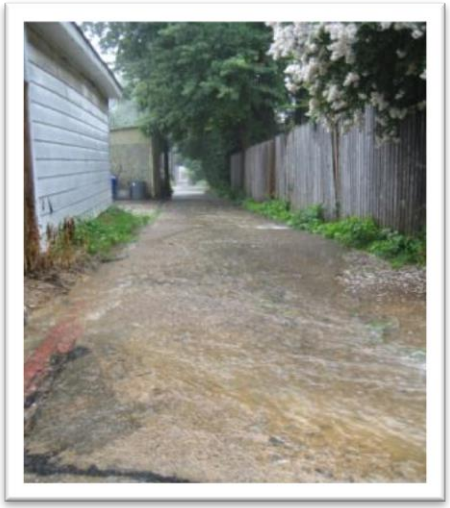
BACKGROUND

Figure 1.1 Water Balance at a Developed and Underdeveloped Site
(Source: Schueler, 1987)



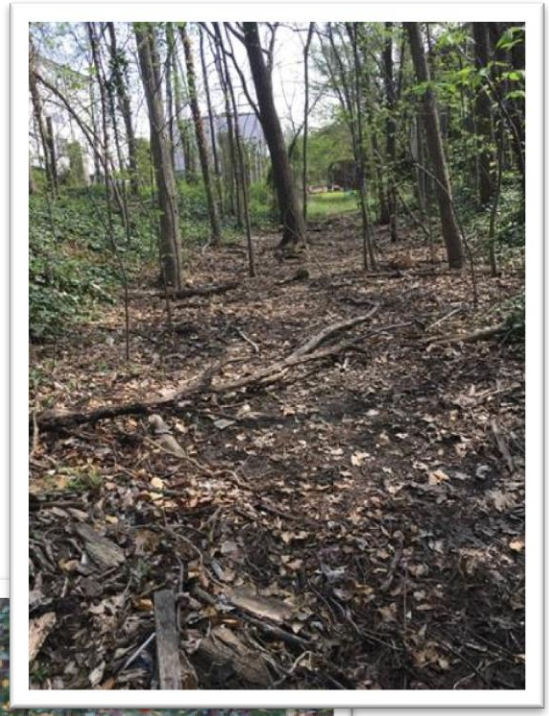
Surface runoff is minimal in an undeveloped site, but dominates the water balance at a highly impervious site.

PROBLEM OF STORMWATER POLLUTION



EXISTING CONDITIONS

- Soggy Conditions
- Standing water at times
- Invasive Plants
- Social Trail



Stormwater from adjacent lands travels through gully to storm drain.

RESTORATION APPROACH

Most stormwater practices all work the same way: they collect stormwater runoff and use or mimic natural processes that result in the infiltration, evapotranspiration or use of stormwater in order to protect water quality and associated aquatic habitat (EPA).

Slow it down, Spread it Out, Soak it In !

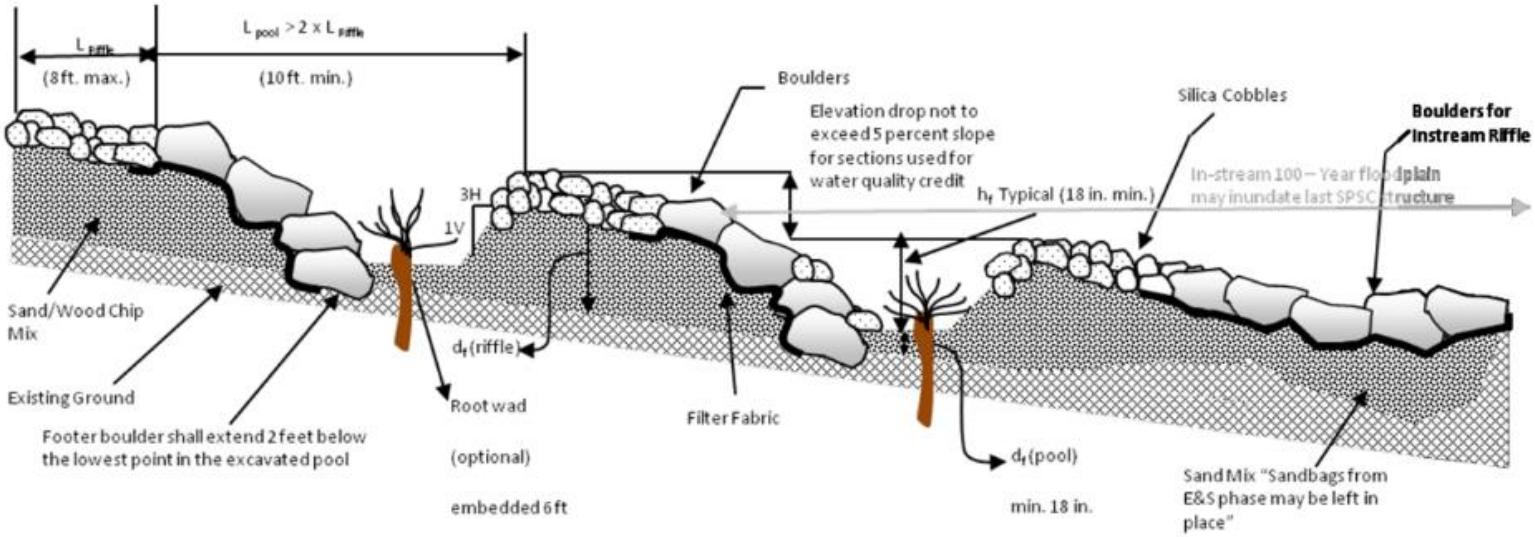
Some examples follow…

EXAMPLES INCLUDE

REGENERATIVE STORMWATER CONVEYANCE

A.

B.



Typical Profile – Alternating Pools and Riffles

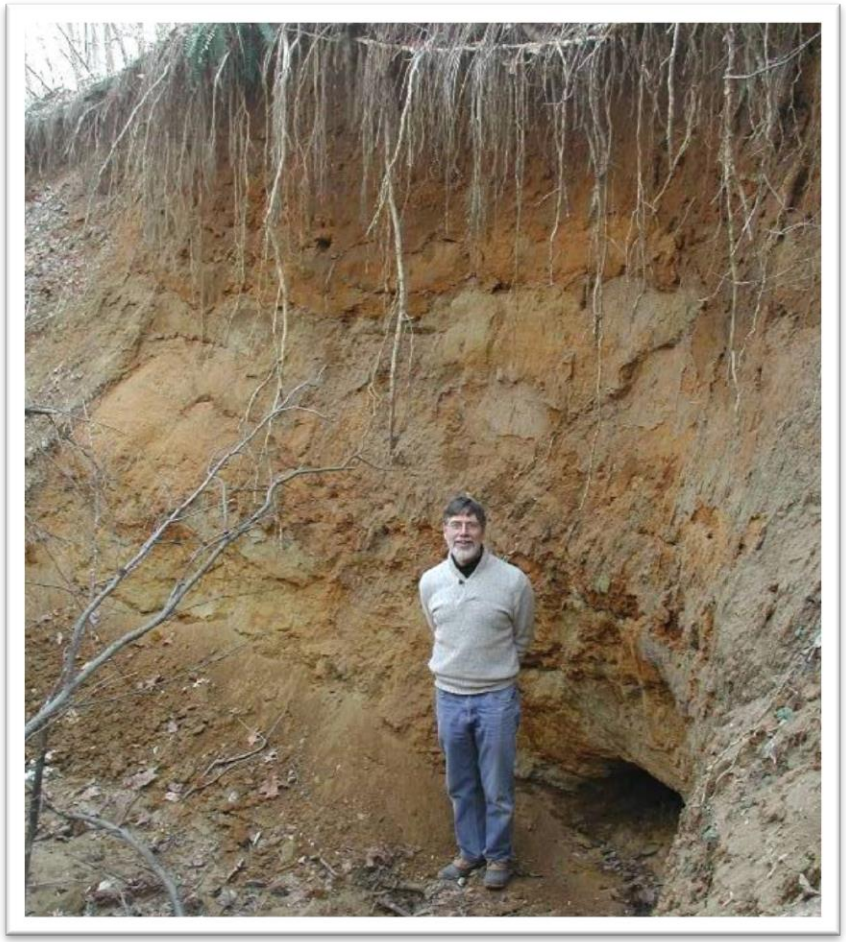
SOME EXAMPLES

PRE RESTORATION

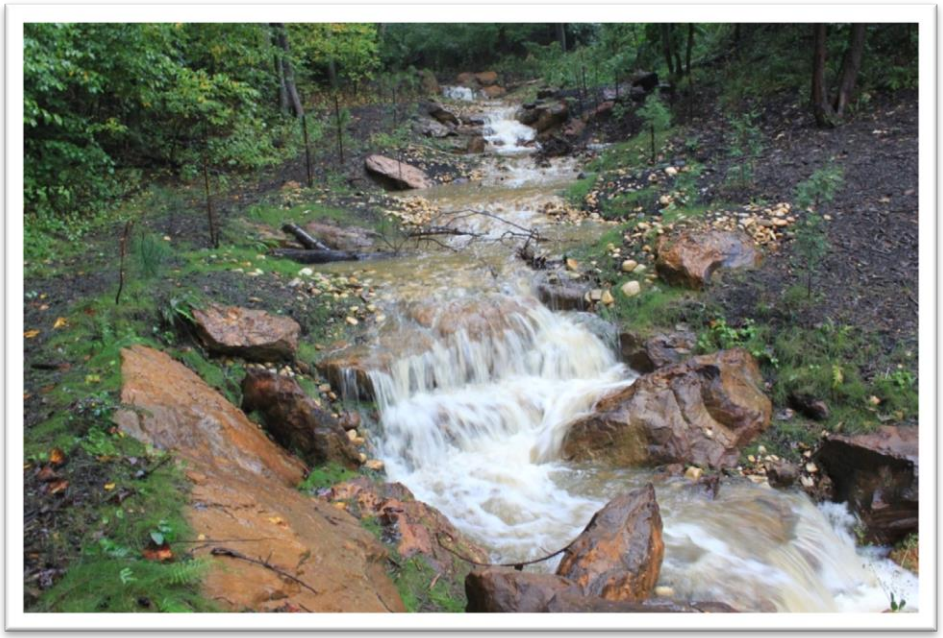
POST RESTORATION

PRE RESTORATION

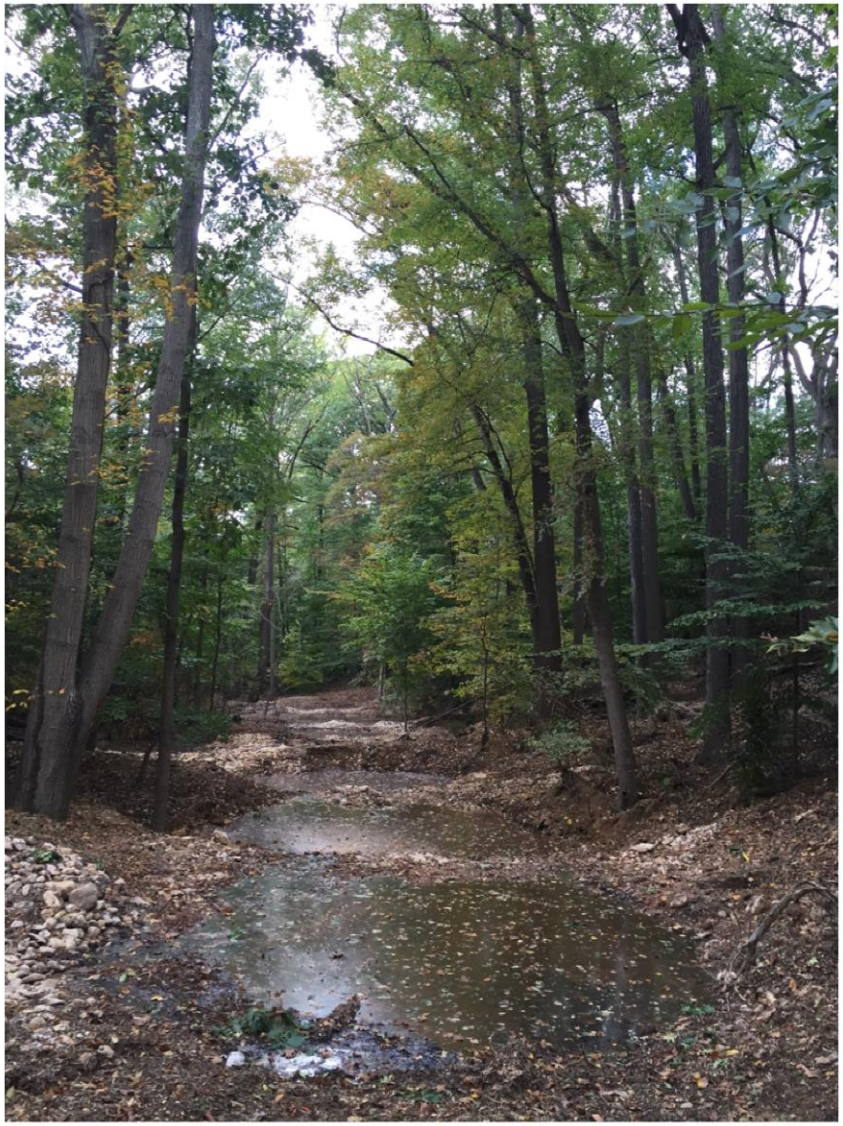
POST RESTORATION



PRE RESTORATION



POST RESTORATION



FOOT PATH
PERGOLA
ASPHALT
GRASS PAVE
BASEBALL FIELD
BIORETENTION
STAGING AND STOCKPILE AREA
PLAYGROUND
SEPTIC TANK
MH 2
LIGHT POLE
TENNIS COURT
0+00
1+00
2+00
3+00
3+96
EXISTING EPHEMERAL CHANNEL
UNIMPROVED FOOT PATH
STORM DRAIN APPROX.
WHEELER HILL DR SE
BIORETENTION OUTFALL (NOT LOCATED)
BLOCK STORM DRAIN INLET STRUCTURE (LOCATION APPROXIMATE)
HORIZONTAL SCALE
0
20
40

PROJECT OBJECTIVES/ ASSUMPTIONS

- Create a healthy, functioning, and self-sustaining ephemeral tributary
- Control and treat runoff from adjacent impervious and compacted areas in the most cost effective way
- Protect, enhance and create wildlife habitat
- Remove and suppress growth of invasive species
- Work only on District land
- Minimal impacts to the community
- Development of a community amenity
- Educational opportunities

PROJECT TIMELINE

- November 2018: contract awarded
- November – January 2019: field assessment (topo, geotech etc.)
- January – June 2019: design development
- 3 public meetings:
  - Concept designs
  - Semi-final designs (~65%)
  - Construction kickoff meeting (timeline)
- September 30, 2019: construction completed*

FAQs

- **How do we find our project sites?**
  - Enthusiastic landowners!
  - Funding sources
  - Large areas of untreated impervious cover
  - More impactful locations

- **What can I do?**
  - RiverSmart Homes
    - Rain Gardens
    - Permeable Pavers
    - Rain Barrels
    - Tree Planting
    - "BayScaping"

RIVERSMART
DEPARTMENT OF ENERGY AND ENVIRONMENT

QUESTIONS?