CONGRESS HEIGHTS ENVIRONMENTAL RESTORATION PROJECT

PUBLIC STAKEHOLDER MEETING CONCEPT DESIGNS

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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)

Pre-development

Surface Runoff
Evapotranspiration
Canopy Interception
Interflow
Baseflow

Post-development

Surface Runoff
Evapotranspiration
Interflow
Baseflow

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

- Bioretention
- Permeable Pavement
- Bioretention
- Permeable Pavement
REGENERATIVE STORMWATER CONVEYANCE

Typical Profile – Alternating Pools and Riffles
SOME EXAMPLES

PRE RESTORATION

POST RESTORATION
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”