FORT STEVENS STORMWATER RETROFIT PROJECT

PUBLIC STAKEHOLDER CONCEPT DESIGN MEETING

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AGENDA

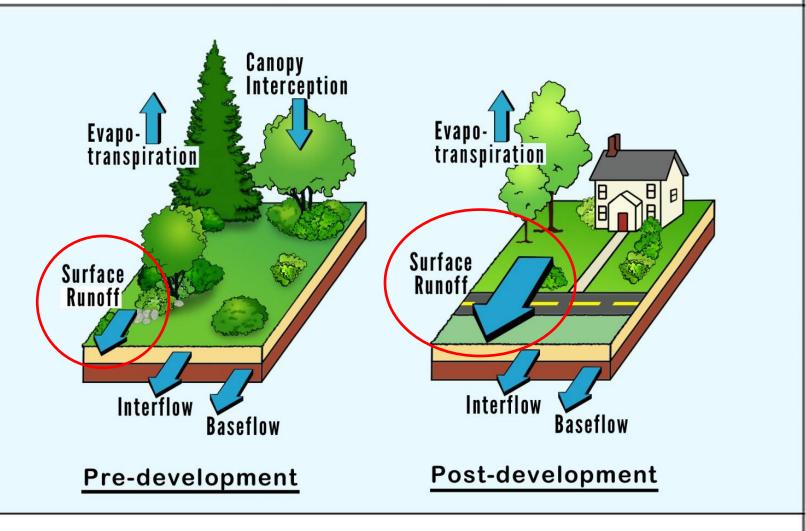
- Project Area & Background
- Existing Conditions
- Project Objectives
- Restoration Approaches
- Project Concept
- Timeline
- FAQs
- Q&A

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







EXISTING CONDITIONS







EXISTING CONDITIONS (triangle)





PROJECT OBJECTIVES

- Treat maximum amount of stormwater from the site in the most cost effective way
- Work only on District land
- Minimal impacts to the community
- Development of a community amenity
- Educational opportunities



RESTORATION APPROACHES

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).

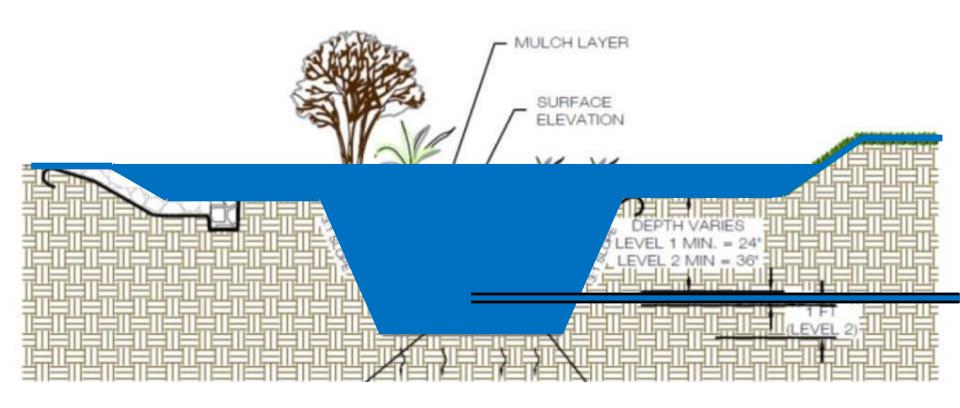
Slow it down, Spread it Out, Soak it In!

BIORETENTION





BIORETENTION: HOW IT WORKS



BIOSWALES





PERMEABLE PAVEMENT







PROJECT CONCEPT



PROJECT TIMELINE

- May 2019: contract awarded
- May August 2019: field assessment (topographic survey, geotechnical investigations etc.)
- August January 2020: design development
- 3 public meetings:
 - Concept designs on 9/10/19
 - Semi-final designs (~65%): TBA
 - Construction kickoff meeting (timeline): TBA
- May 2021: construction complete*
- One year of post-construction maintenance included in contract

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"





QUESTIONS





