

# DOUGLASS COMMUNITY CENTER STORMWATER RETROFIT PROJECT

## PUBLIC STAKEHOLDER SEMI-FINAL DESIGN MEETING

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GOVERNMENT OF THE  
DISTRICT OF COLUMBIA  
**MURIEL BOWSER, MAYOR**

# AGENDA

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

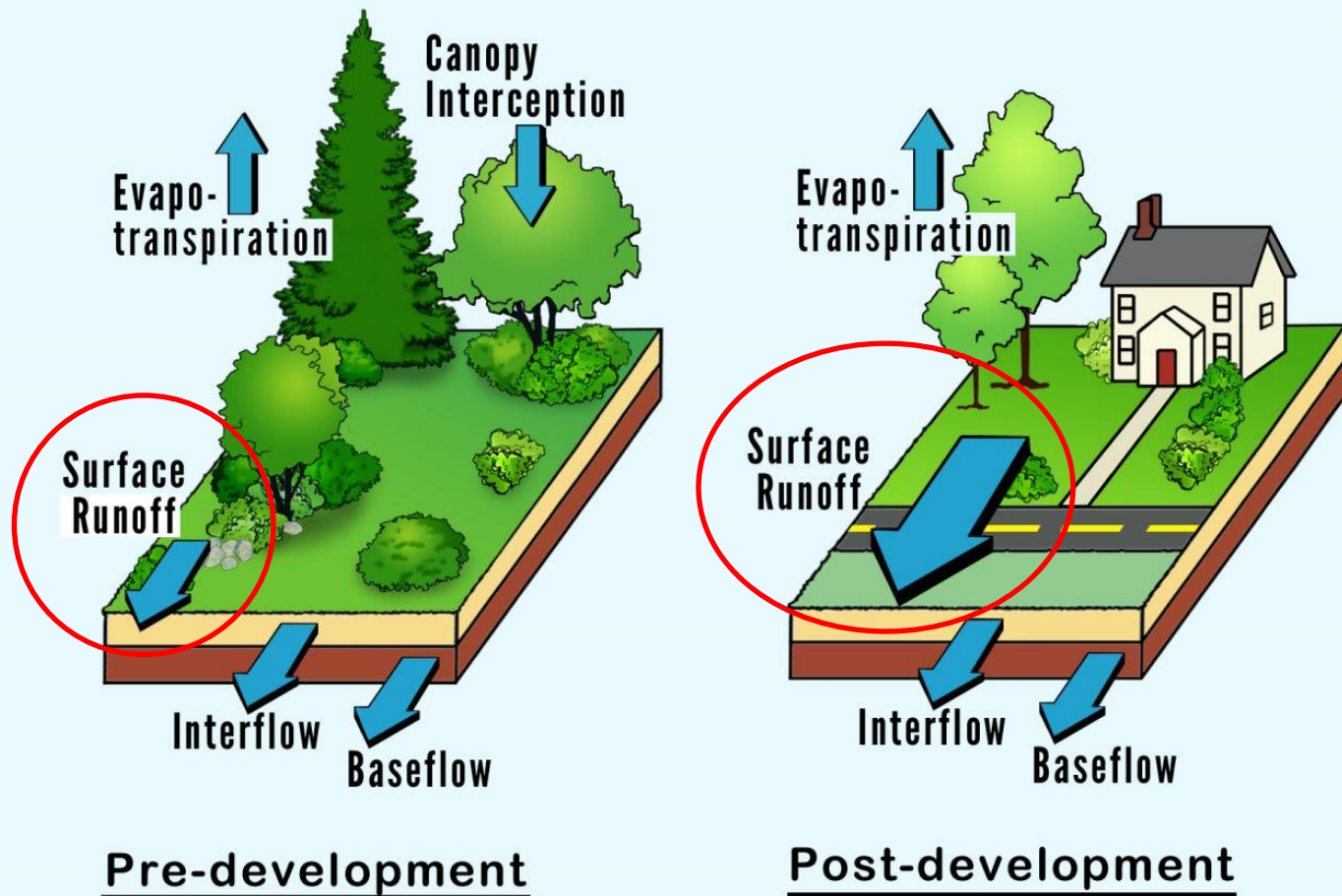
# PROJECT LOCATION



# BACKGROUND

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**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.

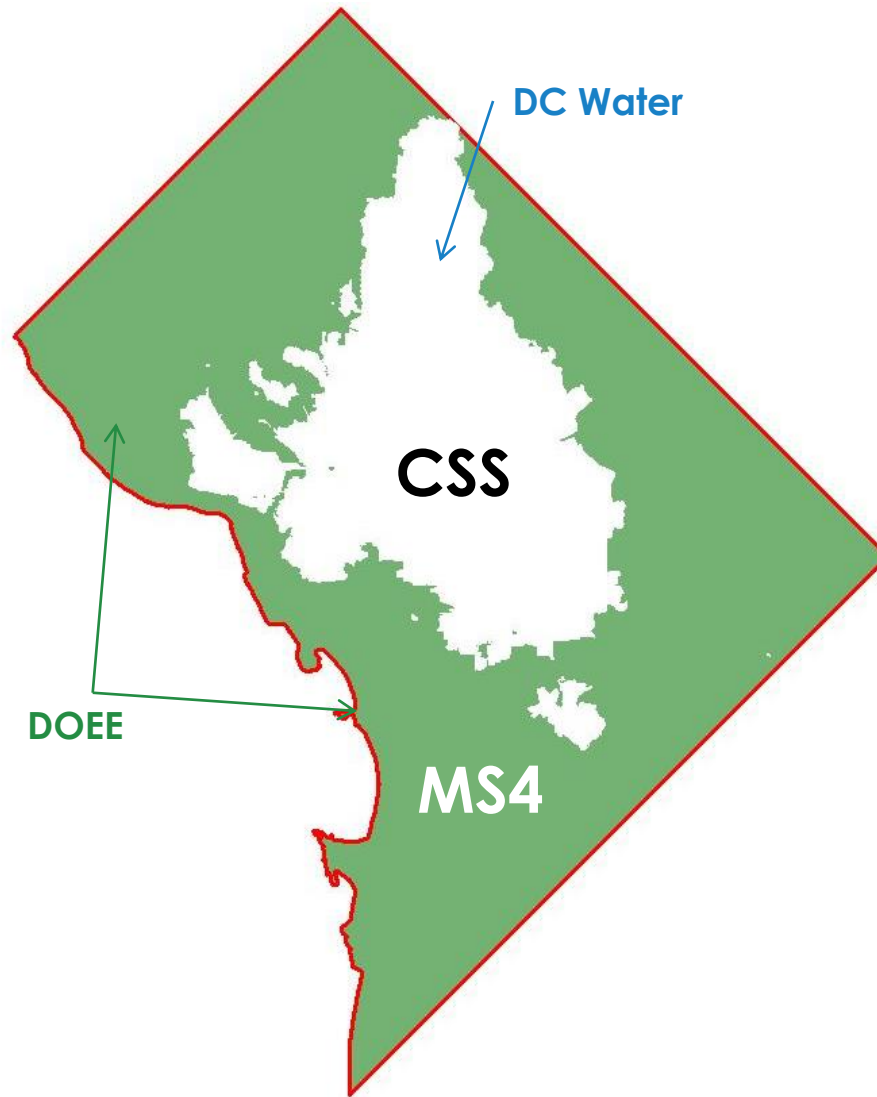


# PROBLEM OF STORMWATER POLLUTION



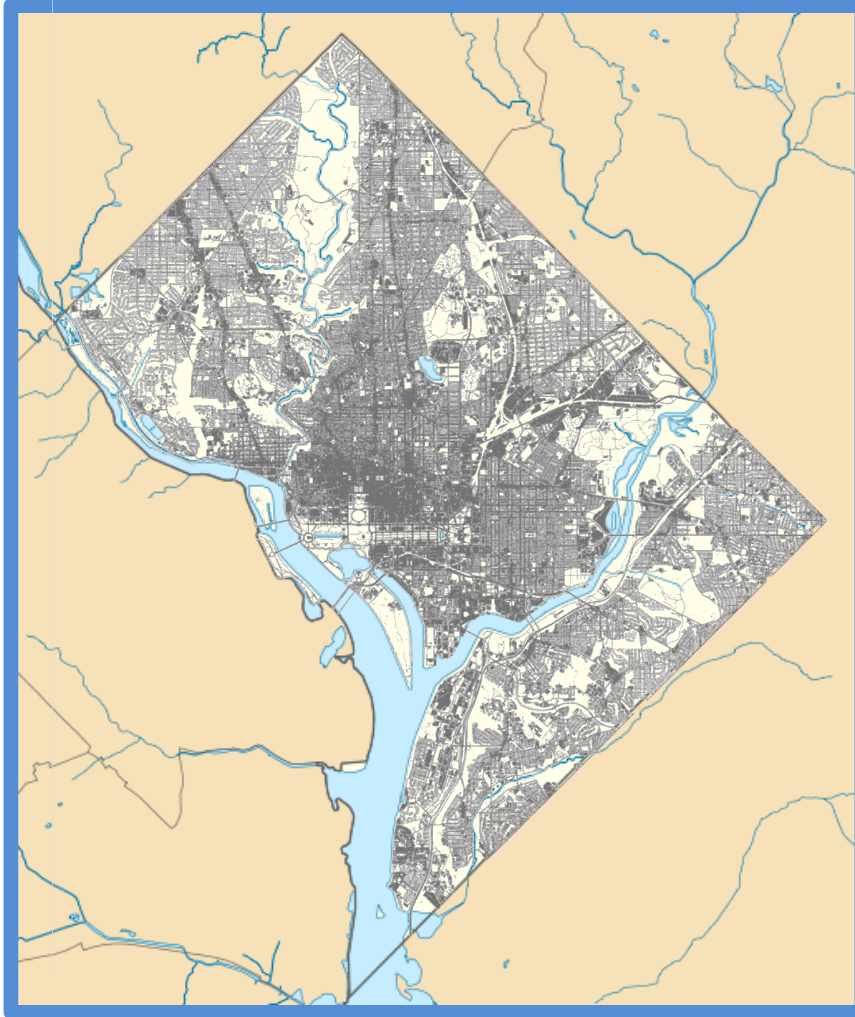
# DC'S RESTORATION APPROACHES

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# DISTRICT OF COLUMBIA LAND USE

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Total Area  
68.3 mi<sup>2</sup>

Land Area  
61.3 mi<sup>2</sup>

Impervious Area  
26.6 mi<sup>2</sup>  
Approx 43%  
of Land Area

*A single 1.2 inch storm falling on this area produces about 525 million gallons of stormwater runoff.*



# EXISTING CONDITIONS

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# PROJECT OBJECTIVES

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- 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

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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 !*

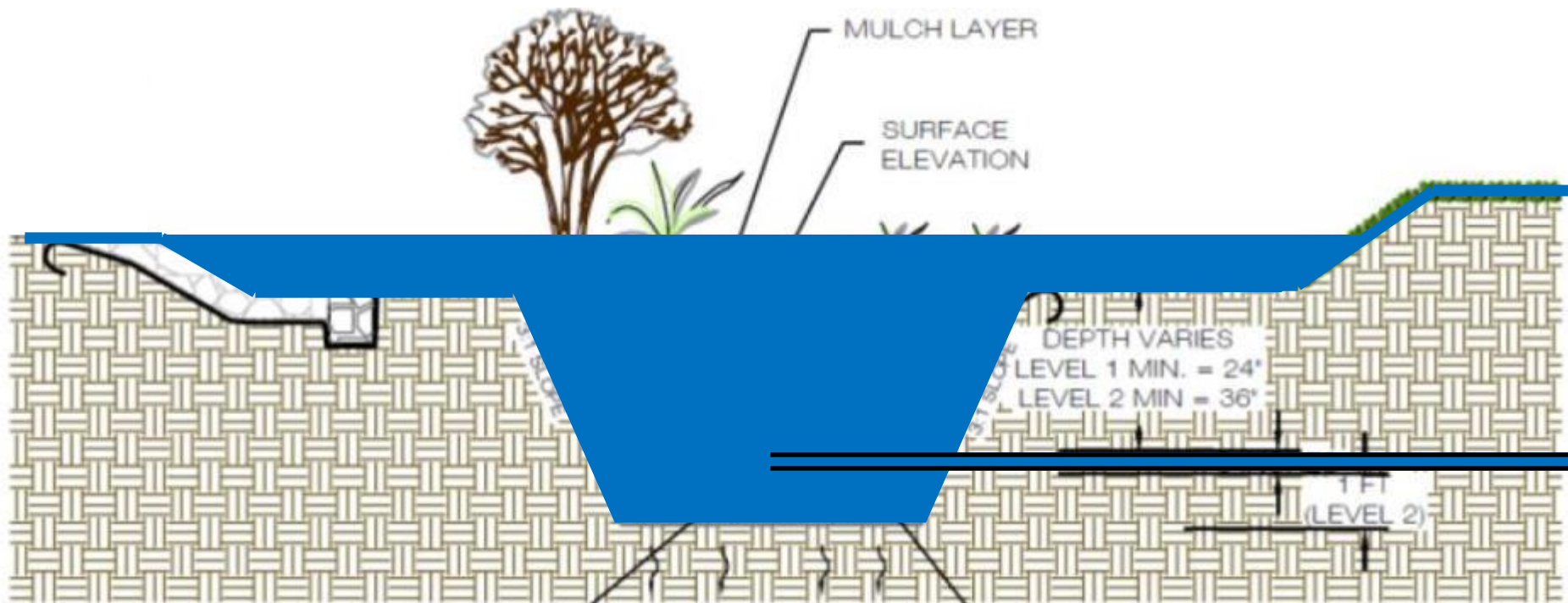
# BIORETENTION

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# BIORETENTION: HOW IT WORKS



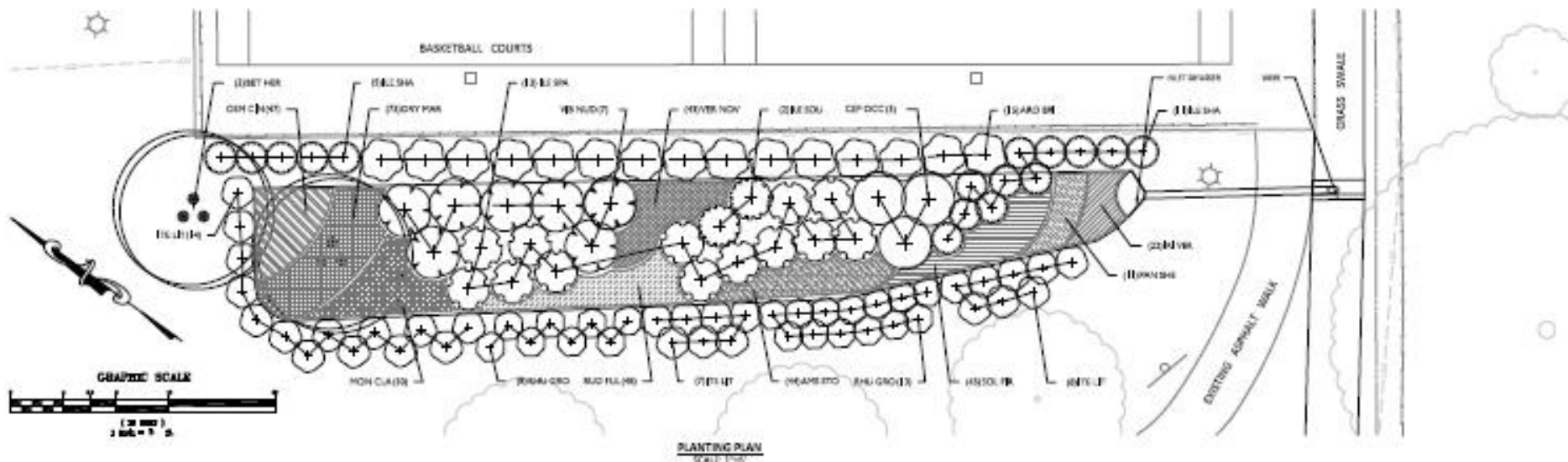
# BIOSWALES

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# PROJECT TIMELINE

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- 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 9/16/19
  - Semi-final designs (~65%) ON 12/16/19
  - Construction kickoff meeting (timeline): TBA
- May 2020: 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

