



City of Cupertino Planning Commission Meeting  
July 23, 2019

# Briefing on Cupertino's Green Stormwater Infrastructure Plan

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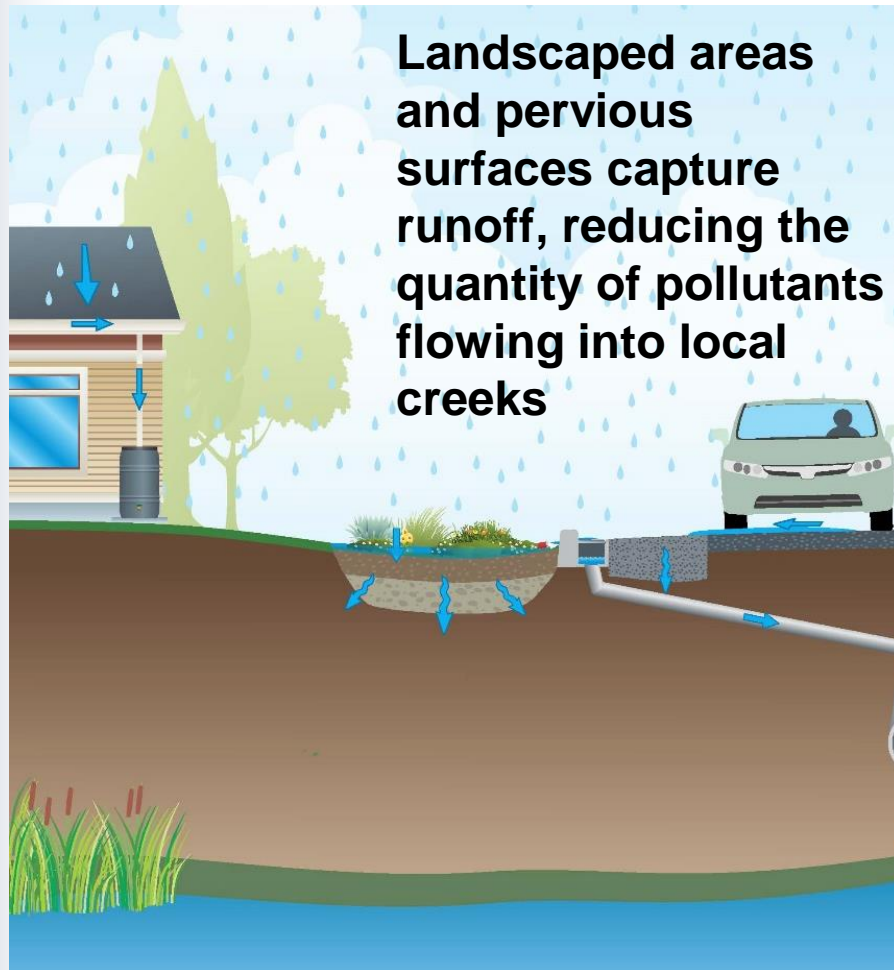
Santa Clara Valley Urban Runoff Pollution  
Prevention Program

# Green Stormwater Infrastructure (GSI)

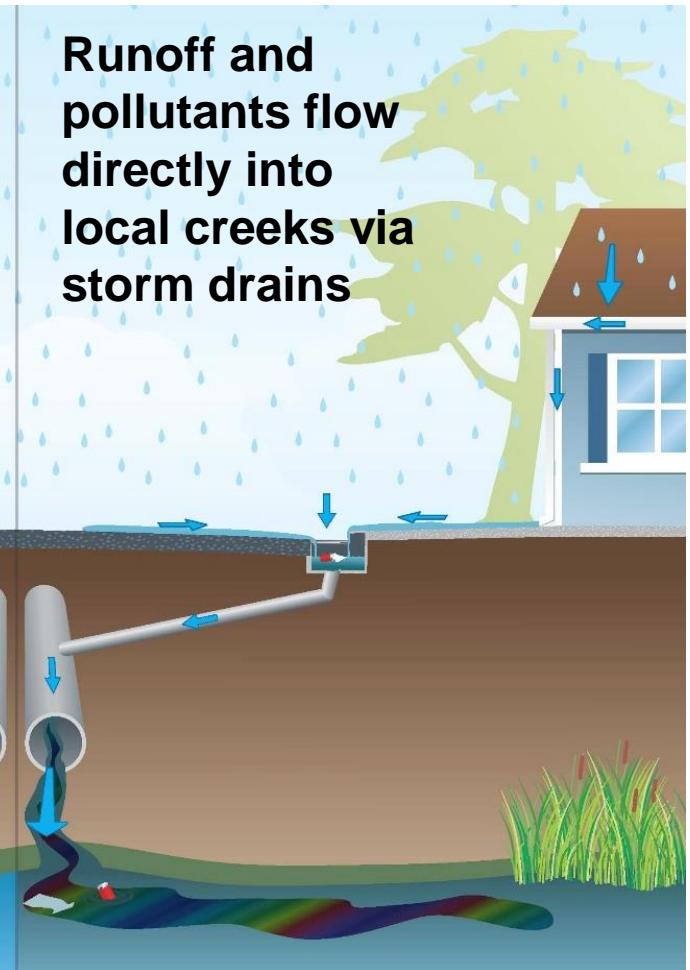
- Systems that use vegetation, soils, and natural processes to manage water and create healthier urban environments



## Green Infrastructure



## Gray Infrastructure



# Green Stormwater Infrastructure

- Approach is focused on retrofitting existing public streets, roofs, and parking lots to divert runoff to:
    - Vegetated areas
    - Pervious pavements
    - Biotreatment and infiltration facilities
    - Rainwater collection systems
  - Similar to Low Impact Development (LID) site measures currently required on projects that add or improve 10,000 sq. ft. or more of impervious surface
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# Bioretention Areas



# Flow-Through Planters

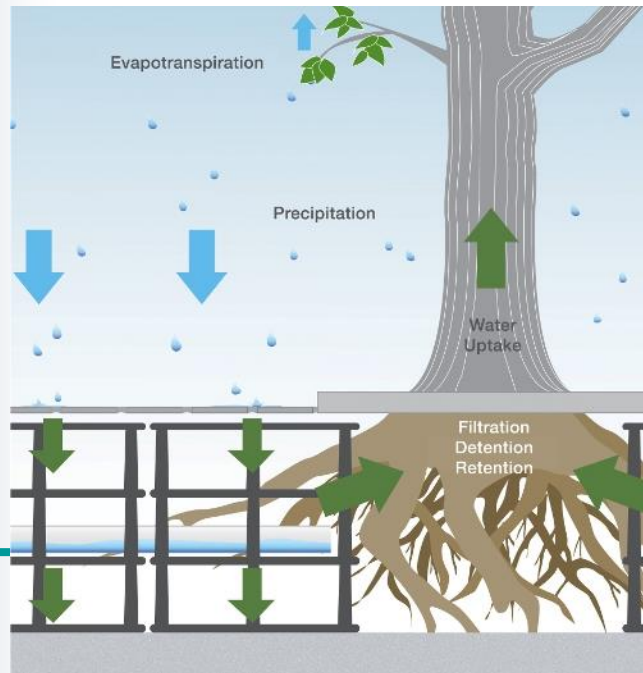




# Green Roofs



# Tree Trench



# Pervious Pavement



# Rainwater Harvesting



# GSI Benefits

- GSI projects can achieve multiple benefits:
  - Flow reduction
  - Pollutant reduction
  - Reduced local flooding
  - Urban greening
  - Traffic calming
  - Improved bike and pedestrian safety
  - Climate resiliency
  - Increased wildlife habitat





# Regulatory Requirements

- Stormwater in Cupertino is regulated by the Regional Water Quality Control Board (SF Bay Region)
  - The City is covered by a Municipal Regional Stormwater Permit (MRP) that includes 76 Bay Area permittees
  - Cupertino and 14 other agencies participate in the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) to achieve MRP compliance
  - The MRP mandates that each permittee submit a GSI Plan to the Regional Water Quality Control Board by September 30, 2019
  - Cupertino's GSI Plan will be brought to Council for approval on August 20, 2019
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# Fiscal Impact

- The MRP requires the following commitments:
    - Develop and submit a GSI Plan by September 2019
    - Prioritize and map potential projects/areas (2020-2040)
    - Incorporate GSI concepts in related municipal plans
    - Evaluate funding options
    - Identify GSI opportunities in public projects
    - Plan implementation, track and report progress annually
  - There is no current quantitative requirement for how many GSI projects must be completed
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# Ensure Compatibility with Other City Plans

- General Plan
  - Sustainability, Transportation, Infrastructure Elements
- Climate Action Plan
- Parks Master Plan
- Bicycle Plan
- Pedestrian Plan
- Safe Routes to School
- Storm Drainage Master Plan
- Environmental staff has been incorporating GSI language in plan development during staff review comment periods





# GSI Opportunity Analysis

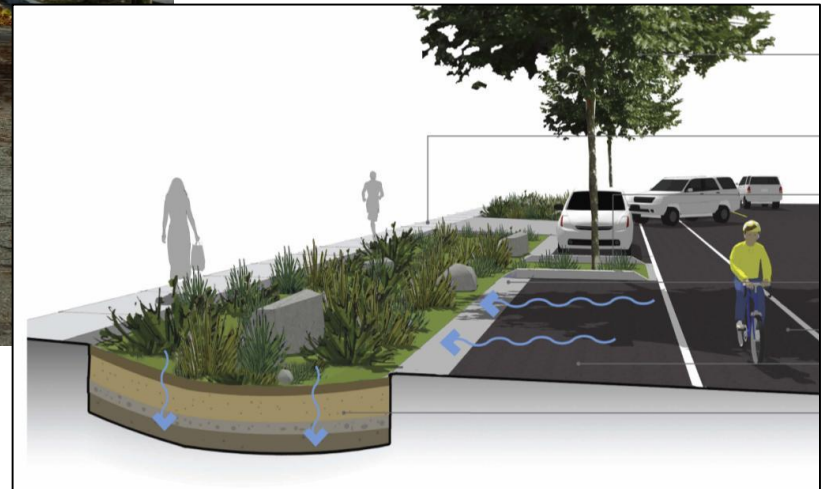
- Cities must annually review lists of public projects and assess potential for GSI
- Lists and results of review must be reported in annual reports to Water Board
- Cupertino is following regional guidance and criteria for conducting annual review and reporting



# Green Infrastructure Opportunity: Hacienda Ave, Campbell



- Road Diet
- Pavement Repair
- Bike Lane Needed



Drawing courtesy of Callendar Associates



# Hacienda Avenue





# Hacienda Avenue



# GSI Opportunity in Cupertino: Parking Lot at Blackberry Farm





# Parking Lot at Blackberry Farm



**Pervious pavement and trees**

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# Stevens Creek Trail



**Pervious concrete application**

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# Questions / Input?



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