



City of Cupertino Planning Commission Meeting
July 23, 2019

Briefing on Cupertino's Green Stormwater Infrastructure Plan

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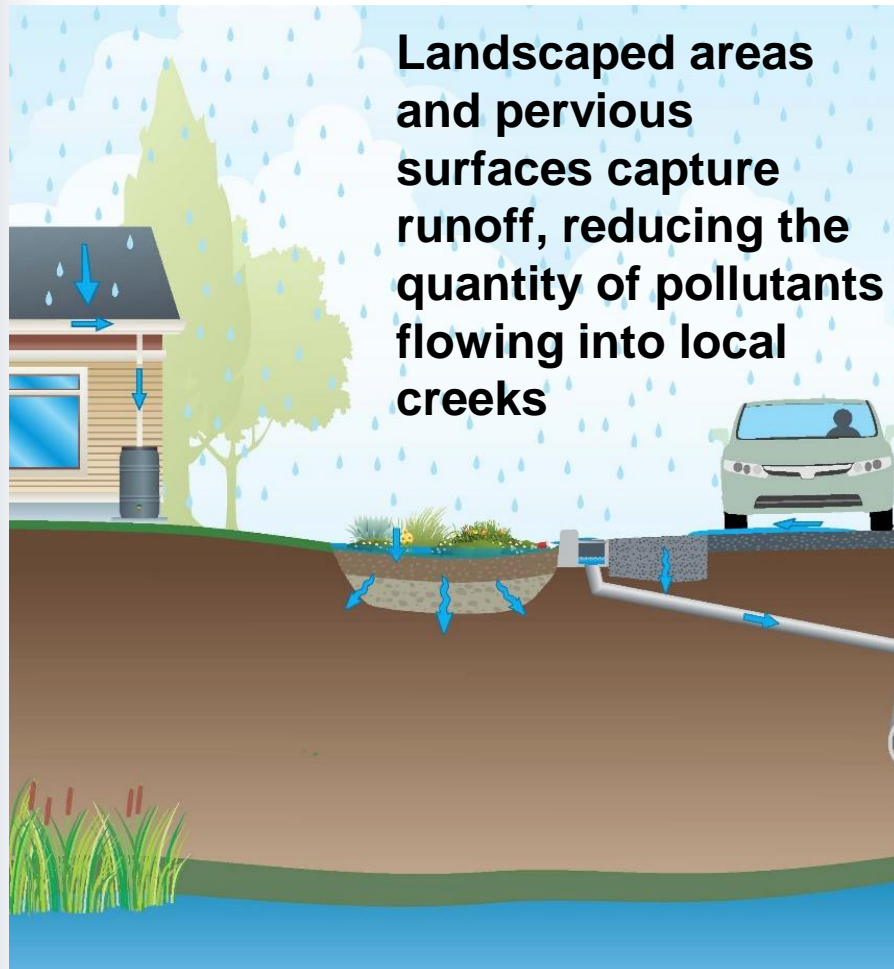
Santa Clara Valley Urban Runoff Pollution
Prevention Program

Green Stormwater Infrastructure (GSI)

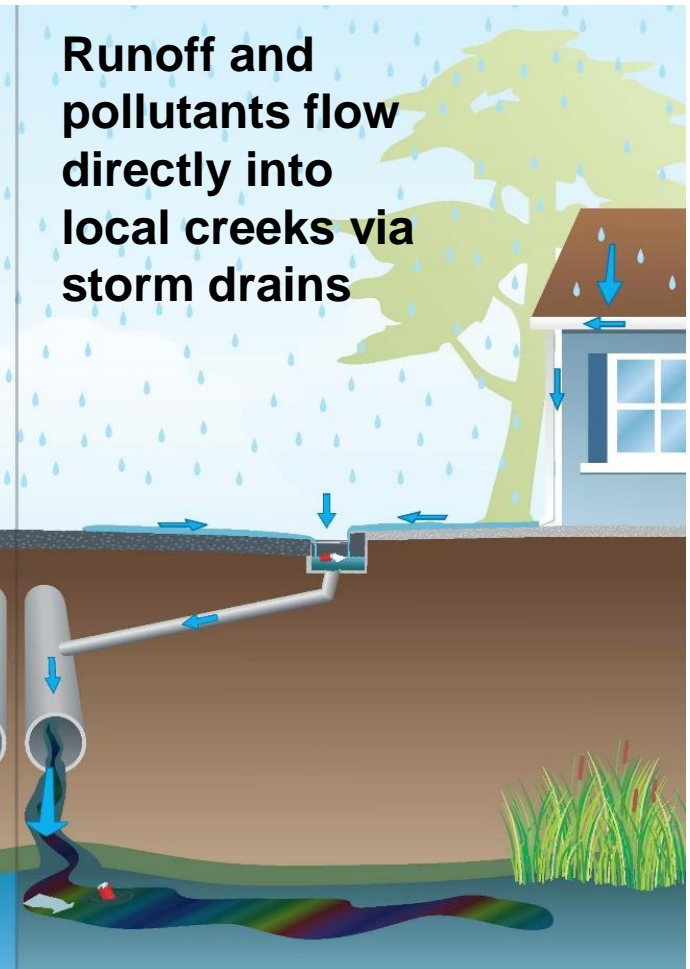
- Systems that use vegetation, soils, and natural processes to manage water and create healthier urban environments



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



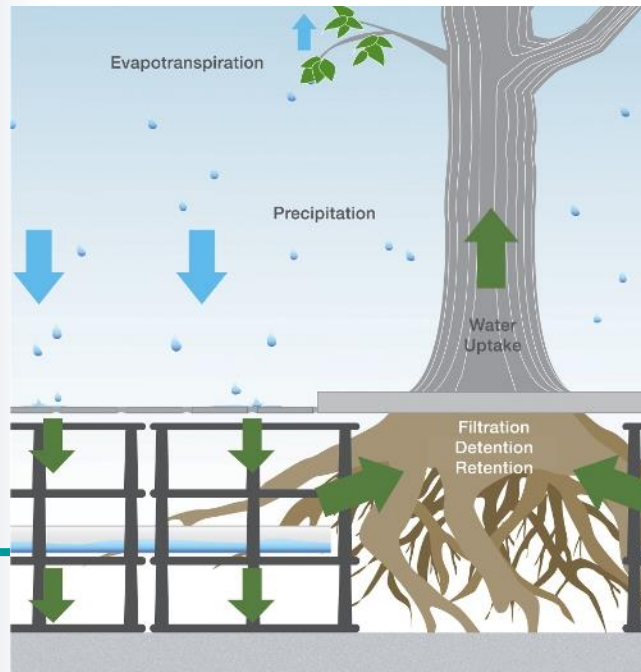
Flow-Through Planters



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

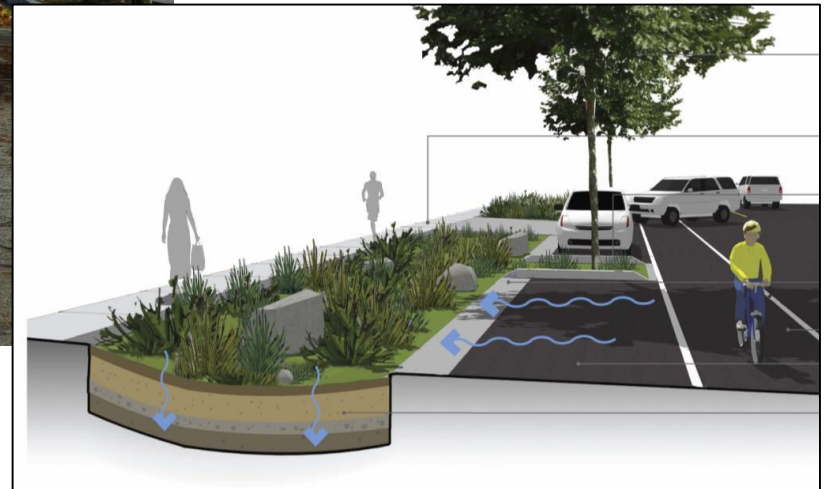
- Cities must annually review lists of public projects and assess potential for GSI
- Lists and results of review must be reported in annual reports to Water Board
- Cupertino is following regional guidance and criteria for conducting annual review and reporting



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

Stevens Creek Trail



Pervious concrete application

Questions / Input?



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