

City of San Jose Green Stormwater Infrastructure Plan

SPUR
April 2, 2019

Agenda

- Welcome and Introductions
- Background and Overview
- Green Stormwater Infrastructure
 - Project Types and Benefits
- Green Stormwater Infrastructure Plan
 - Plan Drivers
 - Plan Outline
- Schedule and Next Steps

Where the Water Goes



Impacts of Unmanaged Stormwater



Examples of Green Stormwater Infrastructure in San Jose



What is Green Stormwater Infrastructure (GSI)?

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



Green Stormwater Infrastructure - Project Types

- Low Impact Development
- Green Streets
- Regional Projects

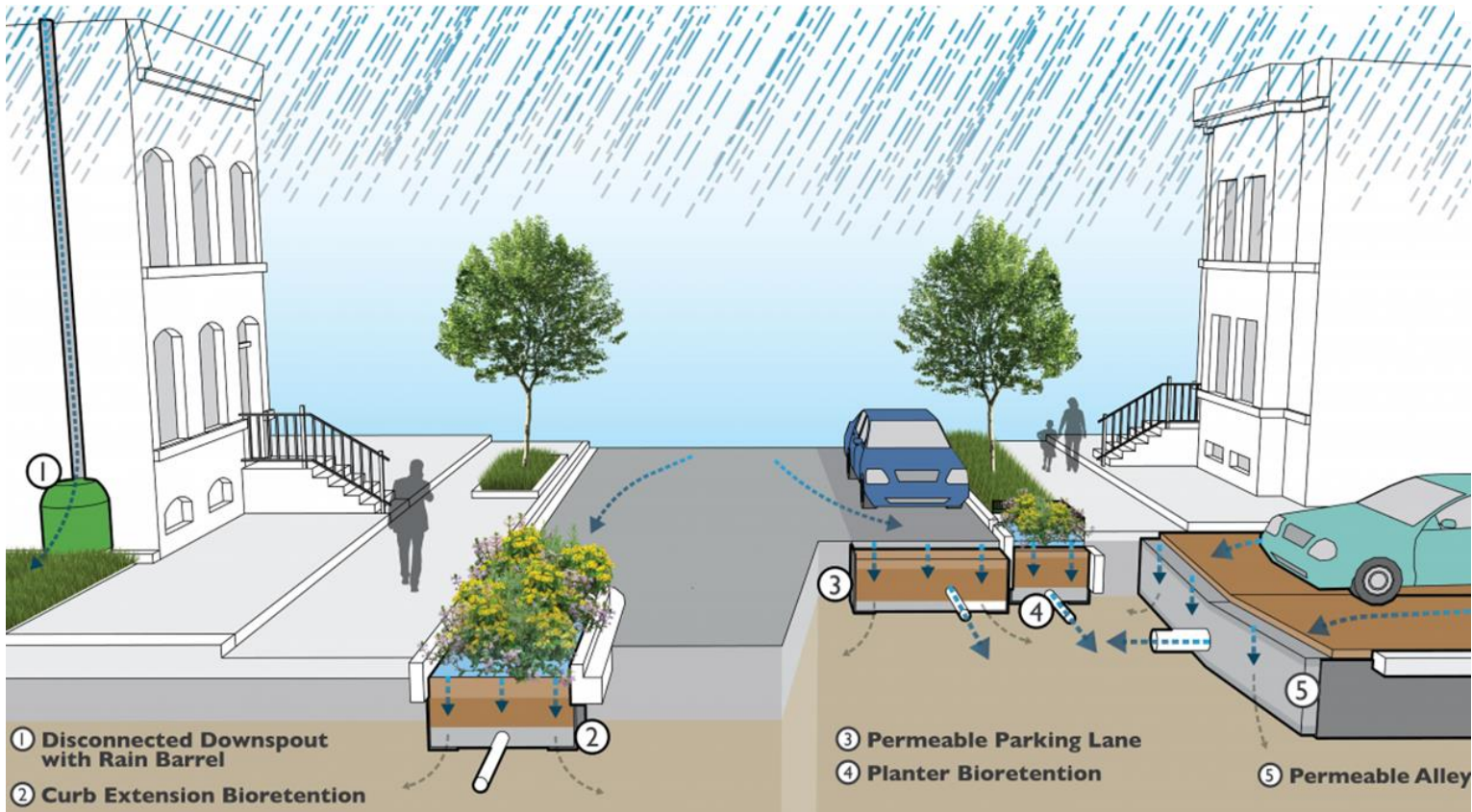


Low Impact Development

- Required to include GSI on new and redevelopment
- 10,000 square foot size
- Private and Public



Green Streets



Regional Projects

Above-ground

Below-ground



Potential GSI Benefits

Environment

- Improved water quality
- Flow reduction
- Climate benefits
- Groundwater recharge/Water conservation
- Wildlife habitat



Martha Gardens,
San Jose



San Pablo Ave,
El Cerrito



Potential GSI Benefits

Community

- Urban greening / beautification
- Reduced localized flooding
- Improved walkability
- Traffic safety improvements

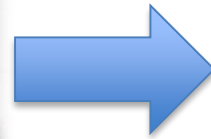
Green Stormwater Infrastructure Constraints



- Siting - existing grades, utility conflicts, land ownership
- Sizing – limited ROW, sizing requirements
- Integration –parking, bike/pedestrian, lane width

Green Stormwater Infrastructure Plan

- Describe citywide shift to green stormwater infrastructure
- Reasonable assurance of water quality improvement



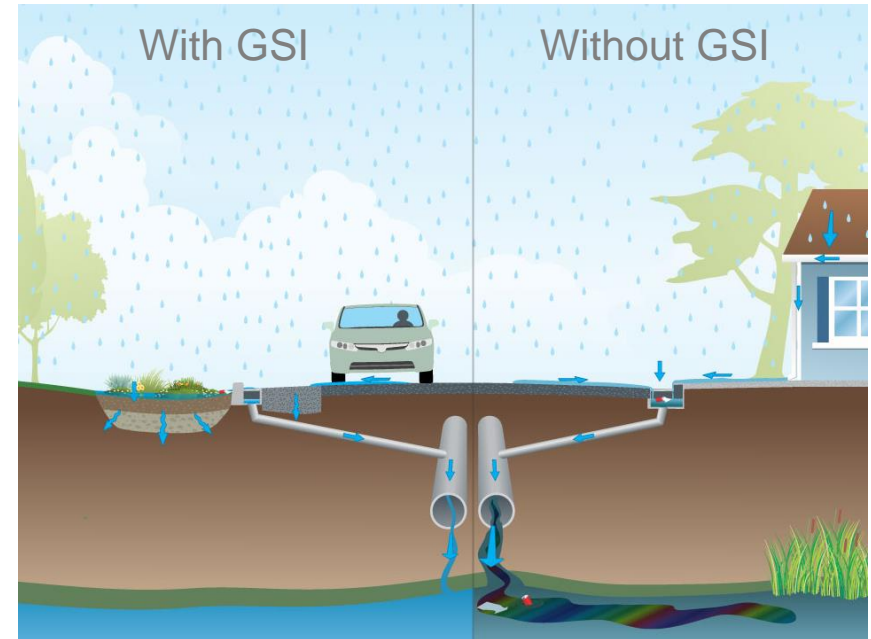
Open Space vs. Green Stormwater Infrastructure

Rainwater on open space

Natural Drainage

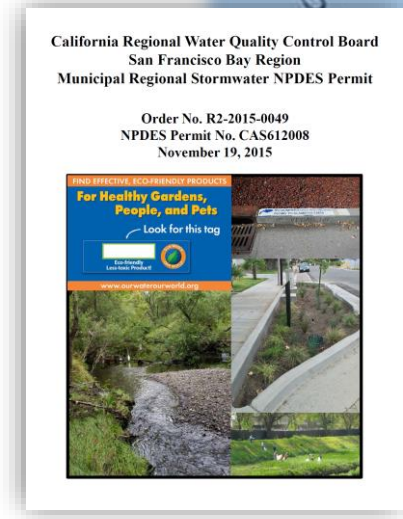


Stormwater Runoff from Impervious Surfaces



Green Stormwater Infrastructure Plan Drivers

- Municipal Regional Stormwater Permit
- SF Baykeeper
 - CLRP (GSI Plan)
- Alignment with City initiatives
 - General Plan
 - Climate Smart

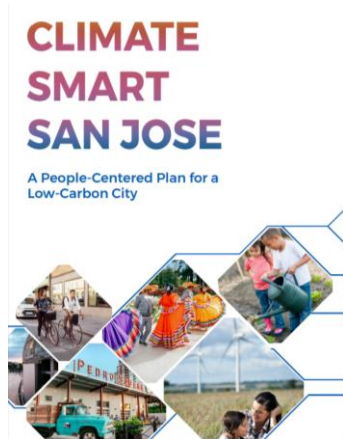
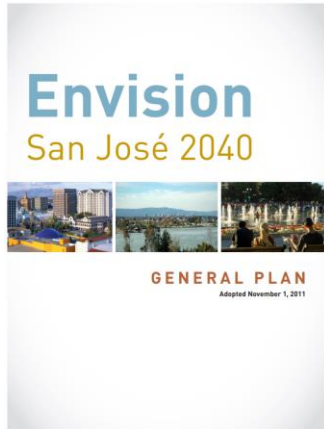


GSI Plan Outline

- Background
- Coordination with Related Planning Documents
- Design Guidelines, Standards, and Specifications
- Project Prioritization Methodology
- Citywide Strategy
- Implementation Plan

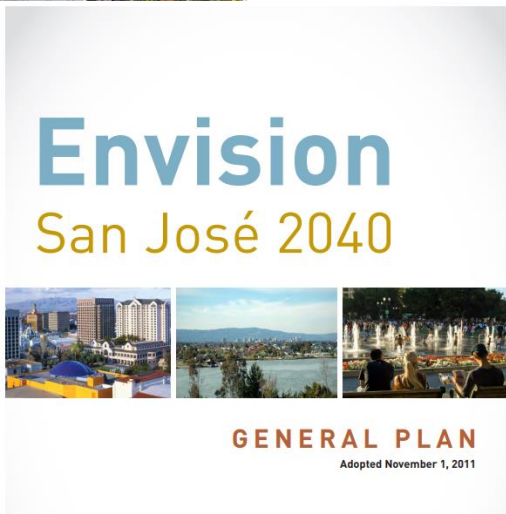
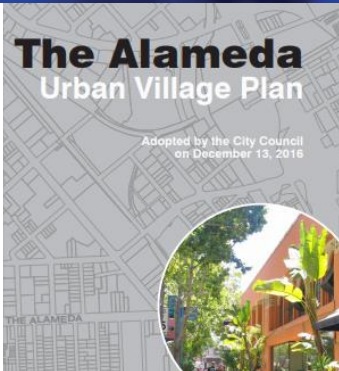


Planning Document Coordination



Plan	Department
General Plan	PBCE
Urban Village Plans	PBCE
Complete Streets	DOT
Storm Sewer Master Plan	PW
Climate Smart San Jose	ESD

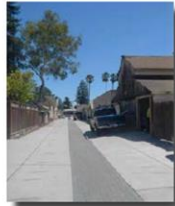
Policy CS-4.2: Require the incorporation of stormwater runoff treatment (green infrastructure) into the public right-of-way (such as along sidewalks, in medians, bulb-outs, parks, and plazas) as part of public improvements to the maximum extent practicable. Allow centralized/regional stormwater treatment facilities as an alternative approach.



IN-3.17 Develop and implement a Green Streets plan consistent with NPDES permit requirements.

Specifications for Incorporating Green Stormwater Infrastructure

Green Stormwater Infrastructure Handbook



Guidance for Implementing Green Stormwater Infrastructure in Public Streetscapes, Parking Lots and Parks



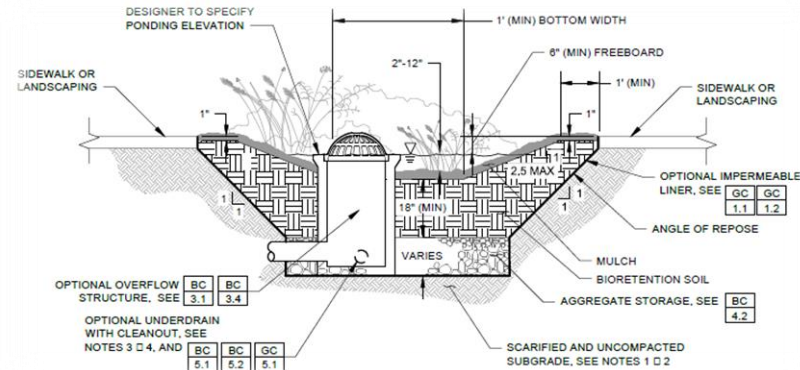
FINAL DRAFT February 2018

Campbell • Cupertino • Los Altos • Los Altos Hills • Los Gatos • Milpitas • Monte Sereno • Mountain View • Palo Alto
San Jose • Santa Clara • Saratoga • Sunnyvale • Santa Clara County • Santa Clara Valley Water District

Part 1



Part 2



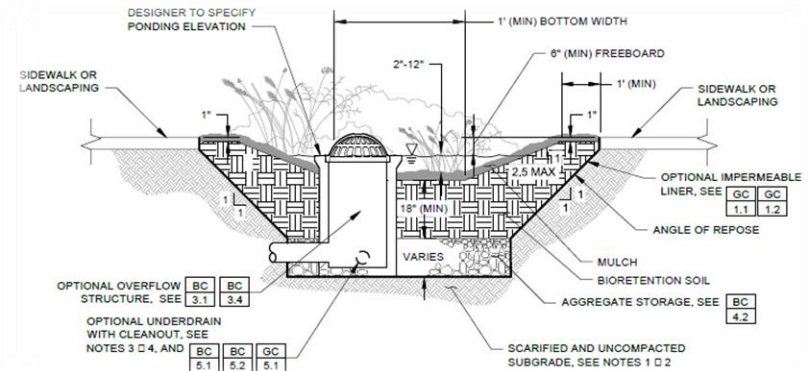
Part 1

- Types of GI and suitable locations
- Techniques to integrate GI with:
 - Roadway
 - Bike lanes
 - Pedestrian facilities
 - Utilities



Part 2

- Typical construction notes and details for:
 - Streetside bioretention
 - Permeable pavement systems



Project Prioritization Methodology

Regional Projects



Green Streets



LID Retrofits



Prioritization Process – Regional Projects



Assessed

- Performance
 - drainage area
- Constructability
 - soil type, groundwater depth, site size
- Co-benefits/Synergies
 - recreational uses, trees, co-located projects

River Oaks Pump Station

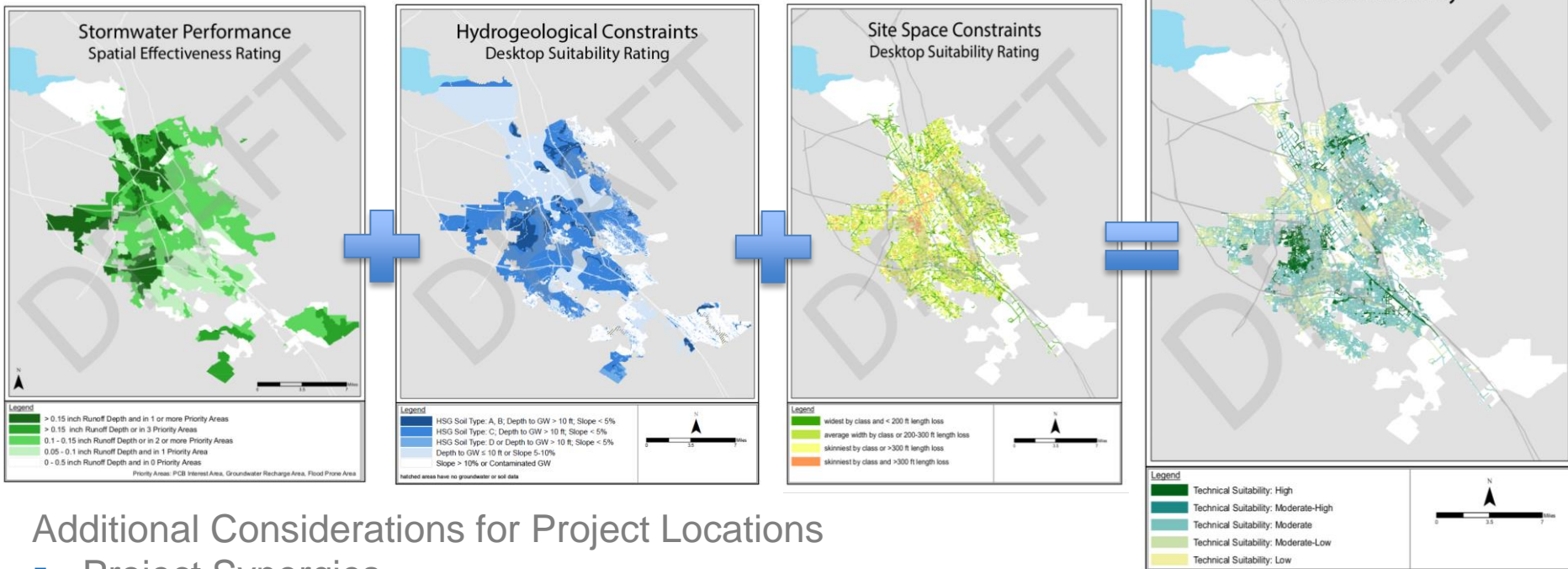


Potential Project Locations

- River Oaks Pump Station
- Vinci Park
- Kelley Park Disc Golf
- Kelley Park Stables
- Roy M. Butcher
- Tully Ballfields



Prioritization Process – Green Streets



Additional Considerations for Project Locations

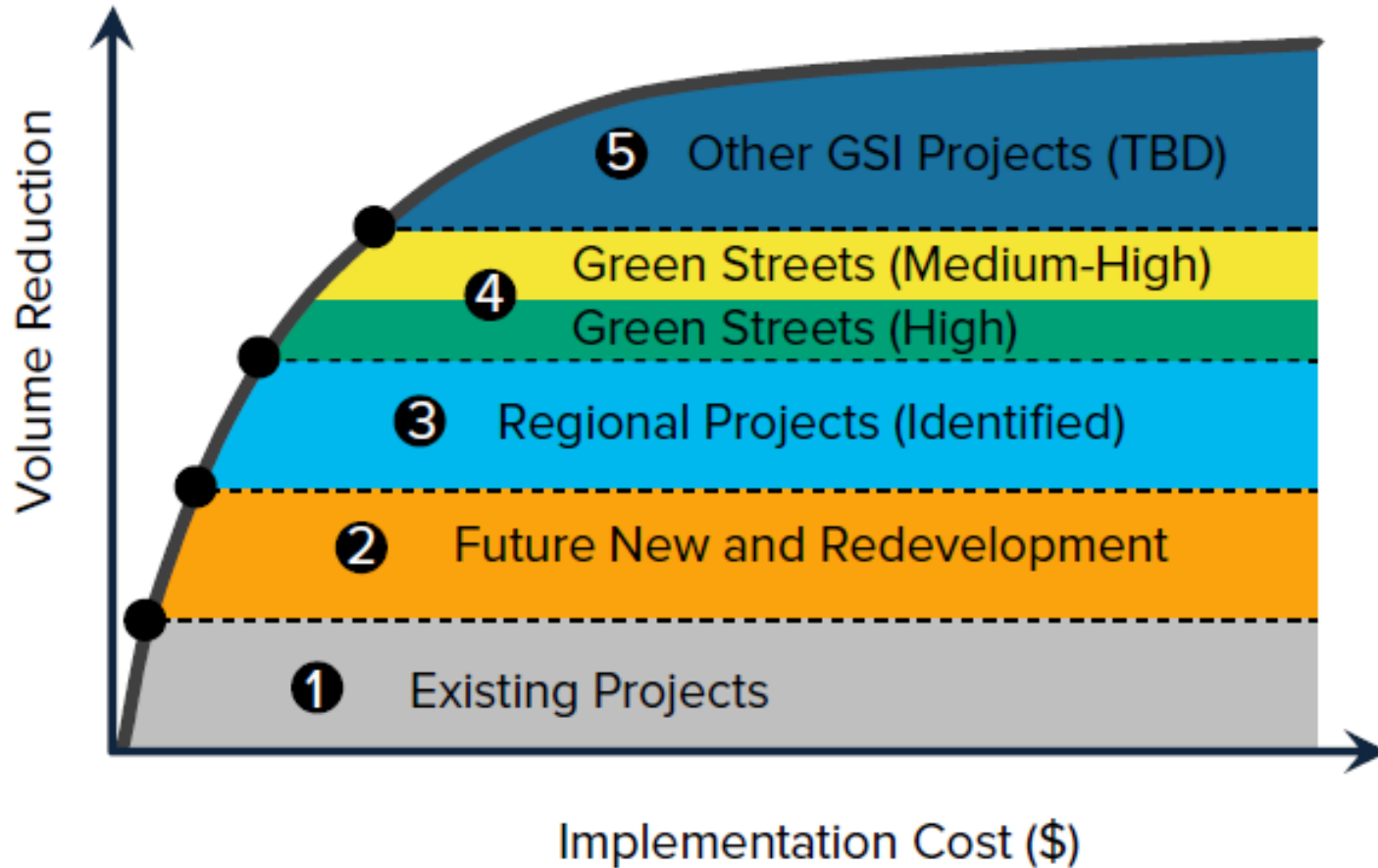
- Project Synergies
- Grant Requirements



Prioritization Process - LID

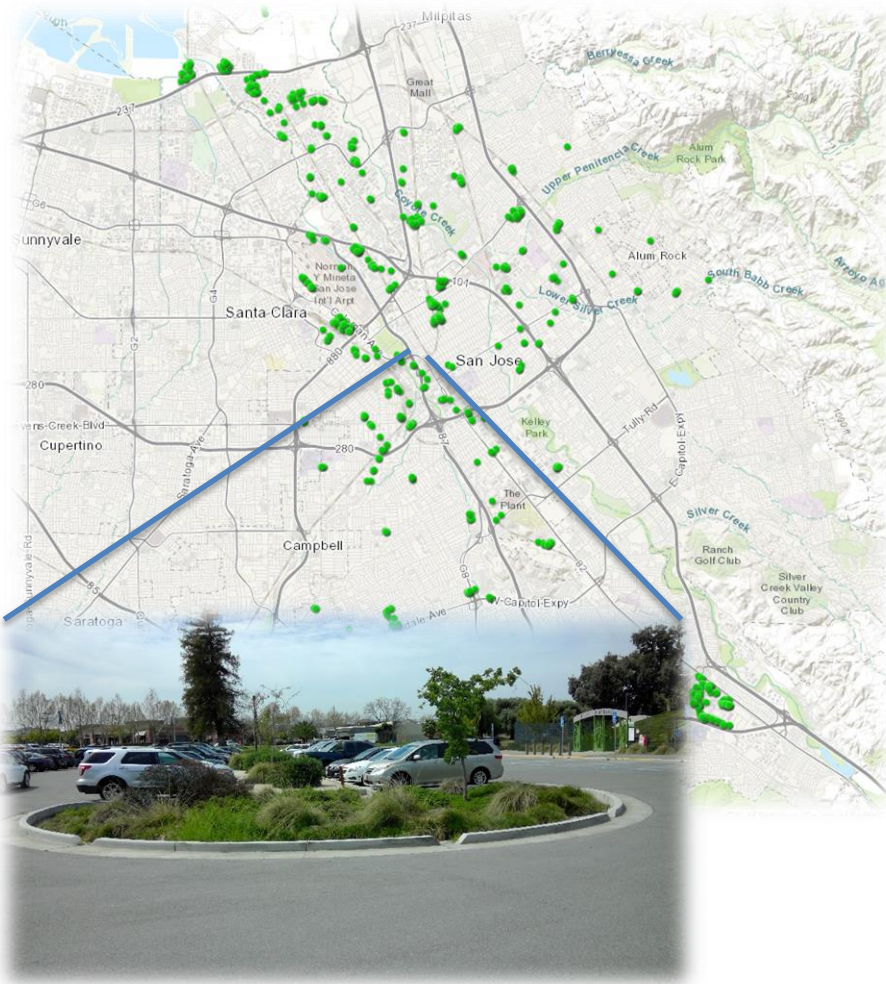
- Evaluate opportunities with City facility upgrades
- Reference Green Street priority layers
- New and Redevelopment Requirements
 - Private
 - Public

Citywide Strategy



Implementation Plan

- Funding analysis
- Performance Assurance
- Project Data Tracking
- Reasonable Assurance Analysis
- Project Workplans
 - Regional Projects
 - Green Streets
 - LID



Next Steps

Date	Action
April 2019	Post draft Green Stormwater Infrastructure Plan on website
June 2019	Present Green Stormwater Infrastructure Plan to Transportation and Environment Committee
August 2019	City Council considers approval of Green Stormwater Infrastructure Plan
September 30, 2019	Submit Green Stormwater Infrastructure Plan to Water Board
2020 – 2025 (estimated)	Site specific public input on designs. Will be done in phases.
2022 (estimated)	Begin project construction (estimated)



Questions