City of San Jose
Green Stormwater Infrastructure Plan

Public Meeting
November 15, 2018

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Agenda

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

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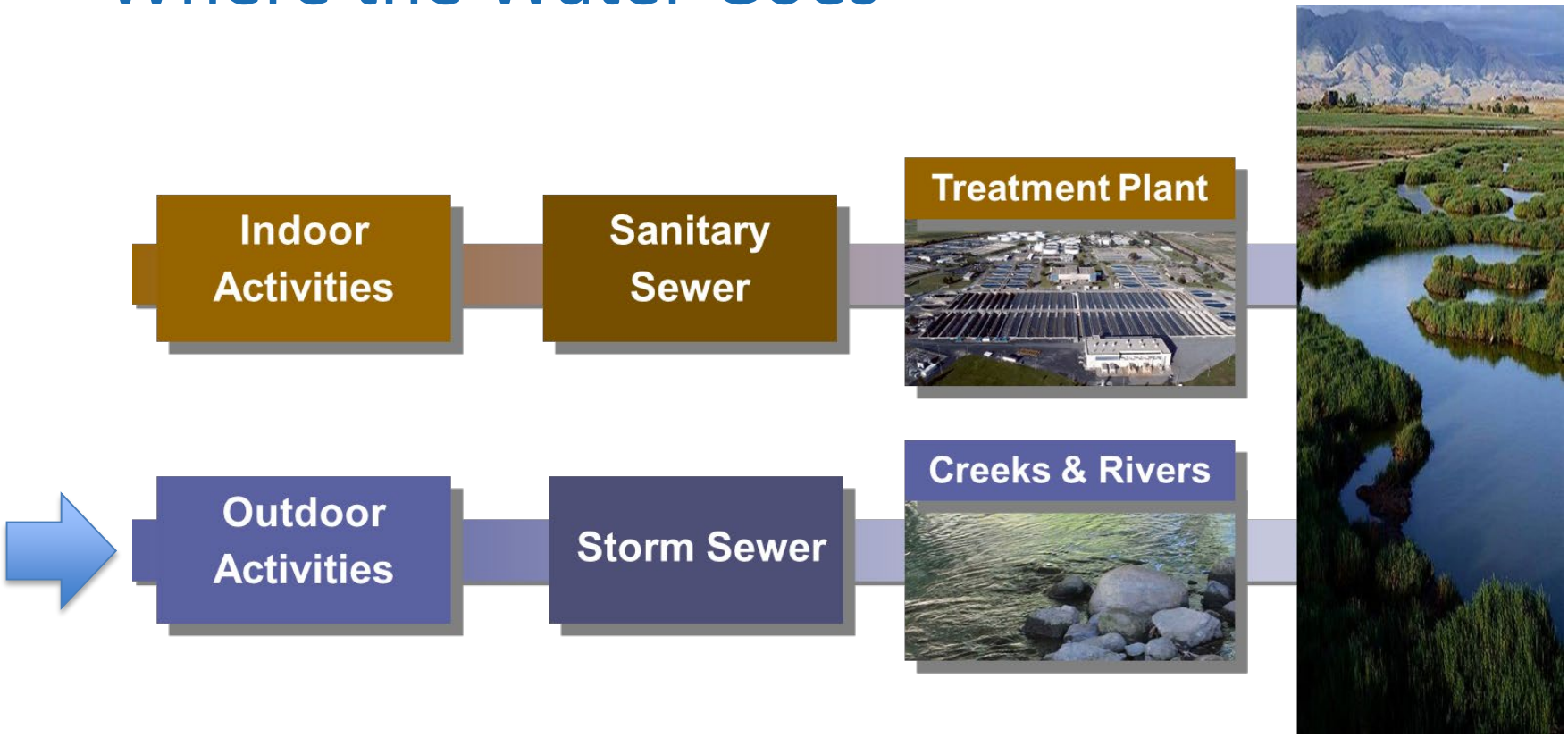
Where the Water Goes



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Impacts of Unmanaged Stormwater

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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 STREETS BLUE BAY
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Green Stormwater Infrastructure - Project Types

- Low Impact Development
- Green Streets
- Regional Projects

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Low Impact Development

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

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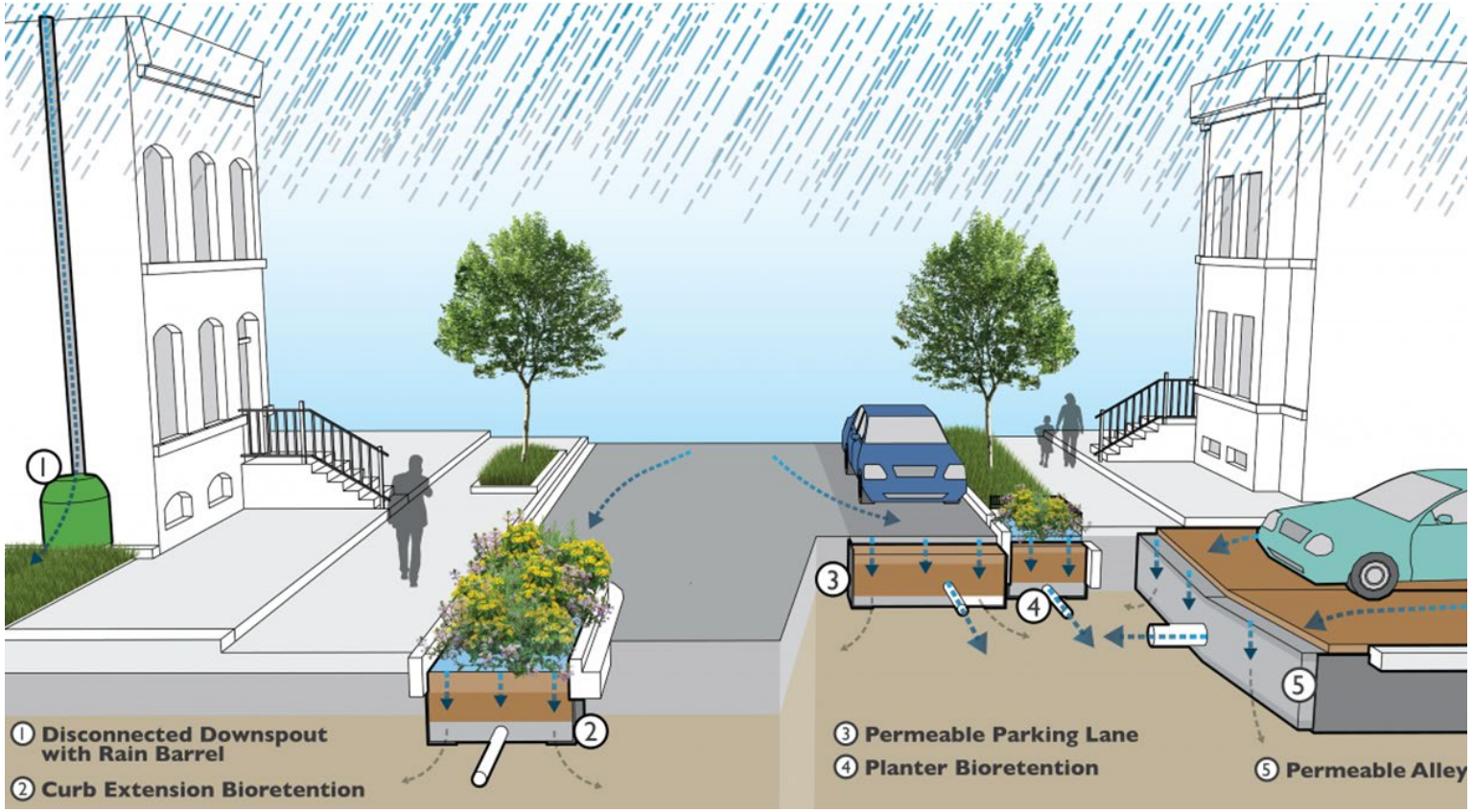
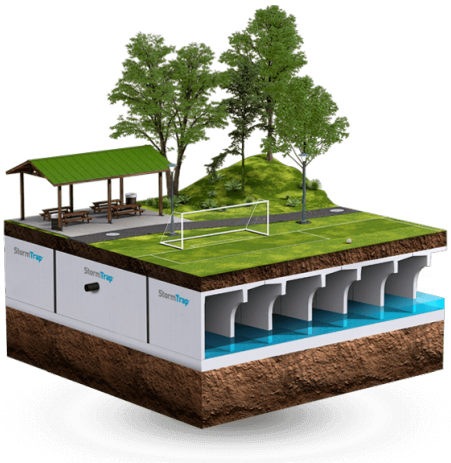
Green Streets



Regional Projects

Above-ground

Below-ground



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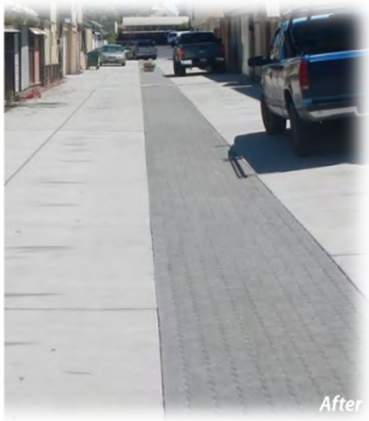

Martha Gardens,
San Jose

San Pablo Ave,
El Cerrito

Potential GSI Benefits

Environment

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

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Potential GSI Benefits

Community

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

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Green Stormwater Infrastructure Constraints

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

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Green Stormwater Infrastructure Plan

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

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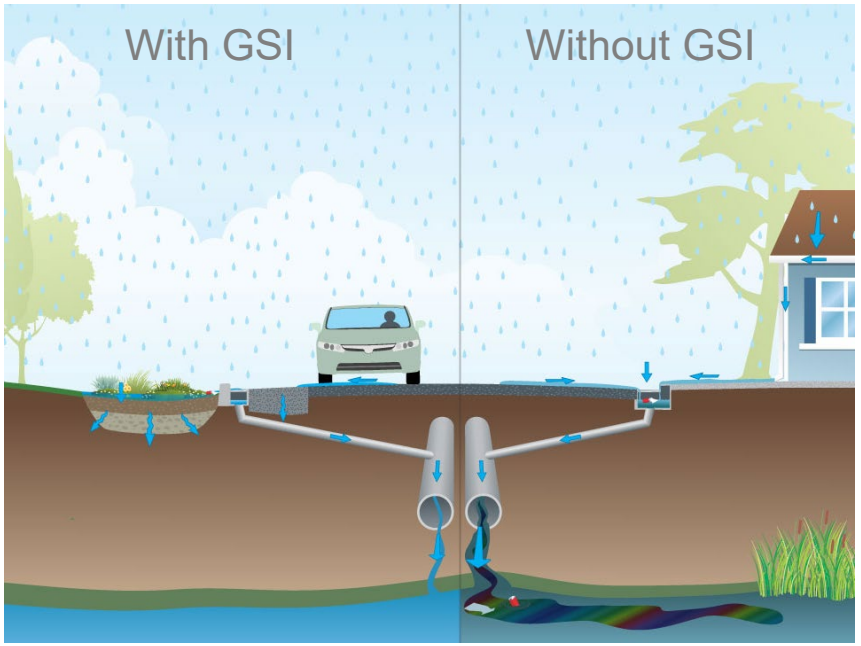
Open Space vs. Green Stormwater Infrastructure

Rainwater on open space

Stormwater Runoff from Impervious Surfaces



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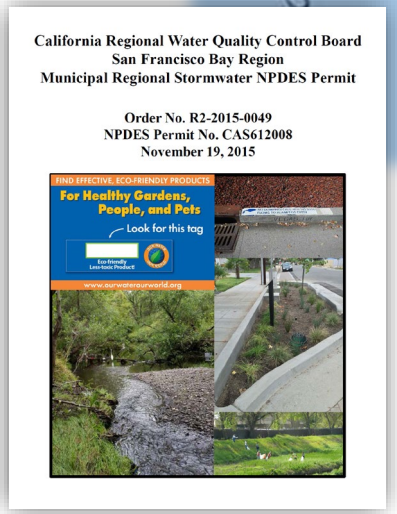
Green Stormwater Infrastructure Plan Drivers

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


California Regional Water Quality Control Board
San Francisco Bay Region
Municipal Regional Stormwater NPDES Permit

Order No. R2-2015-0049
NPDES Permit No. CAS612008
November 19, 2015

FIND EFFECTIVE, ECO-FRIENDLY PRODUCTS
For Healthy Gardens, People, and Pets
Look for this tag
www.ourwaterourworld.org

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GSI Planning Elements

- Planning Document Coordination
- Designs and Specifications
- Project Prioritization
- Project and Water Quality Improvements Tracking
- Maintenance and Inspections

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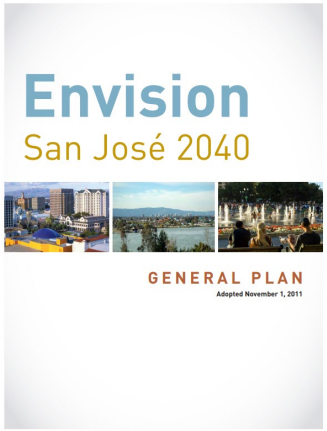
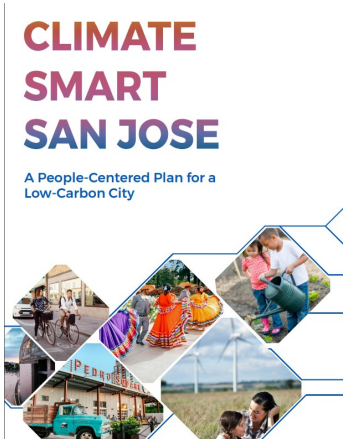
Planning Document Coordination





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

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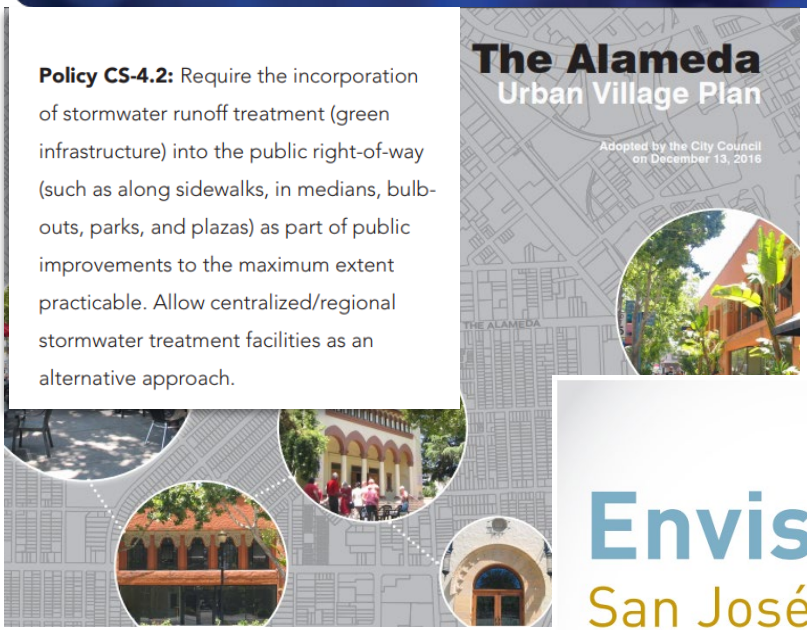
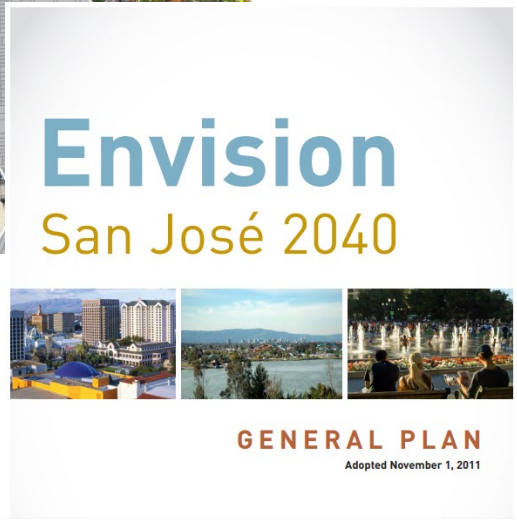
Policy CS-4.2: Require the incorporation of stormwater runoff treatment (green infrastructure) into the public right-of-way (such as along sidewalks, in medians, bulb-outs, parks, and plazas) as part of public improvements to the maximum extent practicable. Allow centralized/regional stormwater treatment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





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

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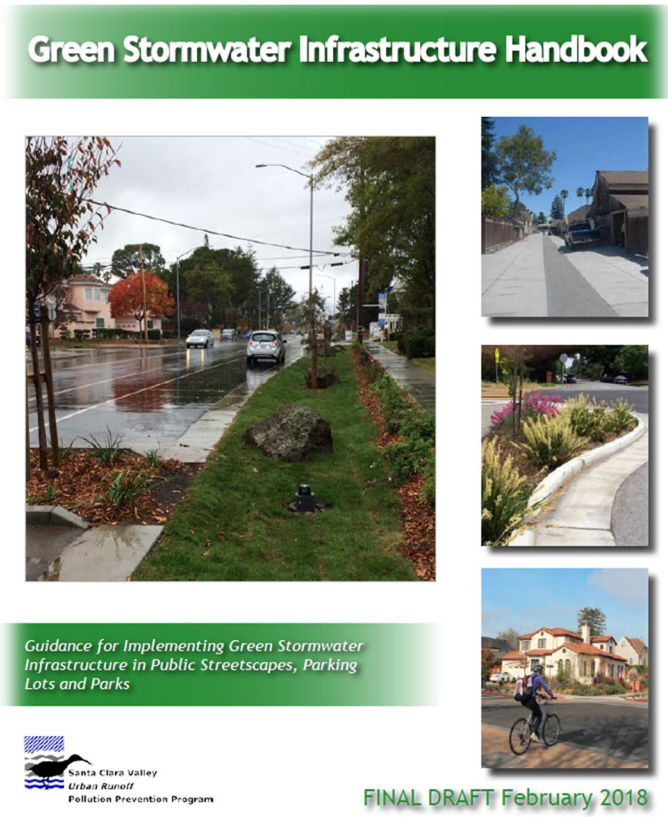
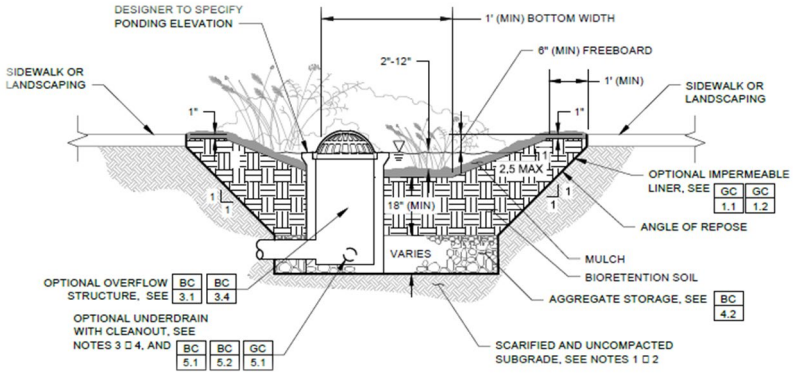
Specifications for Incorporating Green Stormwater Infrastructure



Part 1

Part 2



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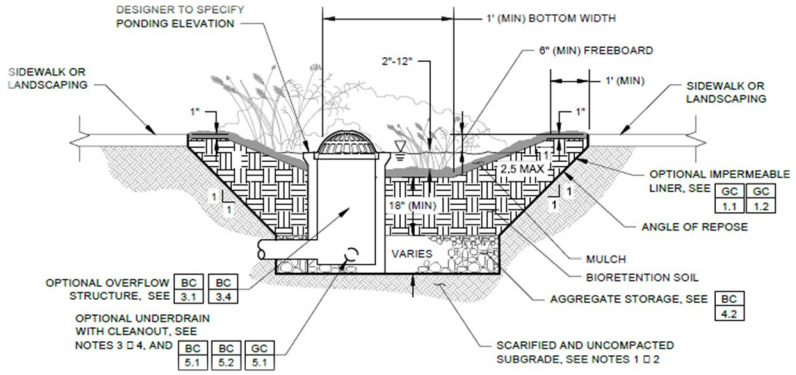
Part 1

- 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
  - Tree Well Filters



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Questions

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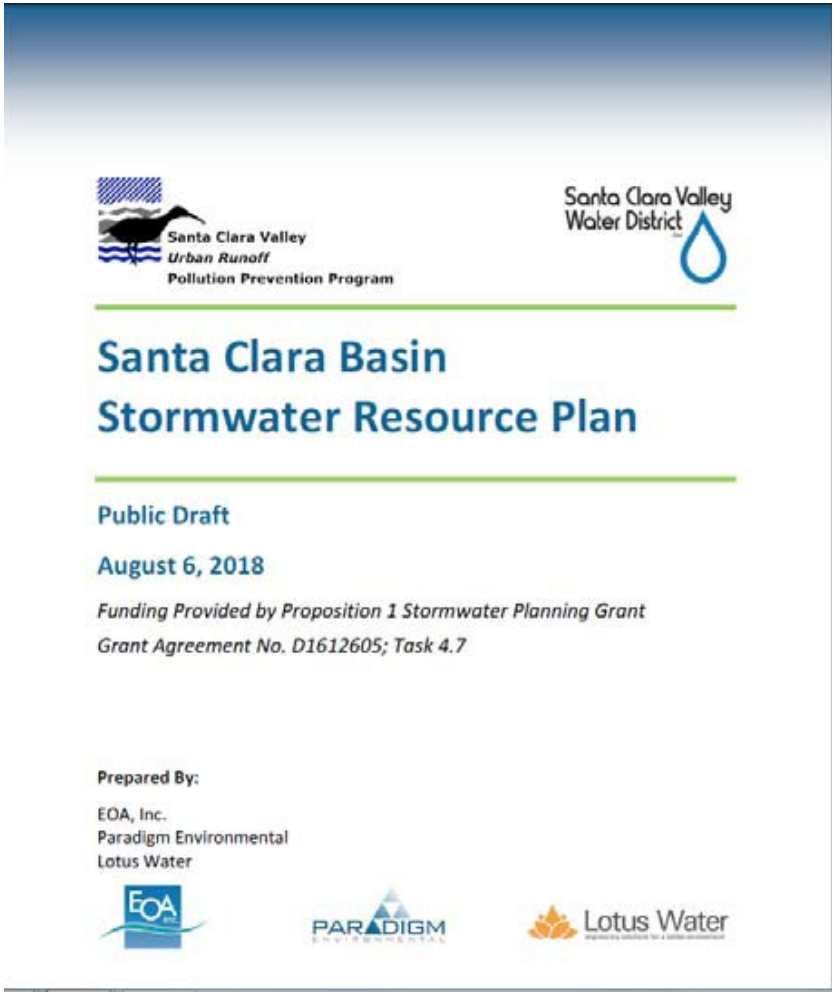

Stormwater Resource Plan

- Required for eligibility for future State grant funds
- Support development and implementation of municipal GSI Plans
- Identify multi-benefit rating criteria

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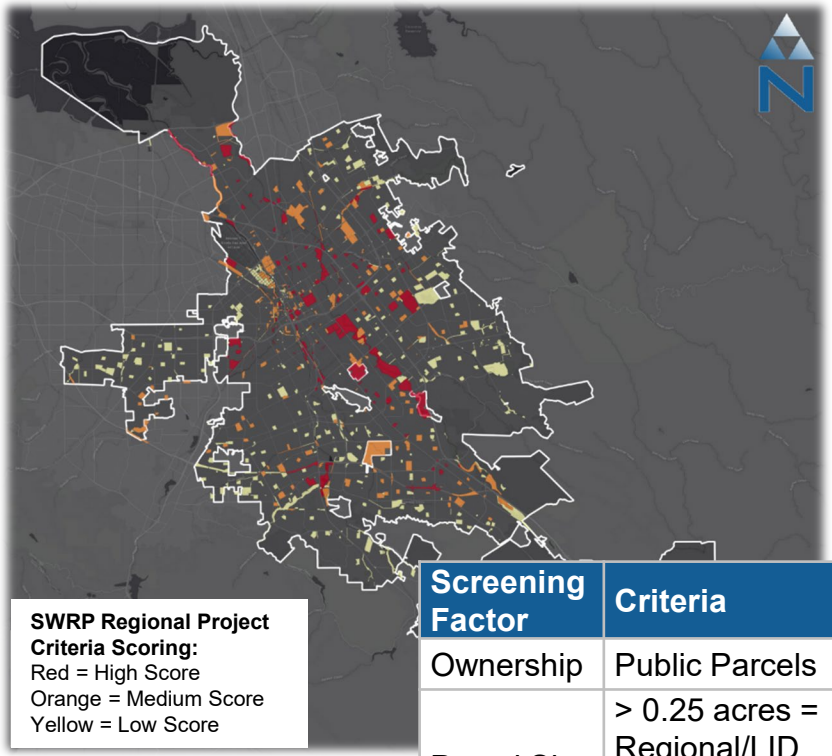
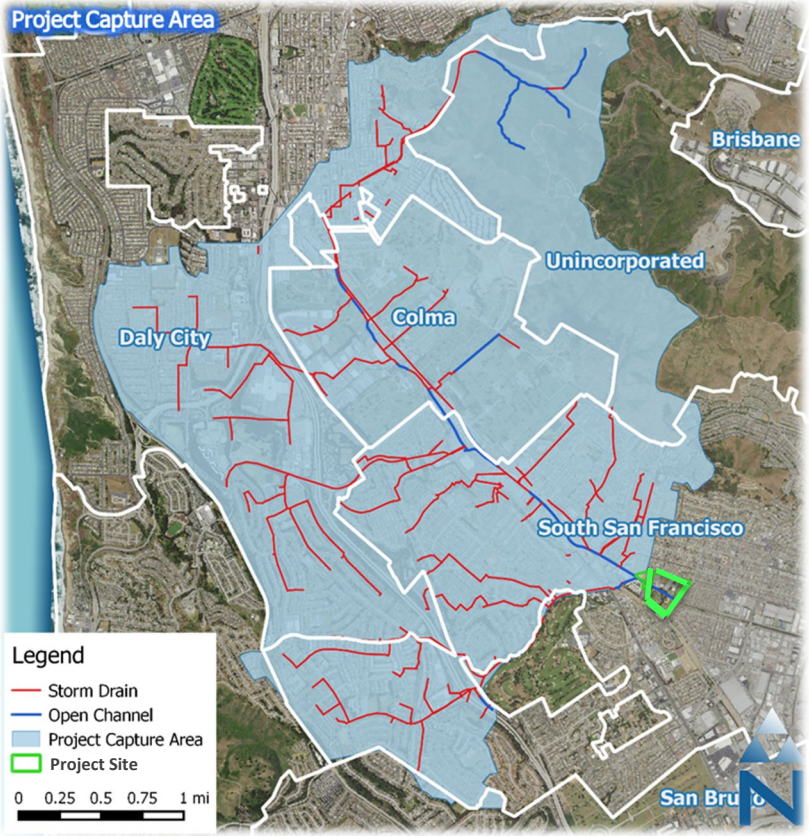
Prioritization Process

- **Regional Projects**



SWRP Regional Project Criteria Scoring:
Red = High Score
Orange = Medium Score
Yellow = Low Score

Screening Factor	Criteria
Ownership	Public Parcels
Parcel Size	> 0.25 acres = Regional/LID
	< 0.25 acres = LID only
Site Slope	< 10 %



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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

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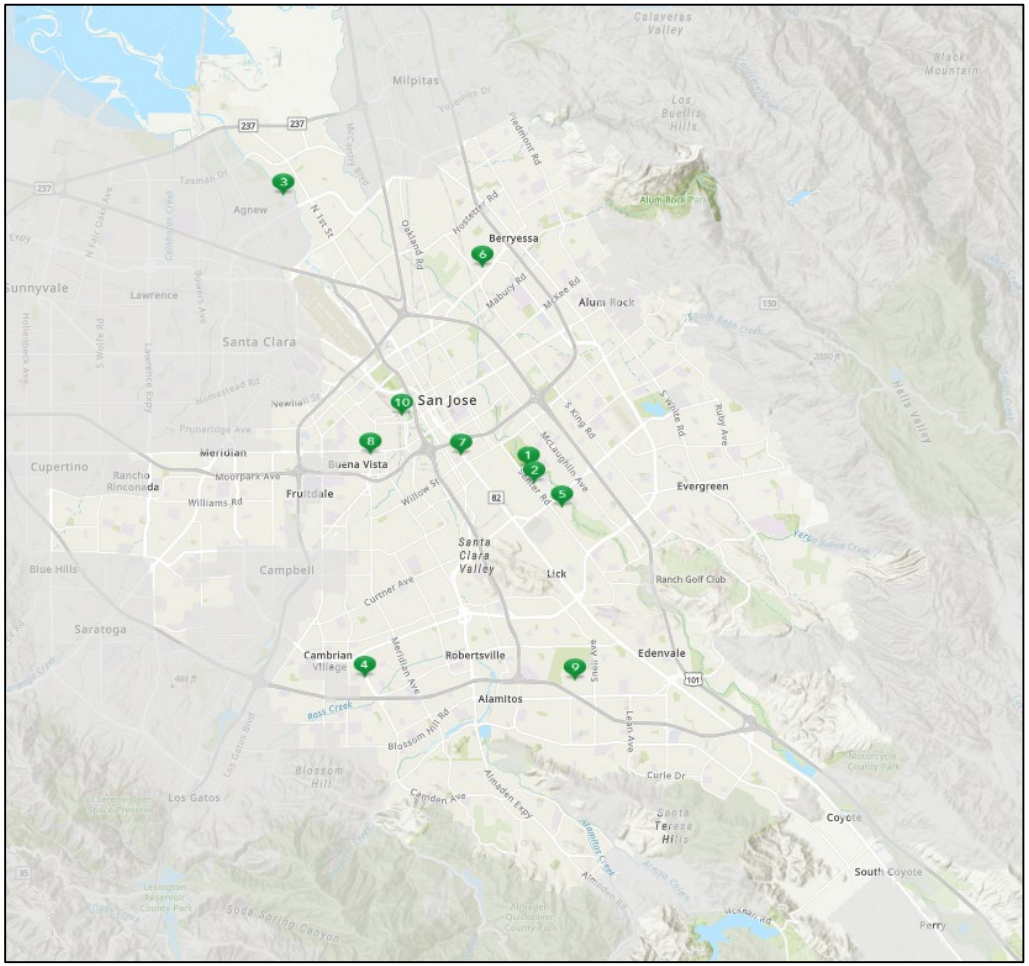
Current and Potential GSI Locations

1. Kelley Park Disc Golf Regional Stormwater Capture Project
2. Kelley Park Stables Regional Stormwater Capture Project
3. River Oaks Pump Station Regional Stormwater Capture Project
4. Roy M Butcher Park Regional Stormwater Project
5. Tully Community Ballfields Regional Stormwater Capture Project
6. Vinci Park Regional Stormwater Capture Project
7. Martha Gardens Green Alleys Project
8. Park Avenue Green Street Project
9. Chynoweth Avenue Green Street Project
10. Autumn Parkway Extension Green Street Project



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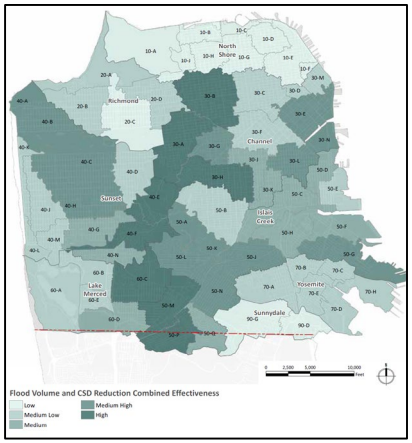
Project Prioritization Continued

- **Green Streets**

Infiltration Feasibility

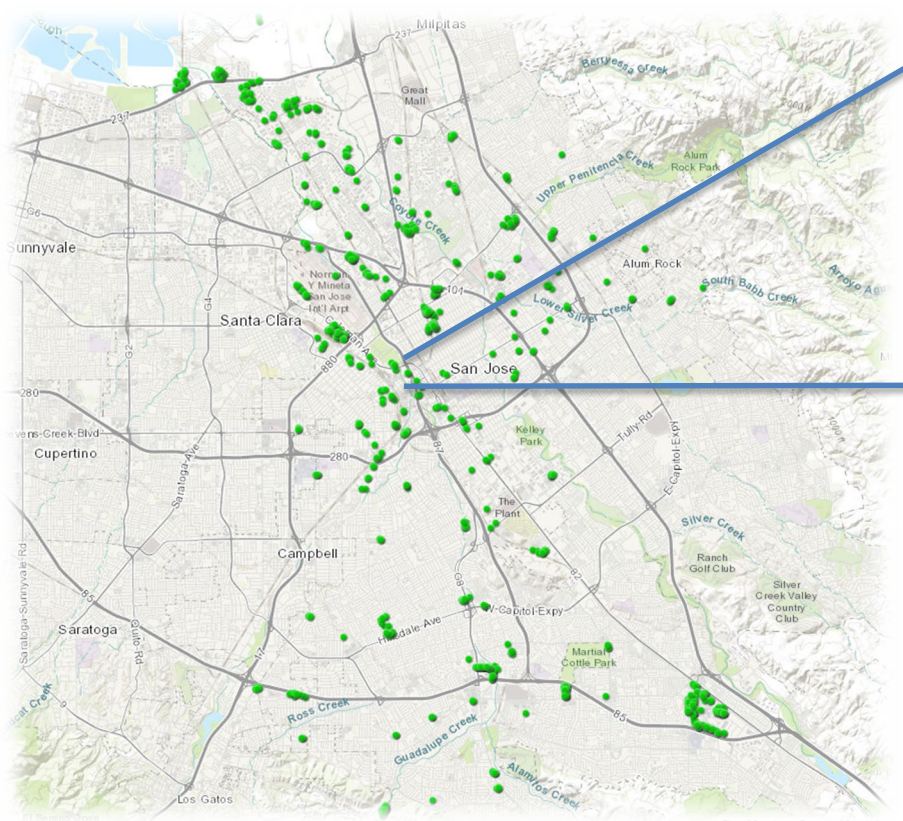
Physical Space Constraints

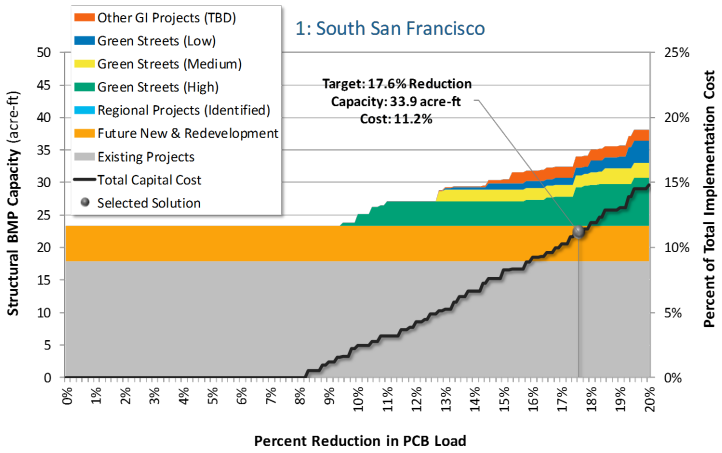
Hydrologic Performance



- **Low Impact Development (Parcels)** – Permit requirements

Tracking Completed Projects and Water Quality Improvements





Maintenance and Inspections

Manually Removing Trash

Proper Storage of Collected Debris

Removing Trash on the Public Right-of-Way

SUGGESTED TOOLS

- Dust pan and brush
- Compostable garbage bags
- Gloves
- Manhole cover hook or lifter (for opening grates)
- Push broom
- Rakes
- Shovels
- Spade
- Tarps/buckets/trash cans (to remove leaf litter/ debris)
- Litter Stick
- Wheel barrow or push cart

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Next Steps

Date	Action
March – 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

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