# San Pablo Ave Green Stormwater Spine August 18, 2021

#### San Mateo Countywide Water Pollution Prevention Program C3 Workshop



# Federal, State, Local Partnerships

# Collaborative, Non-regulatory Public Agency Protect and improve water quality & habitats *Estuary Blueprint* – 5-year workplan

SFEP

**EPA** 

ABAG/

MTC



# **Project Concept Overview**

Design/Build	7 green street retrofits in 7 cities		
Treat	7 acres of impervious surface run-off (cumulatively)		
Emphasize	Bay-Friendly Rated, vegetated approaches		
Monitor	Treatment efficacy		
Maintain	2-year plant establishment		







# **Key Project Goals**

Demonstrate	Multiple Benefits of GSI		
Improve	Water Quality		
Increase	Public Awareness & Understanding		
Grow	Public Agency Acceptance & Capabilities		
Transform	Public Right-of-Way		



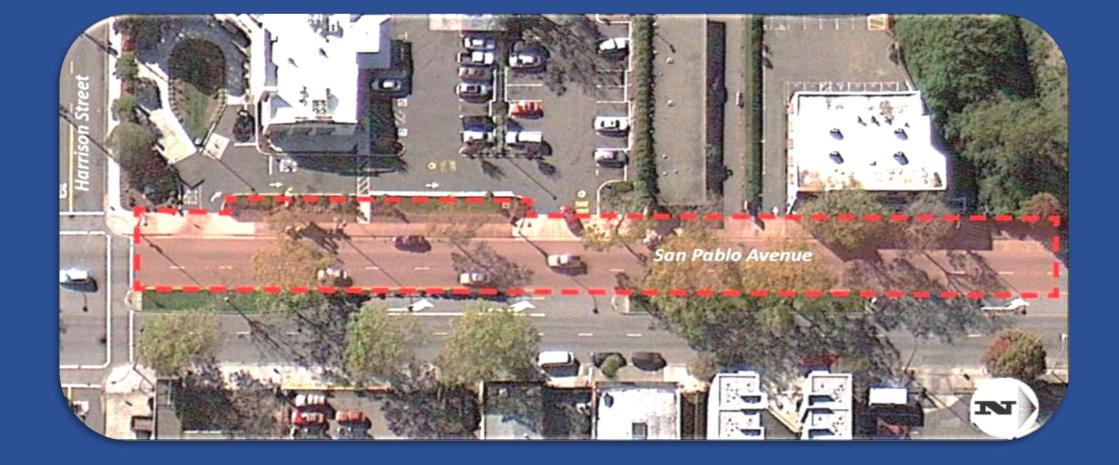
# **Project Team and Funders**

Task	Project Team	Funder	Amt
Plans, Specs, Engineering, Interpretive Signage	Wilsey Ham (civil engineering), Quadriga (landscape design), Kevin Robert Perry (visioning)	US EPA/DWR-IRWM/ <b>MTC-</b> <b>BATA</b>	\$450K
Construction Management, Water Quality Monitoring	MNS Engineering (CM), San Francisco Estuary Institute (Monitoring)	DWR-IRWM/ <b>MTC-BATA</b>	\$2M*
Construction Activities, Plant Establishment	Ghilotti Bros, Inc.	Caltrans/ <b>MTC-BATA</b>	\$1.8M*
El Cerrito 3 Site - Standalone	Same as above	NRA-Strategic Growth Council/ <b>MTC-BATA</b>	\$720K*
		Total	\$4.97M*



# **Project Sites Constructed**





# **Berkeley Site – Before**



### **Berkeley Site – Concept Plan**

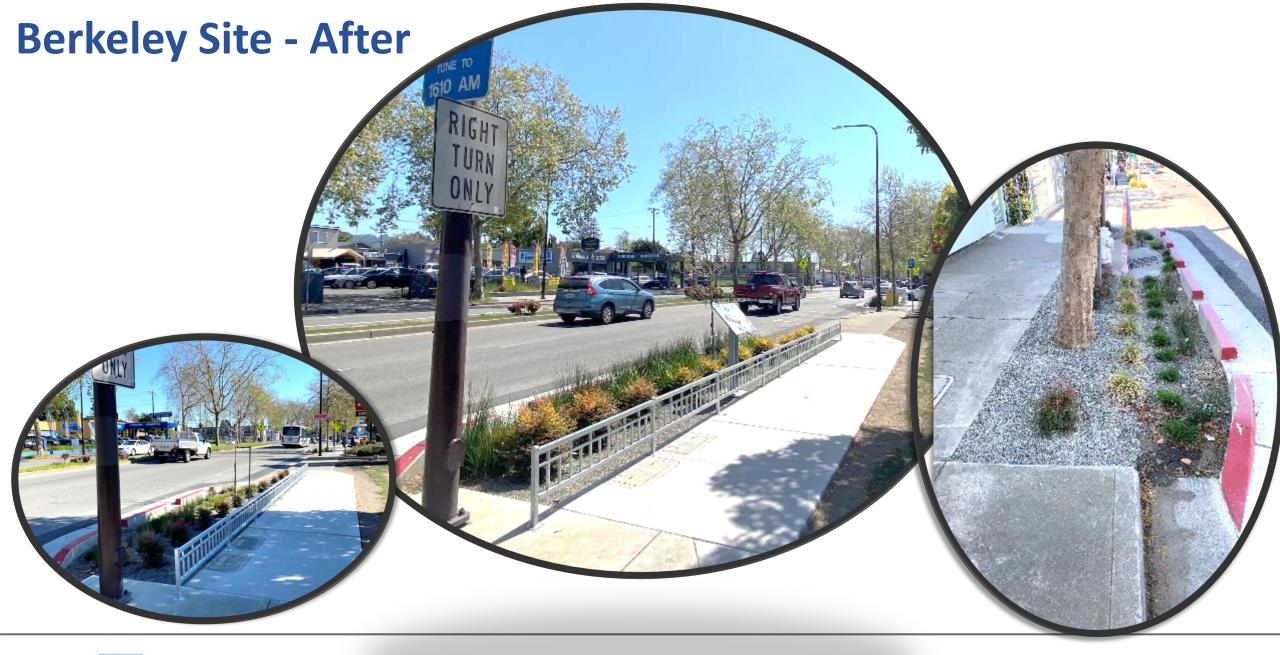




# **Berkeley Site – Existing & Rendering**







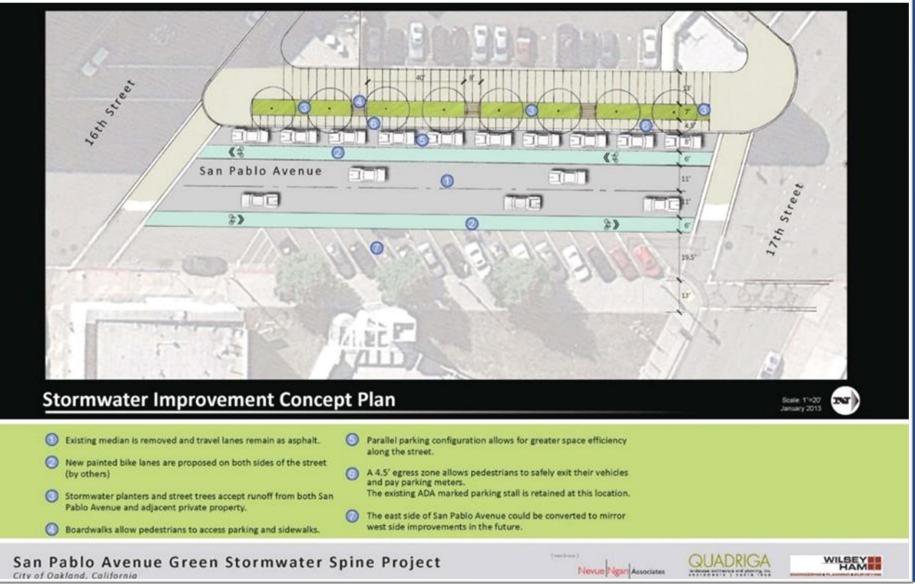




### **Oakland Site - Before**



#### **Oakland Site – Concept Plan**





# **Oakland Site – Existing & Rendering**













#### **El Cerrito Site - Before**

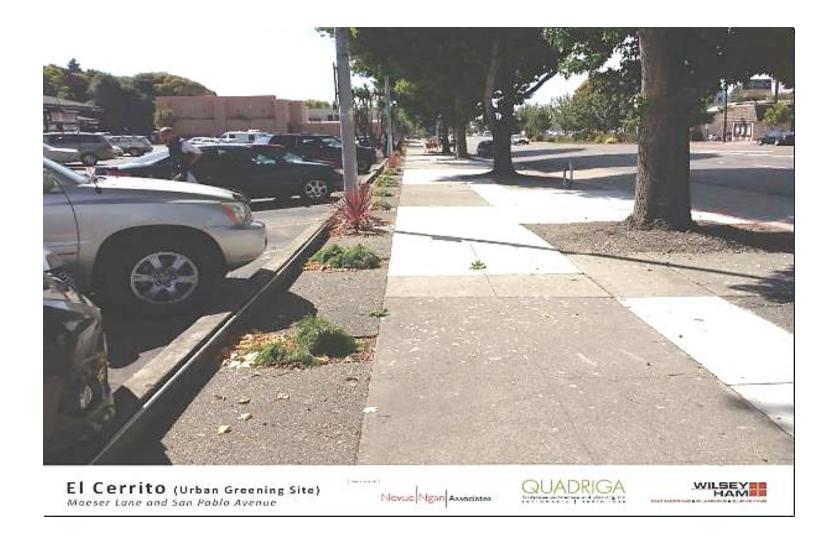




## El Cerrito Site – Concept Plan



# **El Cerrito Site - Existing**







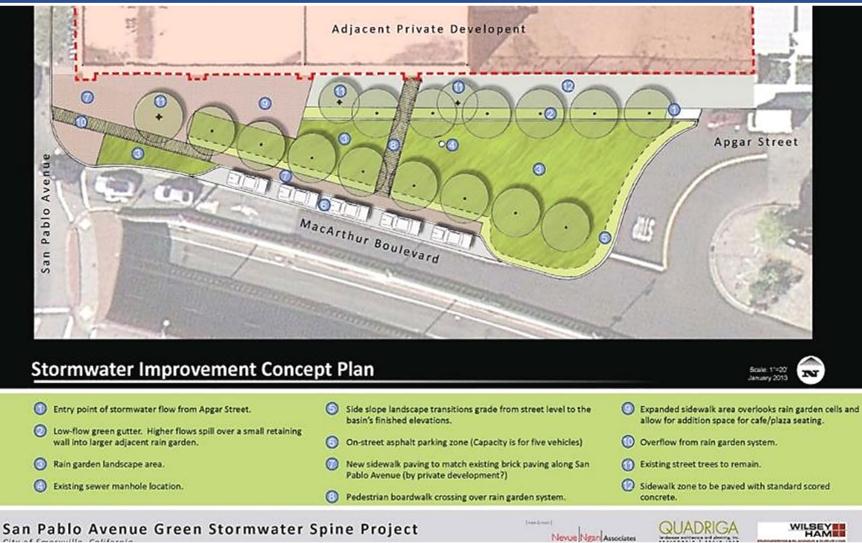




## **Emeryville Site - Before**



#### **Emeryville Site – Concept Plan**



Nevue Ngan Associates

San Pablo Avenue Green Stormwater Spine Project



# **Emeryville Site - Existing**









#### **GREEN STREETS CLEAN POLLUTED WATER BEFORE IT DRAINS TO THE BAY**

#### WHAT ARE GREEN STREETS?

When it rains, stormwater races off roof tops, sidewalks, and streets, picking up pollutants such as motor oil, heavy metals, pesticides, trash, and pet waste. The contaminated water typically flows untreated into storm drains, creeks, and ultimately into the San Francisco Bay

Green Streets collect stormwater in specially designed basins. filled with carefully selected plants and soils. The plants and soil organisms clean the water by filtering and breaking down various pollutants. The cleansed stormwater returns to the storm drain system or soaks into the native soil (replenishing groundwater).

In addition to cleaning the water. Green Streets beautify the community, provide bird and insect habitat, and reduce localized flooding.

#### ¿CUÁLES SON LAS CALLES VERDE?

Cuando flueve, las carreras de aguas pluviales fuera. tejados, aceras y calles recogiendo contaminantes, tales como: aceite de motor, metales pesados, pesticidas, basura y desechos de mascotas. Esta agua contaminada normalmente fluye sin tratar en las alcantarillas, amoyos, y en última instancia en San Francisco Bay.

Calles Verdes recoger las aguas pluviales en las cuencas diseñadas especialmente llenos de plantas y suelos cuidadosamente seleccionadas. Las plantas y los organismos del suelo limpian el agua por filtración y romper varios contaminantes. El agua de lluvia limpia vuelve al sistema colector de aguas pluviales o empapa en los suelos naturales (agua subternineas reposición).

Además de limpiar el agua, las Calles Verdes embeliecer la comunidad, proveen hilbitat de aves y de insectos, y reducir inundaciones localizadas.



# **Challenges & Lessons**



# **Major Lessons Learned**

Integrate GSI into larger street improvement project

\$\$ for utility investigations, coordination & accommodation

Limit project to 2-3 separate jurisdictions

Need <u>active</u> participation & support from municipal partners!!

Be flexible: build low- hanging fruit projects earlier

Communication critical: partners, funders, impacted businesses/residents

Any problem is solvable with enough time & money





# **Thank You**



#### **Have Questions?**

Josh Bradt | Project Manager o 415.778-6671 | c 510.292.7240 Josh.bradt@sfestuary.org

sfestuary.org

