

SAN FRANCISCO



ESTUARY
PARTNERSHIP



San Pablo Avenue Green Stormwater Spine

Project Overview

October 1, 2012

Joshua Bradt





- Estuary Partnership Overview
- Green Infrastructure Overview
- SPINE Demonstration Project
 - Approach/Goals
 - Partners & Rolls
 - Project Components & Timeline
 - Funding Sources





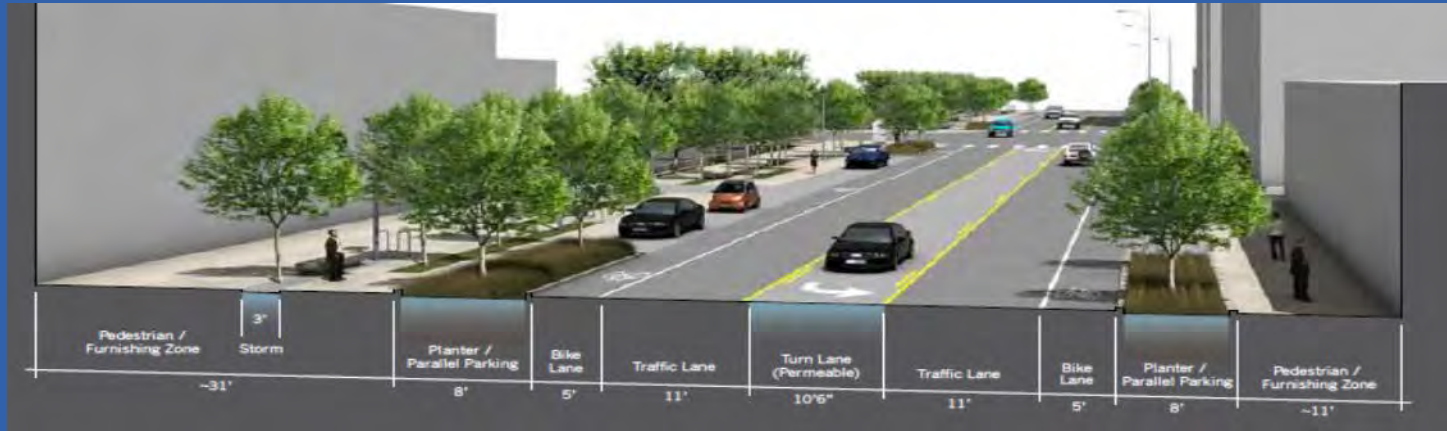
San Francisco Estuary Partnership

- Collaborative, Non-regulatory Public Agency
- Mission: to protect, restore, and enhance water quality and fish and wildlife habitat in and around the San Francisco Bay Delta Estuary
- Creator and Manager of the *Comprehensive Conservation and Management Plan*
 - 200+ actions over 9 program areas
 - 100+ stakeholders





Green Streets/Infrastructure



Method/Benefit	Porous Pav	Ntve Lndscp'g	Mat. Trees	Bio-Swales	Rain Grdns	Greenways
↓ Water pollution	+	+	+	+	+	+
↓ Runoff Volumes	+	+	±	+	+	+
↑ Air Quality	+	+	+	+	+	+
↓ GHG/Store CO2	±	+	+	+	+	+
↓ Energy Use	±	+	+	±	±	±
↓ Heat Islands	-	+	+	+	+	+
↑ Green Jobs	+	+	+	+	+	+
↑ Property Values	?	+	+	+	+	+
↑ Quality of Life	±	+	+	+	+	+
↑ Aesthetics	-	+	+	+	+	+

San Pablo Avenue Green Stormwater Spine Project Description/Approach

- Implement green infrastructure facilities in seven cities along SPA
- Treat runoff from 7 acres of impervious surface (min.) – one acre per city
- Emphasis on vegetated approaches in public right-of-way





Four Key Project Goals

- Demonstrate Benefits and Effectiveness of Green Retrofits
- Improve Water Quality
- Increase Public Awareness
- Increase Municipal/County Acceptance



San Pablo Avenue Approach

Capitalize on Multiple Opportunities



Green Street Opportunity	San Pablo	Richmond	El Cerrito	Albany	Berkeley	Emeryville	Oakland
<i>Shared street and parking lot facilities</i>	👍	👍	👍	👍	👍	👍	👍
<i>Stormwater canopies at transit stops</i>	👍	👍	👍	👍	👍		
<i>Manage parking lot and/or building runoff</i>	👍	👍	👍	👍	👍	👍	👍
<i>Create a better pedestrian environment</i>	👍	👍	👍	👍	👍	👍	👍
<i>Rearrange parking to yield landscape space</i>	👍	👍	👍	👍	👍	👍	👍
<i>Project site is near local creeks</i>		👍			👍		
<i>Project site is near potential development</i>	👍	👍			👍		👍



San Pablo Avenue Opportunities

Create a better and "greener" pedestrian environment



El Camino Real
(Existing Conditions)



San Pablo Avenue Opportunities

Create a better and "greener" pedestrian environment



El Camino Real
(Proposed Arterial Retrofit)



San Pablo Avenue Approach

Create Projects That Have High Demonstration Value





San Pablo Avenue Approach

Make it Beautiful!



San Pablo Avenue Opportunities

Shared stormwater facilities with parking lots and San Pablo Avenue



Donnelly Avenue
Burlingame, California



Project Partners and Roles

Estuary Partnership (Project Manager)	City Partners	SF Estuary Institute	Bay-Friendly Coalition
<ul style="list-style-type: none"> • Consultants • Contractors • CEQA process • Outreach efforts • Model Ordinance • Grant reporting/ budgets 	<ul style="list-style-type: none"> • Select Sites • Provide available data • Review/approve designs • Facilitate permitting • Participate in local outreach • Attend maintenance training workshop • Provide long-term maintenance 	<ul style="list-style-type: none"> • Develop Project Assessment & Evaluation Plan • Conduct water quality & hydrologic monitoring • ReNUWit -- specialized water quality monitoring 	<ul style="list-style-type: none"> • Provide planting plan guidance • Rate all sites using Bay-Friendly scoring system



Major Project Tasks	Timeline	Funding Source
Project Management/Admin	On-going-Dec 2015	All funders
Design & Engineering	Spring 2013	EPA/UG
Environmental Review & Permits	Spring 2013	EPA/UG
Construction & Constr. Management	Summer-Winter 2013	Caltrans/IRWM/UG
Water Quality Monitoring	Fall 2012 - 2015	IRWM
Plant Establishment/Maintenance	Spring 2014-Fall 2015	IRWM/UG
Model Green Infrastructure Ordinance	Fall 2014	EPA
Regional Outreach	On-going-Dec 2015	IRWM



Funding Sources	Total Amount
US EPA – San Francisco Bay Water Quality Improvement Fund	\$307,646
California Department of Transportation (SF-Oakland Bay Bridge Mitigation)	\$1,800,000
DWR – Integrated Regional Water Management Program (Prop 84)	\$2,000,000
Strategic Growth Council – Urban Greening Project Grant (Prop 84)	\$717,692
TOTAL AMOUNT	\$4,825,338

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Josh Bradt

jbradt@waterboards.ca.gov

510.622.5048

www.sfestuary.org



Photograph by Dan Cloak

