

SUSTAINABLE STRATEGIES OF CITY OF LA'S WATER QUALITY COMPLIANCE MASTER PLAN FOR URBAN RUNOFF



Santa Monica Bay

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CITY OF LOS ANGELES



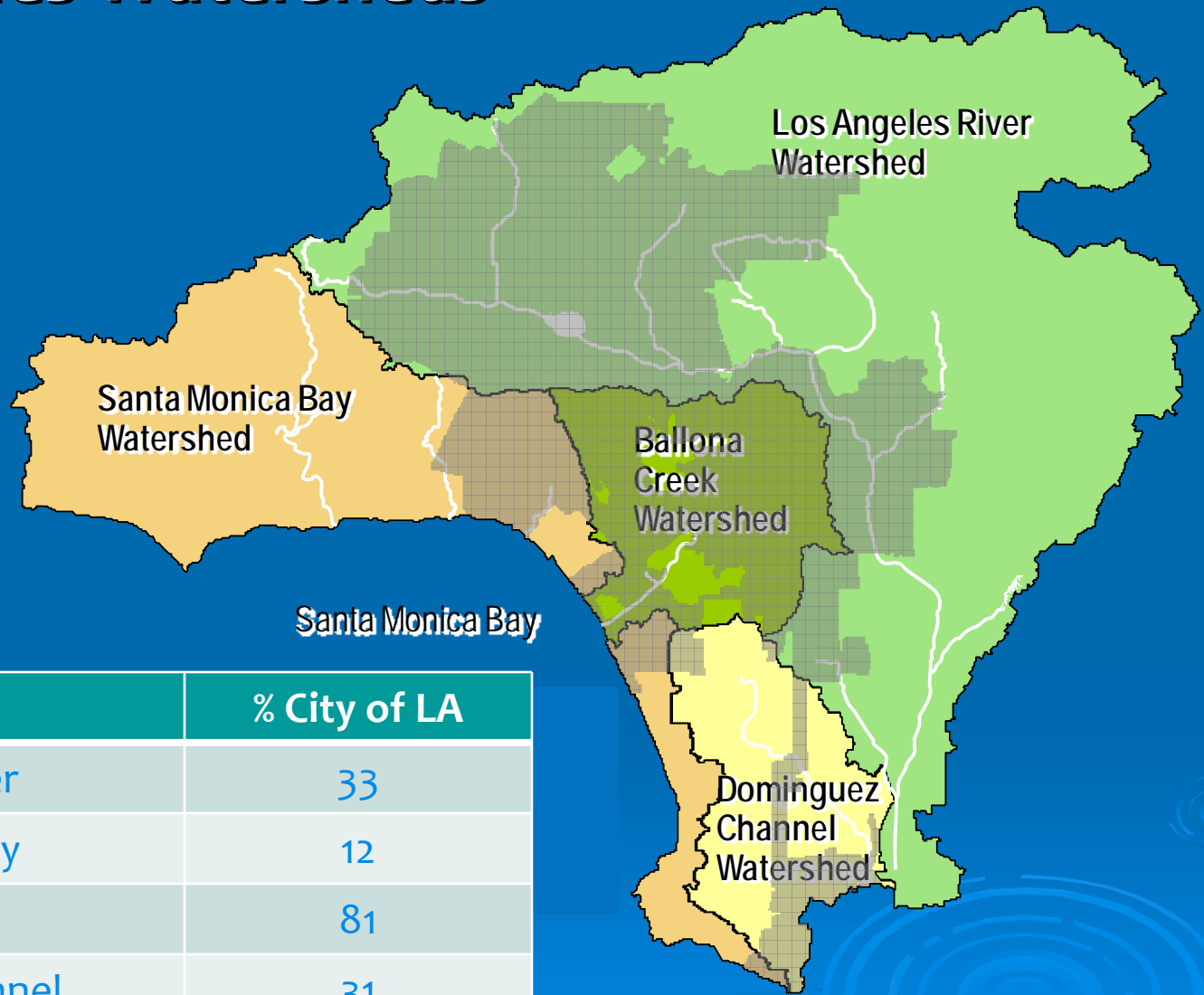
SANITATION
DEPARTMENT OF
PUBLIC WORKS



Overview

- Los Angeles Watersheds & TMDLs
- WQCMPUR Development
- WQCMPUR Funding
- WQCMPUR Implementation Status
- Ballona Creek TMDL Implementation Plans
- Green Infrastructure Demonstration Projects
- Green Design Standards

Los Angeles Watersheds



Watershed	% City of LA
Los Angeles River	33
Santa Monica Bay	12
Ballona Creek	81
Dominguez Channel	31

Los Angeles TMDLs

Water body	Trash	Bacteria	Nutrients	Metals	Toxics	Debris
LA River	+	↑	+	+		
Ballona Creek	+	+		+	+	
Santa Monica Bay		+				↑
Marina del Rey		+			+	
LA Harbor		+		↑	↑	
Machado Lake	+					
Lincoln Park Lake	↑		↑			
Dominguez Channel				↑	↑	
Wilmington Drain				↑		
Echo Park Lake	↑				↑	

➤ Over 60 TMDLs by 2012

WQCMPUR Development

Mission

- Reduce pollution from urban runoff to meet Clean Water Act mandates

Objectives

- Provide strategies for planning, implementation, funding
- Integrate existing efforts
- Engage stakeholders

Keywords

- Source control & institutional measures
- Runoff capture and re-use
- Infiltration and groundwater recharge
- Multi-use benefits
- Green & sustainable approaches

WQCMPUR Schedules

To date

- Council Motion: Mar 07
- WQMPUR first draft: Aug 08
- WQCMPUR final draft: Apr 09
- Board of PW adoption: Apr 09

Next steps

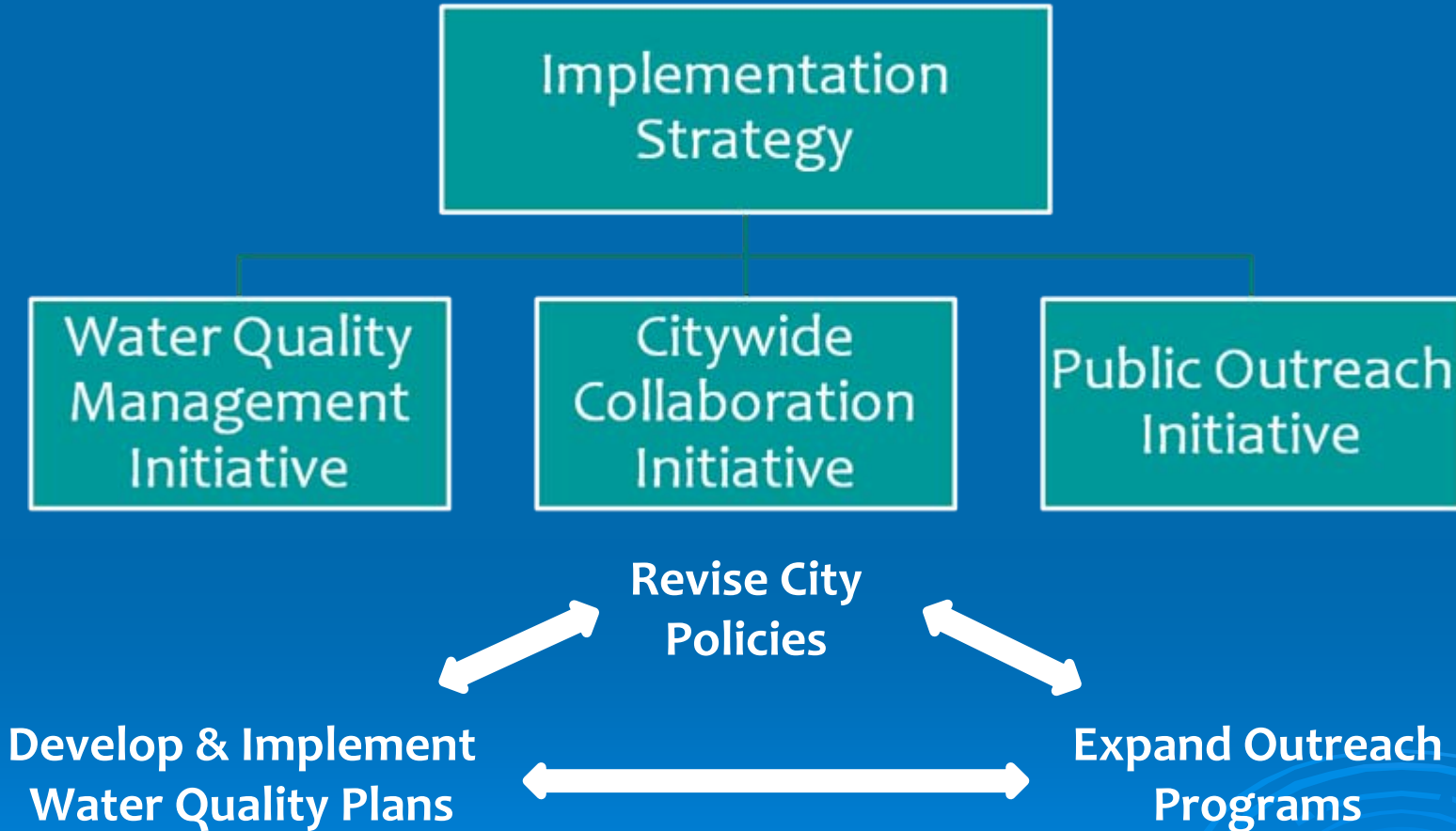
- Funding
- City Council adoption
- Implementation

Website

- www.lastormwater.org

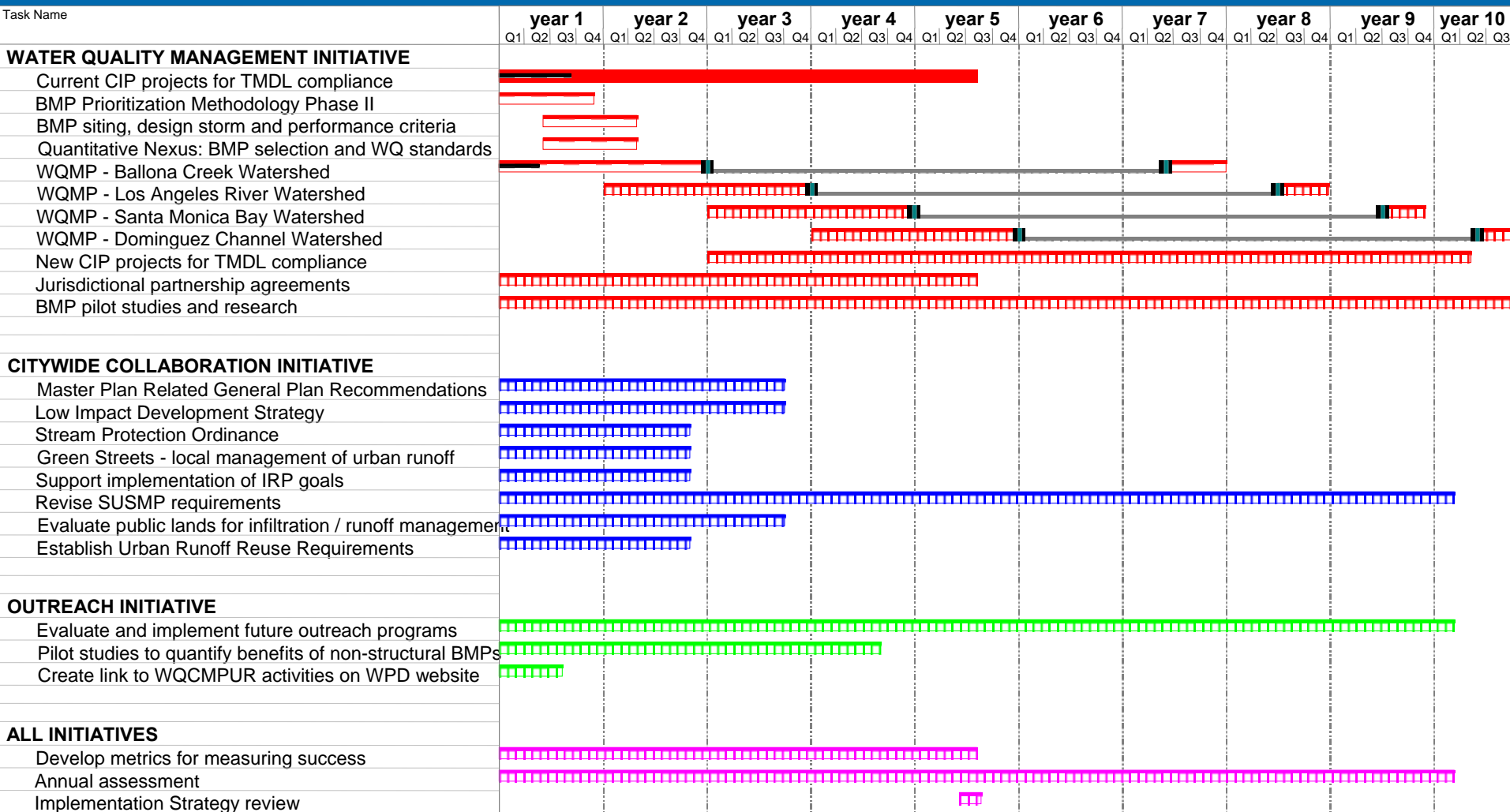


WQCMPUR Development

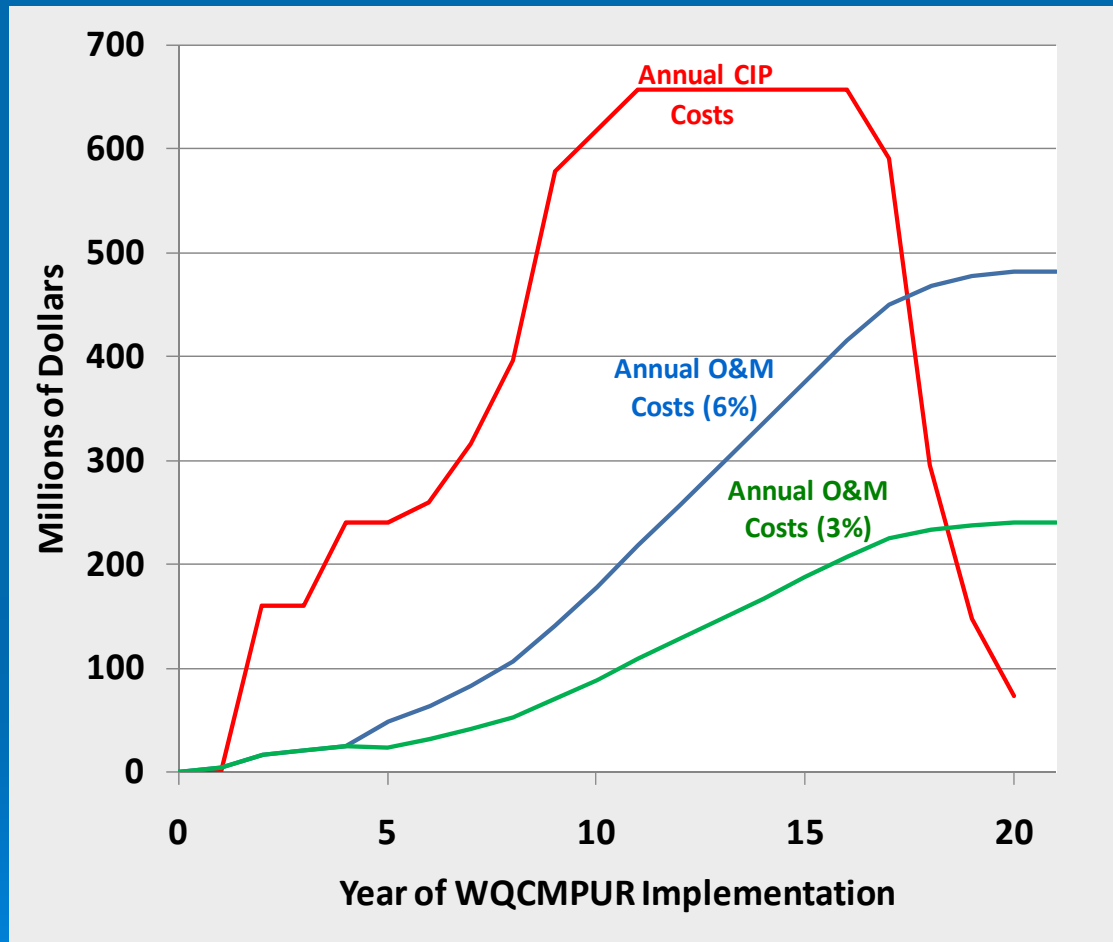


WQCMPUR Development

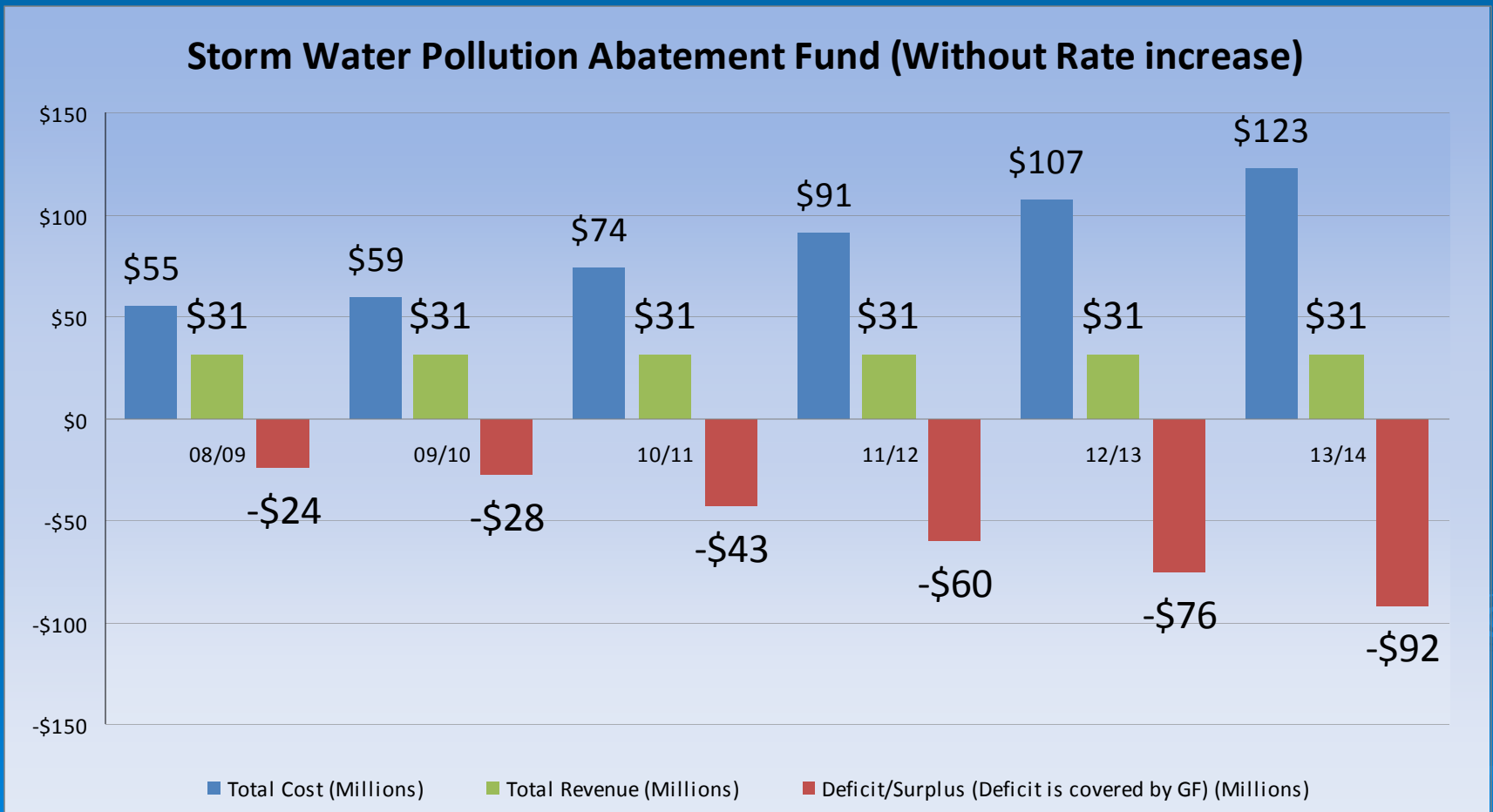
Action Plan



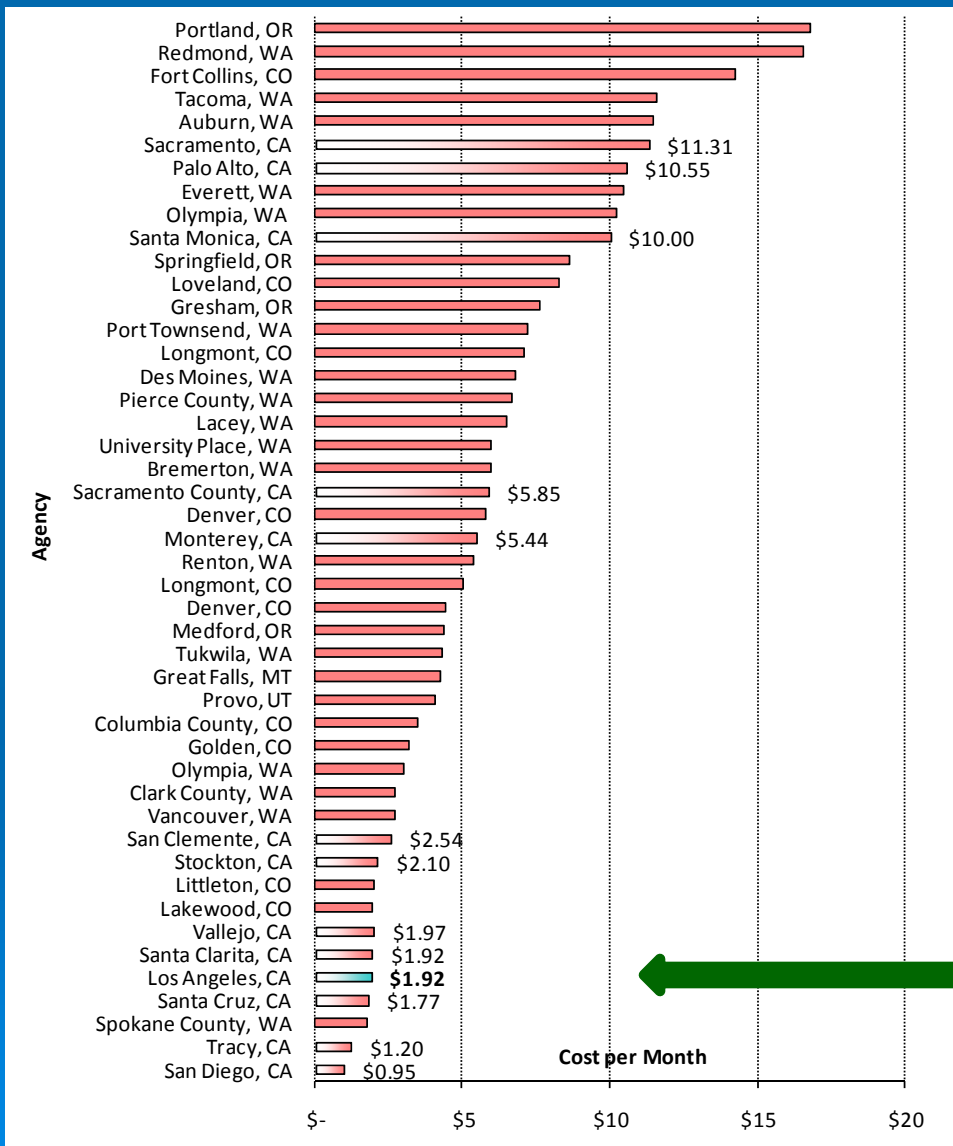
WQCMPUR Funding Needs



Watershed Protection Program Funding



Stormwater Fees



\$1.92/month

WQCMPUR Implementation

WQCMPUR Strategy



Strategic Plan for Ballona Creek



TMDL Implementation Plans



Project concept designs



Ballona Creek TMDL Implementation Plans

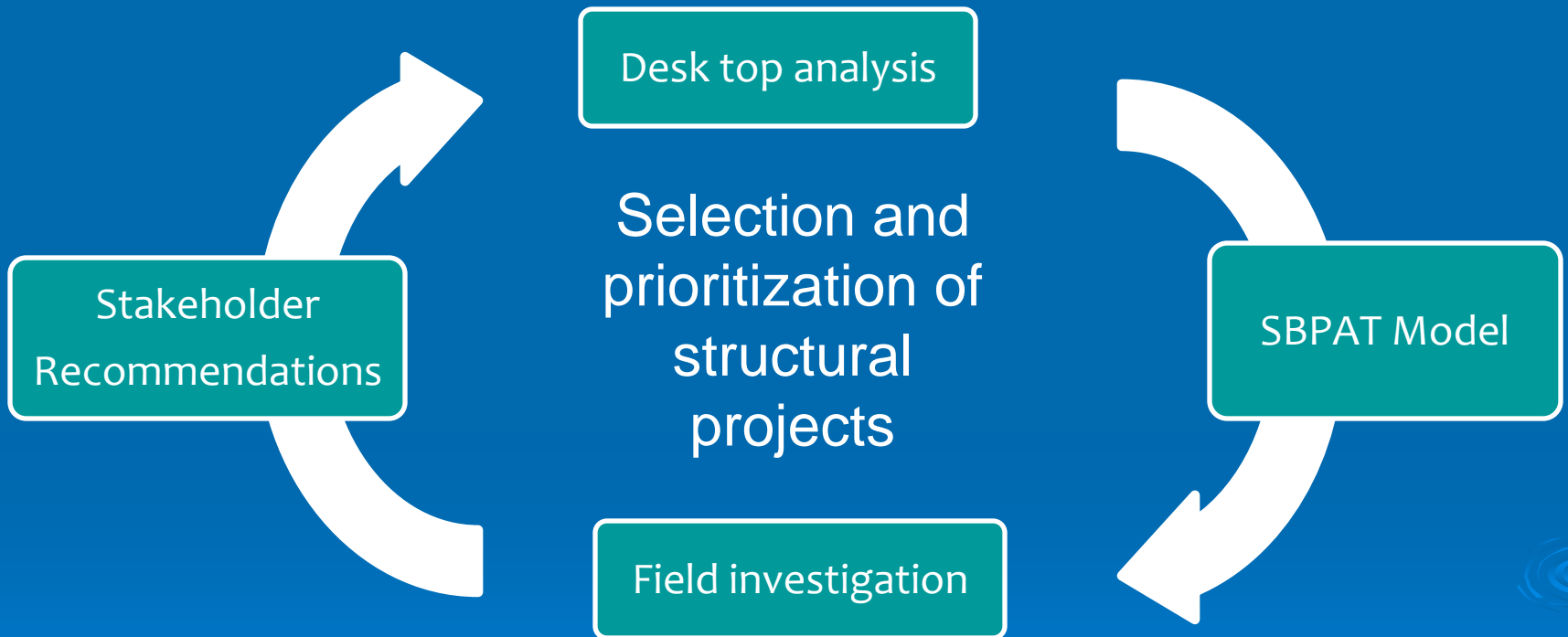
TMDL	I-Plan due	Dry weather compliance	Wet weather compliance
Bacteria	Oct 2009	2013	2021
Metals	Jan 2010	2016	2021
Toxics	Jan 2011	NA	2021



TMDL Implementation Plans

- Institutional measures
- Structural projects: regional and distributed
- Source control/outreach

Ballona Creek TMDL Implementation Plans



Ballona Creek TMDL Implementation Plans

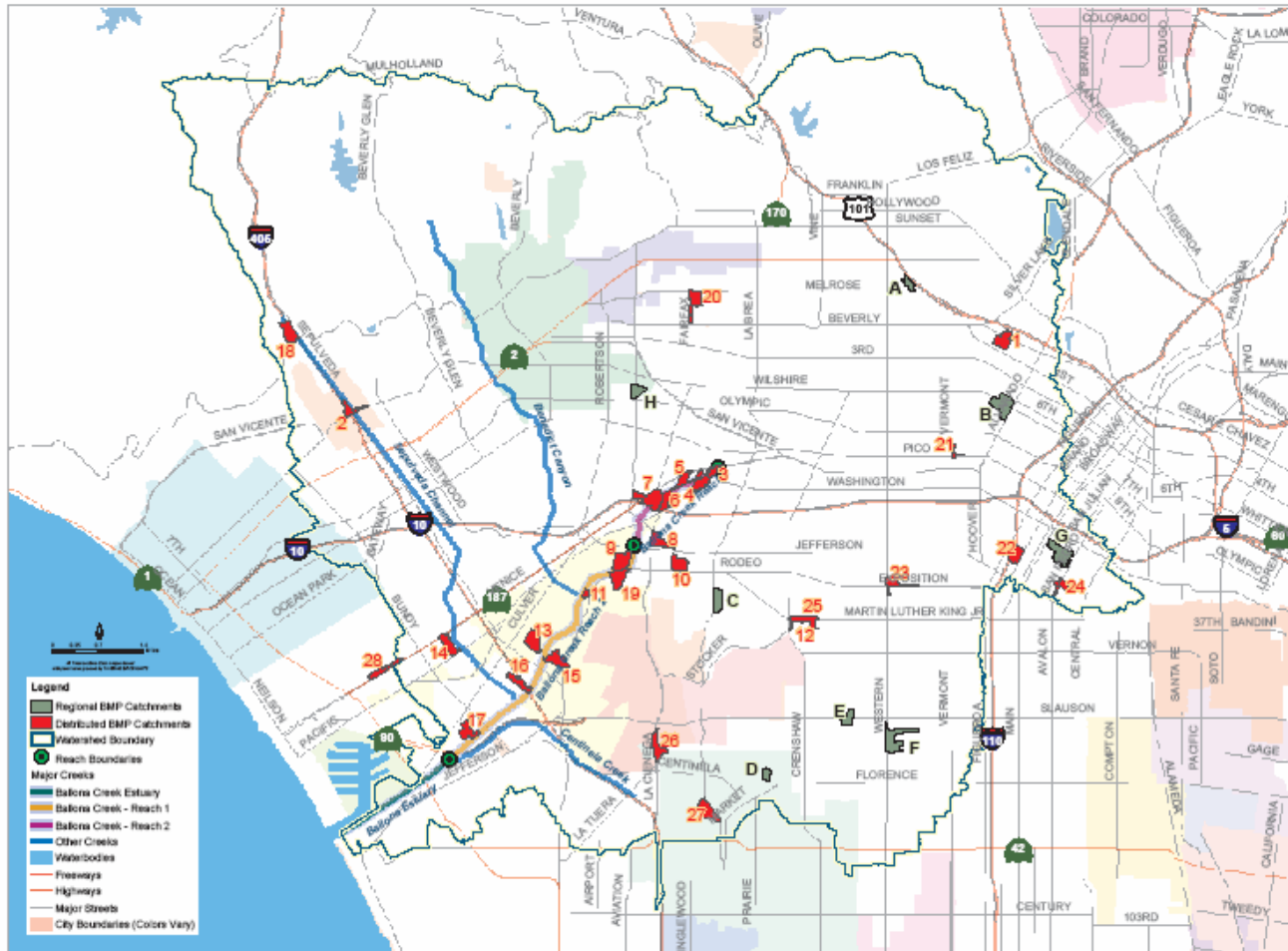


FIGURE ES-3 Ballona Creek Watershed - Priority Distributed and Regional BMP Sites

Green Infrastructure Demonstration Projects

Partners

- Bureau of Sanitation
- Department of Water and Power

Goals

- Local urban runoff management
- Infiltration and groundwater recharge

Projects

- Woodman Avenue Multi-Beneficial Stormwater Capture Project
- Laurel Canyon Boulevard Parkway infiltration Project
- North Hollywood Alley Retrofit BMP Project
- Others in development

Green Infrastructure Demonstration Projects

Woodman Avenue Median Infiltration Demonstration Project



- 3500 ft of street medians
- Pretreatment, vegetated swales, underground detention
- 80 acre-feet/year
- Project cost: \$3.0M

Green Infrastructure Demonstration Projects

Laurel Canyon Blvd. Parkway Infiltration Demonstration Project



- 1400 ft of parkways and sidewalks
- Infiltration swales
- 40 acre-feet/year
- Project cost: \$2.0M

Green Design

Green Design Overview

Application	BMP
Streets	Parkway swales major & secondary highways
	Parkway swales local & collector streets
	Parkway swales without street parking
	Vegetated stormwater curb extensions
Alleys	Gutter retrofit existing alleys
	Permeable pavement new alleys
Residential properties	Downspout disconnections
	Rain gardens
Open spaces	Detention & infiltration ponds

Green Design

Parkway swale in local/collector street



Before



After

Green Design

Parkway swale without street parking



Before



After

Green Design

Vegetated stormwater curb extension



Before



After

Green Design

Gutter retrofit for existing alleys



Before



After

Green Design

Permeable pavement for new alleys



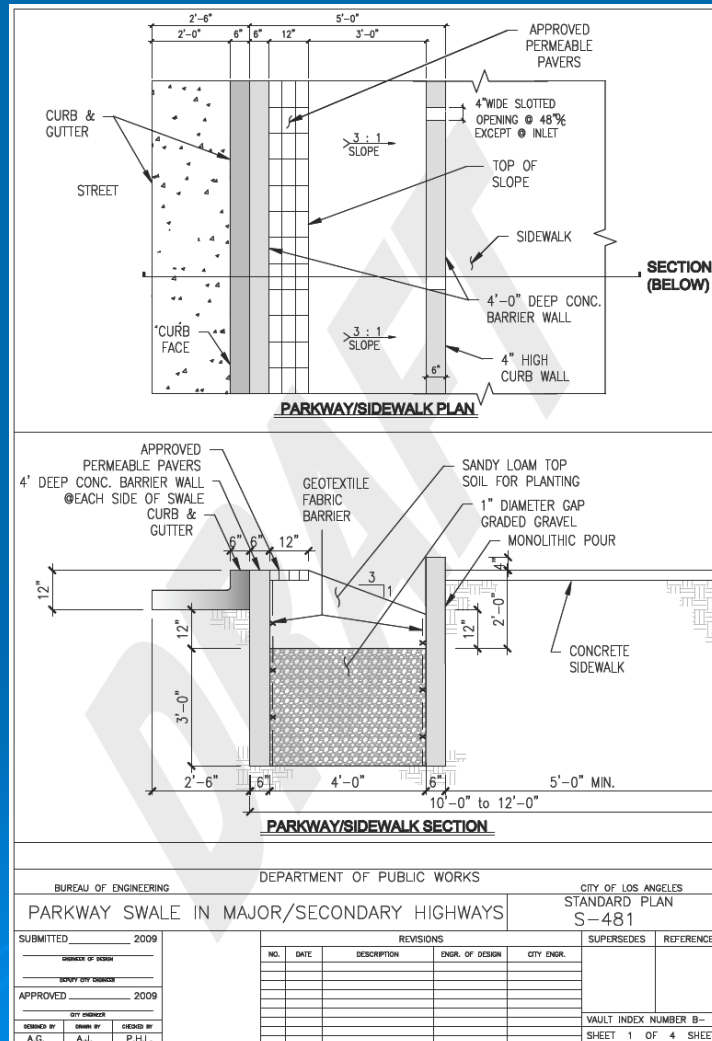
Before



After

Green Design

Example of
Green Design:
Parkway Swale



Plan view

Cross section

City of Los Angeles Stormwater Program

www.lastormwater.org

