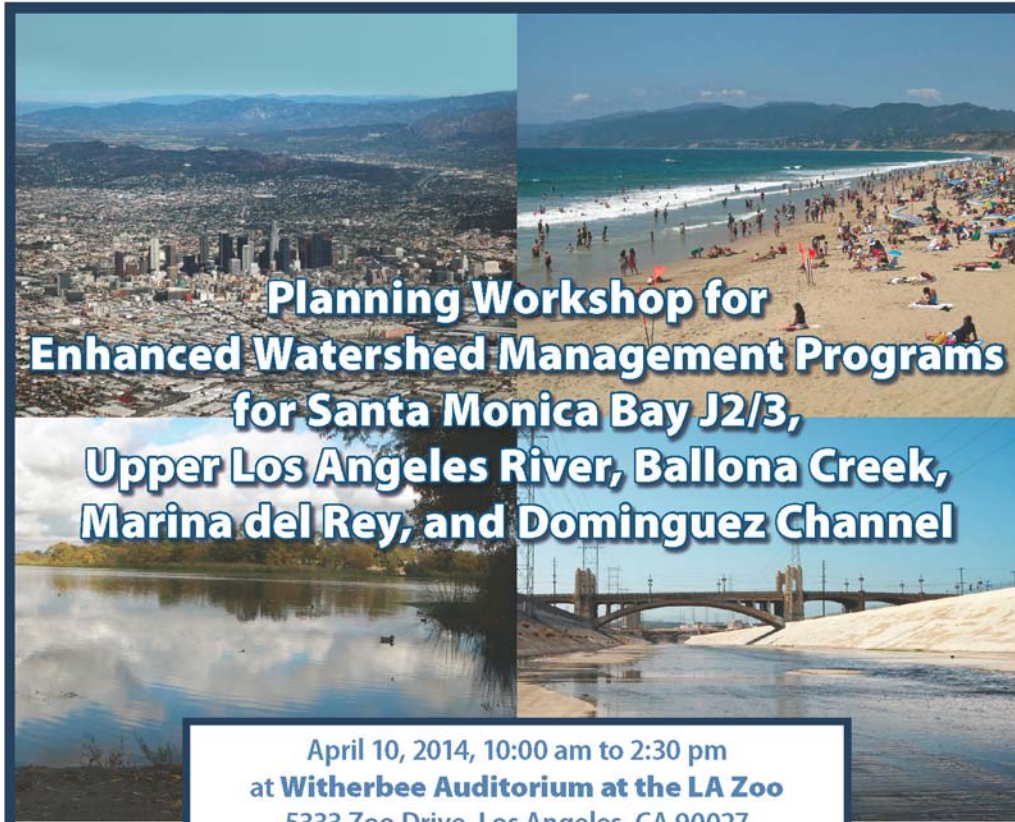


# EWMP Planning Workshop



**Planning Workshop for  
Enhanced Watershed Management Programs  
for Santa Monica Bay J2/3,  
Upper Los Angeles River, Ballona Creek,  
Marina del Rey, and Dominguez Channel**

**April 10, 2014, 10:00 am to 2:30 pm  
at Witherbee Auditorium at the LA Zoo  
5333 Zoo Drive, Los Angeles, CA 90027**

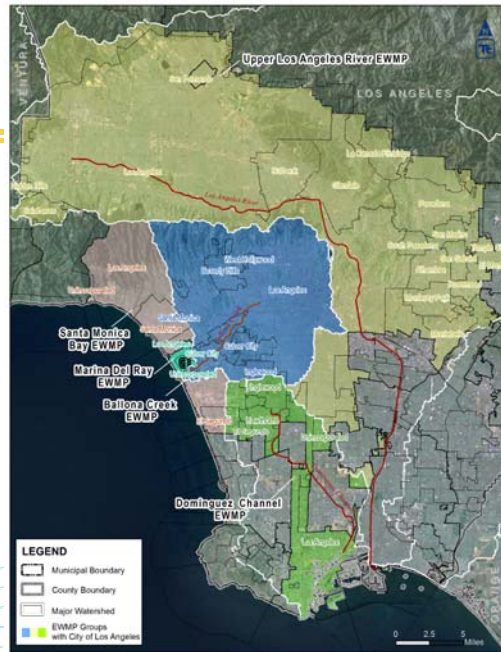
The Watershed Management Groups for Santa Monica Bay J2/3, Upper Los Angeles River, Ballona Creek, Marina del Rey, and Dominguez Channel need your assistance with developing the Enhanced Watershed Management Programs (EWMPs) for the LA County MS4 Permit. All interested parties are welcome to attend this important kickoff meeting. Please help us create a road map for improving water quality in our region. Lunch will be provided.

Please come to the workshop to learn about the EWMP development process and information about how you can provide ideas and comments on the plan. RSVP to [LAStormwater@lacity.org](mailto:LAStormwater@lacity.org) by March 28th. Please let us know if you have special dietary requirements.

## EWMP Partners

Alhambra	El Monte	Inglewood	Monterey Park	San Marino
Beverly Hills	El Segundo	La Canada Flintridge	Pasadena	Santa Monica
Burbank	Glendale	Los Angeles County	Rosemead	South Pasadena
Calabasas	Hawthorne	Los Angeles County	San Fernando	Temple City
City of Los Angeles	Hidden Hills	Flood Control District	San Gabriel	West Hollywood
Culver City		Montebello		

**Five Watersheds being addressed at today's workshop**



**Upper LA River Watershed Management Group  
(representatives & primary contacts)**

- **City of LA &** – Alfredo Magallanes & Vijay Desai
- **County of LA & LACFCD** – Jolene Guerrero & Tona Avalos
- **Alhambra** – Claudine Meeker & David Dolphin
- **Burbank** – Alvin Cruz
- **Calabasas** – Alex Farassati
- **Glendale** – Maurice Oillateguerre
- **Hidden Hills** – Joe Bellomo
- **La Canada Flintridge** – Arabo Parseghian
- **Montebello** – Sam Kouri
- **Monterey Park** – Amy Ho & Mikki Lee
- **Pasadena** – Sheila Kennedy
- **Rosemead** – Sean Sullivan
- **San Fernando** – Robert Dickey
- **San Gabriel** – Algis Marciuska
- **San Marino** – Kevin Sales
- **South Pasadena** – Shin Furukawa & Mikki Lee
- **Temple City** – Mikki Lee

## **Ballona Creek Watershed Management Group (representatives and primary contacts)**

- **City of LA** – Huub Cox & Ryan Thiha
- **County of LA & LACFCD** – TJ Moon
- **Beverly Hills** – Daniel Cartagena
- **Culver City** – Steve Finton & Kaden Young
- **Inglewood** – Lauren Amimoto
- **West Hollywood** – Matthew Magener & Sharon Perlstein
- **Santa Monica** – Neal Shapiro & Rick Valte

3

## **Santa Monica Bay Beaches Watershed Management Group (representatives & primary contacts)**

- **City of LA** – Huub Cox & Hamid Tadayon
- **County of LA & LACFCD** - TJ Moon
- **Santa Monica** – Neal Shapiro & Rick Valte
- **El Segundo** – Lifan Xu

4

## **Dominguez Channel Watershed Management Group (representatives and primary contacts)**

- **City of LA** – Alfredo Magallanes & Vijay Desai
- **County of LA & LACFCD** – Bill Johnson
- **El Segundo** – Lifan Xu
- **Hawthorne** – Doug Krauss
- **Inglewood** – Lauren Amimoto

5

## **Marina del Rey Watershed Management Group**

- **County of LA & LACFCD** – TJ Moon
- **City of LA** – Huub Cox and Wendy Dinh
- **Culver City** – Steve Finton & Kaden Young

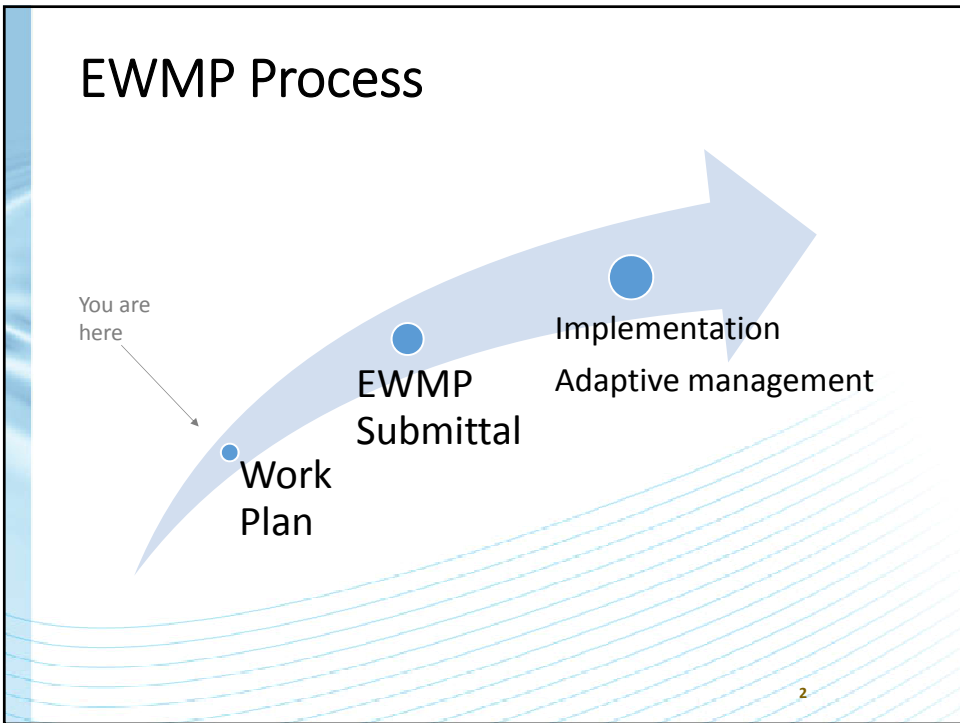
6

## Watershed Management Groups

- **Purpose** – to collaborate amongst agencies (jurisdictions) across the watershed to promote more cost-effective and multi-beneficial water quality improvement projects to comply with the MS4 Permit
- **Process** – the WMGs meet on a monthly basis to address EWMP and other MS4 Permit compliance issues
- **Status** – some WMGs have been meeting regularly for several years. WMG collaboration will likely continue indefinitely to promote regional watershed water quality benefits.

# EWMP Elements

1

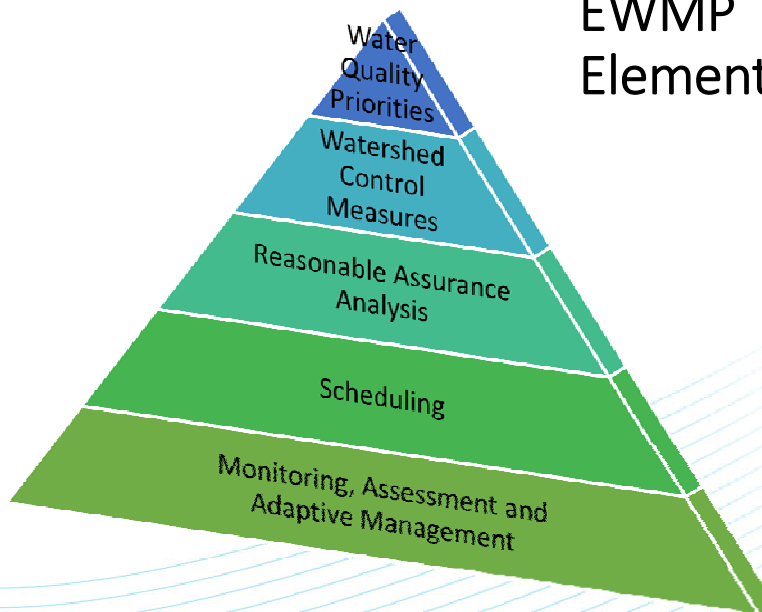


## EWMP Development

- Work Plan
  - Path forward for developing EWMP
  - Data compilation and analysis conducted to date
  - June 28, 2014
  
- EWMP
  - Comprehensive Plan for complying with Permit
  - Multiple other benefits
  - June 28, 2015

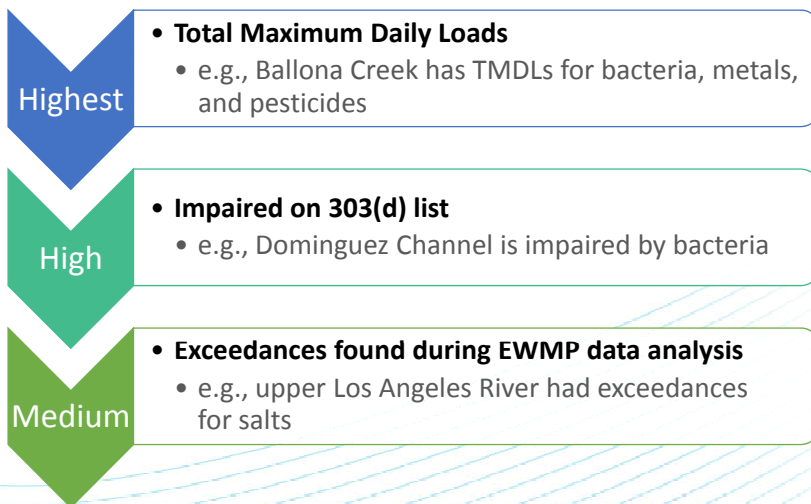
3

## EWMP Elements



4

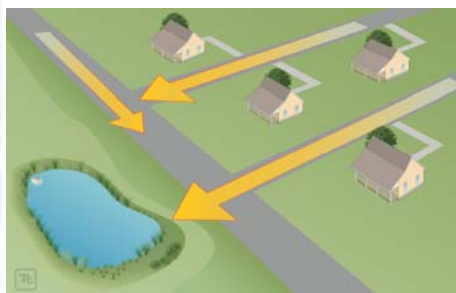
## Water Quality Priorities



5

## Control Measures

### REGIONAL



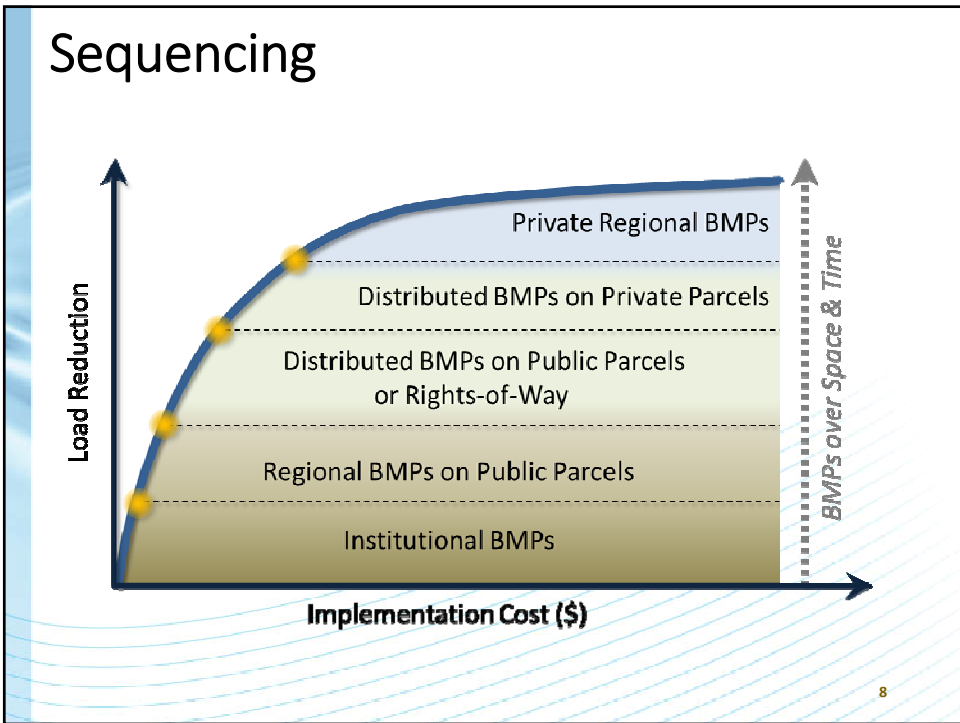
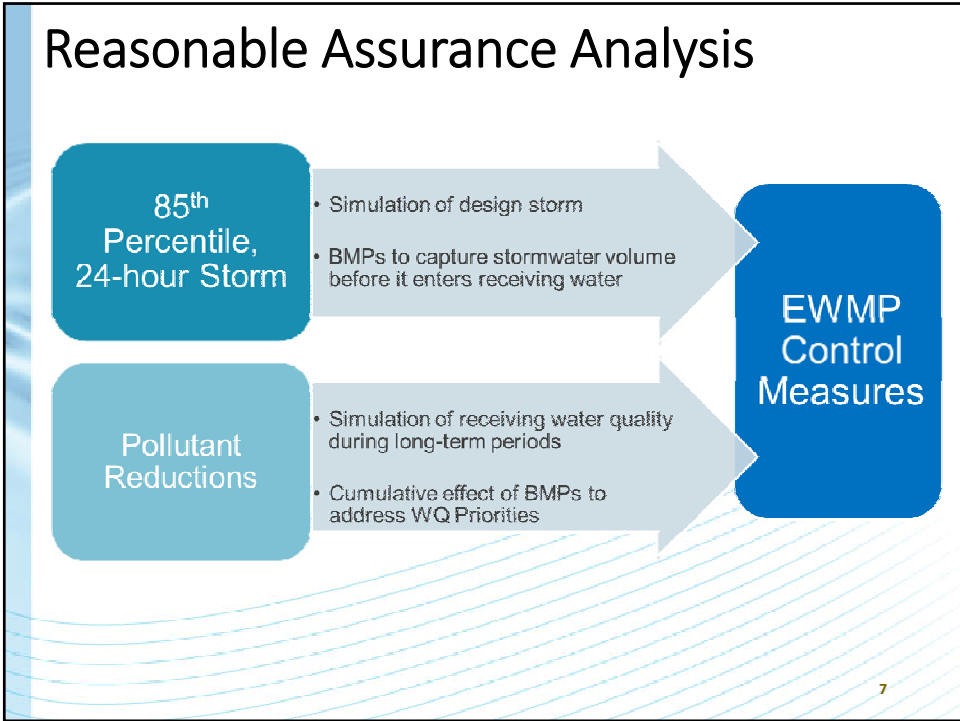
### DISTRIBUTED



### INSTITUTIONAL:

- Enhanced MCMs (e.g., street sweeping)
- Irrigation reduction
- + Many more

6



# Scheduling

## Los Angeles River TMDLs

TMDL	Weather Condition	Compliance Dates and Compliance Milestone									
		2012	2013	2014	2015	2016	2020	2024	2028	2032	2037
Trash	All	9/30	9/30	9/30	9/30	9/30					
		70%	80%	90%	96.70%	100%					
		20%	40%	60%	80%	100%					
Metals	Dry	1/11					1/11	1/11			
		50%					75%	100%			
	Wet	1/11						1/11	1/11		
		25%						50%	100%		
Bacteria	Wet										3/23
											Final

## Outcome of EWMP

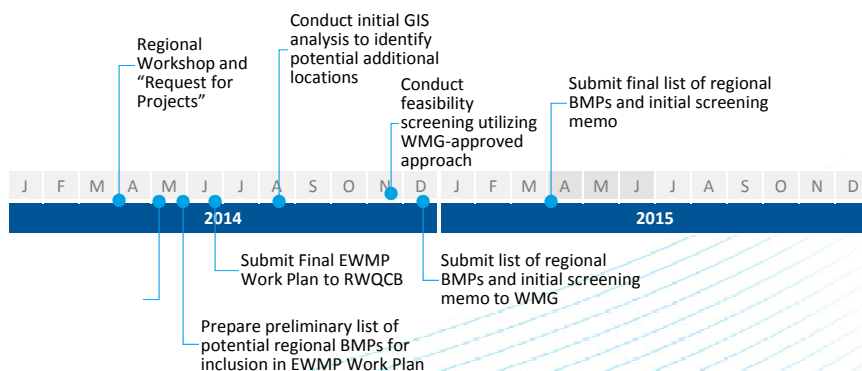
- Prioritization of water quality issues
- Identification of control measures
  - Emphasis on Regional EWMP Projects
- Scheduling for implementation
- Estimates of costs
- Process to adapt based on monitoring data and experience gained

## Regional Projects

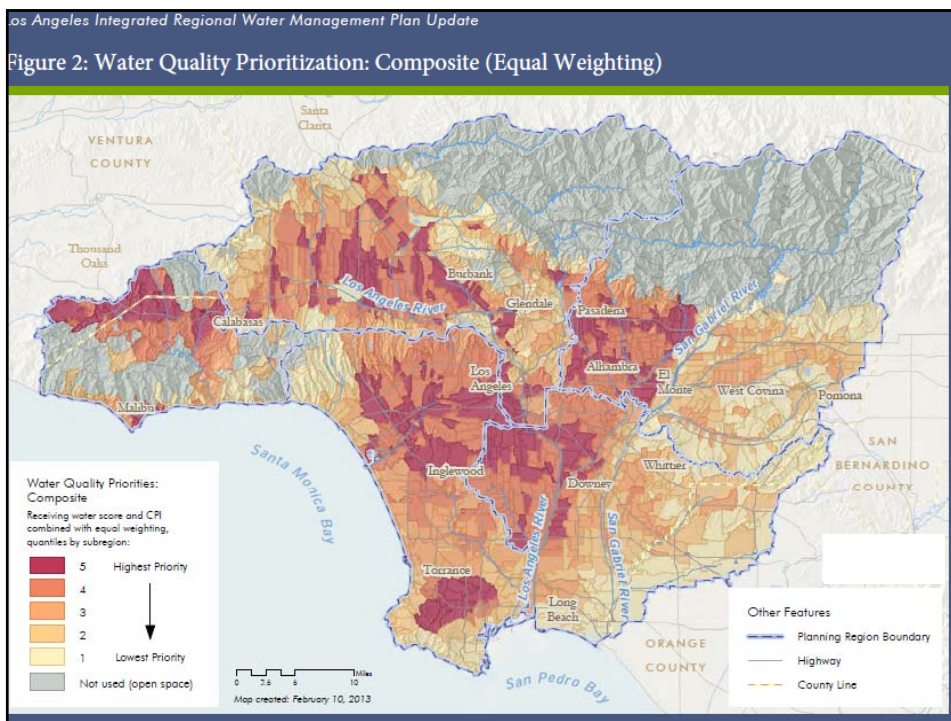
- Review schedule and progress to date
- Describe integration with other planning efforts
- Define types of regional projects
- Provide examples of projects already in place or planned
- Next steps/invite input in breakout sessions

1

## Schedule

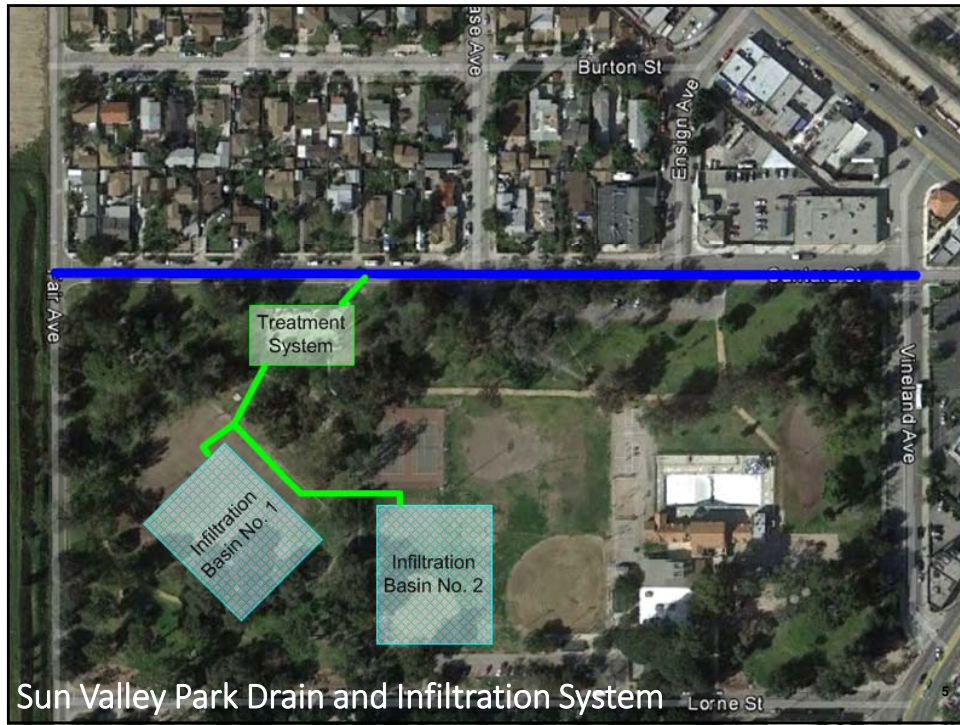


2

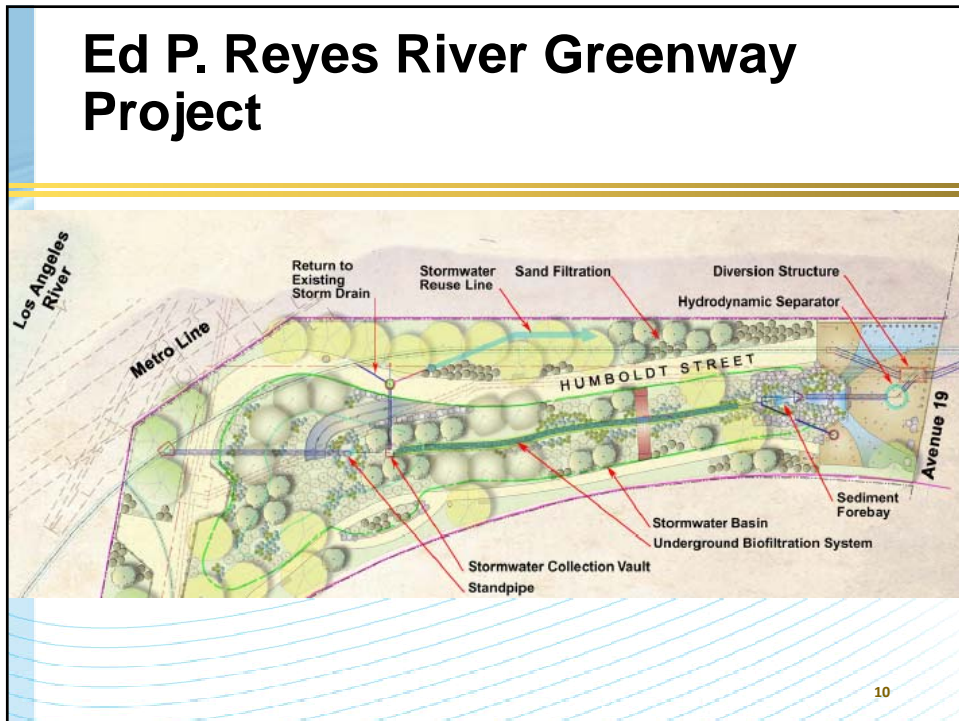


## Definitions of Types of Projects

Category	Subcategory	Example BMP Types
Regional	Infiltration	Surface infiltration basin, subsurface infiltration gallery
	Retention	Surface retention basin, subsurface retention gallery
	Constructed Wetland	Constructed wetland, flow-through/linear wetland
	Treatment Facility	Facilities designed to treat runoff from and return it to the receiving water
	Low Flow Diversion	Facilities designed divert dry weather flows to the sanitary sewer
Distributed	Site-Scale Retention	Dry retention basin, wet retention pond, etc.
	Green Infrastructure	Bioretention and biofiltration (vegetated practices with a soil filter media, and the latter with an underdrain)
		Permeable pavement
		Green streets (often an aggregate of bioretention/biofiltration and/or permeable pavement)
		Infiltration BMPs (non-vegetated infiltration trenches, dry wells, rock wells, etc.)
		Bioswales (vegetative filter strips and vegetated swales)
	Rainfall harvest (green roofs, cisterns, rain barrels)	
	Flow-Through Treatment BMP	Media/cartridge filters, high-flow biotreatment filters, etc.
	Source Control Structural BMPs	Catch basin inserts, screens, hydrodynamic separators, trash enclosures, etc.





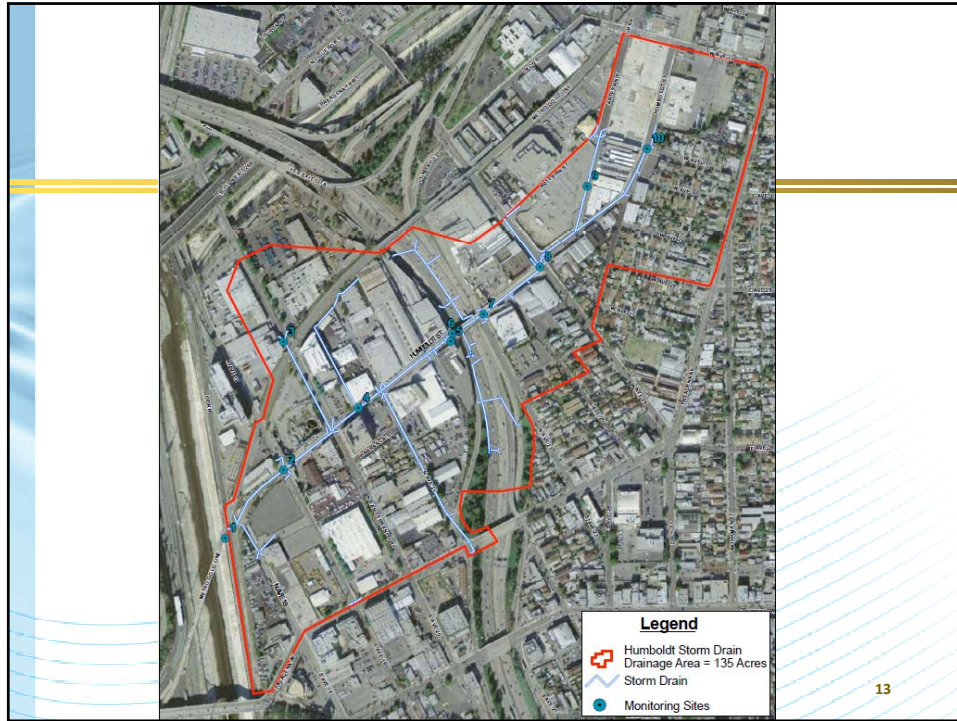


## Ed P. Reyes River Greenway Project (Before)

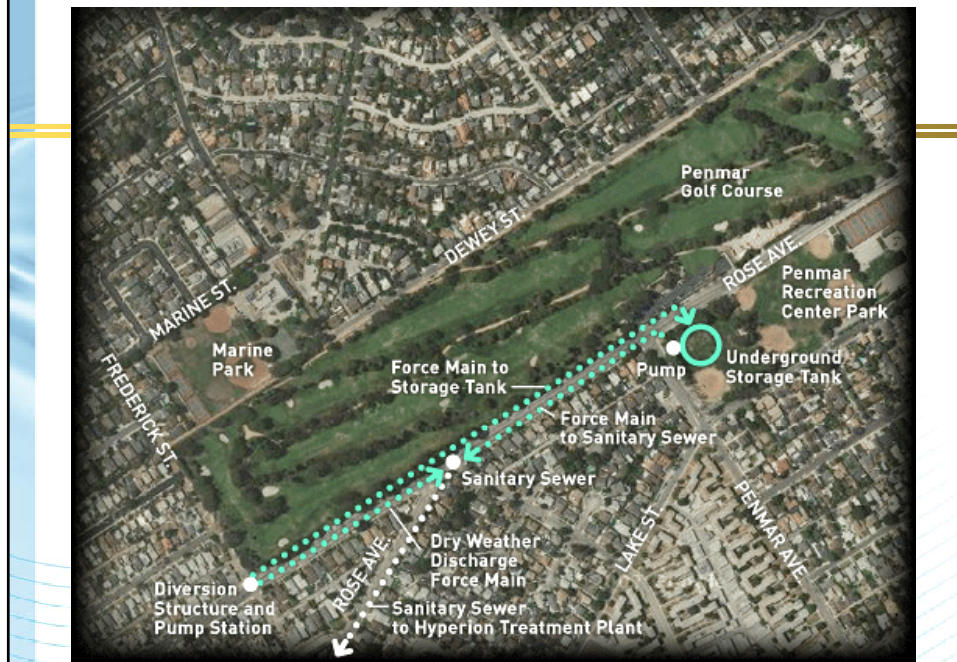


## Ed P. Reyes River Greenway Project (After)





### Penmar WQ Improvement Project



## Hermosa Strand Infiltration Trench Project

Bacteria TMDL compliance (Santa Monica Bay)

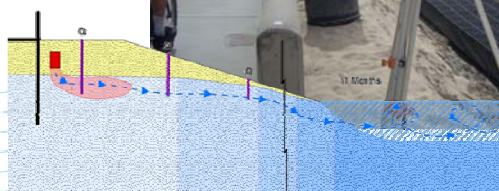
Heavily used recreational beach

Dry weather and low flow wet weather

76-acre drainage area

Groundwater monitoring demonstrated bacteria treatment via combined unsaturated/saturated natural sand filtration

Investigating long-term potential for design storm capacity accounting for sea level rise scenarios

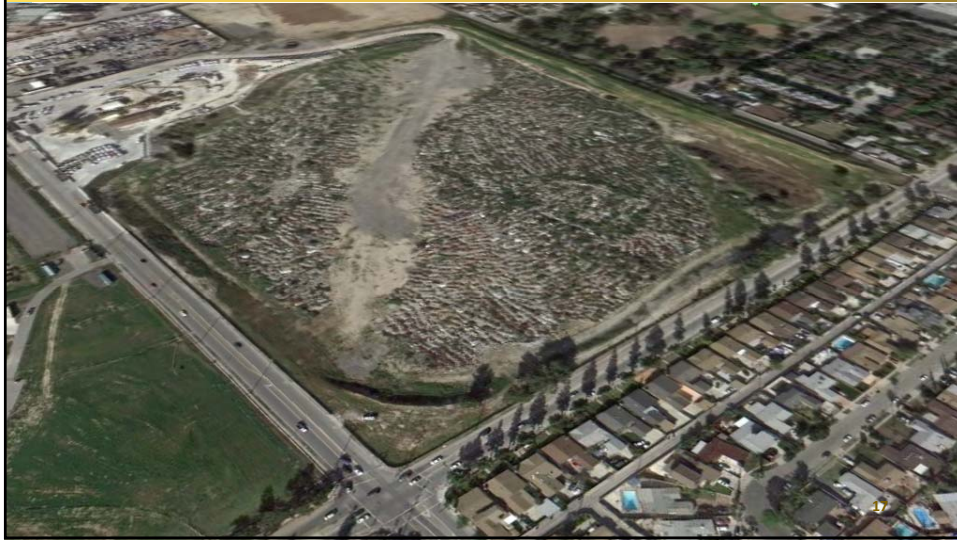


Tujunga Wash - Before



Tujunga Wash - After

## Strathern Wetlands Park - Before



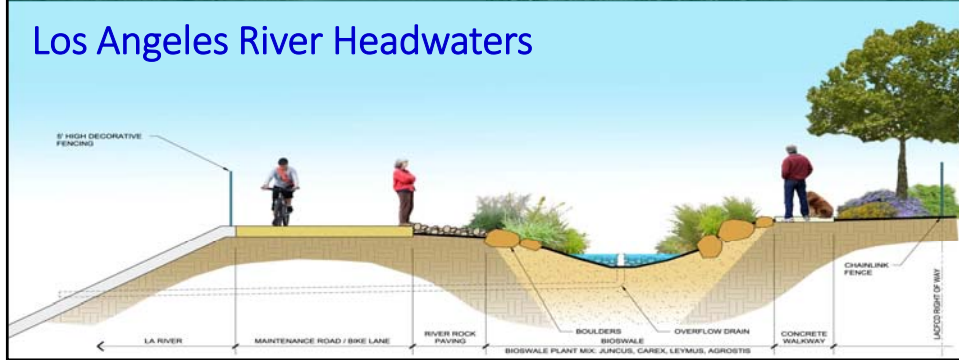
## Strathern Wetlands Park - After

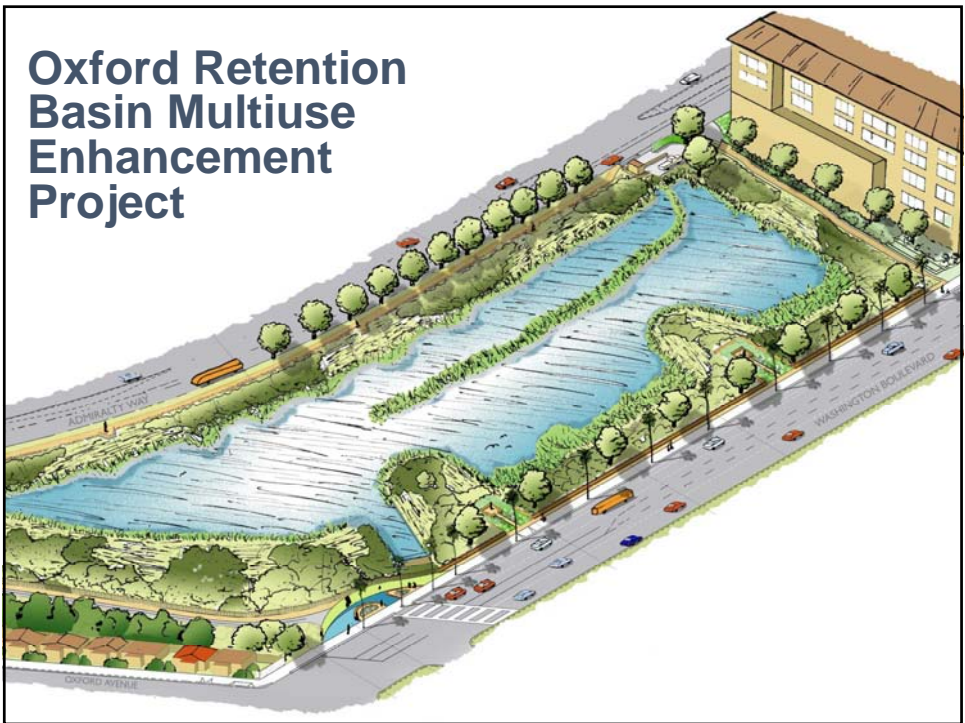






### Los Angeles River Headwaters







## Next Steps

- Attend watershed breakout sessions today
- Get involved
- Submit your ideas - July 2014
- WMGs to Review Projects and Initial Screening – Aug – November 2014
- WMGs to Prepare Draft Final List of Projects – Dec 2014

## Key Reasons for Development of EWMPs

### Regulatory

- 2012 Permit Requires Watershed Management Plan Development – EWMPs Fulfill Requirement
- Multiple TMDLs with effluent limits

### Practical

- Establishes Watershed Management Approach
- Allows BMP Customization, Targeted Implementation
- Facilitates Resource Sharing

### Strategic

- Supports Integrated Water Management Goals
- Promotes Multi-Benefit Outcomes
- Consistent with Sustainability Initiatives

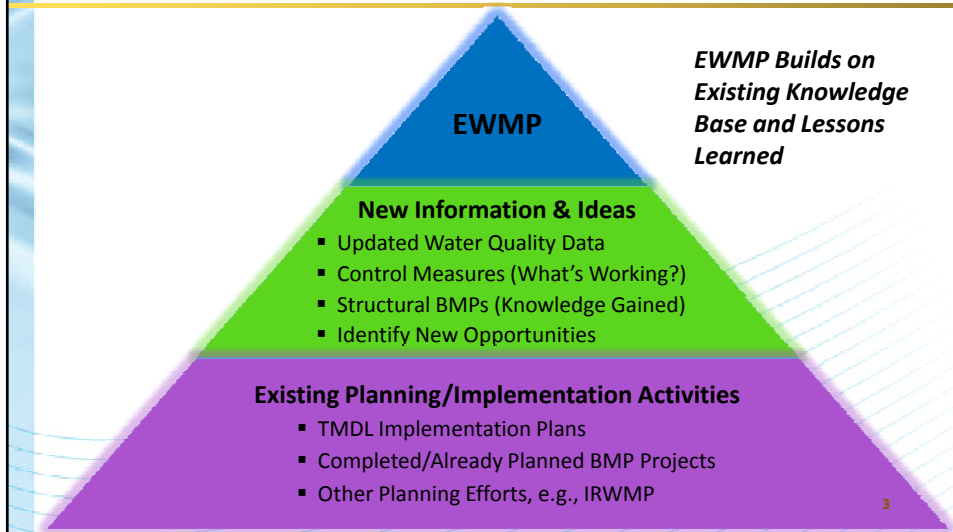
1

## Broad Range of Potential Benefits from EWMP Implementation

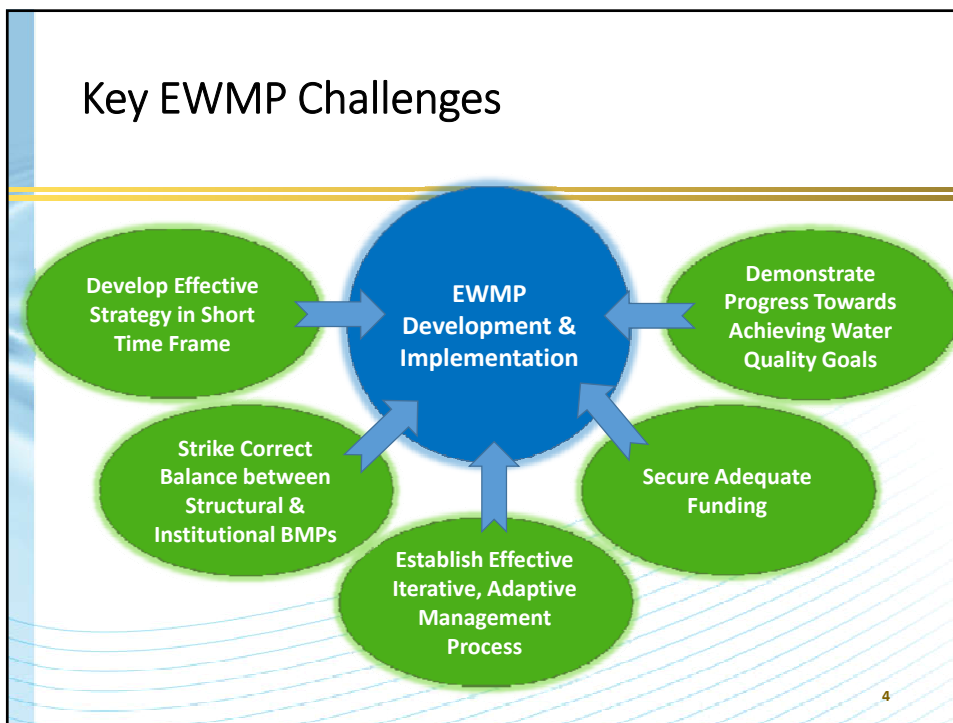


2

## EWMPs Build on Existing Efforts and Knowledge Gained



## Key EWMP Challenges



## EWMP Schedule Revisited

- **Work Plan**
  - Establishes Approach for Developing EWMP
  - Documents Data Compilation and Analysis Conducted to Date
  - Deliver by June 28, 2014
  
- **EWMP**
  - Establish Comprehensive Plan that Complies with Permit Requirements
  - Incorporate Multi-Benefit Stormwater Management Projects
  - Deliver by June 28, 2015