



EDMUND G. BROWN JR.  
GOVERNOR

MATTHEW RODRIGUEZ  
SECRETARY FOR  
ENVIRONMENTAL PROTECTION

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## Los Angeles Regional Water Quality Control Board

### **PUBLIC MEETING ON REVISED WATERSHED MANAGEMENT PROGRAMS (WMPs) PUSUANT TO THE LOS ANGELES COUNTY MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) PERMIT ORDER NO. R4-2012-0175**

Los Angeles Regional Water Quality Control Board, First Floor Carmel Room  
320 W. 4<sup>th</sup> Street, Los Angeles, CA 90013  
Monday, April 13, 2015, 9:00 AM – 11:30 AM

#### **Agenda**

- 1) *Los Angeles Regional Board Opening Statement*
- 2) *Environmental Groups: Comments on Revised WMPs*
- 3) *WMP Individuals/Groups: Responses to Regional Board Comments on Draft WMPs*
- 4) *Open Discussion: Q & A Session*
- 5) *Los Angeles Regional Board Closing Statement*

LA COUNTY-MS4 REVISED WMP MEETING  
 LOS ANGELES REGIONAL WATER QUALITY CONTROL BOARD  
 APRIL 13, 2015

Name	Representing	Address	Phone	E-mail Address
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RB-AR2585

LA COUNTY- MS4 REVISED WMP MEETING  
 LOS ANGELES REGIONAL WATER QUALITY CONTROL BOARD  
 APRIL 13, 2015

Name	Representing	Address	Phone	E-mail Address
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RB-AR2586

LA COUNTY- MS4 REVISED WMP MEETING  
 LOS ANGELES REGIONAL WATER QUALITY CONTROL BOARD  
 APRIL 13, 2015

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RB-AR2587

LA COUNTY- MS4 REVISED WMP MEETING  
LOS ANGELES REGIONAL WATER QUALITY CONTROL BOARD  
APRIL 13, 2015

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Adriana Figueroa	Lower San Gabriel River (City of Norwalk) watershed		562-929-5760	afigueroa@norwalkca.gov
Liz Crosson	LA Waterkeeper			
TJ MOON	county		626-458-4380	tmoon@dpw.lacounty.gov
Cody Hawing	Walnut		(909) 594-9702 <del>626-215</del>	<del>CHAWING</del> chawing@rkagroup.com
Victoria Gambale	The Bay Foundation		213-620-2271	vgambale@waterboards.ca.gov
Julie Carver	City of Pomona		909 626-3628	julie_carver@ ci.pomona.ca.us

RB-AR2588

# Alamitos Bay and Los Cerritos Channel Watershed Management Area

Watershed Management  
Program Comments  
April 13, 2015

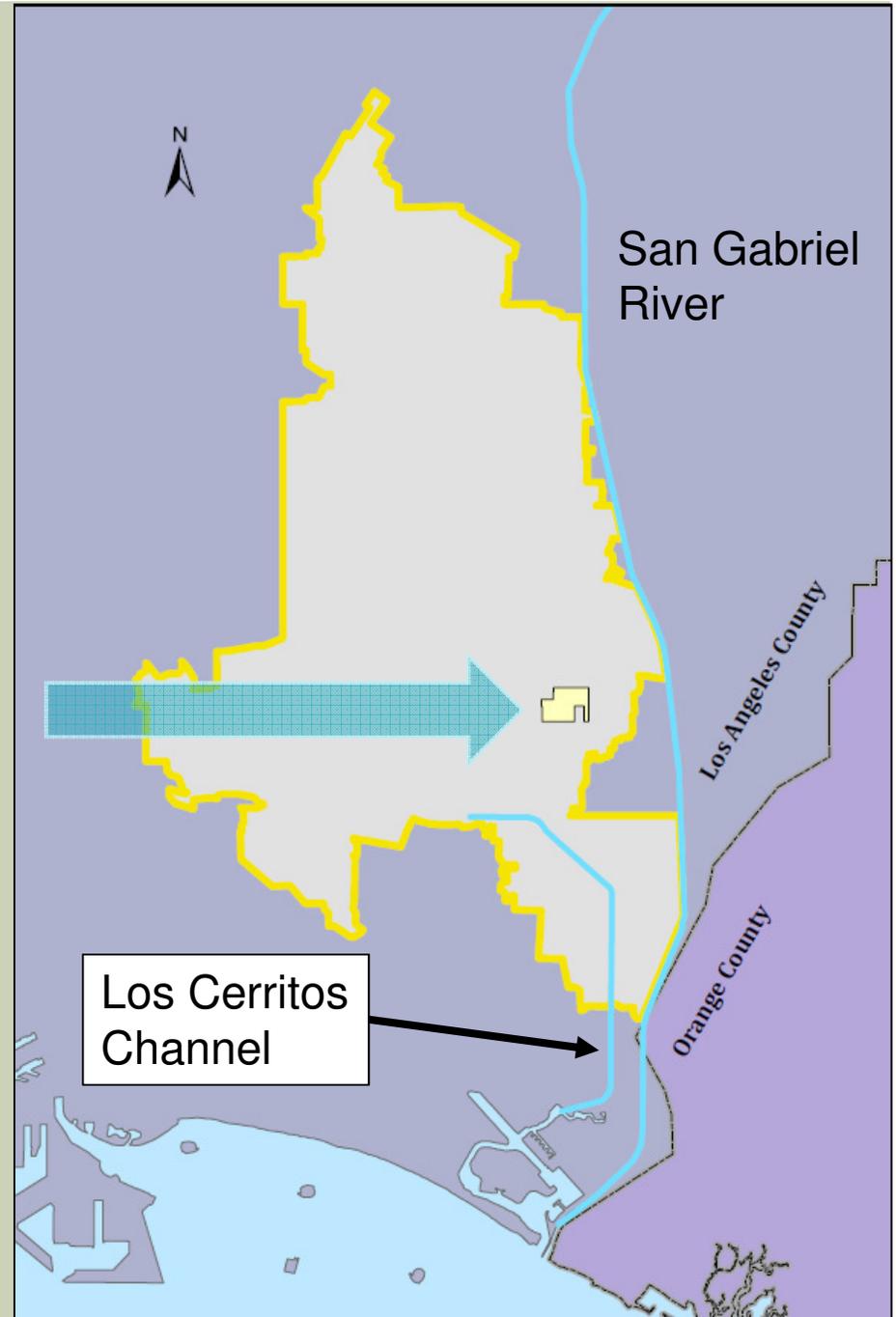


# Comments Received

- Received Regional Board's WMP comments on October 27, 2014
  - Resubmitted WMP on January 27, 2015
- Received Regional Board CIMP comments on November 20, 2014
  - Resubmitted CIMP on February 17, 2015

# Unincorporated County Island

- Located in Los Cerritos Channel Watershed
- Landlocked by the City of Long Beach
- 95 acres
- Unincorporated County comprises less than 1% of Los Cerritos Channel Watershed



# Unincorporated County Island



Palo Verde  
Drain

- Predominately single family residential neighborhood
- 3 catch basins



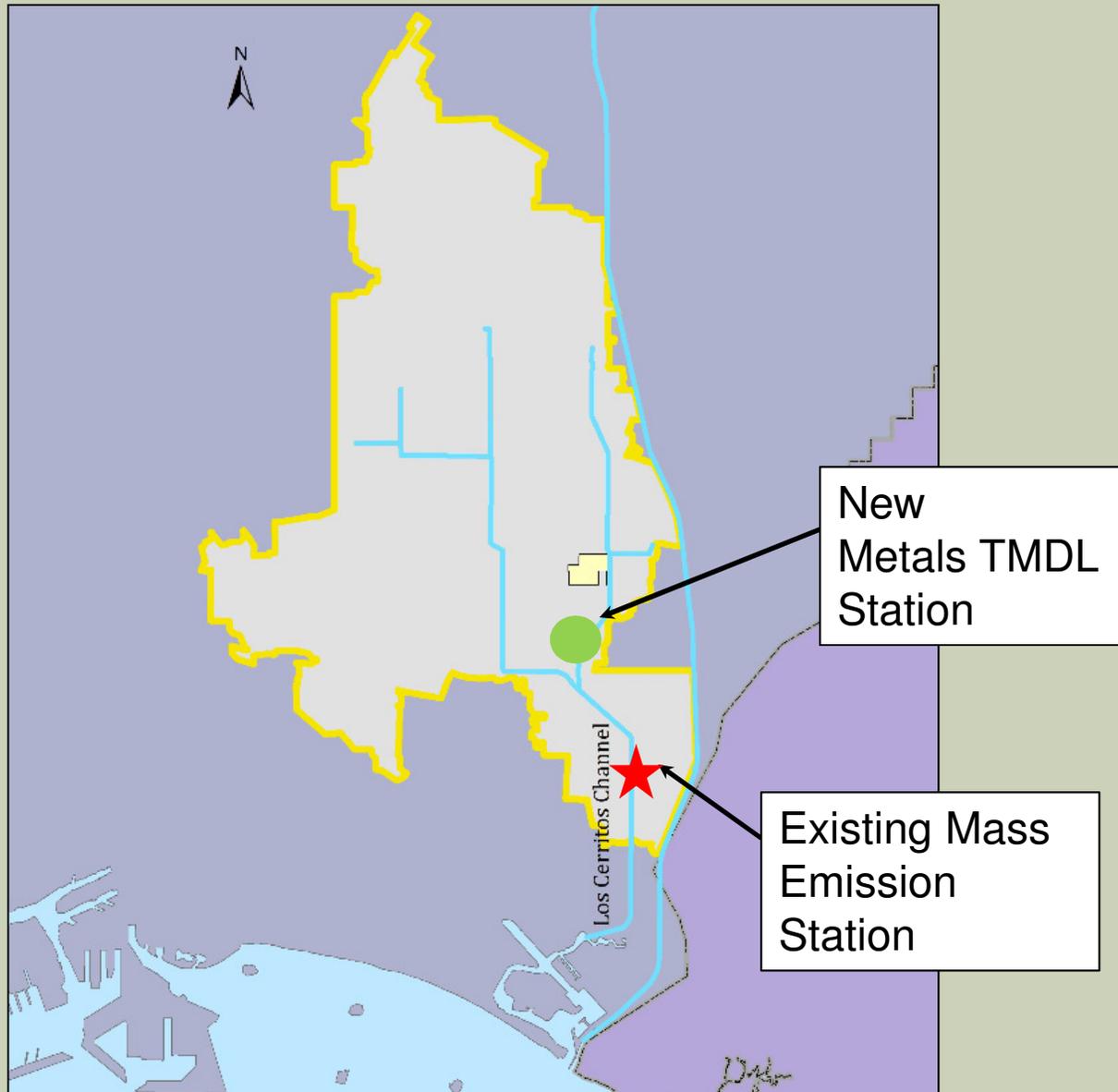
# Water Quality Priorities

## County Island

- Los Cerritos Channel Metals TMDL
- Greater Harbors Toxics TMDL

Waterbody	Category 1 (Highest Priority)		Category 2 (High Priority)	Category 3 (Medium Priority)	Low Priority Pollutants
	Pollutant	TMDL			
Los Cerritos Channel	Copper (wet and dry)	LCC Metals	Ammonia	MBAS	Cadmium (wet)
	Lead	LCC Metals/DC Toxics	Bis(2ethylhexyl) phthalate (DEHP)	Enterococcus	Chlorpyrifos (wet)
	Zinc	LCC Metals/DC Toxics	Chlordane (Sediment)		Chromium (wet)
	DDT (fish tissue)	DC Toxics	Coliform Bacteria		Diazinon (wet and dry)
	PCBs (fish tissue)	DC Toxics	Trash		Dissolved Silver (wet)
	Chlordane (fish tissue)	DC Toxics	pH		
	PAHs (sediment)	DC Toxics			
	Toxicity (sediment)	DC Toxics			

# Monitoring Strategy



RB-AR2594

# WMP/CIMP Comments

- Majority of comments asked for more clarification.
  - January 15, met with RB staff.
- Provide a schedule showing interim metal reductions.
- Modeling Comments:
  - Provide time series output for pollutants
  - Analyze category 2 & 3 pollutants (Zinc still governed)
  - Analyze dry weather Copper reductions
- Include quarterly seasonal dry weather screening.
  - Initially proposed 3 screenings (didn't specify season).
- Accelerate monitoring schedule.

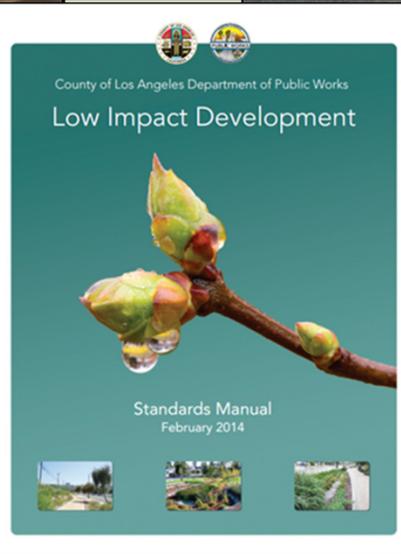
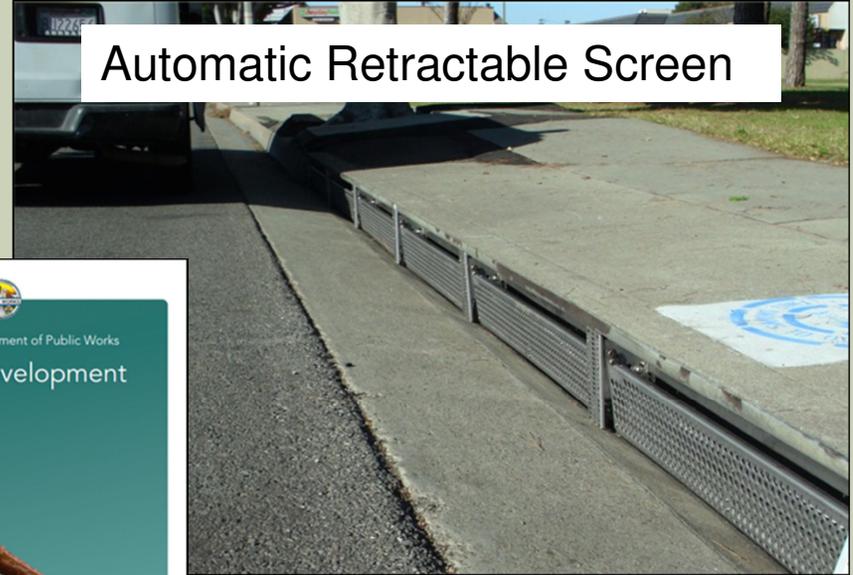


# Actions prior to First LCC Metals Interim Limit

Monitoring Station



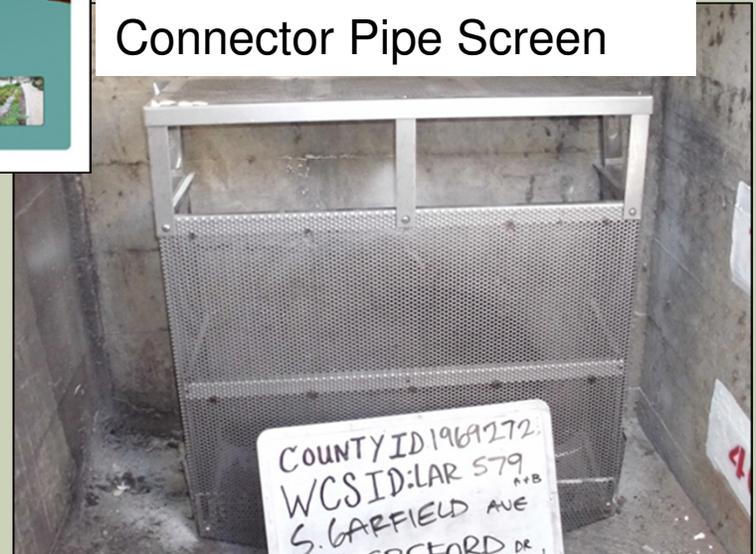
Automatic Retractable Screen



Regenerative Air Sweeper

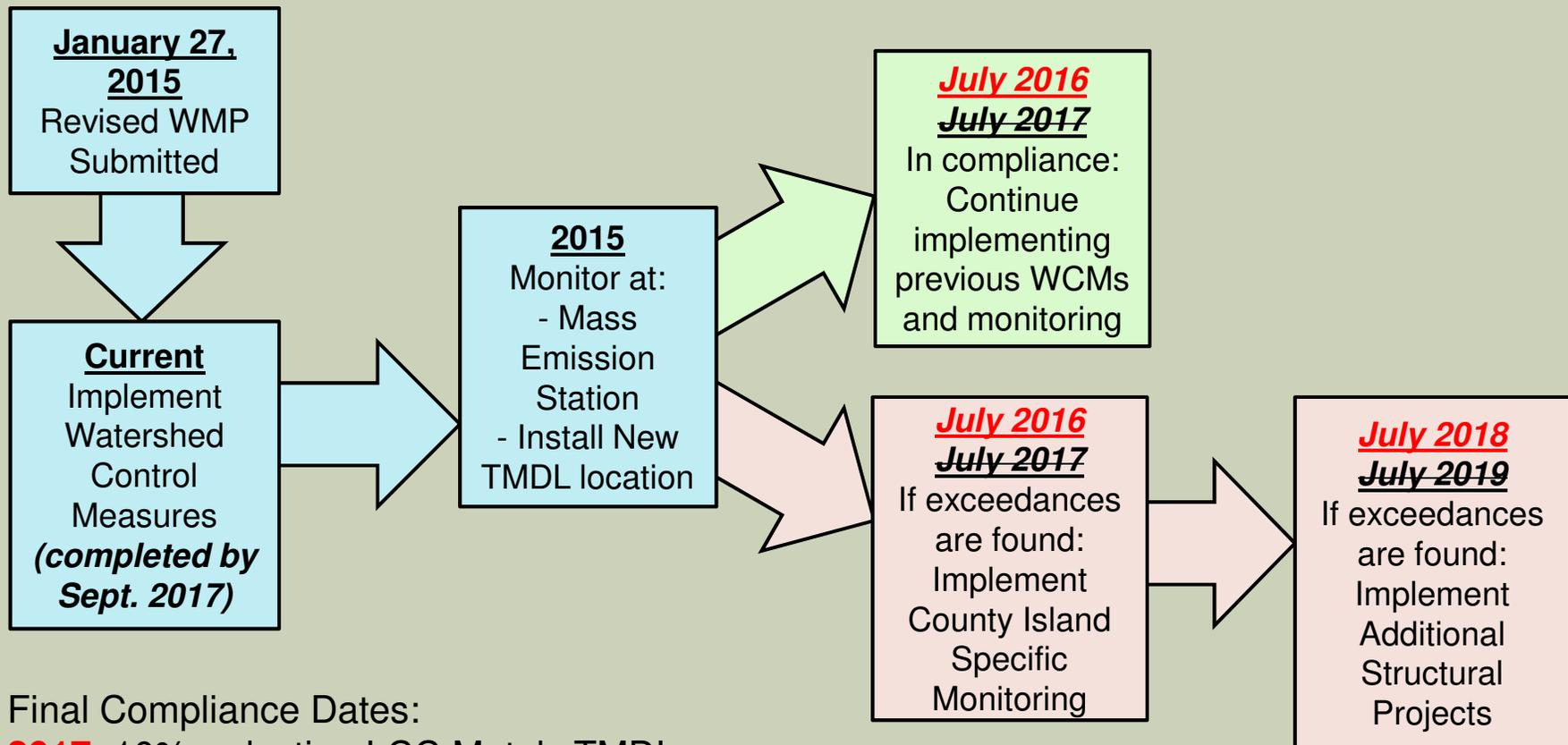


Connector Pipe Screen



# Updated Pollutant Reduction Strategy

- Computer modeling shows a 72% reduction in zinc is needed by 2026



Final Compliance Dates:

**2017**: 10% reduction LCC Metals TMDL

**2020**: 35% reduction LCC Metals TMDL

**2023**: LCC Metals Dry Weather Final Compliance

**2026**: LCC Metals Wet Weather Final Compliance

**2032**: Harbors Toxics TMDL Final Compliance

## **Next Steps**

- **Continue to implement identified Watershed Control Measures**
- **Monitoring efforts have begun**
- **Evaluate monitoring data**
- **If needed, implement additional Structural Projects to meet water quality priorities**



County of Los Angeles  
Department of Public Works  
[dpw.lacounty.gov](http://dpw.lacounty.gov)

**BILL JOHNSON, P.E.**  
Watershed Management Division

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[wjohnson@dpw.lacounty.gov](mailto:wjohnson@dpw.lacounty.gov)

# City of El Monte

## Draft Watershed Management Program (WMP) Revisions

Ed Suher, P.G.

CASC Engineering and Consulting

April 13, 2015



RB-AR2600

# Sections receiving comments

- ❖ **El Monte's draft WMP received comments mainly in the following sections:**
  - \* Water Quality Characterization/Waterbody Pollutant Classification
  - \* Proposed Watershed Control Measures
  - \* Reasonable Assurance Analysis (RAA)/Modeling

# Water Quality Characterization/ Waterbody Pollutant Classification

## ❖ Board Comments:

- \* Provide land use for drainage areas for two outfalls the city elected to sample for characterization data
- \* Revise pollutant categories to include two omitted pollutants and add Receiving Water Limitations
- \* Research and provide data collected during TMDL development and also include applicable tributary monitoring data

# Water Quality Characterization/ Waterbody Pollutant Classification

## ❖ WMP Revisions:

- \* Provided land use map and comparison table
- \* Revised waterbody pollutant combination tables
  - Included additional pollutants (Cadmium and Cyanide for LA River)
  - Re-categorized pollutants between categories
- \* Researched and provided TMDL development data and additional tributary monitoring data for Rio Hondo (from station TSo6 )

# Proposed Watershed Control Measures

## ❖ Board Comments:

- \* Provide greater specificity for how non-stormwater discharges will be identified and eliminated
- \* Provide additional control measures as identified in the TMDL document and TMDL Implementation Plans
- \* Specify strategies and control measures for Category 2 and Category 3 Pollutants

# Proposed Watershed Control Measures

## ❖ WMP Revisions:

- \* Included additional non-stormwater control measures and additional implementation details
- \* Added control measures as identified and recommended by the LA River and Tributaries TMDL Implementation Plan
- \* Provided strategies and control measures for reducing/eliminating non-TMDL pollutants

# RAA/Modeling

## ❖ Board Comments:

- \* Clarify precipitation data and frequency analysis used to select the critical condition for modeling
- \* Provide runoff volume, flow, water quality concentration, and pollutant loads at jurisdictional boundary for Legg Lake
- \* Provide additional monitoring data to further characterize Lead in the San Gabriel River and Cadmium and Nitrogen in the LA River and evaluate as part of RAA

# RAA/Modeling

## ❖ WMP Revisions:

- \* Added additional table and text to clarify precipitation data and frequency analysis used to select the critical condition
- \* Provided runoff volume, flow, water quality concentration, and pollutant loads at jurisdictional boundary for Legg Lake (lake is located outside of El Monte city limits)
- \* Added additional monitoring data and provided runoff volumes and concentrations for additional pollutants in RAA section

# In conclusion

## ❖ City Goals:

- \* Approval of the Watershed Management Program (and Integrated Monitoring Program)
- \* Incorporation of additional water quality features in Ramona Blvd improvements
- \* Expand water quality improvements at Lambert Park and other city parks
- \* Conduct study for possible conversion of Merced Channel to soft bottom



# EAST SAN GABRIEL VALLEY WATERSHED MANAGEMENT GROUP

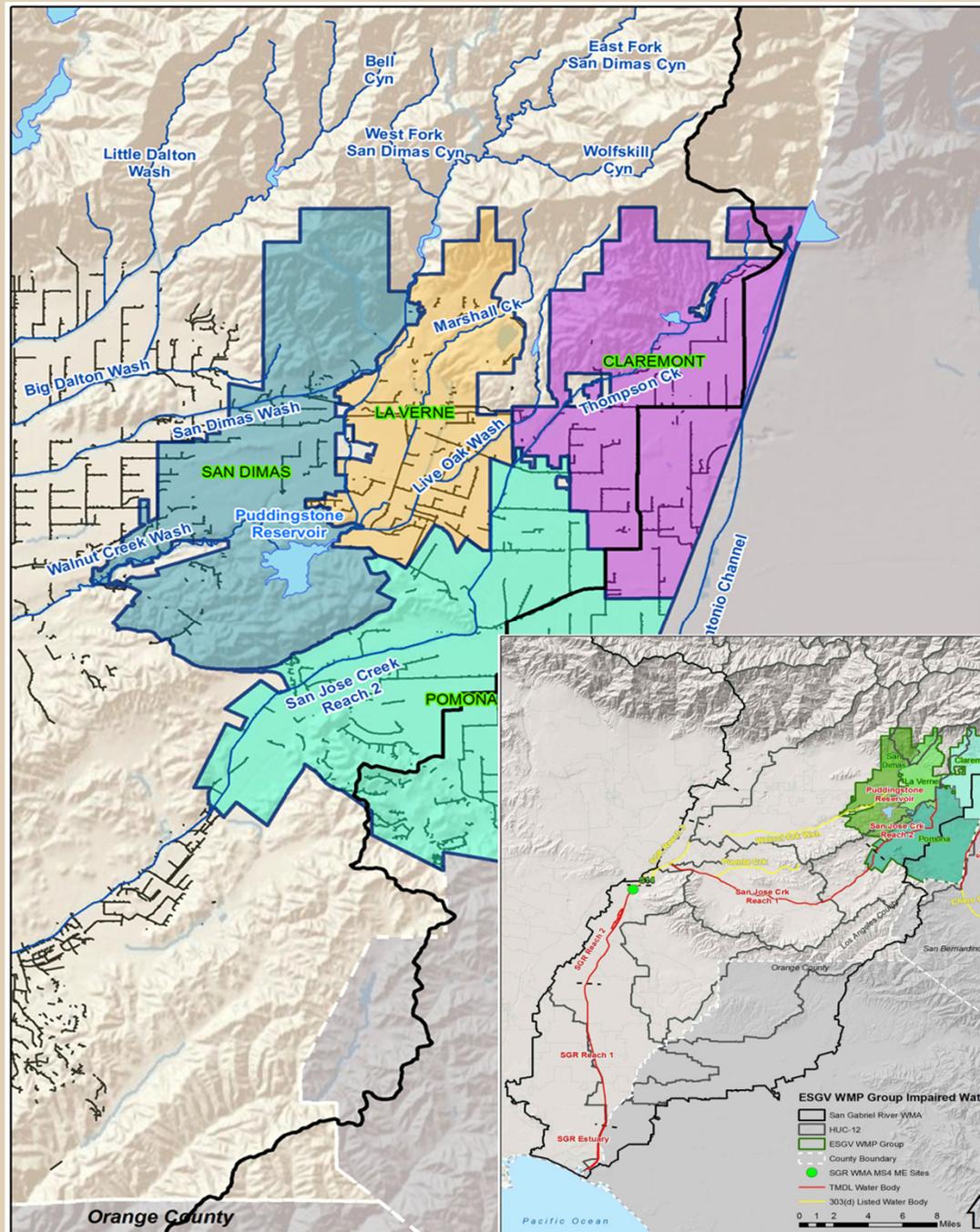
## WATERSHED MANAGEMENT PROGRAM (WMP) DEVELOPMENT

CITIES OF CLAREMONT, LA VERNE,  
POMONA, AND SAN DIMAS

# EAST SAN GABRIEL VALLEY WMG

## Principal Receiving Waters:

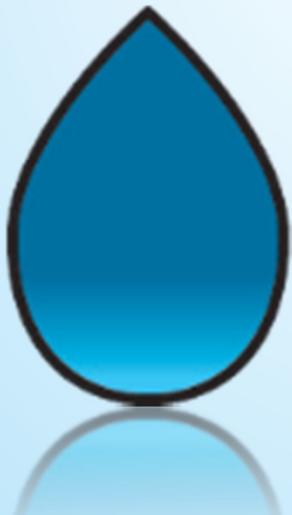
- San Dimas Wash
- San Jose Creek
- San Gabriel River
- San Gabriel Estuary
- Walnut Creek Wash



RB-AR2610

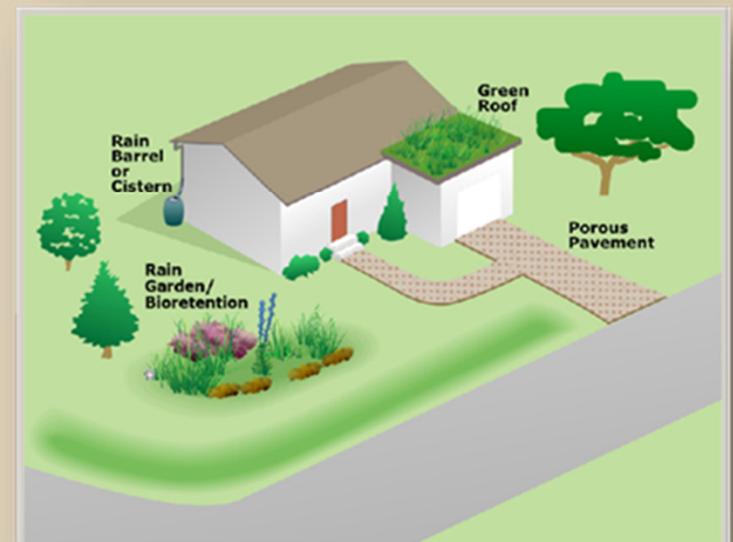
# PRESENTATION OVERVIEW

- Specificity to Non-Structural BMPs
- Industrial and Commercial Facilities Inspections
- Water Quality Characterization
- Specificity on BMP type, location and timing of watershed control measures



# NON-STRUCTURAL BMPS

- Rooftop Runoff Reduction Program
- LID for New/Redevelopment
- Enhanced Construction Site Inspections
- Verification of Post Construction BMPs
- Enhanced Catch Basin Cleaning



# INDUSTRIAL AND COMMERCIAL INSPECTION PROGRAM

- Inspections conducted
  - Claremont – 185
  - La Verne – 170
  - Pomona – 509
  - San Dimas – 130



**Storm Water Pollution Prevention**

**Employee and Customer Education**

- Train employees on storm water pollution prevention practices annually.
- Educate your customers and raise their awareness about proper washing, recycling and disposal procedures.

**Engine and Parts Cleaning**

- Clean parts in a self-contained unit, solvent sink, or parts washer to prevent or storm drain.
- Allow parts to drain over a contained area, rather than allowing materials to drip or spill onto the floor. Never discharge the rinse solution into the storm drain or sanitary sewer system.
- Inspect part-washing units daily for leaks and make repairs immediately.
- Use water-based cleaning solutions instead of solvents. Recycle used solutions through a licensed hazardous waste hauler.
- Avoid using hose-off degreasers and never allow runoff to enter the street, gutter or storm drain. Instead, brush-off loose debris and use damp rags to wipe down parts. Clean used rags through a rag service or dispose of them as hazardous waste.
- Materials and waste such as vehicle parts, fuels, solvents, batteries and oils should be stored off the ground and in areas where they will not be exposed to rainwater.

**Storage**

- Contain cracked batteries to prevent hazardous spills.
- If possible, provide overhead coverage for all outside hazardous materials and waste storage areas. If overhead coverage is not available, cover stored materials with an impermeable material prior to a rain event.

**Waste Recycling and Disposal**

- When possible, recycle and reuse solvents, paints, oil filters, antifreeze, motor oil, batteries, metals scraps, water-based paints, used tires, paper, cardboard, glass containers, and aluminum cans.
- Combining different types of hazardous waste will limit you recycling options and can be dangerous. A licensed hazardous waste hauler can provide information on hazardous waste storage and disposal.

**Report Sewage Spills and Discharges**

that are not contained to your site to the City of Claremont (909) 399-5431  
7 am -6 pm Mon-Thurs  
Weekends, Holidays and After -hours report spills to City of Claremont Police Department (909) 399-5411

For more information about storm drain protection or additional brochures visit [www.ci.claremont.ca.us](http://www.ci.claremont.ca.us)  
**City of Claremont**

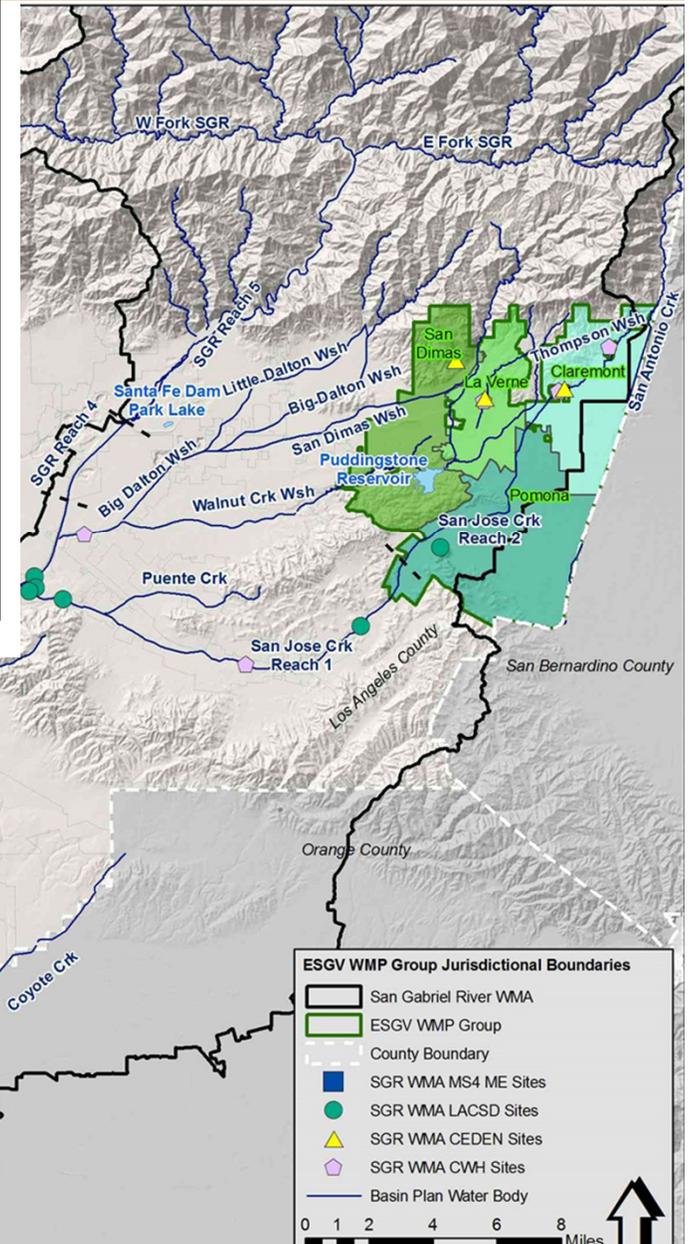
**Management Practices (BMPs)**  
for  
**Automotive Service Facilities  
Retail Gasoline Outlets  
Automotive Dealerships  
Mobile Fleet Managers**

For additional information, contact the City of Claremont at (909) 399-5389 or email: [stormwater@ci.claremont.ca.us](mailto:stormwater@ci.claremont.ca.us)

**City of Claremont**  
1907  
207 Harvard Avenue, Claremont, CA, 91711

# GREATER DETAIL ON THE WATER QUALITY CHARACTERIZATION

Reach	All Data (2002-2012)			Previous 5 Years (2007-2012)		
	Number of Analyses <sup>1</sup>	Number Detected <sup>2</sup>	Number of Constituents <sup>3</sup>	Number of Analyses <sup>1</sup>	Number Detected <sup>2</sup>	Number of Constituents <sup>3</sup>
San Gabriel River Estuary	30,598	16,026	318	12,127	4,991	177
San Gabriel River Reach 1	39,078	23,946	250	14,853	8,593	202
San Gabriel River Reach 2	10,692	3,222	251	4,732	1,513	195
San Gabriel River Reach 3	31,332	16,218	254	11,748	6,505	225
San Jose Creek Reach 1	27,439	12,348	245	12,354	6,536	203
San Jose Creek Reach 2	16,816	8,569	238	7,968	4,437	203
Walnut Creek	248	248	39	145	145	38
Thompson wash	67	65	40	0	0	0
San Dimas Wash	28	26	17	0	0	0
Big Dalton Wash	31	29	17	0	0	0
Puddingstone Reservoir <sup>4</sup>	28	28	17	0	0	0
Totals	156,357	80,725	419	63,927	32,720	249



# IMPLEMENTATION PLAN

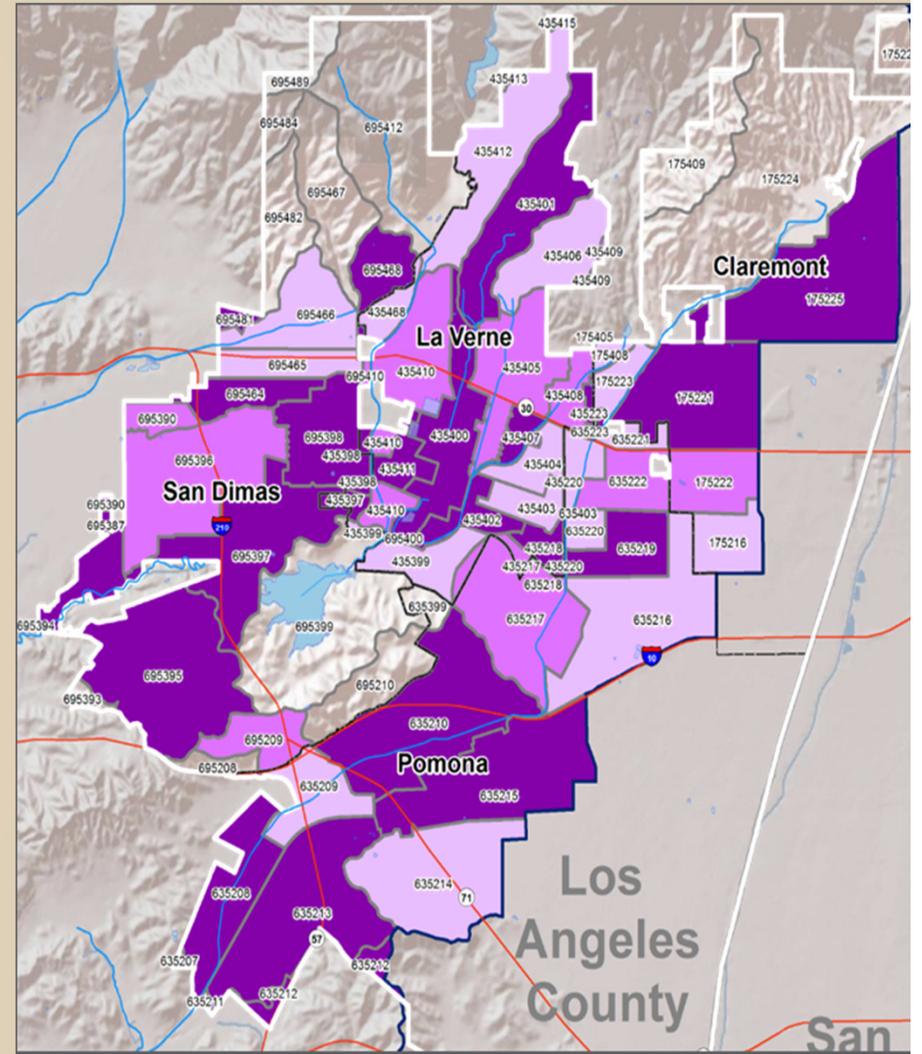
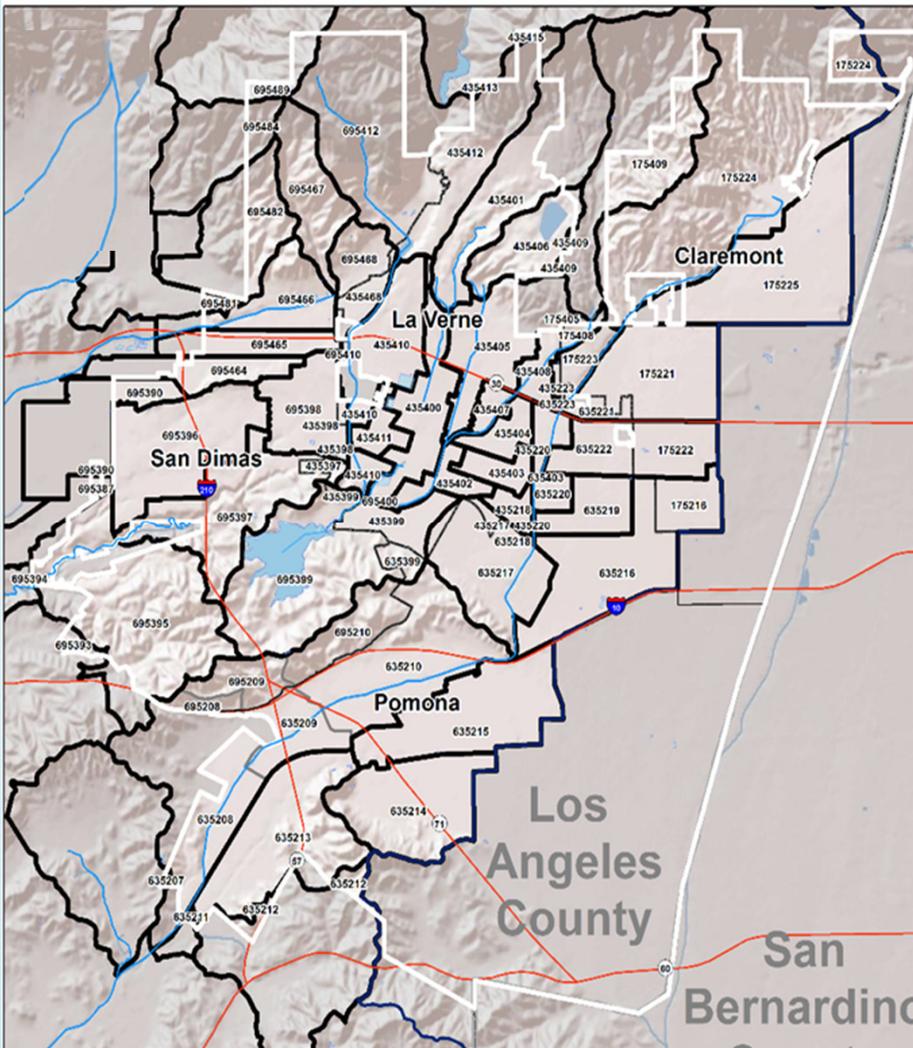
Receiving Water	Grouped SWS ID*	Individual SWS ID	COMPLIANCE TARGET: 85 <sup>th</sup> Percentile, 24-hour Storm Volume to be Retained by MS4 (acre-ft)	IMPLEMENTATION PLAN: APPROACH TO ACHIEVE COMPLIANCE TARGETS, SUBJECT TO ADAPTIVE MANAGEMENT								
				DESIGN STORM RUNOFF TO BE RETAINED <u>IN</u> RIGHTS-OF-WAY		DESIGN STORM RUNOFF TO BE RETAINED <u>OUTSIDE</u> OF RIGHTS-OF-WAY BUT PRIOR TO DISCHARGE FROM MS4 COLLECTION SYSTEM					NON-MS4 RUNOFF	
				Total Estimated Design Storm Volume to be Retained in Right-of-Way (acre-ft)	Estimated Equivalent Length of Green Street BMPs (ft)	Estimated Potential Volume to be Retained by LID on Public Parcels (acre-ft)	Estimated Potential Volume to be Retained by Downspout Disconnection Program (acre-ft)	Estimated Potential Volume to be Retained by LID Ordinance of New/Redevelopment (acre-ft)	Remaining Capacity to the Retained by Other BMPs, Potentially Including Regional BMPs (acre-ft)	Total Design Storm Volume that will <u>not</u> be Retained (acre-ft)	Estimated Potential Volume to be Retained by CALTRANS and other Transportation Entities (acre-ft)	Estimated Potential Volume to be Retained by Industrial Permittees (acre-ft)
San Dimas Wash	5412*	5412*	0.49	0.06	574	0.13	0.01	-	-	0.29	-	-
	5464	5464	3.76	1.50	9,025	0.23	0.13	0.03	1.86	-	0.83	-
	5465	5465	5.30	1.32	5,325	-	0.16	0.04	3.79	-	3.19	0.61
	5466	5466	6.10	2.50	15,331	0.22	0.23	0.12	3.04	-	-	-
	5468*	5468*	4.46	1.75	8,319	0.06	0.09	0.00	2.57	-	0.05	0.24
	5467	5467	0.95	0.02	116	0.39	0.01	0.00	-	0.54	-	-
San Dimas Wash Total			21.07	7.15	38,691	1.03	0.62	0.19	11.26	0.83	4.07	0.86



# SEQUENCING

## Subwatershed Index

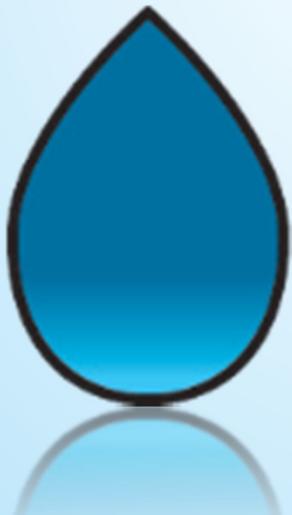
## Milestones



# ADAPTIVE MANAGEMENT

As information is gathered, WMP will undergo modifications allowing the WMP to become more effective by assessing:

- Progress Towards Achieving Water Quality Limits
- Monitoring Data
- Achievement of Interim Milestones
- Re-evaluate Water Quality Strategies



# SCHEDULE OF CONTROL MEASURES

Jurisdiction	Major Watershed	10% Milestone, Year 2017 (acre-ft)	35% Milestone, Year 2020 (acre-ft)	65% Milestone, Year 2023 (acre-ft)	100% Milestone, Year 2026 (acre-ft)
Claremont	Puddingstone	<b>See description in Section 5.3</b>  1. Implementation of Rooftop Runoff Reduction Program 2. LID due to new and re-development 3. Increased construction site inspections 3. Verification of post-construction BMPs 4. Increased catch basin cleaning	0.6	1.1	1.7
	San Jose Creek		29.2	54.3	83.5
	<b>Claremont Total</b>		<b>29.8</b>	<b>55.4</b>	<b>85.2</b>
La Verne	Puddingstone		37.1	68.9	106.1
	San Dimas Wash		2.9	5.4	8.3
	San Jose Creek		2.6	4.8	7.3
	Walnut Creek		1.8	3.4	5.2
	<b>La Verne Total</b>		<b>44.4</b>	<b>82.5</b>	<b>126.9</b>
Pomona	Puddingstone		0.1	0.1	0.2
	San Jose Creek		71.6	133.0	204.6
	Walnut Creek	0.0	0.1	0.1	
	<b>Pomona Total</b>	<b>71.7</b>	<b>133.2</b>	<b>204.9</b>	
San Dimas	Big Dalton Wash	0.7	1.2	1.9	
	Puddingstone	0.3	0.6	0.9	
	San Dimas Wash	7.4	13.7	21.1	
	San Jose Creek	0.7	1.2	1.9	
	Walnut Creek	35.4	65.7	101.1	
	<b>San Dimas Total</b>	<b>44.4</b>	<b>82.5</b>	<b>126.9</b>	
<b>Total</b>			<b>190.3</b>	<b>353.5</b>	<b>543.9</b>



# Response to Los Angeles Regional Water Board Comments on the Los Cerritos Channel Watershed Management Program

Richard Watson, A.I.C.P  
On Behalf of the LCC Watershed Group  
Presented to the Regional Water Board  
13 April 2015

# Response to Regional Board Comments on the LCC WMP

Response to Los Angeles Regional Board Comments on Los Cerritos Channel Watershed Management Program 1-29-2015

<b>LA MS4 Permit Provision</b> (equivalent provisions are also found in the Long Beach MS4 Permit)	<b>Regional Water Board Staff Comment and Necessary Revision</b>	<b>Response/Actions Taken</b>
1  Part VI.C.5.a.ii(2)-(3) (Category 2 and 3 Pollutants - Receiving Water Limitations)	The Group should clearly identify the applicable receiving water limitations for the Category 2 and 3 pollutants it has identified in Tables 2-11 and 2-12 of the draft WMP by referring back to Table 2-3. Table 2-12 includes a column for "Standard of Exceedance" and identifies the document where the standard is found, but not the standard itself. However, it appears that all of the applicable receiving water limitations are included in Table 2-3, including those for the "Low Priority Pollutants" listed in Table 2-13.	Columns were added to Tables 2-11 and 2-12 showing applicable receiving water limitations.
2  Part VI.C.5.a.iv.(2) (Prioritizations - Ammonia)	The draft WMP notes that ammonia has been proposed for delisting and therefore will not be addressed. To justify this position, the Group should present the data demonstrating that there is no longer an impairment due to ammonia to support delisting.	New material was added to sub-section 2.4 describing the 13 years of data collected by the City of Long Beach at the mouth of the channel, and a new Appendix C was added containing data about ammonia and pH in the Los Cerritos Channel for Regional Board review. Data from several special studies document that the few recent dry-weather exceedances of ammonia standards have been due to natural pH cycling in the greatly reduced dry-weather flows. The data show that flows to the channels from the outfalls during the dry season are well within Basin Plan pH standards and that the diurnal cycles in pH are not the result of waste discharges.

# Response to Regional Board Comments on the LCC WMP (Continued)

<p>3 Part VI.C.5.b.iv.(1)(a)(ii) (Minimum Control Measures - Industrial/Commercial Facilities Program)</p>	<p>The Group proposes to alter the commercial and industrial facility inspection frequencies in Parts VI.D.6.d and VI.D.6.e of the LA County MS4 Permit.</p> <p>The proposed modification includes a prioritization process in which the member Cities rate applicable facilities as high, medium, or low priority. High priority facilities are inspected more frequently and low priority facilities are inspected less frequently. The prioritization scheme included in Figure ICF-1 prioritizes facilities by their potential water quality impact.</p> <p>However, the draft WMP also notes that Cities "may follow an alternative prioritization method provided it results in a similar three-tiered scheme." The revised WMP should ensure, and explicitly state that any alternative prioritization method used by a City must also be based on water quality impact. Furthermore, the draft WMP also notes that Cities can prioritize and reprioritize facilities at any time based on their discretion. The Group should revise their draft WMP to clearly state when the initial prioritization of facilities will occur. Additionally, the Group should be explicitly clear that during any reprioritization, the ratio of low priority to high priority facilities must always remain at 3:1 or lower to maintain inspection frequencies identified in the draft WMP.</p>	<p>The Prioritization Method language in Table 4-4 was modified to clarify that any alternative prioritization method used by a City will be based on water quality. The initial prioritization in most cases will occur after the first round of inspections. However, in situations where the second round of inspections has started before the WMP is approved, the initial prioritization may not occur until the next permit cycle. In all cases, the ratio of low priority to high priority facilities will remain at 3:1 or lower to maintain inspection frequencies.</p>
<p>4 Part VI.C.5.a.iv.(2)(a) (Prioritization)</p>	<p>Where data indicate impairment or exceedances of RWLs and the findings from the source assessment implicate discharges from the MS4, the Permit requires a strategy for controlling pollutants that is sufficient to achieve compliance as soon as possible. Although Section 5.0 describes compliance with RWLs and Section 6.0 includes an implementation schedule, the program needs to more clearly demonstrate that the compliance</p>	<p>New language was added to sub-sections 5.2.2 and 5.2.3 explaining the strategies for bringing Category 2 and Category 3 pollutants into compliance as soon as possible. Trash reduction will follow the new statewide trash amendments requirements. The schedule for elimination of Bis(2-ethylhexyl) phthalate exceedances is tied to the trash schedule because Bis(2) is a plasticizer that enters the receiving waters</p>

# Response to Regional Board Comments on the LCC WMP (Continued)

	<p>schedule described in Section 5.0 ensures compliance is "as soon as possible."</p>	<p>as a component of plastic trash. The inspection process will be used to educate maintenance organizations and individuals about not letting detergents and other products enter the storm drain, and that we will target elimination of MBAS exceedances by 2022 (end of next permit term). Further reductions in dry weather discharges will reduce dry-weather bacteria exceedances and possibly eliminate them within 10 years. The only way we currently know to reduce wet-weather bacteria exceedances is to obtain a high-flow suspension and to capture stormwater. 20-25 years will be needed to design, fund, and build enough capacity to significantly reduce wet-weather bacteria exceedances. The Permittees do not propose addressing ammonia and pH in the watershed through control measures. Rather, as explained above, they believe there is sufficient documentation to delist them.</p>
<p>5  Part VI.C.5.b.iv.(4)(b)- (c)(Selection of Watershed Control Measures)</p>	<p>This RAA identifies potential areas for green street conversion and assumes a 30% conversion of the road length in the suitable areas; however, the specific locations and projects are not identified. Although it may not be possible to provide detailed information on specific projects at this time, the WMP should at least commit to the construction of the necessary number of projects within specific sub-basins to ensure compliance with permit requirements per applicable compliance schedules.</p>	<p>Language was added to Section 6.0 reiterating that, consistent with the Water Quality Improvement Hierarchy shown in Figure 3-1 and the overall Water Quality Improvement Strategy discussed in Section 3, the Permittees will construct the necessary mix of water capture facilities, green streets, LID projects, and treatment controls in the various sub-basins to supplement the true source control, runoff reduction, and TSS reduction measures to ensure compliance with permit requirements per applicable compliance schedules. The mix of measures will be periodically adjusted through the adaptive management process.</p>

# Response to Regional Board Comments on the LCC WMP (Continued)

<p>6</p> <p>Watershed Control Measures - Part VI.C.5.b.iv.(4)(c)</p>	<p>The draft WMP does not include clear information on the nature, scope, and timing of implementation of all its watershed control measures.</p> <p>Regional Water Board staff recognizes the amount of information that the Group has provided on watershed control measures in its draft WMP. However, this information at times lacks specificity or is interspersed within different sections of the draft WMP (e.g., street sweeping is discussed in the draft WMP's chapter on strategy, but not in the chapter on control measures). Regional Water Board staff suggests that the Group construct a concise table or other organized listing of all its discussed control measures that contains the required information. This would clarify the descriptions that the Group includes in Sections 3 and 4 of its draft WMP.</p>	<p>Sub-sections 4.5.1 and 4.5.2 were strengthened by adding more information about the control measures discussed in Section 3.0.</p> <p>Preliminary information on the number, type, and location(s) and/or frequency of implementation of structural control measures and non-structural best management practices, as well as the nature, scope, and timing of implementation of pollution prevention measures is found in the revised implementation tables in Section 6.</p>
<p>7</p> <p>Part VI.C.5.b.iv.(4)(c) (Watershed Control Measures - Enhanced Street Sweeping)</p>	<p>The description of the enhanced street sweeping program lacks detail. It is discussed in Section 3 as part of the group's strategy, but details regarding implementation do not appear to be included in Section 4. In particular, since the City of Long Beach does not use vacuum or regenerative street sweepers, as indicated in Table 3-3, the WMP should be clear as to what enhancement to street sweeping the City of Long Beach will implement.</p>	<p>The description of the enhanced street sweeping program was expanded and details concerning the program included in sub-section 4.5.1. A general statement about the City of Long Beach street sweeping program was also added.</p>
<p>8</p> <p>Part VI.C.5.b.iv.(4)(c) (Watershed Control Measures - SB 346 Copper Reductions)</p>	<p>The draft WMP appears to rely mostly on the phase-out of copper in automotive brake pads, via approved legislation SB 346, to achieve the necessary copper load reductions. Given the combination of other Cu sources identified in various LA TMDLs such as building materials, other vehicle wear, air deposition from fuel combustion and industrial facilities, and that SB 346 progressively phases out Cu content in brakes of new cars (5% by</p>	<p>Sub-section 4.5.1 was revised to add a discussion of the implementation of SB 346 and mention the non-brake pad sources of copper shown in Figure 3-2. In addition, two brake pad copper reduction technical memos were added to the WMP in a new Appendix C:</p> <p>1) The "Estimate of Urban Runoff Copper Reduction in Los Angeles County from Brake Pad Copper Reduction</p>

# Response to Regional Board Comments on the LCC WMP (Continued)

	weight until 2021, 0.5% by weight until 2025), then other structural and non-structural BMPs may still be needed to reduce Cu loads sufficiently to achieve compliance deadlines for interim and/or final WQBELS.	Mandated by SB 346" study and 2) a "Brake Pad Copper Reduction - Metrics for Tracking Progress."
9	<p>The MS4 Permit requires that the WMP provide specificity with regard to structural and non-structural BMPs, including the number, type, and locations(s), etc. adequate to assess compliance. In a number of cases, additional specificity on the number, type, and general locations(s) of watershed control measures as well as the timing of implementation for each is needed.</p> <p>Section 6 of the draft WMP includes a four-phase WMP implementation schedule for control measures (MCMs, source control measures, stormwater capture, etc.). Some of these actions are listed as, "encourage the use of..." (e.g., p. 6-6); greater specificity is required as to what actions will be taken by the group to encourage these actions by others.</p> <p>Items in the schedule only reference the year (or years) that a measure of milestone will be implemented. This should be revised to include more specific and/or exact dates where appropriate. Furthermore, some items discussed as control measures do not appear to have milestones within the implementation schedule (e.g., enhanced street sweeping in Table 6-4).</p> <p>Additionally, many items in the implementation schedule are ongoing measures that are not new interim milestones (e.g. MCMs, implementation of SB 346, enhanced street sweeping, etc.). For transparency, Regional Water Board staff recommends that ongoing measures clearly be separated from interim</p>	<p>Section 6.0 was strengthened by adding an explanation of actions to be taken to encourage actions by others. Tables in Section 6.0 were revised to specify quarters by which control measures will be implemented and were restructured to separate ongoing measures from interim milestones for structural controls and non-structural BMPs in the implementation schedule. In addition, where possible and appropriate, more specificity on actions within the current and next permit terms was provided to demonstrate how compliance with interim requirements are to be met.</p>

## Response to Regional Board Comments on the LCC WMP (Continued)

	<p>milestones for structural controls and non-structural BMPs in the implementation schedule.</p> <p>Regional Water Board staff recognizes uncertainties may complicate establishment of specific implementation dates, however there should at least be more specificity on actions within the current and next permit terms to ensure that the following interim requirements are met: (1) a 10% reduction in metals loads during wet weather and a 30% reduction in dry weather by 2017 and (2) a 35% reduction in metals loads during wet weather and a 70% reduction during dry weather by 2020.</p>	
10	<p>For MCMs and NSW discharge screening control measures, the draft WMP clearly lists responsibilities in Table 4-3. However, for other control measures, it is harder to identify Permittee responsibilities.</p> <p>The WMP Implementation Schedule groups together all actions that are being implemented. Although City specific items are marked (e.g. Skylinks Golf Course), it is hard to clearly read amongst the other group actions. The WMP could be improved by including a separate schedule for each City.</p> <p>Table 6-8 also breaks down control measure implementation; however, this is broken up into sub-basins rather than by City, making the responsibilities not immediately clear.</p>	<p>A new Section 4.10 was added to the WMP, generally describing individual Permittee responsibilities within a watershed management program that is initially emphasizing true source control/pollution prevention and runoff reduction, without a separate implementation schedule for each city. In addition, information was added to Table 6-8 listing the responsible jurisdictions for each sub-basin.</p>
11	<p>For waterbody-pollutant combinations not addressed by TMDLs, the MS4 Permit requires that the plan demonstrate using the reasonable assurance analysis (RAA) that the activities and control measures to be implemented will achieve applicable receiving water limitations as soon as possible. The RAA demonstrates the control measures would be adequate to</p>	<p>The new language in sub-sections 5.2.2 and 5.2.3, discussed above, and the new sub-section 5.4, discussed below, together respond to this comment.</p>

## Response to Regional Board Comments on the LCC WMP (Continued)

	comply with the limitations/deadlines for the "limiting pollutants" for TMDLs and concludes that this will ensure compliance for all other pollutants of concern. However, it <b>does not address the question of whether compliance with limitations for pollutants not addressed by TMDLs could be achieved in a shorter time frame.</b>	
12  Part VI.C.b.iv.(5) (Reasonable Assurance Analysis - Limiting Pollutants)	<p>The RAA identifies zinc and <i>E. coli</i> as the limiting pollutants for wet weather and dry weather, respectively. They note that these two pollutants will drive reductions of other pollutants.</p> <p><b>If the Group believes that this approach demonstrates that activities and control measures will achieve applicable receiving water limitations, it should explicitly state and justify this for the category 2 and 3 pollutants.</b> (This appears to have been done for category 1 pollutants and <i>E. coli</i> in Tables 5-6 and 5-9 and Figure 5-13, but not for other categories 2 and 3 pollutants.)</p>	<p><b>A new sub-section 5.4 was added to the WMP entitled "Addressing Limiting Pollutants Drives Other Pollutant Reductions."</b> This new sub-section describes how the control measures to address zinc in wet weather and <i>E. coli</i> in dry weather will drive reductions in exceedances of RWLs for ammonia, pH, trash, Bis(2-ethylhexyl) phthalate, and MBAS.</p>
13  Part VI.C.5.b.iv.(5) (Reasonable Assurance Analysis - New Non- Structural Controls)	<p>The draft WMP assumes a <b>10% pollutant reduction from new non-structural controls.</b> Although 10% is a modest fraction of the overall controls necessary, <b>additional support for this assumption should be provided,</b> particularly since the group appears to be relying almost entirely on these controls for near-term pollutant reductions to achieve early interim milestones/deadlines. <b>Additionally, as part of the adaptive management process, the Permittees need to commit to evaluate this assumption during program implementation and develop alternate controls if it becomes apparent that the assumption is not supported.</b></p>	<p><b>A new paragraph was added to sub-section 4.5.1 supporting the assumption of a 10% pollutant reduction for new non-structural measures by explaining the expected impacts of implementing SB 346, implementing the TSS reduction program, implementing plastic bag bans, and implementing the commercial/industrial inspection program. In addition, sub-section 10.3 was amended to include a commitment to evaluate the assumption as part of the adaptive management process and to develop alternative controls if it becomes apparent that the assumption is not supported.</b></p>

# Response to Regional Board Comments on the LCC WMP (Continued)

<p>14</p> <p>Part VI.C.5.b.iv.(5) (Reasonable Assurance Analysis - Irrigation Reductions)</p>	<p>For dry weather, the WMP assumes a 25% reduction in irrigation (RAA, section 7.1.2). Additional support should be provided for this assumption, particularly since the group appears to be relying almost entirely on this non-structural BMP for near-term pollutant reductions to meet early interim milestones/deadlines. Additionally, as part of the adaptive management process, the Permittees need to commit to evaluate this assumption during program implementation and develop alternate controls if it becomes apparent that the assumption is not supported.</p>	<p>A new paragraph was added to sub-section 3.3 explaining the reduction in average 2001-2008 dry-weather runoff from 2.35 CFS to less than 0.5 CFS and comparing this reduced flow to the modeled 2003 and 2008 dry-weather flows in the RAA. This reduction reflects a successful water conservation program based in large part on reduction of landscape irrigation. Also, sub-section 10.3 was amended to include a commitment to evaluate this assumption as part of the adaptive management process and to develop alternative controls if it becomes apparent that the assumption is not supported.</p>
<p>15</p> <p>Part VI.C.5.b.iv.(5) (Reasonable Assurance Analysis - Regional BMPs)</p>	<p>Section 1.4.2 of Attachment A to the RAA points out that additional potential regional BMPs were identified to provide the remaining BMP volume noted in Table 9-5. It indicates they can be found in Section 3 of the WMP. It is unclear if the RAA is referring to the "First Order Major BMP Sites" listed in Table 4-5 and the "Second Order Major BMP Sites" listed in Table 4-6. The RAA should clarify that sufficient sites were identified. Additionally, the WMP should mention how these sites relate to the RAA.</p>	<p>Language was added to sub-section 4.5.2 explaining the relationship of the first and second order regional BMP sites to the RAA and explaining the need to find and evaluate additional Regional BMP sites through the adaptive management process. This language also explains that the regional capture volume for regional BMPs will be reduced due to implementation of green streets and LID projects as well as effective implementation of source control measures.</p>
<p>16</p> <p>Part VI.C.5.b.iv.(5) (Reasonable Assurance Analysis - Permitted Industrial Facilities)</p>	<p>The draft WMP, including the RAA, excludes stormwater runoff from non-MS4 facilities within the WMA from the stormwater treatment target. In particular, industrial facilities that are permitted by the Water Boards under the Industrial General Permit or an individual stormwater permit were identified and subtracted from the treatment target.</p> <p>Regional Water Board staff recognizes that this was done with the assumption that these industrial facilities will retain their</p>	<p>Sub-section 4.3.2.2.2 was amended to clarify that the Industrial/Commercial Facilities Program will include tracking critical industrial sources and educating industrial facilities with the intent of ensuring that all industrial facilities are implementing BMPs as required.</p>

# Response to Regional Board Comments on the LCC WMP (Continued)

	<p>runoff and/or eliminate their cause/contribution to receiving water exceedances, as required by their respective NPDES permit. However, it is important that the Group's actions under its Industrial/Commercial Facilities Program - including tracking critical industrial sources, educating industrial facilities regarding BMP requirements, and inspecting industrial facilities - ensure that all industrial facilities are implementing BMPs as required.</p>	
<p>17 Part VI.C.5.b.iv.(5) (Reasonable Assurance Analysis - Caltrans Facilities)</p>	<p>The draft WMP, including the RAA, takes a similar approach for areas under the jurisdiction of the California Department of Transportation (Caltrans). Caltrans facilities that are permitted under the Caltrans MS4 permit (Order No. 2012-0011-DWQ) were also identified and subtracted from the treatment target.</p> <p>It should be noted that the Amendment to the Caltrans Permit (Order WQ 2014-0077-DWQ) includes provisions to address TMDL requirements throughout the state. Revisions to Attachment IV of the Caltrans Permit require that Caltrans prioritize all TMDLs for implementation of source control measures and BMPs, with prioritization being "consistent with the final TMDL deadlines to the extent feasible."</p> <p>Additionally, the Caltrans Permit also includes provisions for collaborative implementation through Cooperative Implementation Agreements between Caltrans and other responsible entities to conduct work to comply with a TMDL. By contributing funds to Cooperative Implementation Agreements and/or the Cooperative Implementation Grant Program, Caltrans may receive credit for compliance units, which are needed for compliance under the Caltrans Permit.</p> <p>In a similar manner, the LA County MS4 Permit includes provisions for Permittees to control the contribution of</p>	<p>Language was added to sub-section 3.7, explaining the Watershed Group's coordination with Caltrans and the potential for collaborative implementation of projects through Collaborative Implementation Agreements.</p>

## Response to Regional Board Comments on the LCC WMP (Continued)

	<p>pollutants from one portion of the shared MS4 to another portion of the MS4 through interagency agreements with other MS4 owners - such as Caltrans - to successfully implement the provisions of the Order (see Parts VI.A.2.a.viii and VI.A.4.a.iii). Therefore, the Group should ensure that it is closely coordinating with appropriate Caltrans District staff regarding the identification and implementation of watershed control measures to achieve water quality requirements (i.e. applicable Receiving Water Limitations and WQBELs).</p> <p>Regional Water Board staff recognizes that the Group has taken the initial steps for such collaboration since Caltrans participates in the Group and the draft WMP notes Caltrans in its strategies for runoff reduction and total suspended solids reduction.</p>	
<p>18 Part VI.C.5.b.iv.(6) (Legal Authority)</p>	<p>Attachment D to the draft WMP includes a copy of legal certifications for all Group members except for Long Beach. The legal certifications for Long Beach should be submitted in the revised WMP.</p>	<p>The following language was added to the new Attachment F explaining the status of Long Beach's legal certifications:</p> <p>The legal authority certifications of the cities of the LCC are included in this section. The City of Long Beach's MS4 permit is on a separate timeline (effective date 15 months after the Los Angeles County-Wide MS4 Permit) and a legal authority letter will be submitted separately. A status report will be included in the Long Beach separate area WMP when submitted on or before March 28, 2015.</p>

# Response to Regional Board Comments on the LCC WMP (Continued)

<p>19</p> <p>Part VI.C.5.c.iii(3)(Compliance Schedules - Bacteria)</p>	<p>The draft WMP proposes a final compliance date of September 2040 for <i>E. coli</i> and <i>Enterococcus</i>. However, the Group does not provide sufficient justification for this date. Additionally, milestones and a schedule of dates for achieving milestones are not defined for these two pollutants.</p> <p>In revising this draft WMP, the Group should evaluate compliance schedules of bacteria TMDLs that have been established within the region and modify the proposed compliance schedule for these pollutants to include interim milestones and dates for their achievement and a final compliance date that is as soon as possible. Justification for the final compliance date as well as interim milestones should also be included.</p>	<p>Sub-section 2.4 was amended to provide greater justification for the final compliance date and interim milestones for <i>E. coli</i> and enterococcus. Tables 6-5, 6-6, and 6-7, as subdivided, were amended to include interim milestones for reduction of <i>E. coli</i> and enterococcus, including dry-weather compliance by the fourth quarter of 2025.</p>
<p>20</p> <p>Part VI.C.5.iii(3) (Compliance Schedules - Ammonia and pH)</p>	<p>The draft WMP does not propose milestones or final compliance dates for ammonia and pH, which were both identified as Category 2 pollutants. The WMP should include milestones and compliance date for these pollutants and address them through watershed control measures, or alternatively, provide the data to support delisting (in the case of ammonia) and to support that exceedances of pH outside the acceptable range are due to natural causes.</p>	<p>The WMP does not propose milestones or final compliance dates for ammonia and pH because, as noted above, both are being proposed for delisting. Naturally occurring cycles in pH in the shallow dry-weather flows are causing the exceedances of chronic ammonia standards. In the absence of dry-weather pH cycling, there would be no ammonia exceedances. Language was added to sub-section 2.4 explaining the rationale for delisting ammonia and pH, and a new Appendix C was added containing data about ammonia and pH in the Los Cerritos Channel.</p>
<p>21</p> <p>Figures and Symbols in Draft WMP</p>	<p>Some figures in the draft WMP are distorted. Examples include:</p> <ul style="list-style-type: none"> <li>• Figures 1-2 and 1-3 (on pages 1-6 and 1-8, respectively) have legends that are missing information</li> <li>• Table 4-4 (on page 4-13) does not display Figure ICF-1</li> <li>• Mathematical symbols used on pages 5-4 and 5-5 do not correctly display</li> </ul>	<p>The distorted figure in the draft WMP and the display of mathematical symbols in Section 5.3 (pages 5-4 and 5-5) were corrected.</p>

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# **SUMMARY OF RESPONSES TO REGIONAL BOARD STAFF COMMENTS ON DRAFT WMPS**

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**For the Lower Los Angeles River and Lower San  
Gabriel River Watershed Management Programs**

LARWQCB Public Meeting

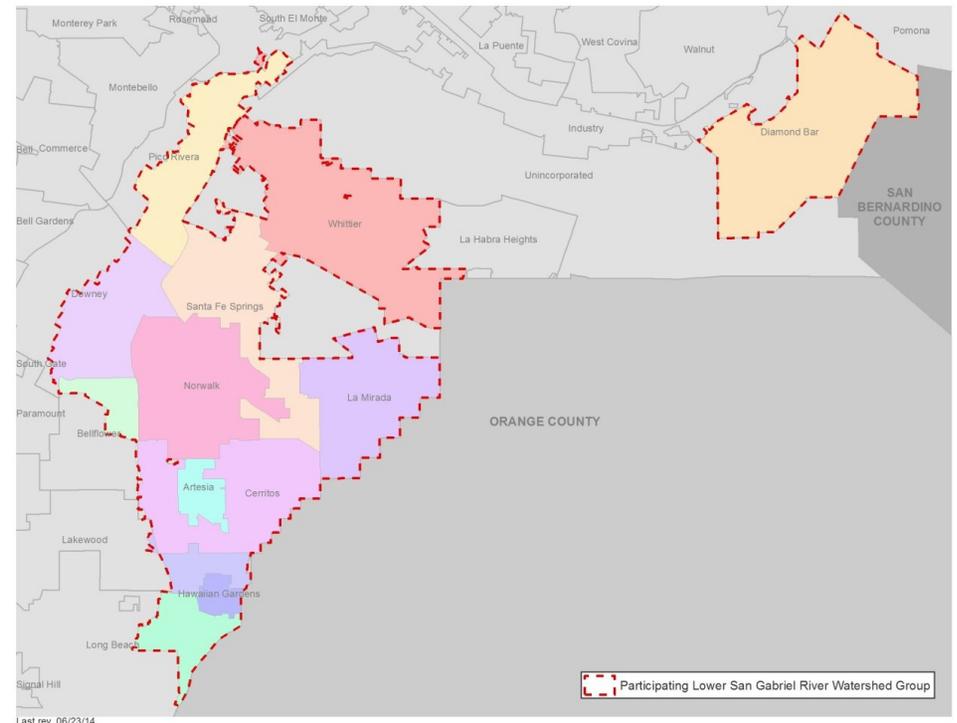
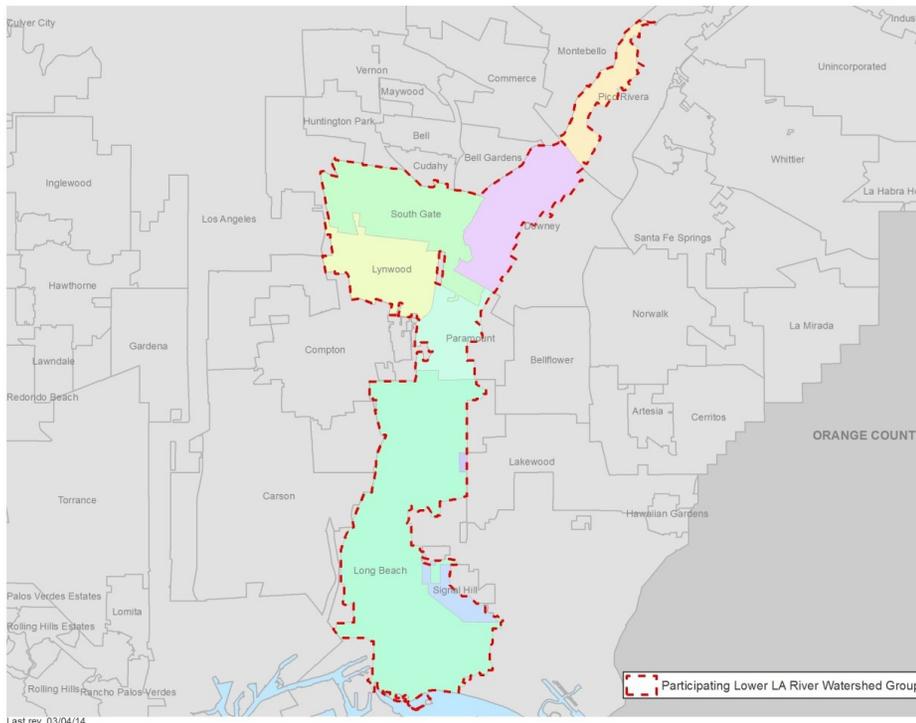
April 13, 2015

# INTRODUCTION

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- Note WMP Group representatives met with Regional Board staff on 1/23/2015 to discuss responses
- Today we review the more pressing comments/responses (These are common to both watersheds and as such are addressed together in this presentation)

# Watershed Group Maps



## Between the two, Participating Agencies are:

Artesia, Bellflower, Cerritos, Diamond Bar, Downey, Hawaiian Gardens, Lakewood, La Mirada, Long Beach, Lynwood, Norwalk, Paramount, Pico Rivera, Santa Fe Springs, Signal Hill, South Gate, Whittier, and the Flood Control District

**RB-AR2634**



# LOWER LA RIVER AND LOWER SG RIVER WMP

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COMMENTS AND RESPONSES

# WMP Comments

Comment ID		Comment Summary	Response
LLAR LSGR	p3, #3 RAA A.3 p2, #2 p4, #1	Provide more specificity on actions within current and next permit term in order to meet pollutant reductions.	WMP modified to increase degree of clarity and specificity regarding schedules and actions. This effort is the maximum practicable considering associated uncertainties. Greater certainty will be provided through adaptive management.  <b>Of particular note:</b> A regional project assessment effort has been added.
			
LLAR LSGR	p3, #3 p3, #3	Commit to construct necessary # of green street conversions to meet compliance schedule.	See above response.  <b>Of particular note:</b> Nexus with Gateway Strategic Transportation Plan has been added.
			

# WMPs Lay out Compliance Approach

- Chapter 5 (Compliance Schedule) includes:
  - RAA load reductions and BMP capacities for each City
  - A specific compliance approach for interim limits
    - Institutional BMPs, ROW BMP capacity, and potential Regional BMPs
- Chapter 3 (Watershed Control Measures) includes:
  - Menu of potential Regional/LID BMPs for each City
  - Estimated Regional BMP capacities
  - R.O.W. map based on GIS file that has specificity for City use
  - Upcoming planned BMPs
- Reasonable Assurance Analysis includes:
  - Optimized schedule by subwatershed for each City
  - Optimized division of BMPs into types (Public LID, ROW, Regional)

# Compliance Approach: Chapter 5

January 11, 2024 to meet the 50% interim compliance milestone, and 76.5 acre-feet by January 11, 2028 to meet the final compliance milestone.

If Ralph C. Dills Park was transformed into an infiltration BMP, the parks would have the potential of retaining 17.9 acre-feet of stormwater. Right-of-Way BMPs could be used for the remaining 3.0 acre-feet to meet the 31% compliance milestone.

If Spane Park was transformed into an infiltration BMP, the parks would have potential of retaining 5.3 acre-feet of stormwater. Right-of-Way BMPs could be used for the remaining 3.2 acre-feet to meet the 50% compliance milestone.



31% Interim Compliance Milestone	
Potential BMP Site	Potential Design Capture Volume (ac-ft)
Ralph C. Dills Park	17.9
Right-of-Way BMPs	3.0
Total	20.9
50% Interim Compliance Milestone	
Potential BMP Site	Potential Design Capture Volume (ac-ft)
<u>Spane</u> Park	5.3
Right-of-Way BMPs	3.2
Cumulative Total	29.3

# Compliance Approach: Chapter 3

Table 3-13: Potential site list

**Example:  
Paramount's  
Regional BMP  
list alone  
meets final  
milestone**

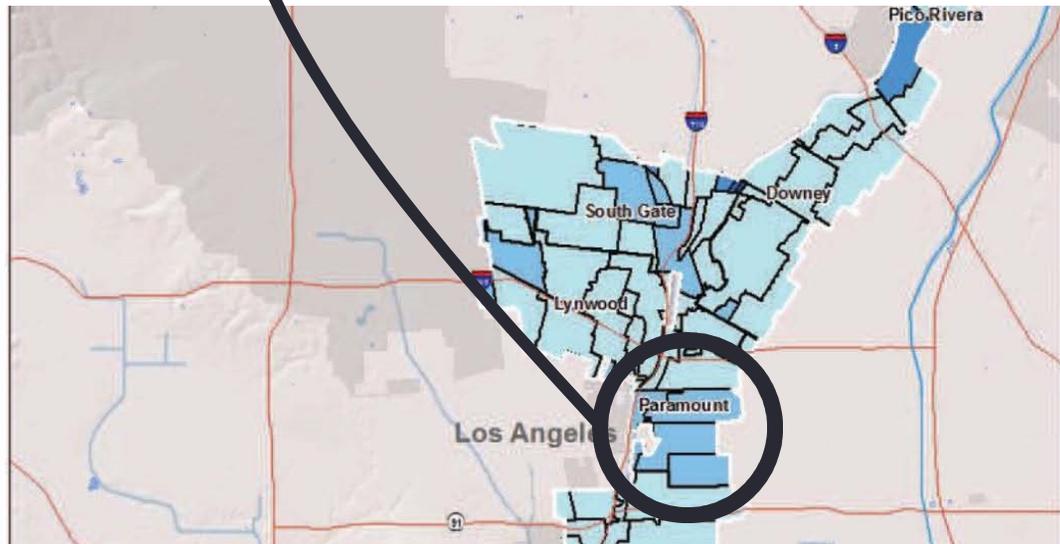
City Name	Land Use Designation	Site Name	Site Address	Latitude	Longitude	Area (Acres)	Area (Quadrantary, Acres)	Max Design Capture Volume (DCV, Ac-ft)	
Paramount	Open Space & Recreation	Ralph C. Dills Park	6500 San Juan St.	33.9001	-118.1843	14.1	217	17.9	
		Paramount Park	14400 Paramount Blvd.	33.9018	-118.159	12.5	182	15.0	
		Spane Park	14400 Gundry Ave.	33.9029	-118.1759	4.4	64	5.3	
		Village Skate Park	7718 Somerset Blvd.	33.8959	-118.1649	0.7	10	0.9	
		Meadows Park	15753 Gundry Ave.	33.8895	-118.1751	0.7	9	0.8	
		open space	Somerset Blvd.	33.8965	-118.1837	0.4	5	0.4	
	Educational Use	Elementary School	Excluded for privacy				8.1	117	9.7
		School	Excluded for privacy				4.3	62	5.1
		Elementary School	Excluded for privacy				3.3	49	4.0
		Elementary School	Excluded for privacy				3.2	46	3.8
		School	Excluded for privacy				2.8	41	3.4
		School	Excluded for privacy				2.0	30	2.5
		High School	Excluded for privacy				1.8	27	2.2
		Elementary School	Excluded for privacy				1.7	25	2.1
	Elementary School	Excluded for privacy				1.5	21	1.8	
<b>Total</b>		<b>15 Potential Projects</b>						<b>75</b>	
Pico Rivera	Open Space & Recreation	Rio Hondo Park	8421 San Luis Potosi Pl.	34.0119	-118.0921	11.9	172	14.2	
		park	Calico Ave.	34.0175	-118.084	1.4	21	1.7	
	Educational	open space	Cope Dr.	34.0147	-118.087	3.1	45	3.8	

# WMPs Lay out Approach: RAA

Subwatershed maps and tables optimize type and placement of BMP for each City

## B1.5. City of Paramount

Subwatershed	Milestone	COMPLIANCE TARGET	POLLUTANT REDUCTION PLAN				
		Remaining MS4 Responsible Critical Year Volume (acre-ft/year)	Existing Distributed BMP Volume (acre-ft)	Total Estimated Right-of-Way BMP Volume (acre-ft)	Estimated Potential LID on Public Parcels Volume (acre-ft)	Remaining BMP Volume (Potentially Regional BMPs) (acre-ft)	Total BMP Volume to Achieve Compliance (acre-ft)
6069	31%	0.0	-	-	-	-	-
6071	Final	120.7	0.0	4.9	0.9	9.9	15.6
6072	Final	172.9	0.0	7.6	1.1	13.9	22.6
6073	Final	61.4	-	1.9	0.2	4.6	6.6
6075	31%	163.7	-	9.0	1.7	10.2	20.9
6076	50%	65.7	-	7.4	0.8	0.3	8.6
6078	Final	21.7	-	0.5	0.0	1.8	2.3
6080	Final	-	-	-	-	-	-
Grand Total		606.1	0.1	31.2	4.7	40.6	76.6



# Additional BMP Specificity

- Groups understand need for specificity
- ROW BMPs:
  - Group does not see utility in listing all potential street projects
  - WMPs provide necessary ROW BMP capacities for each City
  - RAA includes GIS list of prioritized streets for use by Cities
  - **NEW:** WMP states that ROW BMPs will be tied into Gateway Strategic Transportation Plan
- Regional BMPs:
  - **NEW:** WMP commits to Regional BMP assessment in each City
    - **March 2016:** Preliminary site assessment and feasibility study
    - **December 2016:** Field analysis including ground truthing

# Additional BMP Specificity

- Group emphasizes that biennial adaptive management provides mechanism to refine compliance approach



# WMP Comments

Comment ID		Comment Summary	Response
LLAR LSGR	p3, #3 p3, #1 RAA A.1	Provide additional support for the 10% pollutant reduction due to non-structural controls.	WMP Sec. 4.3 added to address. (Should be 10% for "non-modeled" controls. Structural LID ordinance implementation was not modeled.) Includes support for ~3% reduction from TSS Reduction Program. With new MCMs (~5%) and LID ordinance implementation (~2%), 10% is a modest assumption. Groups also commit to evaluation of assumptions through Adaptive Management Process.
LLAR LSGR	p4, #1 p5, #3	Provide additional support for 25% reduction in irrigation.	WMP Sec. 4.2.1 added to address. Literature review conducted and relevant support provided.

# WMP Comments

Comment ID		Comment Summary	Response
LLAR LSGR	p3, #1 p2, #2	Demonstrate that compliance schedule ensures compliance as soon as possible.	Clarifying language included in Chapter 5, following ASAP as defined in MS4 Permit VI.C.2.a.ii.(4)  <i>“...a timeframe(s) that is as short as possible, taking into account the technological, operation, and economic factors that affect the design, development, and implementation of the control measures that are necessary.”</i>
LLAR LSGR	p7, #1 p5, #1 RAA A.3	Demonstrate that “limiting pollutant” approach will achieve compliance for each priority pollutant	Addressed in Compliance Schedule (Chapter 5).
LLAR LSGR	p3, #2 p3, #1	Address potential for shorter compliance timeframes for non-TMDL priority pollutants	Addressed in Compliance Schedule (Chapter 5).

# WMP Comments

Comment ID		Comment Summary	Response
LLAR LSGR	p1, #3 p3, #2	Include date for initial prioritization of industrial/commercial facilities.	Addressed in Watershed Control Measures (Chapter 3).
LLAR LSGR	p2, #1 p2, #1	Provide a process/timeline to develop a drainage area map and database for major outfalls.	Drainage areas for individual outfalls are not readily available. Defining these areas requires significant resources. The Group proposed to provide drainages areas for major outfalls with significant discharges and outfalls where stormwater monitoring will be conducted. This task will be completed within one year of WMP approval.

# RAA-specific Comments

Comment ID		Comment Summary	Response
LLAR LSGR	RAA B.1 RAA B.1	Incorporate upstream flow volume to improve model performance.	Addressed
LLAR LSGR	RAA B.2 RAA B.2	Provide summary tables of baseline loads for pollutants of concern.	Included
LLAR LSGR	RAA B.3 RAA B.3	Provide time series plots comparing baseline loads and allowable loads for the critical year.	Included
LLAR LSGR	RAA B.4 RAA B.4	Explain lack of modeling for organics (DDT, PCBs, PAHs)	Explained
LLAR LSGR	RAA B.5 RAA B.5	Provide volume, required volume reductions, and proposed reductions from BMPs for subbasins.	Included
LLAR LSGR	RAA B.6 RAA B.6	Include a commitment to collect data necessary to calibrate future models for non-stormwater.	Included
LLAR LSGR	RAA B.7 RAA B.7	Include subwatershed ID numbers from model input file in RAA.	Included

# Current and Upcoming Activities

- Monitoring: Outfall screening/nonstormwater characterization
- Planned control measures include (but are not limited to):
  - Prop 84 Grant implementation (Multi-jurisdictional LID projects)
  - Exposed soil ordinance
  - South Gate Urban Orchard
  - Long Beach's Municipal Urban Stormwater Treatment facility

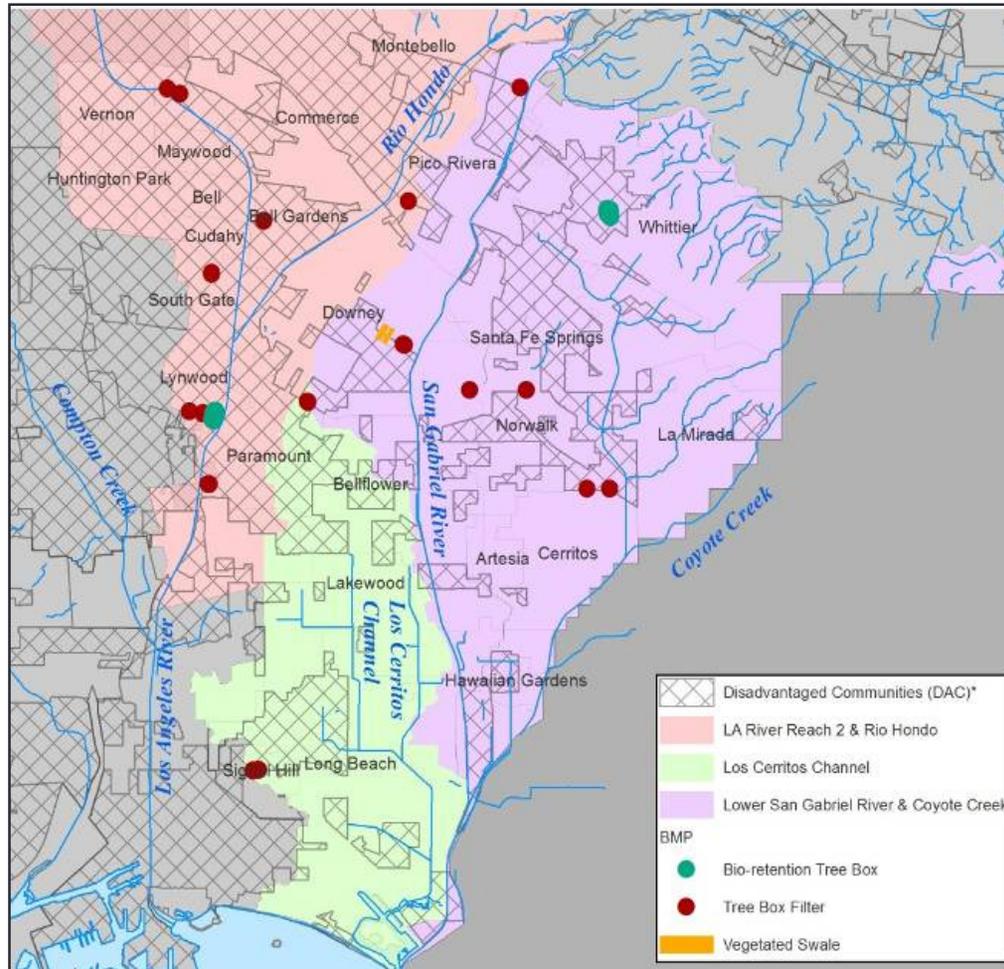


# Current and Upcoming Activities



**Exposed Soil Ordinance**

# Current and Upcoming Activities



**Prop 84 Grant implementation (Multi-jurisdictional LID projects)**

**RB-AR2650**

# Current and Upcoming Activities



**South Gate Urban Orchard (multi-benefit project using recycled stormwater)**

# Current and Upcoming Activities



**Long Beach Municipal Urban Stormwater Treatment facility**

Photo of Santa Monica's Urban Runoff Recycling Facility.

Accessed from <http://www.smgov.net/Departments/PublicWorks/ContentWater.aspx?id=8051>

**RB-AR2652**

# Current and Upcoming Activities

- Groups are working cooperatively, meeting regularly, and drafting MOUs for the WMP/CIMP implementation phase



THANK YOU

---

And Good Day from the Lower LA and Lower SG River  
Watershed Groups

April 13, 2015

# Watershed Management Program for Santa Monica Bay Jurisdictional Group 7 within the City of Los Angeles



RB-AR2655

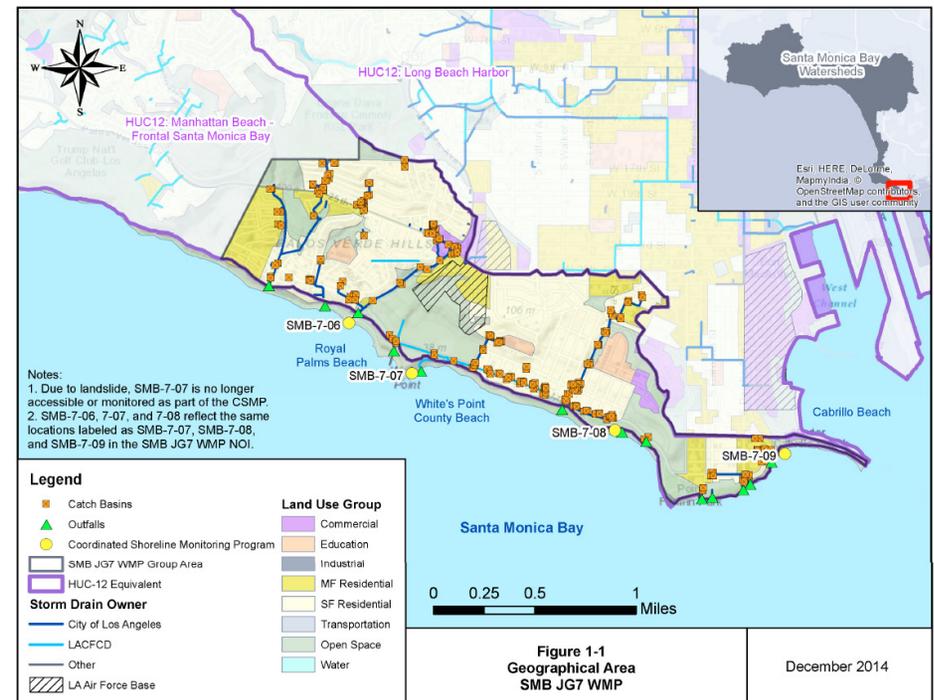


# SMB JG7 WMP

## Comments Received from RB

### 1) Include Point Fermin sub-watershed

- *Point Fermin Park Beach sub-watershed added*
- *Expanded the geographical area to 1056 acres*
- *Included SMB 7-09 shoreline monitoring station*



# SMB JG7 WMP

## Comments Received from RB

### **2) Further assess 2003 & 2008 Bight data for other sediment bound pollutants of concern in offshore area**

*Further assessment shows:*

- *Offshore bight sediment data not representative of MS4 discharge due to distance from outfalls and proximity to PV shelf superfund site*
- *WQC policy for development of CWA sec 303(d) listing requires sample size of 16 for toxicants and 26 for other pollutants. Bight data do not include qualifying number of samples. Sample size between 3 to 10 for all parameters.*

# SMB JG7 WMP

## Comments Received from RB

### 3) Evaluate bacteria TMDL shoreline monitoring data and exceedances

*Evaluation shows:*

- *With the exception of SMB 7-07, other monitoring sites are non-point source open beach (no outfall)*
- *Investigation of exceedances show local activities as potential cause of exceedances*
- *Exceedances not caused by MS4 discharges*

# SMB JG7 WMP Comments Received from RB



*Local activities  
potential cause of  
bacteria exceedances*



# SMB JG7 WMP

## Comments Received from RB

### 4) Specify strategy to eliminate non-storm water discharges

CIMP:

- *Outfall screening of significant non-stormwater discharges*
- *Source investigations*

WIMP:

- In case the discharge is prohibited, then the discharge will eliminate through one of the following;
  - a) Source control; b) localized BMP; or c) LFD

# SMB JG7 WMP

## Comments Received from RB

### 5) Provide interim compliance/Catch basin retrofit schedule

- *Total number of Catch basins to be retrofitted 218*

#### *Catch Basin Retrofit Implementation Schedule*

Implementation Goal	Date
57 catch basins opening cover and/or inserts retrofits (cumulative) (26% of load reduction)	December 2015
161 catch basins opening cover and/or inserts retrofits (cumulative) (100% of load reduction)	July 2016

- *Ahead of March 2020 schedule in Debris TMDL*

# SMB JG7 WMP

## Comments Received from RB

### 6) Provide compliance schedule for EPA TMDL for PBC/DDT

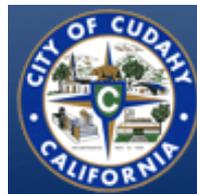
- *TMDL does not include compliance schedule*
  - *Demonstrate compliance thru monitoring*
  - *Determine annual loadings for PBC/DDT*
  - *Compliance determination based on 3-year average*
  - *Report data to RWQCB*

# SMB JG7 WMP

## Comments Received from RB

### **Other Comments required either additional information or clarification**

- 7) *Include Footnote on fish consumption advisory* ✓
- 8) *Include Language referring to EPA recommendation not to include sediment toxicity as category 2* ✓
- 9) *Include Catch basins and major outfalls map* ✓
- 10) *Include Source assessment language* ✓
- 11) *Provide Legal authority* ✓



# Los Angeles River Upper Reach 2 Watershed Management Program (WMP) Plan Revisions

**April 13, 2015  
Public Meeting**

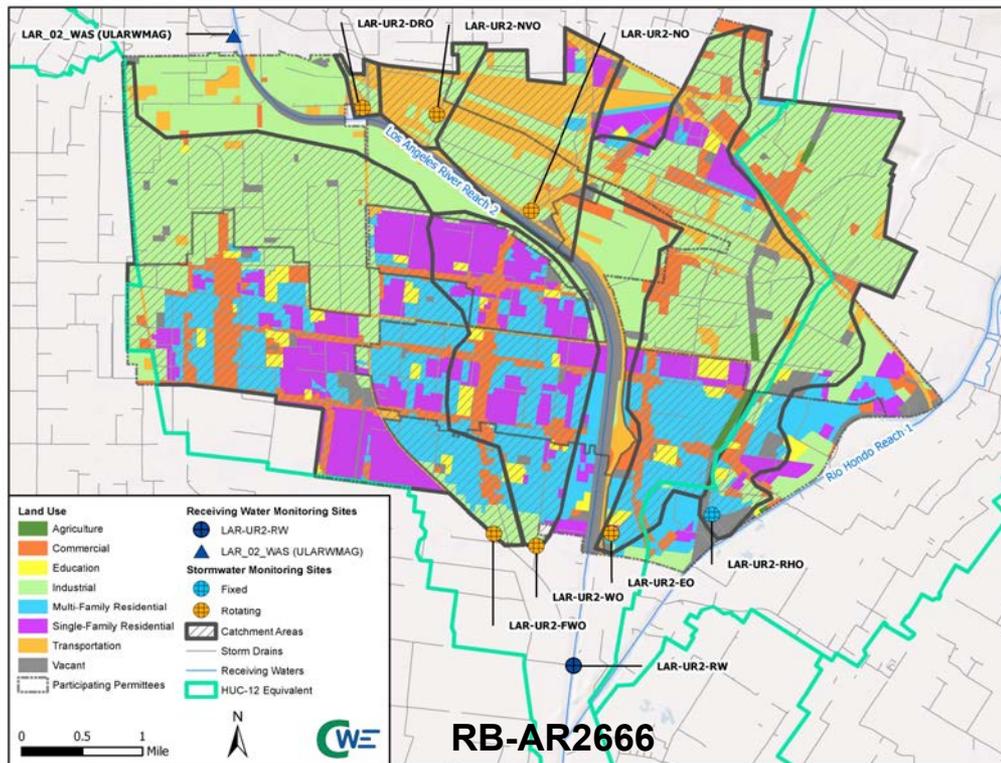
Dr. Gerald "G<sup>2</sup>" Greene, DEnv, PE, QEP, QSP/D  
Director Stormwater, CWE Corporation

RB-AR2665



# LAR UR2 WMA Specifics

- Industrial/Commercial/Transportation Areas (Permits within Permits)
- Several small DAC communities: more multi, than single family areas
- CIMP, nearly 80% of tributary area monitored at outfalls each year
- WMP: 6 Regional BMPs (\$210M) and LID/Green Street Needs (\$90M)



# SB-PAT RAA Model Inputs

- Current model uses only 8 land use categories for pollutant load data
- No logical way to incorporate 35/161 SMARTS Industrial Permit data a
- SMARTS data rarely matches impairments, is variable, has limitations
- Must use surrogates pollutants for pH, Cr & Ni, TN, *E. coli* load data

**Table 4-1 SBPAT RAA EMCs - Arithmetic Estimates of the Lognormal Summary Statistics**

Land Use	TSS (mg/L)	TP (mg/L)	DP (mg/L)	NH3 (mg/L)	NO3 (mg/L)	TKN (mg/L)	DCu (µg/L)	TCu (µg/L)	TPb (µg/L)	DZn (µg/L)	TZn (µg/L)	FC (#/100mL)
Agriculture (row crop)	999.2 (648.2)	3.34 (1.53)	1.41 (1.04)	1.65 (1.67)	34.40 (116.30)	7.32 (3.44)	22.50 (17.50)	100.1 (74.8)	30.2 (34.3)	40.1 (49.1)	274.8 (147.3)	60,300 (153,000)
Commercial	67.0 (47.1)	0.40 (0.33)	0.29 (0.25)	1.21 (4.18)	0.55 (0.55)	3.44 (4.78)	12.3 (10.2)	31.4 (25.7)	12.4 (34.2)	153.4 (96.1)	237.1 (150.3)	51,600 (173,400) <sup>a</sup>
Education (Municipal)	99.6 (122.7)	0.30 (0.17)	0.26 (0.2)	0.4 (0.99)	0.61 (0.67)	1.71 (1.13)	12.2 (11.0)	19.9 (13.6)	3.6 (4.9)	75.4 (52.3)	117.6 (83.1)	11,800 <sup>b</sup> (23,700)
Industrial	219.2 (206.9)	0.39 (0.41)	0.26 (0.25)	0.6 (0.95)	0.87 (0.96)	2.87 (2.33)	15.2 (14.8)	34.5 (36.7)	16.4 (47.1)	422.1 (534.0)	537.4 (487.8)	3,760 (4,860)
Multi-Family Residential	39.9 (51.3)	0.23 (0.21)	0.20 (0.19)	0.50 (0.74)	1.51 (3.06)	1.80 (1.24)	7.40 (5.70)	12.1 (5.60)	4.5 (7.80)	77.5 (84.1)	125.1 (101.1)	11,800 <sup>c</sup> (23,700)
Single Family Residential	124.2 (184.9)	0.40 (0.30)	0.32 (0.21)	0.49 (0.64)	0.78 (1.77)	2.96 (2.74)	9.4 (9.0)	18.7 (13.4)	11.3 (16.6)	27.5 (56.2)	71.9 (62.4)	31,100 <sup>d</sup> (94,200)
Transportation	77.8 (83.8)	0.68 (0.94)	0.56 (0.82)	0.37 (0.68)	0.74 (1.05)	1.84 (1.44)	32.40 (25.5)	52.2 (37.5)	9.2 (14.5)	222.0 (201.7)	292.9 (215.8)	1,680 (456)
Vacant/Open Space	216.6 (1482.8)	0.12 (0.31)	0.09 (0.27)	0.11 (0.25)	1.17 (0.79)	0.96 (0.9)	0.60 (1.90)	10.6 (24.4)	3.0 (13.1)	28.1 (12.9)	26.3 (69.5)	484 (806)

**Note:** EMC statistics are calculated based on 1996-2000 data for Los Angeles County land use sites (Los Angeles County, 2000), except for agriculture which are based on Ventura County MS4 EMCs (Ventura County, 2003) and fecal coliform which are based on 2000-2005 SCCWRP Los Angeles region land use data (SCCWRP, 2007b). These EMC datasets are summarized in the SBPAT User's Guide (Geosyntec, 2012).

<sup>a</sup> The default log distribution best fit summary statistics for this land use-pollutant combination produced an unreasonably high deviation, therefore the arithmetic estimate of the log mean was held constant while the log summary statistics were recomputed based on the log CoV for SFR (SCCWRP's low-density residential EMC).

<sup>b</sup> Multi-family residential EMC used here since educational land use site not available in the SCCWRP fecal coliform dataset.

<sup>c</sup> The fecal coliform EMC for the multi-family residential land use is based on SCCWRP's dataset for "high-density residential".

<sup>d</sup> The fecal coliform EMC for the single-family residential land use is based on SCCWRP's dataset for "low-density residential".

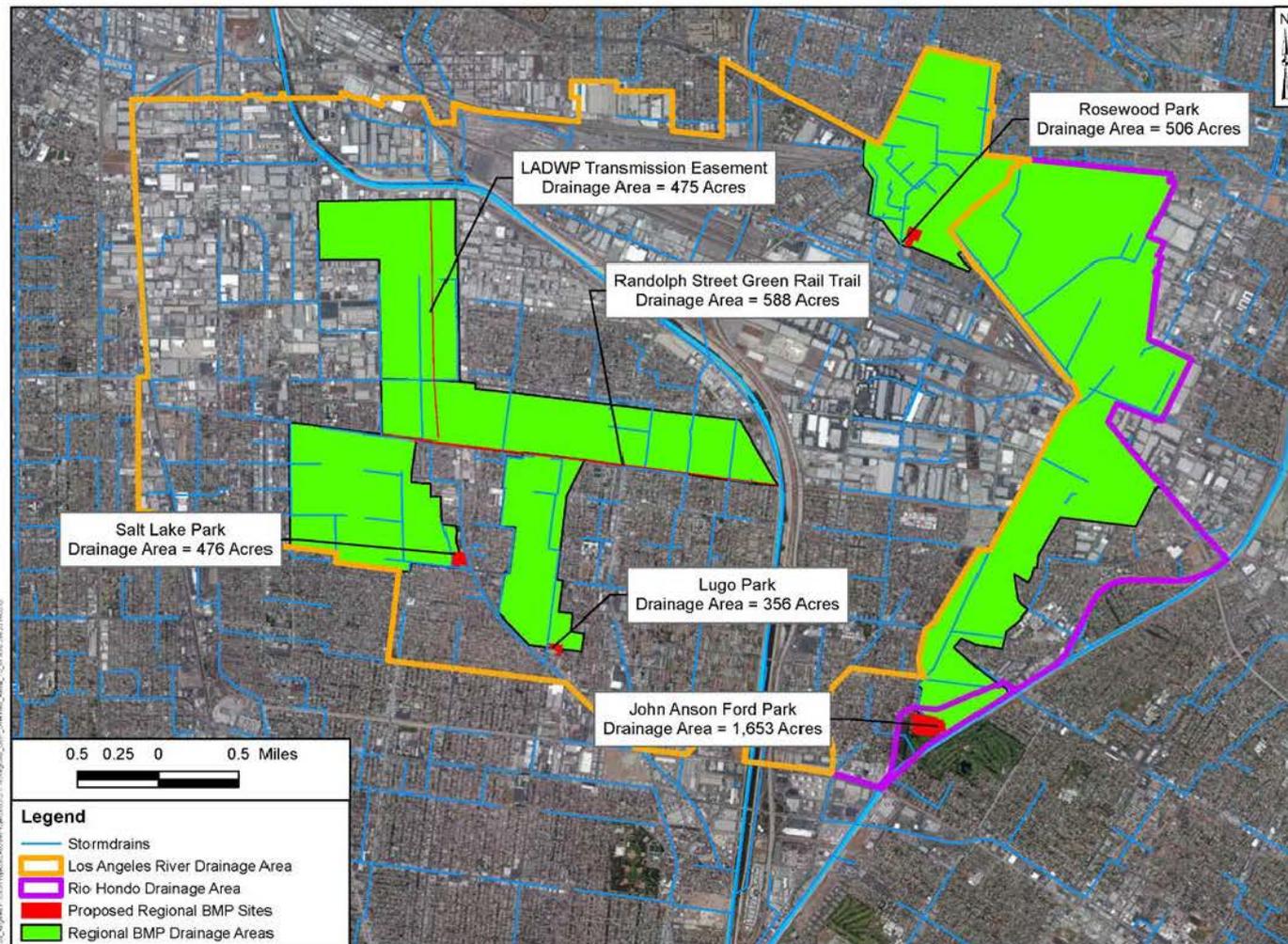
RB-AR2667



# LID/Green Street Specificity

- LAR UR2 introduced LID Streets in response to model guidelines attributing bacteria to residential and commercial land uses areas
- Unlike Permit defined Green Streets, LID streets are in residential and commercial areas (low travel intensities) near the source
- Revised WMP identifies current Green Street Projects
- LAR UR2 WMA Cities do not have Pavement Management Systems (PMSs), street maintenance is Capital Improvement Program (CIP) based: one or two year schedules and frequently grant supported
- LID streets will probably require reconstruction, land acquisition, a longer process with greater political and social planning demands
- Each city assigned from \$0.4M to \$21M in LID/Green street work
- **Once approved the WMP becomes the guide for evaluating alternative LID Street designs and seeking support**

# Regional Infiltration Based BMPs



RB-AR2669



# Regional BMP Design Criteria

	Footprint (ft <sup>2</sup> )	Tributary Acres	Depth (ft)	Volume (ft <sup>3</sup> )	Cost Estimate
Randolph Street Greenway or cistern (R BMP #1)	104,000	588	10	353,600	\$10,760,000
Los Angeles DWP Transmission Lines (R BMP #2)	95,280	475	10	656,003	\$19,510,000
John Anson Ford Park (R BMP #3)	544,707	1,653	10	3,124,069	\$91,060,000
Rosewood Park (R BMP #4)	217,729	506	10	1,249,628	\$36,770,000
Lugo Park (R BMP #6)	100,260	356	10	574,829	\$17,170,000
Salt Lake Park (R BMP #7)	196,004	476	10	1,124,665	\$33,110,000
<b>Total Regional BMPs</b>					<b>\$210,000,000</b>
<b>LID/Green Streets</b>	400,000	910	variable		<b>\$90,000,000</b>
<b>Total Regional BMPs and LID/Green Streets</b>					<b>\$300,000,000</b>

# Discovery Park, Downey

- Regional BMP concepts based on “in the ground” projects
- Infiltration, not “treatment”
- Discovery Park, Downey
- Sun Valley Park, Los Angeles
- Garvanza Park, Los Angeles



# BMP Implementation Schedule

BMP Program or Project	RAA assumes BMP is implemented by:
LID Ordinance Based Redevelopment (~0.25%/year to 2037)	June, 2014 through March, 2037 (interim milestones assume linear progress towards load reduction)
LID and Green Streets (Los Angeles River only)	June, 2014 through March, 2037 (50% implementation by March, 2030)
Non-MS4 Parcels (Individual/General Permittees, Caltrans, Federal)	June, 2017 (MS4 Permit Report of Waste Discharge)
John Anson Ford Park (R BMP #3)	January, 2024 (Dry-weather), 2028 (Wet-weather)
Non-Modeled Non-Structural BMPs	January, 2028
Brake Pad Reformulation (legislation codified)	January, 2028
Randolph Street Greenway or cistern (R BMP #1)	January, 2028
Los Angeles DWP Transmission Lines (R BMP #2)	January, 2028
Rosewood Park (R BMP #4)	January, 2030
Lugo Park (R BMP #6)	March, 2037
Salt Lake Park (R BMP #7)	March, 2037

# Question and Answers



"Honest disagreement is often a good sign of progress."  
-Mahatma Gandhi

05/14/2014 18:59

RB-AR2673



Recording from Public Meeting on  
April 13, 2015

(available on webpage Titled “Audio  
Recording of Public Meeting” at:

[http://www.waterboards.ca.gov/losangeles/water\\_issues/programs/stormwater/municipal/watershed\\_management/index.shtml](http://www.waterboards.ca.gov/losangeles/water_issues/programs/stormwater/municipal/watershed_management/index.shtml)