

Regional MS4 Permit Reissuance Workshop # 2

July 12, 2018
Item 13

Focus on Upper Santa Clara River (USCR), Santa
Monica Bay (SMB), and Dominguez Channel (DC)
and Harbors Watersheds

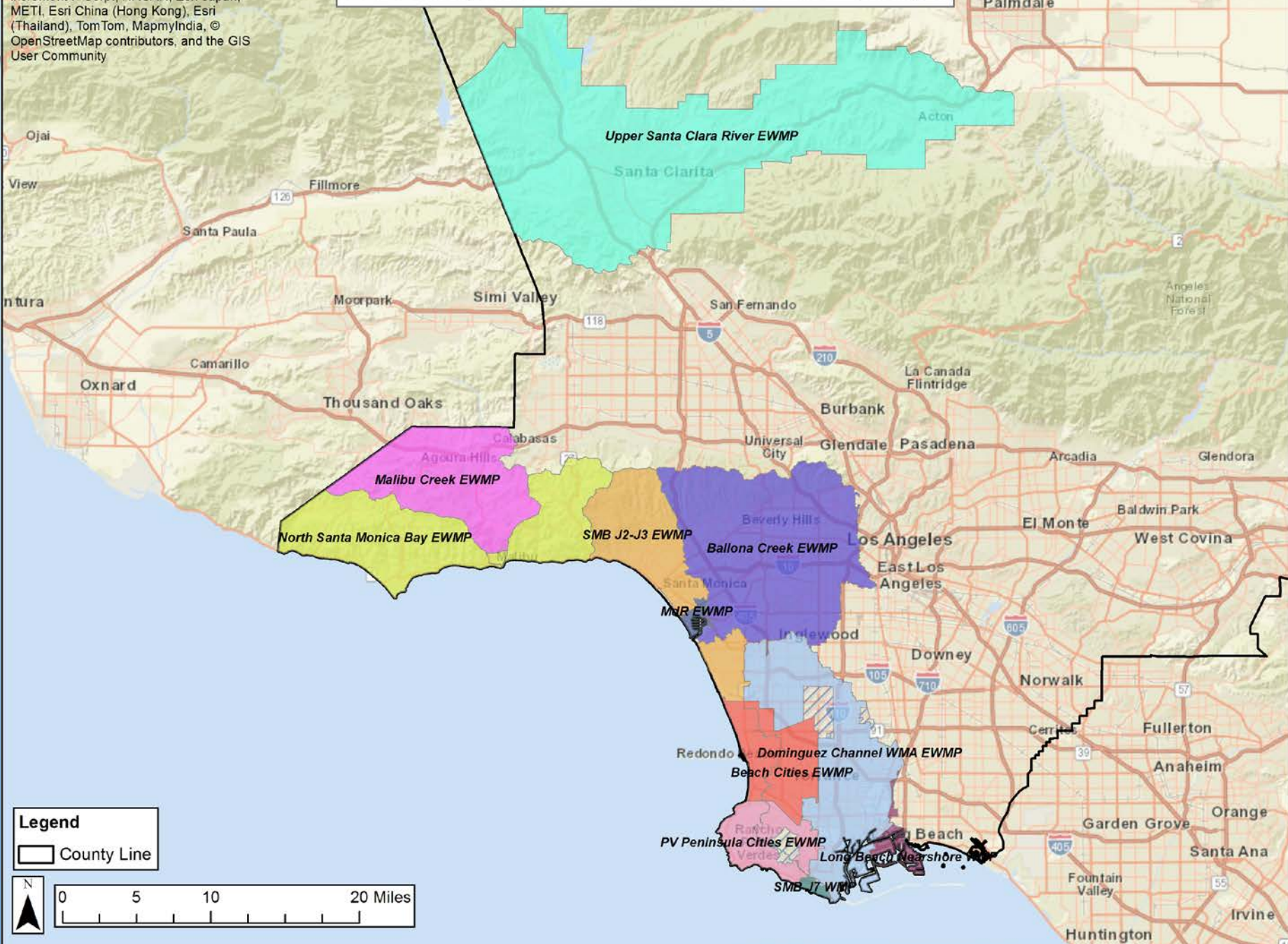


Today's Workshop

- An overview of trends across the region with a focus on monitoring data and permit implementation updates for the following watersheds:
 - Upper Santa Clara River
 - Santa Monica Bay
 - Dominguez Channel and Harbors
- Overview of the Regional Permit

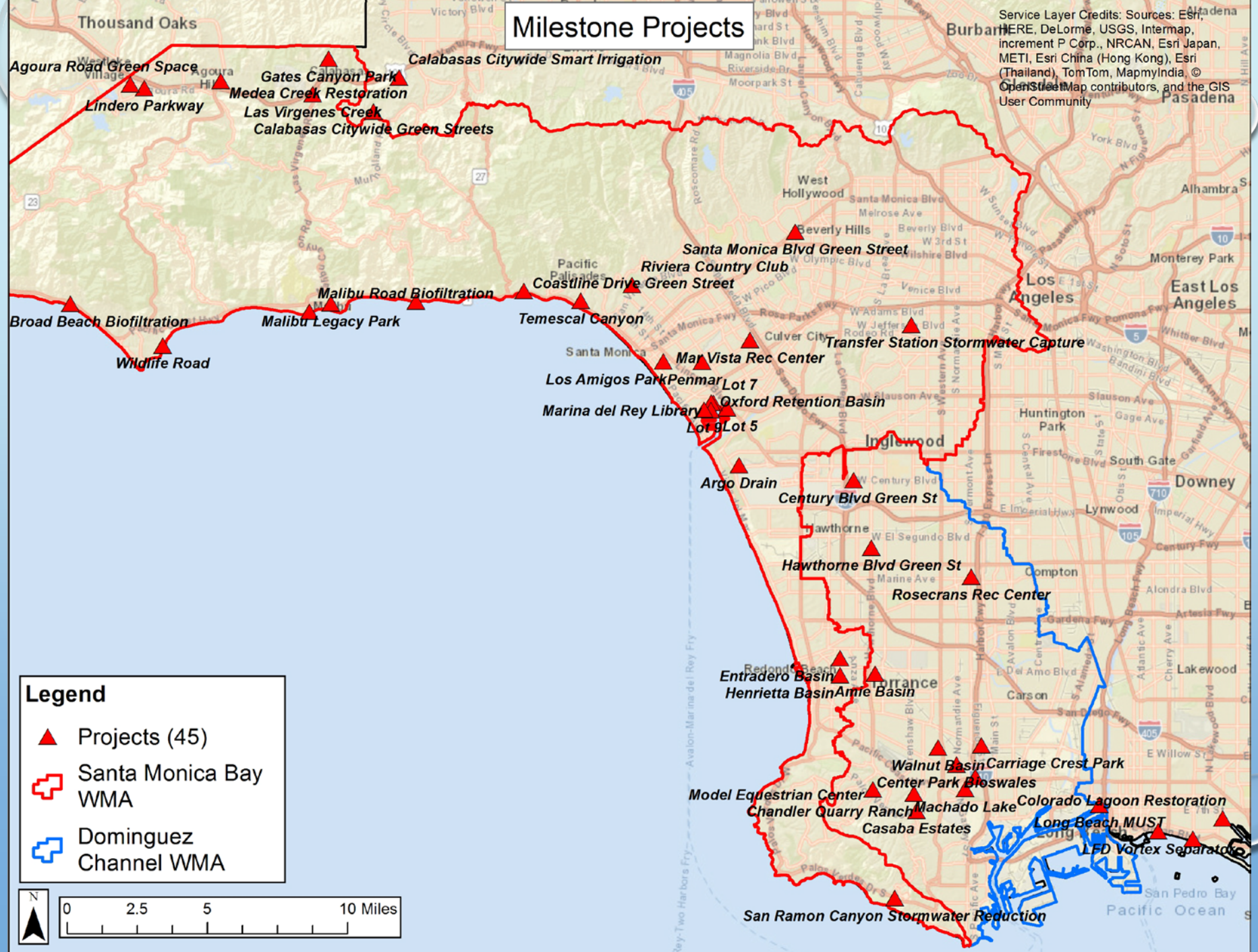
LA County MS4 Permit - WMP/EWMP Groups

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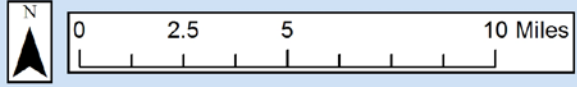
Milestone Projects

Service Layer Credits: Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community



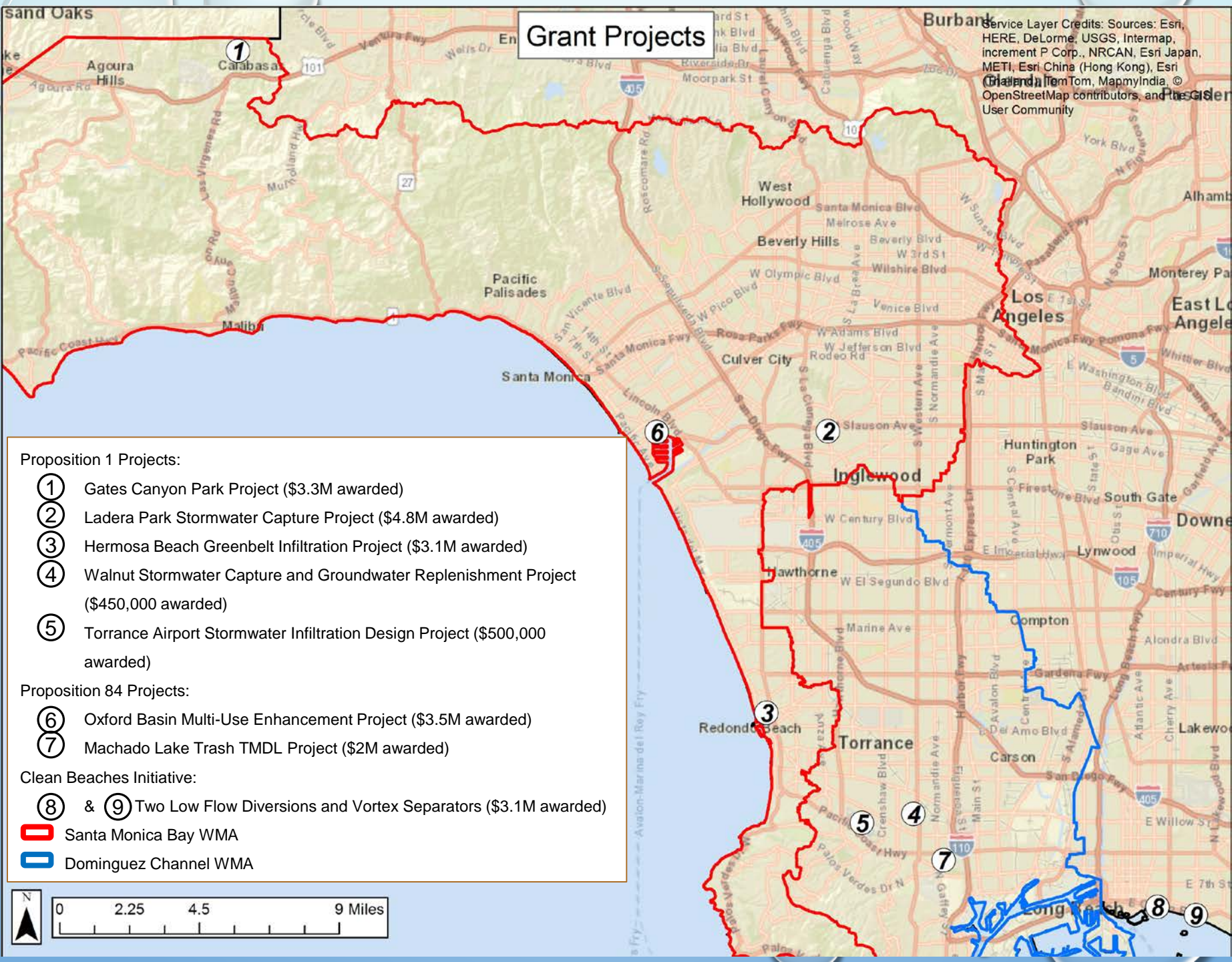
Legend

- ▲ Projects (45)
- Santa Monica Bay WMA
- Dominguez Channel WMA



Grant Projects

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Proposition 1 Projects:



- ① Gates Canyon Park Project (\$3.3M awarded)
- ② Ladera Park Stormwater Capture Project (\$4.8M awarded)
- ③ Hermosa Beach Greenbelt Infiltration Project (\$3.1M awarded)
- ④ Walnut Stormwater Capture and Groundwater Replenishment Project (\$450,000 awarded)
- ⑤ Torrance Airport Stormwater Infiltration Design Project (\$500,000 awarded)

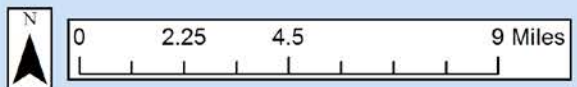
Proposition 84 Projects:

- ⑥ Oxford Basin Multi-Use Enhancement Project (\$3.5M awarded)
- ⑦ Machado Lake Trash TMDL Project (\$2M awarded)

Clean Beaches Initiative:

- ⑧ & ⑨ Two Low Flow Diversions and Vortex Separators (\$3.1M awarded)

-  Santa Monica Bay WMA
-  Dominguez Channel WMA



Stormwater Retention & TLR by WMP/EWMP Group since Effective Date of 2012 Permit

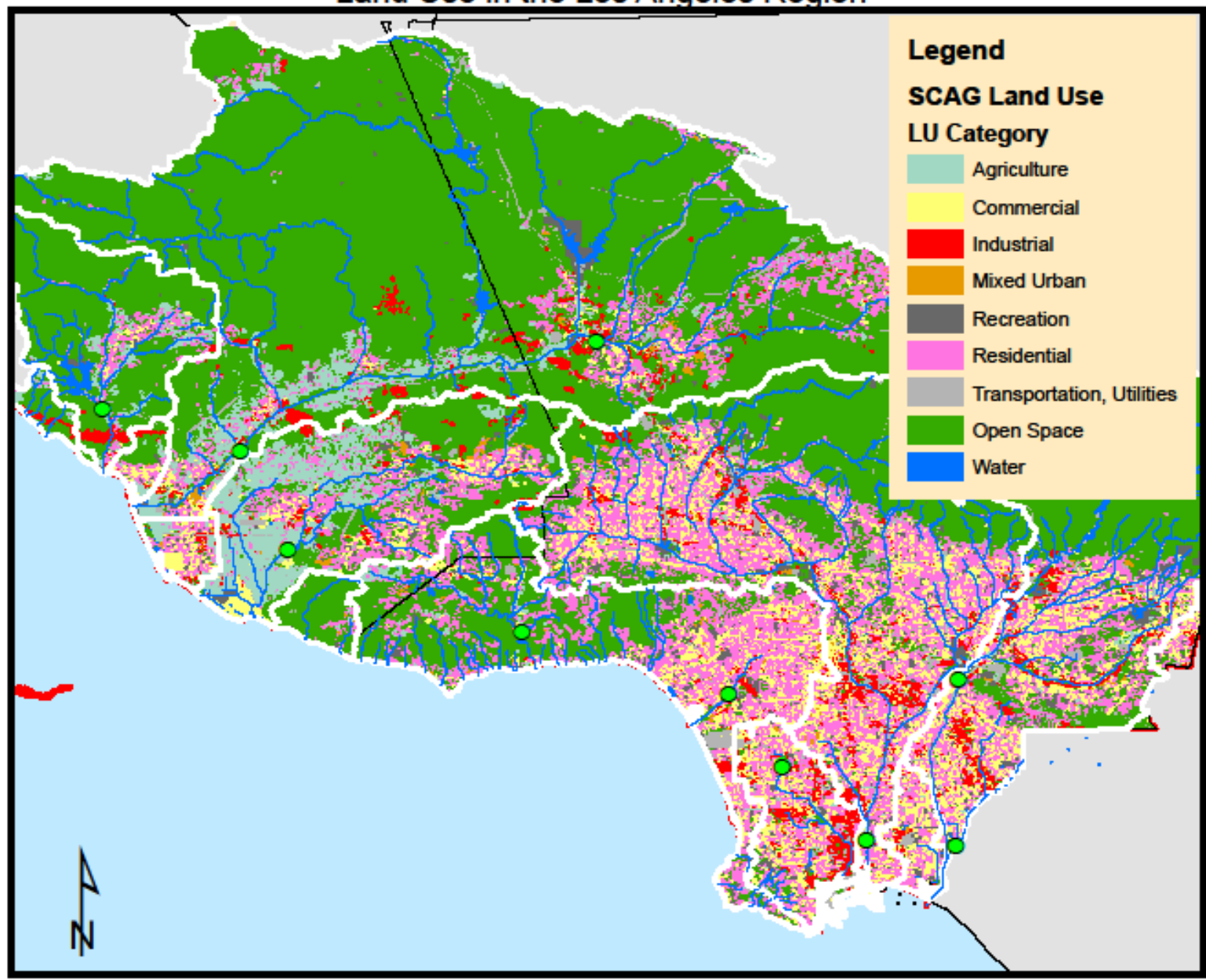
WMP/EWMP Group	Milestone	BMP Capacity or TLR required for Compliance with Near-term Milestones (TLR / acre-feet)	Total BMP Retention Capacity or TLR Achieved since 2012 (TLR /acre-feet)
Upper Santa Clara River EWMP Group	2029 - Final Bacteria TMDL	602.7	17.66
North Santa Monica Bay Coastal Watersheds EWMP Group	2017 - Final Malibu Creek Nutrients TMDL 2018 - 50% Reduction Wet Weather Bacteria TMDL	0% TLR of TN/TP 0% TLR of FC	0.21
Malibu Creek Watershed EWMP Group	2017 - Final Malibu Creek Nutrient TMDL	12.02	0.08
Santa Monica Bay J2&J3 EWMP Group	2018 - 50% Reduction Wet Weather Bacteria TMDL	1732.60	153.38
Marina del Rey Watershed EWMP Group	2016 - 50% Reduction Mdr Back Basins Toxics TMDL	189	0.96
Ballona Creek Watershed EWMP Group	2019 - 75% Reduction Metals TMDL	1657.26	13.04
Beach Cities Watershed EWMP Group	2018 - 50% Reduction Wet Weather Bacteria TMDL	13% TLR of FC	14.4% TLR of FC
Palos Verdes Peninsula EWMP Group	2018 - 50% Reduction Wet Weather Bacteria TMDL 2018 - Machado Lake Nutrient TMDL	0% TL of FC 67.3-80.7% TLR of TP	7.5% TLR of FC 68.1% TLR of TP
Dominguez Channel EWMP Group	2026 - 50% reduction DC and Harbors Toxics TMDL	349.8	192.78
Santa Monica Bay J7 WMP Group	2018 - 50% Reduction Wet Weather Bacteria TMDL	0	0.95
Nearshore Watersheds (City of Long Beach)	2024 - 20% Pollutant Load Reduction	14.3	0.066



Region-Wide Monitoring Data

Mass Emissions Stations (Receiving Water)

Mass Emissions MS4 Monitoring Stations (green) and Land Use in the Los Angeles Region



Legend

SCAG Land Use

LU Category

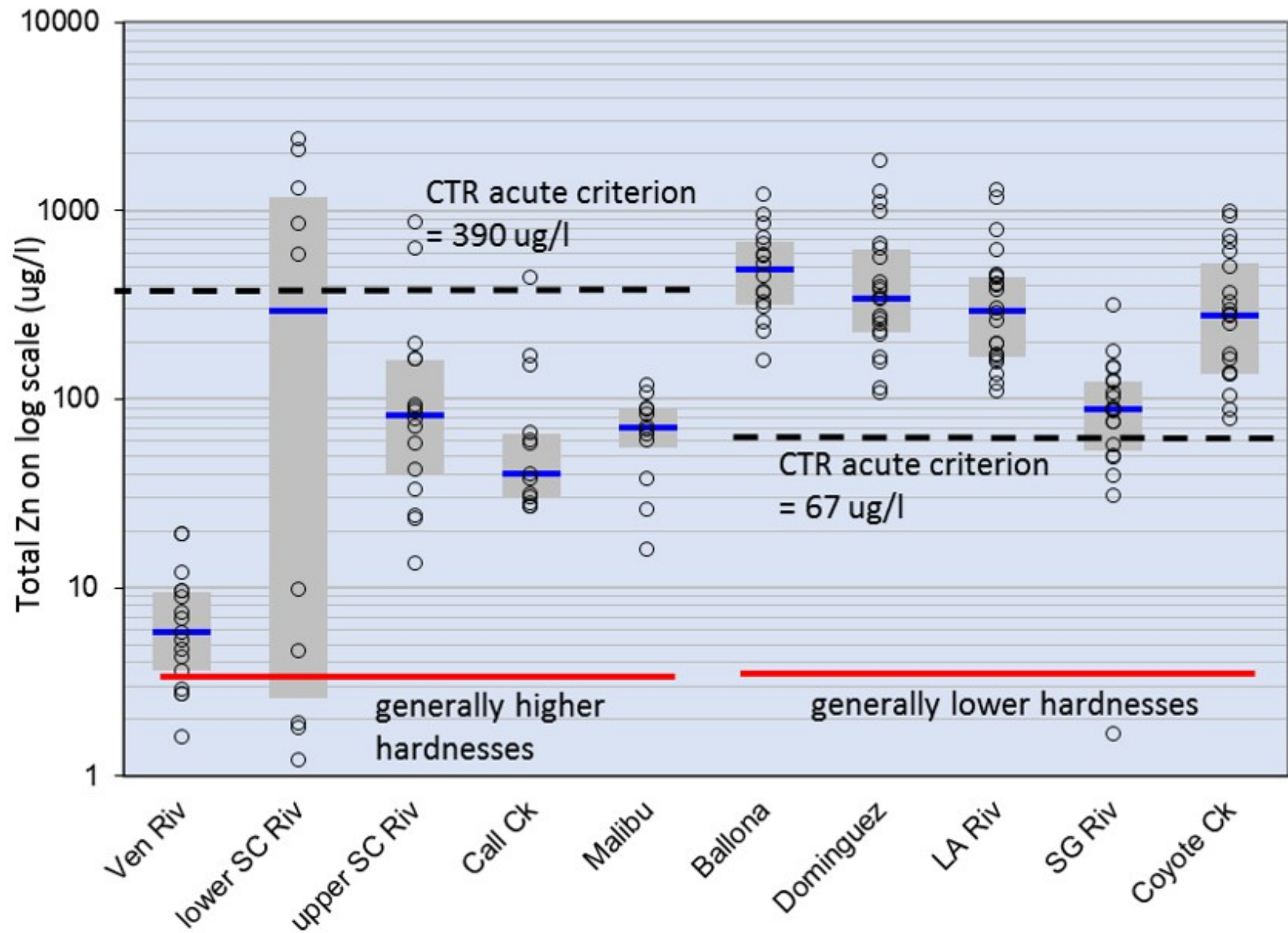
- Agriculture
- Commercial
- Industrial
- Mixed Urban
- Recreation
- Residential
- Transportation, Utilities
- Open Space
- Water

0 4.75 9.5 19 28.5 38 Miles

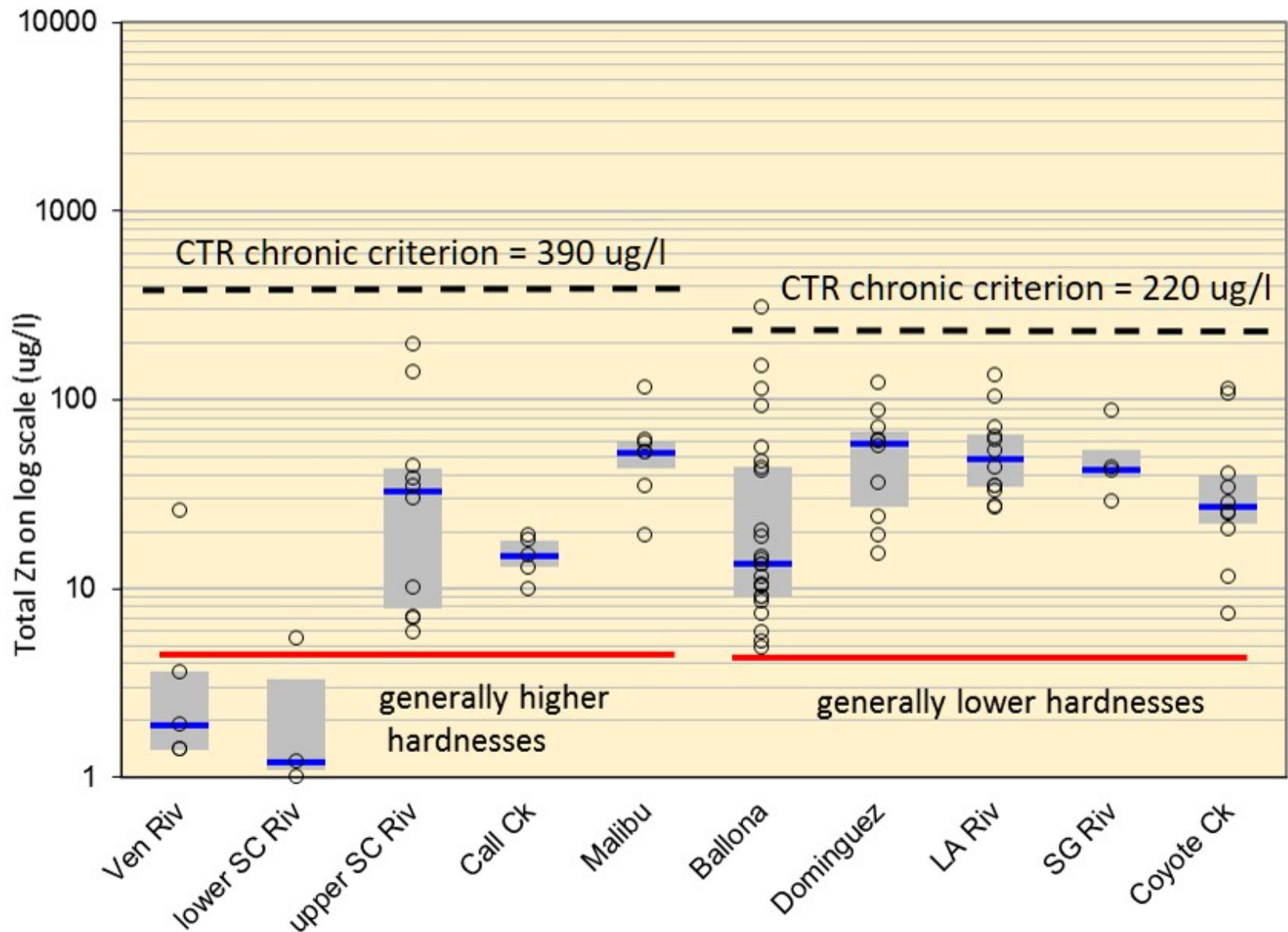
The background is a light blue gradient with several realistic water droplets of various sizes scattered around the edges. The droplets have highlights and shadows, giving them a three-dimensional appearance. The text is centered in the middle of the page.

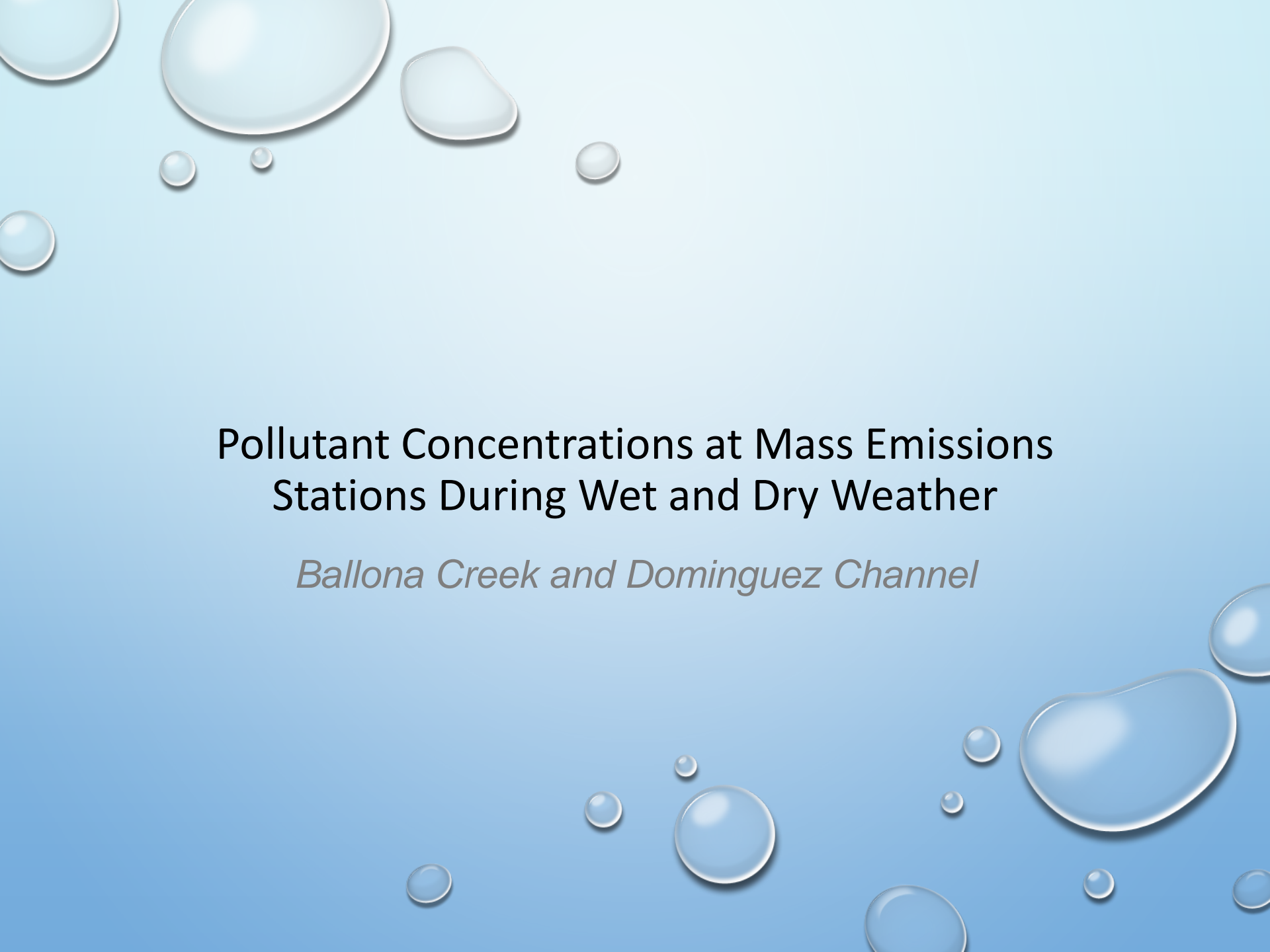
Total Zinc in the Region During Wet and Dry Weather

Total Zinc During Wet Weather at Mass Emissions Stations in Ventura and Los Angeles Counties During Fall 2012 to Spring 2017 with Acute CTR at Two Hardnesses (50 and 400 mg/l dashed lines)



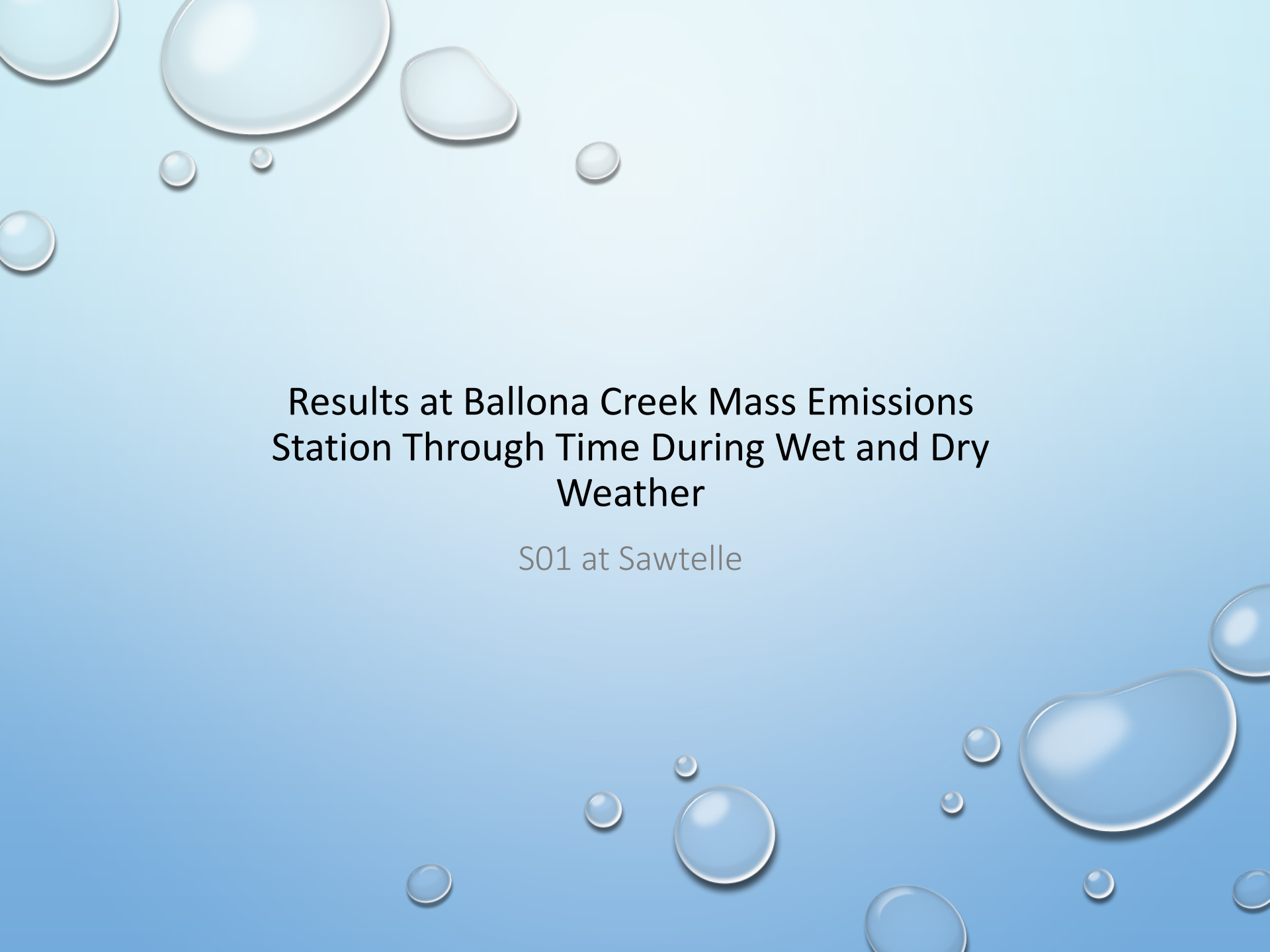
Total Zinc During Dry Weather at Mass Emissions Stations in Ventura and Los Angeles Counties During Fall 2012 to Spring 2017 with Chronic CTR at Two Hardnesses (200 and 400 mg/l dashed lines)



The background is a light blue gradient with several realistic water droplets of various sizes scattered across the surface. The droplets have highlights and shadows, giving them a three-dimensional appearance.

Pollutant Concentrations at Mass Emissions Stations During Wet and Dry Weather

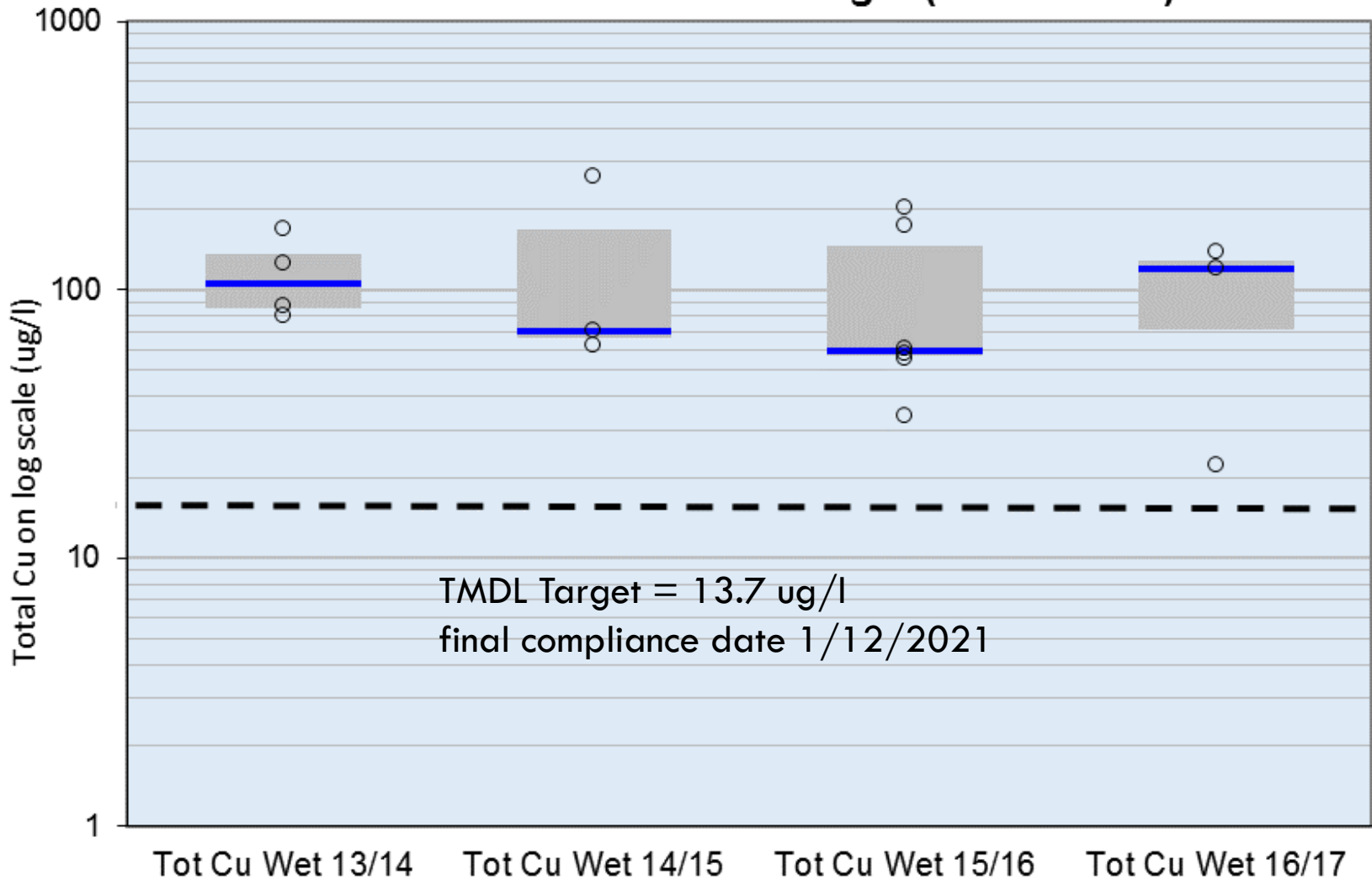
Ballona Creek and Dominguez Channel

The background is a light blue gradient with several realistic water droplets of various sizes scattered across the surface. The droplets have highlights and shadows, giving them a three-dimensional appearance.

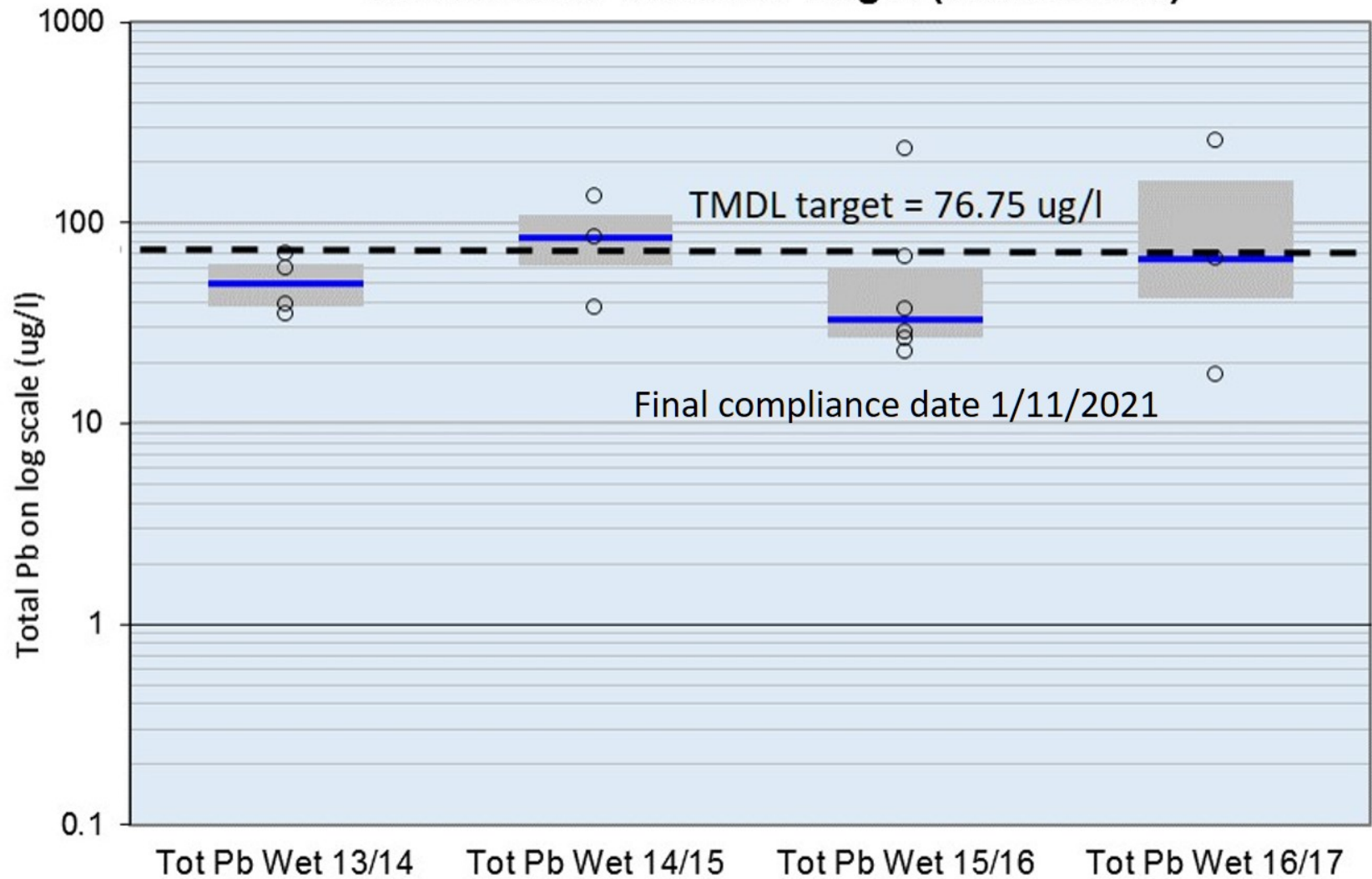
Results at Ballona Creek Mass Emissions Station Through Time During Wet and Dry Weather

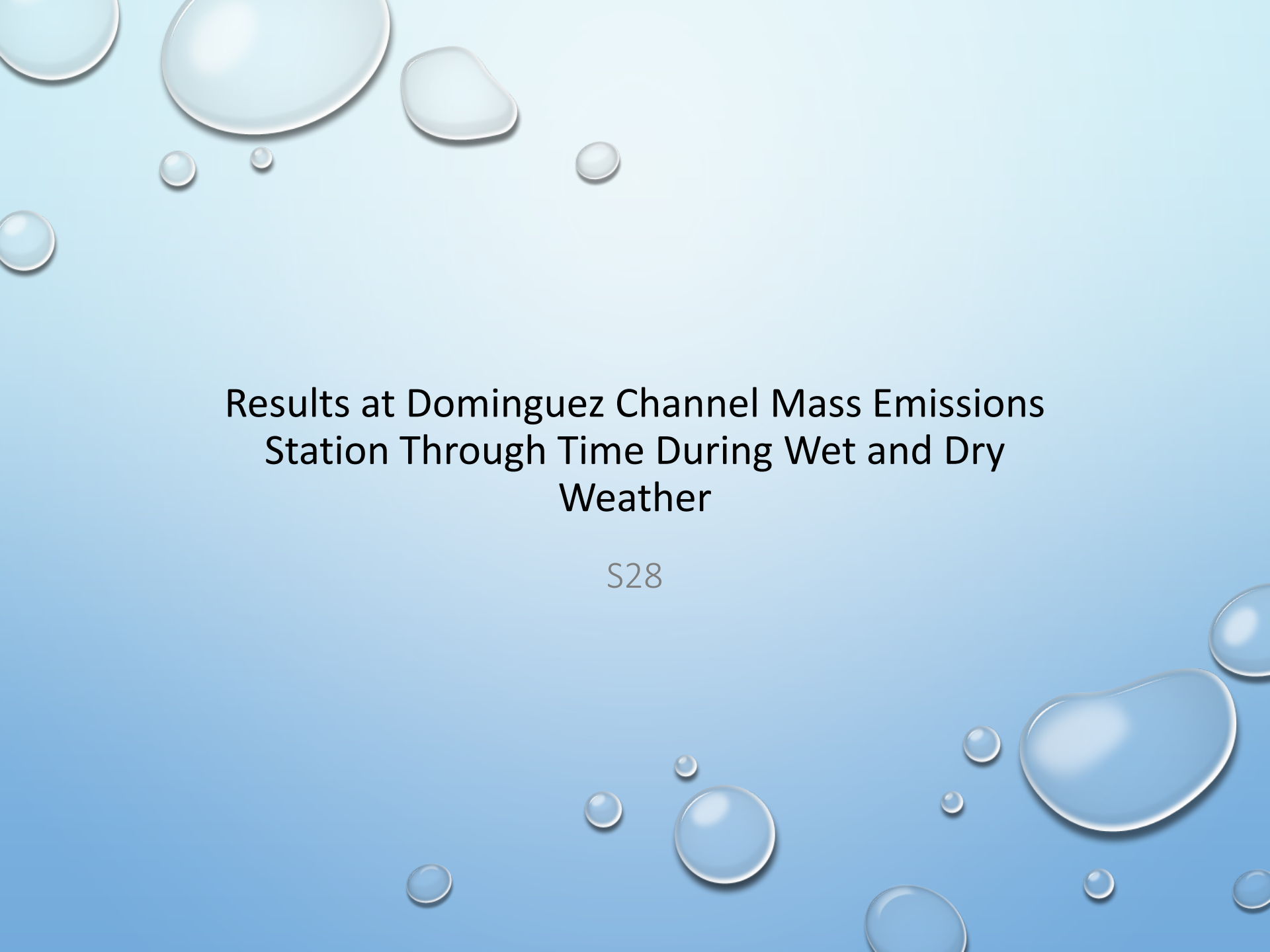
S01 at Sawtelle

Total Copper at Ballona Creek Mass Emissions Station During Wet Weather Fall 2013 - Winter 2017 with TMDL Wet Weather Numeric Target (dashed line)



Total Lead at Ballona Creek Mass Emissions Station During Wet Weather Fall 2013 - Winter 2017 with TMDL Wet Weather Numeric Target (dashed line)

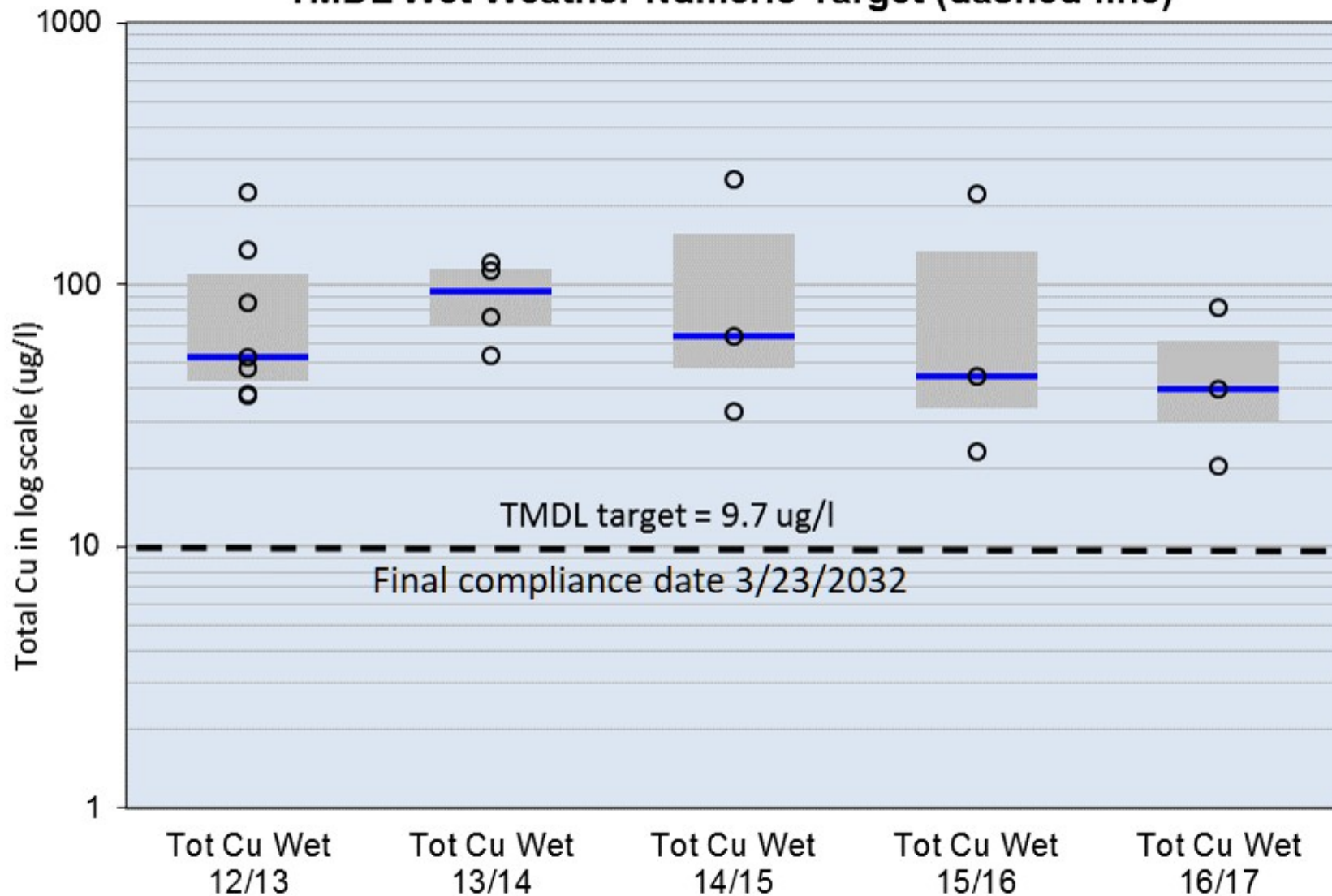


The background is a light blue gradient with several realistic water droplets of various sizes scattered across the surface. The droplets have highlights and shadows, giving them a three-dimensional appearance. The text is centered in the middle of the page.

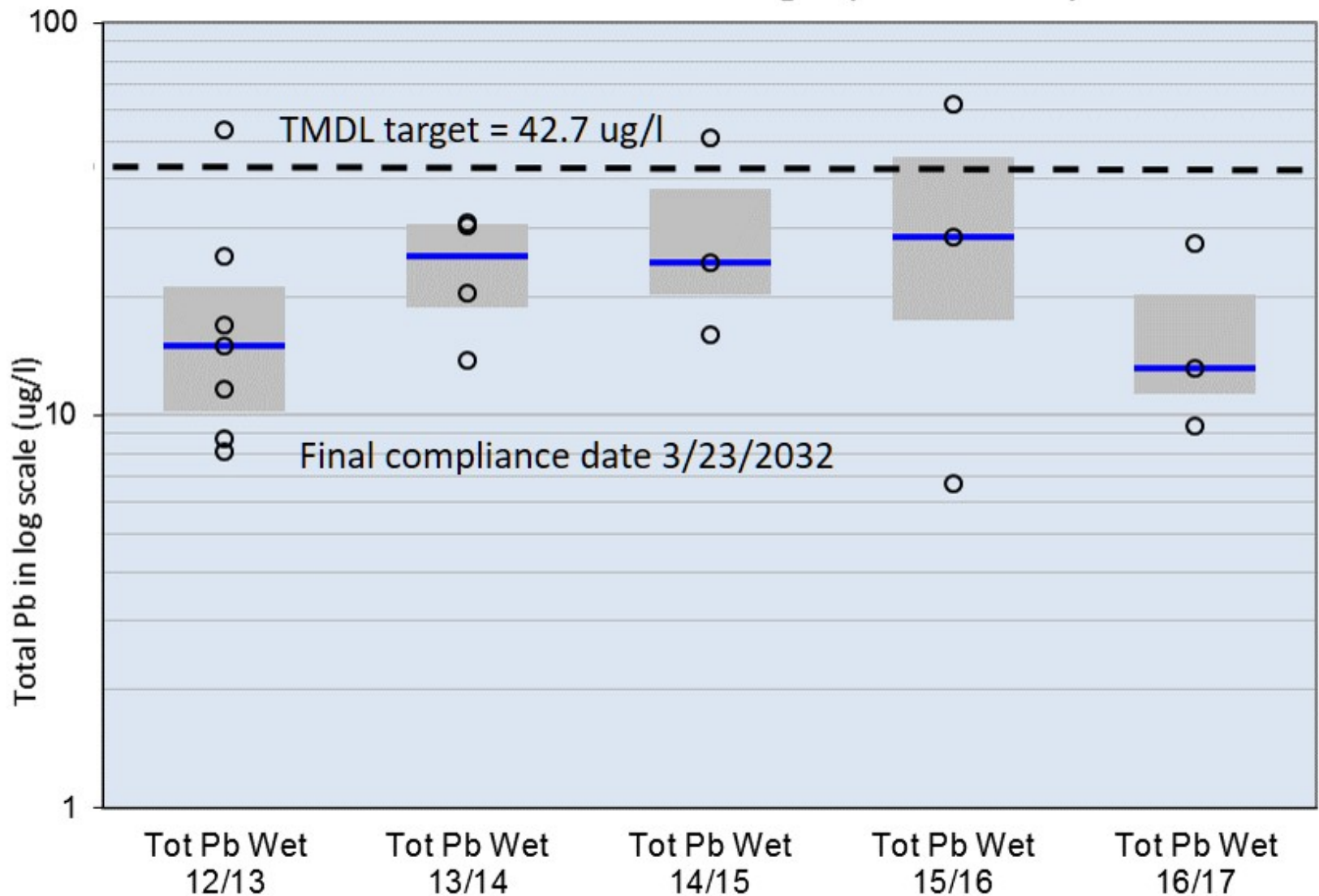
Results at Dominguez Channel Mass Emissions Station Through Time During Wet and Dry Weather

S28

Total Copper at Dominguez Channel Mass Emissions Station During Wet Weather Fall 2012 - Winter 2017 with TMDL Wet Weather Numeric Target (dashed line)

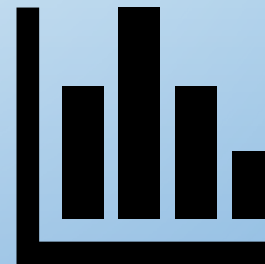


Total Lead at Dominguez Channel Mass Emissions Station During Wet Weather Fall 2012 - Winter 2017 with TMDL Wet Weather Numeric Target (dashed line)



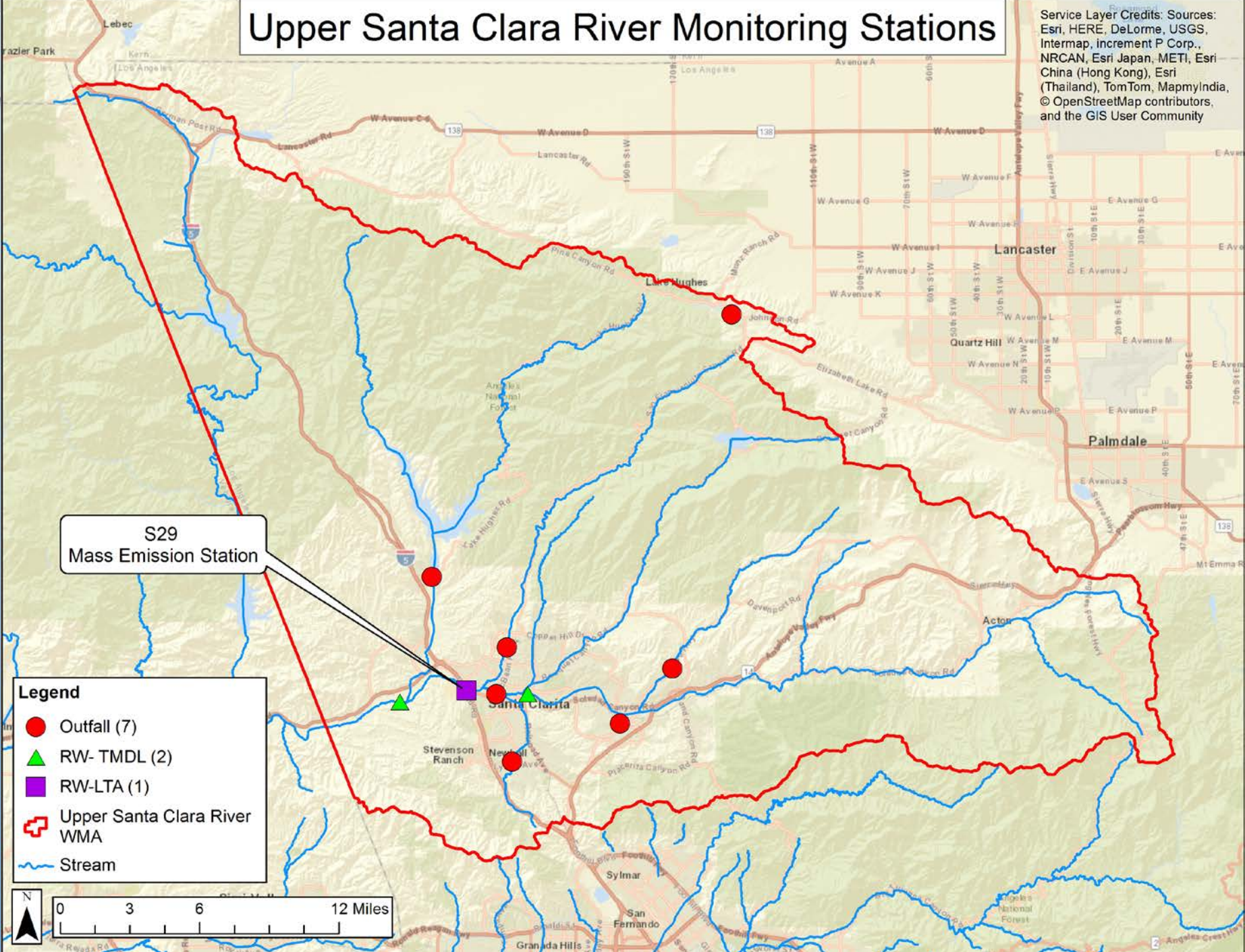
Monitoring Data

Upper Santa Clara River, Santa Monica Bay (including subwatersheds: Malibu Creek, Ballona Creek, Marina del Rey), and Dominguez Channel (including Machado Lake subwatershed)



Upper Santa Clara River Monitoring Stations

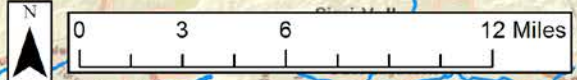
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S29
Mass Emission Station

Legend

- Outfall (7)
- ▲ RW-TMDL (2)
- RW-LTA (1)
- Upper Santa Clara River WMA
- Stream



TMDLs with Past Interim and Final Compliance Dates in the Upper Santa Clara River Watershed

TOTAL MAXIMUM DAILY LOADS (TMDL)	Compliance Dates: Through 2017
Santa Clara River Nitrogen Compounds TMDL	Final – 12/28/2012
Upper Santa Clara River Chloride TMDL	Final – 12/28/2012
Lake Elizabeth Trash TMDL	Final - 3/6/2016
Santa Clara River Indicator Bacteria TMDL (Wet and Dry Weather)	Interim - 3/21/2016

Santa Clara River Nitrogen Compounds TMDL

Ammonia

0 Exceedances in 15 Outfall Samples

Nitrate + Nitrite

0 Exceedances in 14 Outfall Samples

Upper Santa Clara River Chloride TMDL

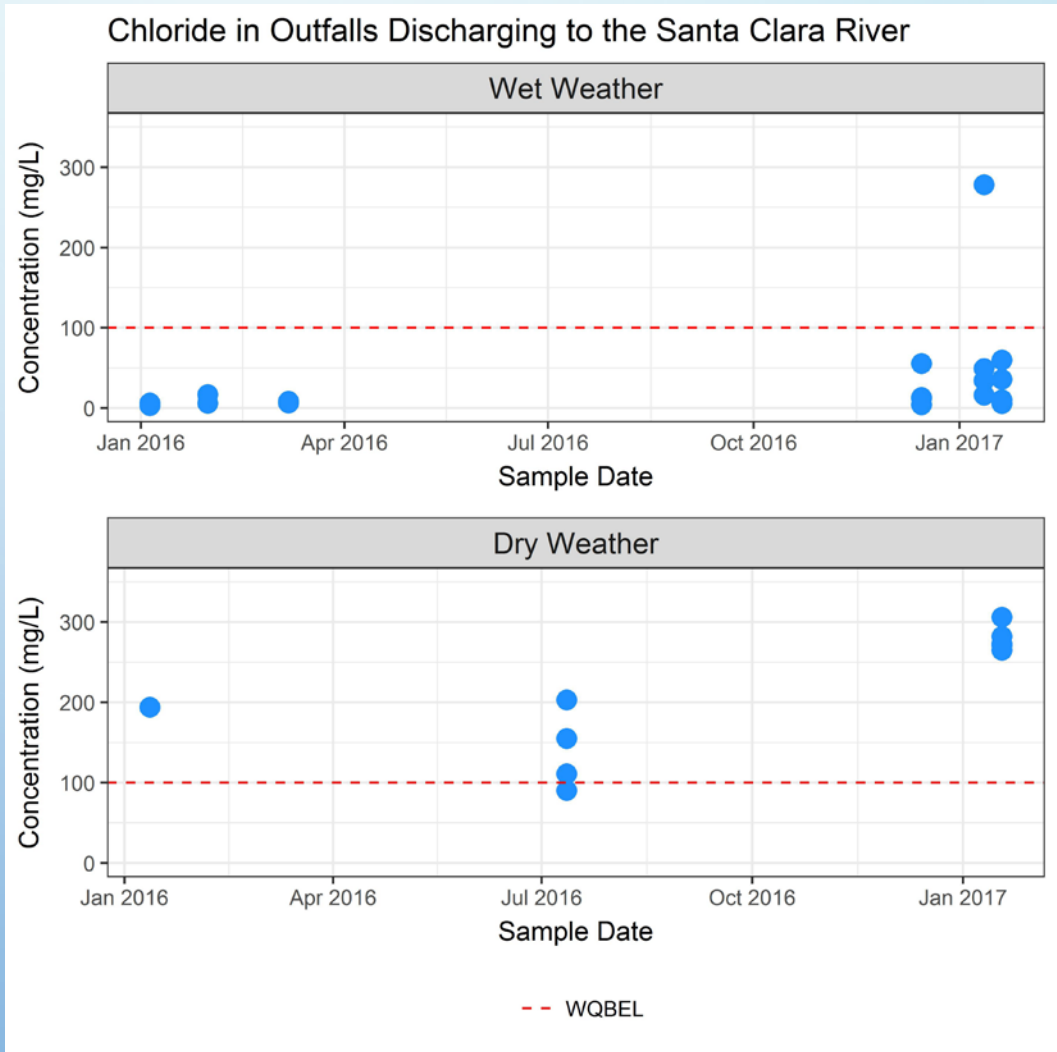
Outfall Results

Wet Weather

1 Exceedance in 19 Samples

Dry Weather

9 Exceedances in 10 Samples



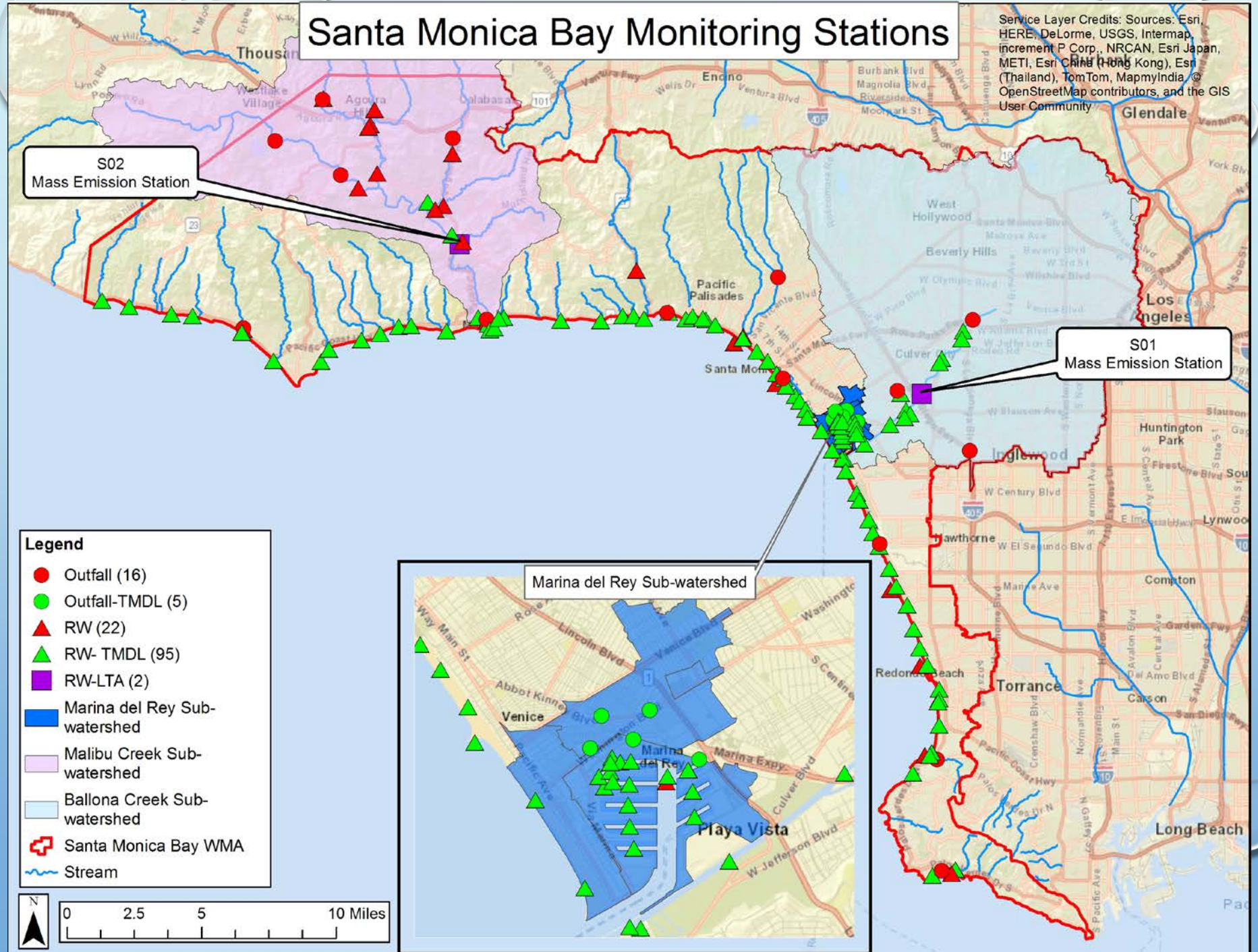
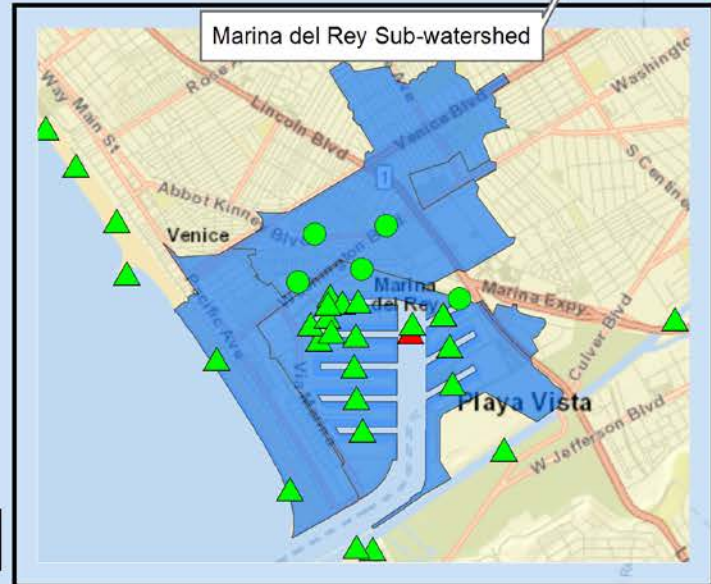
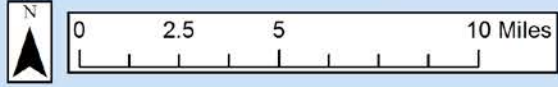
Santa Monica Bay Monitoring Stations

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S02
Mass Emission Station

S01
Mass Emission Station

- Legend**
- Outfall (16)
 - Outfall-TMDL (5)
 - ▲ RW (22)
 - ▲ RW-TMDL (95)
 - RW-LTA (2)
 - Marina del Rey Sub-watershed
 - Malibu Creek Sub-watershed
 - Ballona Creek Sub-watershed
 - Santa Monica Bay WMA
 - ~ Stream



TMDLs with Past Interim and Final Compliance Dates in the Santa Monica Bay Watershed

TOTAL MAXIMUM DAILY LOADS (TMDL)	Compliance Dates: Through 2017
Santa Monica Bay Beaches Bacteria TMDL (Summer and Winter Dry Weather Only)	Final - 12/28/2012
Santa Monica Bay Beaches Bacteria TMDL (Wet Weather Only)	Interim - 25% Reduction by 7/15/2013
Santa Monica Bay Nearshore and Offshore Debris TMDL	Interim – 40% Reduction by 3/20/2017
Santa Monica Bay TMDL for DDTs and PCBs (USEPA Promulgated)	Compliance Schedule defined by Approved WMP/EWMP

TMDLs with Past Interim and Final Compliance Dates in the Malibu Creek Subwatershed

TOTAL MAXIMUM DAILY LOADS (TMDL)	Compliance Dates: Through 2017
Malibu Creek and Lagoon Bacteria TMDL (Summer and Winter Dry Weather Only)	Final - 12/28/2012
Malibu Creek Watershed Trash TMDL	Final - 7/7/2017
Malibu Creek Watershed Nutrients TMDL (USEPA Promulgated)	Final - 12/28/2017

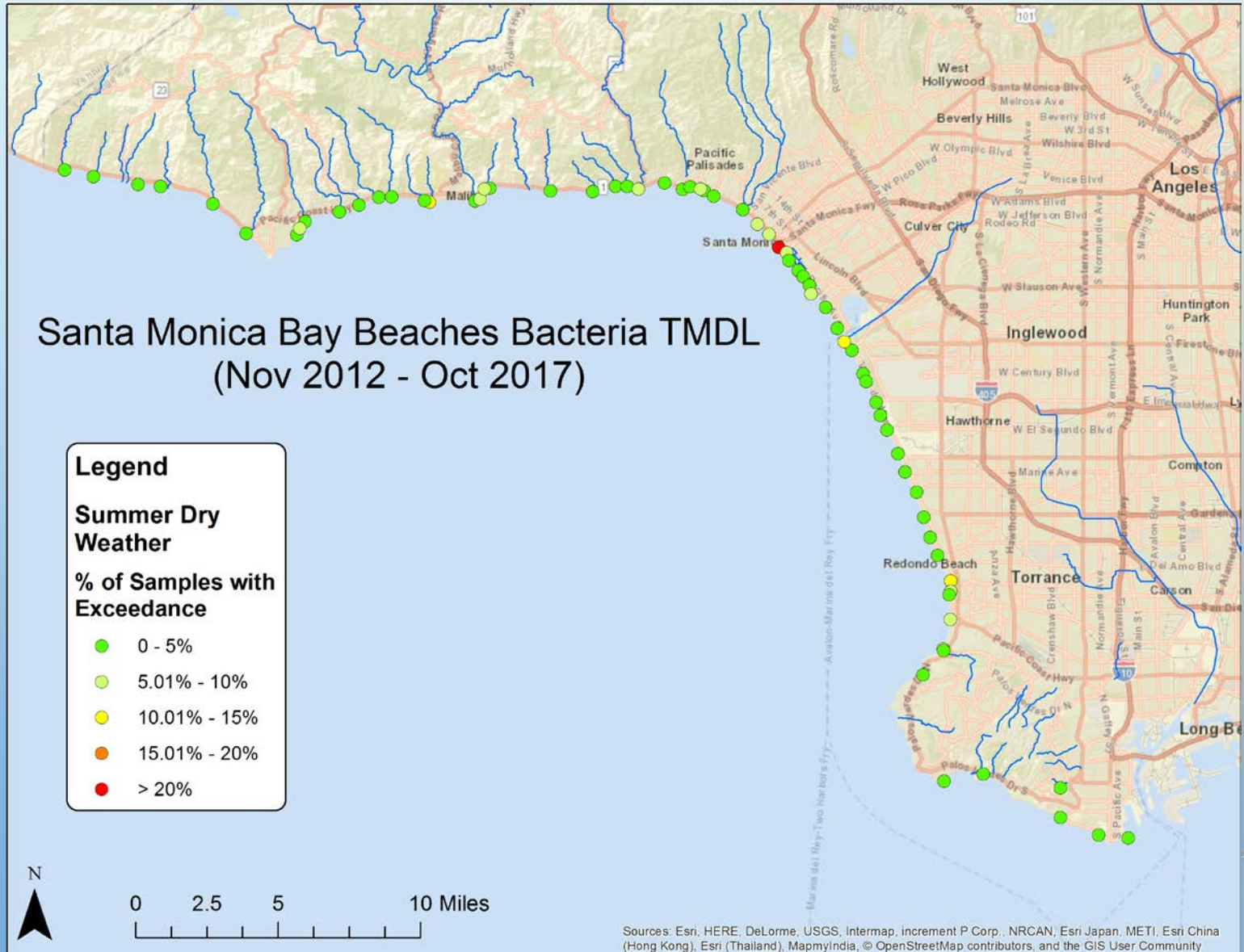
TMDLs with Past Interim and Final Compliance Dates in the Ballona Creek Subwatershed

TOTAL MAXIMUM DAILY LOADS (TMDL)	Compliance Dates: Through 2017
Ballona Creek, Ballona Estuary, and Sepulveda Channel Bacteria TMDL (Dry Weather Only)	Final - 4/27/2013
Ballona Creek Trash TMDL	Final - 9/30/2015
Ballona Creek Metals TMDL (Dry Weather Only)	Final - 1/11/2016
Ballona Creek Metals TMDL (Wet Weather Only)	Interim – 50% by 1/11/2016
Ballona Creek Estuary Toxic Pollutants TMDL	Interim - 75% by 1/11/2017
Ballona Creek Wetlands TMDL for Sediment and Invasive Exotic Vegetation (USEPA Promulgated)	Compliance Schedule defined by Approved WMP/EWMP

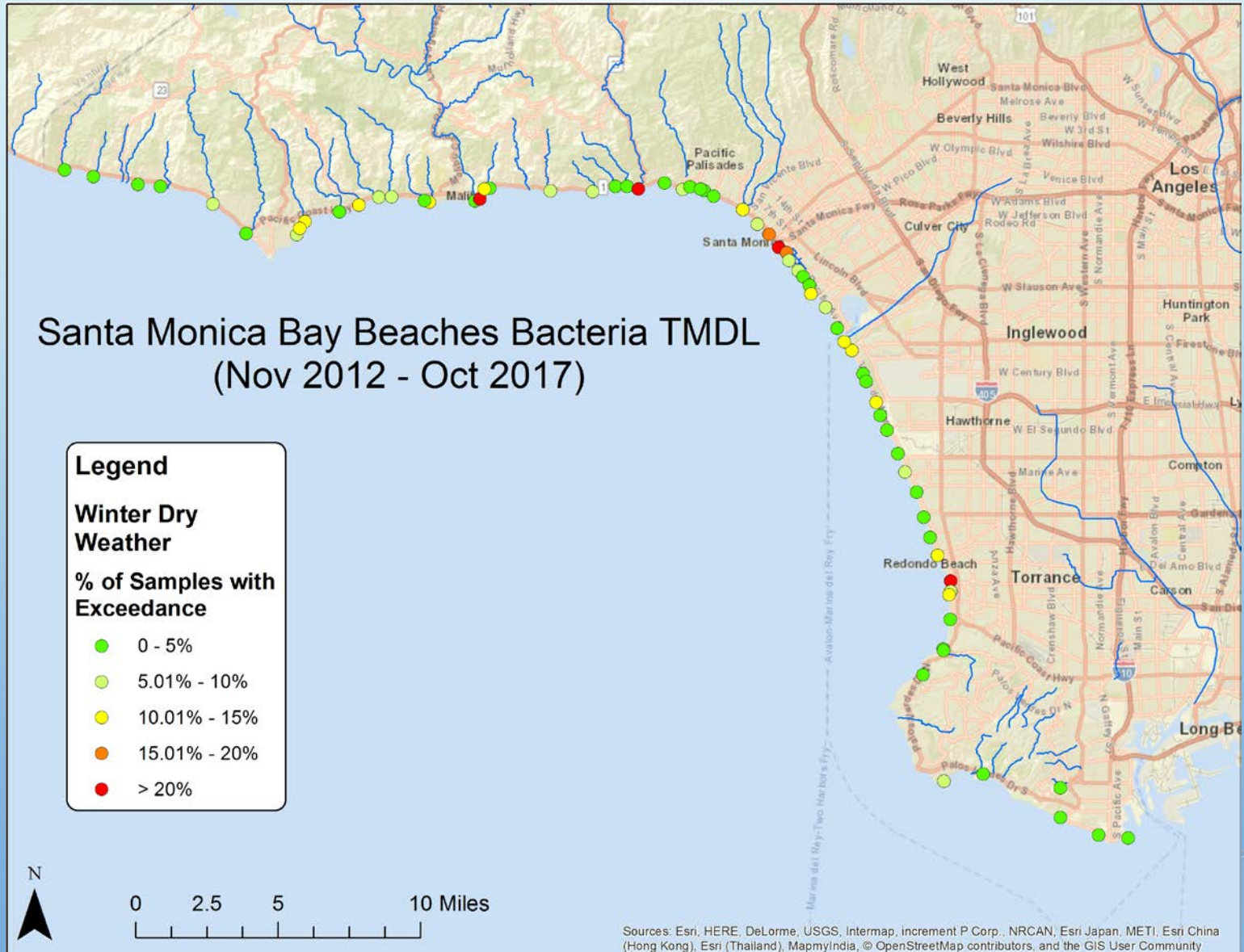
TMDLs with Past Interim and Final Compliance Dates in the Marina del Rey Subwatershed

TOTAL MAXIMUM DAILY LOADS (TMDL)	Compliance Dates: Through 2017
Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL (Summer and Winter Dry Weather Only)	Final – 12/28/2012
Marina del Rey Harbor Toxics Pollutants TMDL	Final - 3/22/2016

Santa Monica Bay Beaches Bacteria TMDL (Summer Dry)

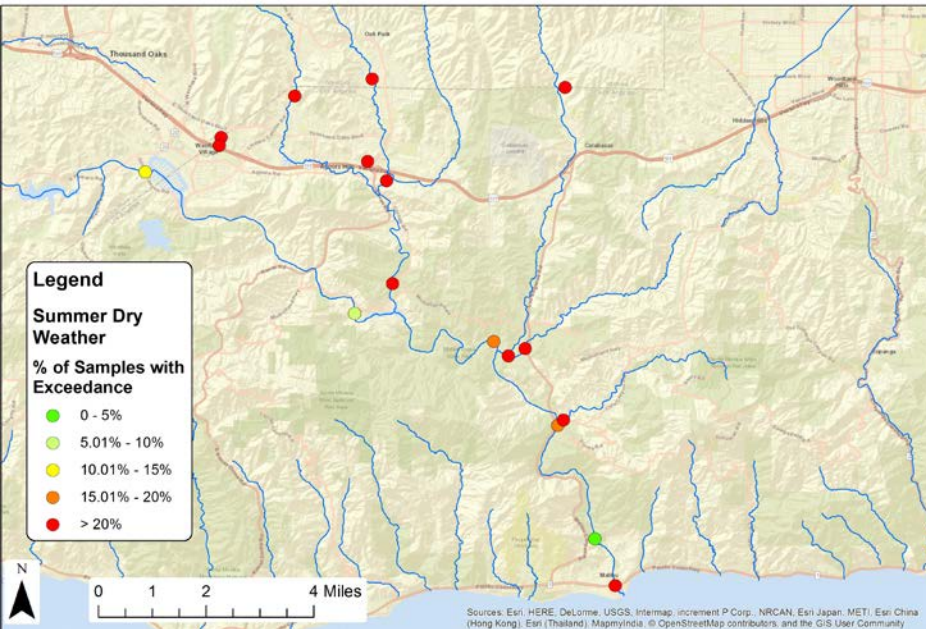


Santa Monica Bay Beaches Bacteria TMDL (Winter Dry)

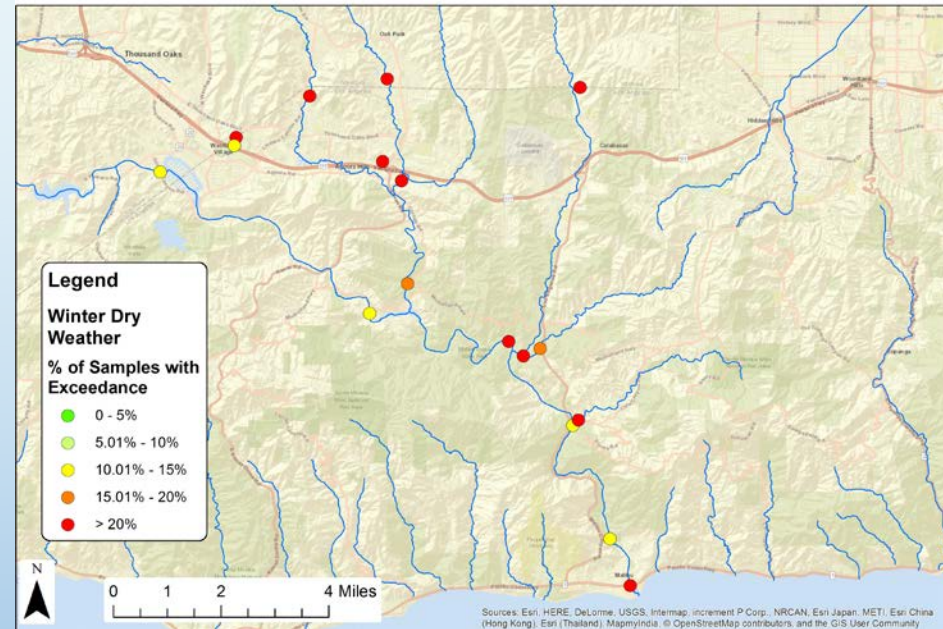


Malibu Creek Bacteria TMDL

Malibu Creek Bacteria TMDL
(Nov 2012 - Oct 2017) **SUMMER DRY**



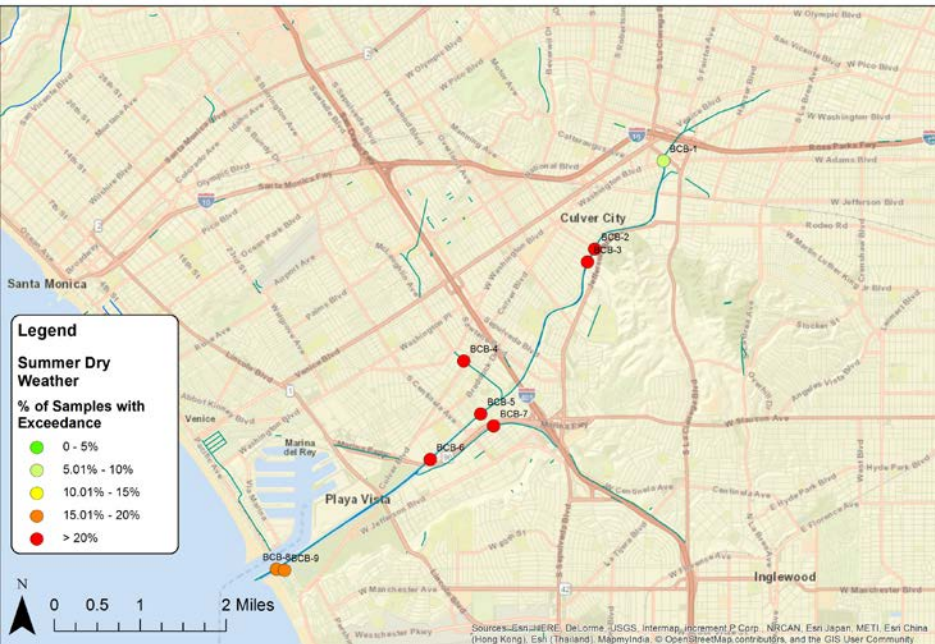
Malibu Creek Bacteria TMDL
(Nov 2012 - Oct 2017) **WINTER DRY**



Ballona Creek Bacteria TMDL

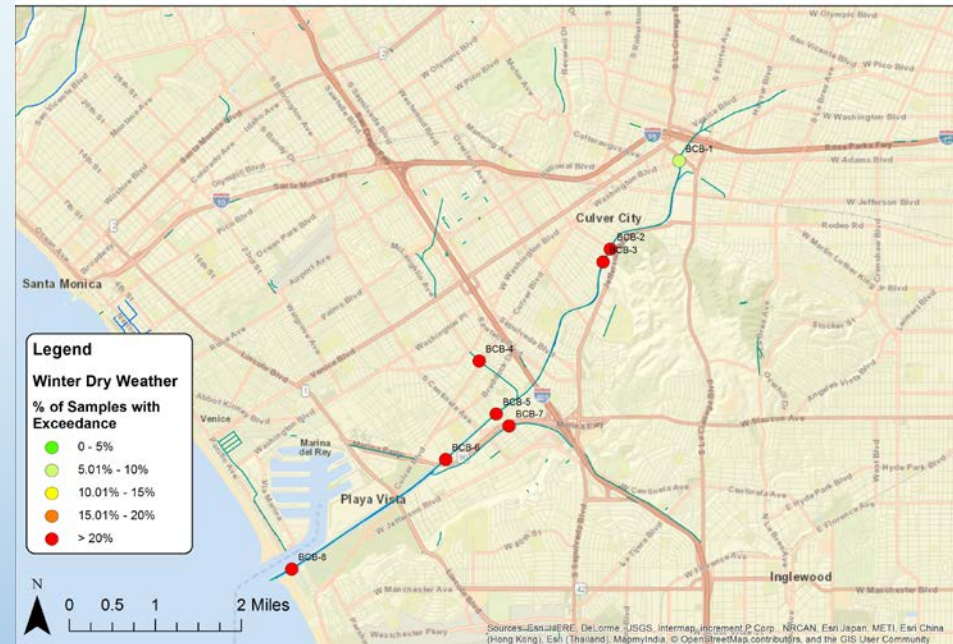
Ballona Creek Bacteria TMDL
(Nov 2012 - Oct 2017)

SUMMER DRY



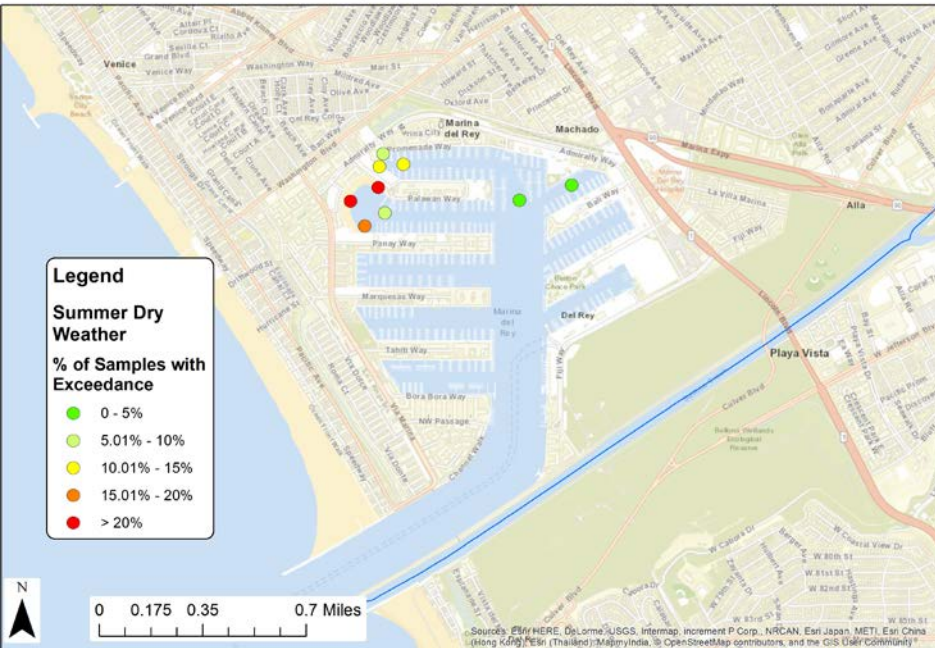
Ballona Creek Bacteria TMDL
(Nov 2012 - Oct 2017)

WINTER DRY

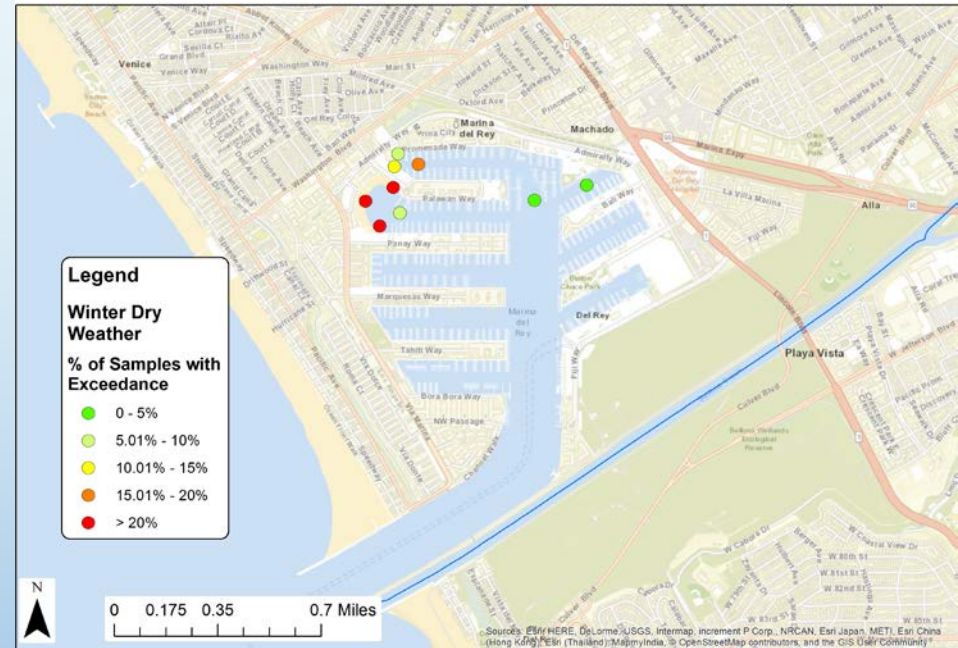


Marina del Rey Bacteria TMDL

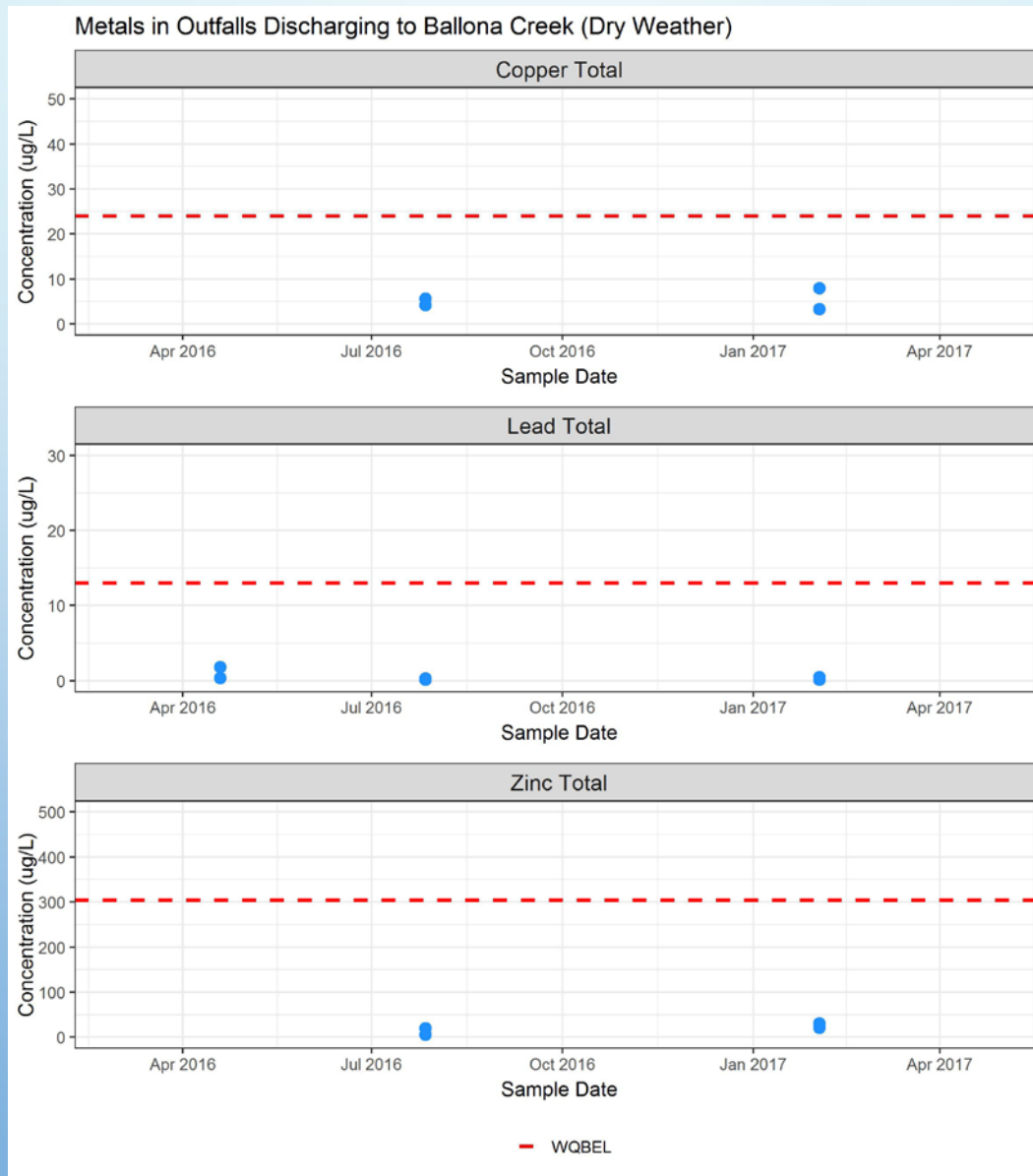
Marina del Rey Bacteria TMDL
(Nov 2012 - Oct 2017) **SUMMER DRY**



Marina del Rey Bacteria TMDL
(Nov 2012 - Oct 2017) **WINTER DRY**



Ballona Creek Metals TMDL – Dry Weather

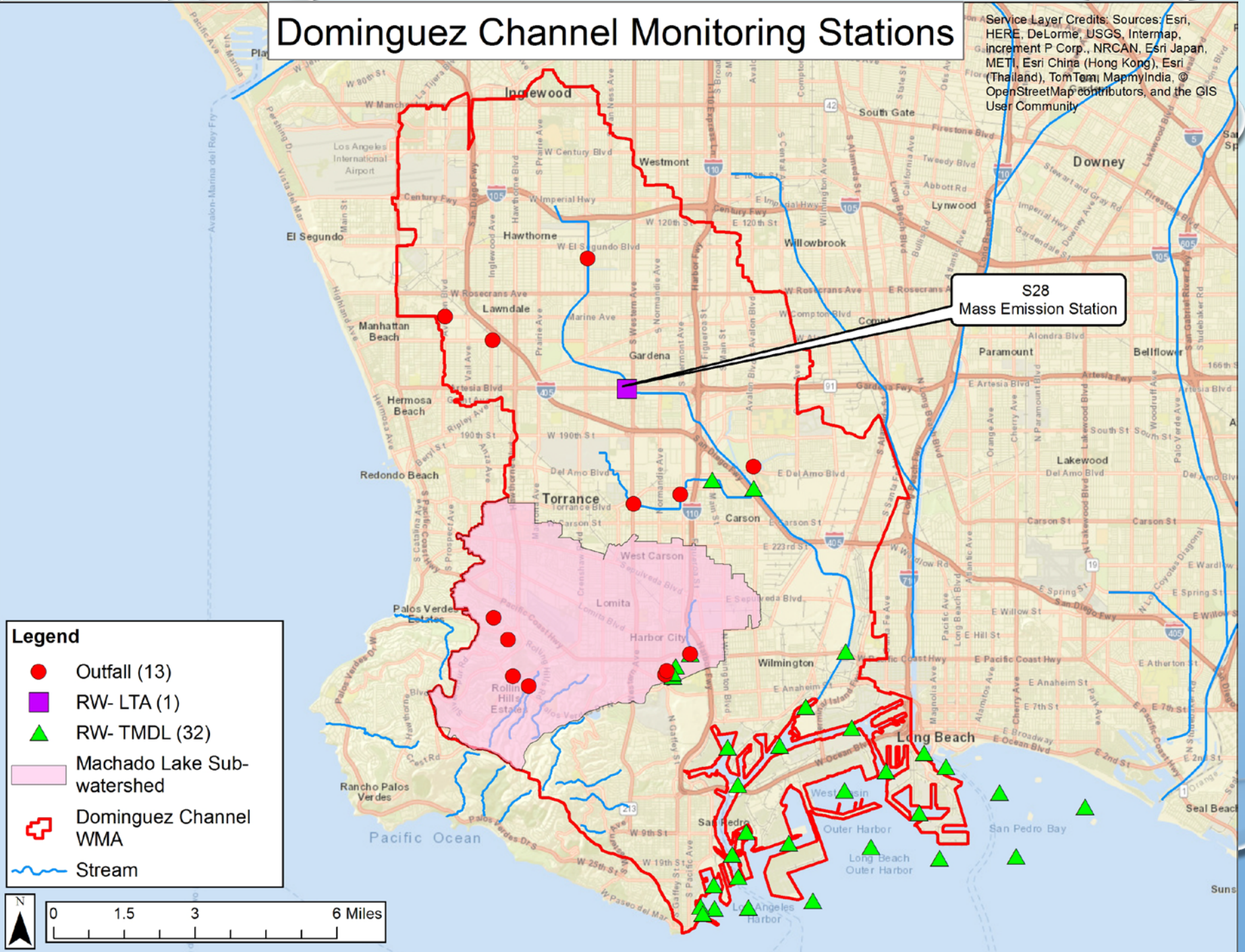
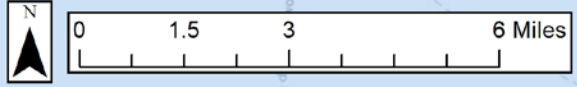


Dominguez Channel Monitoring Stations

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Legend

- Outfall (13)
- RW- LTA (1)
- ▲ RW- TMDL (32)
- ▭ Machado Lake Sub-watershed
- ⊕ Dominguez Channel WMA
- ~ Stream

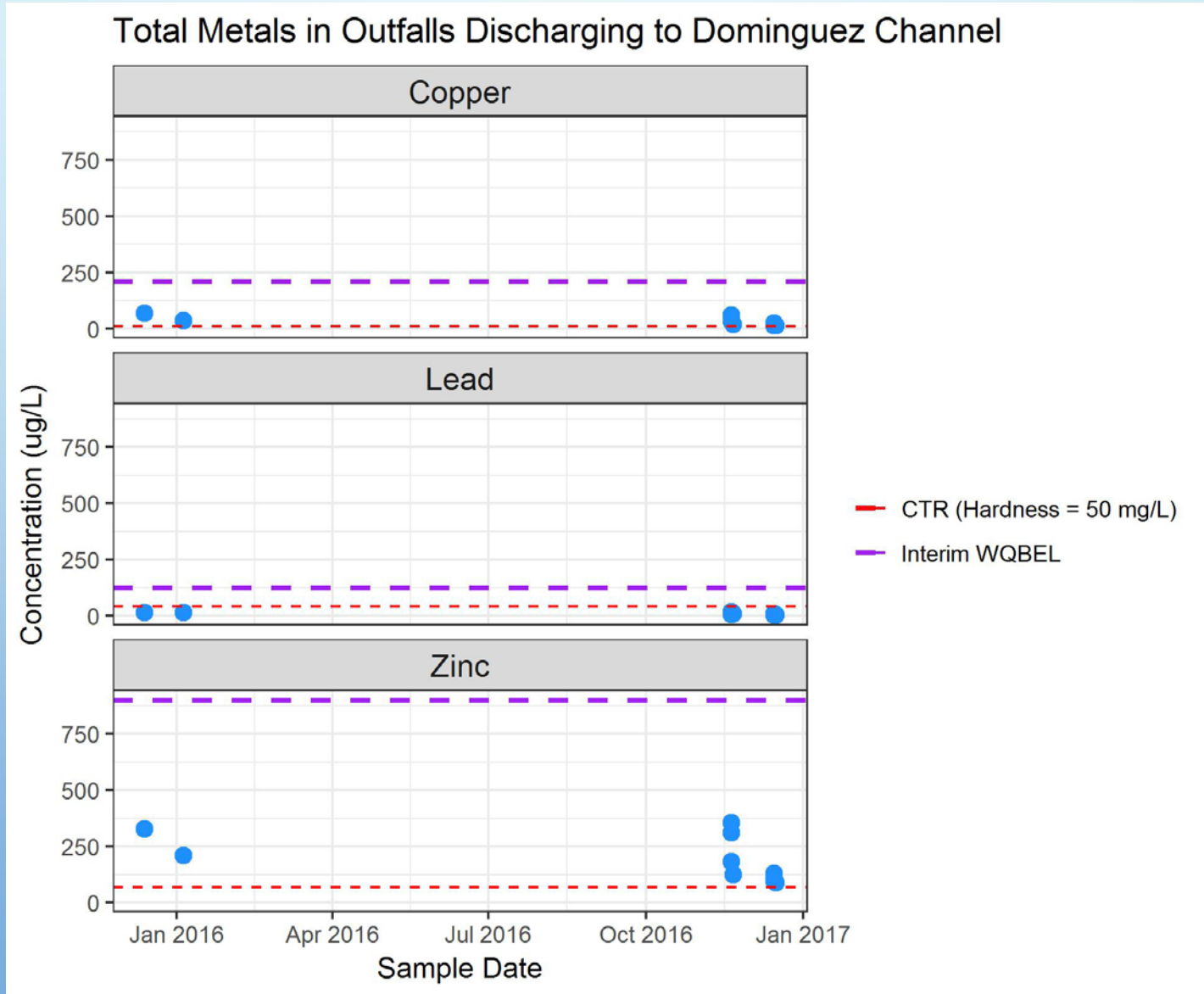


S28
Mass Emission Station

TMDLs with Past Interim and/or Final Compliance Dates in the Dominguez Channel Watershed (including Machado Lake Subwatershed)

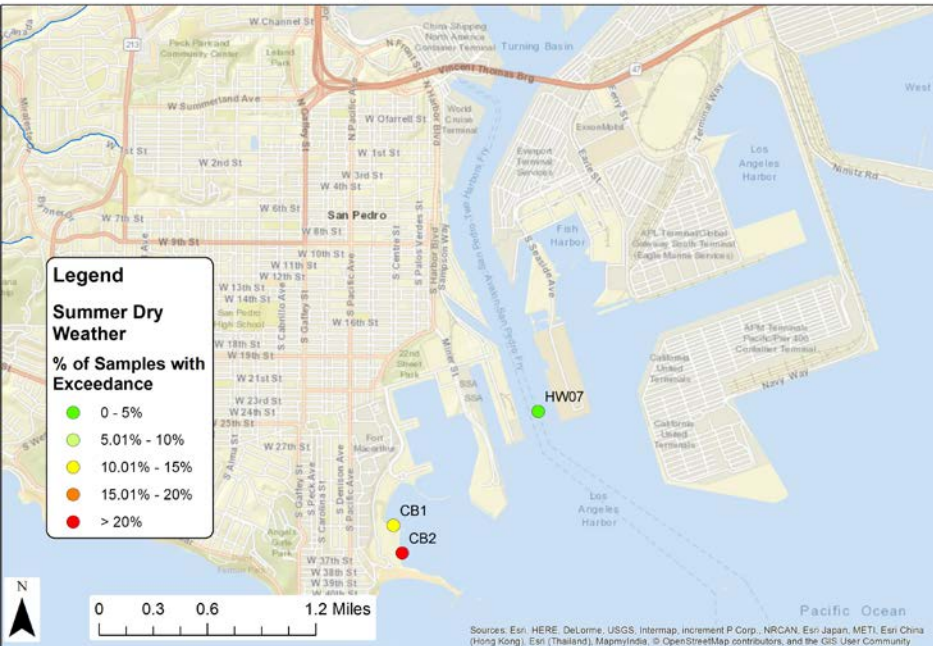
TOTAL MAXIMUM DAILY LOADS (TMDL)	Compliance Dates: Through 2017
Los Angeles Harbor Bacteria TMDL	Final - 12/28/2012
Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL	Interim - 12/28/2012
Machado Lake Nutrient TMDL	Interim - 3/11/2014
Machado Lake Trash TMDL	Final - 3/6/2016

Dominguez Channel and Greater Harbor Toxics TMDL - Wet Weather

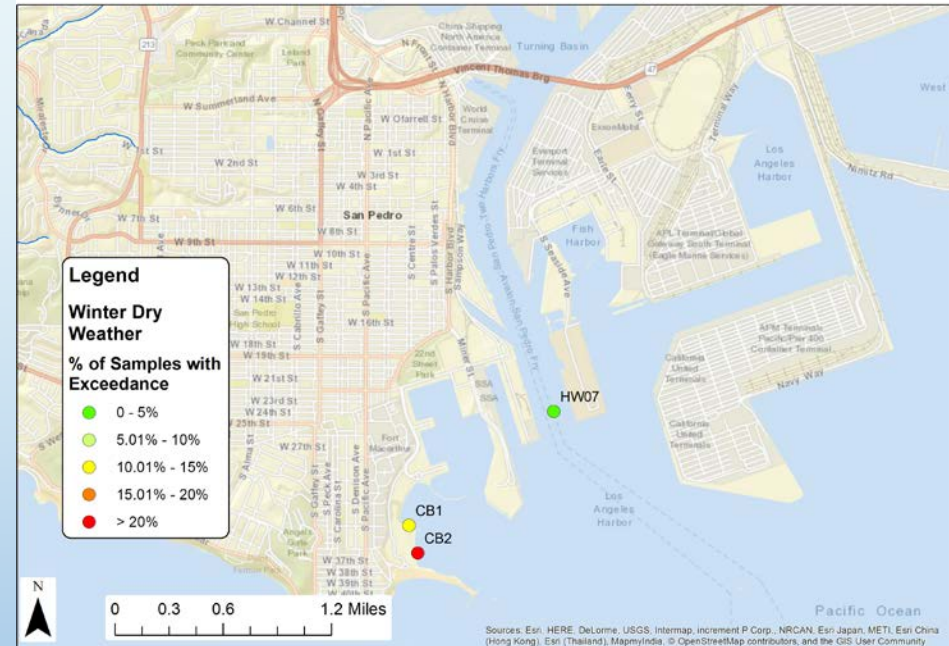


Los Angeles Harbor Bacteria TMDL

Los Angeles Harbor Bacteria TMDL
(Nov 2012 - Oct 2017) **SUMMER DRY**

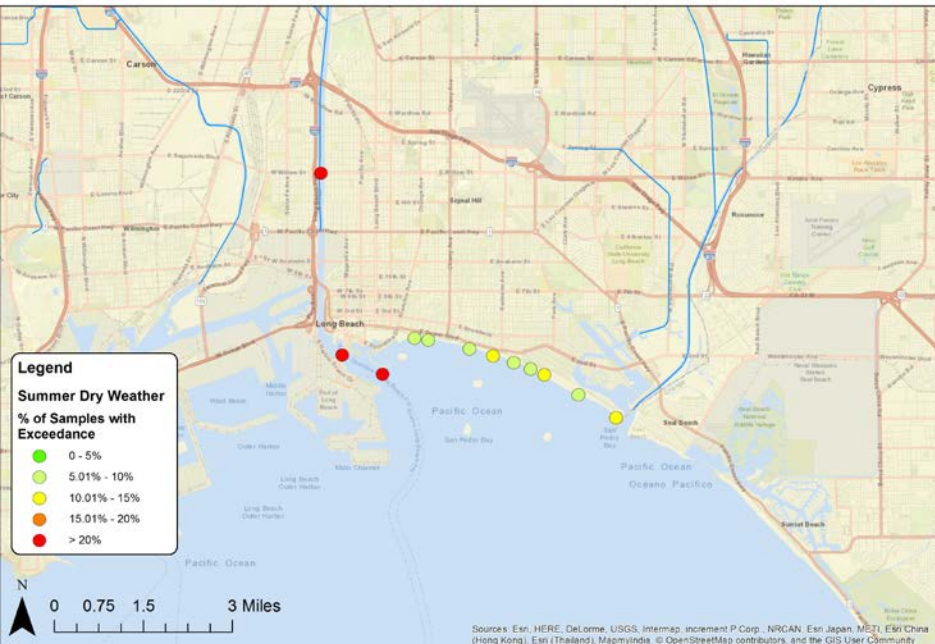


Los Angeles Harbor Bacteria TMDL
(Nov 2012 - Oct 2017) **WINTER DRY**

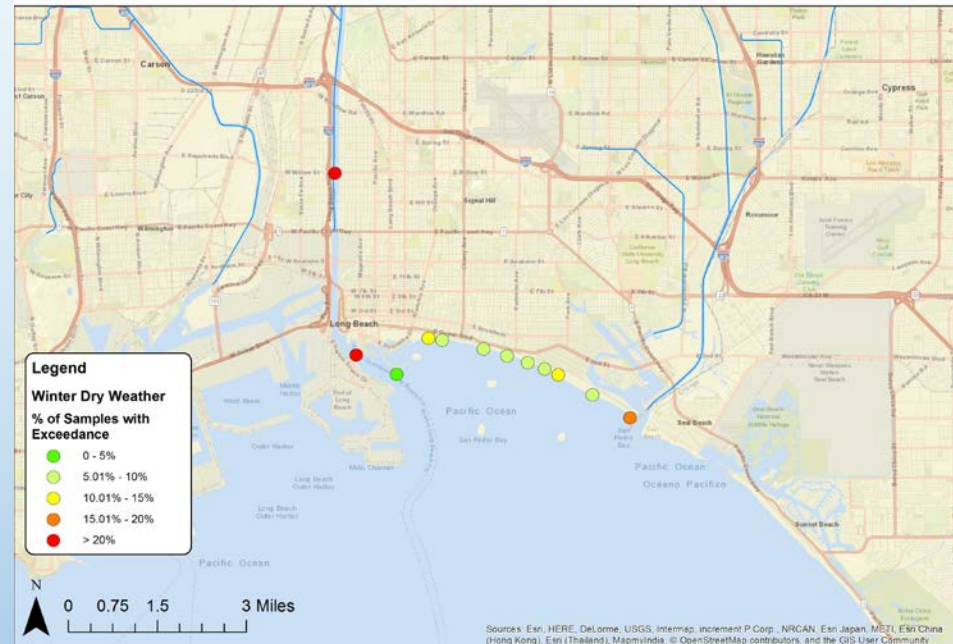


LA River Estuary and Long Beach City Beaches Bacteria TMDL

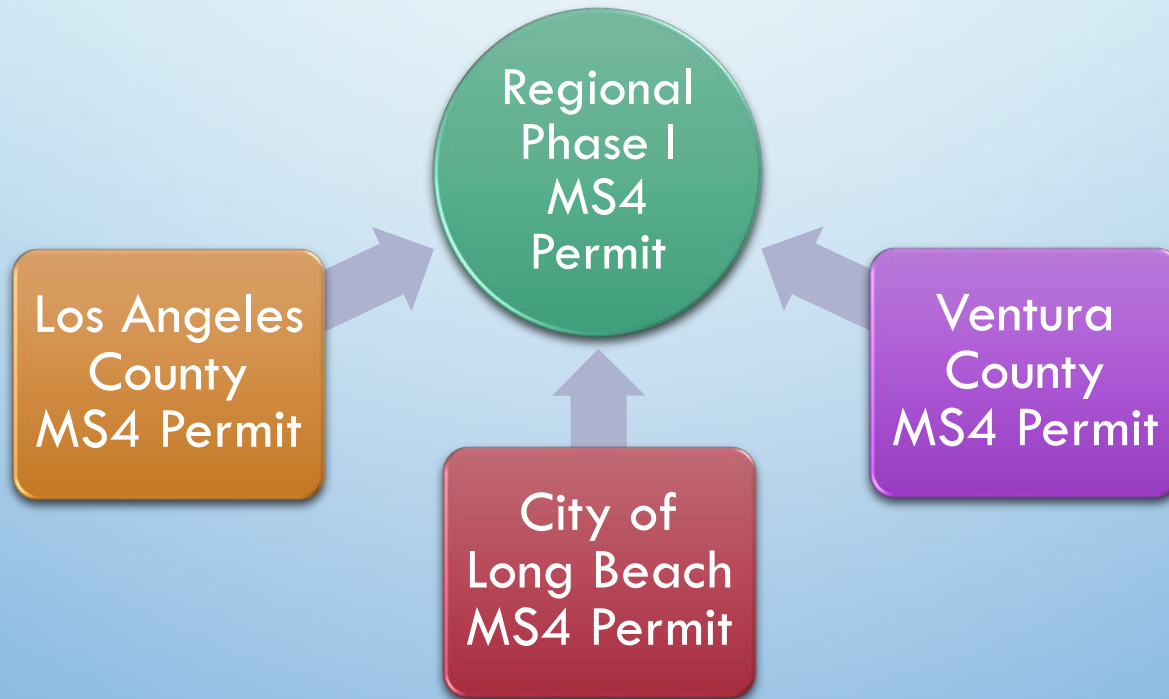
LA River Estuary and Long Beach City Beaches Bacteria TMDL
(Nov 2012 - Oct 2017) **SUMMER DRY**



LA River Estuary and Long Beach City Beaches Bacteria TMDL
(Nov 2012 - Oct 2017) **WINTER DRY**



Regional Phase I MS4 Permit



Anticipated Permit Process Timeline



Proposed Requirements in the Regional Phase I MS4 Permit

- New/revised TMDLs since the issuance of the previous permits
- State-Wide Trash Amendment provisions
- Provide Ventura County MS4 permittees the option to develop a Watershed Management Program

Proposed Requirements in the Regional Phase I MS4 Permit

- Submit monitoring data to the California Environmental Data Exchange Network (CEDEN).
- Reporting requirements will clearly define reporting periods.
- Annual Report Form as an Attachment

Upcoming Board Workshops

- September Board Workshop (9/13/18):
 - Monitoring data and permit implementation for Ventura County
 - Regional Permit Overview
- Workshops on Specific Regional Permit Topics: TBD

Order of Permittee/Stakeholder Presentations

Order	Permittees and Stakeholder Presentations
1	Nearshore Watersheds (City of Long Beach) WMP
2	Beach Cities EWMP Group
3	Palos Verdes Peninsula EWMP Group
4	Dominguez Channel EWMP Group
5	Santa Monica Bay Jurisdiction 2, 3, & 7 WMAs
6	Ballona Creek EWMP Group
7	Marina del Rey EWMP Group
8	North Santa Monica Bay EWMP Group
9	Upper Santa Clara River EWMP Group
10	Malibu Creek EWMP Group
11	Los Angeles County
12	LAWK, NRDC, and HTB
13	Interested Persons