

Safe, Clean Water Program

North Santa Monica Bay

Watershed Area Steering Committee (WASC)



Meeting Minutes:

Thursday, January 30, 2020

10:00am - 12:00pm

Agoura Hills/Calabasas Community Center – Agoura Room
27040 Malibu Hills Road, Calabasas, CA 91301

Attendees

Committee Members Present:

Cung Nguyen (LA County Flood Control District)
David Rydman (LA County – Waterworks District)
Tevin Schmitt (Wishtoyo Chumash Foundation)
Kristen James (Resident)
Nathan Hamburger (Agoura Hills)
Alex Farassati (Calabasas)
Joe Ballomo* (Hidden Hills)

Bruce Hamamoto* (LA County)
Shea Cunningham (Malibu)
Jessica Arden (Westlake Village)
Richard Ambrose* (UCLA)
Katy Yaroslavsky (LA County Supervisor District 3)
Dave Roberts* (LVMWD)

Committee Members Not Present:

Doug Marian (California Plumbing & Mechanical Contractors)
Chad Christensen (MRCA)
Jessica Duboff (LA Area Chamber of Commerce)

*Committee Member Alternate

See attached sign-in sheet for full list of attendees

1. Welcome and Introductions

Kirk Allen called the meeting to order.

All committee members made self-introductions, and quorum was established.

2. Approval of Meeting Minutes from December 12, 2019

The District provided a copy of the meeting minutes from the previous meeting.

Nathan Hamburger made a motion to approve the meeting minutes. Tevin Schmitt seconded the motion. The Committee voted to approve the meeting minutes from December 12, 2019 (unanimous).

3. Committee Member and District Updates

Kirk Allen provided updates from the District for the first round of call for projects, the progress so far in the Scoring Committee, a new Ex Parte Guidance document, a new COI Q&A guideline document, the progress so far for the development of the Watershed Coordinator RFQ, progress on the development of the Municipal and Regional Transfer Agreements, and the release of a Safe Clean Water (SCW) GIS tool developed by District Consultant Stantec.

a) Public Comment Period

No public comments received.

Safe, Clean Water Program

North Santa Monica Bay

Watershed Area Steering Committee (WASC)



4. Discussion Items

a) Ex Parte Communications Disclosure

Jessica Arden has had conversations with Madelyn Glickfeld with how to quantify various benefits for SCW Projects

b) Summary of feasibility studies and scientific studies submitted for North Santa Monica Bay WASC for consideration

Kirk Allen provided a summary of the estimated budget and the projects submitted for the NSMB WASC.

Katy Yaroslavsky inquired why cities had not submitted a project. Jessica Arden and Shea Cunningham noted that the call for projects time window was too short for her city to have their counsel review their projects. Kirk Allen clarified that the Feasibility Guidelines had been available since June 2019 for the call for projects that ended in December 31, 2019; but there will be significantly longer time for the second-round call for projects, which is now open and will close July of this year.

Kristen James and Joe Bellomo inquired for municipality proportional benefit, would the District or Project applicants be evaluating this and would an agreement have to be made between the municipalities to agree to those benefits. Kirk Allen clarified that it is proportional benefit and not necessarily proportional funding, and that the District is currently working on additional guidance documents to help describe that process. Bruce Hamamoto and Kirk Allen clarified that the intent of this requirement is to ensure equity across the watershed.

Jessica Arden and Joe Bellomo noted that for the projects funded by the SCW Program, the Regional Board could potentially consider these projects (that benefit multiple municipalities) as counting towards the EWMP compliance requirements.

David Rydman inquired what kinds of projects and project costs the cities are looking to do within the NSMB WASC, either a single large project over 5 years, or one small project done every year. Joe Bellomo noted that his city has had discussions on the types of projects they will want to bring forward, with projects planned for the second round of call for projects; further noting that his city will be focusing on much larger projects to span across multiple funding years. Kirk Allen clarified that there is also municipal local return that could be potentially used to augment the WASCs projects. Nathan Hamburger agreed with Joe Bellomo that for the cities in the NSMB they are looking for larger projects. Jessica Arden noted that for her city, she would only receive \$250k per year which would not be able to move projects through at that cost.

Katy Yaroslavsky inquired if large partner agencies with larger budgets such as Caltrans could be invited to the WASC meeting to consider funding agreements. Kirk Allen noted that one of the primary goals of the Watershed Coordinator is to help facilitate those types of partnerships for the Watershed Areas. Richard Ambrose noted that the WASC should be considering a strategic plan for the NSMB WASC. Kirk Allen noted that programming the 5-year SIP is critical to that point.

Cung Nguyen noted that one of the issues found in other WASCs is how to get partners to agree to funding and insure that there is certainty in getting project partner funding. Jessica Arden noted that for Measure M, cities will typically front the full cost of the proposed project and the partner share would be paid back over a period of time.

Safe, Clean Water Program

North Santa Monica Bay

Watershed Area Steering Committee (WASC)



c) Presentations

i) Enhanced Watershed Management Program (EWMP) for North Santa Monica Bay Coastal Watersheds

David Rydman inquired if Bruce Hamamoto would be considering EWMP priority projects for the County's proposed SCW projects. Shea Cunningham noted that pushing forward EWMP priority projects is the plan of her city. Katy Yaroslavsky inquired what level of coordination the District will provide to ensure the EWMP priorities are accomplished. Kirk Allen clarified that it is the NSMB WASC sets priorities and watershed goals. Bruce Hamamoto noted that the County is working to ensure that the Unincorporated County SCW proposed projects are in line with the EWMP goals. Kirk Allen also clarified that all projects that are proposed through the SCW Program have to be within an existing Water Quality Plan, such as the EWMP documents.

ii) Enhanced Watershed Management Program (EWMP) for Malibu Creek Watershed Presented by the Malibu Creek Watershed EWMP Group

No Comments Received

iii) Viewridge Road Stormwater Improvements Project – presentation will cover how the Project will treat urban runoff and stormwater runoff by means of bio-filtration, improving water quality discharge into Topanga Creek and Santa Monica Bay

Tevin Schmitt inquired what plantings were being used for the project. Alberto Grajeda noted that he would work with his landscape engineer to get the planting plan.

Kirsten James requested further clarification on the benefits provided to the entire Watershed and if the project is also part of the EWMP. Alberto Grajeda noted that the project is part of the EWMP priorities list, and that the project would provide water quality benefits as well as recreational opportunities in the creek by removal of pollutants. Bruce Hamamoto also clarified that the NSMB watershed is a unique watershed in that there are over a dozen sub-watersheds within the NSMB watershed. This particular watershed will benefit, and the County plans to propose additional projects to benefit other areas of the watershed.

Richard Ambrose inquired if there would be additional opportunities to provide comments on this project. Kirk Allen noted that this was only the first presentation for this project, that there is a web submission for WASC members to view more detailed information about the submittal, but that in future meetings additional questions or recommendations could be considered for the project during the development of the SIP.

Katy Yaroslavsky and Richard Ambrose inquired what level of modifications the WASC is able to propose to a submitted project. Kirk Allen noted that it is the eventual goal of the WASC meetings to have additional time to vet and deliver projects through the program, but with this first year's time constraints, the vetting and comment period are expedited. Kirk Allen and Cung Nguyen also clarified that during the development of the SIP would offer additional opportunities to have discussion on this project.

iv) Regional Scientific Study to Support Protection of Human Health through Targeted Reduction of Bacteriological Pollution (Richard Watson & Associates)

Comments held for time.

Safe, Clean Water Program

North Santa Monica Bay

Watershed Area Steering Committee (WASC)



5. Public Comment Period

Public Comments – inquired if the WASC would be open to a presentation on various technologies available for future projects. Kirk Allen noted the suggestion would be discussed with the chairs of the committee.

6. Voting Items

- a) Send completed feasibility study to Scoring Committee for scoring

Katy Yaroslavsky inquired how the score of 60 was achieved for the Viewridge project. Kirk Allen noted that the Project Scoring Module estimates an initial score for projects and that a validated score from scoring committee is still necessary.

Jessica Arden inquired if there are adjustments that can still be made to the project. Kirk Allen noted that the score is just one part of a project's evaluation, but there will definitely be time to ask additional questions and provide recommendations to the project applicants.

Joe Bellomo inquired if all County projects have made it past the 60-point threshold. Bruce Hamamoto and Kirk Allen noted that to date all County Projects have passed the validation process conducted by the Scoring Committee.

Tevin Schmitt made a motion to proceed sending the feasibility study to the SC for scoring. Jessica Arden seconded the motion. The Committee voted to approve sending the feasibility study to the SC for scoring. (unanimous).

7. Items for next agenda

Tevin Schmitt requested additional information on the Viewridge project be added to the next agenda. Kirk Allen noted that the Website does have this project available for additional details, but that the WASC meeting can schedule additional presentations for the Viewridge Project. Bruce Hamamoto noted that his group will be available at the next meeting to answer any questions on the Viewridge project.

Richard Ambrose requested additional clarification on Ex Parte communication. Kirk Allen noted that disclosing outside discussions will be part of the next agenda.

8. Adjournment

Kirk Allen thanked the committee members and public for their time and participation and adjourned the meeting.

North Santa Monica Bay
 Watershed Area Steering Committee Meeting
 COMMITTEE MEMBER AND ALTERNATE SIGN-IN



Member Name	Municipality/ Organization	Email Address		Signature
Cung Nguyen	FCD	CUNGUYEN@dpw.lacounty.gov	P	
Carolina Hernandez	FCD	CHERNANDEZ@dpw.lacounty.gov	A	
Dave Rydman	Los Angeles County-Waterworks District	drydman@dpw.lacounty.gov	P	
Greg Even	Los Angeles County-Waterworks District	GEVEN@dpw.lacounty.gov	A	
Chad Christensen	Mountains Recreation and Conservation Authority	chad.christensen@mrca.ca.gov	P	
Sarah Rascon	Mountains Recreation and Conservation Authority	sarah.rascon@mrca.ca.gov	A	
David Pedersen	Las Virgenes Municipal Water District	dpedersen@lvmwd.com	P	
Dave Roberts	Las Virgenes Municipal Water District	droberts@lvmwd.com	A	
Madelyn Glickfeld	Institute of the Environment and Sustainability UCLA	madelyn.glickfeld@ioes.ucla.edu	P	
Richard Ambrose	UCLA Fielding School of Public Health	rambrose@ucla.edu	A	
Doug Marian	California Plumbing and Mechanical Contractors	d.marian@uaplumber78.com	P	
Jessica Duboff	LA Area Chamber of Commerce	Jessica.Duboff@gmail.com	P	
Kendal Asuncion	LA Area Chamber of Commerce	kasuncion@lachamber.com	A	
Tevin Schmitt	Wishtoyo Chumash Foundation Ventura County	tschmitt@wishtoyo.org	P	
Kirsten James	Resident	kirstenjames@gmail.com	P	

North Santa Monica Bay
 Watershed Area Steering Committee Meeting
 COMMITTEE MEMBER AND ALTERNATE SIGN-IN



Member Name	Municipality/ Organization	Email Address		Signature
Fran Diamond	Resident	mediafranh2o@gmail.com	A	
Nathan Hamburger	Aguora Hills	Nhamburger@ci.agoura-hills.ca.us	P	
Louis Celaya	Aguora Hills	Lcelaya@ci.agoura-hills.ca.us	A	
Alex Farassati	Calabasas	afarassati@cityofcalabasas.com	P	
Alba Lemus	Calabasas	alemus@cityofcalabasas.com	A	
Kerry Kallman	Hidden Hills	kerry@hiddenhillscity.org	P	
Joe Bellomo	Hidden Hills	jbello@willdan.com	A	
Katy Yaroslavsky	LA County Supervisor District 3	kyaroslavsky@bos.lacounty.gov	P	
Virdiana Velez	LA County Supervisor District 3	vvelez@bos.lacounty.gov	A	
Paul Alva	Los Angeles County	PALVA@dpw.lacounty.gov	P	
Mark Lombos	Los Angeles County	MLOMBOS@dpw.lacounty.gov	A	
Bruce Hamamoto	Los Angeles County	BHAMAMO@dpw.lacounty.gov	A	
Shea Cunningham	Malibu	scunningham@malibucity.org	P	
Mark Johnson	Malibu	mjohnson@malibucity.org	A	
Jessica Arden	Westlake Village	jessica@wlv.org	P	

North Santa Monica Bay
 Watershed Area Steering Committee Meeting
 PUBLIC SIGN-IN



First Name	Last Name	Municipality/Organization	Email Address
JOSIE	GUTIERREZ	LACDPW	jgutierr@dpw.lacounty.gov
Jon	Abelson	Stanrec	jorathan.abelson@stanrec.com
Michael	O'MARY	APD CleanWaterTech	info@cleanwatertech.com
Geremew Amenu	Amenu	LACFCD	gamenu@pw.lacounty.gov
Alberto Grajeda	Grajeda	LADPW	algrajeda@pw.lacounty.gov
Richard Watson	Watson	RWA	rwatson@rwa-planning.com
Chris Minton	Minton	LWA	chrism@lwa.com
Kirsten	James	Resident	
Annelisa	Moe	Heal the Bay	amoe@healthebay.org

*Signing or completing this form is voluntary for members of the public

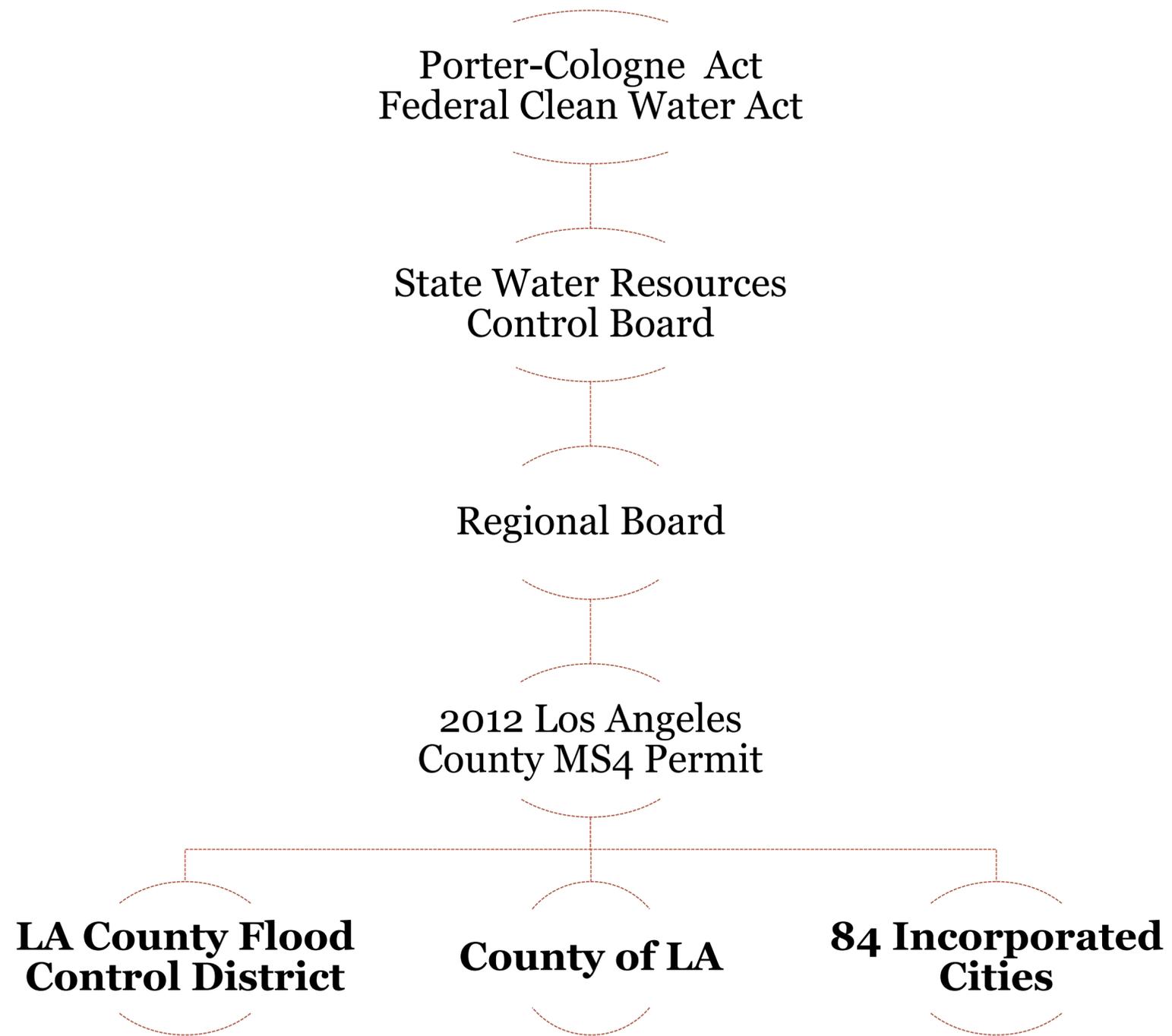
Safe Clean Water Program
North Santa Monica Bay
Steering Committee

January 30, 2020



NORTH SANTA MONICA BAY COASTAL WATERSHEDS ENHANCED WATERSHED MANAGEMENT PROGRAM

MUNICIPAL SEPARATE STORM SEWER (MS4) PERMIT



LOS ANGELES COUNTY MS4 PERMIT-2012

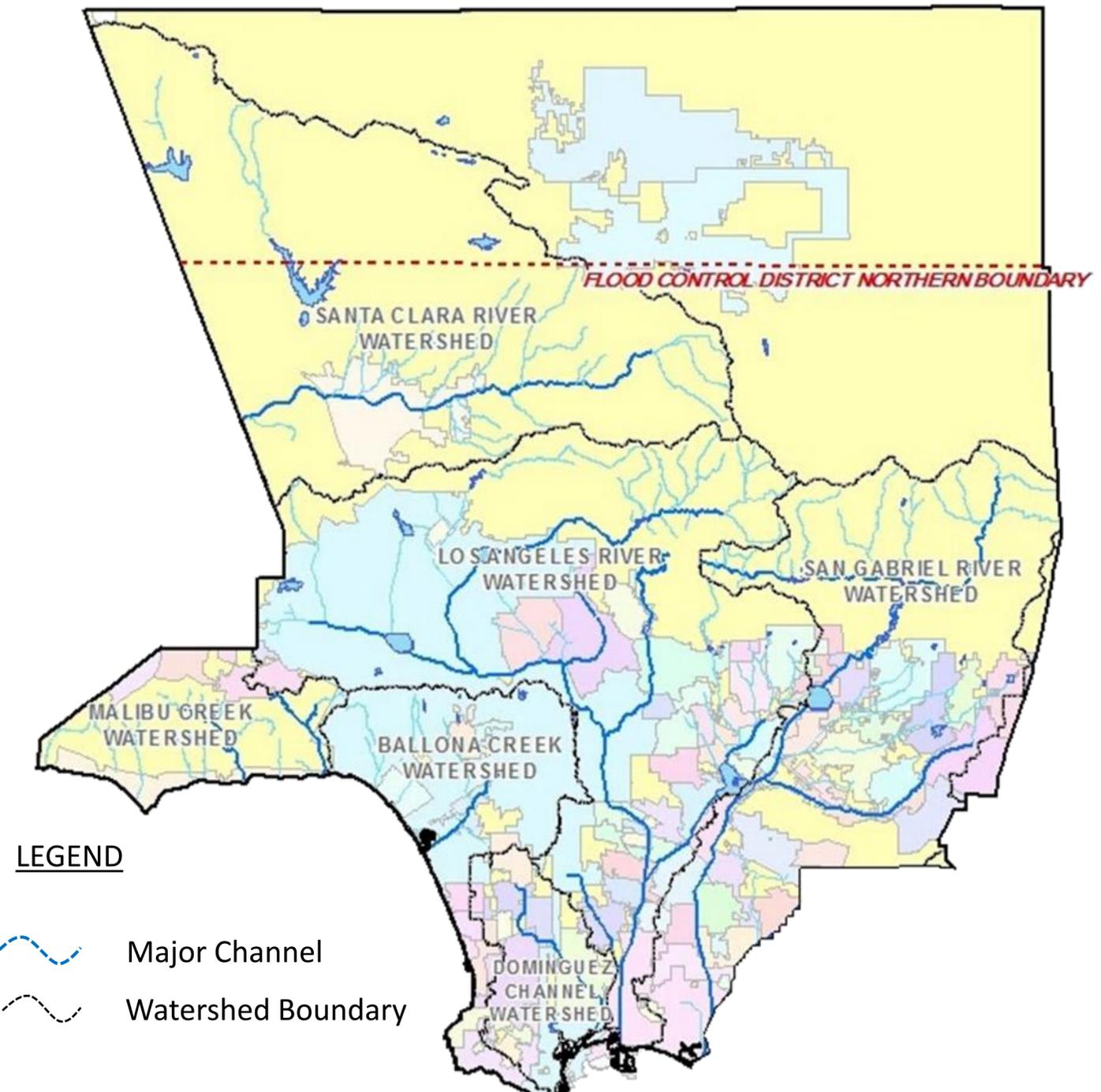
Most Stringent in the State

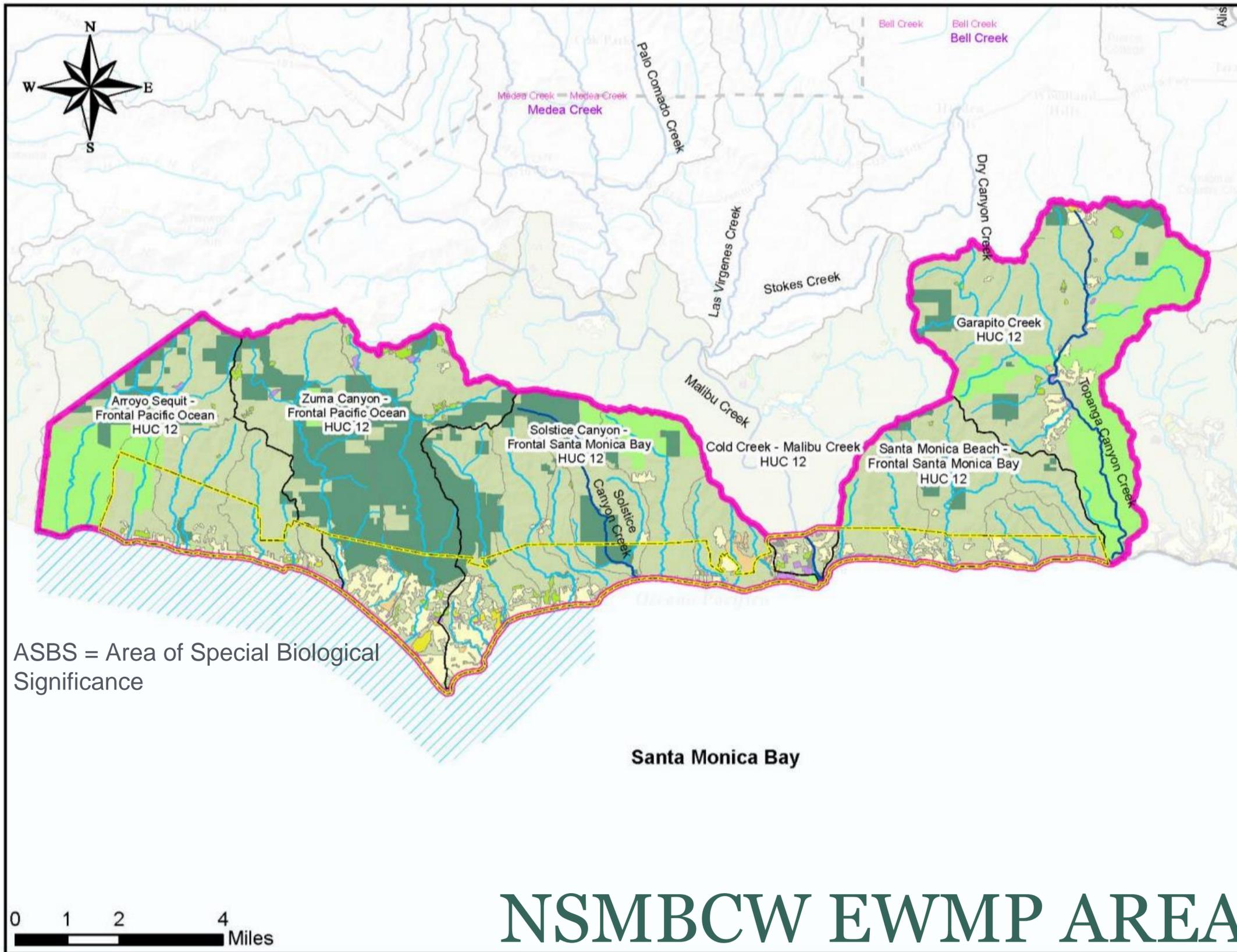
Total Maximum Daily Loads (TMDLs): at least 33

For trash, bacteria, metals, nutrients, legacy pollutants, etc.

Compliance through:

1. Numeric Limits
2. Watershed Management Program (WMP)
3. Enhanced Watershed Management Program (EWMP)





ASBS = Area of Special Biological Significance

NSMBCW EWMP AREA

ENHANCED WATERSHED MANAGEMENT PROGRAM

- Stormwater permit compliance partnership
 - MS4 Permit Administration
 - Public Information and Participation
 - Water quality monitoring and reporting
 - Stormwater treatment projects



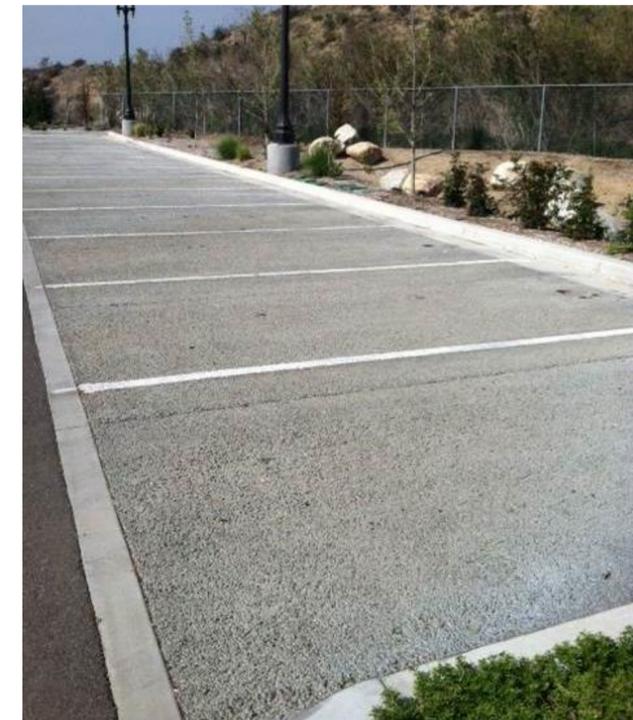
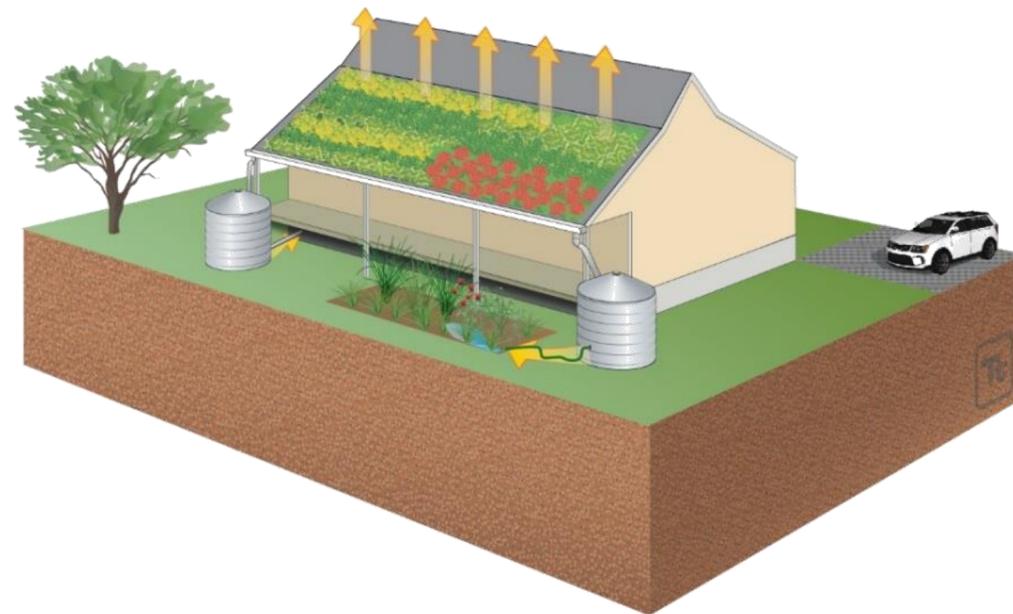
WATERSHED CONTROL MEASURES

Institutional BMPs



WATERSHED CONTROL MEASURES

Low Impact Development



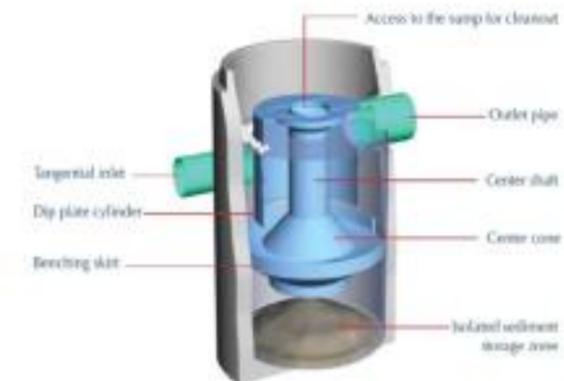
WATERSHED CONTROL MEASURES

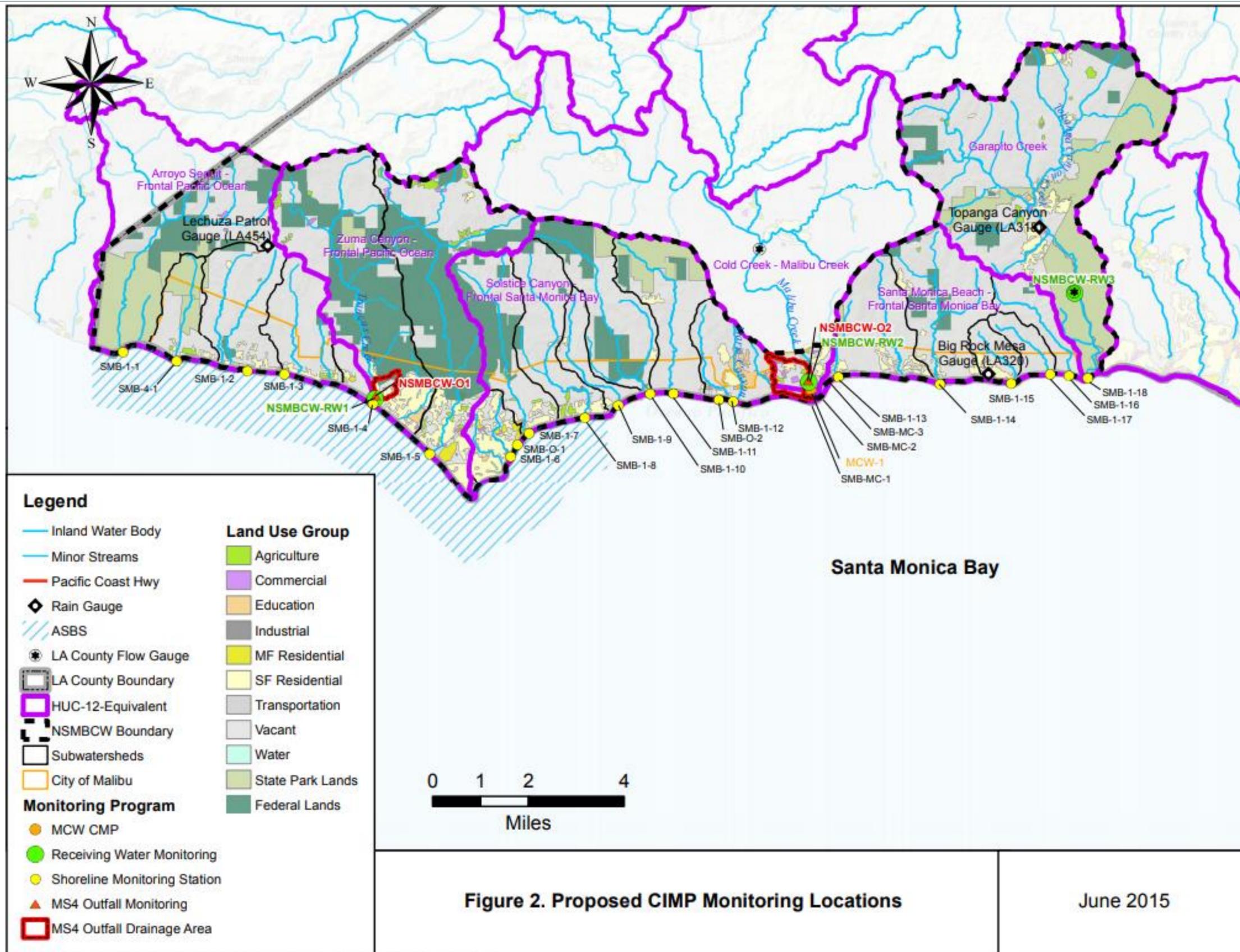
Green Streets



WATERSHED CONTROL MEASURES

Regional BMPs





WATER QUALITY IMPROVEMENT PROJECTS (PRIOR TO EWMP)

**2007
Civic Center
Stormwater
Treatment
Facility (\$6M)**

**2008
Solstice
Creek
Bridge
Fish
Barrier
Removal
(\$1M)**

**2010
Ramirez
Creek/
Paradise
Cove
Stormwater
Treatment
Facility
(\$1M)**

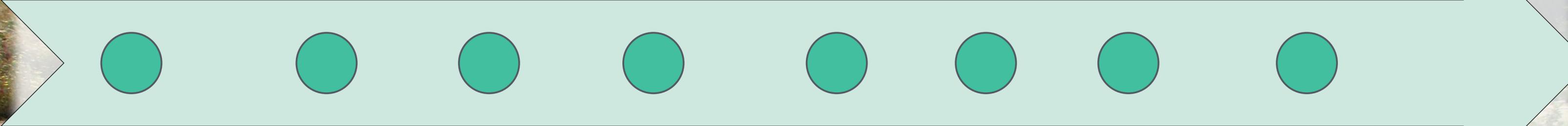
**2015-16
Biofilters
(\$2.8M)**

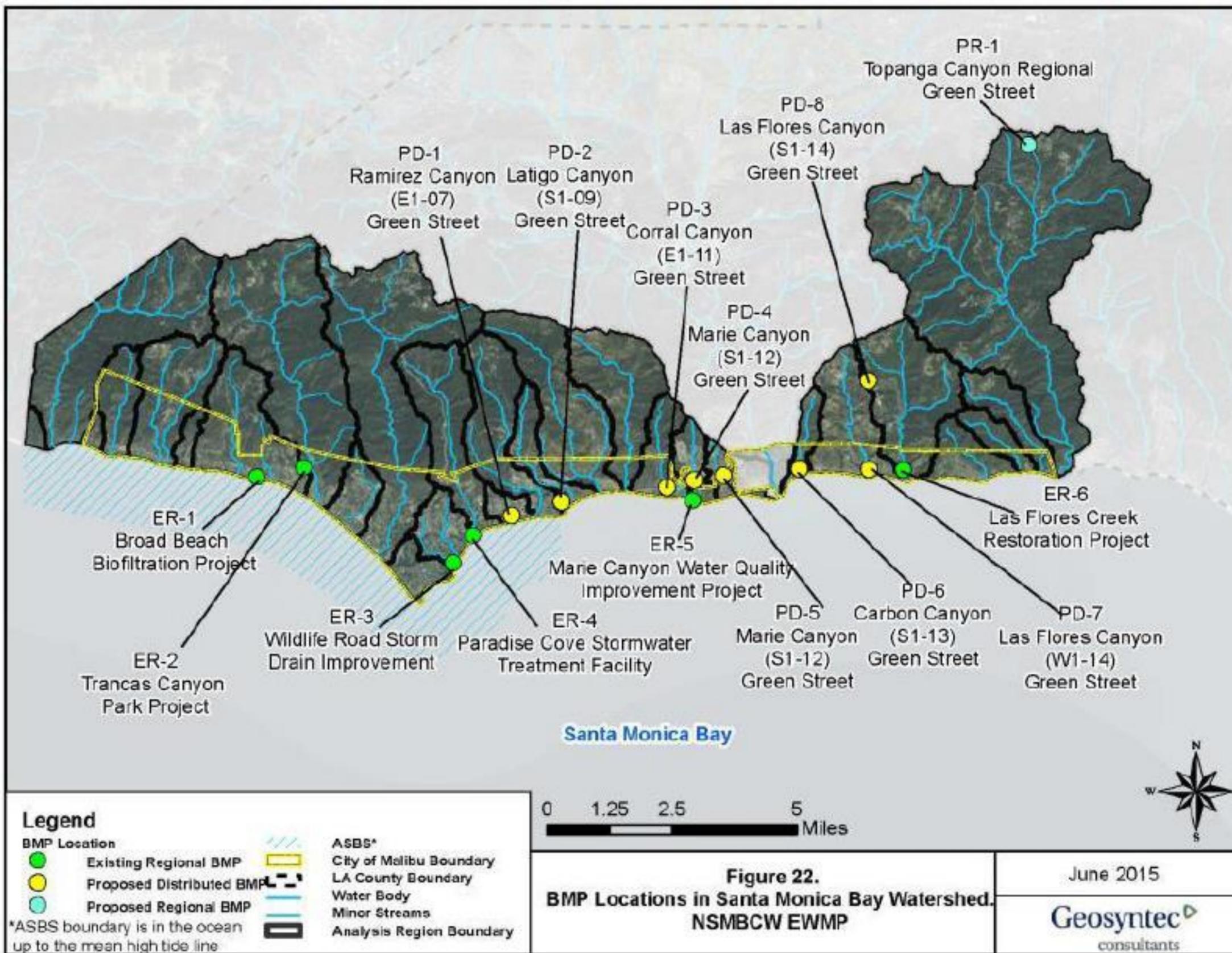
**2008
Las Flores
Creek
Restoration
(\$4M)**

**2008
Marie
Canyon
Stormwater
Treatment
Facility/Part
nered with
LA County
(\$1.2M)**

**2010
Legacy
Park
(\$35M)**

**2018
Civic Center
Wastewater
Treatment
Facility
(\$60M)**





DISTRIBUTED GREEN STREET BMP'S

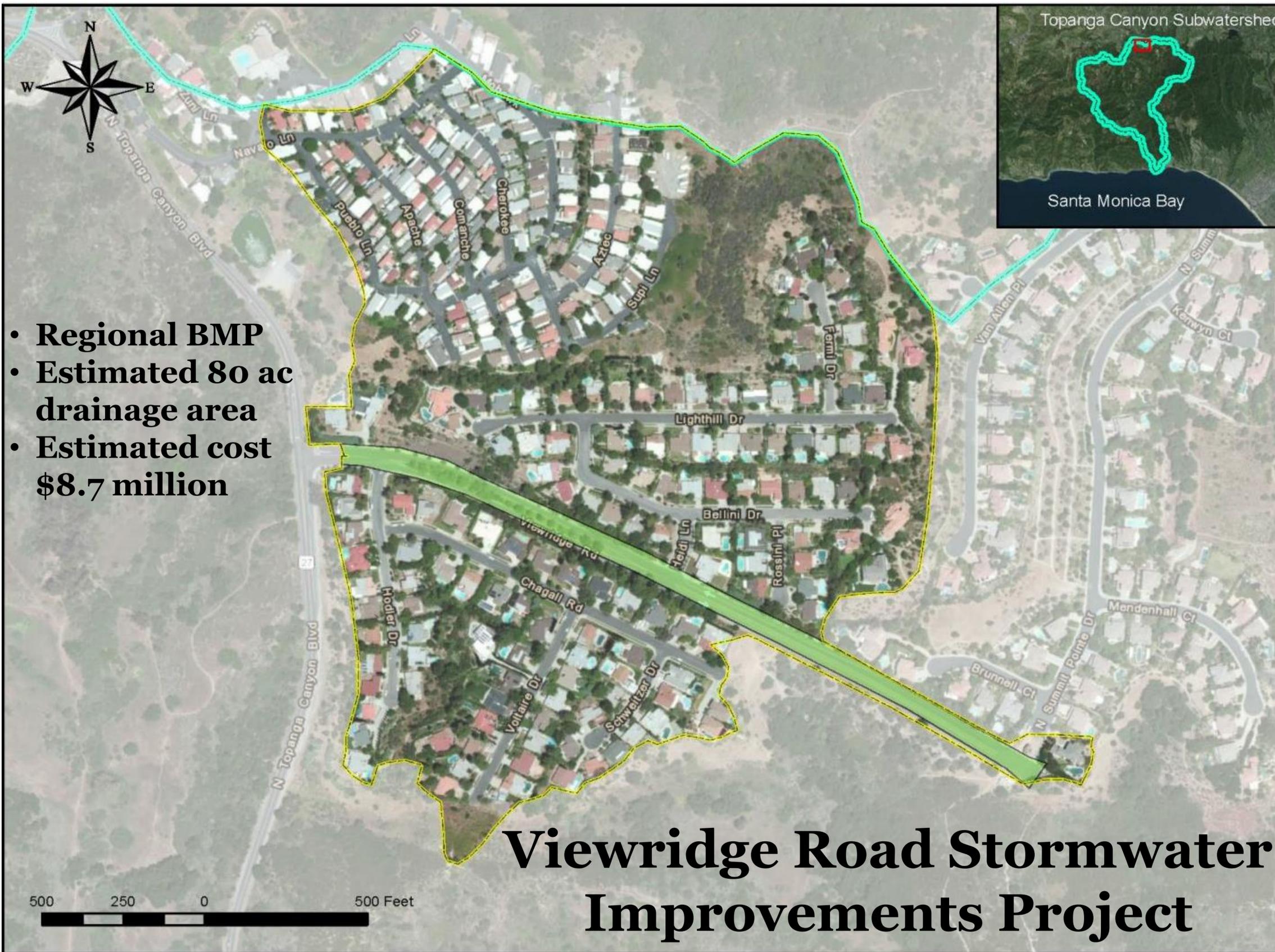
- Ramirez Canyon
- Las Flores Canyon
- Latigo Canyon
- Corral Canyon
- Marie Canyon
- Winter Canyon
- Sweetwater Canyon



GREEN STREETS BENEFITS

- Improves Surface Water Quality
 - Dry Weather
 - Smaller Storm Event Flows
 - Drought tolerant landscape
- Cost Effective
- Reduce Heat Islands





SAFE CLEAN WATER PROGRAM

- To the extent possible, Feasibility Studies should provide estimates of the benefits provided by each Project.
 - Water Quality Benefits,
 - Water Supply Benefits, and
 - Community Investment Benefits
 - Nature based
 - Local Match

Malibu Creek Watershed Enhanced Watershed Management Program

January 30, 2020

Malibu Creek Watershed EWMP Group



Presentation Overview

- Implementation
- Monitoring and Studies
- Planning
- Future Projects

Components of Implementation

- Minimum Control Measures
- Low Impact Development
- Green Streets
- Regional Projects
- Creek Restoration
- Trash Capture Devices



Key Minimum Control Measures

- Targeted Ordinances
 - Water Conservation
 - Food Packing
 - Mobile Commercial Washing Operations
- Utilization of Smart Irrigation
- Community Engagement and Participation



LID: Westlake Village Regional Park Detention Basin



Green Streets: Westlake Village Agoura Road Sidewalk



Quick Facts

Approach

Sidewalk Pervious
Pavers

Completed

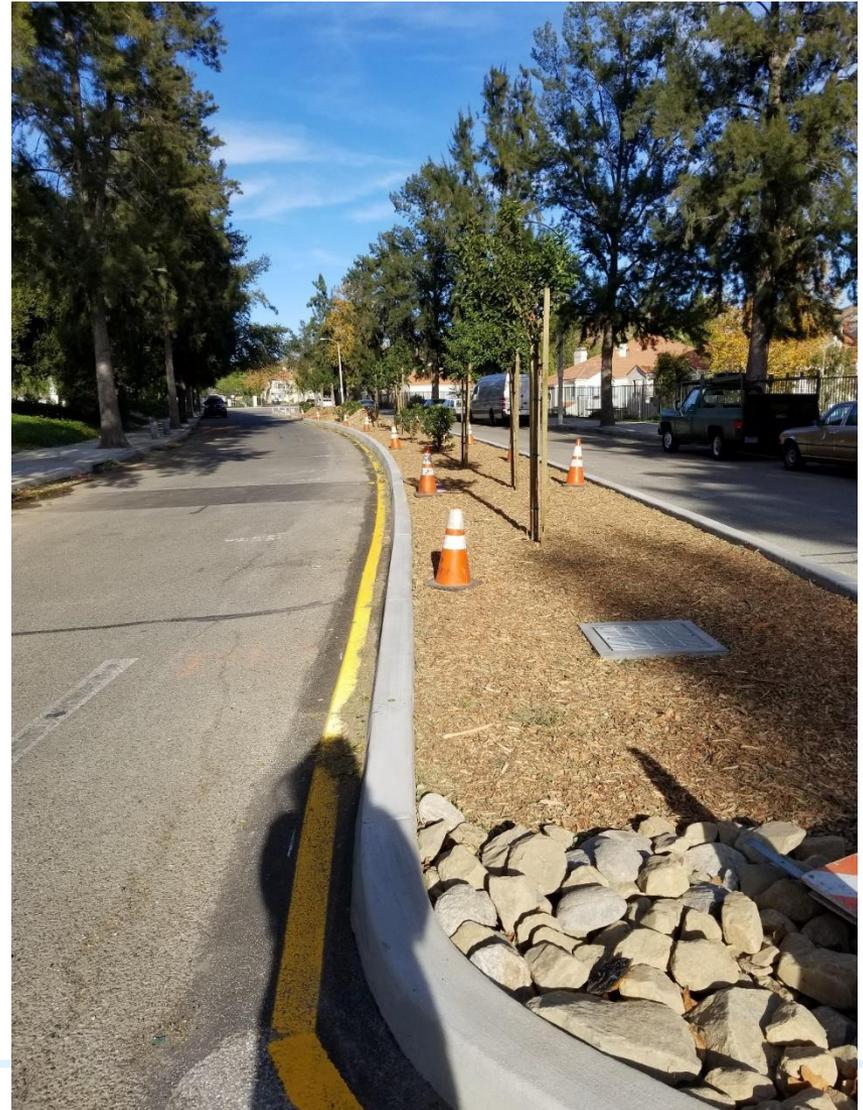
2016

Pollutants: Bacteria, Sediment, and
Nutrients

Green Streets: Calabasas Malibu Hills Road

Quick Facts

Approach	Median Redesign
Phase I	Completed: 2017
Phase II	Completion: March 20
Pollutants: Bacteria, Sediment, Nutrients, and Trash	



Regional: County and Calabasas Gates Canyon Park



Quick Facts

Design Volume 3.5 Acre Feet

Cost \$11M

Funding Local + Grant

Completion Spring 2020

Benefits: Water Quality and
Supply, Recreation,
Educational

Restoration: Medea Creek



Quick Facts

Removed concrete and used
natural channel stabilization

Incorporated native vegetation

Completed in 2016 for \$2M



Restoration: Las Virgenes Creek





Quick Facts

Restored native habitat

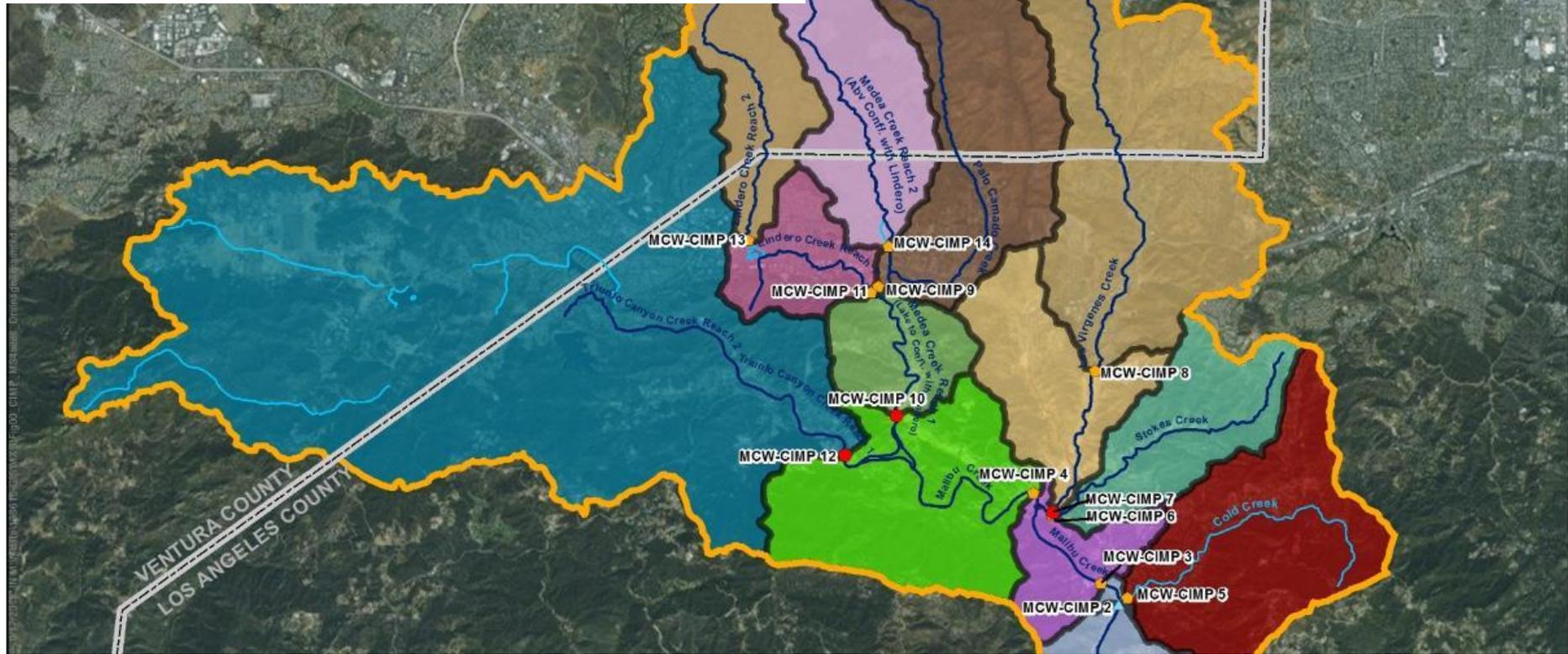
Protected fish passage

Phase I: 2008 (\$1.8M)

Phase II: 2019 (\$3.5M)

Phase III: TBD (\$1.4M)

Studies (Nutrients and Bacteria)



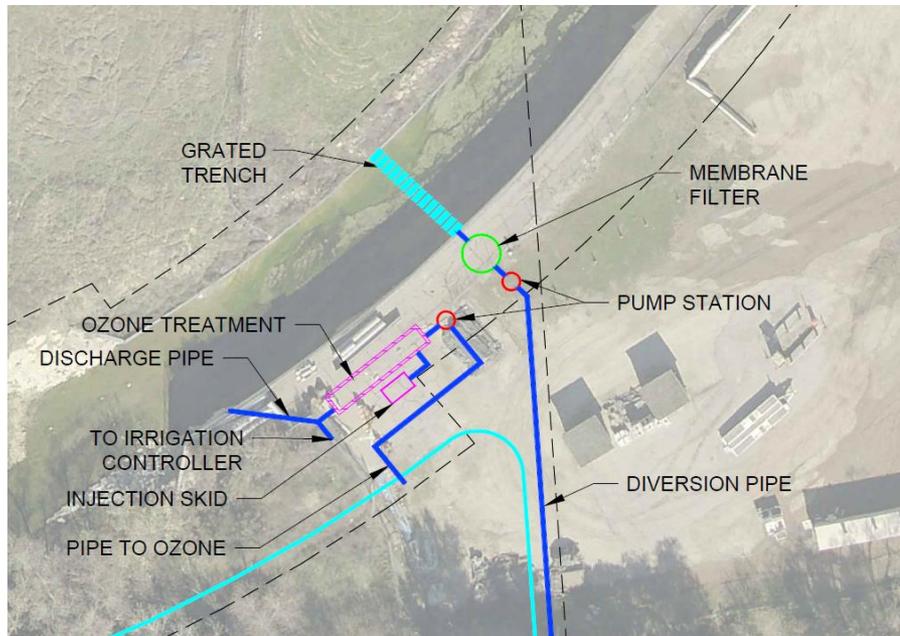
- Goal = improve implementation and outcomes
- Nutrients: Identify additional factors that impact benthic community (invasives, habitat alteration) and BMPs
- Bacteria: Identify greatest risks and BMPs

Planning (EWMP Adaptive Management)

- Updated EWMP (June 2021)
 - Approximately 8 years of new water quality data
 - Consideration of new and revised TMDLs (nutrients, benthic community, sedimentation, and trash)
 - Lessons learned through implementation
 - Safe, Clean Water Program opportunities
 - Stakeholder input
- Expected Outcomes
 - Updated reasonable assurance analysis
 - New and revised projects
 - Align with Safe, Clean Water Program requirements

Future Projects: Agoura Hills County Yard

- Improve water quality
- Capture (2,500+ acres) and use (400 af/year)
- Cost ~ \$20.5M (Phase 1 ~ \$8.5M)

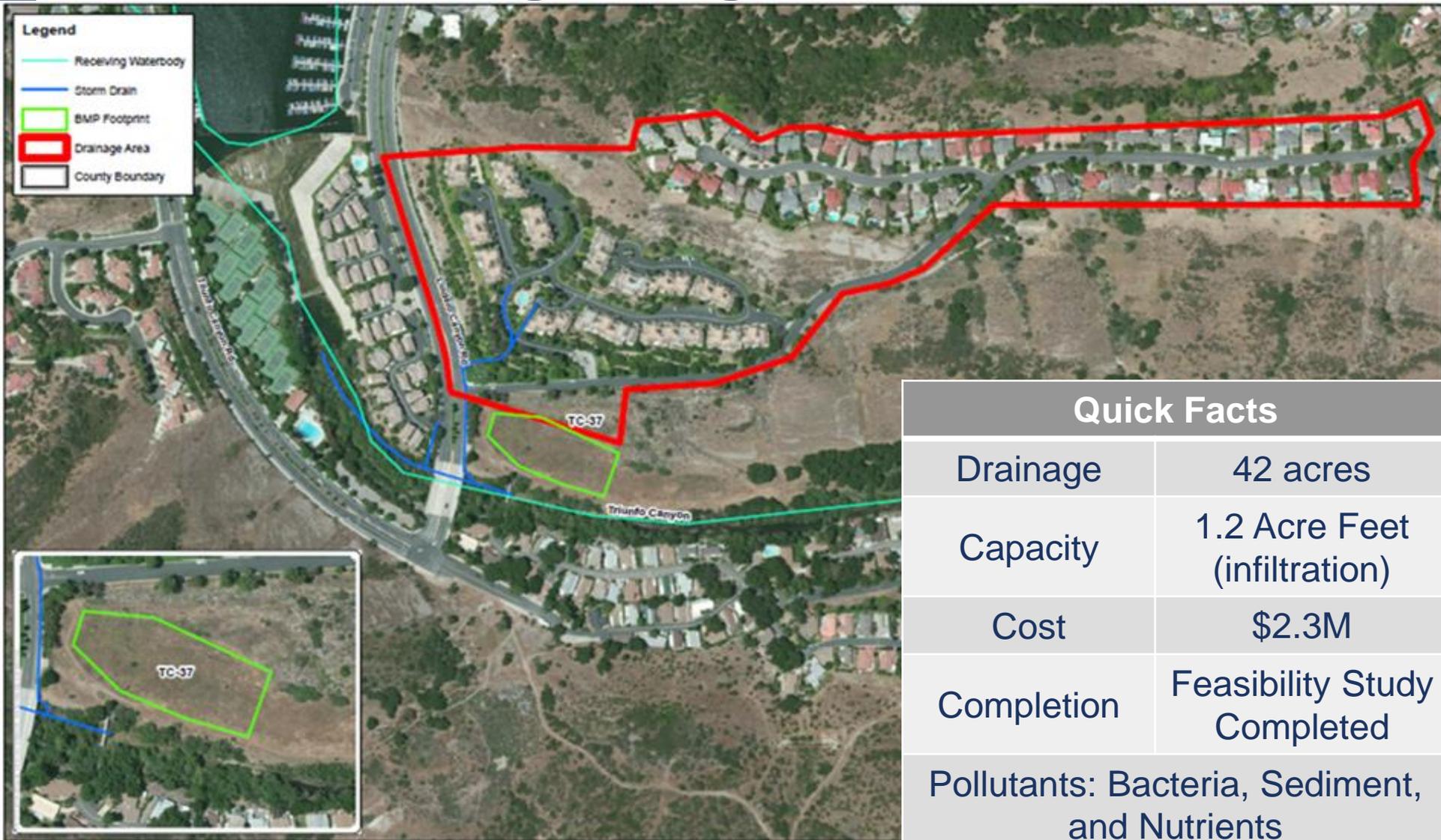


Future Projects: County Led Green Streets

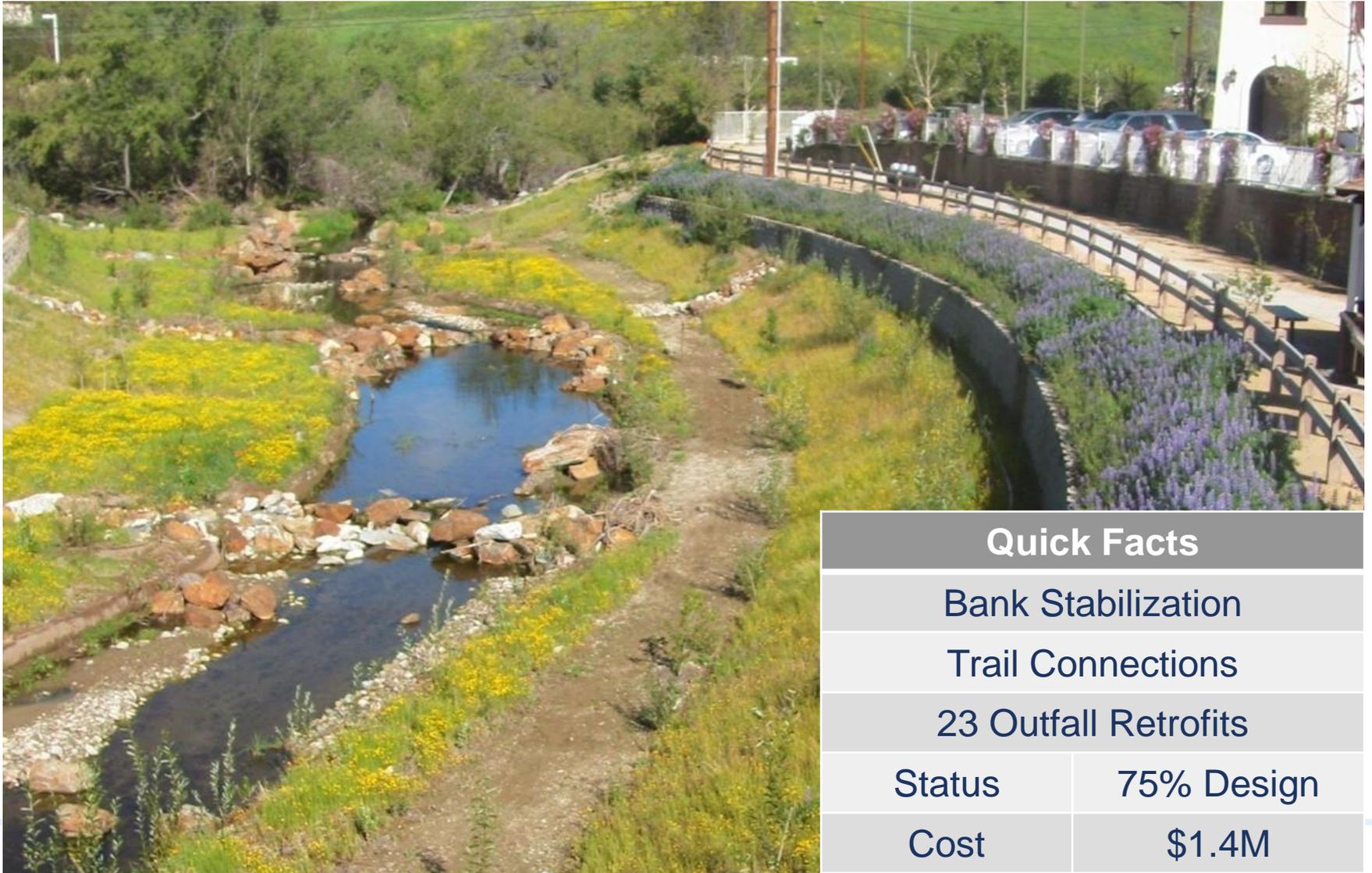
- Agoura Hills: Hazel Nut Court, Liberty Canyon, Davids Road, Mullholland Highway
- Calabasas: Mureau Road



Future Projects: Westlake Village Ridgford Infiltration Basin



Future Projects: Calabasas Las Virgenes Phase III



Quick Facts

Bank Stabilization

Trail Connections

23 Outfall Retrofits

Status

75% Design

Cost

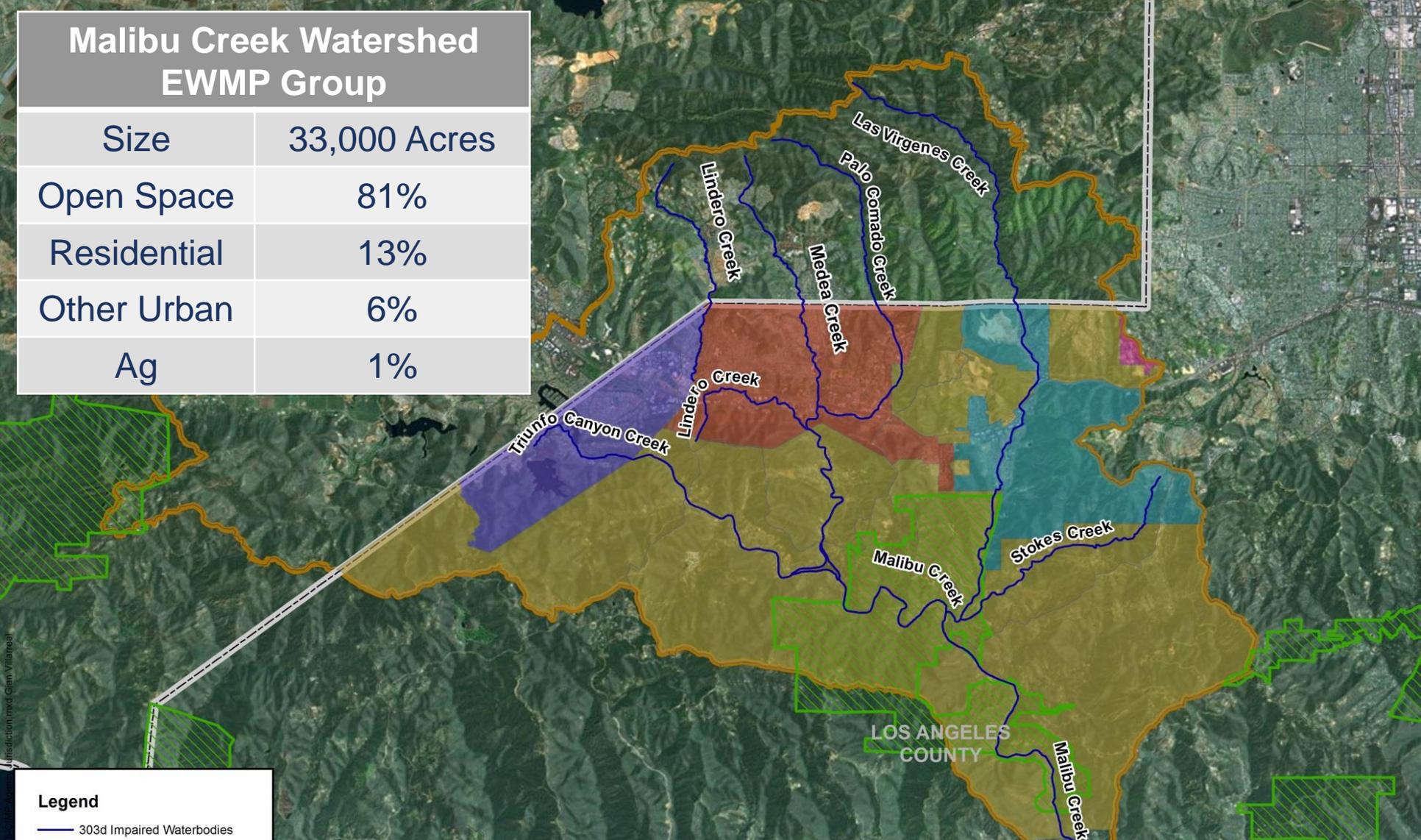
\$1.4M

Looking Ahead

- Next 6 Months
 - Work on July 2020 applications
- Next 18 Months
 - Update EWMP
 - Enhance suite of projects for the SIP
- Next 5 Years
 - Implementation
 - Evaluate effectiveness of projects
 - Continue to apply for funding

Malibu Creek Watershed EWMP Group

Size	33,000 Acres
Open Space	81%
Residential	13%
Other Urban	6%
Ag	1%



Legend

- 303d Impaired Waterbodies
- State Park or Forest Boundary
- CIMP Agencies**
- Agoura Hills
- Calabasas
- Hidden Hills
- Unincorporated
- Westlake Village
- County Boundary

Malibu Creek Watershed EWMP Group

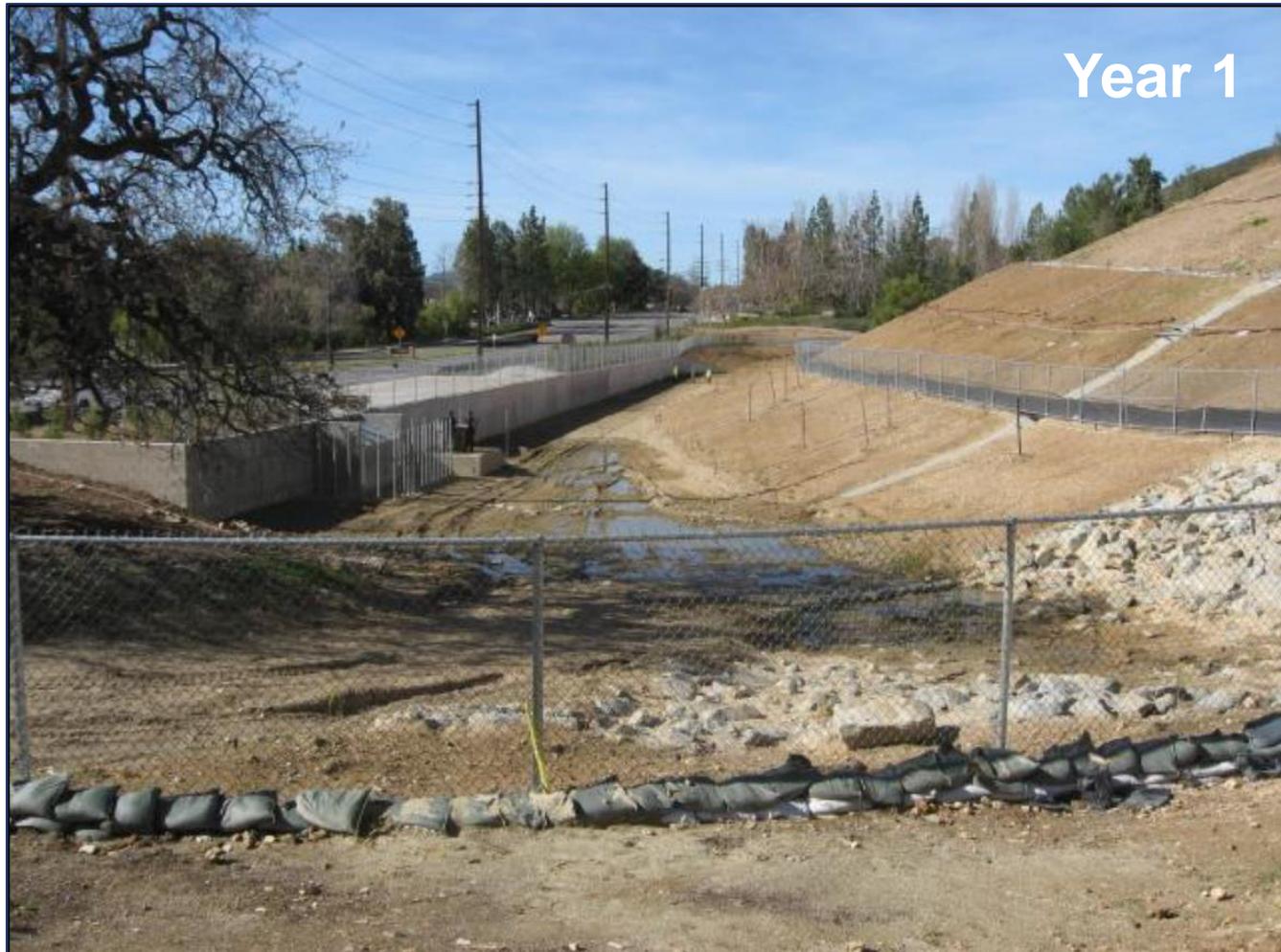


CITY of CALABASAS



AGOURA HILLS

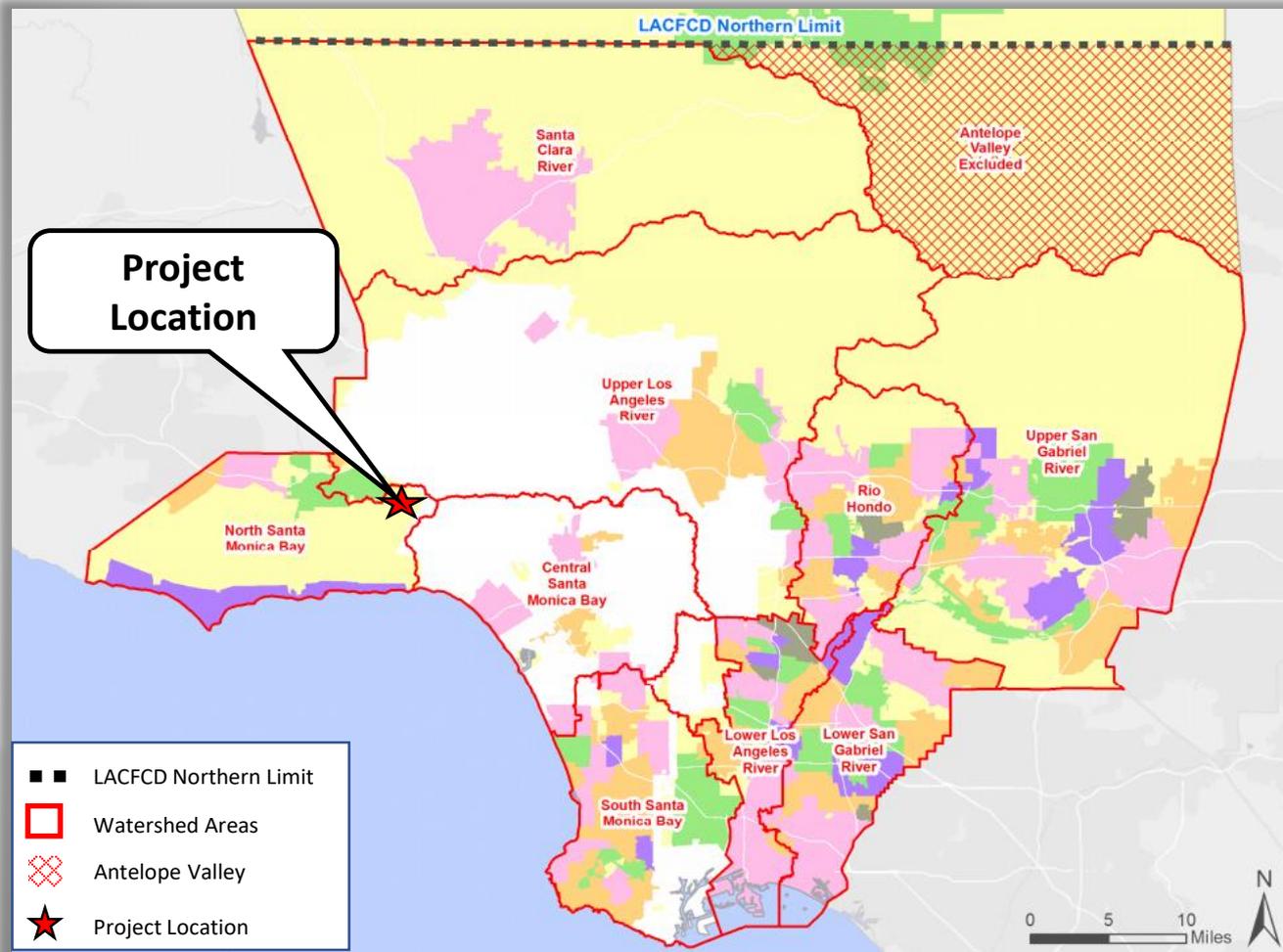
LID: Westlake Village Regional Park Detention Basin





Viewridge Road Stormwater Improvements Project

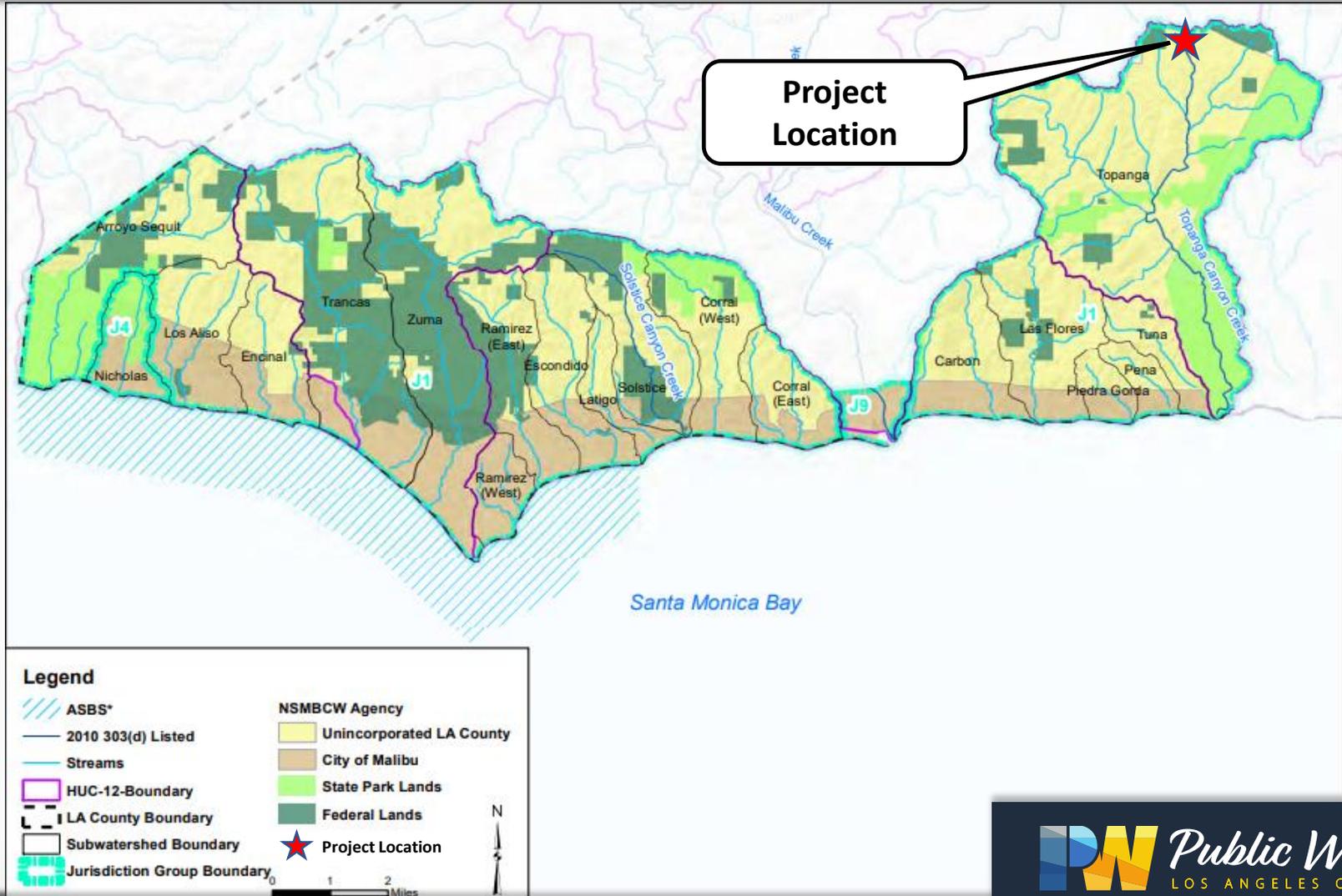
Viewridge Road Stormwater Improvements Project



Location

- North Santa Monica Bay Watershed Area
- Unincorporated Community of Topanga, CA

Viewridge Road Stormwater Improvements Project



Viewridge Road Stormwater Improvements Project

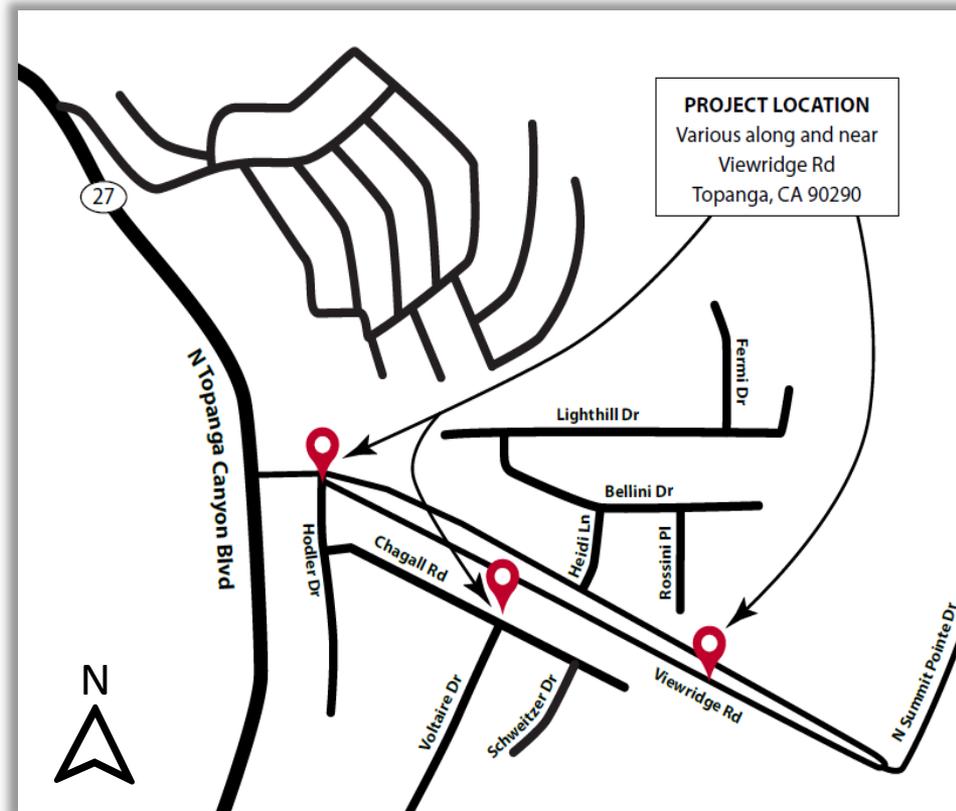
Project Summary

Project Specifics:

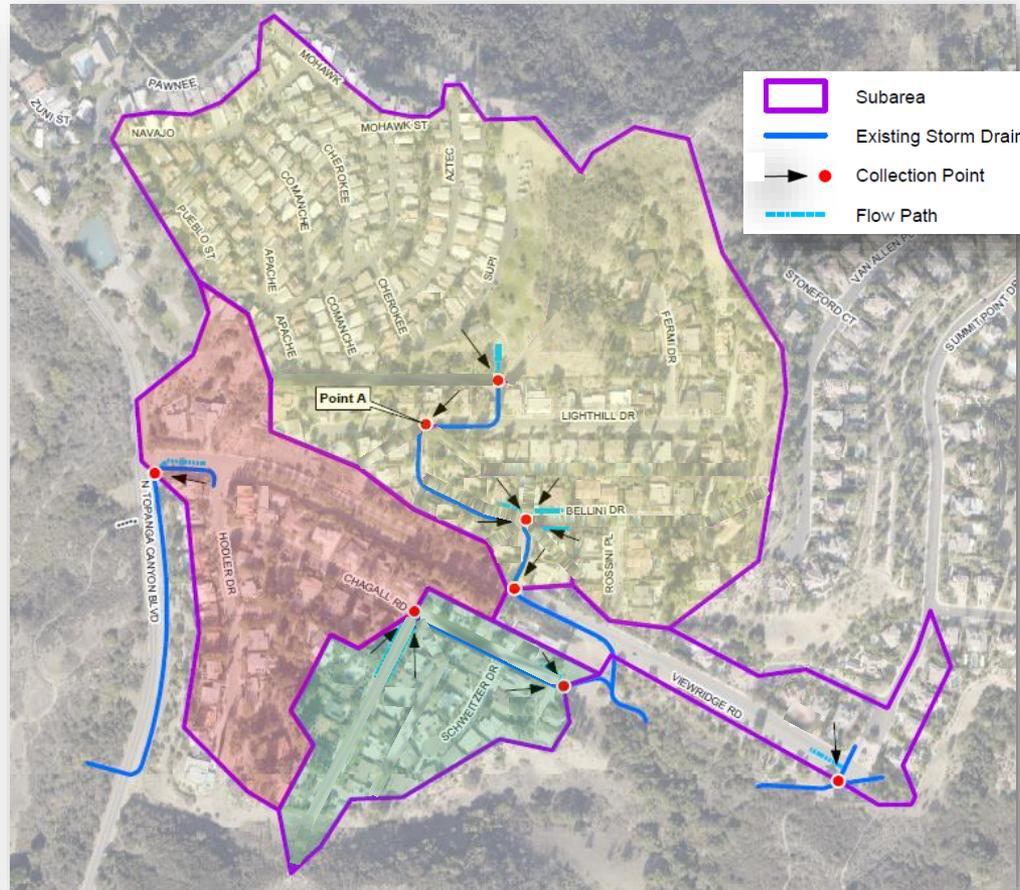
- 80-Acre Tributary
- Up to 33 AFY Runoff Treated

BMP Locations:

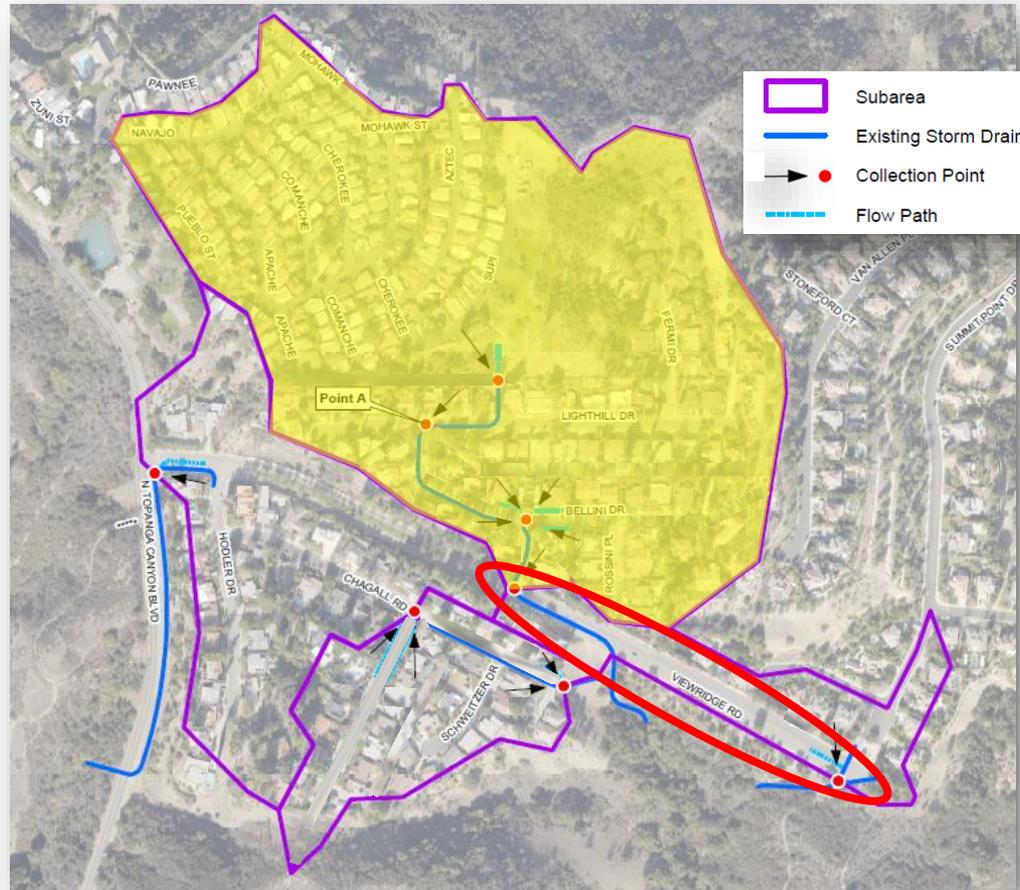
- Viewridge Road
- Hodler Drive
- Chagall Road
- Voltaire Drive



Viewridge Road Stormwater Improvements Project



Viewridge Road Stormwater Improvements Project



Viewridge Road Stormwater Improvements Project



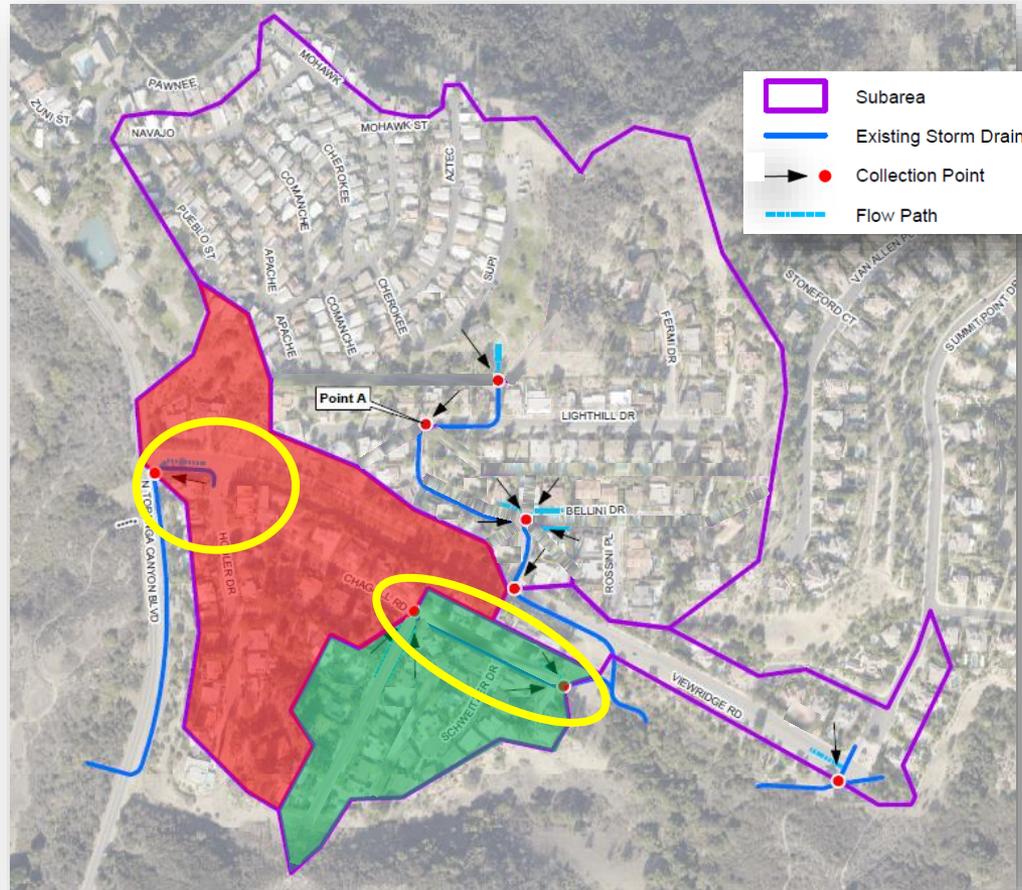
Viewridge Road Stormwater Improvements Project



Viewridge Road Stormwater Improvements Project



Viewridge Road Stormwater Improvements Project



Viewridge Road Stormwater Improvements Project



PLAN VIEW
STORMWATER BIOFILTRATION SYSTEM WITH 100% PLANTING AREA



Solidago californica
California Goldenrod



Carex pansa
California Meadow Sedge



Juncus patens
California Grey Rush

BIOFILTRATION PLANT EXAMPLES

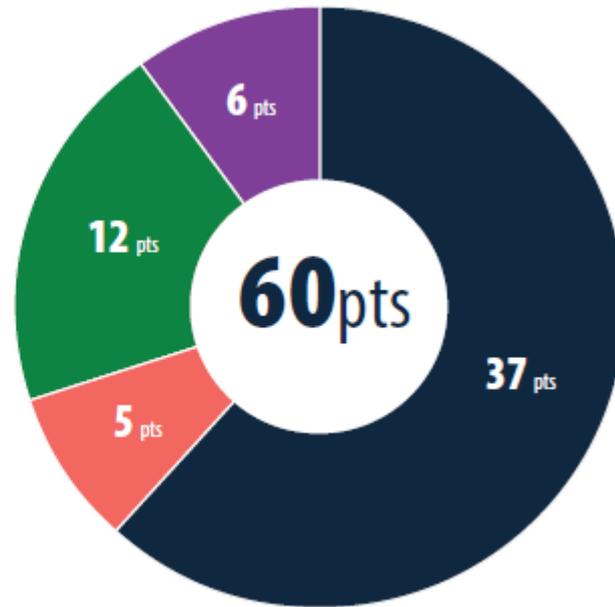


PERSPECTIVE VIEW
STORMWATER BIOFILTRATION SYSTEM WITH 100% PLANTING AREA

Viewridge Road Stormwater Improvements Project

Safe, Clean Water Program Score

- Water Quality
- Community Investment
- Nature-Based Solutions
- Funds and Community



Viewridge Road Stormwater Improvements Project

Safe, Clean Water Benefits:

Wet Weather Water Quality

- Santa Monica Bay
- 6-mi Downstream Coastal Watershed
 - Bacteria
 - PCB/DDT
 - Sediment
 - Trash
 - Lead Impairment

Community Investment

- Enhance Park/Habitat
- Enhance Recreational Opportunities
- Reduce Heat Island Effect
- Increase Tree Canopy



Viewridge Road Stormwater Improvements Project

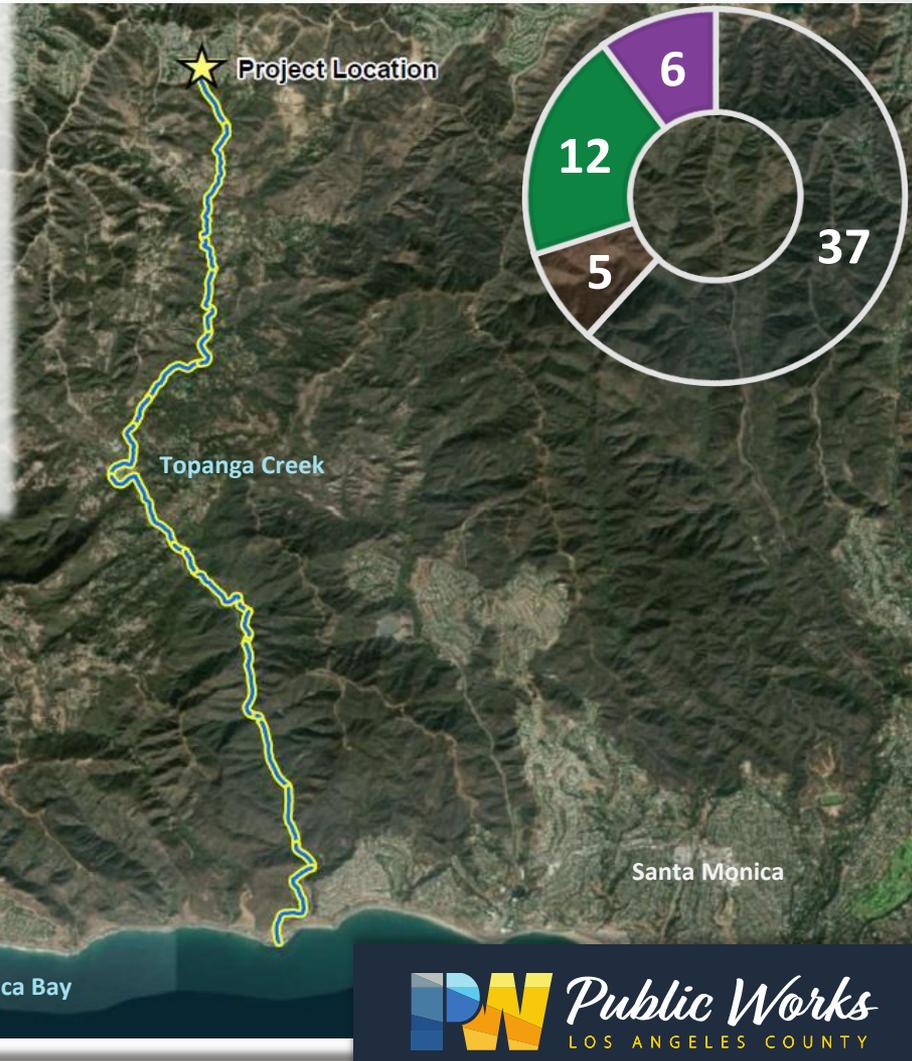
Safe, Clean Water Benefits (Cont'd):

Nature Based Solutions

- Natural Process
- Natural Materials
- Remove Impervious Area

Leveraging Funds

- IRWM Grant Funds
- County General Fund



Viewridge Road Stormwater Improvements Project

Safe, Clean Water Benefits (Cont'd): Community Support



Viewridge Road Stormwater Improvements Project

Projection

Phase	Cost	Completion	FY	Request
Planning	NA	Completed	FY 20-21	\$1.8 M
Design	\$ 1,200,000	Mid 2020	FY 21-22	\$0.9 M
Construction	\$ 7,500,000	Mid 2021	FY 22-23	\$0.2 M
Total Project Cost Estimate	\$8,700,000		Total	\$2.9 M

Overview of Proposed Scientific Study

Richard Watson, Richard Watson & Associates, Inc. (RWA)

Presentation to North Santa Monica Bay WASC

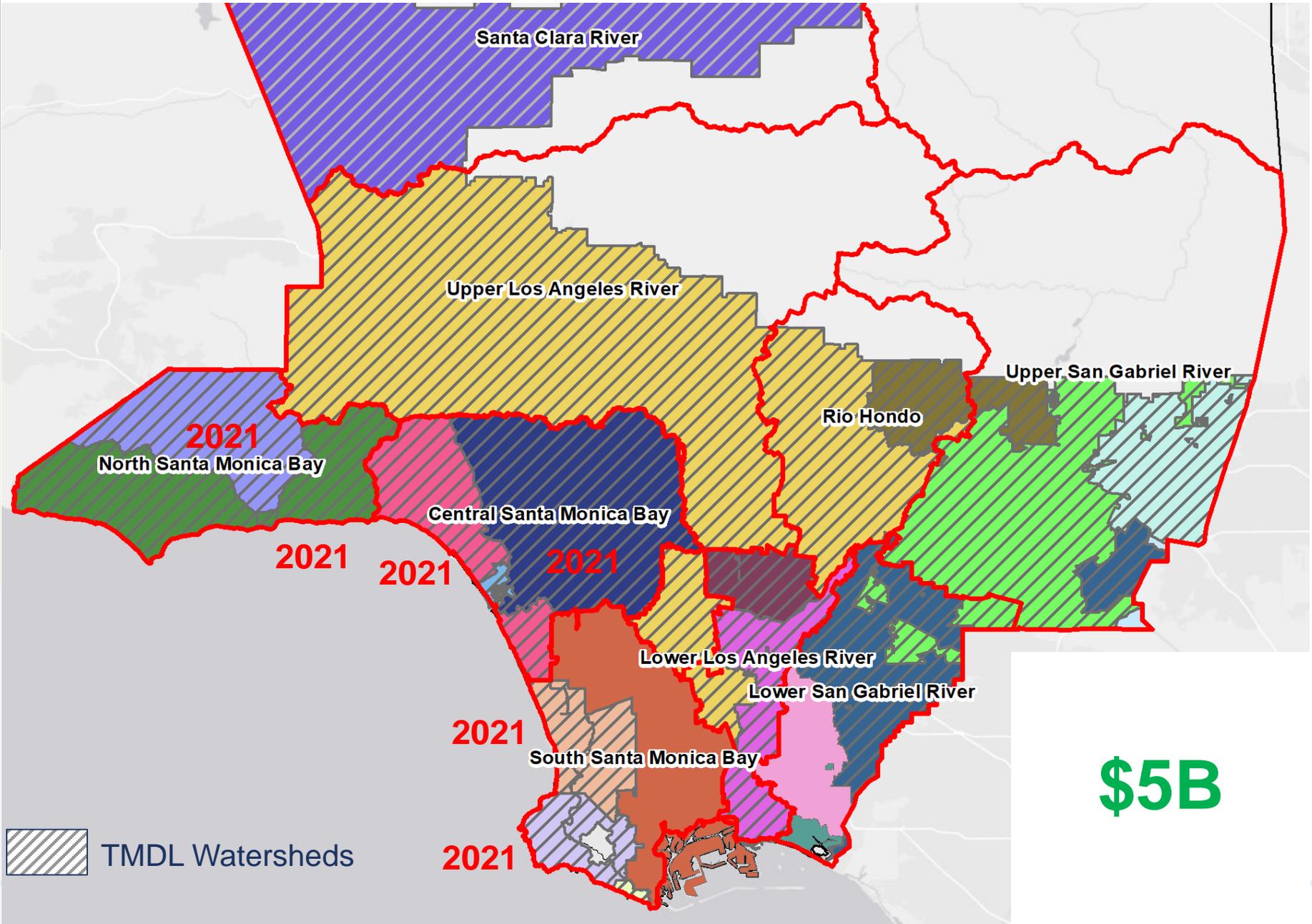
Calabasas, CA

30 January 2020

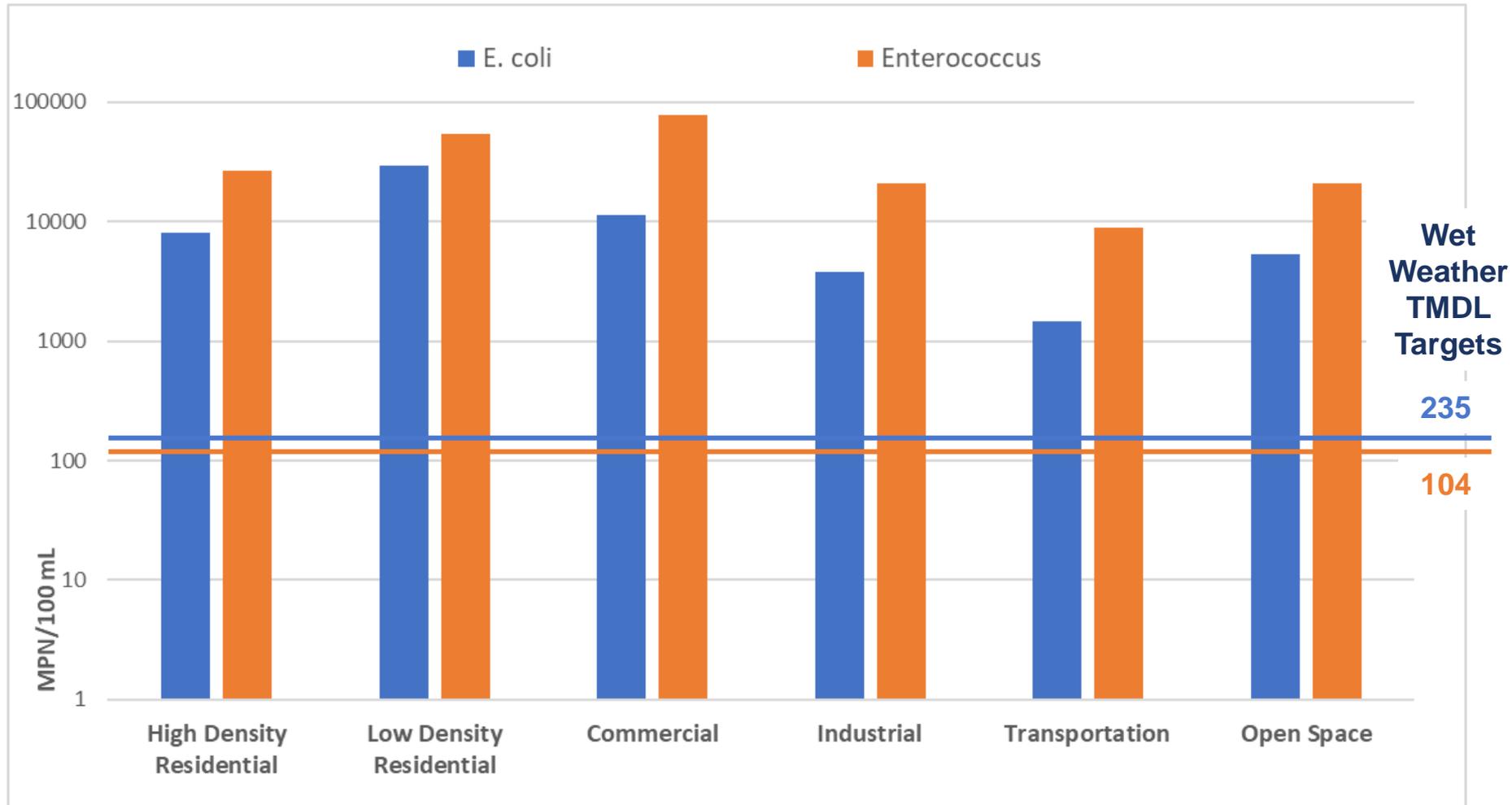
Overview

- Bacteria Challenges
- Nexus to Stormwater Capture
- Objectives of Study
- Scientific Study Approach
- Scientific Study Schedule and Cost Estimate
- Summary of Study

E/WMP Groups Addressing Bacteria



Wet Weather Average Concentrations: LA County Land Uses



Nexus to Stormwater Capture and Study Objectives

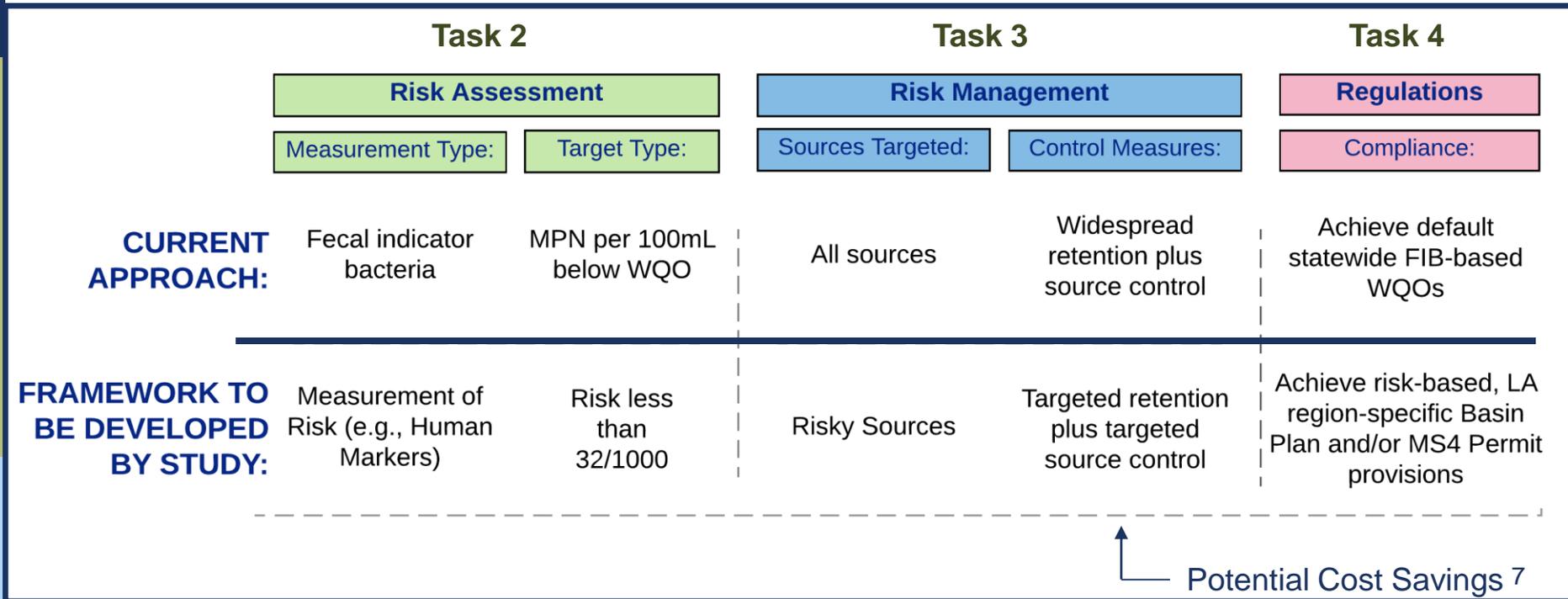
- Nexus to Stormwater Capture
 - Study will facilitate improved targeting of sources and water to capture
 - Study could reduce need to capture stormwater for bacteria compliance purposes
- Objective of Study
 - Leverage recent research
 - Produce strategies for incorporation into Program Plans
 - Support regulating agencies in making informed decisions

Scientific Study: Initial Steps

- Small Group Initiated Discussions
 - City and County of LA; LLC, LLAR, LSGR; and LWA
- Developed Special Study Approach
 - Apply state of the science to LA County specific issues
 - Built a scope for Measure W Regional Program funded study that each group can elect to participate (or not)
- Presented Approach E/WMP Groups
- Discussed with Regional Board staff

What will the study do?

Task 1 Stakeholder Process



Study Schedule

Task	Year									
	1		2		3		4		5	
Task 1 – Stakeholder Process	■	■	■	■	■	■	■	■	■	■
Task 2 – Risk Assessment	■	■	■	■	■	■	■	■	■	■
Task 3 – Risk Management	■	■	■	■	■	■	■	■	■	■
Task 4 – Regulatory Revisions	■	■	■	■	■	■	■	■	■	■

Measure W Scientific Study Funding

- Funding is now available to address issue through studies
- Multi-year studies eligible for scientific study funding (5% of regional program funds)

Watershed Area	Estimated Available Regional Funding for Special Studies	
	Annual*	5 Years*
Central Santa Monica Bay	\$890,000	\$4,450,000
Lower Los Angeles River	\$640,000	\$3,200,000
Lower San Gabriel River	\$835,000	\$4,175,000
North Santa Monica Bay	\$90,000	\$450,000
Rio Hondo	\$575,000	\$2,875,000
Santa Clara River	\$300,000	\$1,500,000
South Santa Monica Bay	\$920,000	\$4,600,000
Upper Los Angeles River	\$1,930,000	\$9,650,000
Upper San Gabriel River	\$945,000	\$4,725,000
Total	\$7,125,000	\$35,625,000

* Assumes Measure W revenue of \$285,000,000/year.

Cost Estimate

Tasks		Cost Estimate
Task 1-	Stakeholder Process	\$490,000
Task 2-	Risk Assessment	\$5,880,000
Task 3-	Risk Management	\$2,940,000
Task 4-	Regulatory Revisions	\$490,000
Total		\$9,800,000

Watershed Area Cost Allocations – Los Angeles County Bacteria Scientific Study

Watershed Area	% Share of Budget for Study ²	Projected SCWP Scientific Study Funds		Study Contribution by Watershed Area	Percent of SCWP Scientific Study Funds over 5-Years
		Annual	5-Year		
Central Santa Monica Bay	12.5%	\$890,695	\$4,453,125	\$1,224,282	27.5%
Lower Los Angeles River	8.98%	\$639,825	\$3,199,125	\$880,257	
Lower San Gabriel River	11.72%	\$835,050	\$4,175,250	\$1,148,559	
North Santa Monica Bay	1.26%	\$89,775	\$448,875	\$123,786	
Rio Hondo	8.07%	\$574,988	\$2,874,938	\$790,860	
Santa Clara River	4.21%	\$299,962	\$1,499,812	\$412,629	
South Santa Monica Bay	12.91%	\$919,838	\$4,599,188	\$1,265,369	
Upper Los Angeles River	27.09%	\$1,930,162	\$9,650,812	\$2,654,816	
Upper San Gabriel River	13.26%	\$944,775	\$4,723,875	\$1,299,442	
Total	100%	\$7,125,000	\$35,625,000	\$9,800,000	

1. Costs assume participation by all Watershed Areas, which increases efficiency of the study. Costs will need to be recalculated if not all Watershed Areas participate. Projected SCWP Scientific Study Funds are based on \$142.5 million in annual funds for the regional program (5% of which is available for scientific studies).
2. Percent of Total Budget is based on a proportional distribution of the costs based on the SCWP taxable impervious area.

Watershed Area Cost Allocations – Annual Cost Estimates to Implement Bacteria Study

Watershed Area	Study Year					Total Budget	Projected Scientific Study	
	1	2	3	4	5		Funds Available	% of Funds
Central Santa Monica Bay	\$330,750	\$330,750	\$330,750	\$116,016	\$116,016	\$1,224,282	\$4,453,125	27.5%
Lower Los Angeles River	\$237,611	\$237,611	\$237,611	\$83,712	\$83,712	\$880,257	\$3,199,125	
Lower San Gabriel River	\$310,111	\$310,111	\$310,111	\$109,113	\$109,113	\$1,148,559	\$4,175,250	
North Santa Monica Bay	\$33,340	\$33,340	\$33,340	\$11,883	\$11,883	\$123,786	\$448,875	
Rio Hondo	\$213,532	\$213,532	\$213,532	\$75,132	\$75,132	\$790,860	\$2,874,938	
Santa Clara River	\$111,397	\$111,397	\$111,397	\$39,219	\$39,219	\$412,629	\$1,499,812	
South Santa Monica Bay	\$341,599	\$341,599	\$341,599	\$120,286	\$120,286	\$1,265,369	\$4,599,188	
Upper Los Angeles River	\$716,800	\$716,800	\$716,800	\$252,208	\$252,208	\$2,654,816	\$9,650,812	
Upper San Gabriel River	\$350,860	\$350,860	\$350,860	\$123,431	\$123,431	\$1,299,442	\$4,723,875	
Total	\$2,646,000	\$2,646,000	\$2,646,000	\$931,000	\$931,000	\$9,800,000	\$35,625,000	

1. Costs assume participation by all Watershed Areas, which increases efficiency of the study. Costs will need to be recalculated if not all Watershed Areas participate. Projected SCWP Scientific Study Funds are based on \$142.5 million in annual funds for the regional program (5% of which is available for scientific studies).
2. Percent of Total Budget is based on a proportional distribution of the costs based on the SCWP taxable impervious area.

Summary of Study

- Will use latest available technologies to measure water-borne pathogens across watersheds.
- Will help identify key sources of human health risk, develop cost-effective protective strategies, and support needed regulatory shifts in support of this approach.
 - To make this successful, can't just be technical
 - Best way to focus on risk in the region
 - The time is now.

Questions and Thank You

Richard Watson
Richard Watson & Associates
rwatson@rwaplanning.com
(949) 394-8495