

Malibu Creek Watershed Enhanced Watershed Management Program

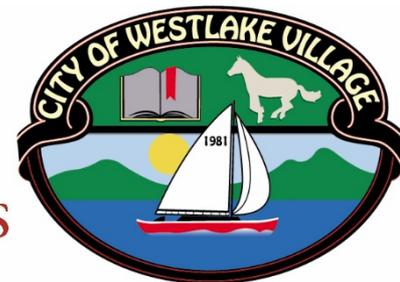
J. Michael Trapp, Ph.D.

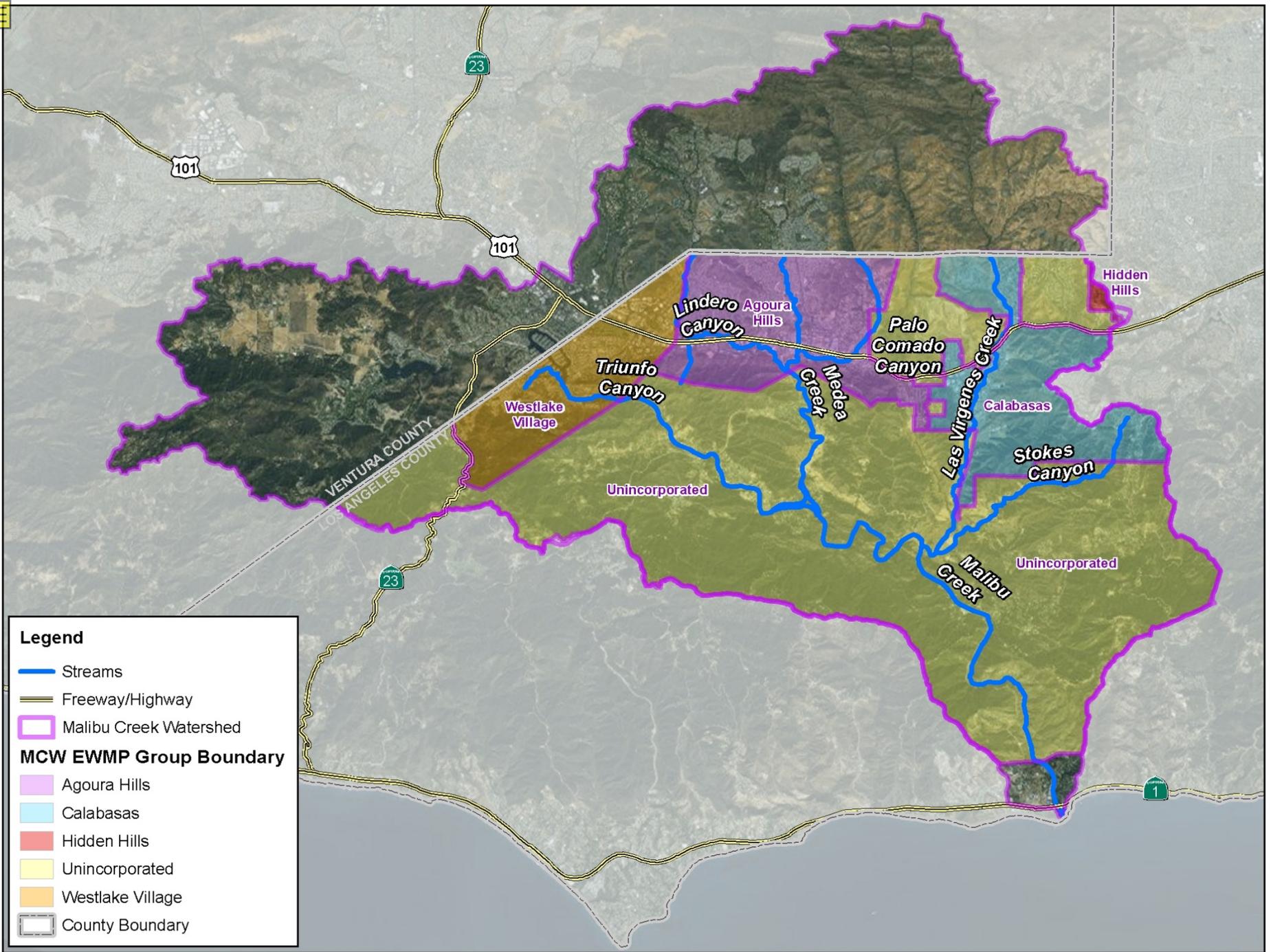
Michael Baker Intl.

on behalf of the Malibu Creek EWMP Agencies



CITY of CALABASAS



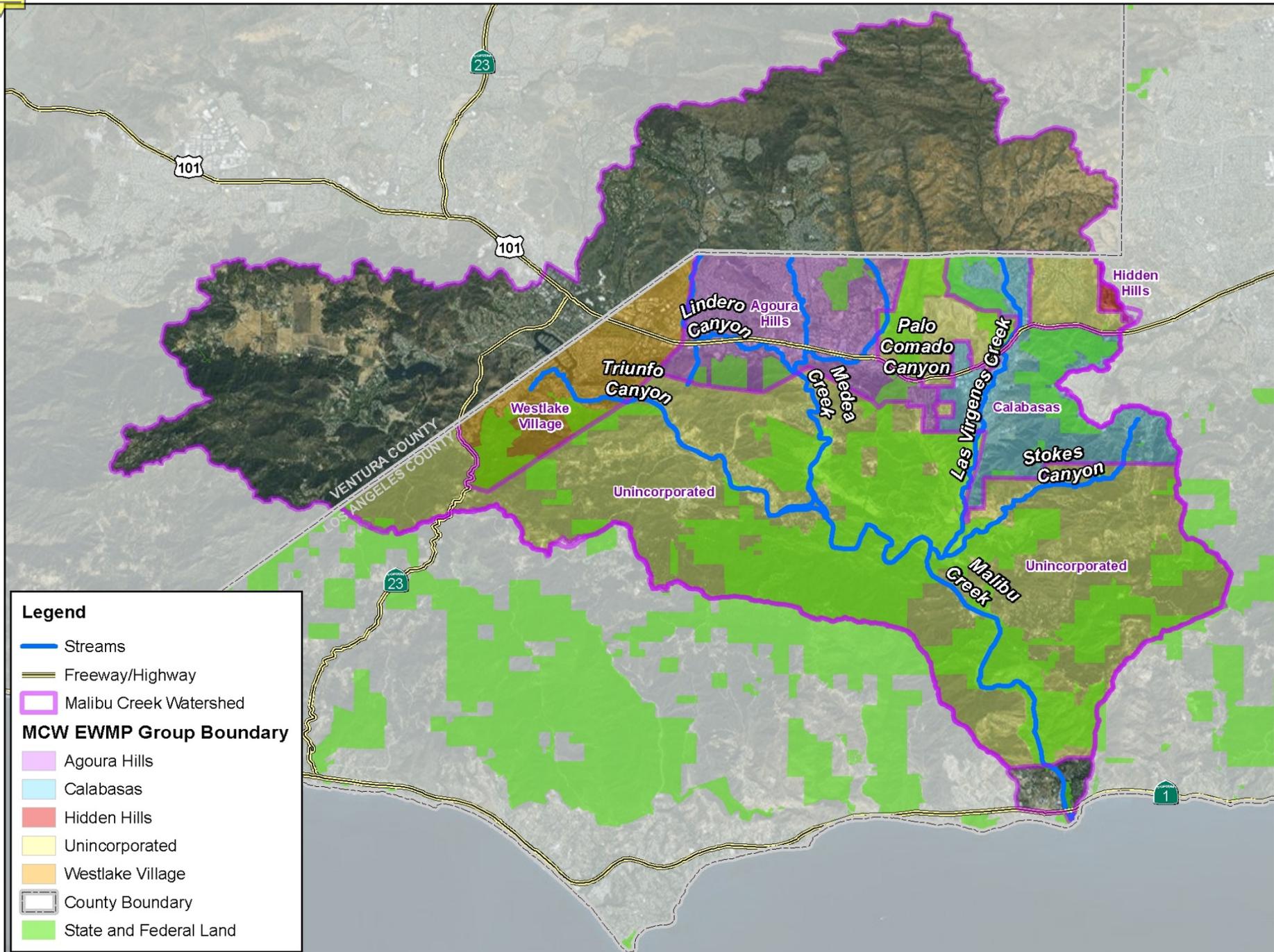


Legend

-  Streams
-  Freeway/Highway
-  Malibu Creek Watershed

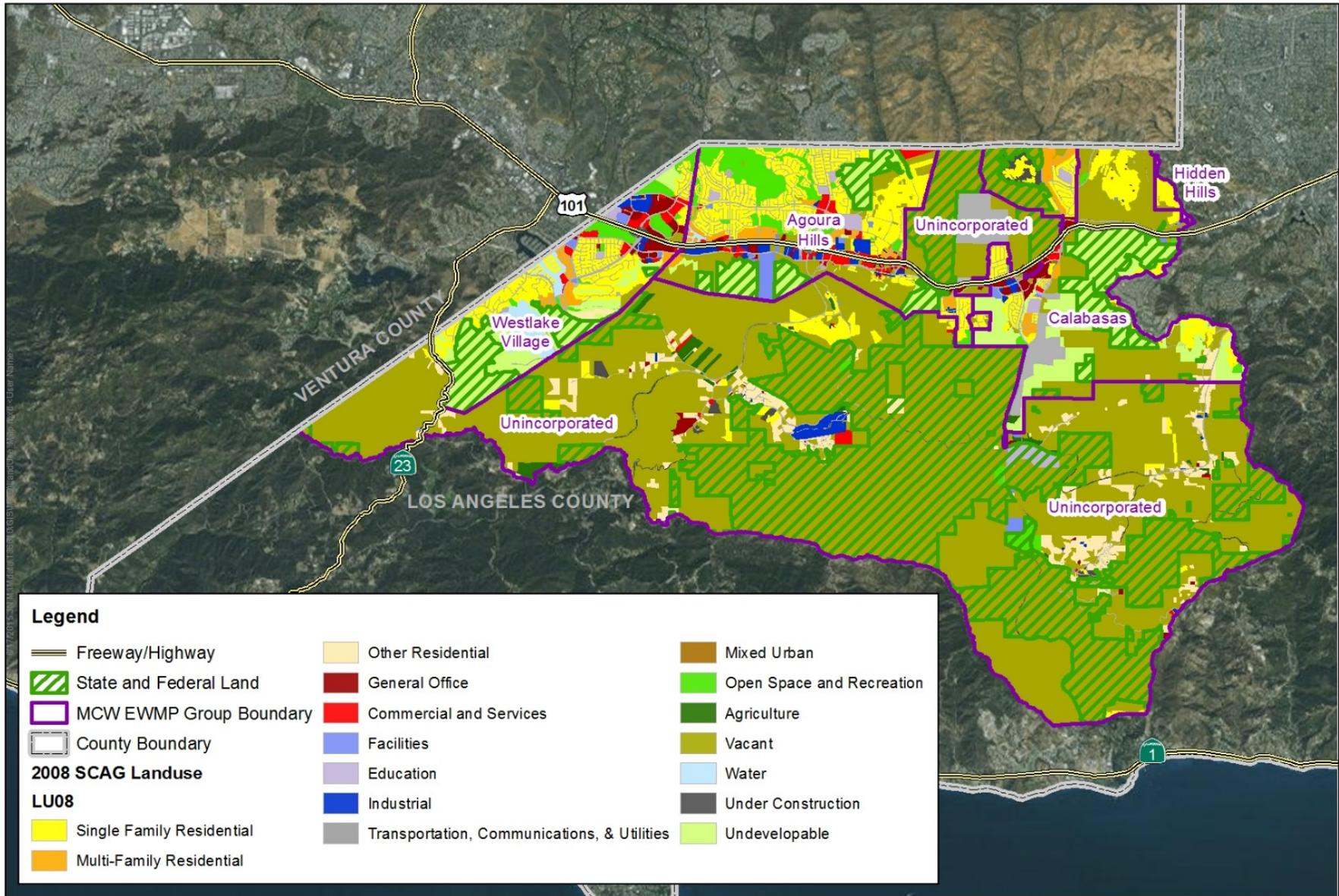
MCW EWMP Group Boundary

-  Agoura Hills
-  Calabasas
-  Hidden Hills
-  Unincorporated
-  Westlake Village
-  County Boundary

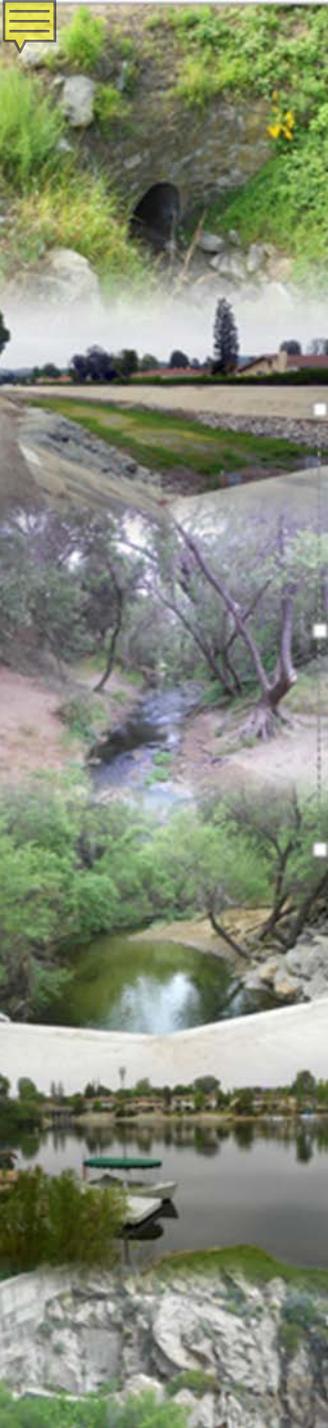


Legend

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-  Freeway/Highway
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- MCW EWMP Group Boundary**
-  Agoura Hills
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-  County Boundary
-  State and Federal Land



EWMP Stakeholder Coordination



Public Workshop

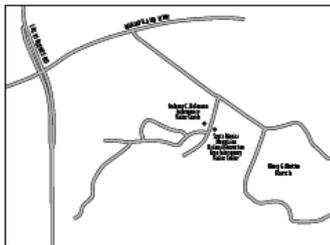
May 22, 2014 | 6:30-8:30 PM

King Gillette Ranch
26800 West Mulholland Highway, Calabasas, CA 91302

Public Workshop for Enhanced Watershed Management Programs for the Malibu Creek Watershed and the North Santa Monica Bay Coastal Watersheds

Your local public agencies invite you to a workshop to discuss the development of Enhanced Watershed Management Programs (EWMPs) for the Malibu Creek Watershed and North Santa Monica Bay Coastal Watersheds as part of the Los Angeles County Municipal Stormwater Discharge Permit. All interested parties are encouraged to attend to be a part of this important and proactive process for our area.

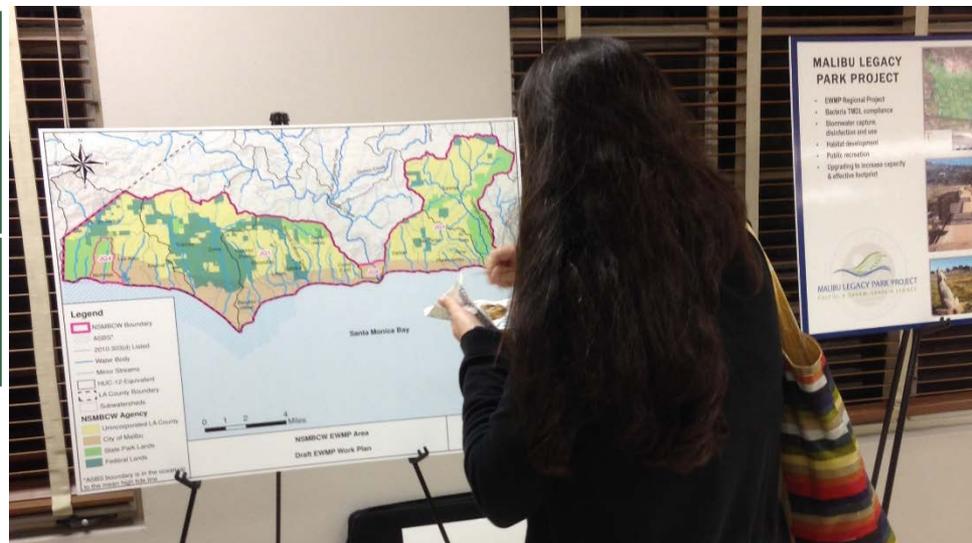
You'll learn about the EWMP development process and how you can provide ideas and comments on these plans. Please help us to protect and improve water quality in the region.



EWMP Partners:

County of Los Angeles, Los Angeles County Flood Control District, City of Calabasas, City of Agoura Hills, City of Hidden Hills, City of Malibu, and City of Westlake Village.

RSVP to afarassati@cityofcalabasas.com or at www.eventbrite.com (search "EWMP" under the Find an Event option) by May 15th.



Watershed Priorities

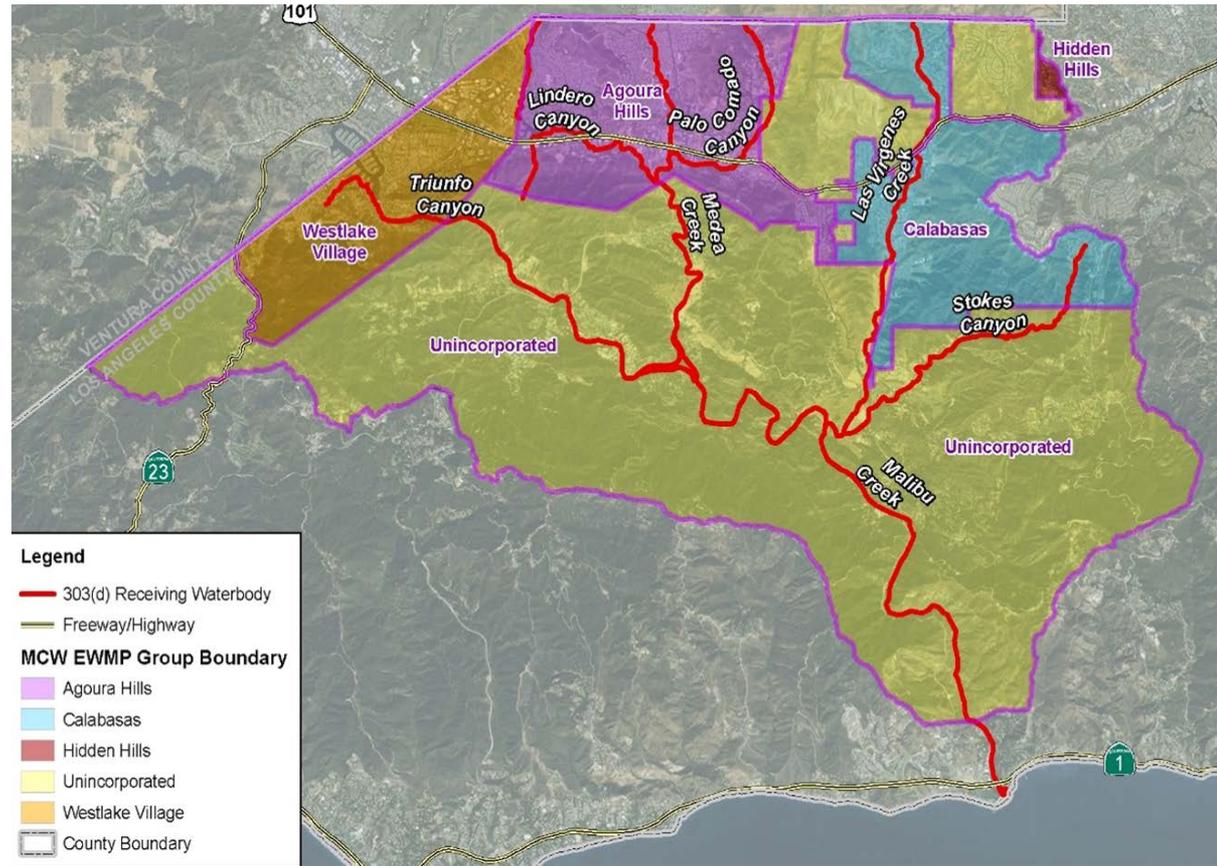
-TMDLs

- Nutrients (2017)
- Bacteria (2021)
- Benthic Communities (2032)

-303(d) Listed Impairments

- Metals
- Sulfate
- Sediment/Siltation

-Other water Quality Objective Exceedances





EWMP Strategy

- Wet Weather

Achieve compliance through volume reductions (Bacteria limiting pollutant)

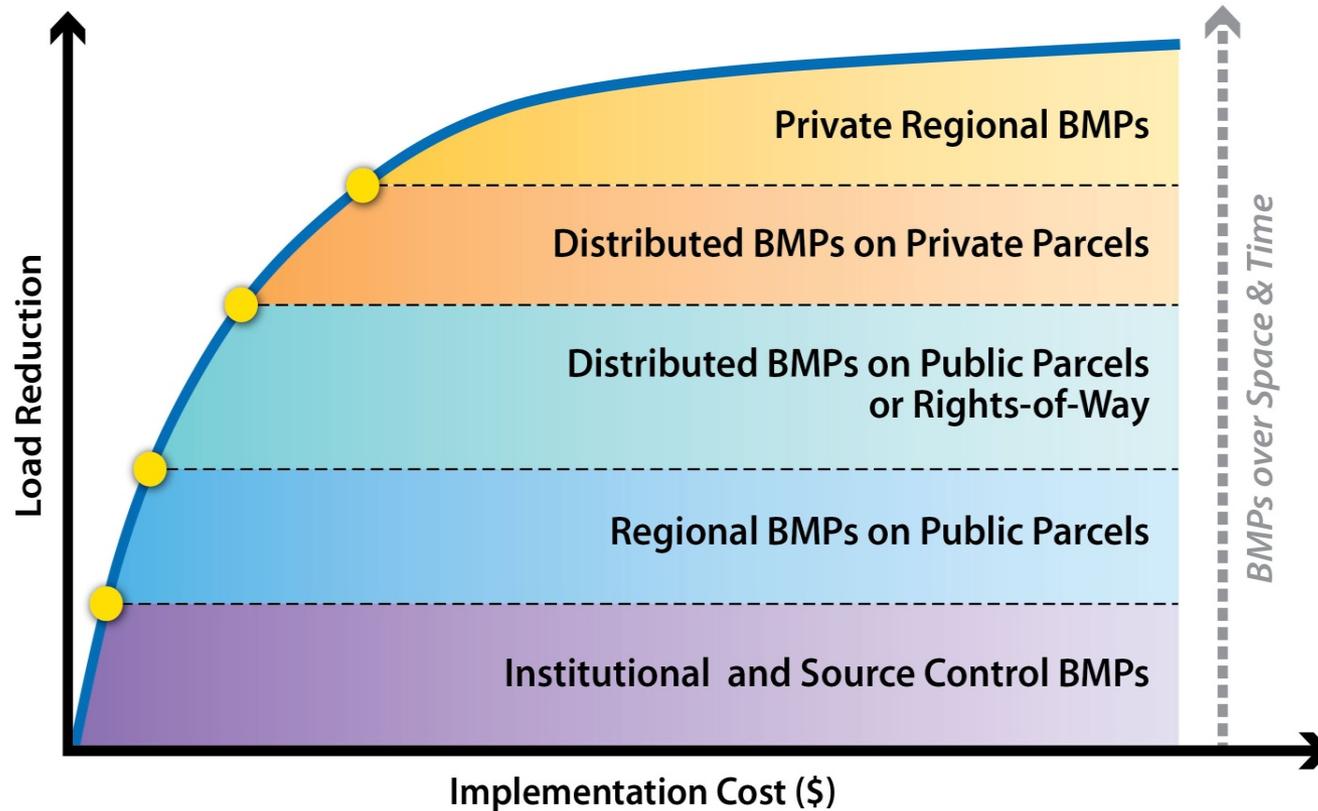
- 90th percentile, 16th wettest day

- Dry Weather

Achieve compliance through CIMP IDDE activities (Nutrient limiting pollutant)



MCW EWMP BMP Approach

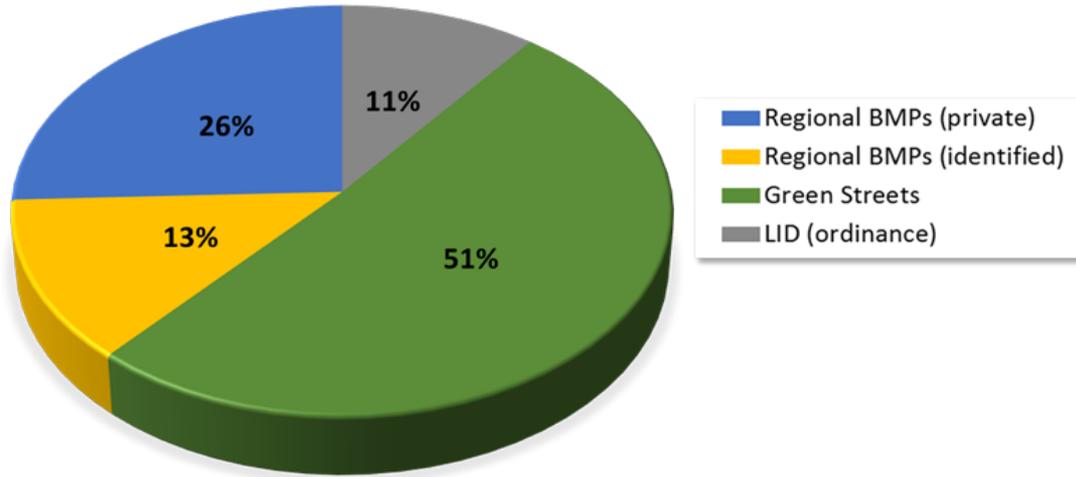


- Identification of Enhanced Control Measures
- Reasonable Assurance Analysis & Schedule
- Cost Estimates

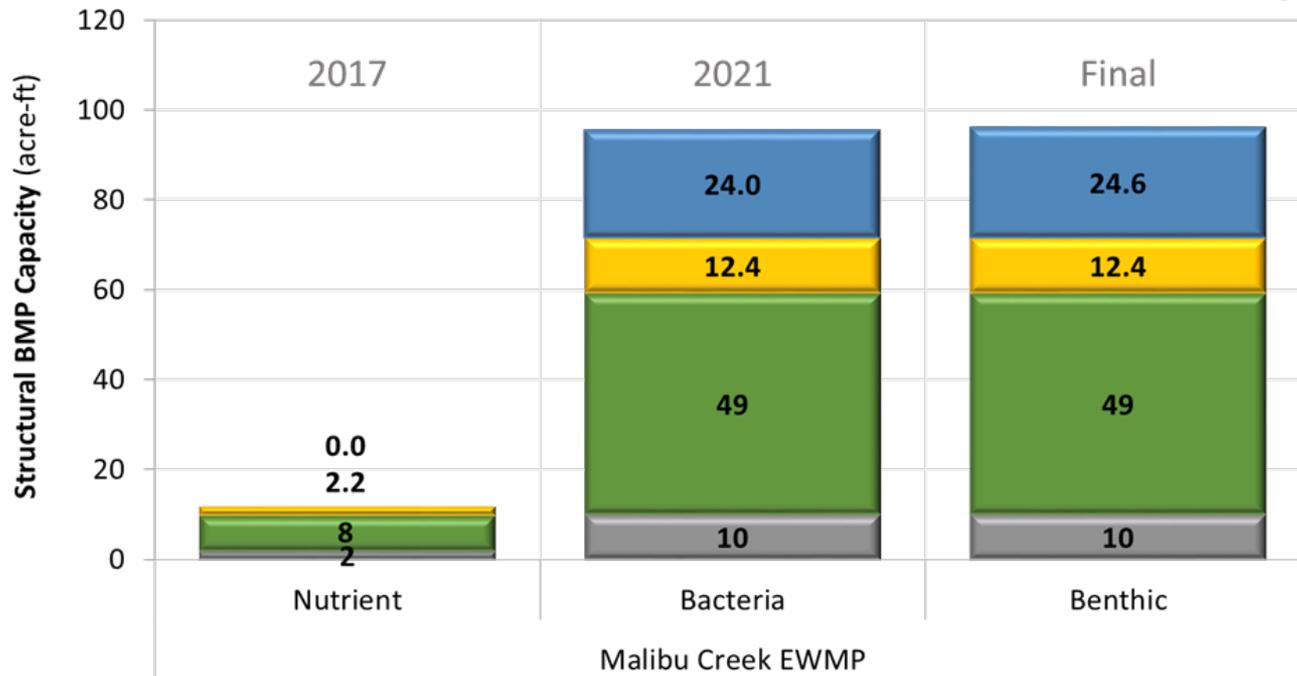
Reasonable Assurance Analysis

Malibu Creek EWMP

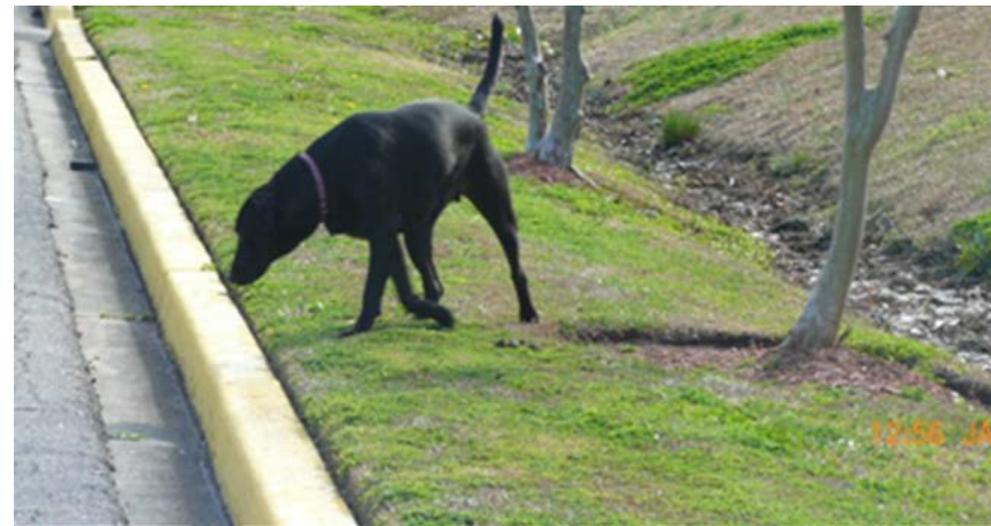
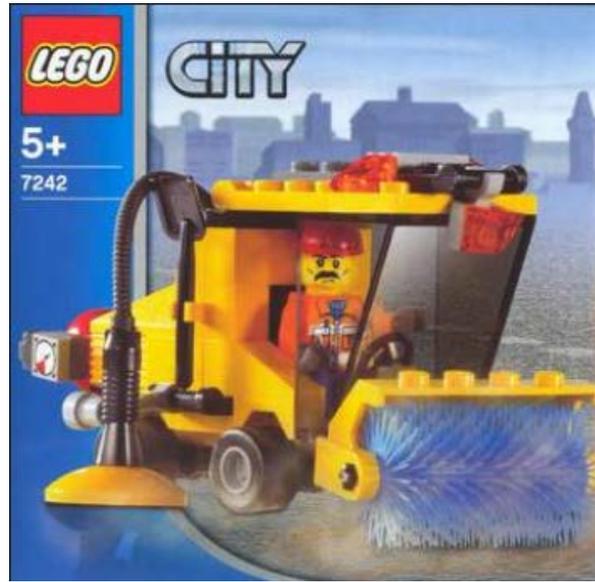
Final EWMP Compliance for Benthic TMDL



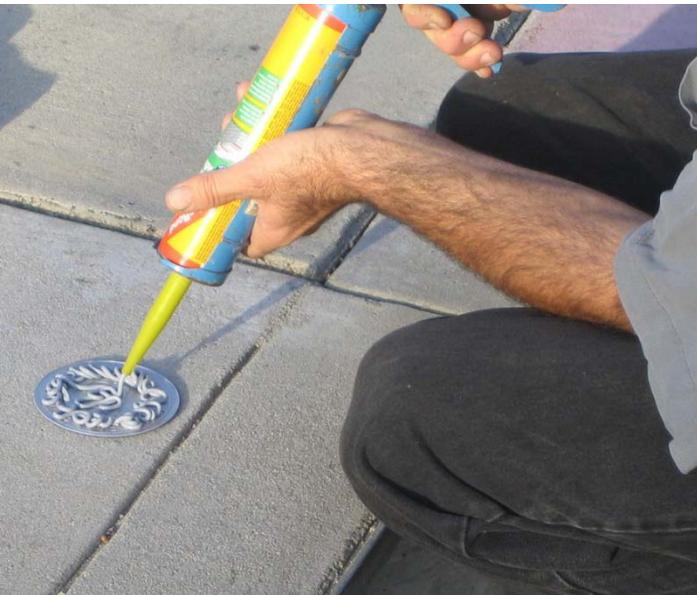
Control Measure Scheduling



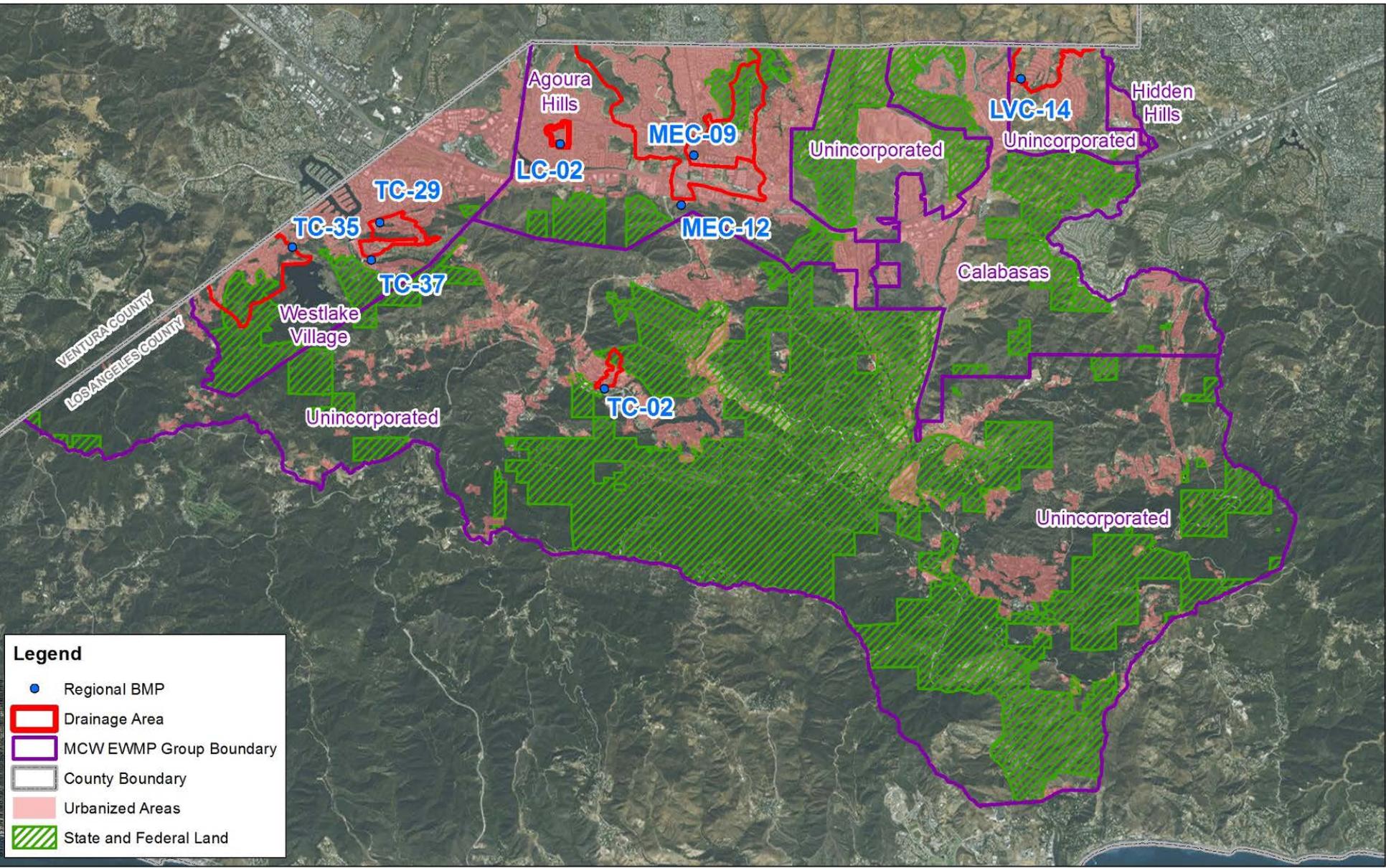
Source Control BMPs



Early Action Projects



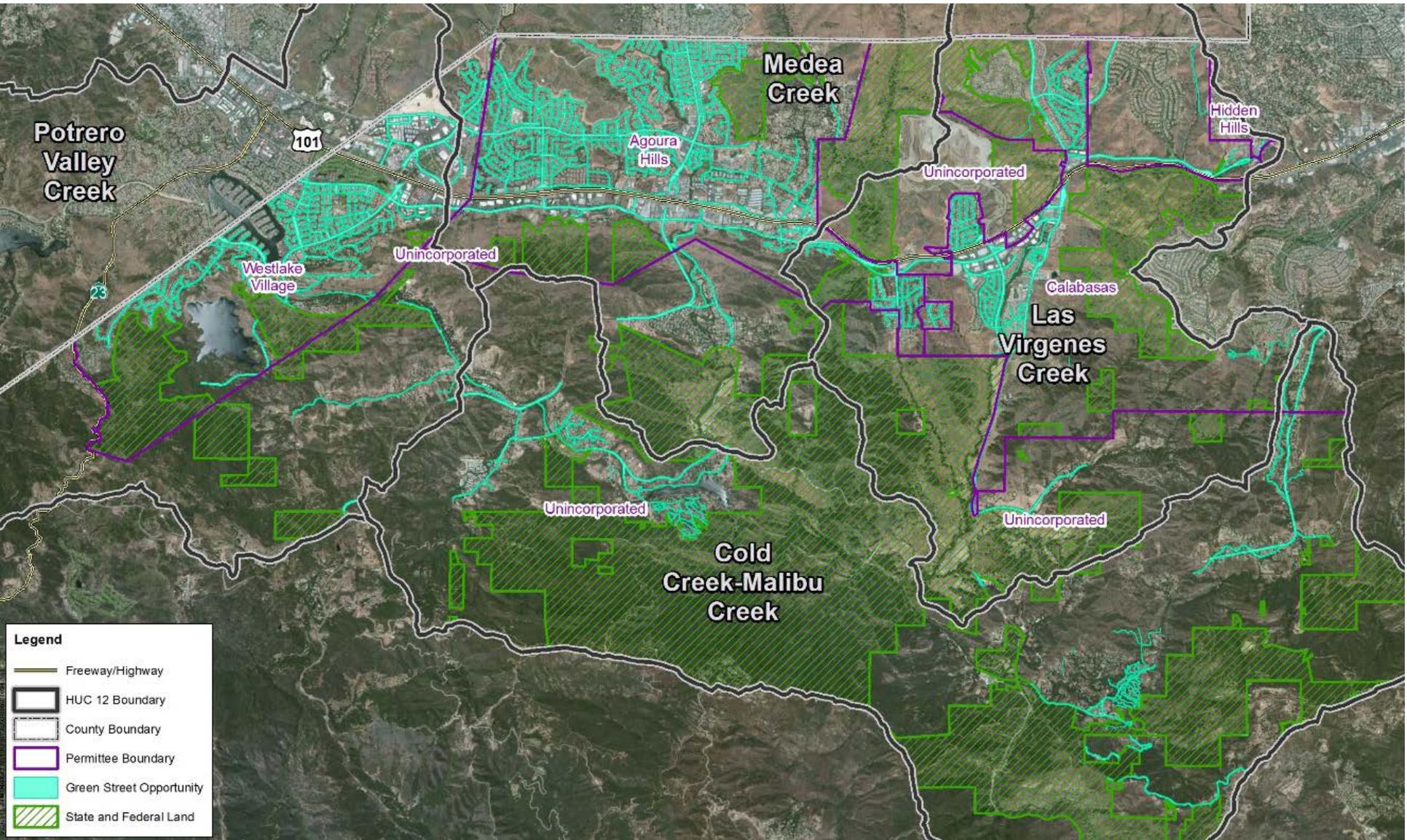
Regional BMP Projects



Legend

- Regional BMP
- ▭ Drainage Area
- ▭ MCW EWMP Group Boundary
- ▭ County Boundary
- ▭ Urbanized Areas
- ▭ State and Federal Land

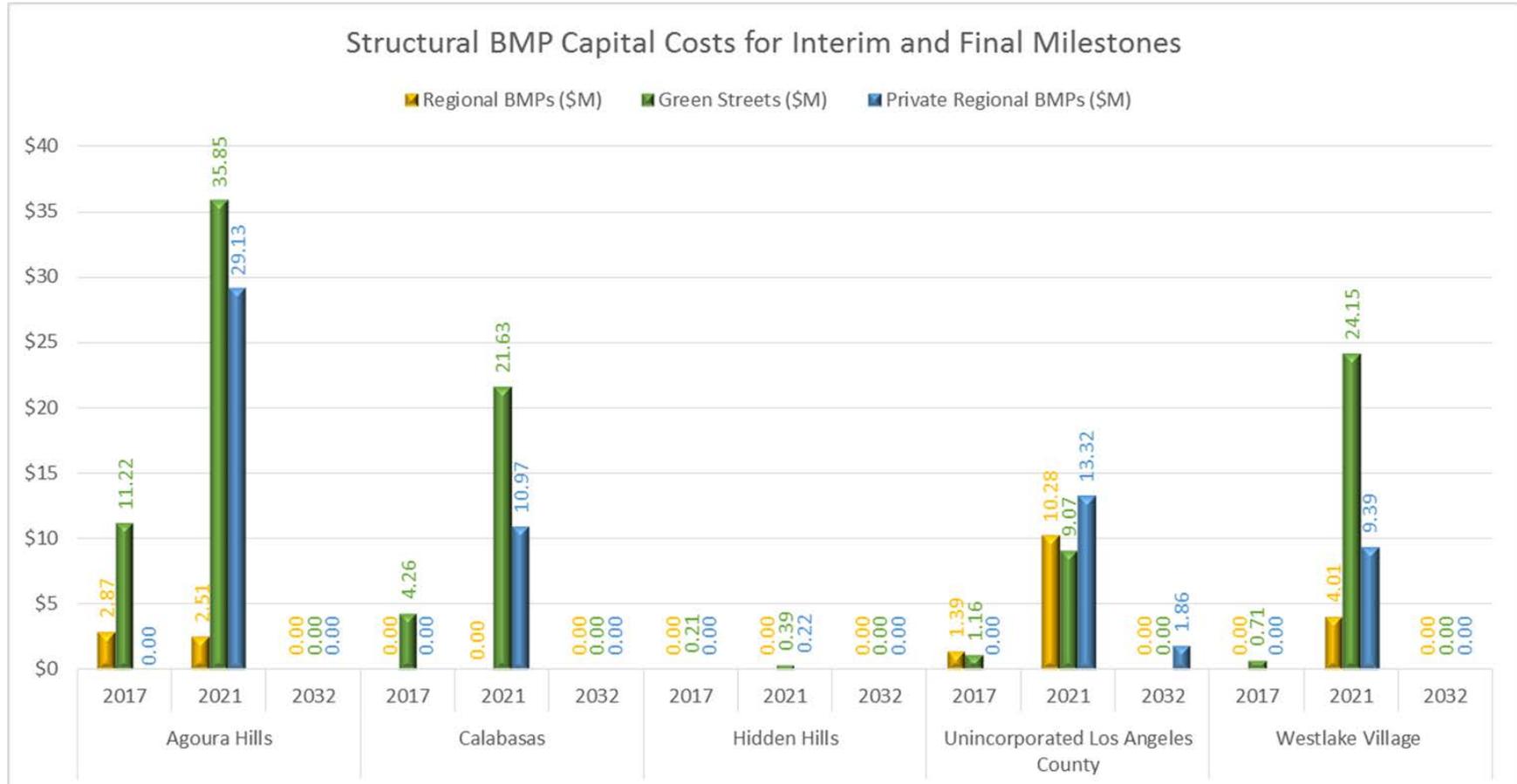
Green Streets





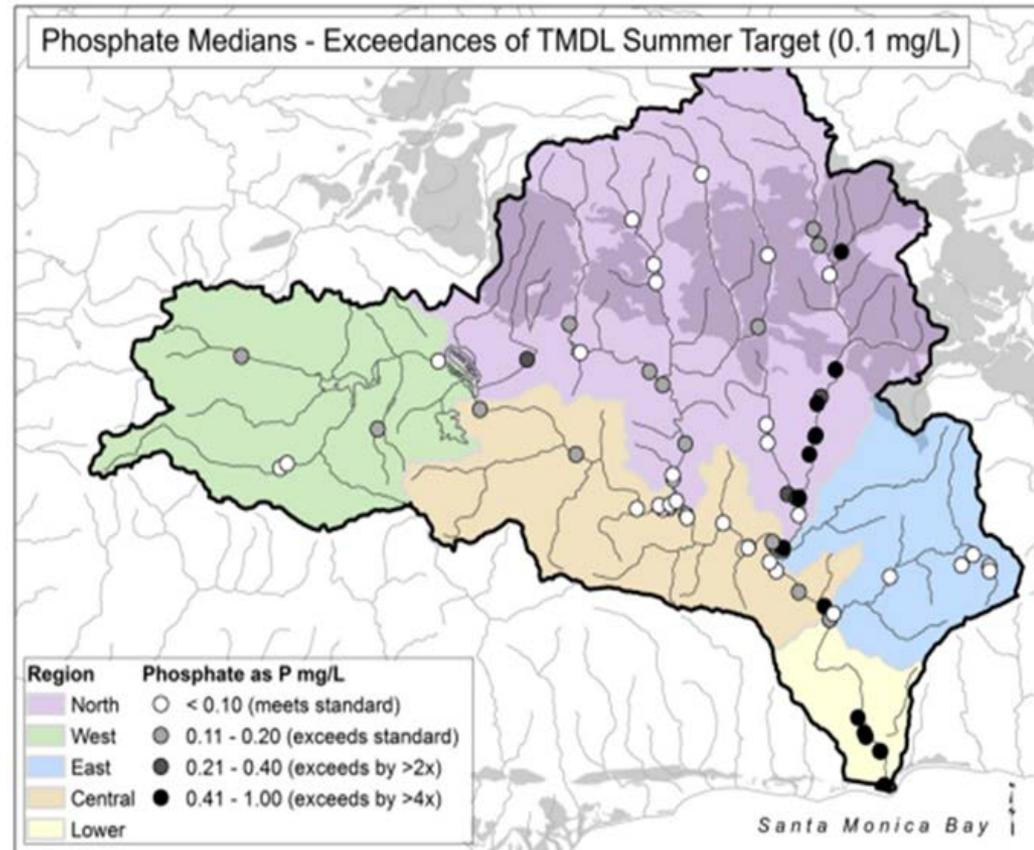
Estimated Costs

Watershed Control	Cost Estimate
Public Regional BMPs	\$21.1M
Green Streets	\$108.6M
Private Regional BMPs	\$64.9M
Total	\$194.6M



Adaptive Management

- Use of CIMP data to evaluate EWMP performance
- BMP implementation
- Regulatory changes
- Special studies





Funding Strategy

- **Grants**

- Prop 1 Water Bond
- IRWMP
- USEPA 319 Grants
- Clean Beaches Initiative

- **Fees**

- Local Stormwater Fees
- Sales Tax

- **Legislative**

- Amend Prop 218
- Source Control (i.e. SB 346)

- **General Funds**





Questions

