

# WATER QUALITY SOLUTIONS FOR YOUR COMMUNITY: THE TRUE SOURCE CONTROL STORY

CITY LEADERS SUMMIT

MAY 12, 2022



## WHAT IS STORMWATER?



# WHAT IS STORMWATER?



# WHY SHOULD YOU CARE ABOUT STORMWATER?

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

ORDER RS-2015-0023  
NPDES NO. CAS022597

WASTE DISCHARGE REQUIREMENTS  
CITIES OF CITRUS HEIGHTS, ELK GROVE, FOLSOM, GALT, RANCHO CORDOVA,  
SACRAMENTO, AND COUNTY OF SACRAMENTO  
STORM WATER DISCHARGES FROM  
MUNICIPAL SEPARATE STORM SEWER SYSTEM  
SACRAMENTO COUNTY

The California Regional Water Quality Control Board, Central Valley Region, (hereafter Regional Water Board) finds that:

1. The Cities of Citrus Heights, Elk Grove, Folsom, Galt, Rancho Cordova, Sacramento and the County of Sacramento, hereafter jointly referred to as Permittees, submitted a completed Report of Waste Discharge (ROWD) on 15 March 2013 requesting rescission of waste discharge requirements under the National Pollutant Discharge Elimination System (NPDES) area-wide municipal separate storm sewer system (MS4) permit to discharge storm water runoff from storm drains within their jurisdictions. The ROWD was deemed complete on 22 November 2013. Included with the ROWD were the Permittees' Long Term Effectiveness Assessment and proposed changes to their Storm Water Management Plans (also known as Stormwater Quality Improvement Plans or SQIPs).
2. A Region-wide MS4 general permit is under development by the Regional Water Board which will propose allowing Permittees an option to participate in a Regional Monitoring Program (RMP) and reduce some of the required local water quality monitoring. The proposed Region-wide MS4 general permit is not expected to be considered for adoption by the Regional Water Board for at least six months to a year from now. Therefore, this individual Order is being renewed for a limited term to allow the option to participate in a RMP, such as the Delta RMP immediately, rather than having to wait until the proposed Region-wide MS4 general permit is adopted.
3. The Permittees have chosen the title of Stormwater Quality Improvement Plan (SQIP) to refer to any SQIP requirements or references in this Order.

*UNOFFICIAL DRAFT – Not Certified by Clerk*

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM  
(NPDES) GENERAL PERMIT FOR  
WASTE DISCHARGE REQUIREMENTS (WDRs)  
FOR STORM WATER DISCHARGES FROM  
SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4s)**

WATER QUALITY (WQ) ORDER 2013-0001-DWQ NPDES NO. CAS000094  
AS AMENDED BY ORDER WQ 2015-0133-EXEC, ORDER WQ 2016-0099-EXEC,  
WQ ORDER 2017-XXXX-DWQ, ORDER WQ 2018-0001-EXEC, AND  
ORDER WQ 2018-0007-EXEC

WQ Order 2013-0001-DWQ was adopted by the State Water Resources Control Board on:	February 5, 2013
WQ Order 2013-0001-DWQ became effective on:	July 1, 2013
The Executive Director of the State Water Resources Control Board issued Order WQ 2015-0133-EXEC on:	September 2, 2015
The Executive Director of the State Water Resources Control Board issued Order WQ 2016-0099-EXEC on:	June 20, 2016
WQ Order 2017-XXXX-DWQ, amending Order 2013-0001-DWQ, was adopted by the State Water Resources Control Board on:	December 19, 2017
The Executive Director of the State Water Resources Control Board issued Order WQ 2018-0001-EXEC on:	January 24, 2018
The Executive Director of the State Water Resources Control Board issued Order WQ 2018-0007-EXEC on:	March 13, 2018
The amendments to WQ Order 2013-0001-DWQ contained in WQ Order 2017-XXXX-DWQ are effective on:	January 1, 2019

I, Jeanine Townsend, Clerk to the Board, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the State Water Resources Control Board on February 5, 2013, and amended by the Executive Director of the State Water Resources Control Board on September 2, 2015, June 20, 2016, and January 24, 2018, and amended by the State Water Resources Control Board on December 19, 2017.

### Vision for Sustainable Stormwater Management

**Vision, Principles, and Purpose**

**Vision for Sustainable Stormwater**

California sustainably manages stormwater as an essential component of the state's water resources that supports human and ecological needs, protects water quality, and enhances and restores our waterways.

**Guiding Principles**

There are four guiding principles to achieve this Vision. Like the legs of a chair, each Principle is essential and all four must be in place to support the whole.

- Principle #1: Program Implementation**  
Projects and programs that use stormwater as a resource, protect water quality and beneficial uses, and efficiently minimize pollution are critical for sustainable stormwater management.
- Principle #2: Permits, Regulations, and Legislation**  
Permits, regulations, and legislation need to focus on effectiveness and desired outcomes to support sustainable stormwater management.
- Principle #3: Public Education**  
Public awareness, understanding, and support is essential to sustainable stormwater management.
- Principle #4: Funding**  
Significant financial investment is required to achieve sustainable stormwater management.

### Vision for Sustainable Stormwater Management

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**Maximize Stormwater Capture**

**Minimize Pollution**

**BMP Effectiveness**

## WHAT IS TRUE SOURCE CONTROL?



WAGNER OE+

**CONTAINS LOW-COPPER LEVELS**

+ Met 2021 requirements at introduction in 2015

GET IT INSTALLED ► BUY IN STORE ►



## WHY DO WE NEED IT?

Treatment / Removal



TREATMENT ON ALL WATERBODIES, EVERYWHERE, FOR ALL POLLUTANTS?

OR...

IDENTIFY SOURCE AND REMOVE IT BEFORE IT ENTERS THE ENVIRONMENT



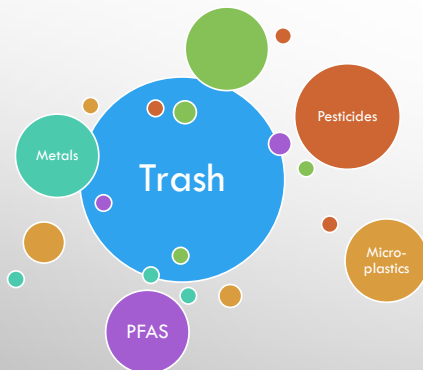
Solution / Fix the Problem



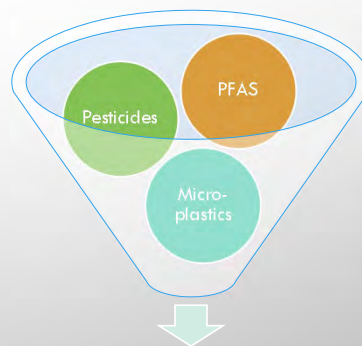
INTEGRATED WATER  
DEPENDS UPON  
TRUE SOURCE  
CONTROL



HOW DO WE ACHIEVE IT?



Pollutant by Pollutant



Producer Accountability



## WHAT OPPORTUNITIES DO WE HAVE?



NGOS, WASTEWATER, DRINKING WATER, REGULATORS, PUBLIC  
STATES LEVEL, FEDERAL LEVEL



## CALIFORNIA SUCCESS STORIES

### COPPER: LEGISLATIVE SOLUTION

- REQUIRES CHANGE IN BRAKE PAD COMPOSITION

### ZINC: REGULATORY SOLUTION (IN PROGRESS)

- PETITION TO CALIFORNIA DEPARTMENT OF TOXICS SUBSTANCES CONTROL (DTSC)

### PESTICIDES: REGULATORY SOLUTION

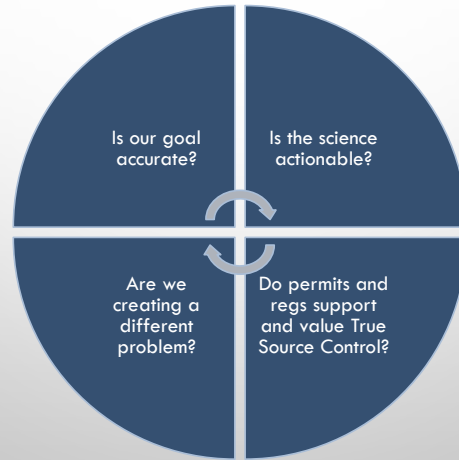
- UNIVERSAL APPROACH TO RESOLVING TOXICITY

### OTHERS UNDER CONSIDERATION

- TRASH
- MICROPLASTICS



## WHAT ELSE DO WE NEED TO CONSIDER?



Time and Political Will



## WHAT CAN YOU DO?

- EDUCATE: SPREAD THE WORD AND GET FOLKS TO START THINKING ABOUT SOLUTIONS
- SHIFT YOUR OWN THINKING: HOW DO WE SOLVE THIS PROBLEM RATHER THAN TREAT IT?
- BUILD PARTNERSHIPS: LOCALLY, STATEWIDE, NATIONALLY
- ADVOCATE: TRUE SOURCE CONTROL IN PERMITS, REGULATIONS, AND LEGISLATION



**WORKING TOGETHER  
WE CAN MAKE A DIFFERENCE!**

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# True Source Control – A Local Perspective

**League of California Cities, City Leader's Summit  
May 12, 2022**

# Agenda



- **City of SD Stormwater System**
- **Stormwater Infrastructure, water quality and funding Challenges**
- **Solutions and True Source Control Efforts**



# Stormwater System



# Stormwater Department Services



**encouraging public partnership**



**safeguarding communities from flood**



**providing community benefits**



**using stormwater as a resource**

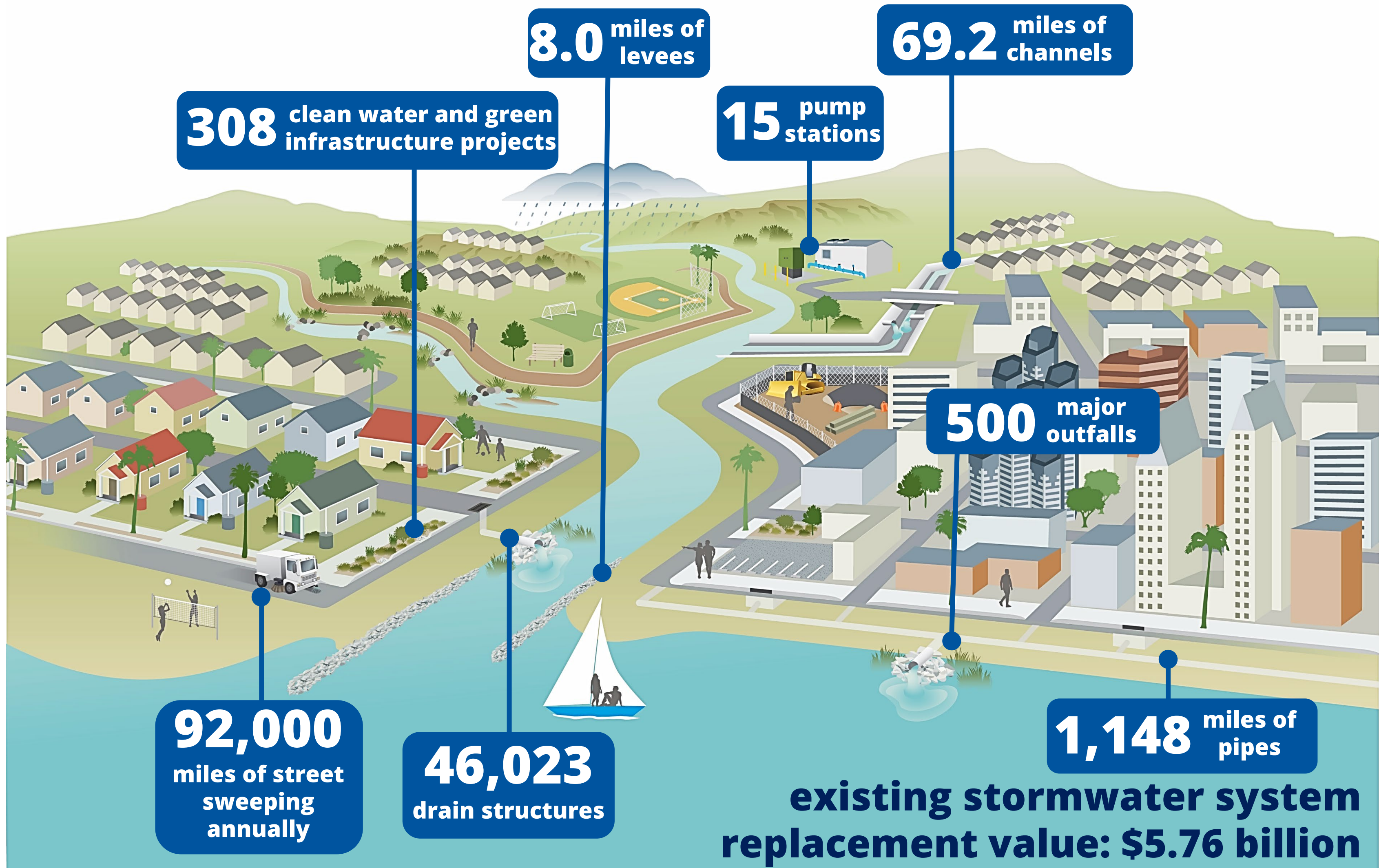


**restoring the environment**



**protecting clean, safe water**

# Stormwater System



**308** clean water and green infrastructure projects

**8.0** miles of levees

**15** pump stations

**69.2** miles of channels

**500** major outfalls

**92,000** miles of street sweeping annually

**46,023** drain structures

**1,148** miles of pipes

**existing stormwater system replacement value: \$5.76 billion**



# Stormwater Challenges



# Challenges

- **Aging infrastructure**
- **Urbanization**
- **Climate change**
- **Increasing regulatory requirements**
- **99% of the City drains to an impaired water body**





# Pollution Challenges

- Polluted water can be harmful
- 101 projected impairments
- 586 beach advisories & 55 beach closures per year (on average)
- Clean Water Act Violations
- Major compliance deadlines missed in April 2021
- Anticipated fines and lawsuits



Trash build up at the mouth of Chollas Creek





# Infrastructure Challenges

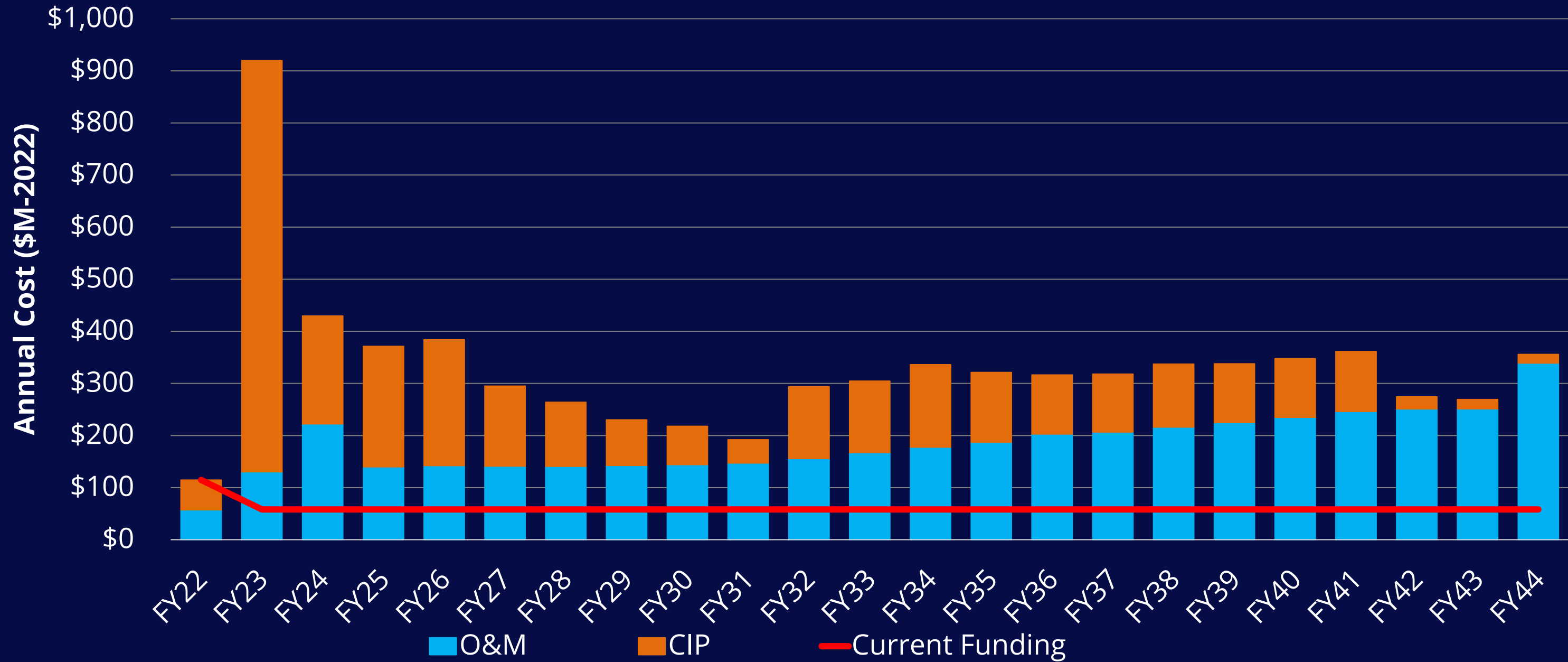
- Aging infrastructure needs replacing
- Infrastructure failures can impact water quality
- Lost opportunity to capture water for drought preparedness
- Reliance on costly infrastructure to remove pollution



Erosion and mud slide during 2020 rain event due to stormwater pipe failure



# Stormwater Funding Needs





# Solutions



# Traditional Pollution Solutions



**RELY ON  
INFRASTRUCTURE**



**REVITALIZE OUR  
WATERWAYS**



**CAPTURE STORMWATER  
FOR LOCAL SUPPLY**



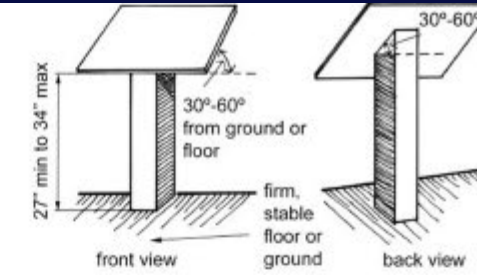
# Traditional Pollution Solutions

Ashley Falls Concept Plan



CONNECT TO EXISTING TRAIL

18" - 5' DIA' BRUSH INTEGRATED  
"LEMON BERRY" (TYP)



A. INTERPRETIVE SIGNAGE



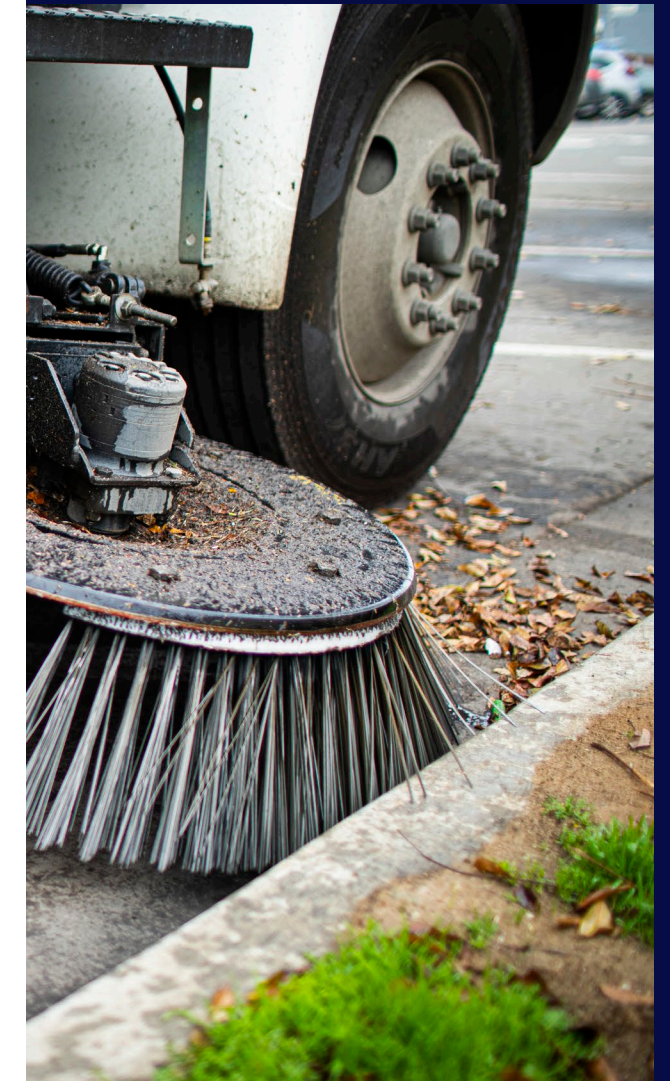
B. FOOTBRIDGE



C. WALKING TRAIL



D. RIVER ROCK





# True Source Control as a Solution

- Targets the true source of the pollutants, not cleaning up after
- Truly prevents pollution
- Cleaner water for the community
- Avoid costly infrastructure and maintenance
- Cooperative effort with stakeholders
- Stay in front of emerging pollutants





# True Source Control – Examples

- Copper in brake pads legislation
- Zinc in tires
- Pesticides
- Local bans on Styrofoam, single use plastic utensils and straws





# Moving Forward Locally

- Involvement in CASQA, other state and national efforts
- The power of comments - letters and verbal
- Local source control efforts



San Dieguito River





# Thank you!

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