

Funding Program (Infrastructure Program)
Fiscal Year 2022-2023
Santa Clara River Watershed Area
County of Los Angeles
Josafat Flores, P.E.

Project Overview

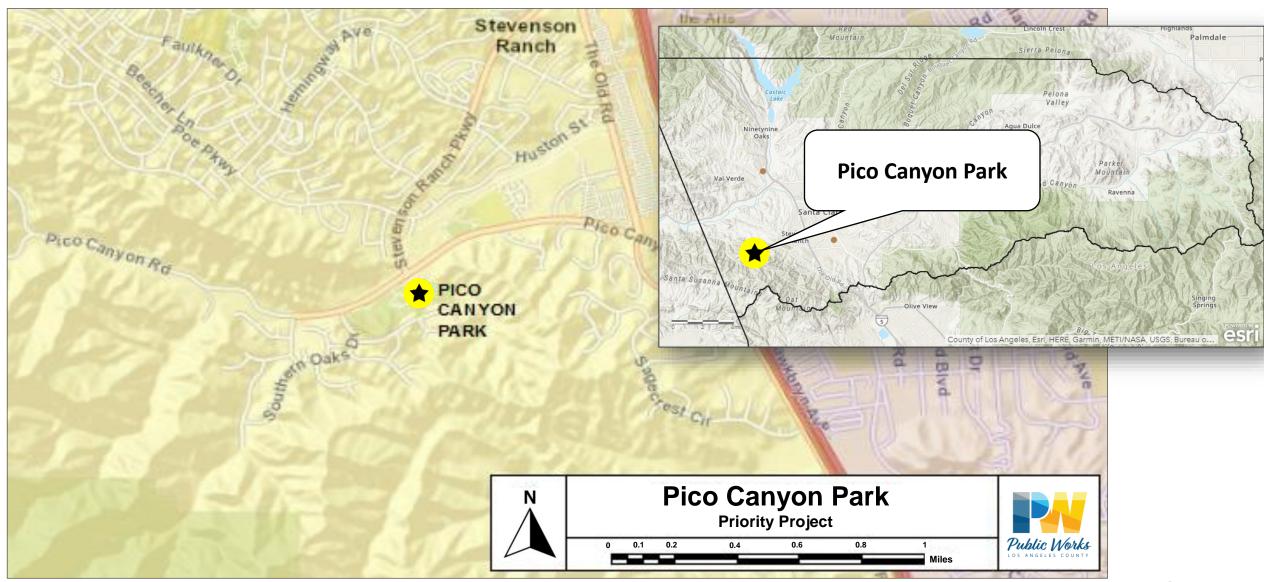
The Project will divert stormwater/urban runoff into an infiltration gallery underneath the park and will include above ground improvements.

- Primary Objective: Water Quality
- Secondary Objectives: Community Investment
- Project Status: Planning
- Phases for which SCW funding is being requested: Design Phase
- Total Funding Requested: \$500,000



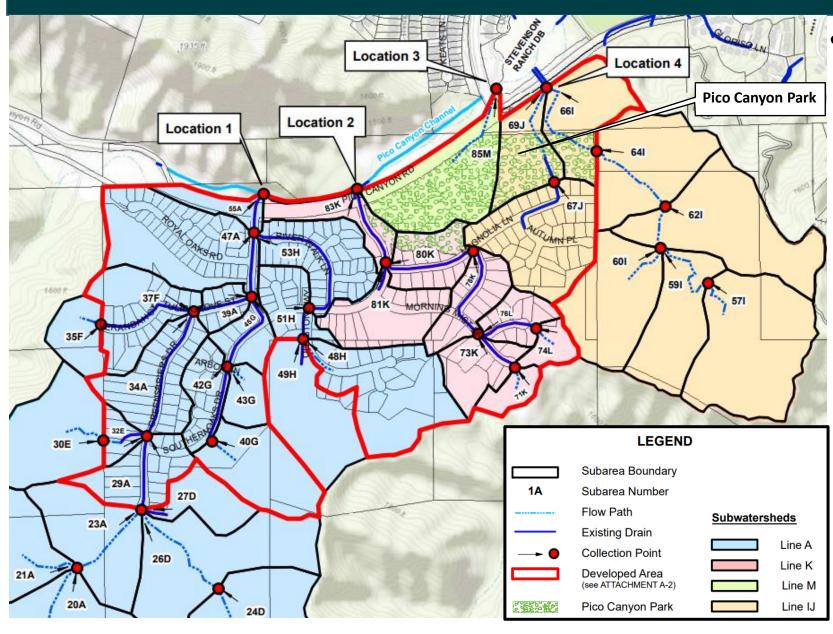


Project Location





Project Background

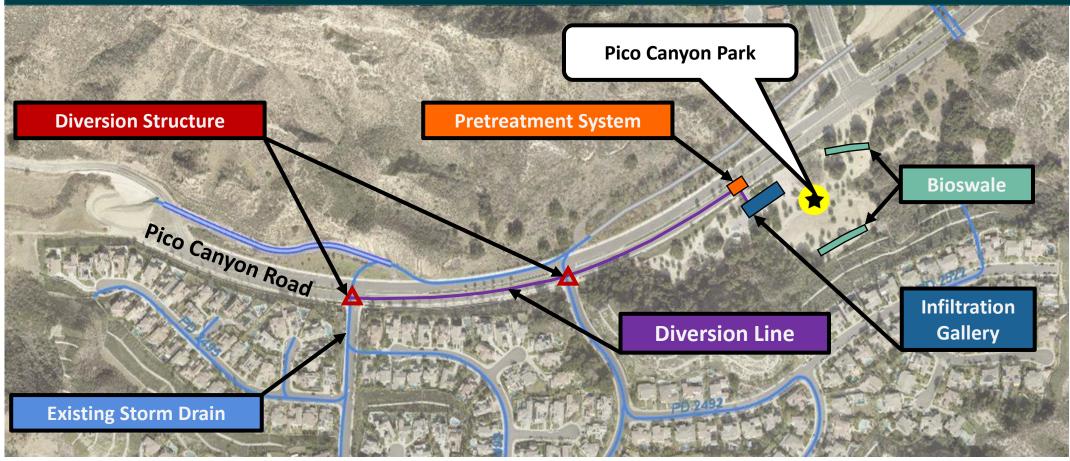


Project background:

- 150 Acre Drainage Area
- 4.8 Acre-Feet Capacity
- Upper Santa Clara River Enhanced Watershed Management Program (EWMP)
- Highest-Priority (Tier A)



Project Background



Benefits

Improved Water Quality

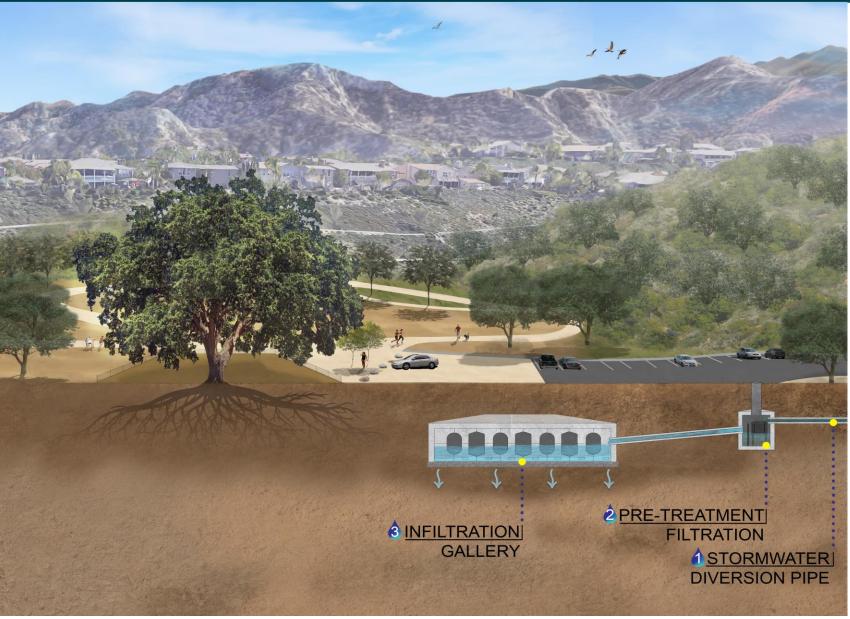
- Protect beneficial uses of the receiving waters
- Reduction of target pollutants

Community Enhancements

- Creates and enhances habitat
- Enhances recreational opportunities



Project Details



Details

- Improved water quality
 - Pre-TreatmentDevice
 - InfiltrationGallery
- Recharge Local Groundwater Basin
- Capture & Treat
 85th Percentile



Project Details







Details

- Nature-based
 Solutions
 - Bioswale
 - Native/ Drought Tolerant Landscaping
 - Educational Signage



Cost & Schedule

Phase	Description	Cost	Completion Date	
Planning	Development of a Project Concept Report	\$ 750,000	Early 2022	
Design	Develop 60%, 90%, and Final Plans, Specifications and Estimates	\$ 1,380,000	Mid 2023	
Construction	Award contract and construction implementation	\$ 5,380,000	Mid 2025	
TOTAL		\$ 7,510,000		

Annual Cost Breakdown				
Annual Cost:	\$ 565,000			

• Project Lifespan: 50 years

• Lifecycle Cost: \$20.3M



Funding Request

Year	SCW Funding Requested	Phase	Efforts during Phase and Year
1	\$500,000	Design	Complete 60% design plans, 90% design plans, and Final plans, Specifications and Estimates.
TOTAL	\$500,000		

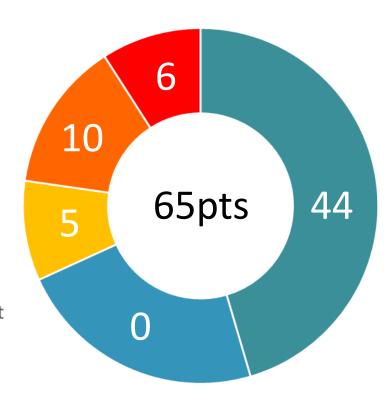
- Leveraged Funding amount \$880,000 (+50%)
- Future SCW Funds: Construction



Preliminary Score

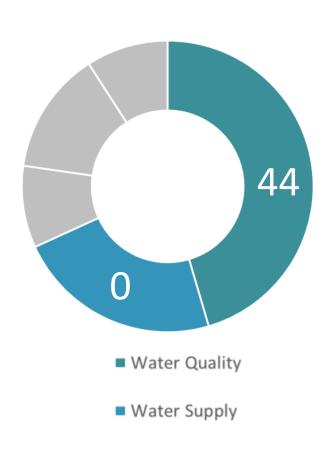


- Water Supply
- Community Investment Benefits
- Nature Based Solutions
- Leveraged Funds and Community Support





Water Quality & Water Supply Benefits

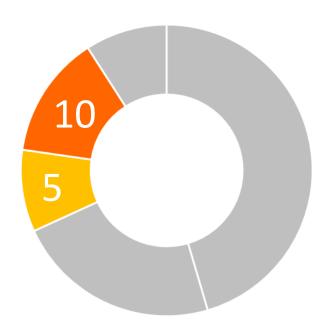


Water Quality Benefits

- Project will divert and treat wet weather runoff via:
 - Diversion Structures
 - Pretreatment Devices
 - Infiltration Gallery
- Wet Weather
- Tributary Area = 150 Acres
- Capacity = 4.8 Acre-Feet (85th percentile, 24-hour storm)
- Pollutant Reduction (Bacteria &Trash)
- Project also has the capacity to also reduce:
 - Metals
 - Toxics



Community Investment Benefits and Nature Based Solutions



- Community Investment Benefits
- Nature Based Solutions

Community Investment Benefits

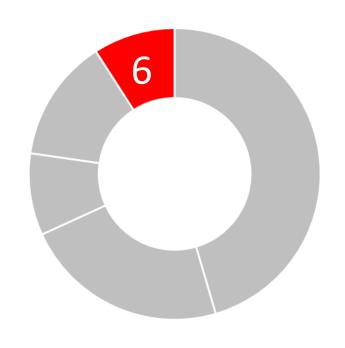
- Creates and Enhances Habitat
- Enhances Recreational Opportunities

Nature Based Solutions

- Bioswales
- Native/Drought Tolerant Planting



Leveraging Funds and Community Support



Leveraged Funds and Community Support

Leveraging Funds

- Leveraged amount \$880,000
- +50% Funding Matched
- General Fund & SCW Municipal Funds

Community Support

- Community Outreach
 - Westridge HOA July 21, 2021
 - Southern Oaks HOA August 9, 2021
 - Stevenson Ranch HOA September 21, 2021
- Outreach Plan
 - Information sessions
 - Host a website
 - Mailers and/or social media engagements





Funding Program (Technical Resources Program)
Fiscal Year 2022-2023
Santa Clara River Watershed Area
County of Los Angeles
Josafat Flores, P.E.

Project Overview

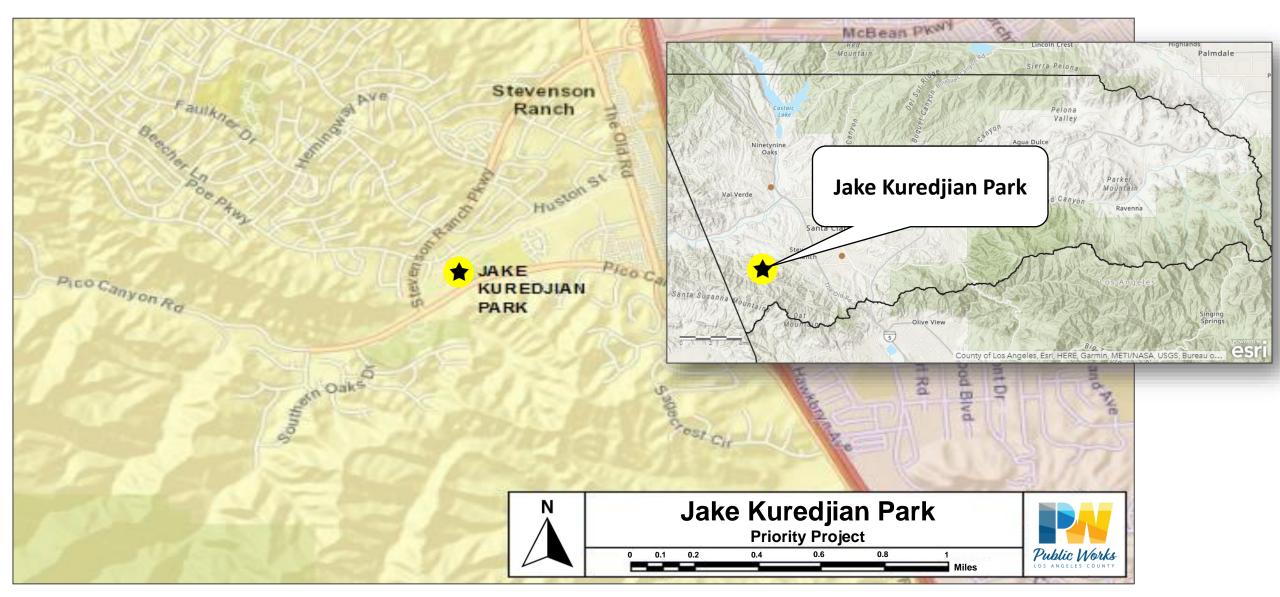
The feasibility study involves analysis of stormwater capture BMPs at Jake Kuredjian Park in the unincorporated Stevenson Ranch area.

- Primary Objective: Water Quality
- Secondary Objectives: Community Investment & Water Supply
- Project Status: Concept
- Phases for which SCW funding is being requested: Planning Phase
- Total Funding Requested: \$300,000 (TRP)



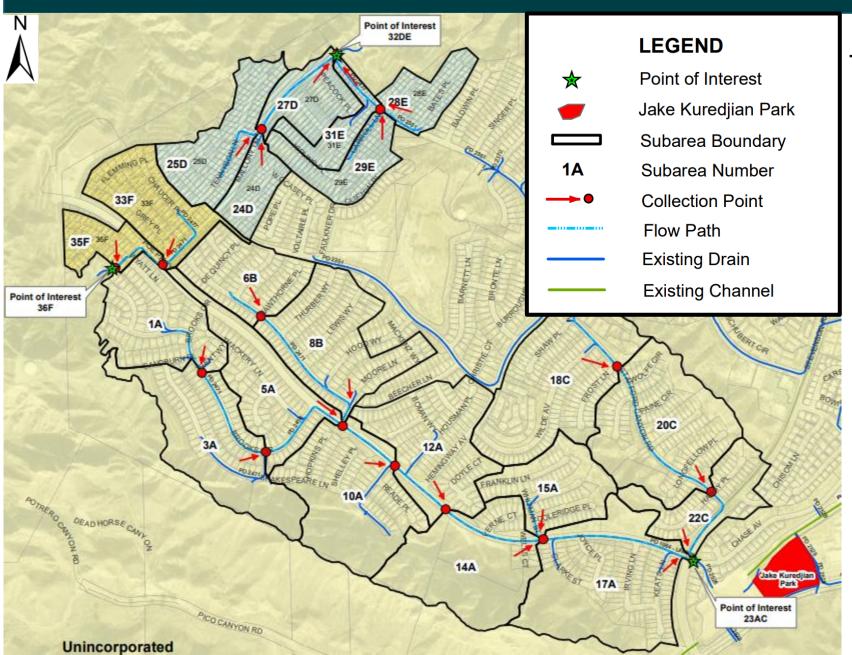


Project Location





Project Background

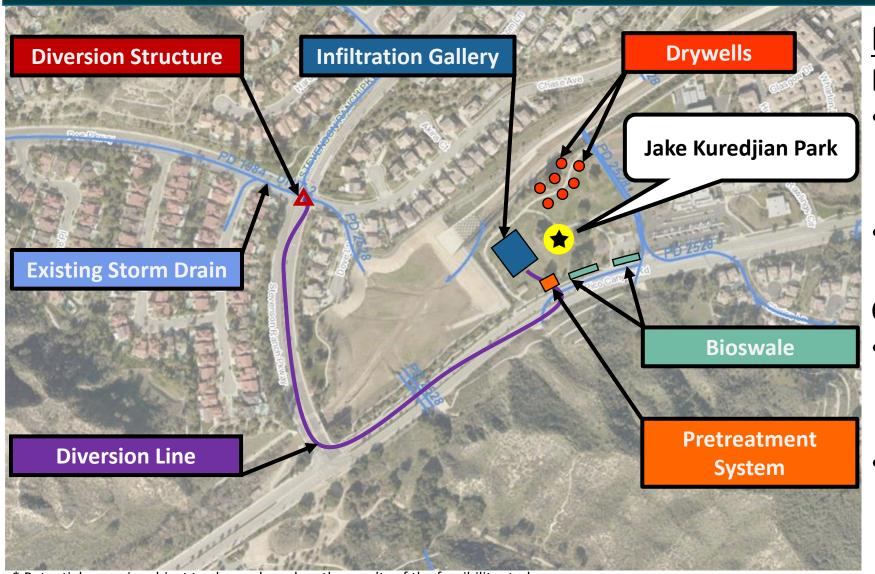


Project background:

- 395 Acre Drainage Area
- 12 Acre-Feet Capacity
- Upper Santa Clara River Enhanced Watershed Management Program (EWMP)
- Highest-Priority (Tier A)



Project Background



* Potential scope is subject to change based on the results of the feasibility study

Benefits

Improved Water Quality

- Protect beneficial uses of the receiving waters
- Reduction of target pollutants

Community Investment

- Creates habitat & Recreational opportunities
- Enhances green spaces at school

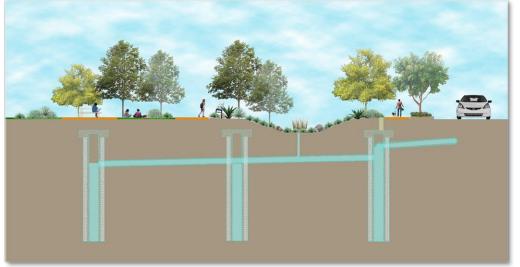


Project Details









Details

- Potential Improvements
 - Pre-TreatmentDevice
 - Infiltration Gallery
 - Dry wells
- Improve Water Quality
- Recharge Local
 Groundwater Basin



Project Details

Details

Potential

Improvements

- Nature-based Solutions
 - Bioswale
 - Permeable walkway
 - Native/ Drought Tolerant Landscaping
 - Educational Signage









Cost & Schedule

Phase	Description	Cost*	Completion Date*	
Planning	Development of a Project Concept Report, 30% Design, CEQA	\$2,200,000	Late 2022	
Design	Develop 60%, 90%, and Final Plans, Specifications and Estimates	\$2,200,000	Late 2024	
Construction	Award contract and construction implementation	\$ 12,000,000	Late 2026	
TOTAL		\$ 14,200,000		

Annual Cost Breakdown*				
Annual Cost:	\$ 550,000			

Project Lifespan: 50 years

^{*} Preliminary costs and schedule are subject to change based on results of the feasibility study

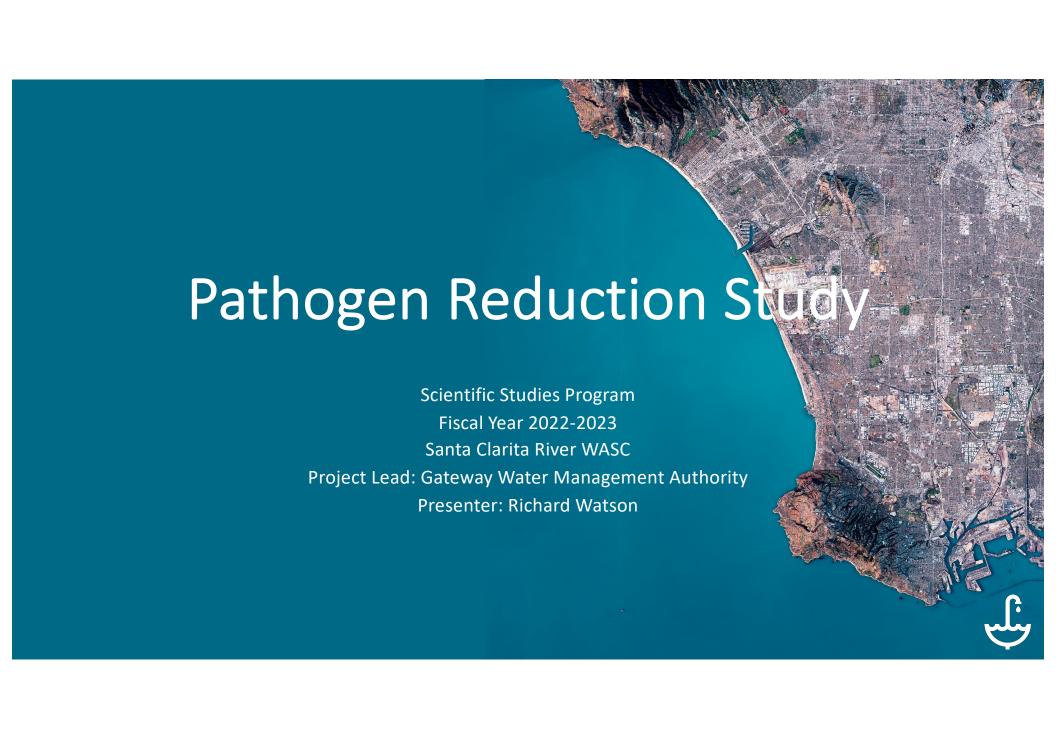


Funding Request

Year	SCW Funding Requested	Phase	Efforts during Phase and Year
1	\$300,000	Planning	Complete Feasibility Study
TOTAL	\$300,000		

 Additional SCW funding will be requested upon completion of the Feasibility Study





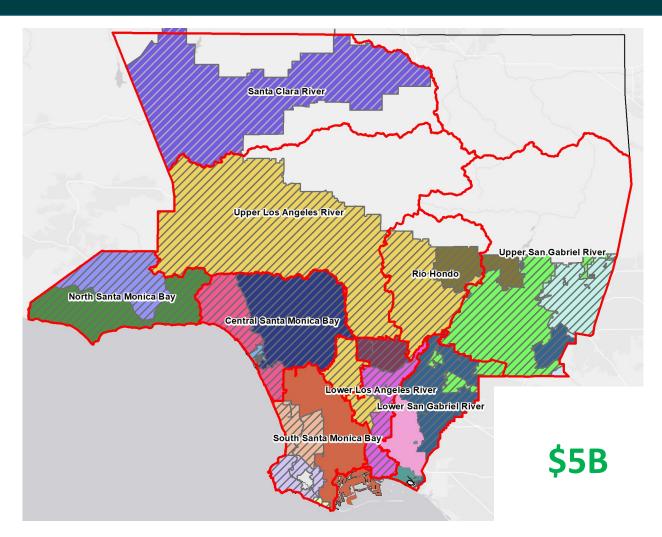
Study Overview

- This Study aims to use the latest available science to measure water-borne pathogens across watersheds. It will help identify key sources of human health risk, and develop costeffective protective strategies
- Nexus to Stormwater and Urban Runoff Capture and Pollution Reduction
 - Study will facilitate improved targeting of pathogen sources and water to capture and/or treat
 - Study may reduce the level of stormwater capture for bacteria compliance purposes through the identification of non-MS4 sources of risk thereby improving the protection of human health
 - Study will likely lead to partnering with various parties, such as wastewater agencies and homeless services agencies, to address human sources of pathogens.





Study Location



3



Study Details

Problem Statement:

- Waterborne pathogens represent the most significant potential threat to the health of people recreating in and around the ocean and inland waters of Los Angeles County.
- Current standards are based on FIB (fecal indicator bacteria), which are used as proxies for pathogens.
 - FIB are ubiquitous; a vast network of structural control measures would need to be implemented to provide adequate control projected cost over \$5 billion.
 - USEPA and academia agree that human sources of pathogens pose the greatest risk
 - Unless high-risk sources are targeted, water capture projects may receive large FIB loads, but miss the highest risk human sources.

(Continued)



Scientific Study Details (Continued)

Methodology:

- Study work plan will be developed through a stakeholder-led process with the input of technical experts, including academics.
 - Stakeholder engagement is at the forefront of the study to ensure that diverse viewpoints are incorporated.
- Study will collect samples from beaches and waterbodies. Samples will be analyzed for traditional bacterial indicators, viruses, and human markers during wet and dry weather.
 - Identify areas with highest risk to support a focus on those areas
 - Identify the sources causing the highest risk to focus on those sources
- Study will assess control measure effectiveness and efficiency
 - Identify the best BMPs to address the sources
 - Support planning, applying municipal funds, requests for SCWP funding, and actions by other parties

(Continued)



Scientific Study Details (Continued)

- Regional collaboration efforts:
 - Small Group Initiated Discussions and built a scope for a Safe, Clean Water Regional Program project
 - Presented Approach to E/WMP Groups
 - Discussed with proponents of watershed-specific studies
 - Discussed with Regional Board staff
- Revised study twice to address concerns
 - Clearly focused on human pathogens
 - Clarified that study is a component of overall strategy to protect human health
 - Clarified that implementation continues during the study
 - Recognized that we do not need to wait until the end of the study to take action
 - Reduced first year cost of study



Recent Revisions to Regional Pathogen Summary

- Added North Santa Monica Bay back into study
- Added an illustrative overview in Attachments (for Section 2.3)
- Added a Details Attachment (for Section 2.4)
- Attachments include a fact sheet, a table of potential constituents, and a map of potential monitoring sites
- Clarified that focus is on urbanized areas
- Clarified that monitoring sites would be chosen from MS4 monitoring sites.



Cost & Schedule

Phase	Description	Cost	Schedule
Task 1	Stakeholder Process	\$490,000	7/22 – 6/27
Task 2	Health Risk Assessment	\$5,880,000	7/22 – 9/26
Task 3	Risk Management	\$1,734,600	4/23 – 3/27
Task 4	Application of Study Findings	\$490,000	1/26 – 6/27
TOTAL		\$8,594,600	



Funding Request

WASC	Year 1	Year 2	Year 3	Year 4	Year 5
CSMB	\$47,109.15	\$329,764.06	\$282,654.91	\$307,364.38	\$107,432.50
LLAR	\$33,843.21	\$236,902.50	\$203,059.29	\$220,810.57	\$77,179.51
LSGR	\$44,169,54	\$309,186.78	\$265,017.24	\$288,184.85	\$100,728.71
NSMB	\$4,748.60	\$33,240.22	\$28,491.61	\$30,982.33	10,829.20
RH	\$30,413.67	\$212,895.68	\$182,482.01	\$198,434.45	\$69,358.42
SCR	\$15,866.36	\$111,064.53	\$95,198.17	\$103,520.32	\$36,183.27
SSMB	\$48,654.33	\$340,580.32	\$291,925.99	\$317,445.93	\$110,956.29
ULAR	\$102,094.95	\$714,664.67	\$612,569.72	\$666,120.09	\$232,827.71
USGR	\$49,973.39	\$349,813.71	\$299,840.33	\$326,052.14	\$113,964.40
TOTAL	\$376,873.21	\$2,638,112.47	\$2,261,239.26	\$2,458,915.06	\$859,460.00



Summary of Benefits

- By developing a better understanding of pathogens present in the region's watersheds, the relative risk to human health they pose, and the effectiveness of various control measures, new or adapted BMPs can be established that improve water quality and reduce human health risks at our beaches and inland waterbodies.
- Short-term: results could be used to protect people from health risks that aren't currently known.
- Long-term: results will enable the targeted placement of BMPs in locations where they can maximize the prevention or treatment of key sources of human pathogens.

