

Safe, Clean Water Program

Upper Los Angeles River

Watershed Area Steering Committee (WASC)



Meeting Minutes:

Wednesday, January 22, 2020

1:00pm – 4:00pm

Los Angeles County Public Works, Headquarters – Conference Room C
900 S. Fremont Ave., Alhambra, CA 91803

Attendees:

Committee Members Present:

Paul Lui (LA Dept. of Water and Power)

Javier Solis* (LA Recreation & Parks)

Alfredo Magallanes (Los Angeles – Sanitation)

Delon Kwan (LA Dept. of Water and Power)

David Nahai (Lewis Brisbois Bisgaard & Smith)

Veronica Padilla-Campos (Pacoima Beautiful)

John Luker (Santa Susana Mountain Park
Association)

Chris Chew* (Glendale)

Teresa Villegas* (Los Angeles)

Kris Markarian (Pasadena)

Patrick DeChellis (La Canada Flintridge)

Miguel Luna (Urban Semilla DakeLuna
Consultants)

Paul Alva (Los Angeles County Public Works)

Gary Hildebrand (Los Angeles County Flood
Control District)

Committee Members Not Present:

Ernesto Pantoja (Laborers Local 300)

Ackley Padilla (Los Angeles)

Jeff Camp (Los Angeles)

*Committee Member Alternate

See attached sign-in sheet for full list of attendees

1. Welcome and Introductions

Mr. Nahai, the Chair of the Upper Los Angeles River WASC, called the meeting to order.

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

2. Approval of Meeting Minutes from January 6, 2020

The District provided a copy of the meeting minutes from the previous meeting. Mr. Nahai asked the committee members for comments or revisions, there were none. Mr. DeChellis made a motion to approve the meeting minutes from January 6, 2020. Mr. Luker seconded the motion. **The Committee voted to approve the meeting minutes from January 6, 2020 (unanimous).**

3. Committee Member and District Updates

a) Regional Watershed Coordinator Updates

Mr. Jon Abelson (District consultant) announced that interviews have been conducted with stakeholders for the Regional Watershed Coordinator position. He also announced that Stantec and the County have finished the Regional Public Map that will soon be available for public view.



b) Scoring Committee Update

Mr. Caluag announced that the Scoring Committee met yesterday (January 21, 2020), and out of the approximately one third of the projects scored (58 Total), about half did not provide sufficient information to be scored. The Los Angeles County Flood Control District (District) noted the tentative upcoming WASC timeline. The District is currently scheduling project applicant presentations throughout February. The Committee will develop their Stormwater Investment Plan (SIP) in March, and the Regional Oversight Committee will provide their review and recommendations in April. May through June, the District will prepare the Board Letter that presents the SIP to the Los Angeles County Board of Supervisors for approval. For this WASC meeting, nine presentations are scheduled, and the District anticipates the remaining presentations to be scheduled through March.

Mr. Nahai announced that all presentations today will be allocated no more than ten minutes, and questions about each presentation will be allocated no more than eight minutes.

Mr. Alva requested that hard copies of each presentation can be provided. Mr. Nahai responded that for future meetings which have presentations, the presenters should bring and supply the hard copies. Mr. Hildebrand suggested that the presentations be emailed to the Committee members before the WASC meetings.

4. Public Comment Period

No public comments.

5. Discussion Items

a) Ex Parte Communication Guidelines

The District provided copies of the Ex Parte Communication Guidelines and reminded the Committee that any communication with any person about information which would influence a project(s) must be disclosed.

Mr. Luker disclosed that he had general conversations about the Safe, Clean Water Program with three different entities. He took a tour with an entity and made suggestions on how to improve the facility, and to submit any projects to the Safe, Clean Water Program. Furthermore, Mr. Luker met with LA City Councilman John Lee, received a message from Jason Manuka, and also stated the submittal of any projects to the Safe, Clean Water Program. Mr. Luker stated that if this is a problem, he can recuse himself from any voting raising a conflict of interest. Mr. Nahai added that if a Committee member is being briefed on specifics about a project, that is information that others do not have, and suggested that LA County Counsel (Counsel) comment further on this matter.

Mr. Kwan stated that many departments within the City of LA are vying for the Safe, Clean Water Program funding, and is concerned about what he can and cannot discuss with other departments and divisions. Mr. Caluag stated that the Committee can get guidance from Counsel. Mr. Alva suggested inviting Counsel to a future meeting to clarify Ex Parte Communication Guidelines.

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Mr. DeChellis shared that the Upper LA River group had questions about today's Upper LA River WASC meeting. Mr. Nahai stated that by rule, no communications should be taking place outside of today's meeting. Mr. Caluag suggested looking at the WASC guidelines for any voting matters.

Mr. Solis stated that he is committed to being transparent, but also wants his Department to be a candidate for SCW funding.

Ms. Villegas introduced herself and stated that she is the alternate for Barbara Romero.

Mr. Nahai shared that he had a brief discussion with the LA Regional Water Quality Control Board's (Regional Board) Executive Officer Renee Purdy regarding scientific studies and the concern that results from these studies will not be used to delay or attain compliance for permittees. Ms. Purdy responded that it is crucial to have the Regional Board, the State Water Resources Control Board, and the State's Environmental Protection Agency (CAL-EPA) on board with the scientific studies.

b) Presentations

i) Recalculation of Wet Weather Zinc Criterion (Scientific Studies Program) – Mr. Jon Ball, City of Los Angeles.

The Study will use the latest available science to evaluate zinc toxicity in the Los Angeles River, Ballona Creek, and Dominguez Channel watersheds given the particular environmental conditions found in these watersheds. This site-specific evaluation may be used to efficiently allocate community funds, inform the type and placement of stormwater Best Management Practices (BMPs), and support attainment of water-quality requirements. Through an investment in scientific research, the Study will support iterative planning and adaptive management that will contribute to the attainment of water-quality requirements.

Mr. Ball provided a PowerPoint presentation of his submittal to the Scientific Studies Program to the Committee. Mr. Luna asked what happens if we continue with the current zinc standards. Mr. Ball replied that the compliance costs would not lessen.

Mr. Alva commended the City of LA for taking the leadership role with these efforts, and that if he understands correctly, the current zinc standards have been used for the last 30 years. The region should be using the latest available data and should be revising the zinc water quality standards. Mr. Nahai requested that only questions be asked due to the limited time for the many presentations.

Ms. Padilla-Campos asked if the zinc standards will lower the compliance costs, and thus bring a discount or savings to ratepayers. Mr. Ball responded that if the zinc compliance costs are lessened, the "leftover" funds will be used to address other Safe, Clean Water Program priorities.

Ms. Villegas asked why this study is requesting more funding from the Upper LA River watershed area than Central and South Santa Monica Bay watershed areas. Mr. Ball responded that the Upper LA River watershed area receives the more SCW Regional funds and thus requesting a higher allotment.

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Ms. Markarian asked how this effort would fall into the compliance schedule. Mr. Ball did not know the milestones off hand, but he believes the LA River Metals TMDL has an upcoming milestone which would line up with this study's results. Mr. Ball later provided his response to the District. The compliance milestones can be found as attachment along with the presentation.

Mr. Hildebrand asked what conversations have been conducted with the Regional Board. Mr. Ball mentioned that no conversations have taken place to date, but that the Regional Board will need to be part of the stakeholder process. Mr. Hildebrand stated that the Regional Board should first give its take on this study before it is endorsed for funding.

ii) Load Reduction Strategy Adaptation to Address the LA River Bacteria TMDL for the ULAR Watershed Management Group (Scientific Studies Program) – Brianna Datti and Katie Ward, Tetra Tech and San Gabriel Valley Council of Governments (SGVCOG), respectively.

The Upper LA River Group has asked the SGVCOG to submit a scientific studies application under the Safe, Clean Water Program on their behalf to pursue the necessary funding for development of a Load Reduction Strategy (LRS) adaptation plan, with the goal to adapt the LRS to better align implementation actions in order to successfully reduce potential health risks to recreators.

Ms. Datti and Ms. Ward provided a PowerPoint presentation of their submittal to the Scientific Studies Program to the Committee.

Mr. Lui asked how this is different than the other bacteria regional scientific study and if it can be funded regardless of that study. Ms. Datti stated that this study is more accelerated than the regional study and that it is complimentary to it, and that it can be funded regardless of the regional study.

A committee member asked if the study is more focused on dry-weather. Ms. Datti stated that initially, the study is focused on dry-weather because of earlier dry-weather regulatory deadlines, but eventually will also focus on wet-weather.

A committee member asked what reaches of the Arroyo Seco the study will focus on. Ms. Datti responded that there are four priority outfalls where samples will be collected for the study.

Mr. DeChellis asked for the basis of how the \$250,000 costs were split. Ms. Datti responded that it was evenly split amongst the two pertinent sub-watersheds.

Mr. Nahai asked why there are two studies, and why it has taken eight years (since issuance of 2012 MS4 permit) to get going on these efforts. Ms. Datti stated that this particular study is focused on abating and identifying human bacterial sources.

iii) preSIP: A Platform for Watershed Science and Project Collaboration (Scientific Studies Program) – Chad Helmle, Craftwater Engineering/SGVCOG

As a precursor to the Stormwater Investment Plans (SIP), this preSIP Scientific Study will support the WASC and the SGVCOG by developing a platform to consolidate intertwined goals and disparate project proposals into a balanced, collaborative, and cost-effective plan.

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Mr. Helmle provided a PowerPoint presentation of his submittal to the Scientific Studies Program to the Committee.

Mr. Nahai asked if this was is a pre-determined SIP and why the Committee would decide to fund this study now. Mr. Helmle reminded the Committee that this would be a tool to identify projects throughout the region to rank each for the scoring categories. Especially since many projects will be implemented over time, a database can grow to help the Committee choose projects.

Ms. Villegas stated that the available data from this platform will not capture or deliver infrastructure projects in all communities. Mr. Helmle responded that the goal is to prioritize projects and ultimately demonstrate that all communities are installing projects.

The Committee decided to take a break.

iv) Hay Canyon Channel / FIS Sports Facilities Stormwater Capture Feasibility Study (Technical Resources Program) – Greg Jaquez, City of La Canada Flintridge

The project proposes a diversion and treatment of stormwater runoff in the Hay Canyon Channel. The treated stormwater could then be conveyed by gravity to a subsurface cistern for storage and irrigation reuse.

Mr. Jaquez provided a PowerPoint presentation of his submittal to the Technical Resources Program to the Committee.

Mr. Solis asked what the current park water consumption is and if the project improvements will offset this current consumption demand. Mr. Jaquez did not know the current consumption off hand, but believes the project improvements will help offset potable water demands (dependent on the number of rain events for more capture and reuse). Mr. Solis also asked how much water is used for irrigation purposes. Mr. Jaquez responded it is about 2-4 acre-ft annually.

Ms. Padilla-Campos asked if the project is a water reuse and infiltration project, and whether the school district will allow education on-site. Mr. DeChellis responded yes to both questions.

Mr. Nahai stated that the funds for this feasibility study do not get distributed to the cities. A committee member expressed that they were not aware of this. Mr. Nahai asked what the criteria was for a project to be deemed feasible. He requested that the project applicant provide an in-depth answer to this in the future and that the District provide updates on the feasibility reports on all the projects.

Mr. Luker asked if this project benefits an undeserved community. Mr. Jaquez stated that there is no disadvantaged community (DAC) benefit at the moment, but in the development process there will be opportunities for job opportunities and working with the right groups to address that.

The Committee discussed the Technical Resources Program (TRP) funding. The District explained how a feasible project in this case refers to projects that can be funded into the Safe, Clean Water Program Project Module as an applicant for the Infrastructure Program. The District will develop the TRP for the feasibility studies.

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v) Winery Canyon Channel / Descanso Gardens Stormwater Capture Feasibility Study (Technical Resources Program) – Greg Jaquez, City of La Canada Flintridge

The project proposes a diversion and treatment of stormwater runoff in the Winery Canyon. The treated stormwater could then be conveyed by gravity to a subsurface cistern for storage and irrigation reuse.

Mr. Jaquez provided a PowerPoint presentation of his submittal to the Technical Resources Program to the Committee.

Mr. Solis asked about the surface water source for irrigation. Mr. Jaquez confirmed that surface water is conveyed to this site for irrigation and that this project would replace the irrigation needs at the site.

Mr. Chew asked how much dry-weather flow is currently in the nearby channel. Mr. Jaquez did not know exactly how much, but said a small amount.

Mr. Nahai asked about the total projected cost of the project. Mr. Jaquez said there are many possibilities between \$10 and \$12 million.

vi) Arroyo Seco Projects Parts 1, 2, 3 and 4: Constructed Wetlands by the Arroyo Seco (Technical Resources Program) – Shahid Abbas and Cameron McCullough, South Pasadena and John L. Hunter & Associates

Mr. Abbas and Mr. McCullough provided a PowerPoint presentation of their submittal to the Technical Resources Program to the Committee.

The committee asked for clarification on the funding for these projects. Mr. McCullough referred to the funding request slide of the PowerPoint and clarified that it would be about \$100,000 to prepare a feasibility study to submit to the Safe, Clean Water Program Infrastructure Program, or \$200,000 to fund all of them. The District explained that in this stage of the SIP development, the Committee can consider a flat rate of about \$300,000 for the District to complete this feasibility study under the TRP. A discussion with District staff is necessary to arrive at what the actual costs are.

Ms. Villegas expressed a budget concern, as well as her understanding of the TRP's creation was to serve DACs.

The Committee expressed concern at how the flat rate of \$300,000 was arrived at for each feasibility study. The Committee expressed that there should not be a "one size fits all" approach with feasibility studies. The District explained that if the TRP does not end up costing \$300,000, then the WASC will be reimbursed and if it goes over, funds will be used from the District's 10% pot of the funding for the WASC. The actual cost of doing a TRP feasibility study will be track over time and the adjusted accordingly. The District will need to further consult on this matter and consult with the Scoring Committee for project funding.

6. Break

Committee took a break after agenda item #5.iii).

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7. Voting Items

- a) None

8. Adjournment

A Committee member asked about the breakdown of each city's revenue projections. District staff indicated that it was included in the original summary package and can also be found on the Safe, Clean Water Program website.

The Committee asked about the status of the Transfer Agreement – the District expects an update on these efforts in April 2020.

Mr. Nahai thanked the committee members and public for their time and participation and adjourned the meeting.

Next Meeting:

Monday, February 10, 2020 3:00pm – 5:00pm
LA County Public Works Headquarters, Conference Room C
900 S. Fremont Ave.
Alhambra, CA 91803

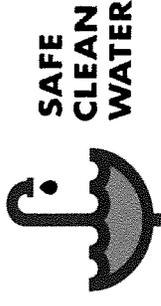
Future Meeting Dates and Times:

Monday, February 24, 2020, 3:00pm – 5:00pm (Conference Room B)

Monday, March 2, 2020, 2:00pm – 4:00pm (Conference Room A)

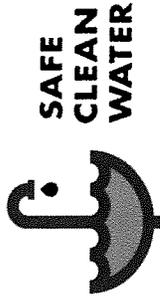
Thursday, March 12, 10:00am – 12:00pm (Conference Room C)

Upper Los Angeles River
Watershed Area Steering Committee Meeting
COMMITTEE MEMBER AND ALTERNATE SIGN-IN



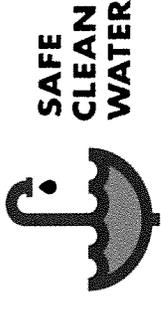
Member Name	Municipality/ Organization	Email Address	Signature
Gary Hildebrand	FCD	garyisah@gmail.com	
Genevieve Osmena	FCD	gosmena@dpw.lacounty.gov	
Paul Liu	Los Angeles Department of Water and Power	paul.liu@ladwp.com	
Rafael Villegas	Los Angeles Department of Water and Power	Rafael.Villegas@ladwp.com	
Cathie Santo Domingo	Los Angeles Recreation & Parks	cathie.santodomingo@lacity.org	
Javier Solis	Los Angeles Recreation & Parks	javier.solis@lacity.org	
Alfredo Magallanes	Los Angeles - Sanitation	alfredo.magallanes@lacity.org	
Ariel Flores	LA Sanitation and Environment	ariel.flores@lacity.org	
Delon Kwan	Los Angeles Department of Water and Power	delon.kwan@ladwp.com	
Art Castro	Los Angeles Department of Water and Power	art.castro@ladwp.com	
Ernesto Pantoja	Laborers Local 300	ernesto.pantoja@gmail.com	
Sergio Rascon	Laborers Local 300	srascon@local300.com	
Miguel Luna	Urban Semilla DakeLuna Consultants	miguel@dakeluna.com	
David Nahai	Lewis, Brisbois, Bisgaard & Smith	dn@davidnahai.com ; lr@davidnahai.com	
Jacob Lipa	Lipa Consulting Company	jacob@lipaconsulting.com	

Upper Los Angeles River
Watershed Area Steering Committee Meeting
COMMITTEE MEMBER AND ALTERNATE SIGN-IN



Member Name	Municipality/ Organization	Email Address	Signature
Veronica Padilla-Campos	Pacoima Beautiful	vpadilla@pacoimabeautiful.org	
Felipe Escobar	Pacoima Beautiful	fescobar@pacoimabeautiful.org	
John Luker	Santa Susana Mountain Park Association	jcluker2@yahoo.com	
Wendi Gladstone	Santa Susana Mountain Park Association	ssmpawendi@gmail.com	
Yazdan Emrani	Glendale	YEmrani@Glendaleca.gov	
Chris Chew	Glendale	CChew@Glendaleca.gov	
Patrick DeChellis	La Canada Flintridge	pdechellis@lcf.ca.gov	
Alvin Cruz	Los Angeles LACPW	acruz@ lacity.org lacity.org	
Barbara Romero	City of Los Angeles	barbara.romero@lacity.org; riki.esquer@lacity.org	
Teresa Villegas	Los Angeles	teresa.villegas@lacity.org	
Ackley Padilla	Los Angeles	ackley.padilla@lacity.org	
Jeff Camp	Los Angeles	jeff.camp@lacity.org	
Paul Alva	Los Angeles County	PALVA@dpw.lacounty.gov	
Mark Lombos	Los Angeles County	MLOMBOS@dpw.lacounty.gov	
TJ Moon	Los Angeles County	TMOON@dpw.lacounty.gov	

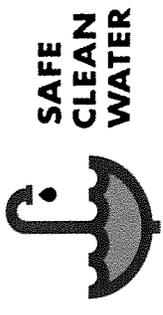
Upper Los Angeles River
Watershed Area Steering Committee Meeting
PUBLIC SIGN-IN



First Name	Last Name	Municipality/Organization	Email Address
Chad	Helmbke	Craftwater	chad.helmbke@craftwater.com
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Bronwyn Kelly	Kelly	Carollo	bkelly@carollo.com
Shona Carroll	Carroll	TNC	scorroll@tnc.org
Maged	ER Rabeen	La Canada Flintridge	cityengineer@lct.ca.gov
SARAH	RASLON	MRCAT	SARAH.RASLON@MRCAT.CA.GOV

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

Upper Los Angeles River
 Watershed Area Steering Committee Meeting
 PUBLIC SIGN-IN



First Name	Last Name	Municipality/Organization	Email Address
Jon Beatt	Ball	LASAN	jon.ball@lacity.org
Katie	Wart	SGVCOG	KWart@sgvcog.org
Hans	Trennuel	Western Solutions	hans.trennuel@westernsolutions.com
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Clint	Boschen	Tetra Tech	clint.boschen@tetratech.com
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Oliver Galang	Galang	craftworks eng	oliver.galang@craftwaterllc.com
Carmen	Andrade	LASAN	carmen.andrade@lacity.org
ARot	CASTR0	EADWP	
Carrie Sutkin	.	UAP	Carrie.sutkin@gmail.com

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

Recalculation of Wet Weather Zinc Criterion

Scientific Study Proposal to
Upper Los Angeles River Steering Committee
January 21, 2020



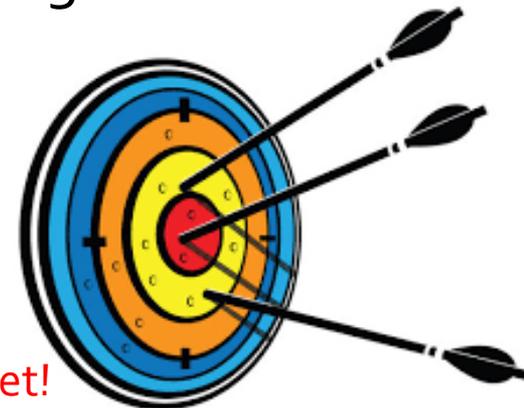
Jon Ball (Environmental Supervisor)
Watershed Protection Program
LA Sanitation & Environment
323-342-1557
jon.ball@lacity.org

Objective

- Re-evaluate & Update Zinc Criterion
 - USEPA's Recalculation Procedure
 - Wet Weather (CTR Acute Criterion)
 - Incorporate latest available data
 - Site-specific evaluation:
 - LA River, Ballona Creek, Dominguez Channel

Background

- Zinc is major challenge for EWMPs
 - \$6.5 Billion (Implementation Costs) for BC, DC, and ULAR
- Current Criterion is over 20 years old
 - Based on a nationwide toxicity dataset
 - Includes species that do not occur in our region
 - New data are available!



We must aim at the right target!

Overview of the Study

- Stakeholder engagement:
 - Environmental NGOs
 - Technical Advisory Committee (TAC)
 - LA Regional Board
- Task 1: SIP Analysis
- Task 2: Develop Study Workplan
- Task 3: Recalculation & Report
- Task 4: Implementation Report
- Task 5: Project Management

Expected Outcomes

- Previous Studies show Zinc criterion increase by factor of 1.2 to 2.2
- Potential Cost-savings for EWMP
 - \$300 Million to \$1.1 Billion
- Zinc Problem won't go away!
 - Sizing, cost, and locations of BMPs will be affected.

Cost & Schedule

- Total Cost: \$500,000
 - Central Santa Monica Bay: \$89,000 (17.8%)
 - South Santa Monica Bay: \$58,000 (11.6%)
 - Upper Los Angeles River: \$353,000 (70.6%)
- Timeline:
 - Start: July 2020
 - Completion: July 2023

Final Considerations

- Effective use of Public Funds
- Straightforward Approach
- Support attainment of Water Quality Requirements
- Maintain Protection for Aquatic Life

Load Reduction Strategy Adaptation to Address the LA River Bacteria TMDL for the Upper Los Angeles River Watershed Management Group

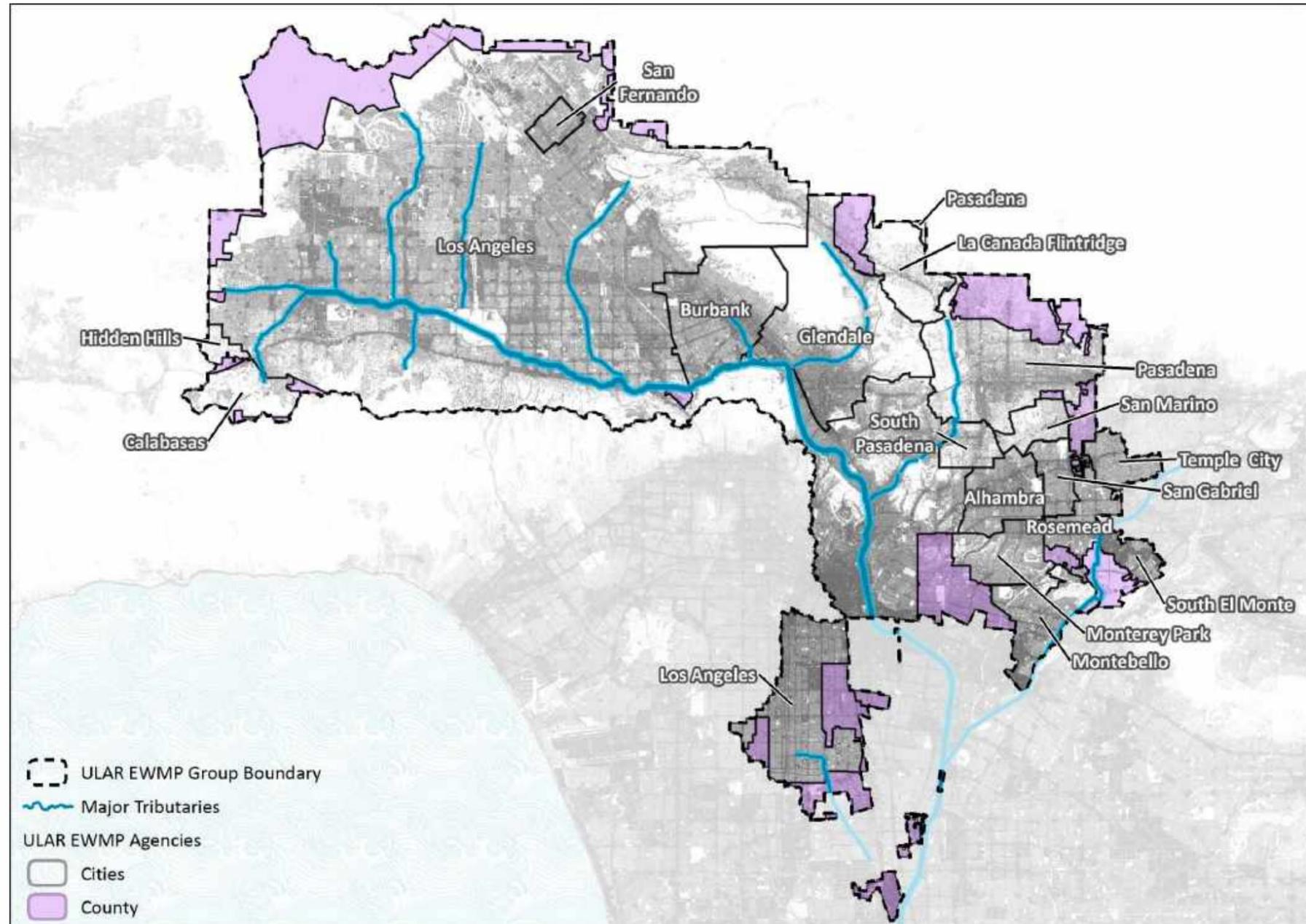
Watershed Area Steering Committee Meeting
January 22, 2020

Study Lead: San Gabriel Valley Council of Governments on behalf of the ULAR Watershed Management Group (19 Agencies)

Presenter: Brianna Datti, Tetra Tech
brianna.datti@tetratech.com
(603)988-6997

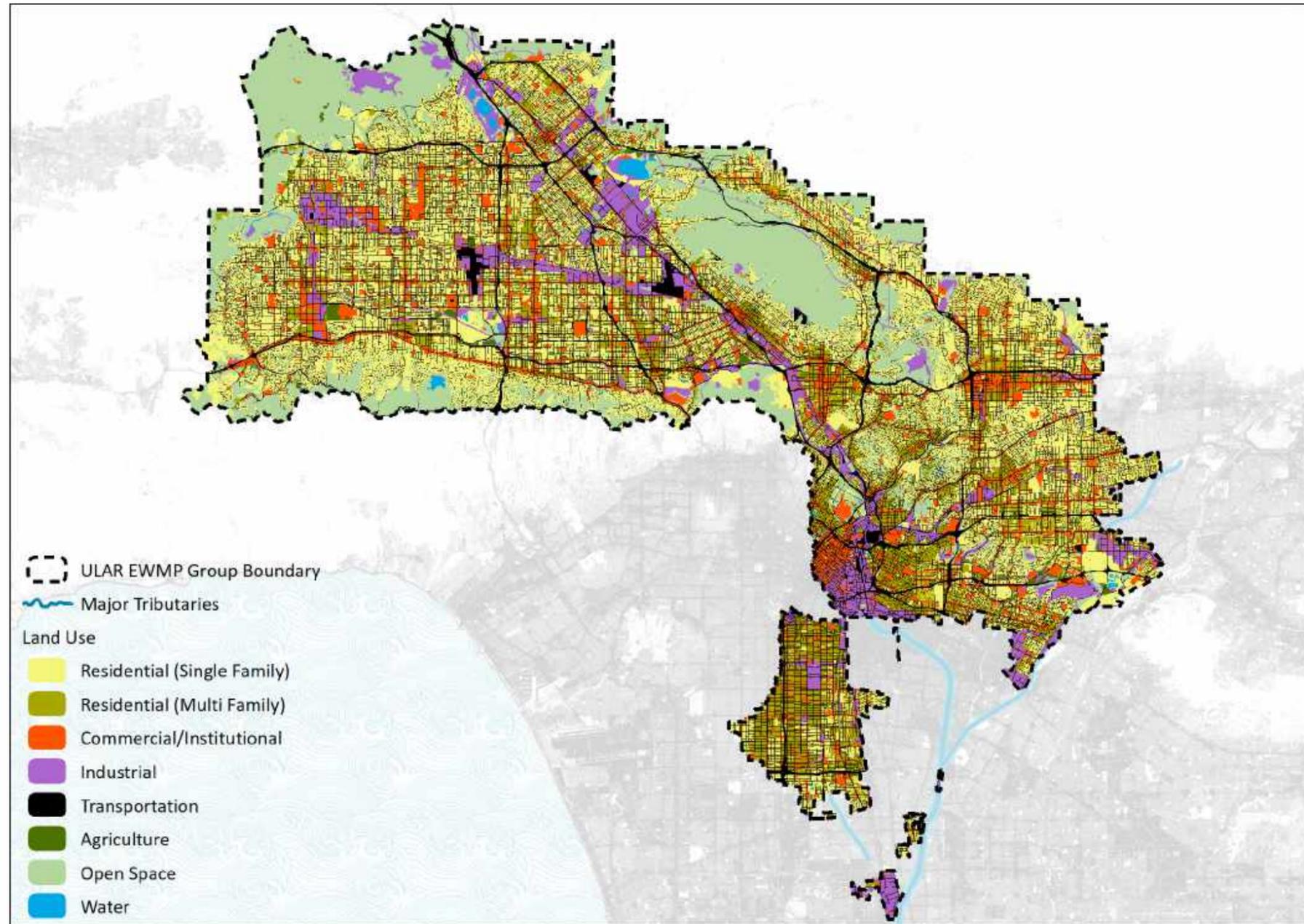
Clint Boschen, Tetra Tech
clint.boschen@tetratech.com
(703)593-1803

Upper Los Angeles River a Unique and Diverse Watershed Management Area

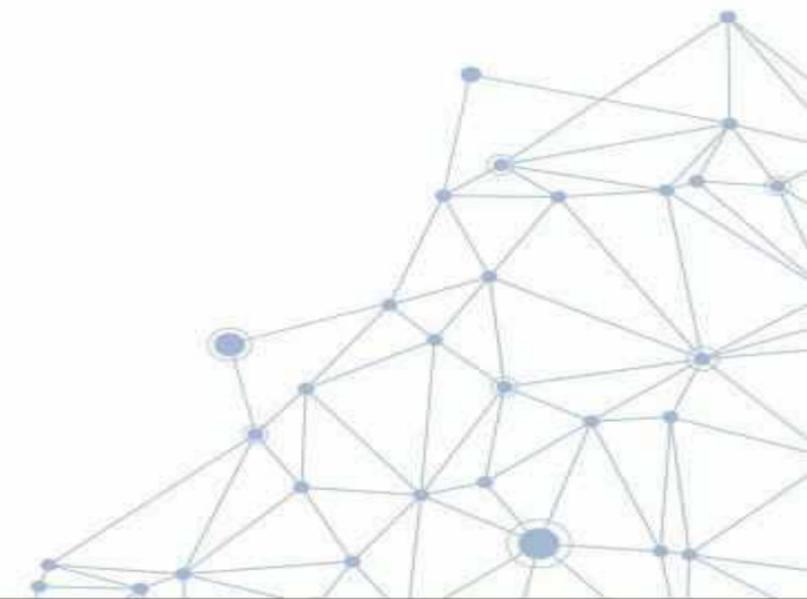


- 19 Permittees

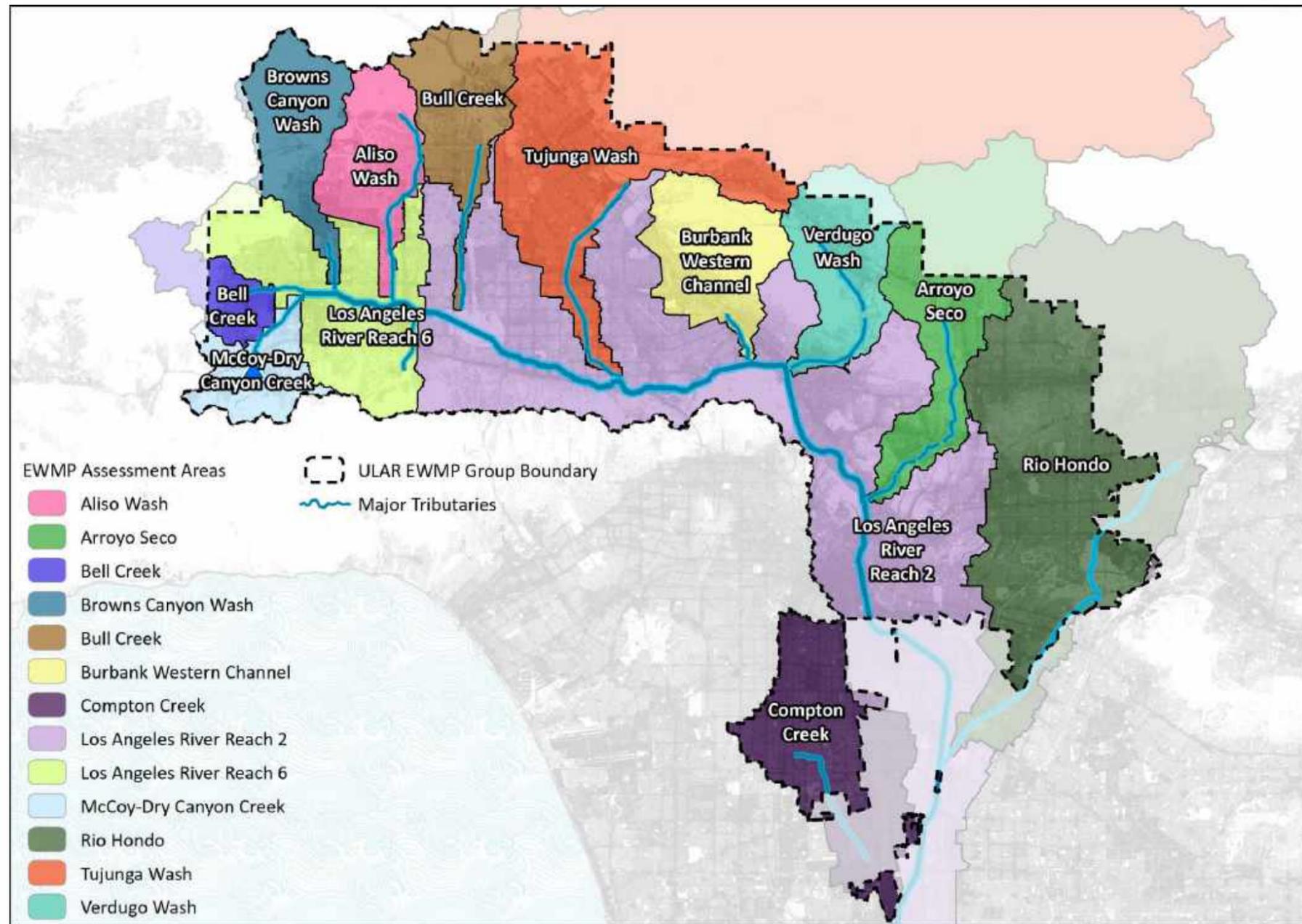
Upper Los Angeles River a Unique and Diverse Watershed Management Area



- 19 Permittees
- Open space/forest upstream and downstream urbanized



Upper Los Angeles River a Unique and Diverse Watershed Management Area



- 19 Permittees
- Open space/forest upstream and downstream urbanized
- 31.5 miles of LA River and 11 Tributaries

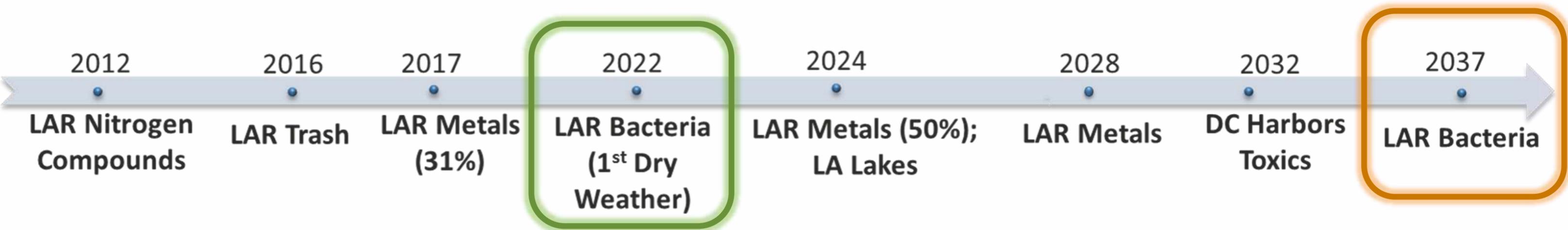
Upper Los Angeles River a Unique and Diverse Watershed Management Area



➤ Challenge to protect recreational beneficial uses, threatened by bacteria impairments



Bacteria Most Immediate (and Costly) Regulatory Deadline



- **Dry Weather Strategy:**

- Load Reduction Strategy (LRS)
 - 16 prioritized segments
 - Submitted 5 LRS's
 - 2 completed projects, other's issues with implementation

- **Wet Weather Strategy:**

- Additional Structural BMPs:
 - 1,218 acre-ft
 - \$2.6 Billion (Capital)
 - Annual O&M increases \$34 Million

Challenges with LRS Implementation

Encountered Numerous Issues during Implementation

- Requested extensions for:

- Segment B – Mainstem Los Angeles River
- Segment B (Tributary) – Arroyo Seco
- Segment B (Tributary) - Rio Hondo (pending decision)

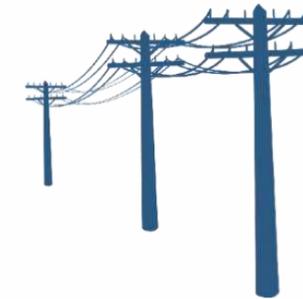
Negotiations with Private Parties



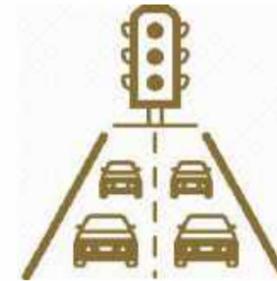
Soil Contamination



Utility Conflicts



Traffic Mitigation



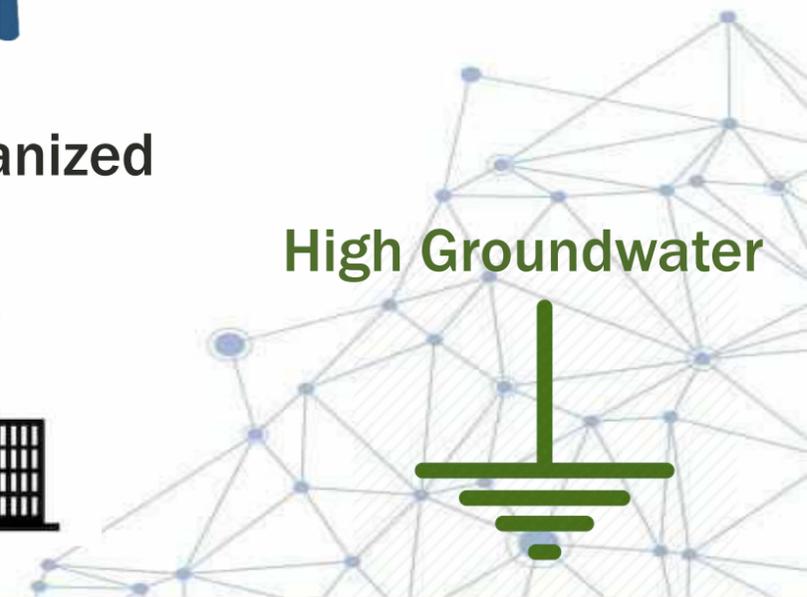
Heavily Urbanized



Underground Storage Tanks



High Groundwater



Challenges with LRS Implementation

Encountered Numerous Issues during Implementation

- Requested extensions for:

- Segment B – Mainstem Los Angeles River
- Segment B (Tributary) – Arroyo Seco
- Segment B (Tributary) - Rio Hondo (pending decision)

DENIED

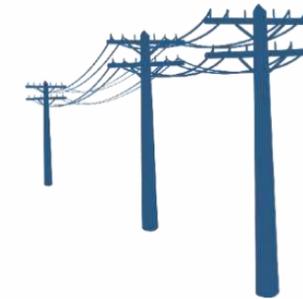
Negotiations with Private Parties



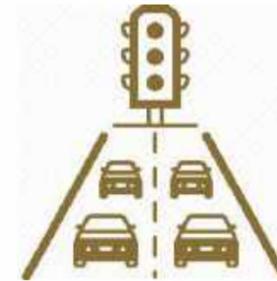
Soil Contamination



Utility Conflicts



Traffic Mitigation



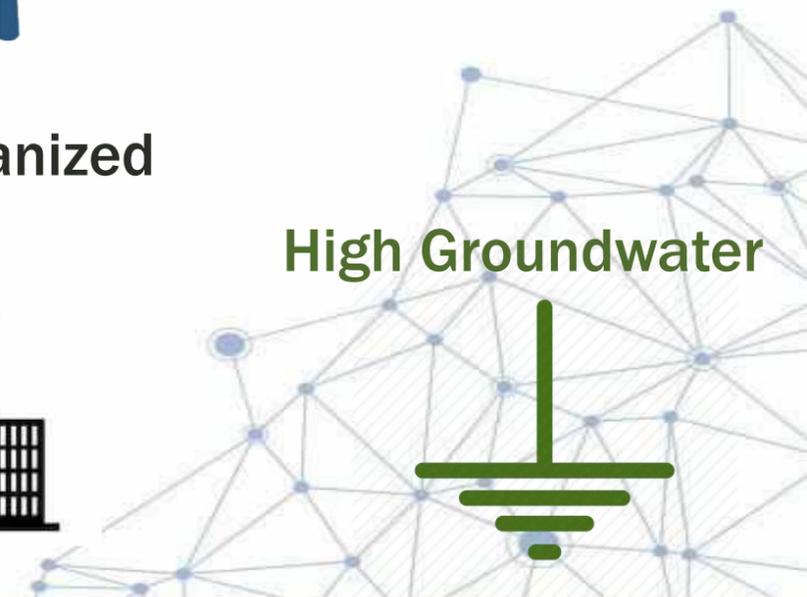
Heavily Urbanized



Underground Storage Tanks



High Groundwater



Example of Continued LRS Challenges

- **Arroyo Seco**

- Four priority outfalls

High Groundwater

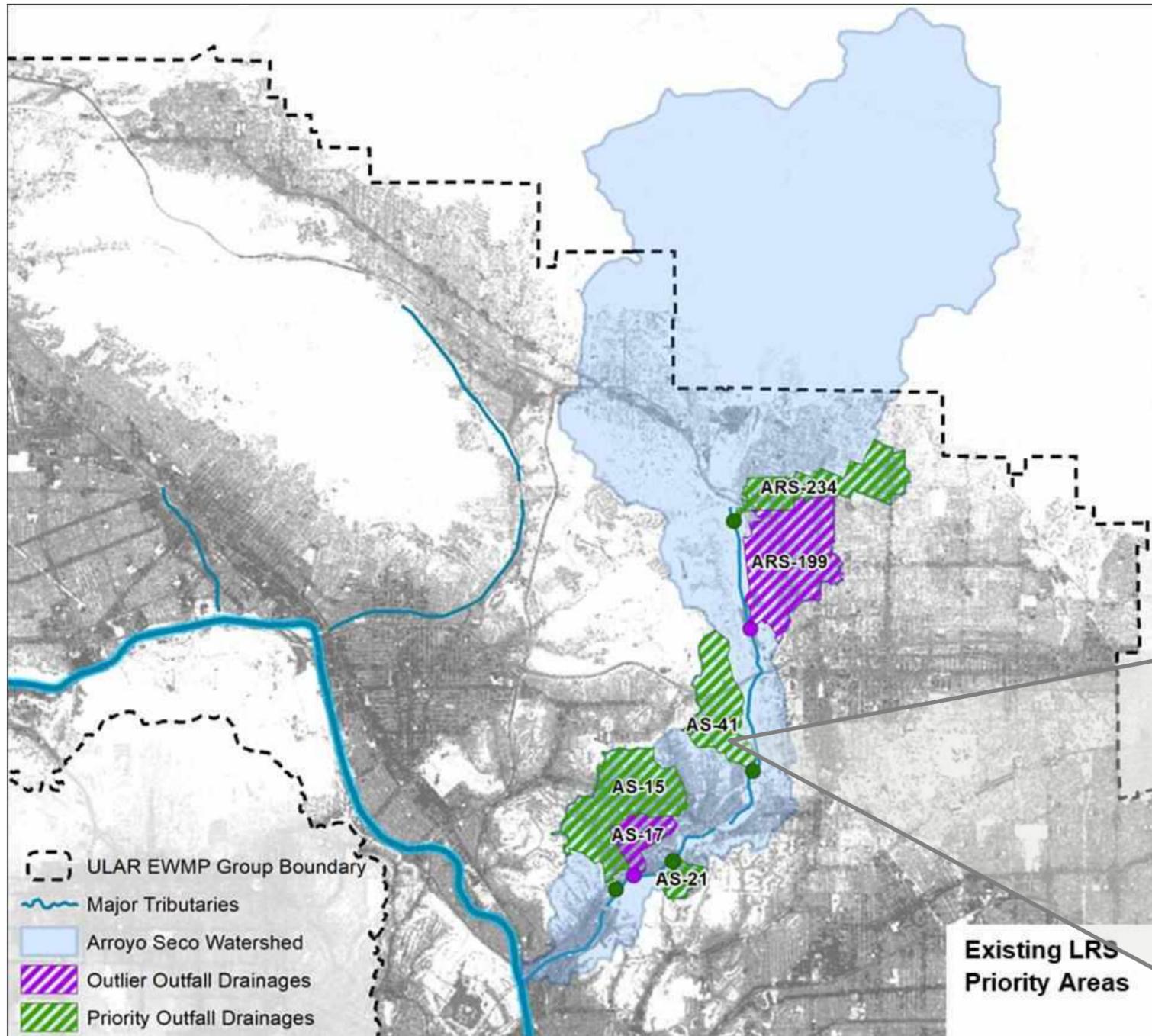


Water Rights

Negotiations with Private Parties

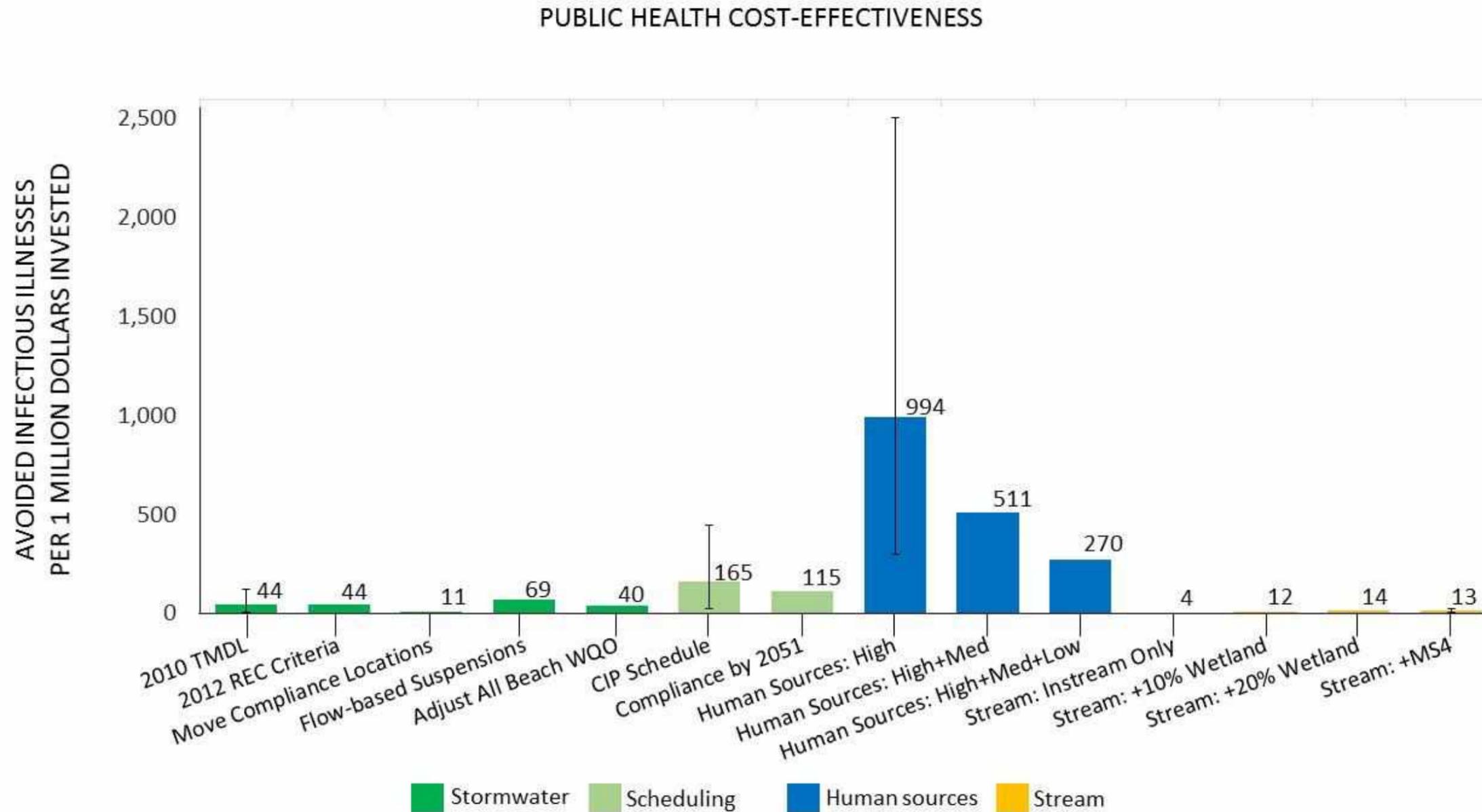


Soil Contamination



Fecal Indicator Bacteria (FIB) vs Pathogens

FIB are indicators of pathogens but do not cause illness directly



CBA Steering Committee, 2017

Adaptive Management of LRS

Current Approach

Load Reduction Strategy



Uncertain Beneficial Use Attainment

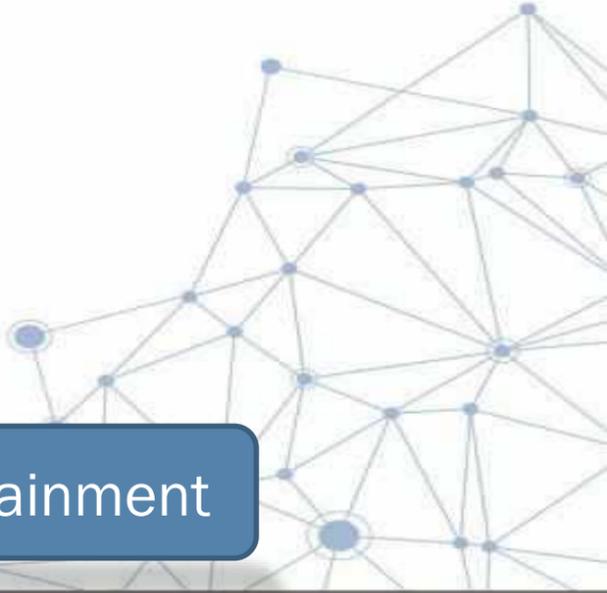
New Proposed Approach

Load Reduction Strategy

Strategic Work Plan to Prioritize Source ID and Abatement Efforts



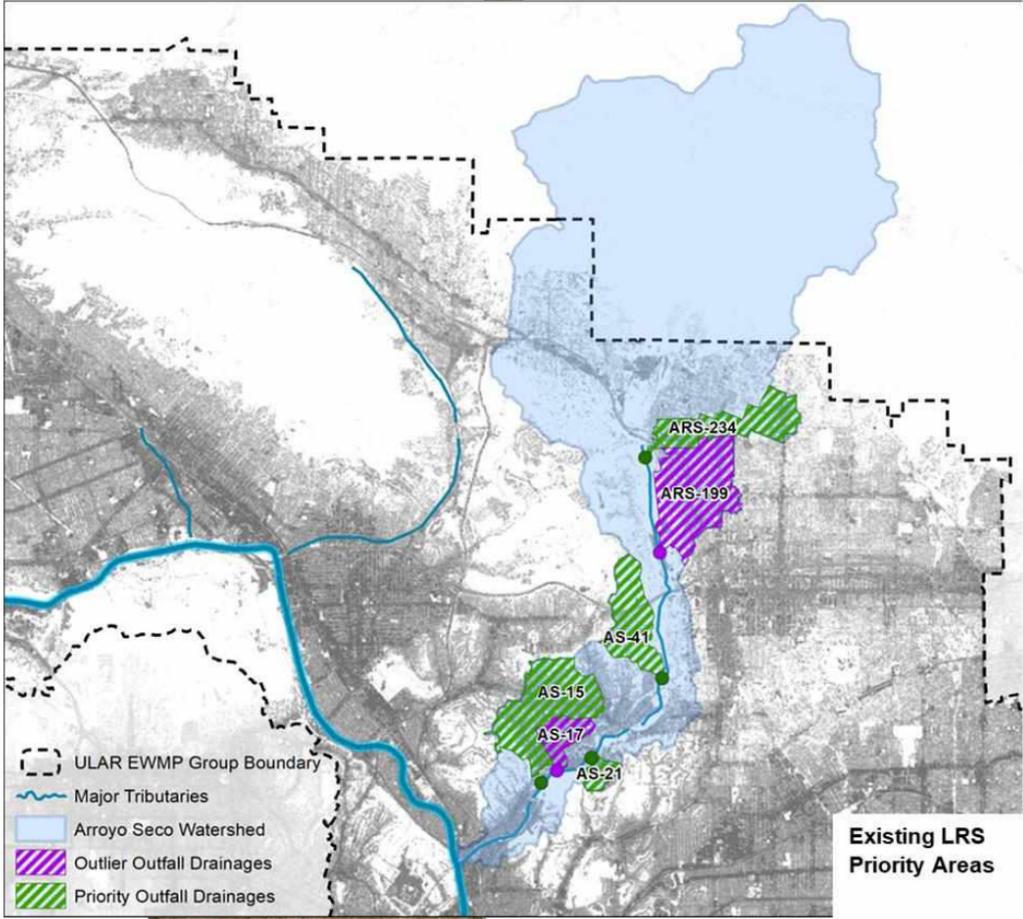
Assured Beneficial Use Attainment



Adaptive Management of LRS

Current Approach

Load Reduction Strategy

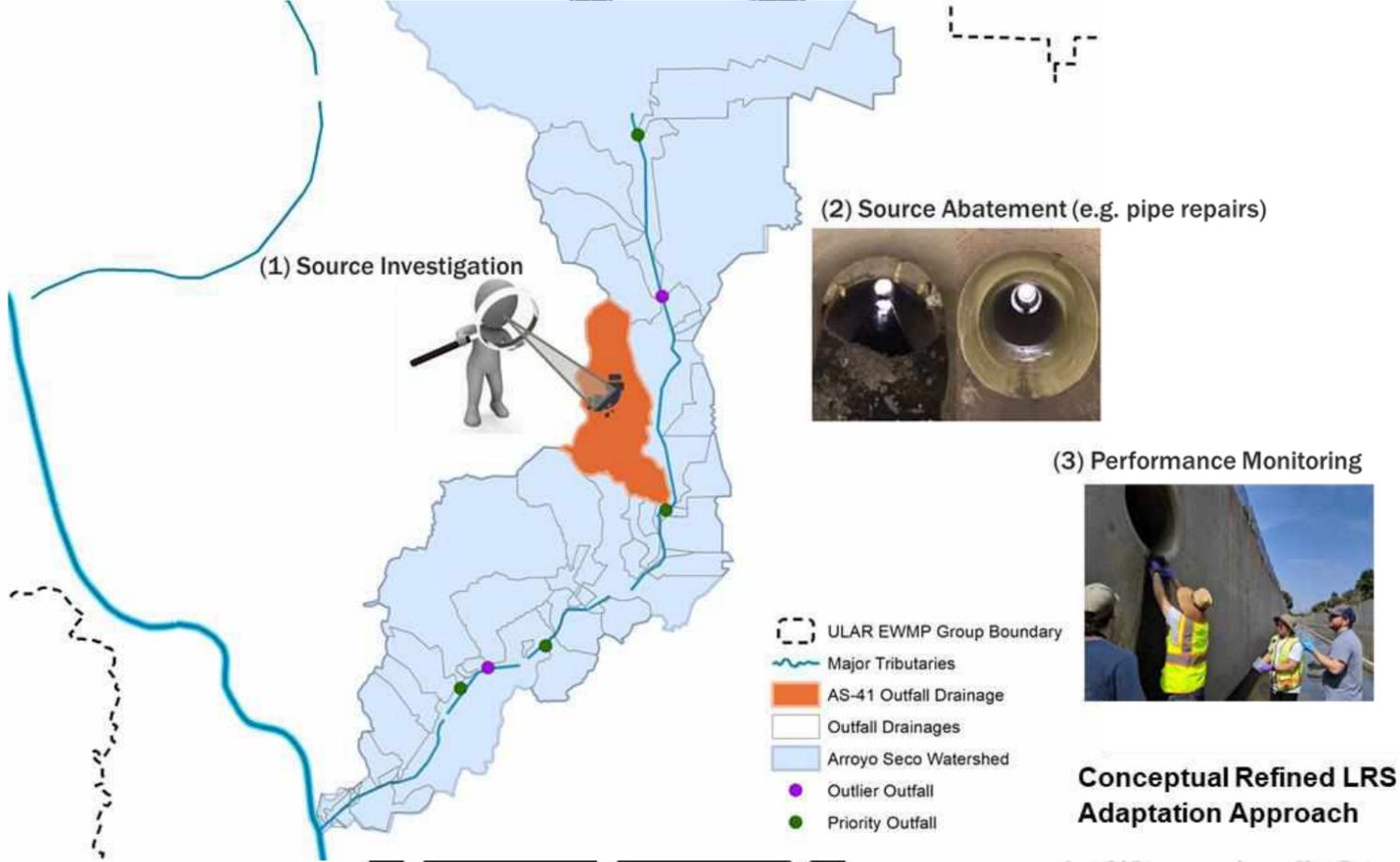


Uncertain Beneficial Use Attainment

New Proposed Approach

Load Reduction Strategy

Strategic Work Plan to Prioritize Source ID and Abatement Efforts



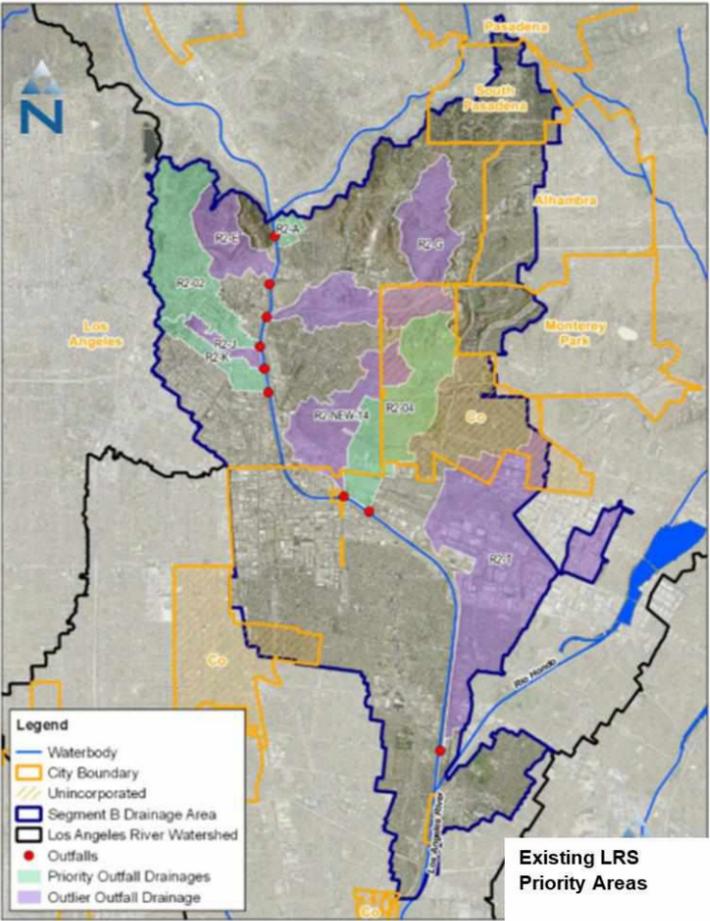
Assured Beneficial Use Attainment

Conceptual Refined LRS Adaptation Approach

Adaptive Management of LRS

Current Approach

Load Reduction Strategy

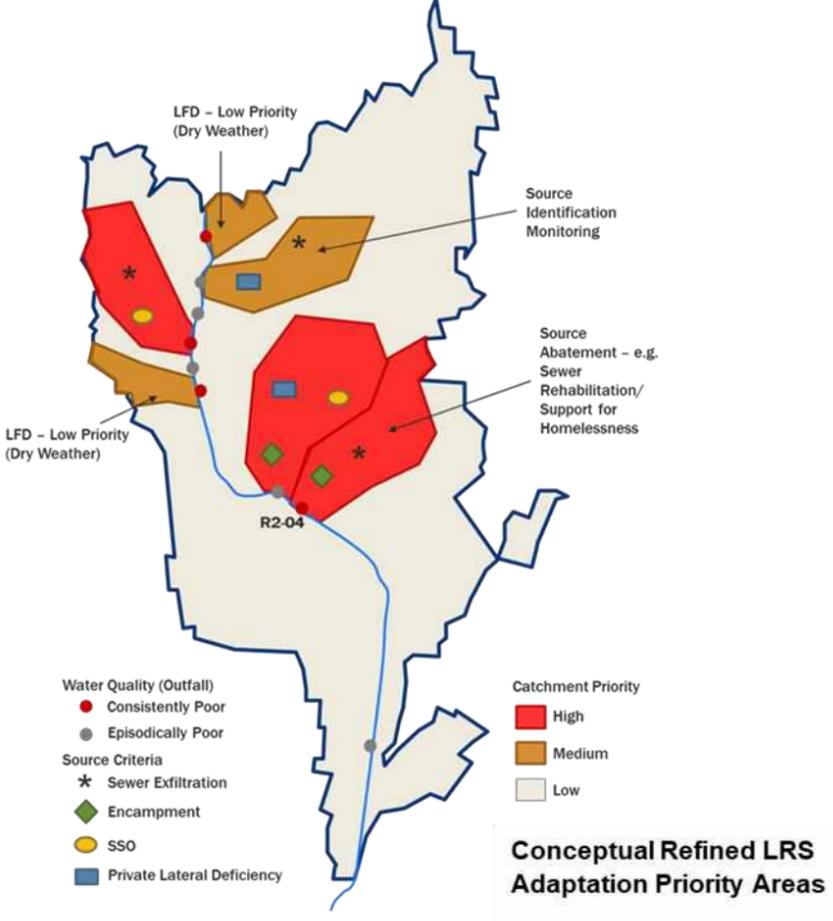


Uncertain Beneficial Use Attainment

New Proposed Approach

Load Reduction Strategy

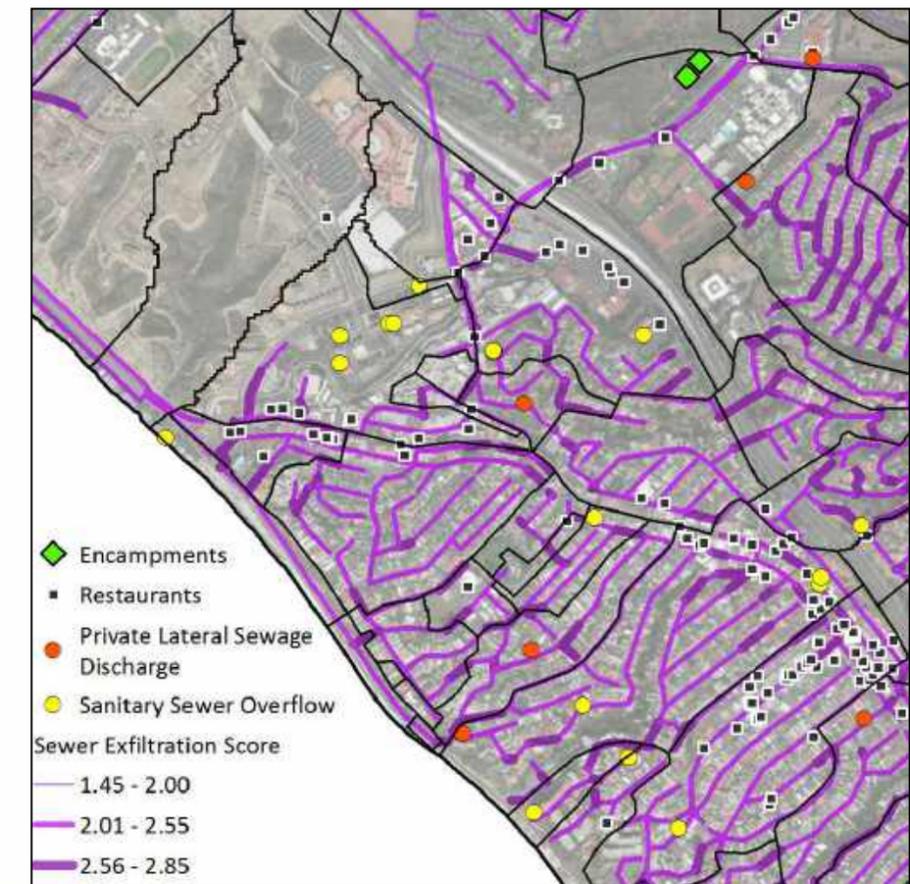
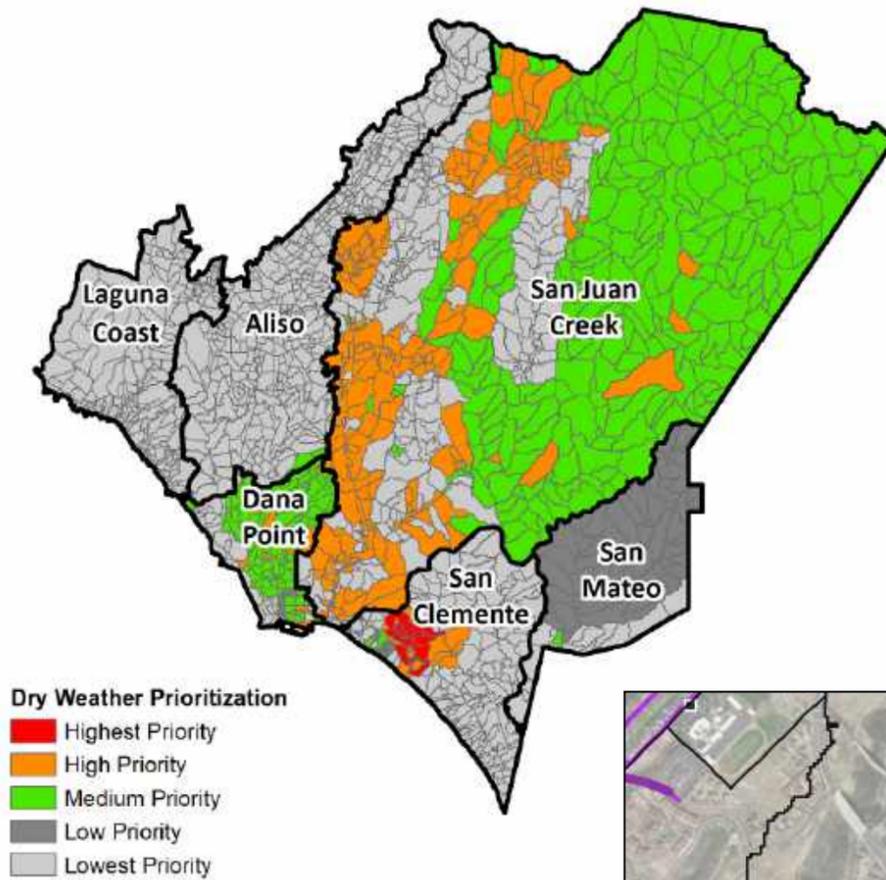
Strategic Work Plan to Prioritize Source ID and Abatement Efforts



Assured Beneficial Use Attainment

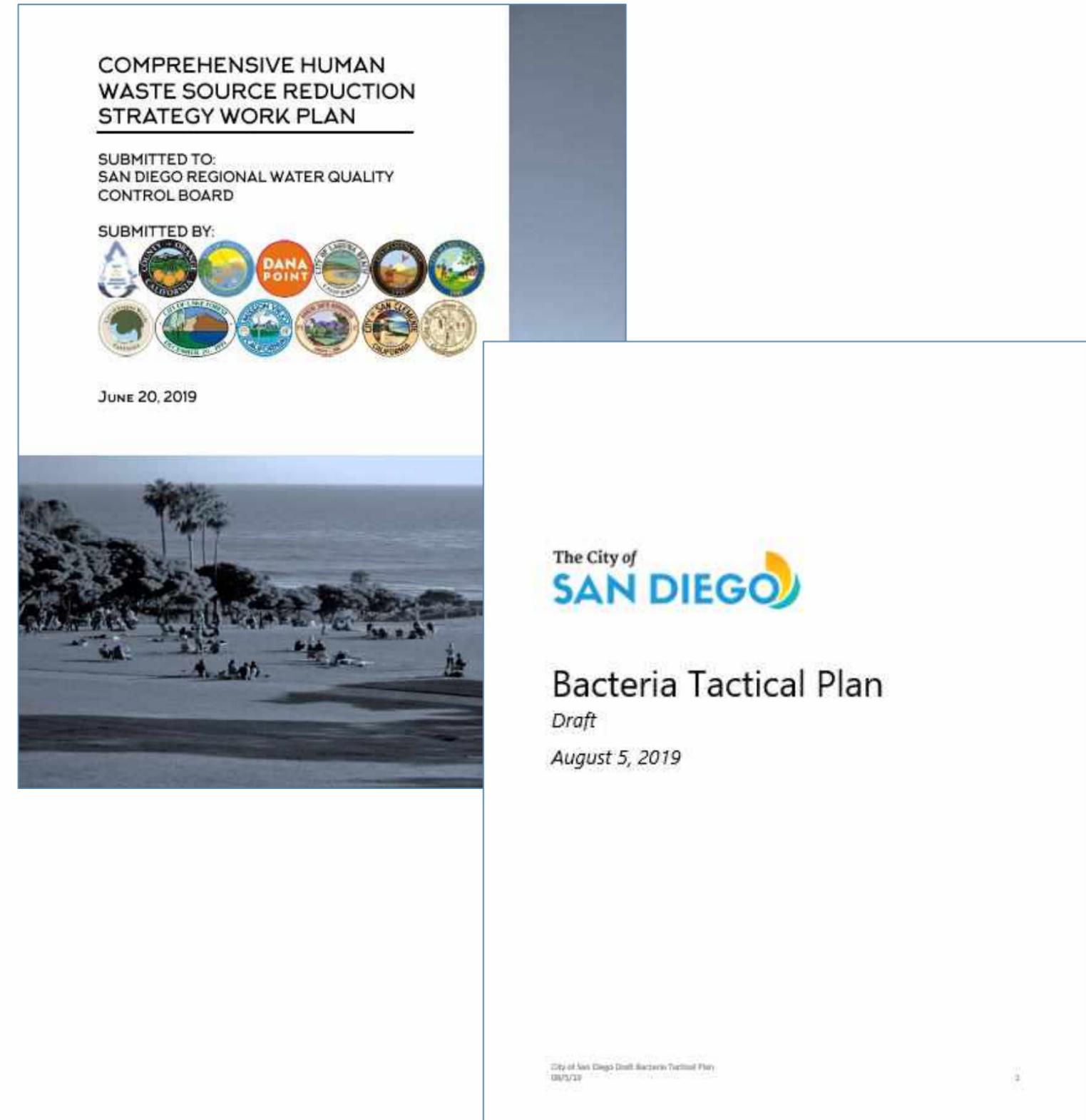
Outcomes & Benefits

- Refine prioritized investigation/abatement areas based on feasibility and effectiveness
- Evaluate potential pathogen sources, ID data gaps, monitoring to fill, and appropriate abatement actions
- More cost-effective implementation actions, protective of beneficial uses
- Potential to leverage methods and data region-wide
- Coordination with stakeholders and Regional Board, to ensure align with regulatory expectations



Outcomes & Benefits

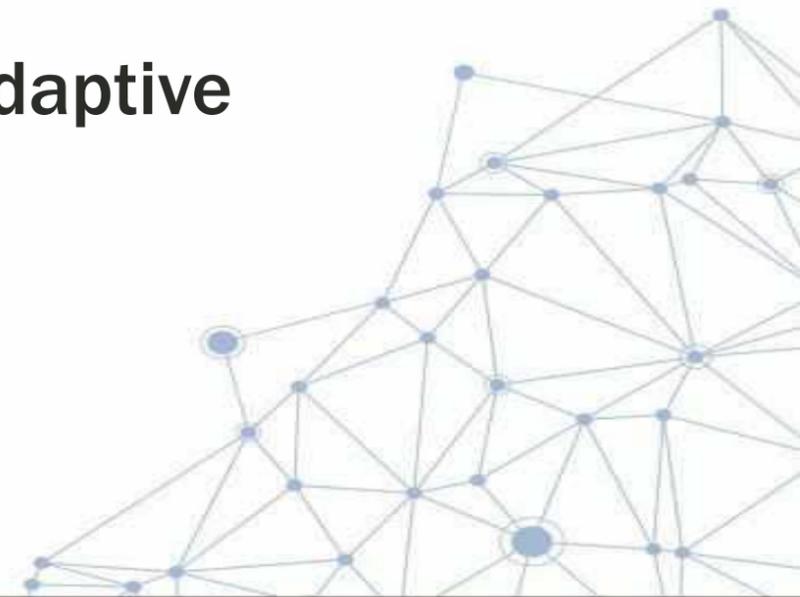
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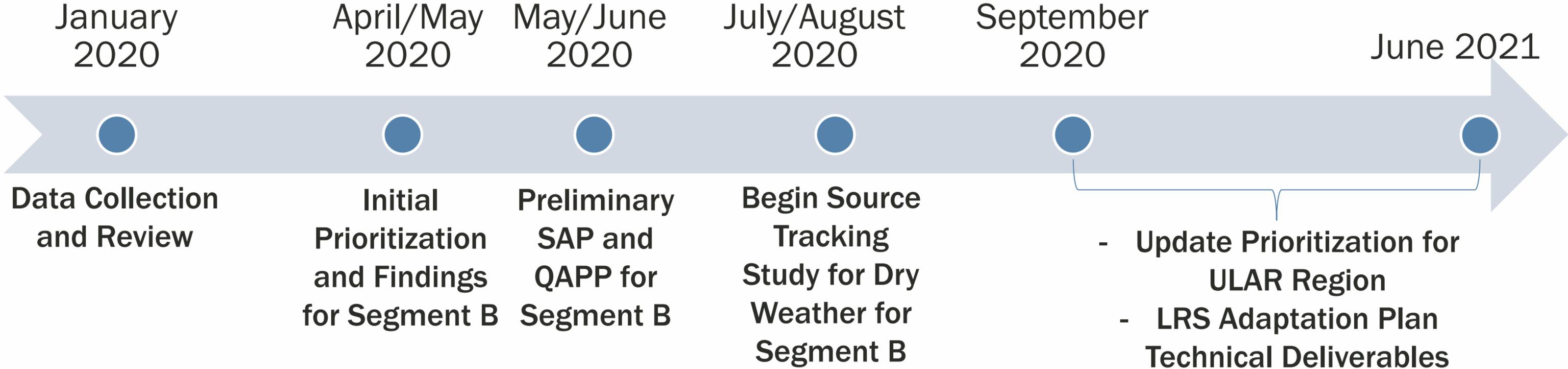
Outcomes & Benefits

Safe, Clean Water Program Objectives Addressed:

- **Improve water quality and contribute to attainment of water quality requirements**
 - Progress toward attainment of bacteria-related water quality objectives
- **Improve public health by preventing and cleaning up contaminated water**
 - Focused on protecting public health
- **Encourage innovation and adoption of new technologies and practices**
 - Applying significant advances in scientific understanding of bacteria-related issues
- **Implement an iterative planning and evaluation process to ensure adaptive management**
 - Plan itself is adaptive management
- **Promote green jobs and career pathways**
 - Source ID/Abatement efforts require appropriate staffing



Schedule and Budget for FY 20-21



- **Cost FY 20-21: \$250K**
 - Upper Los Angeles River: \$192,500
 - Rio Hondo: \$57,500

• **Phase II: FY 21-22, 22-23 – Continue source ID/abatement based on LRS Adaptation Plan findings, schedule focused on earliest regulatory deadlines**

Questions?



CJ Caluag

From: Jon Ball <jon.ball@lacity.org>
Sent: Friday, January 24, 2020 1:03 PM
To: CJ Caluag
Subject: Zinc Recalculation Study (follow up)

CAUTION: External Email. Proceed Responsibly.

Hello CJ,

I gave the presentation for "Recalculation of Zinc Wet Weather Criterion" (Scientific Study Proposal), on January 22 at the ULAR WASC meeting. There was a question that came up during the Q&A period that I did not adequately answer and would like to provide clarification. I believe it was Kris Markarian from City of Pasadena that asked the following question (paraphrase):

Question: *What are the current and upcoming TMDL compliance milestones for Zinc in LA River?*

Answer:

The table below is taken from page Attachment O, pg O-5 of the current MS4 (Stormwater) Permit:

3. Permittees shall comply with interim and final water quality-based effluent limitations for metals discharged to the Los Angeles River and its tributaries, per the schedule below:

Deadline	Total Drainage Area Served by the MS4 required to meet the water quality-based effluent limitations (%)	
	Dry weather	Wet weather
January 11, 2012	50	25
January 11, 2020	75	--
January 11, 2024	100	50
January 11, 2028	100	100

In addition, the LA River Enhanced Watershed Management Plan (EWMP) also lists an interim milestone of 31% (effective January 2017). So, basically the next Wet Weather compliance date is 2024, whereby 50% of the drainage area needs to be in compliance with the applicable effluent limitations. Full compliance must be achieved by 2028. The compliance schedule is one of the driving factors as to why this is a necessary and timely study.

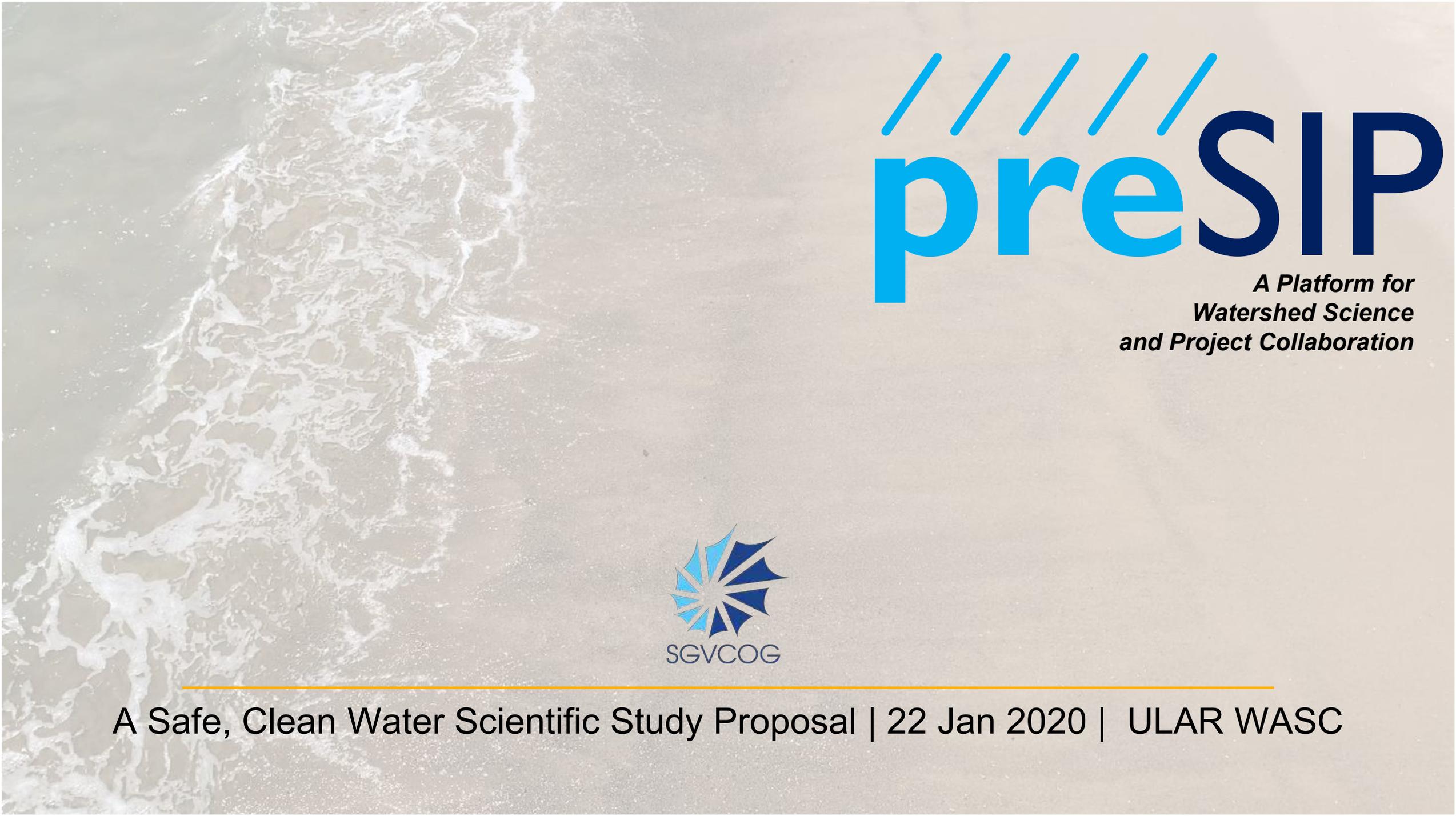
Please feel free to distribute this info to the WASC members.

Thank you,
-Jon Ball

--

Jon Ball | Environmental Supervisor | LA Sanitation
Watershed Protection Program
(323)-342-1557





presIP

*A Platform for
Watershed Science
and Project Collaboration*

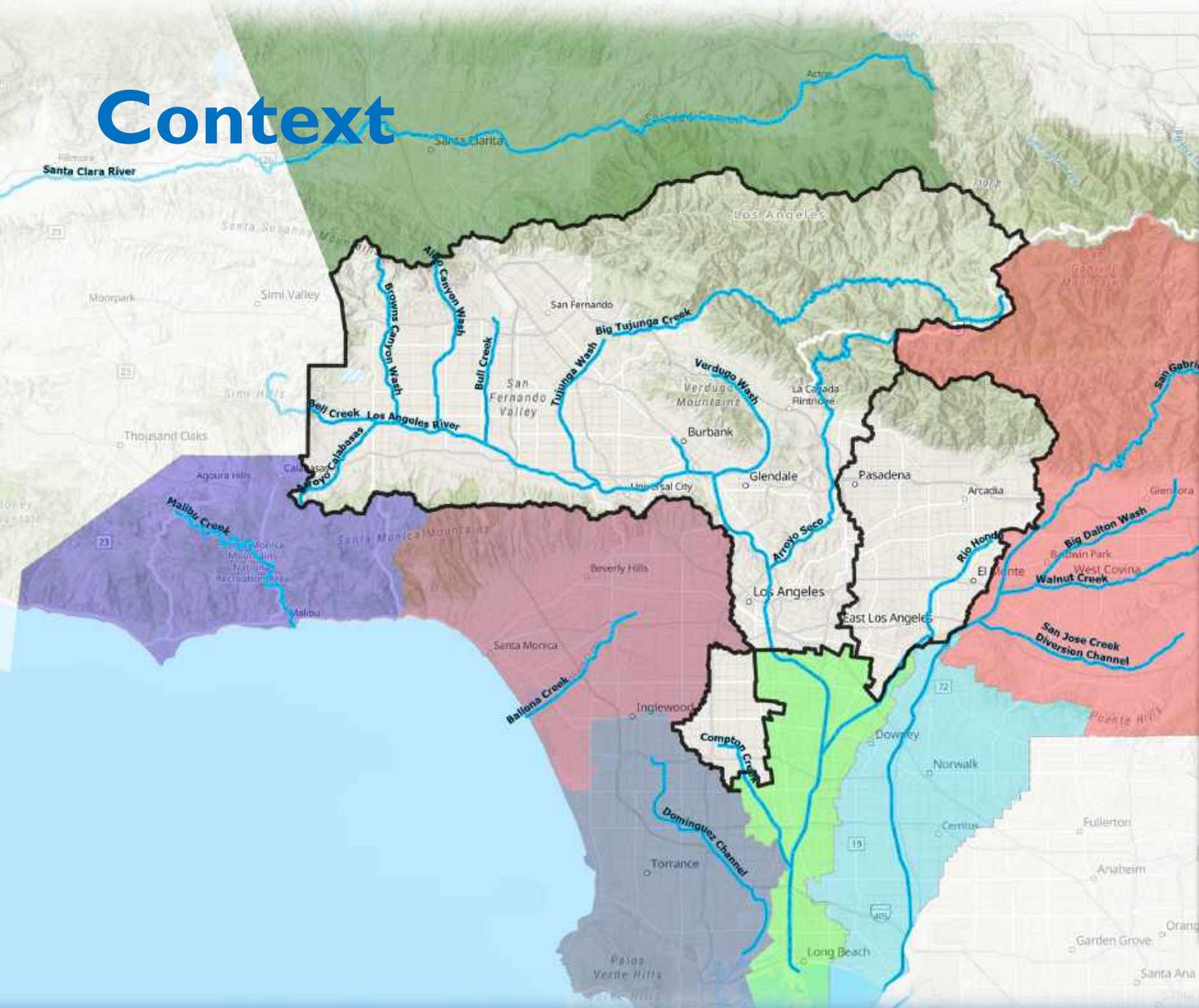


A Safe, Clean Water Scientific Study Proposal | 22 Jan 2020 | ULAR WASC



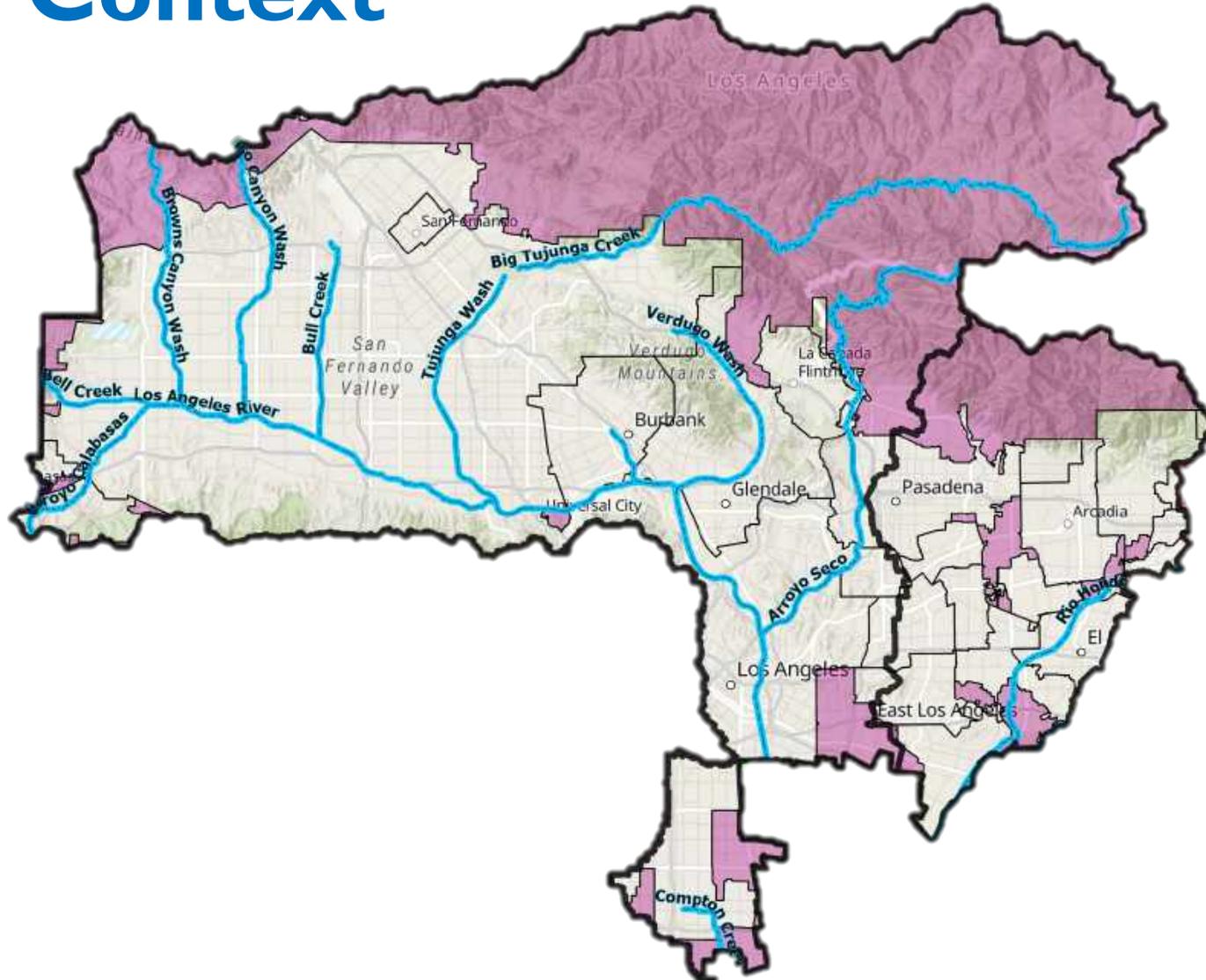
Why Are We Here?

Context



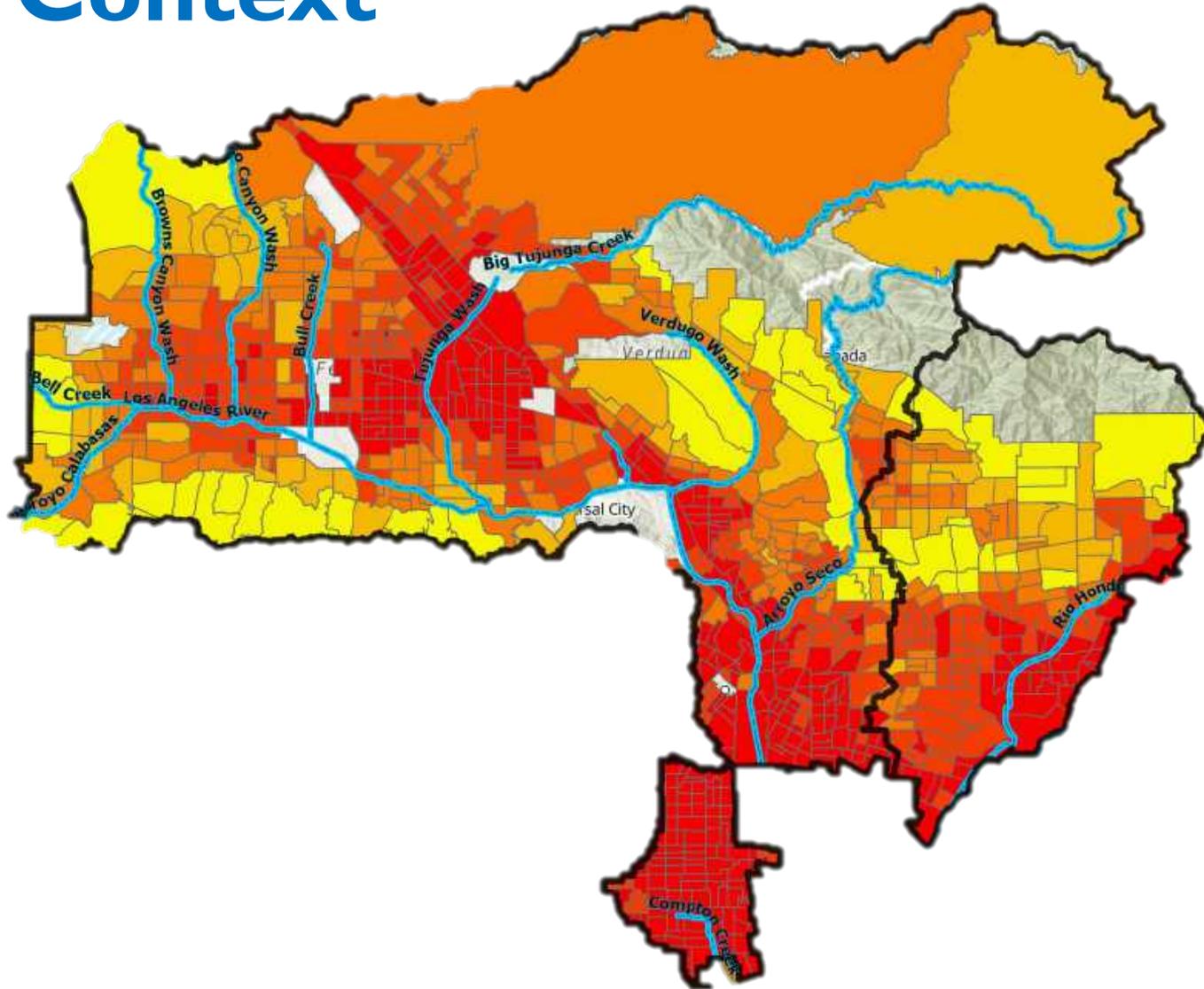
**TOGETHER,
LARGEST
WATERSHED
AREA BY...**

Context



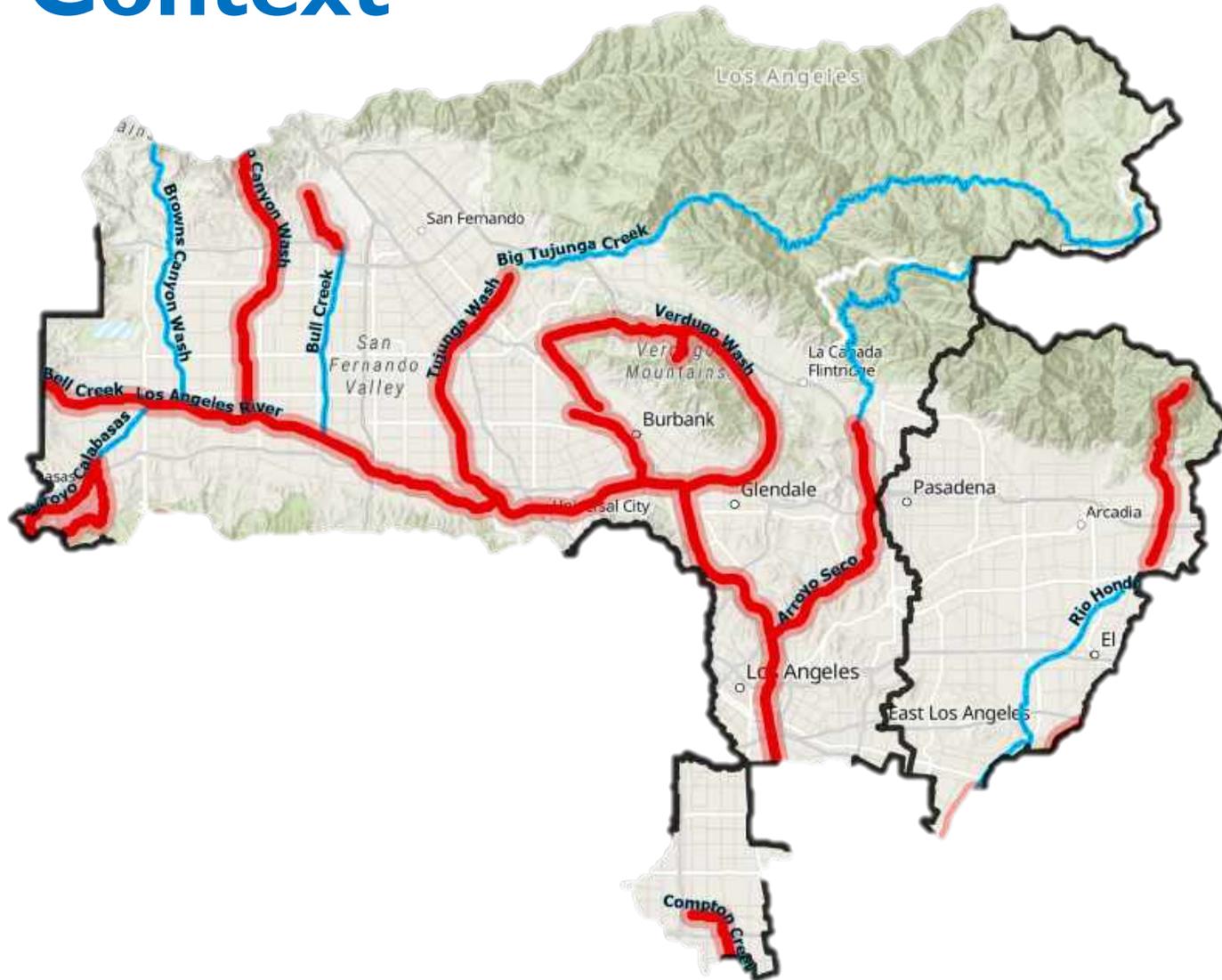
**AREA
CITIES
POPULATION
DACs
GROUND-
WATER**

Context



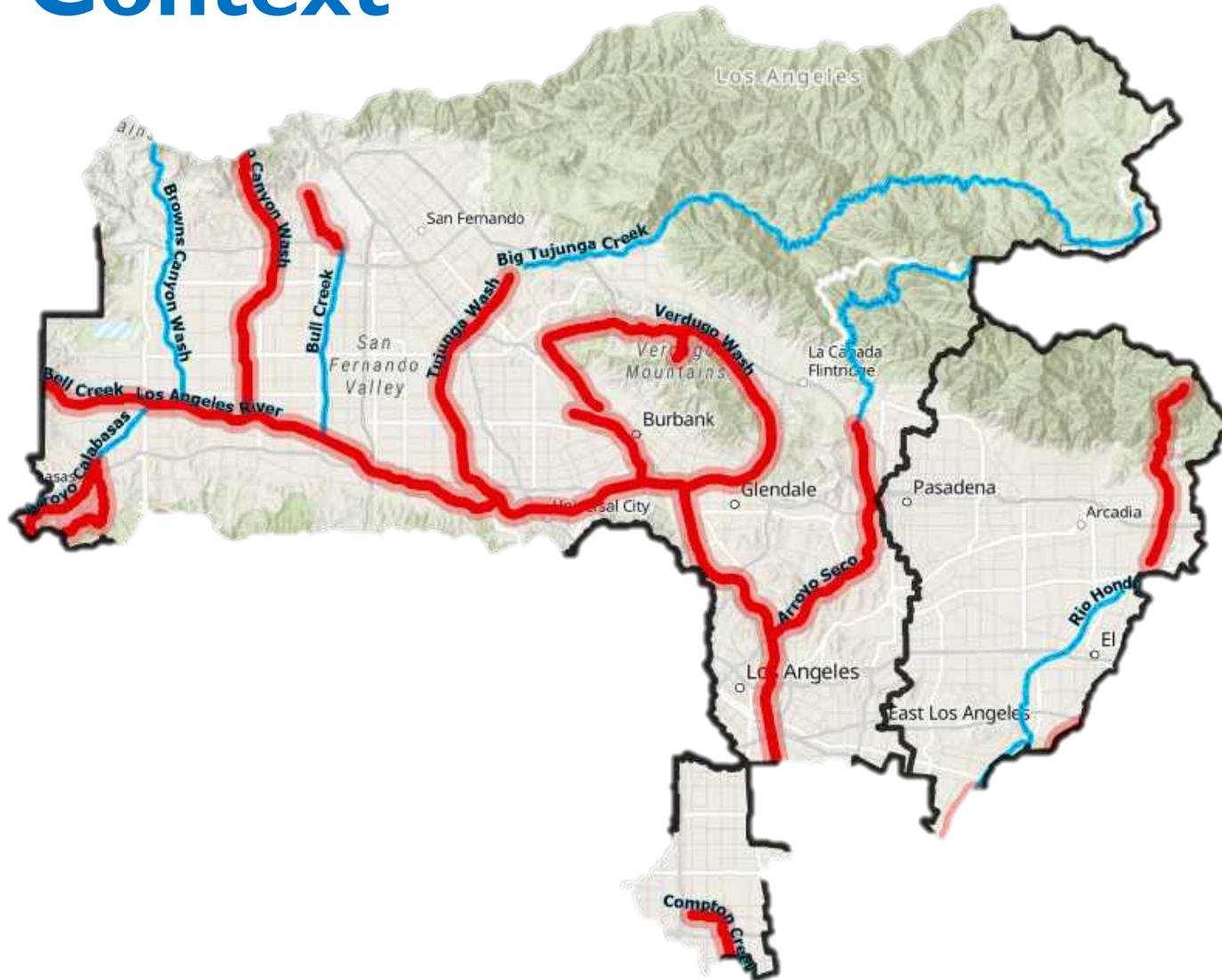
**AREA
CITIES
POPULATION
DACs
GROUND-
WATER**

Context



**62 IMPAIRED
WATERBODY
SEGMENTS
(33 MILES)**

Context



\$6B+
to address
water quality
alone

All Eyes on the WASC

WATERSHED
MGMT
PROGRAMS
(E/WMPs)

NGOs

AGENCY

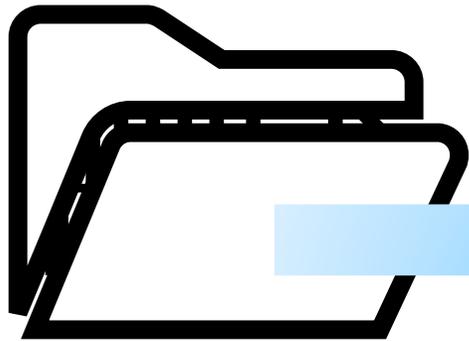


SW
CAPTURE
MASTER
PLAN

ELECTED

PUBLIC

Building Your Best SIP



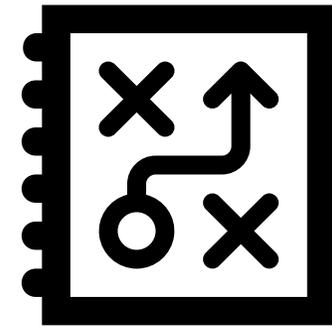
**CANDIDATE
FEASIBILITY
STUDIES**



Building Your Best SIP

SIP Needs to Be:

- Efficient & Balanced

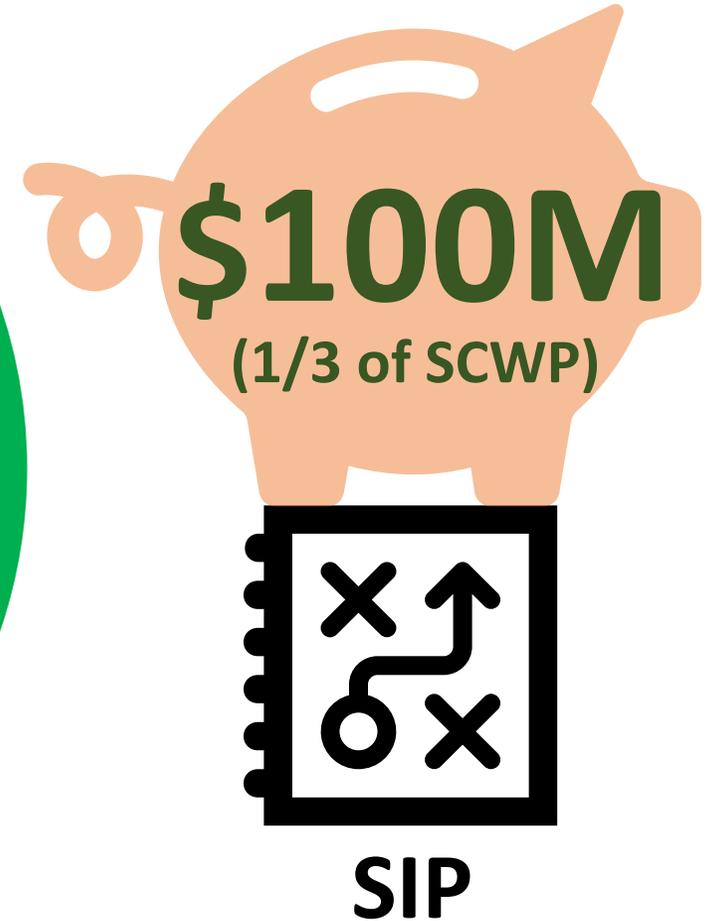
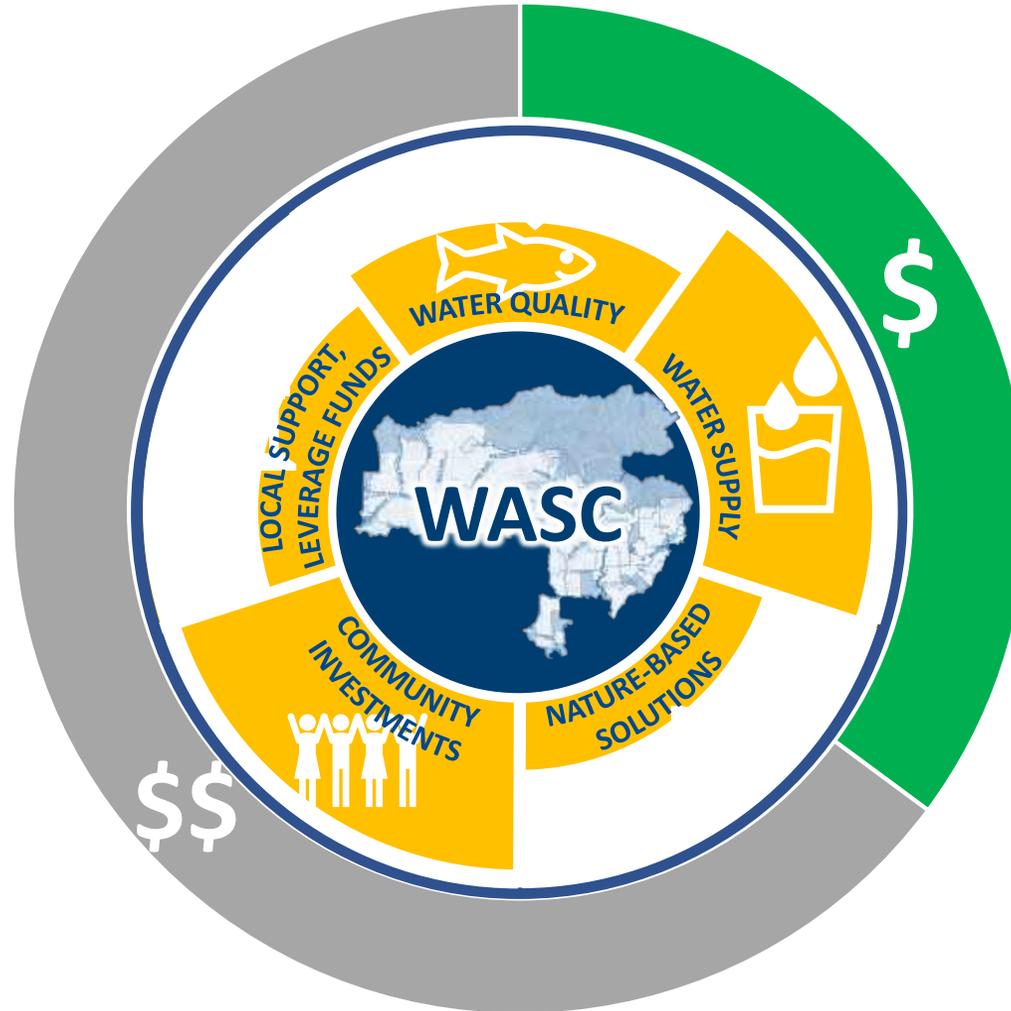


SIP

Building Your Best SIP

SIP Needs to Be:

- Efficient & Balanced
- Defensible & Collaborative



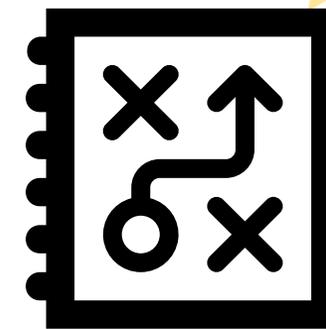
Building Your Best SIP

SIP Needs to Be:

- Efficient & Balanced
- Defensible & Collaborative
- Science-Driven Assurance of Compliance



COMPLIANCE TARGET 

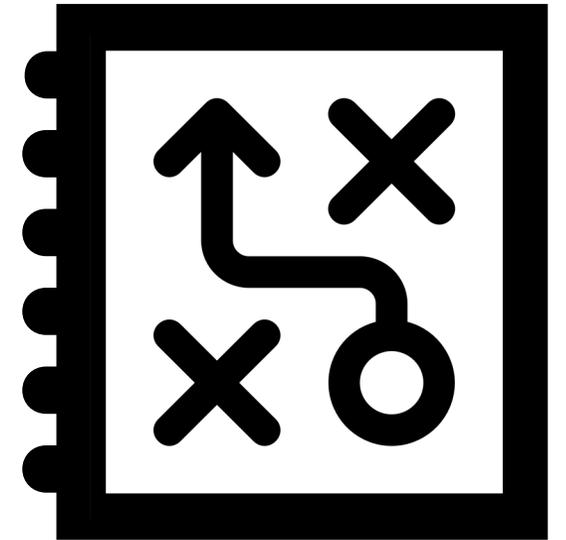


SIP

Building Your Best SIP

SIP Needs to Be:

- Efficient & Balanced
- Defensible & Collaborative
- Science-Driven Assurance of Compliance
- Adaptable & Accessible



SIP

preSIP is Here to Help



preSIP is Here to Help



preSIP is Here to Help



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preSIP



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preSIP



EWMP

NOW

DEADLINE



preSIP is Here to Help



preSIP



FWMP

DEADLINE

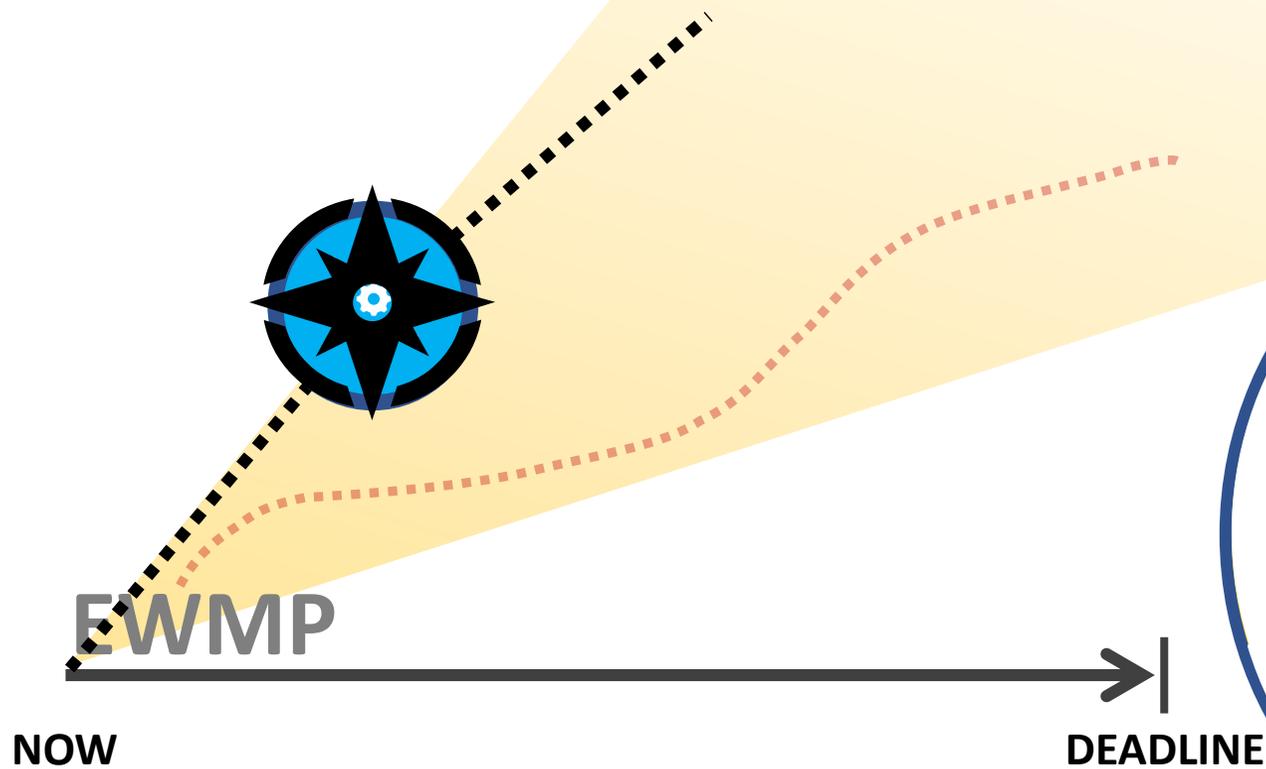


preSIP is Here to Help


PROJECTS


preSIP


COMPLIANCE TARGET



preSIP is Here to Help


PROJECTS


preSIP


COMPLIANCE
TARGET



EWMP

NOW

DEADLINE

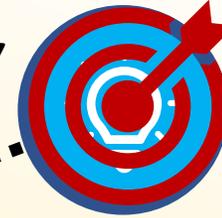


preSIP is Here to Help



preSIP

PROJECTS PATHWAY



COMPLIANCE TARGET



EWMP

NOW

DEADLINE

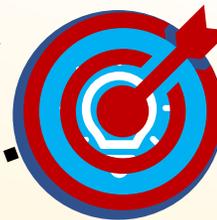


preSIP is Here to Help



preSIP

PROJECTS PATHWAY



COMPLIANCE TARGET



EWMP

NOW

DEADLINE



preSIP is Here to Help



preSIP

PROJECTS PATHWAY



COMPLIANCE TARGET



preSIP is Here to Help



preSIP

PROJECTS PATHWAY PLATFORM

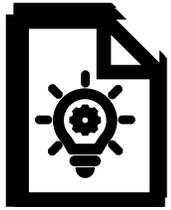


preSIP is Here to Help

PROJECTS PATHWAY PLATFORM



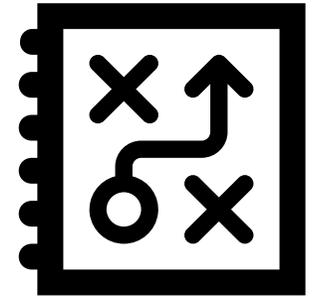
preSIP is a scientific study to build a platform for collaboration that can BALANCE and AMPLIFY your SIP outcomes



CANDIDATE
FEASIBILITY
STUDIES

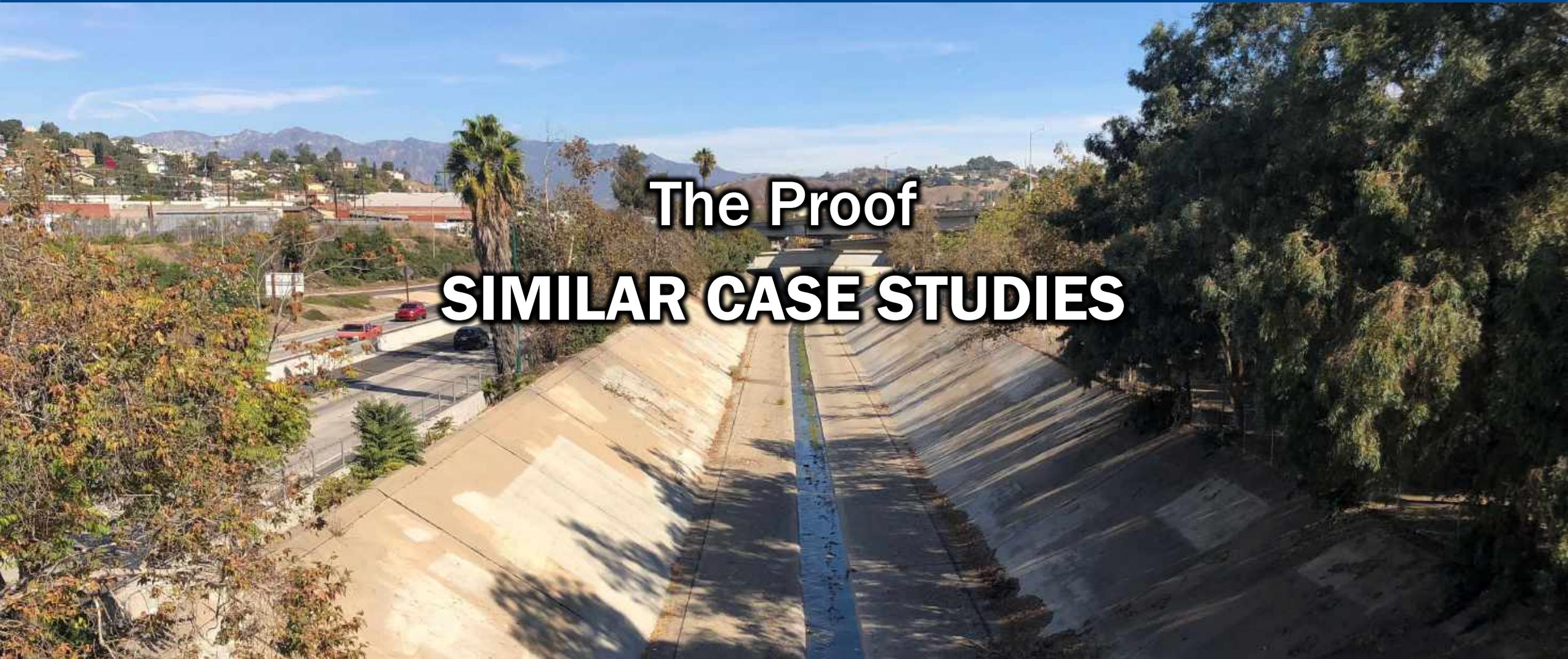


OTHER
POTENTIAL
PROJECTS



BEST SIP

- Efficient & Balanced
- Defensible & Collaborative
 - Science-Driven
- Assurance of Compliance
- Adaptable & Accessible

An aerial photograph of a long, straight concrete-lined canal. The canal is filled with water and runs through a landscape of trees and vegetation. In the background, there are residential buildings and mountains under a clear blue sky. The text "The Proof" and "SIMILAR CASE STUDIES" is overlaid on the image.

The Proof
SIMILAR CASE STUDIES

Beyond Proof-of-Concept

- Rio Hondo/San Gabriel reWMP
- LA River Upper Reach 2 WMP Feasibility Studies
- Compton Creek Strategic Project Pilot Study
- Dominguez Channel Adaptive Management Screening
- Lower San Gabriel River Feasibility Studies
- Upper LA River Pilot Study

73%
Savings

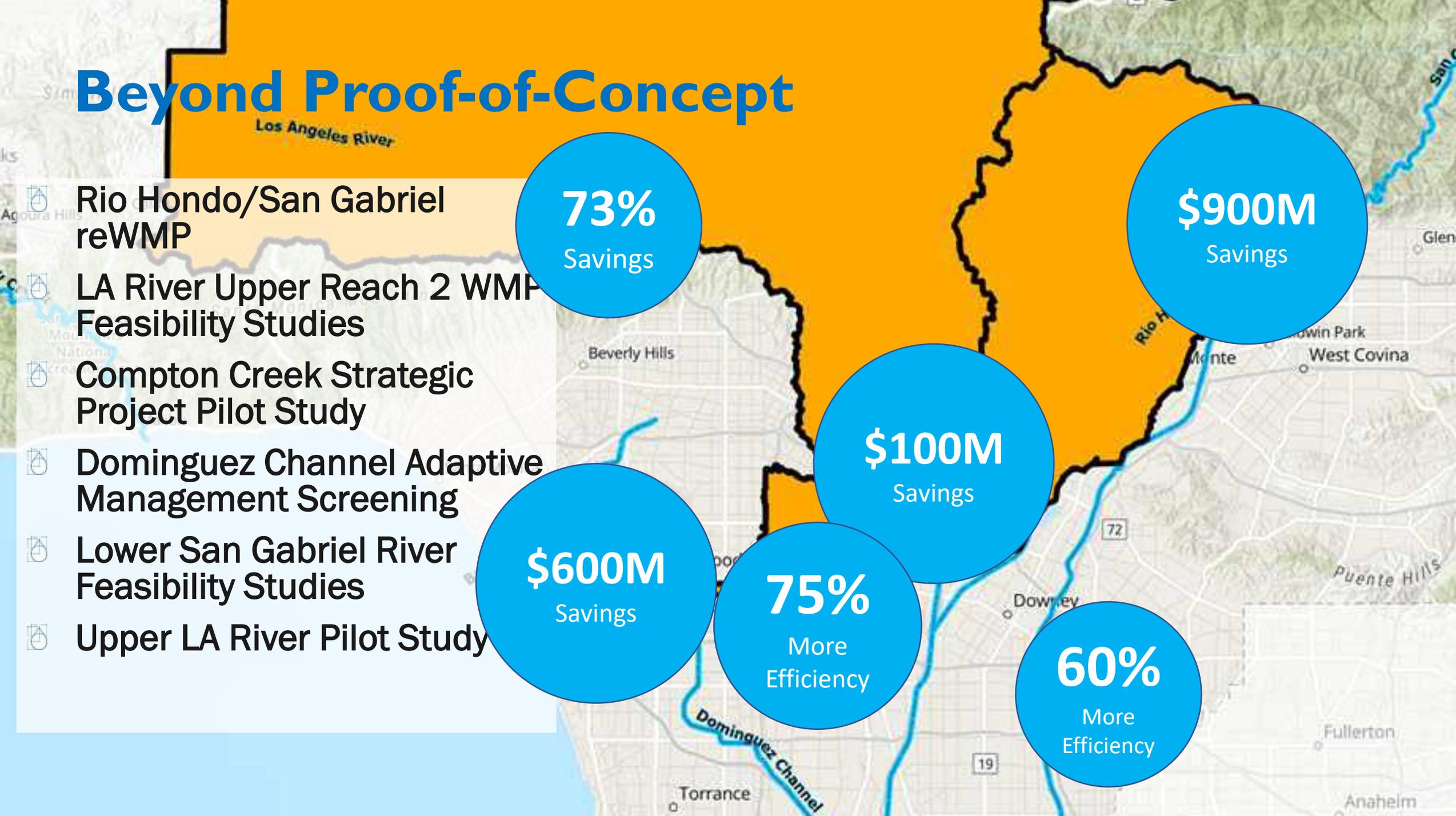
\$900M
Savings

\$100M
Savings

\$600M
Savings

75%
More Efficiency

60%
More Efficiency



Beyond Proof-of-Concept

Rio Hondo/San Gabriel reWMP

LA River Upper Reach 2 WMP Feasibility Studies

Compton Creek Strategic Project Pilot Study

Dominguez Channel Adaptive Management Screening

Lower San Gabriel River Feasibility Studies

Upper LA River Pilot Study

73% Savings

\$900M Savings

73%

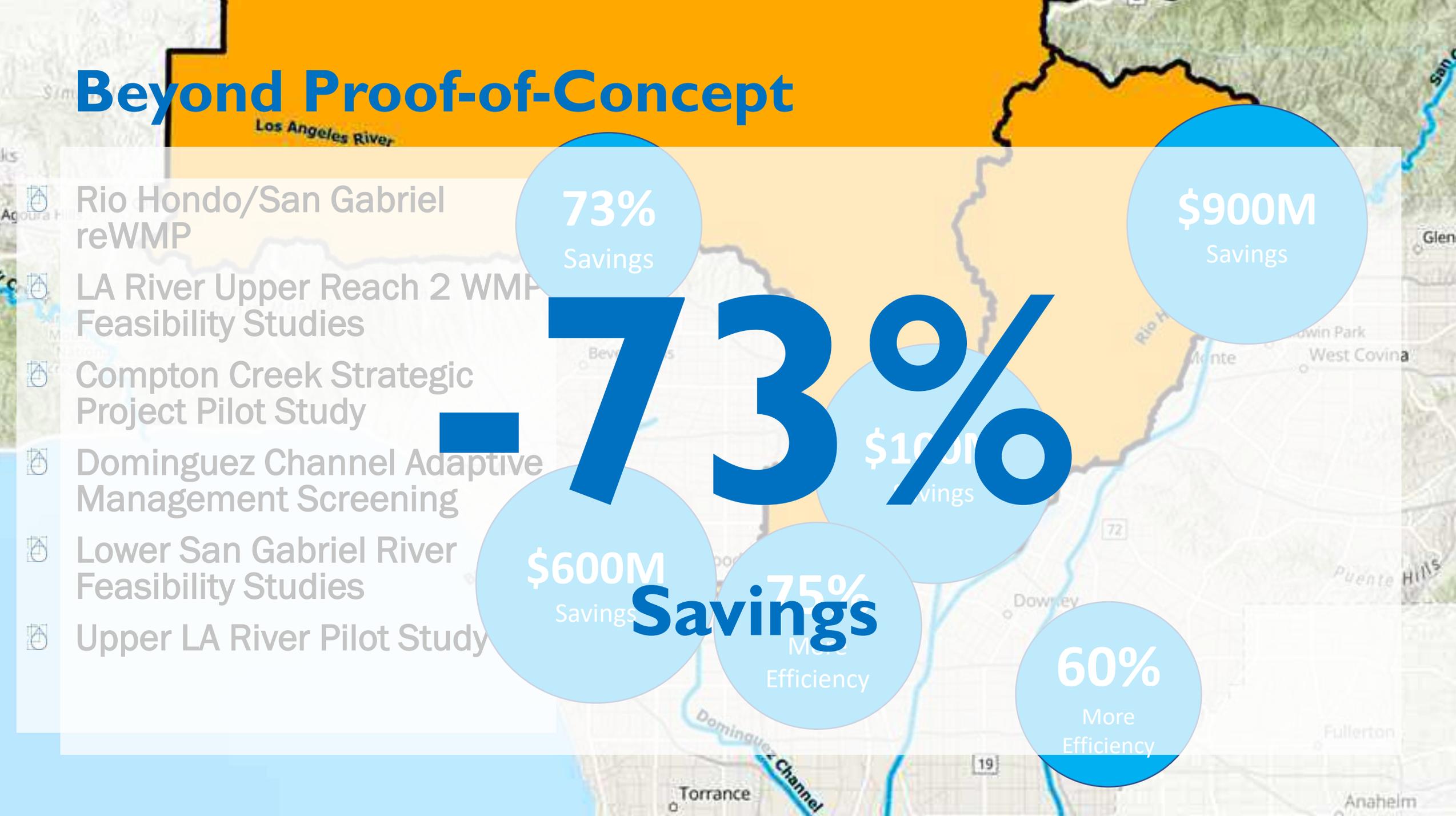
\$100M Savings

\$600M Savings

Savings

75% More Efficiency

60% More Efficiency



Beyond Proof-of-Concept

- Rio Hondo/San Gabriel reWMP
- LA River Upper Reach 2 WMP Feasibility Studies
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- Dominguez Channel Alternative Management Screening
- Lower San Gabriel River Feasibility Studies
- Upper LA River Pilot Study

73% Savings

\$900M Savings

\$4.35B

\$600M Savings
75% More Efficiency

60% More Efficiency

Watershed-Wide



Building it Together



Support for the preSIP Study



ULAR WATERSHED MANAGEMENT GROUP (REPRESENTING 19 PARTNER AGENCIES ACROSS ULAR AND RH)



What Makes it Special



	preSIP
COVERAGE	ULAR and Rio Hondo Watershed Areas
WASC COORDINATION	Directly coordinates with and leverages existing WASC structure
SUPPORT	Developed and funded in collaboration with the ULAR Watershed Management Group (including Rio Hondo Agencies) and with support from WMG and LADWP
ADMINISTRATION	SGVCOG offers fiscal clarity and efficient contracting
CERTAINTY AND PRIOR INVESTMENT	ULAR and RHSGR Groups already invested over \$0.6M to prove concept (can expect 50-90% enhancement in program efficiency)
PHILOSOPHY	Inclusive (schools, CBOs, other agencies), data-driven, bottom-up approach that reconciles municipal/regional spending
COMPLIANCE PLAN ACTIONABILITY	Will yield specific, implementation-oriented, engineer-informed pathway to compliance



**Hay Canyon Channel /
FIS Sports Facilities
Stormwater Capture Project
Feasibility Study**

PRESENTED BY THE CITY OF LA CANADA FLINTRIDGE

GREG JAQUEZ, PE, PROJECT MANAGER

GJAQUEZ@MNSENGINEERS.COM, (323) 797-1498

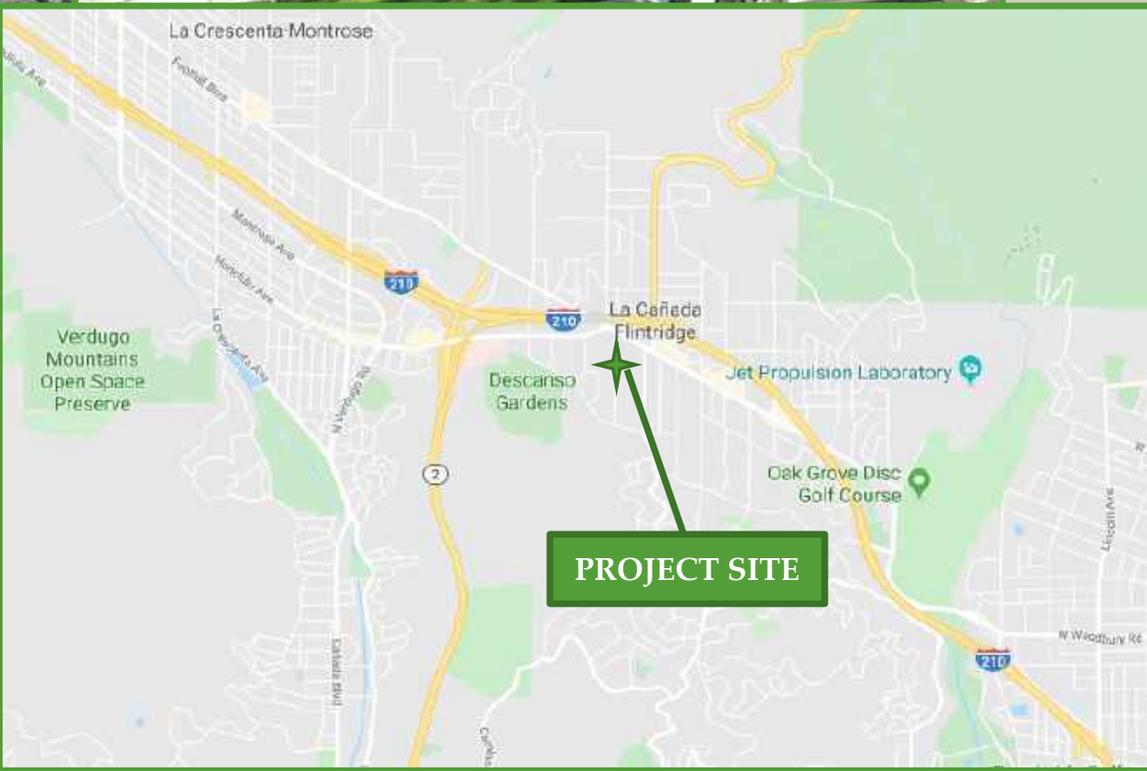
JANUARY 22, 2020



Hay Canyon Channel / FIS Sports Facilities Stormwater Capture Project

Project Location / Site

HAY CYN CHANNEL

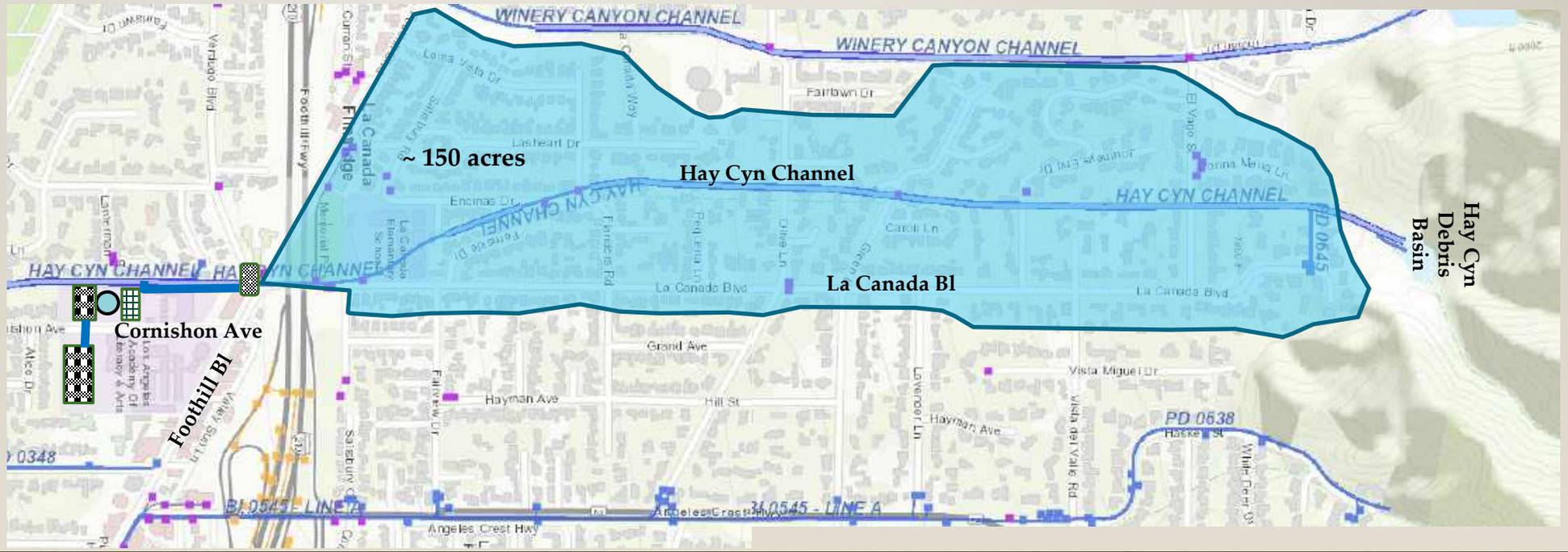


Project Site NOT Located in a DAC

Hay Canyon Channel / FIS Sports Facilities Stormwater Capture Project

Project Description

- Diversion from Hay Canyon Channel
- Detention/Treatment Under Upper Tennis Courts
- Storage for Irrigation Reuse Under Lower Tennis Courts
- Infiltration Chambers Under Playing Fields



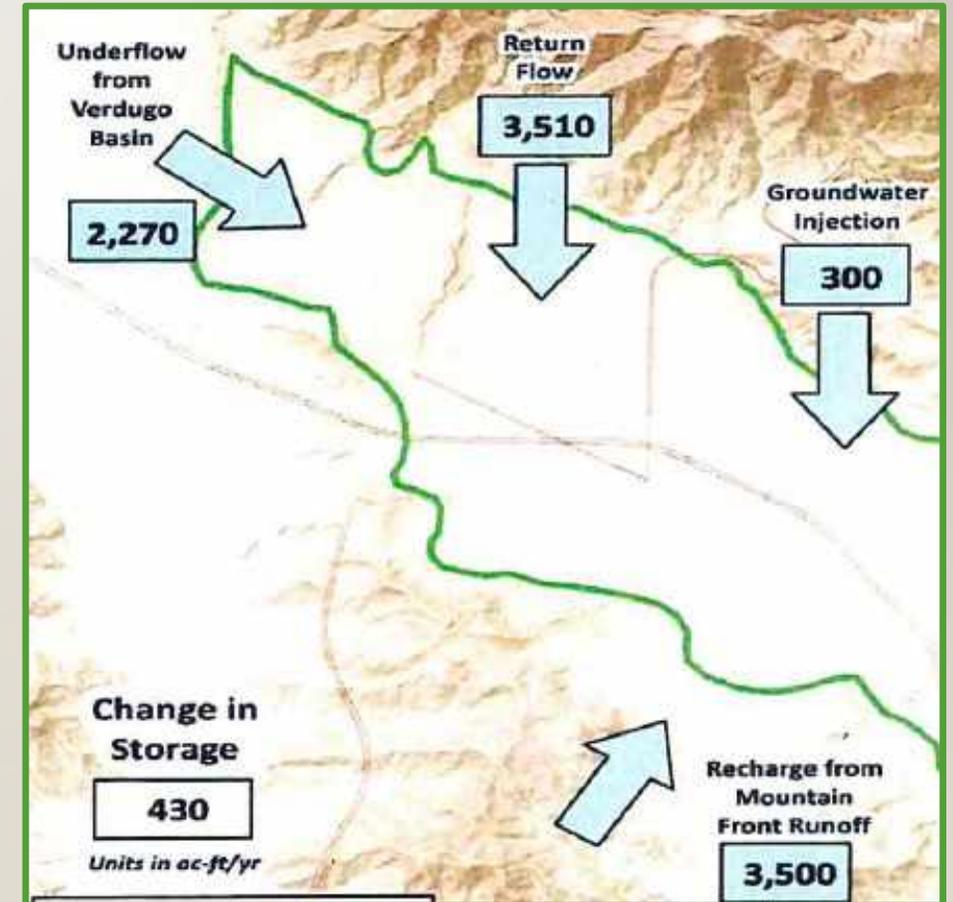
NOT TO SCALE



Hay Canyon Channel / FIS Sports Facilities Stormwater Capture Project

Feasibility Study Scope

- Potential Water Quality Volume Treatment
- Potential Water Reuse for Playing Field Irrigation
- Potential Groundwater Recharge



Hay Canyon Channel / FIS Sports Facilities Stormwater Capture Project

Project Outreach

- Discussions with LCUSD on Facilities Condition, Water Use
- City/LCUSD Coordination/Collaboration through Joint Use Committee
- Additional Discussion Venues through Planning Commission, Design Commission, Public Works & Traffic Commission, City Council, and LCUSD Board
- Feasibility Study to develop comprehensive outreach plan



Funding Details

Funding

- Feasibility Study Cost - \$300,000
- No matching funds, but City can provide SCW Municipal funds to cover costs exceeding budget
- Grant Request - \$300,000
- Matching Funds Source (if budget is exceeded) – SCW Municipal
- O&M Costs Per Year – Not Applicable for Feasibility Study

Partners

- LCUSD
- Valley Water Company



Hay Canyon Channel / FIS Sports Facilities Stormwater Capture Project

Program Preferences

- Climate change response through drought resilience
- Regional water self-reliance through offset of water purchase from Foothill MWD
- Addresses SCW Program Goals
 - Captures water otherwise lost to ocean
 - Protects local waters in Flint Canyon and Arroyo Seco
 - Modernization of groundwater recharge in area of Raymond Basin lacking recharge facilities
- Expected useful life of ~ 50 years
- Feasibility Study will initiate CEQA process



Hay Canyon Channel / FIS Sports Facilities Stormwater Capture Project

Benefits

Background Conditions

- Two playing fields demand high potable water use for irrigation
- Two sets of 4 tennis courts on unstable fill material

Physical Benefits

- Improved stores of groundwater supplies
- Improved groundwater quality
- Reduced reliance on potable water for irrigation
- Enhanced recreational facilities

Benefits Determination Method

- Feasibility Study will produce metrics on benefits through hydrologic, hydrogeologic, and economic analyses



Hay Canyon Channel / FIS Sports Facilities Stormwater Capture Project

Estimated Budget

Table 1 – Feasibility Study Budget

Category	Cost Share: Non-State Fund Source	Requested Grant Amount	Other Cost Share (including other State Sources)	Total Cost
Project Administration		\$30,000		\$30,000
Planning/Design/Engineering/Environmental Documentation		\$270,000		\$270,000
Grand Total		\$300,000		\$300,000



Hay Canyon Channel / FIS Sports Facilities Stormwater Capture Project

Feasibility Study Schedule

Task	Start Date	End Date
Direct Project Administration	07/06/2020	06/30/2021
Planning/Design/ Engineering/ Environmental Documentation	09/07/2020	06/30/2021



Questions/Comments?

Thank You!



**Winery Canyon Channel /
Descanso Gardens
Stormwater Capture Project
Feasibility Study**

PRESENTED BY THE CITY OF LA CANADA FLINTRIDGE

GREG JAQUEZ, PE, PROJECT MANAGER

GJAQUEZ@MNSENGINEERS.COM, (323) 797-1498

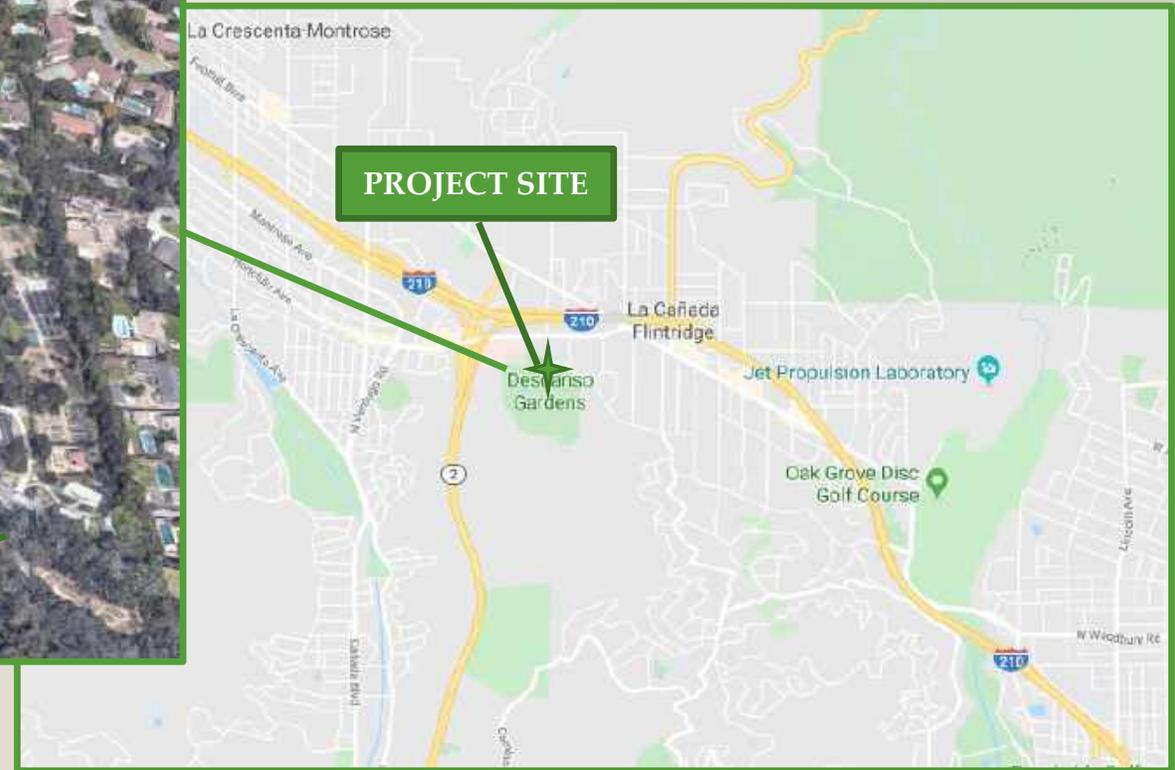
JANUARY 22, 2020



Descanso Gardens

Winery Canyon Channel / Descanso Gardens Stormwater Capture Project

Project Location / Site



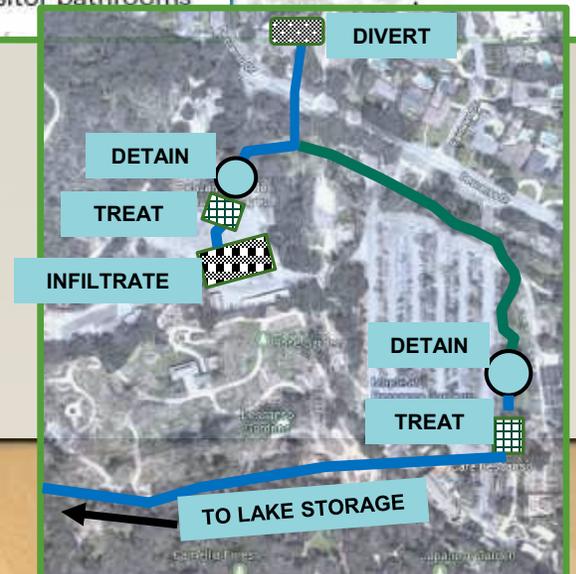
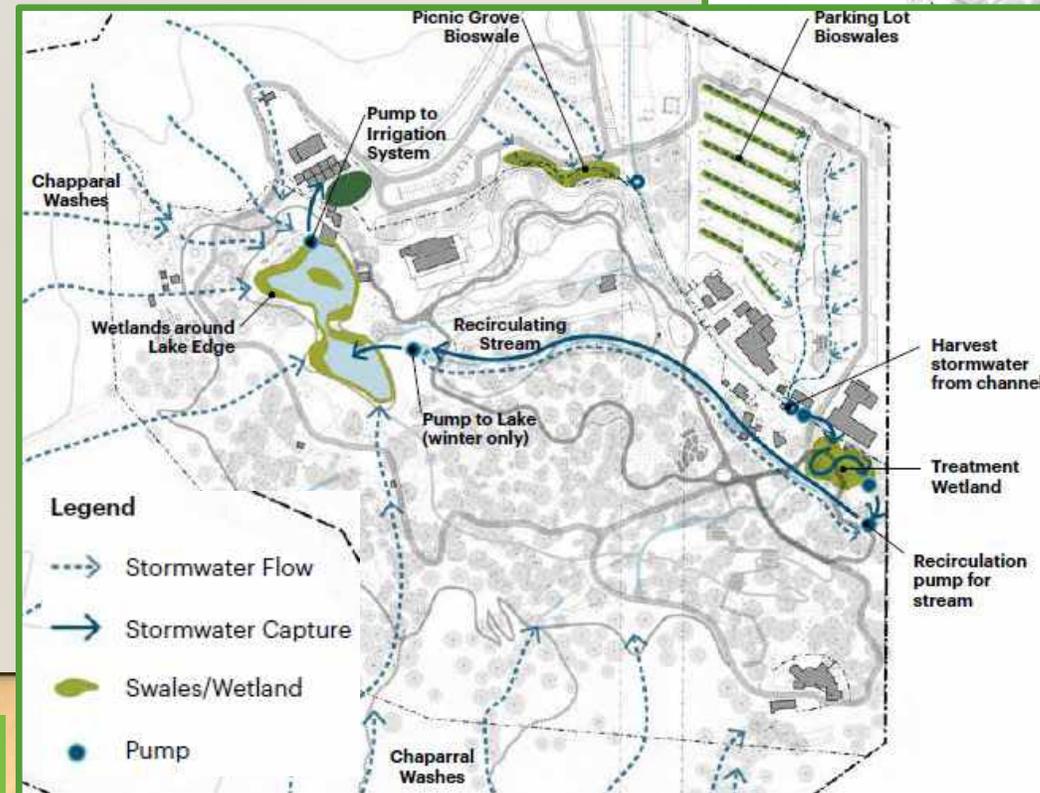
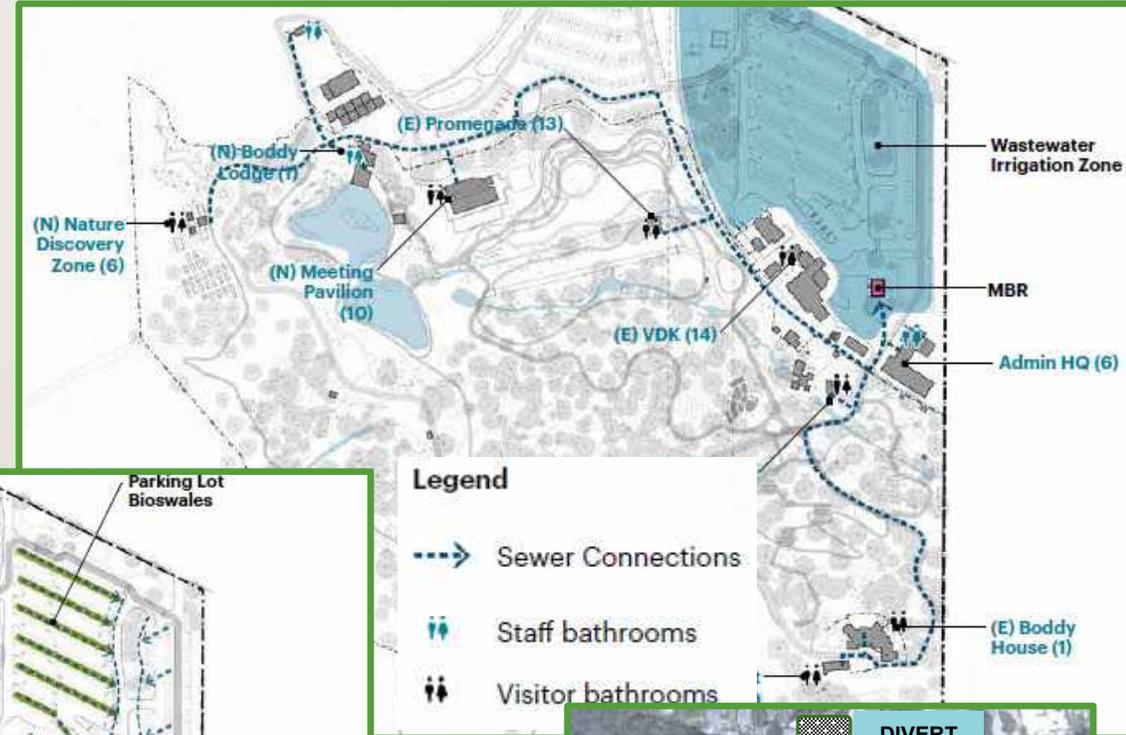
Descanso Gardens

Project Site NOT Located in a DAC

Winery Canyon Channel / Descanso Gardens Stormwater Capture Project

Project Description

- Diversion from Winery Canyon Channel
- Detention/Treatment Under Parking Lot
- Storage in Lakes for Irrigation Reuse
- Infiltration Chambers Under Parking Lot

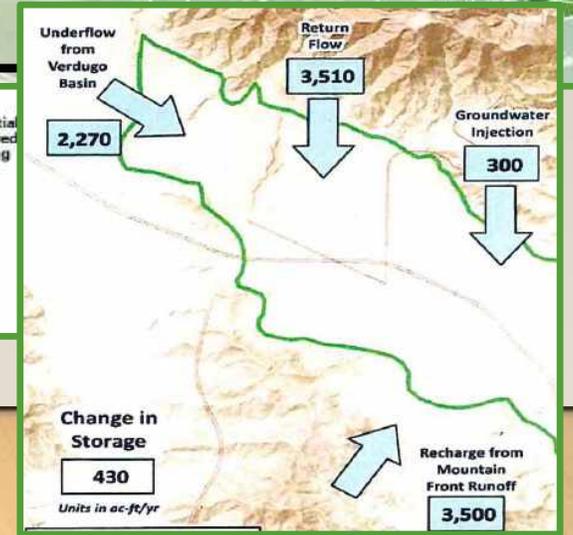


Descanso Gardens

Winery Canyon Channel / Descanso Gardens Stormwater Capture Project

Feasibility Study Scope

- Potential Water Quality Volume Treatment
- Potential Water Reuse for Descanso Gardens Irrigation
- Potential Groundwater Recharge



Descanso Gardens

Winery Canyon Channel / Descanso Gardens Stormwater Capture Project

Project Outreach

- City Engaged with Descanso Gardens Guild on Master Plan and Water Use
- Potential Project Oversight Committee with City, DGG, LA County Parks & Recreation, LACFCD, and Valley Water Company
- Additional Discussion Venues through Planning Commission, Design Commission, Public Works & Traffic Commission, and City Council
- Feasibility Study to develop comprehensive outreach plan



Descanso Gardens

Creating a lush, more welcoming Entry Garden

When you think of disposing of up to 40,000 gallons of recycled water a day, beautiful gardens are not the first thing to leap to mind. But turning that particular basket of lemons into lemonade is exactly what Descanso Gardens intends to do. Turning a problem into an asset doesn't always present itself with so tangible a result, but plans are developing to turn the 1.5 acres along Descanso's front drive into a garden

Putting recycled water to work for Descanso

This fall, Descanso Gardens will install an onsite wastewater treatment plant called a Membrane Bioreactor near the

by the new wastewater treatment project, which will be installed after Labor Day. The two problems seemed to converge into one beautiful solution, a

this system makes sense," said Juliann Rooke, Descanso Executive Director.

arid. They were looking for a landscape more congruent with their own yards. Rios designers saw things similarly. Daily

From Our Director



represents the beauty within the Gardens. Even more exciting news – this garden will be irrigated with recycled water from our new water treatment project. Beautiful and sustainable – a double win!

The Visitor Center was also gussied up this year, with wide-open windows that make your first stop more welcoming than ever.

And we hope you are enjoying the new curbside gathering area in front of the Visitor Center, with attractive new paving and benches. We are grateful to the City of La Cañada Flintridge for its support of this project. The city provided funds for the new water fountain through its community group funding program. It also secured a grant for the new bike racks from the Mobile Source Air Pollution Reduction Review Committee, which provides funding for cities and counties within the South Coast Air Quality Management District for programs that reduce air pollution. We hope the bike racks encourage visitors to use "pedal power" when they visit.

Whether you bike, walk or drive to Descanso, we hope these projects provide a warm welcome to you!

Juliann Rooke, Executive Director



Winery Canyon Channel / Descanso Gardens Stormwater Capture Project

Project Outreach / Disadvantaged Communities

- “Nature is for everyone.”
- Programs to make Descanso Gardens accessible
 - Free admission to the public one Tuesday every month
 - Participant in the annual Museum Free for All day
 - Free admission to residents with EBT cards
 - Free admission to active military and veterans through the Blue Star Museums program
 - 14,524 students, chaperones, and teachers visited on school field trips free of charge (2018)
 - Worked with LAUSD 2,250 students in the Beyond the Bell afterschool program (2018)



Descanso Gardens



Winery Canyon Channel / Descanso Gardens Stormwater Capture Project

Funding Details

Funding

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Partners

- Descanso Gardens Guild
- LA County Parks & Recreation
- Valley Water Company



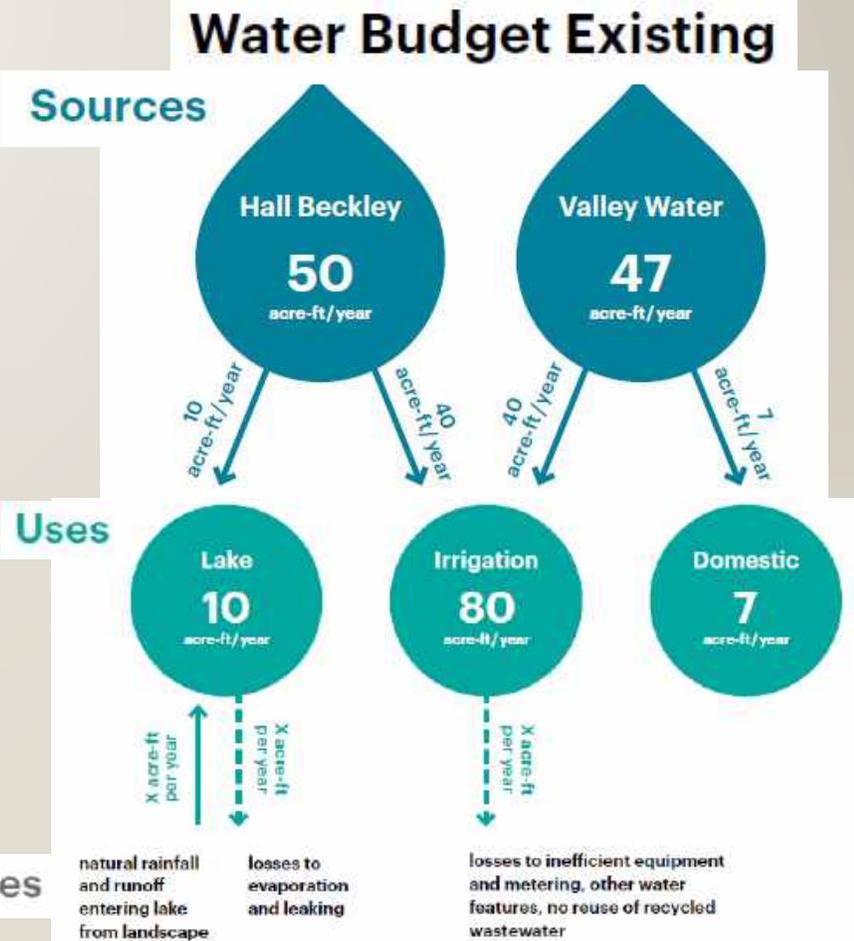
Winery Canyon Channel / Descanso Gardens Stormwater Capture Project

Program Preferences

- Climate change response through drought resilience
- Regional water self-reliance through offset of water purchase from Foothill MWD
- Addresses SCW Program Goals
 - Captures water otherwise lost to ocean
 - Protects local waters in Flint Canyon and Arroyo Seco
 - Modernization of groundwater recharge in area of Raymond Basin lacking recharge facilities
- Expected useful life of ~ 50 years
- Feasibility Study will initiate CEQA process



Descanso Gardens



Winery Canyon Channel / Descanso Gardens Stormwater Capture Project

Benefits

Background Conditions

- Descanso Gardens demand high potable water use for irrigation
- Potential loss of surface water supply from Hall-Beckley Canyon
- Failing Septic Systems Led to MBR Installation Decision

Physical Benefits

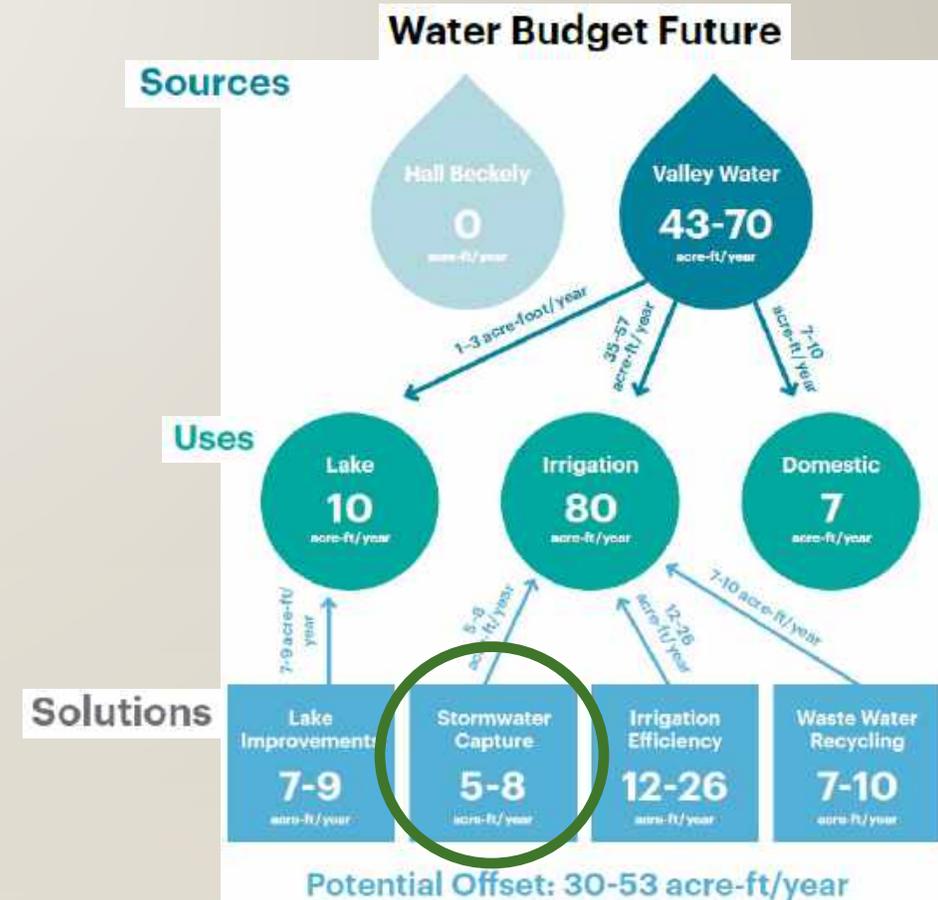
- Improved stores of groundwater supplies
- Improved groundwater quality
- Reduced reliance on potable water for irrigation
- Enhanced (passive) recreational facilities

Benefits Determination Method

- Feasibility Study will produce metrics on benefits through hydrologic, hydrogeologic, and economic analyses



Descanso Gardens



Winery Canyon Channel / Descanso Gardens Stormwater Capture Project

Estimated Budget

Table 1 – Feasibility Study Budget

Category	Cost Share: Non-State Fund Source	Requested Grant Amount	Other Cost Share (including other State Sources)	Total Cost
Project Administration		\$30,000		\$30,000
Planning/Design/Engineering/Environmental Documentation		\$270,000		\$270,000
Grand Total		\$300,000		\$300,000



Descanso Gardens

Winery Canyon Channel / Descanso Gardens Stormwater Capture Project

Feasibility Study Schedule

Task	Start Date	End Date
Direct Project Administration	07/06/2020	06/30/2021
Planning/Design/ Engineering/ Environmental Documentation	09/07/2020	06/30/2021



Descanso Gardens

Questions/Comments?

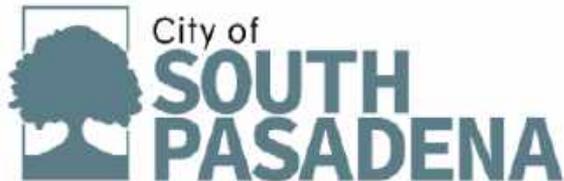
Thank You!



Technical Resources Program Project Applications

For Four Projects along the Arroyo Seco
Submitted by the City of South Pasadena

Shahid Abbas, Director of Public Works
Cameron McCullough, JLHA



The Arroyo Seco Projects

Are located:

- In South Pasadena on City-owned land
- On existing park and open space
- At a prime spot identified in the EWMP

Are adjacent to:

- The Arroyo Seco (0 ft to 400 ft)
- Each other ($\frac{1}{2}$ mile total distance)
- Storm drain pipes that outfall to the Arroyo Seco
- Disadvantaged communities (across river)

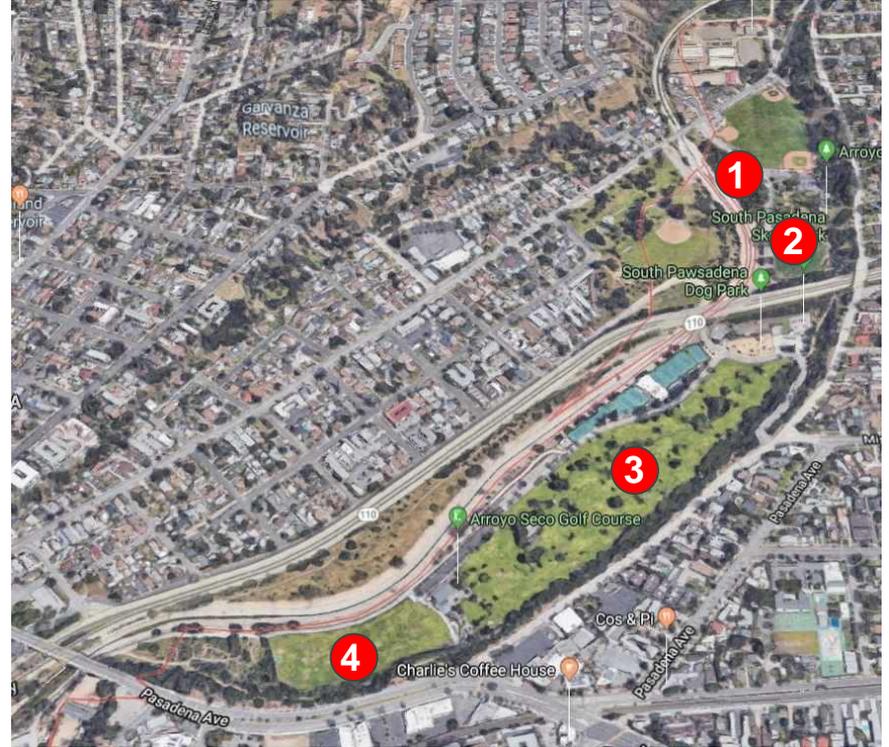
Will provide:

- Community investment benefit
- Nature-based solutions
- Water quality and supply benefit



The Arroyo Seco Projects

1. Constructed Wetlands by the Arroyo Seco
1. Stormwater Capture Basin and Park Improvements
1. Constructed Wetlands at the Arroyo Seco Golf Course
1. Constructed Wetlands at the Arroyo Seco Driving Range



Funding Request

\$100,000

to prepare a Feasibility Study following SCW guidelines for any one of the projects

OR

\$200,000

to develop a Feasibility Study for all four projects

If awarded and the Feasibility Study results are favorable, the City intends to submit the project(s) for funding under the SCW Infrastructure Program

South Pasadena within the ULAR Watershed Area



Project 1: Constructed Wetlands by the Arroyo Seco



Project features

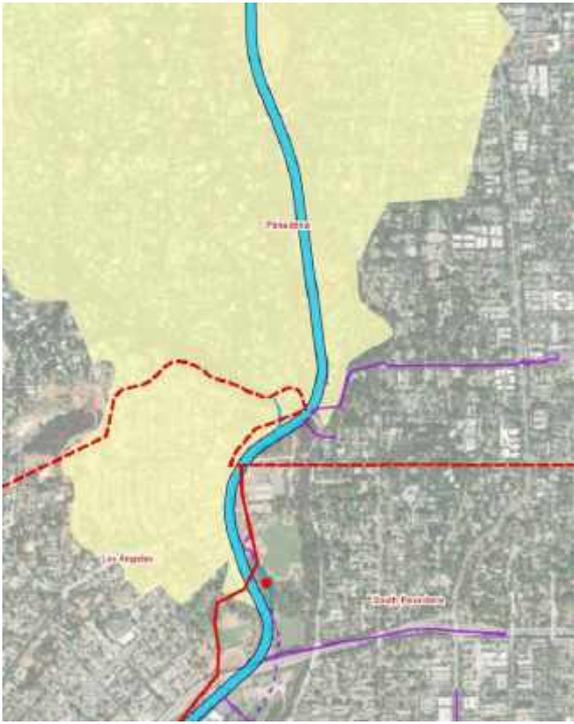


Aerial imagery

Project 1: Constructed Wetlands by the Arroyo Seco



Concept 1 drainage area



Concept 2 drainage area

Project 1: Constructed Wetlands by the Arroyo Seco

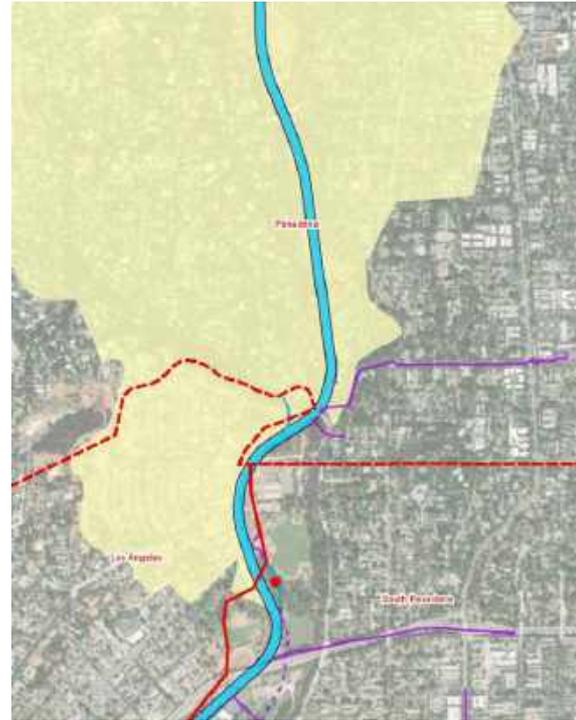


Concept 1 drainage area

- Located at existing dike structure
- Captured water to be used for irrigation
- Potential capture area: 137 acres
- Potential capacity: 8 acre-feet

Project 1: Constructed Wetlands by the Arroyo Seco

- Alternate concept
- Located at existing dike structure
- Captured water to be used for irrigation
- Divert first flush stormwater flows
- Potential capacity: TBD



Concept 2

Project 1: Constructed Wetlands by the Arroyo Seco



Existing dry weather diversion



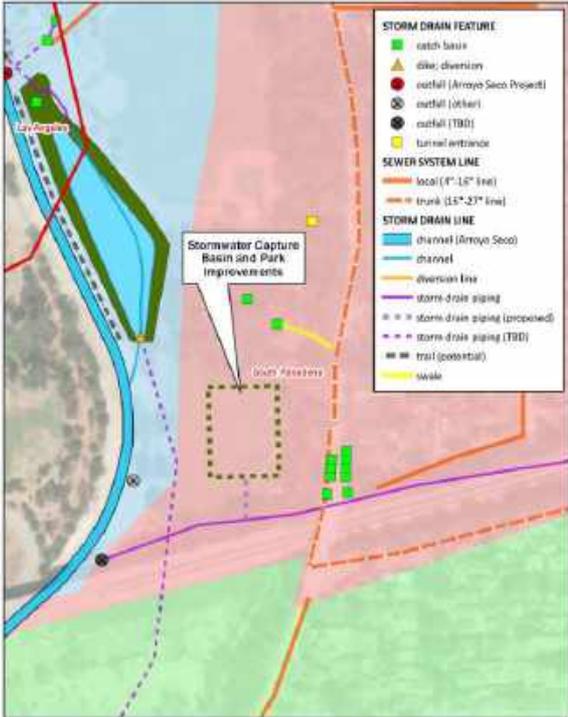
Existing dike

Project 2: Stormwater Capture Basin and Park Improvements

- Located at existing open space (*Arroyo Park*)
- Underground detention basin
- Storm drain is adjacent
- Captured water to be used for irrigation
- Potential capture area: 165 acres
- Potential capacity: 8 acre-feet



Project 2: Stormwater Capture Basin and Park Improvements



Project features



Aerial imagery

Part 3: Constructed Wetlands at the Golf Course

- Located at existing public golf course
- Located at an existing pond
- Storm drain immediately adjacent
- Captured water to be used for irrigation
- Potential capture area: 106 acres
- Potential capacity: 6 acre-feet



Project 3: Constructed Wetlands at Golf Course



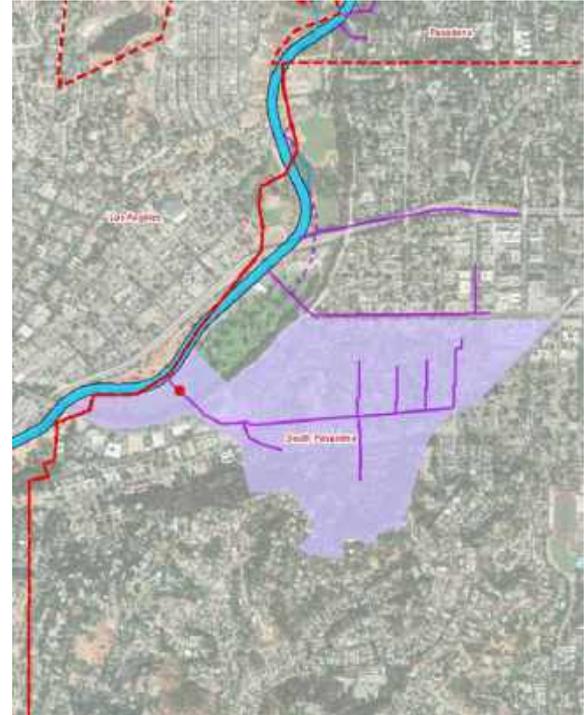
Existing dry weather diversion flow



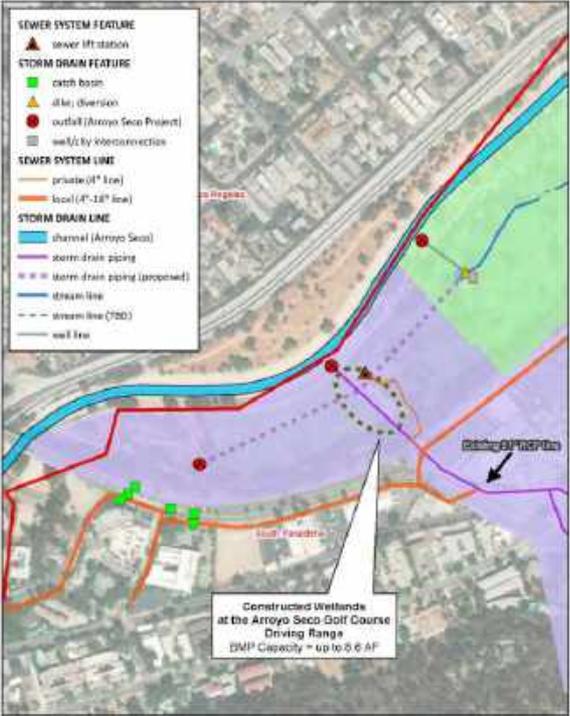
Existing pond

Project 4: Constructed Wetlands at the Driving Range

- Located at existing driving range
- Unused space (within the range)
- Storm drain immediately adjacent
- Could serve as range feature
- Potential capture area: 166 acres
- Potential capacity: 8.6 acre-feet



Project 4: Constructed Wetlands at the Driving Range



Project features



Aerial imagery

Multi-Benefit Projects

- Community investment
- Nature-based solutions
- Water supply benefit
- Water quality benefit
- Reduced costs and impact
 - Uses existing infrastructure
 - Land ownership (City-owned project locations)



Multi-Benefit Projects

Community investment: Improved trails, park uses, and surface water features



Arroyo Seco Project 1 (Constructed Wetlands by the Arroyo Seco) and Project 2 (Stormwater Capture Basin and Park Improvements): Initial Concept Landscape Plan

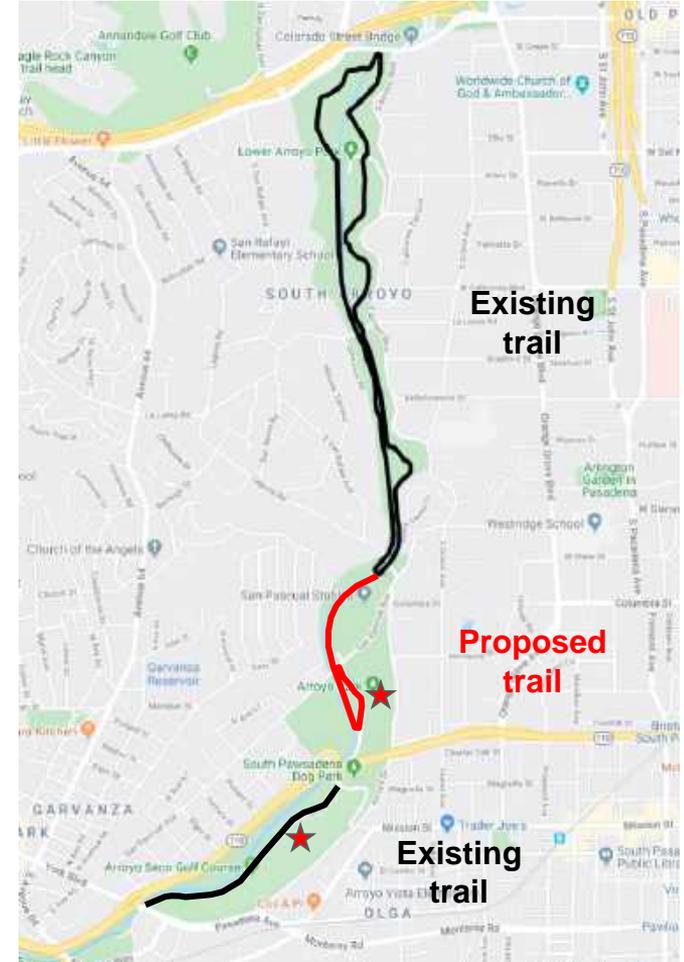


Arroyo Seco Project 3 (Constructed Wetlands at the Arroyo Seco Golf Course) and Project 4 (Constructed Wetlands at the Arroyo Seco Golf Course Driving Range): Initial Concept Landscape Plan

Multi-Benefit Projects

Community investment: Improved trails, park uses, and surface water features

- Bicycle and pedestrian trails
 - Could connect to existing Arroyo Seco Trail
 - Length: 3,250 ft (0.6 mi)



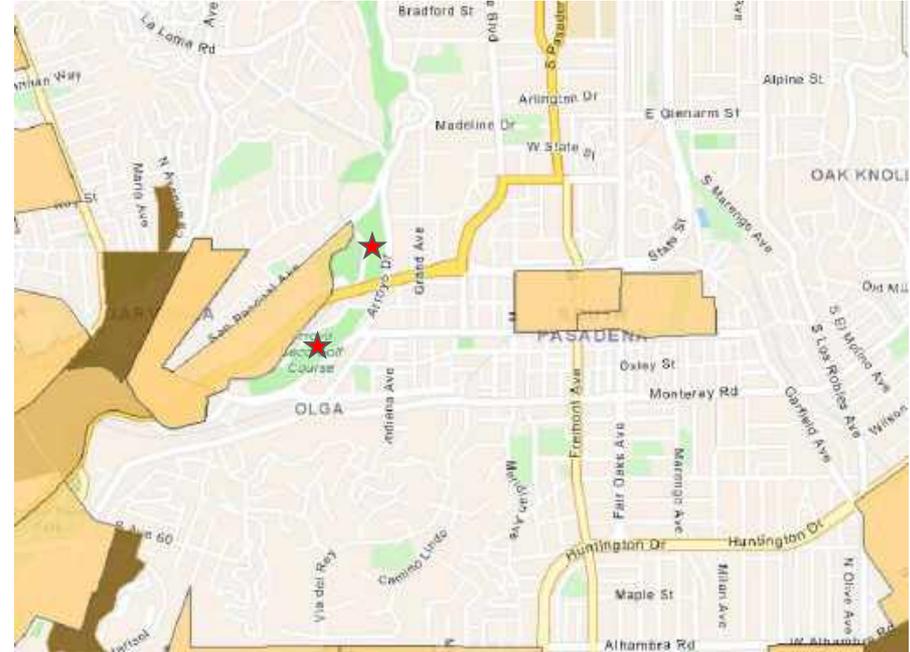
Multi-Benefit Projects

Disadvantage Community (DAC) Benefit

- City of LA: 4,224 people
- South Pasadena: 1,591 people

Source:

CA Department of Water Resources, DAC Mapping Tool (DAC 2016 Census Data)



Multi-Benefit Projects

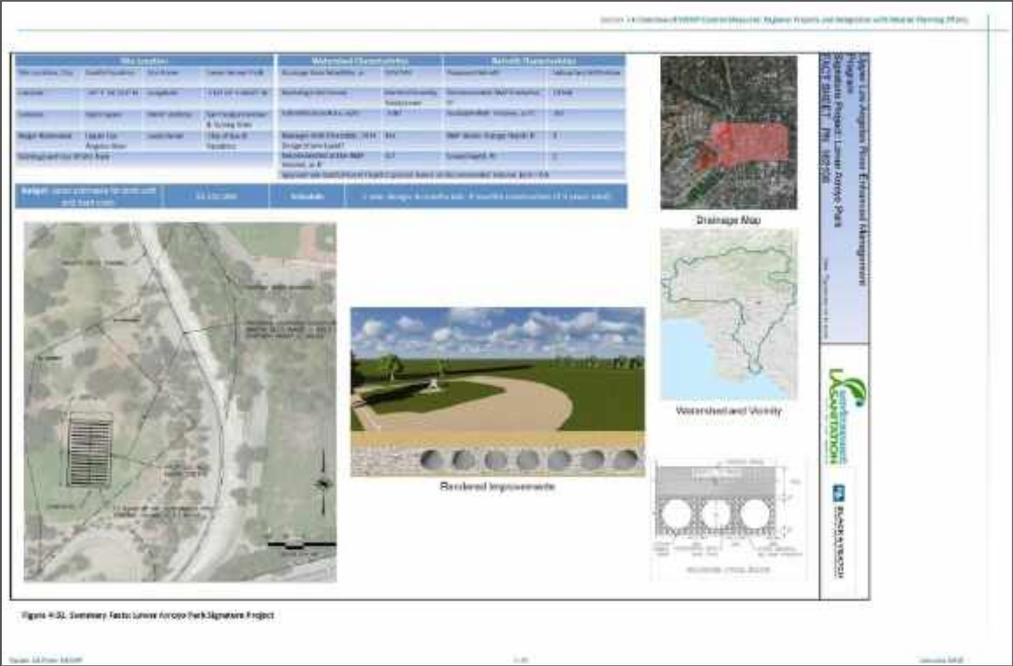
Water supply: The City's Water Division provides

- 32 acre-feet/year to Arroyo Park,
- 30 acre-feet/year of potable water to the Arroyo Seco Golf Course,
- 2 acre-feet/year to the Arroyo Nature trail.

So dry weather flows and stormwater have potential to be irrigation water source

Multi-Benefit Projects

Water quality: Improves upon EWMP “signature” project (Lower Arroyo Park)



Remember the Arroyo Seco

- The Arroyo Seco requires its own protection (see NPDES Permit, EWMP, TMDLs, Basin Plan)
- No other 20/21 SCW proposed projects address the Arroyo Seco

