



Gateway Area Pathfinding (GAP) Study Recap & Next Steps





Background: GAP Phase 1 & 2

Funded by



Lower Los Angeles River &
Lower San Gabriel River
Watershed Area Steering
Committees

Led by



On behalf of the Lower Los
Angeles River, LA River Upper
Reach 2, Lower San Gabriel
River, & Los Cerritos Channel
Watershed Management
Groups

Conducted by





*We created a modeling framework
to answer questions about the...*

Past

How much progress have I made?

Present

How do I decide what projects to pursue now?
How do they advance me towards compliance?

Future

Are there even enough projects to get to my goals?
Can I operate and maintain them all?

*What did we do in
Phases 1 & 2?*

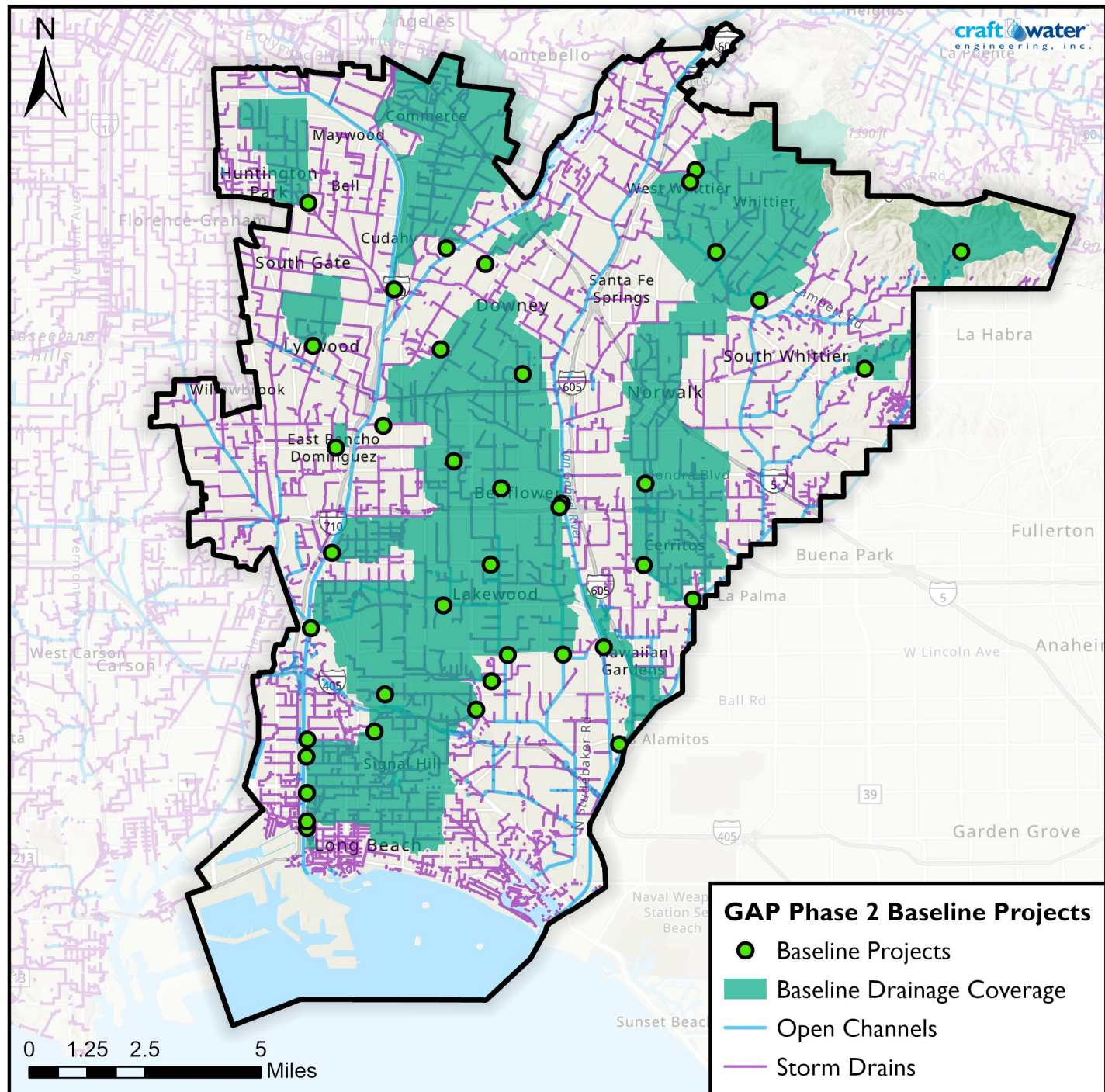


This included...

Baseline Projects

What's in place?

***What's funded
and on the way?***





**Avg. Annual
Zinc Reduction
(lbs/yr)**

*Progress towards
cleaner water &
alignment w/SCWP*

**Structural BMP
Capacity (ac-ft)**

**Runoff Managed
in Avg. Year
(ac-ft)**

**Impervious Area
Managed (ac)**

Watershed Management Program (WMP) compliance equivalency

**Water Quality
Reduction (%)**

**Potential Water
Supply (ac-ft)**

SCWP scoring metrics

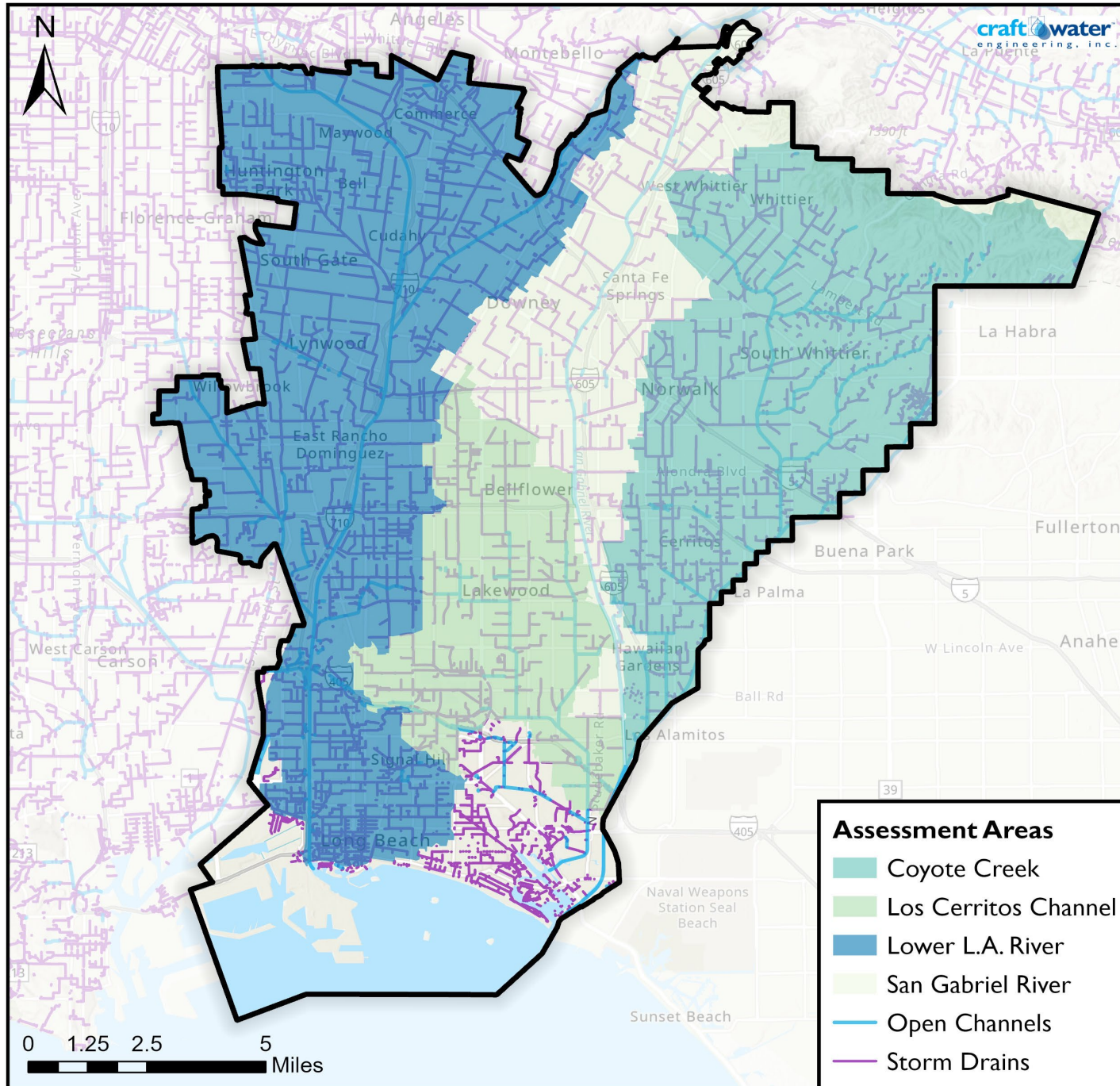
Watershed-scale indicators

**Metrics
Matter**

Project-based evaluators



Progress Towards Goal

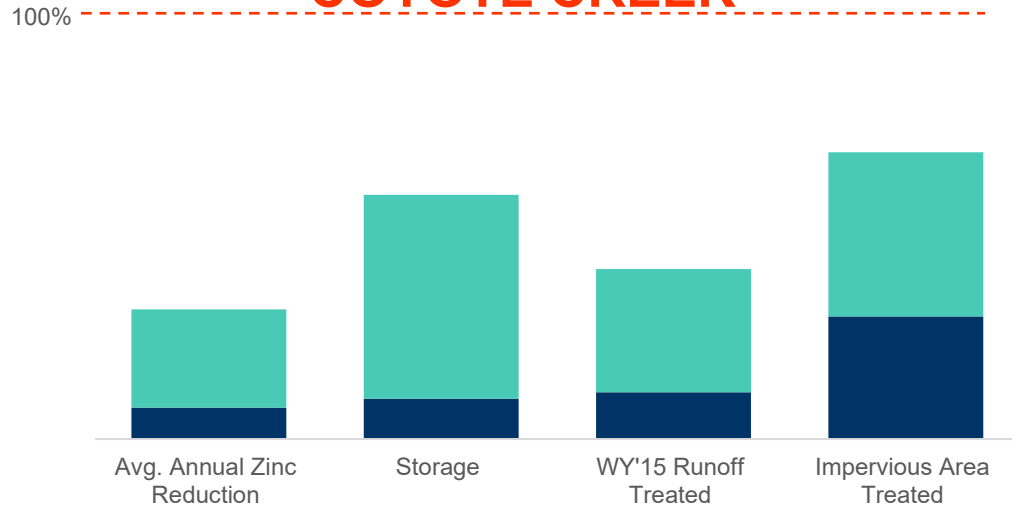




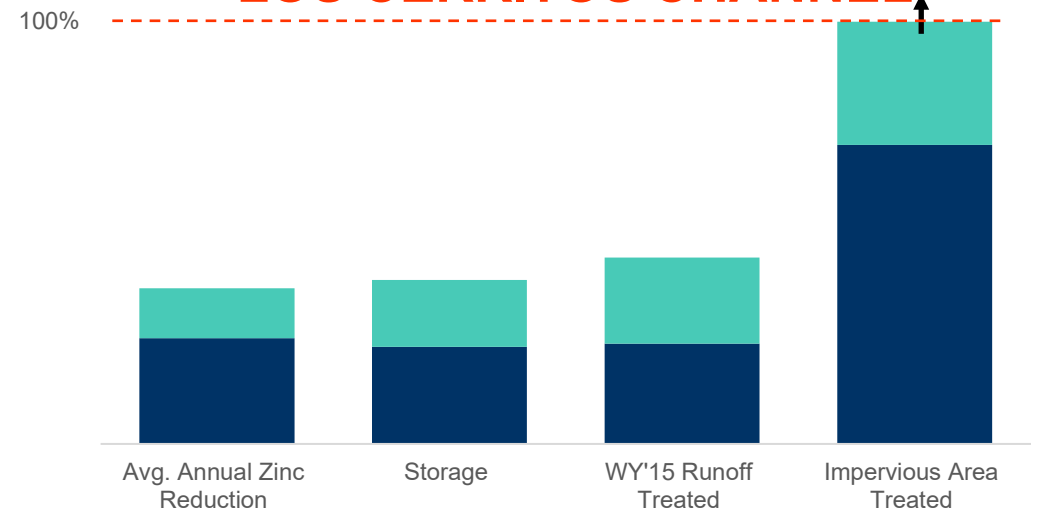
Progress Towards Goal

Existing SCWP Funded

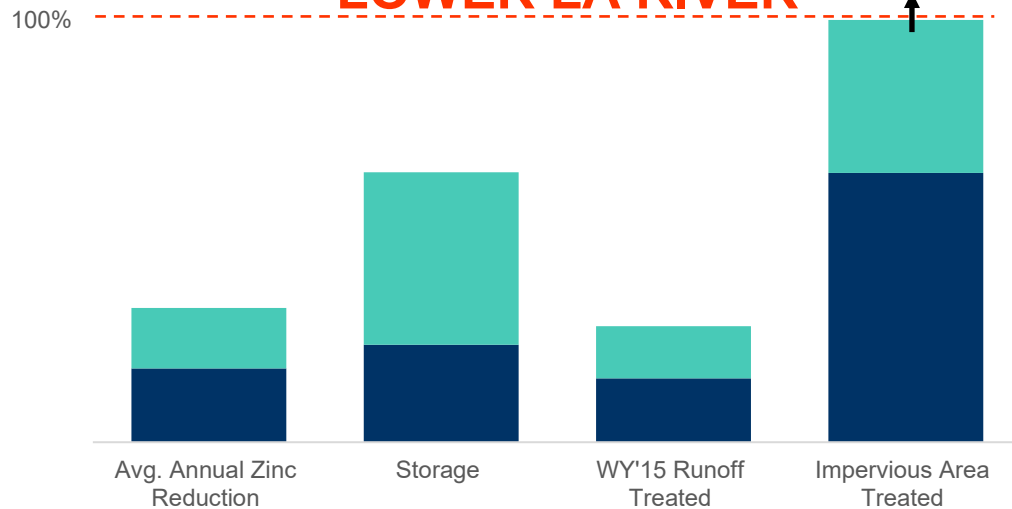
COYOTE CREEK



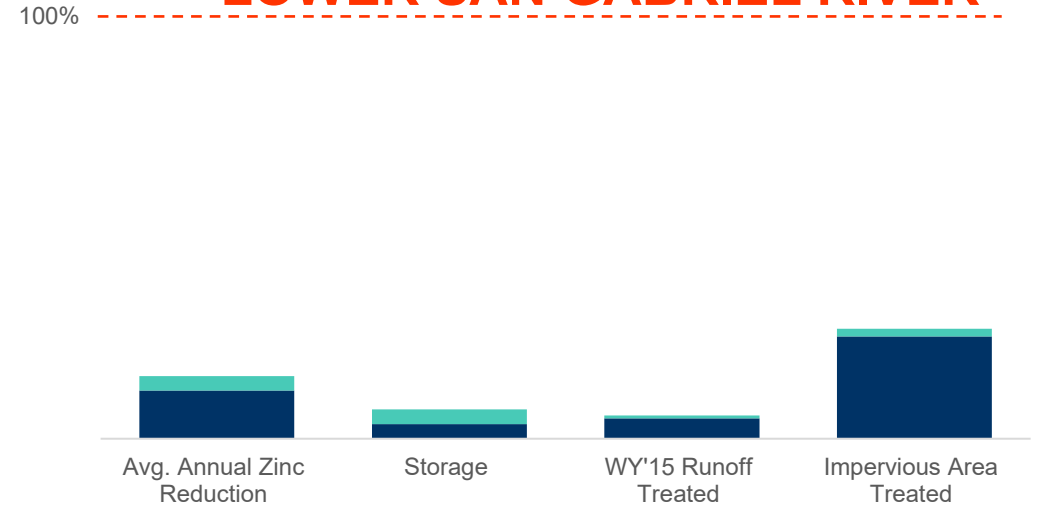
LOS CERRITOS CHANNEL



LOWER LA RIVER



LOWER SAN GABRIEL RIVER



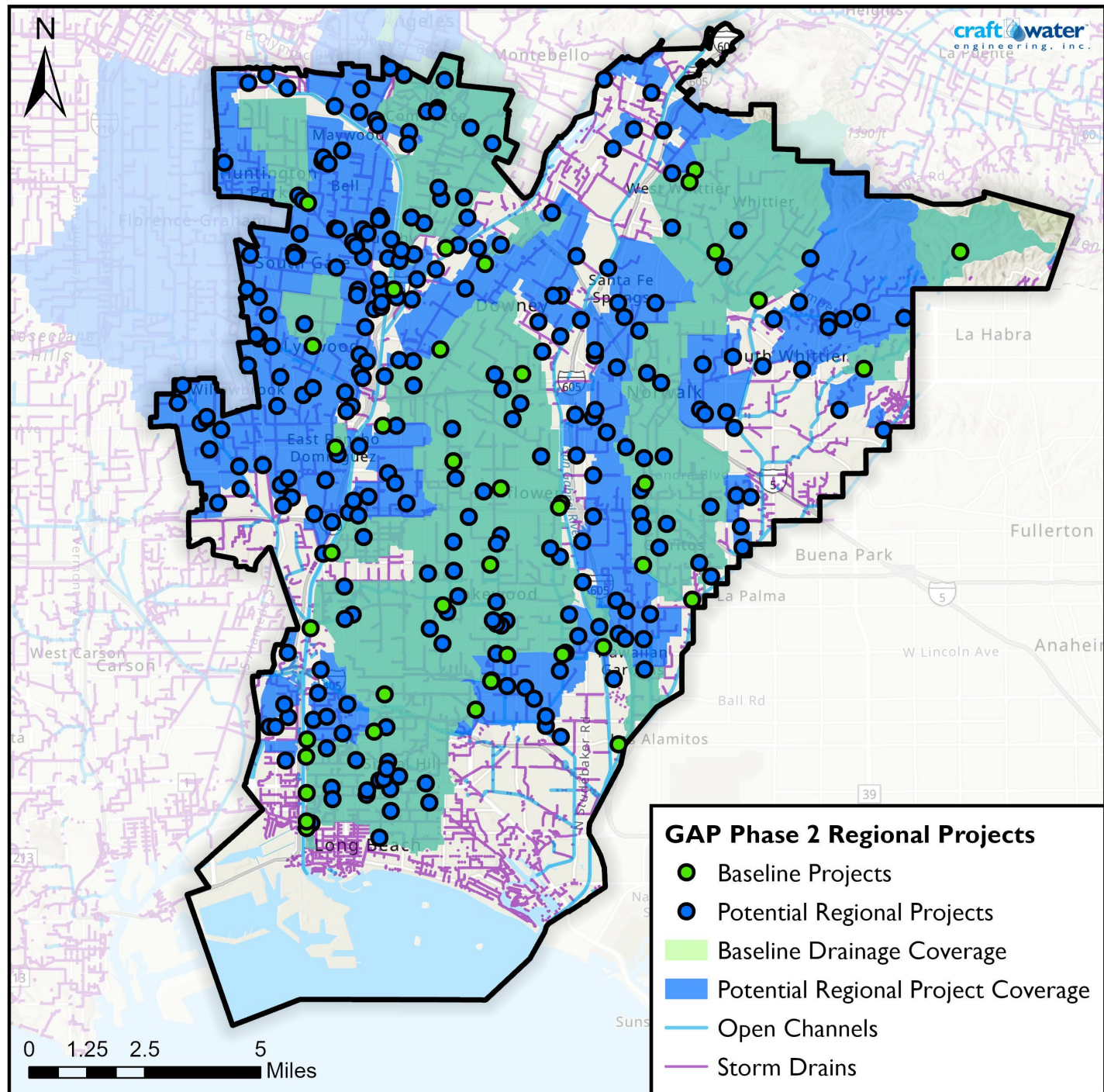


This expanded...

Potential Regional Projects

What's next?

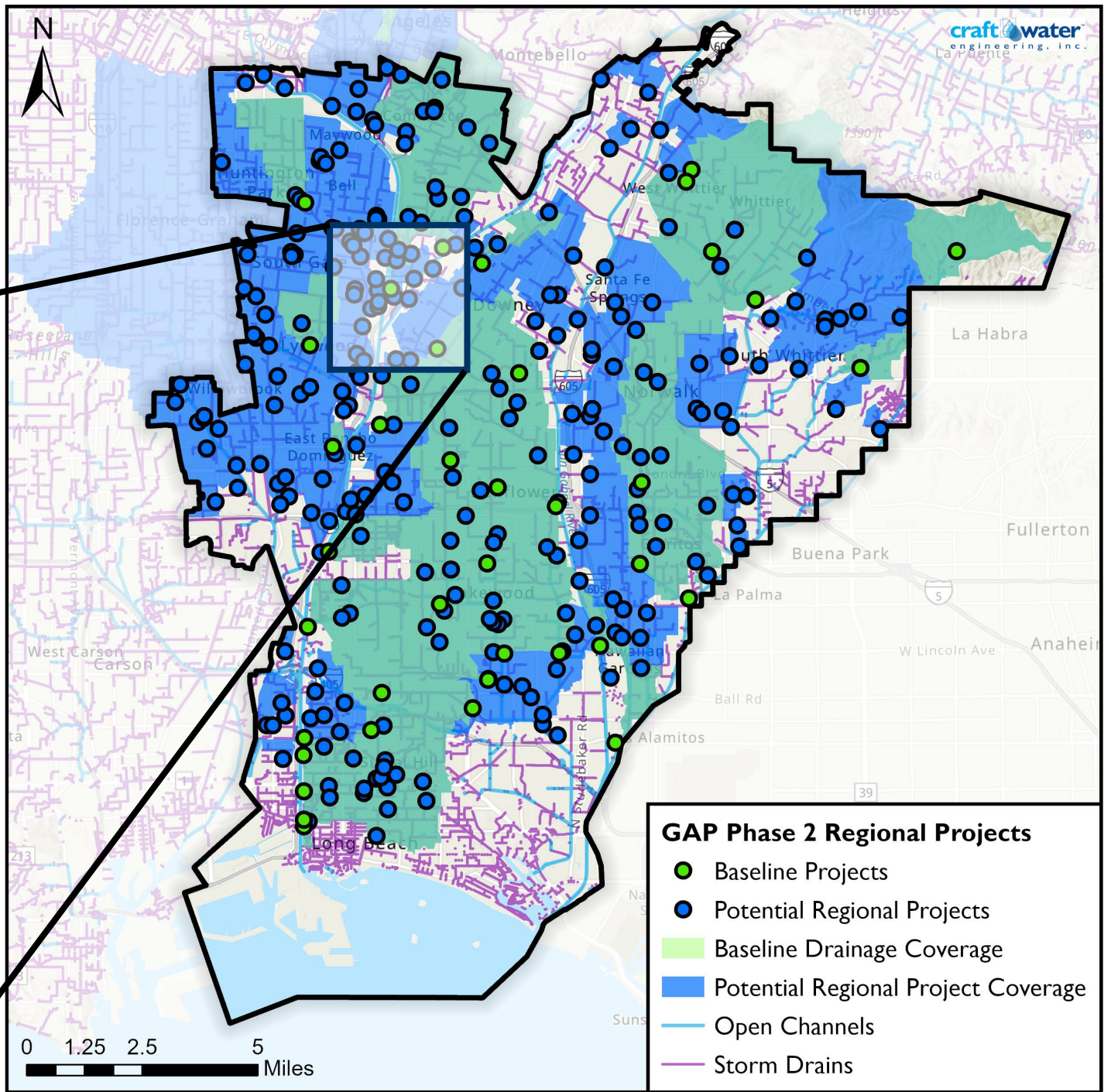
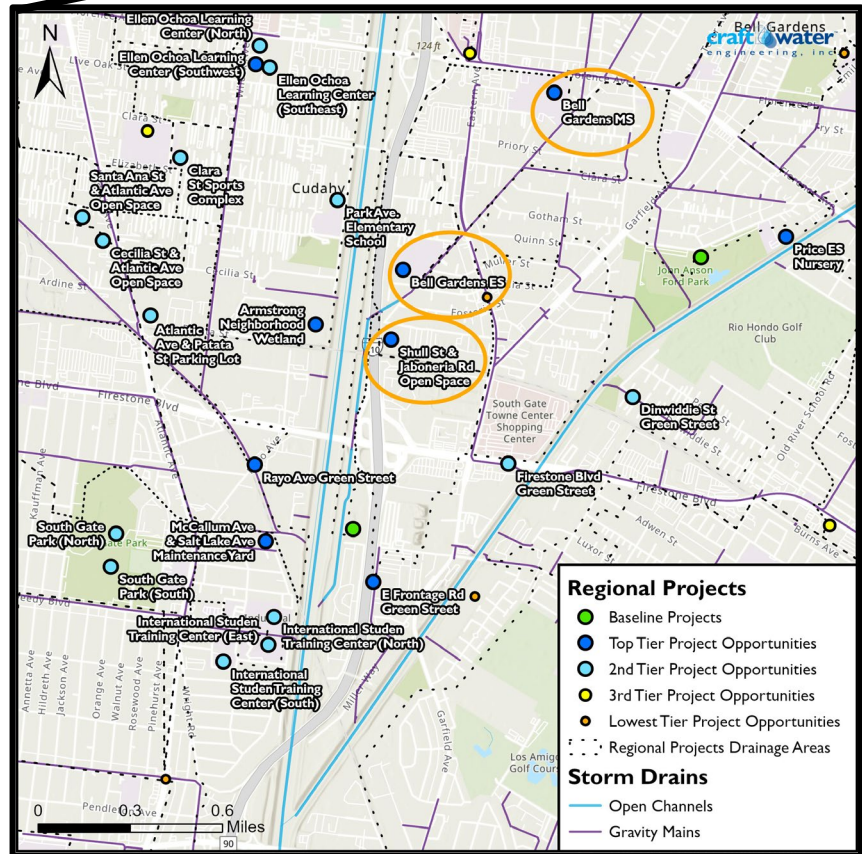
What's best?





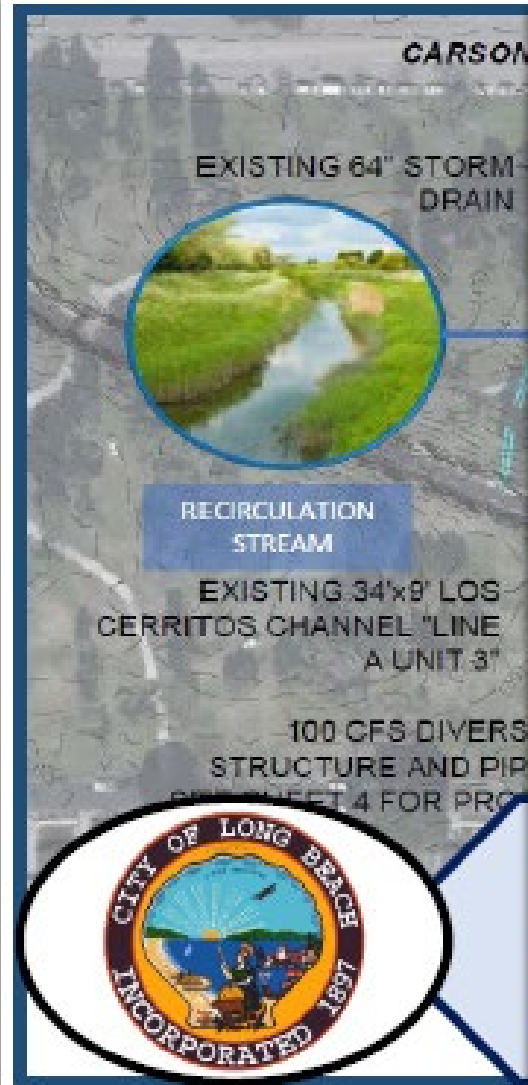
This provided...

Focused Planning Insights





And timely decision support.



Heartwell Park at Clark Channel Stormwater Capture Project, City of Long Beach

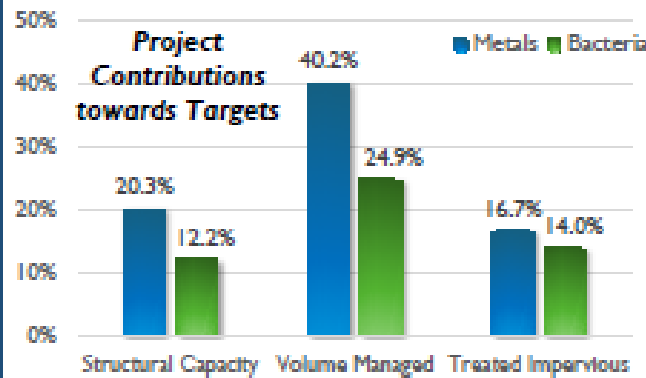
Storage Volume: 30.0 ac-ft

Diversion Rate: 100 cfs (BI0009 Unit 3 Line A)

Treatment: 15.68 cfs pumped filtration

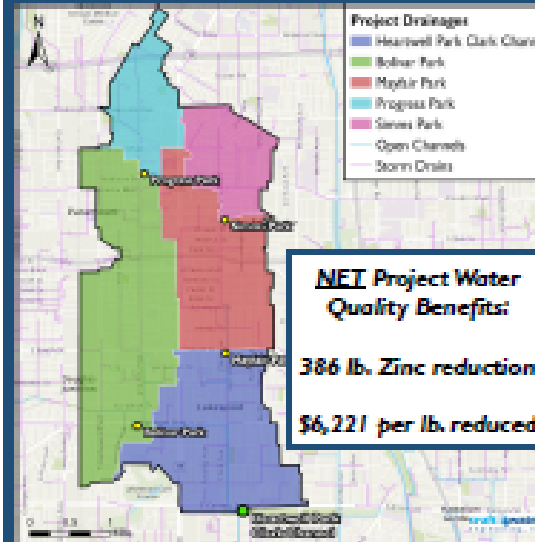
Additional Features: Natural recirculation stream, wetland cells, native tree/shrub plantings

WMP CONTEXT



WMP Metric	Los Cerritos Metals Target	Los Cerritos Bacteria Target
Structural	148.06 ac-ft	244.96 ac-ft
Volumetric	2,246 ac-ft (WY15)	3,625 ac-ft (WY15)
Treated Area	6,495 acres	7,751 acres

WATERSHED CONTEXT



Project treats drainage area with multiple existing and funded projects upstream that work as a system.

SAFE CLEAN WATER CONTEXT

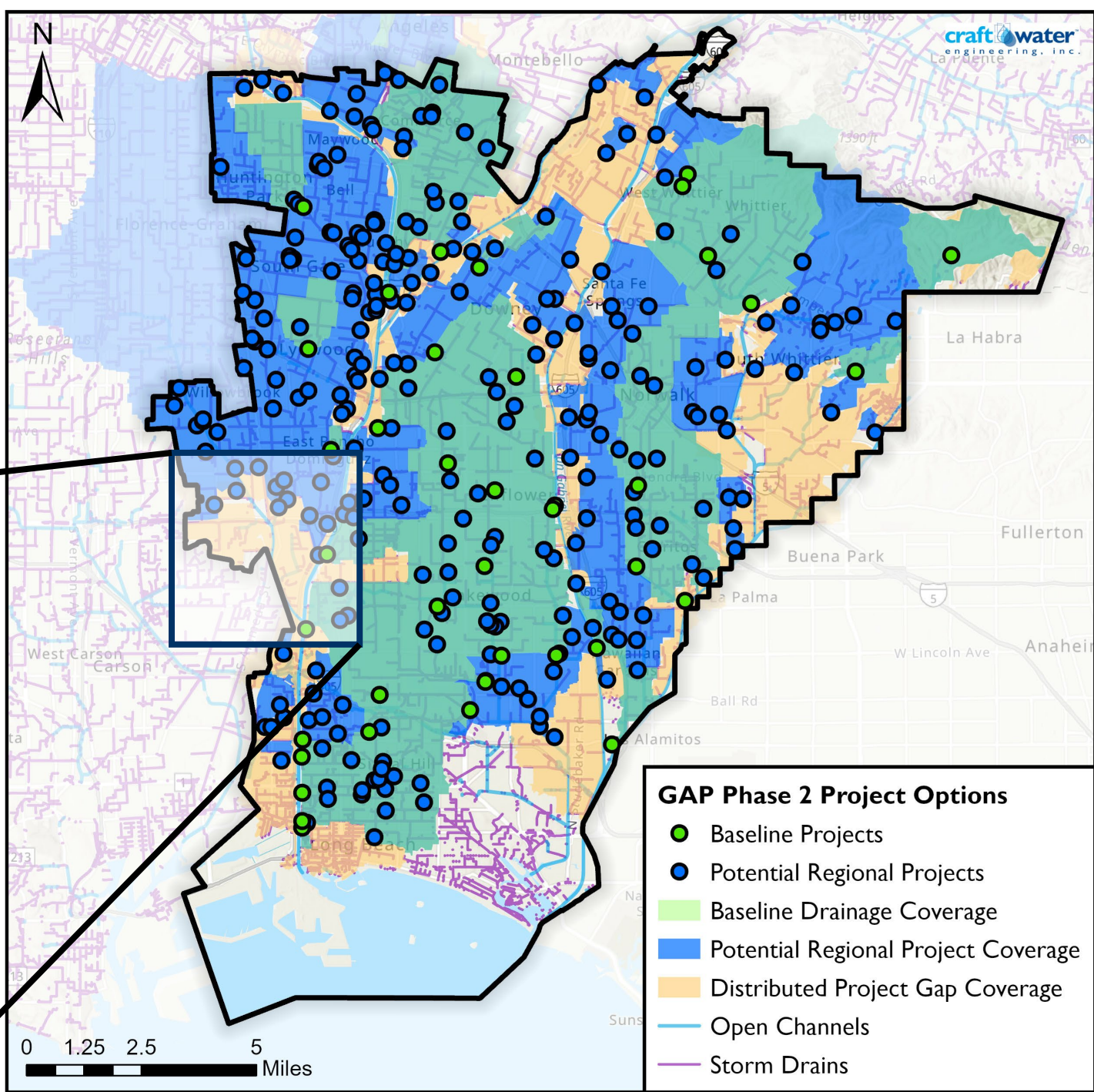
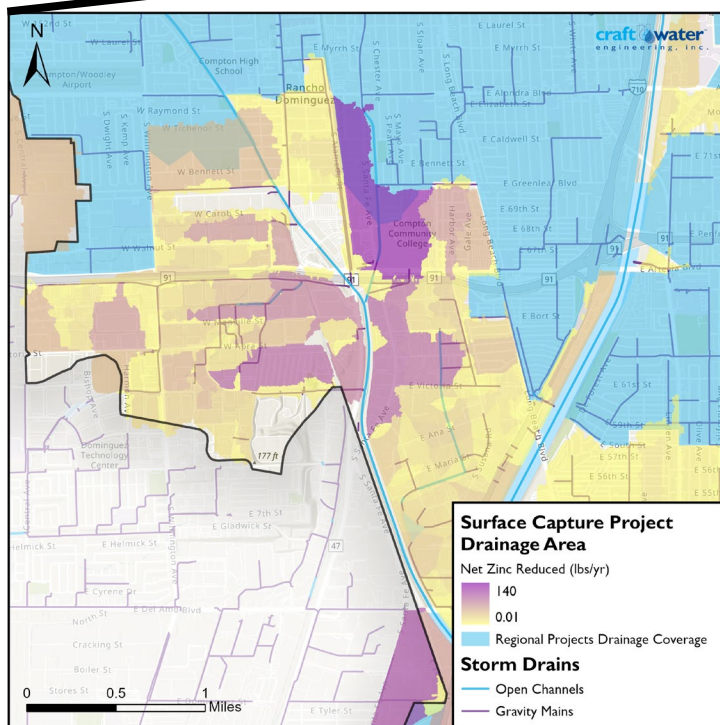
Score	Project Criteria	Project Value(s)	Points
Water Quality Part 1 (Dry-Weather)	Capture all dry-weather flow	Affirmative	20
Water Quality Part 2 (Dry-Weather)	Tributary Size	>200 acres	20
Water Supply Part 1	(Annualized Project Cost / (Avg. Annual Water Supply))	\$2,402,062 / 28 = \$82,044/ac-ft	2
Water Supply Part 2	Avg. Annual Water Supply Provided	38 ac-ft	5
Other Scores	Community Investment, Nature-Based Solutions, & Leveraging Funds	See SCWP Submission for Details	18
TOTAL			65

NOTE: Water Supply Scores developed using Alternative Scoring Rubric



Gaps were filled...

Distributed Opportunities & Nature-Based Solutions

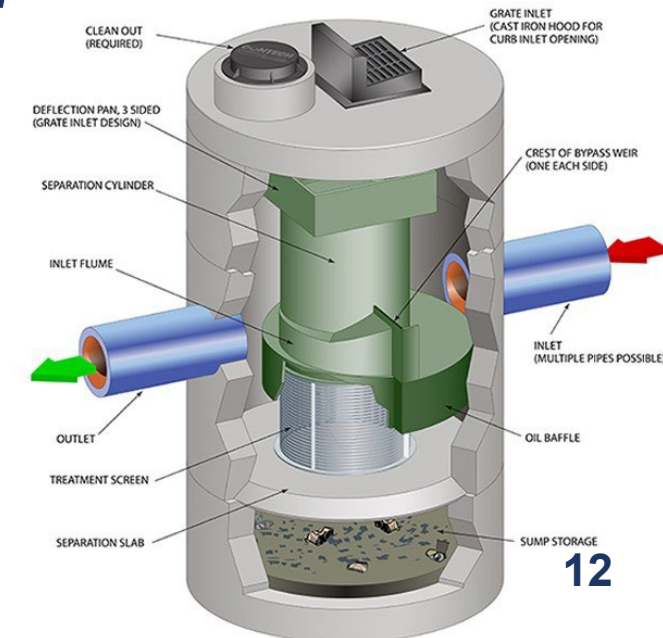
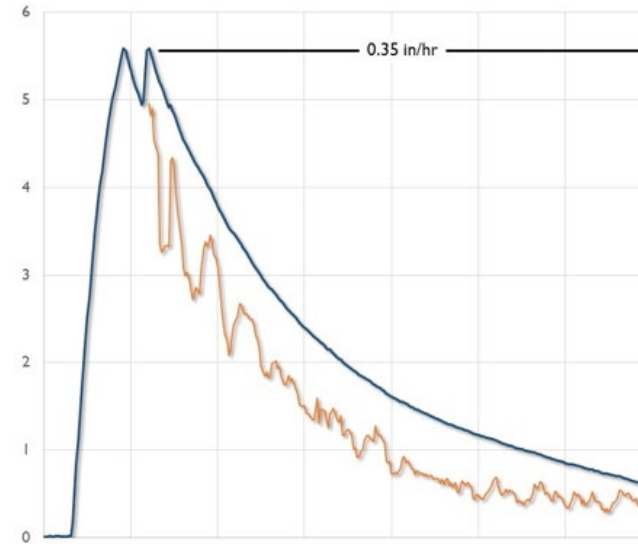




And maintenance context was established...

Project O&M Considerations

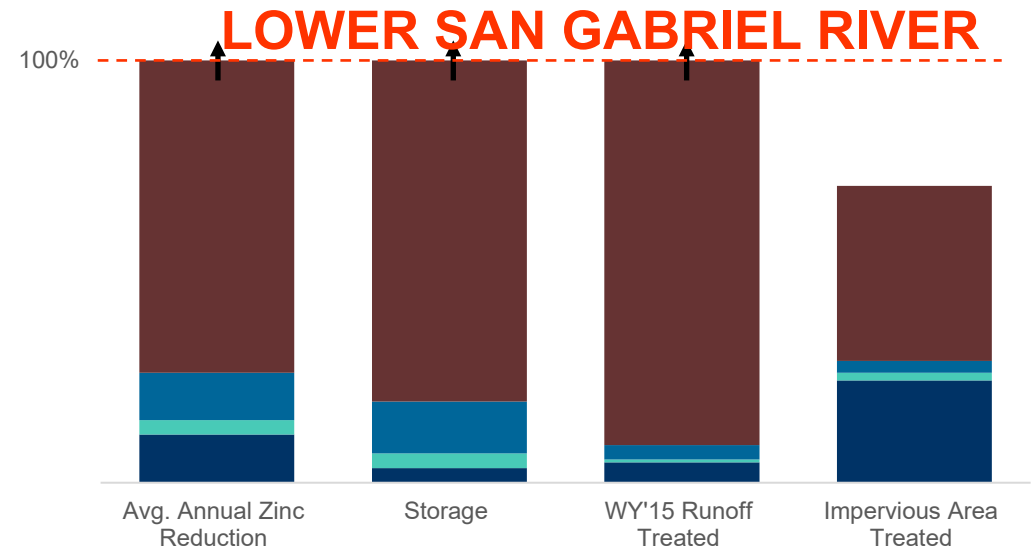
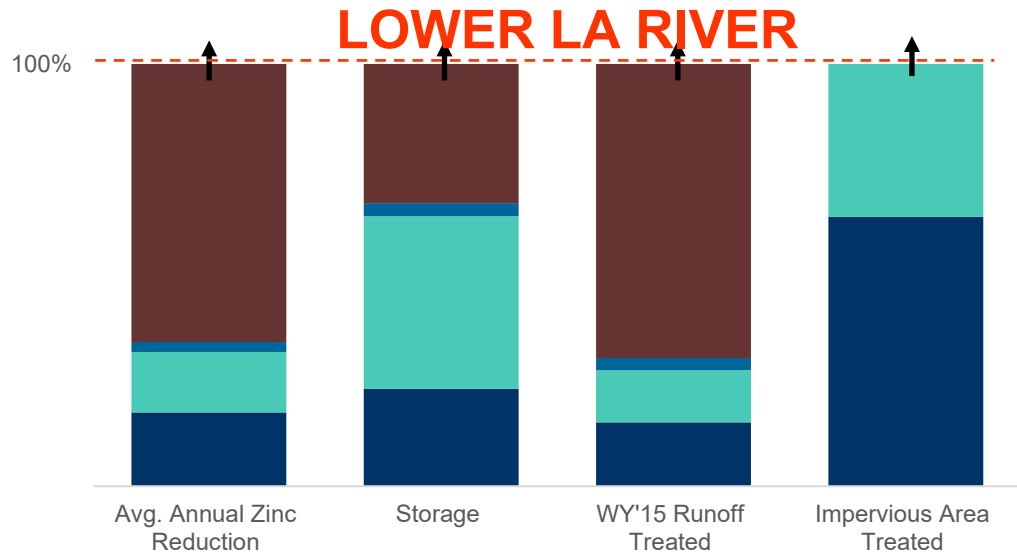
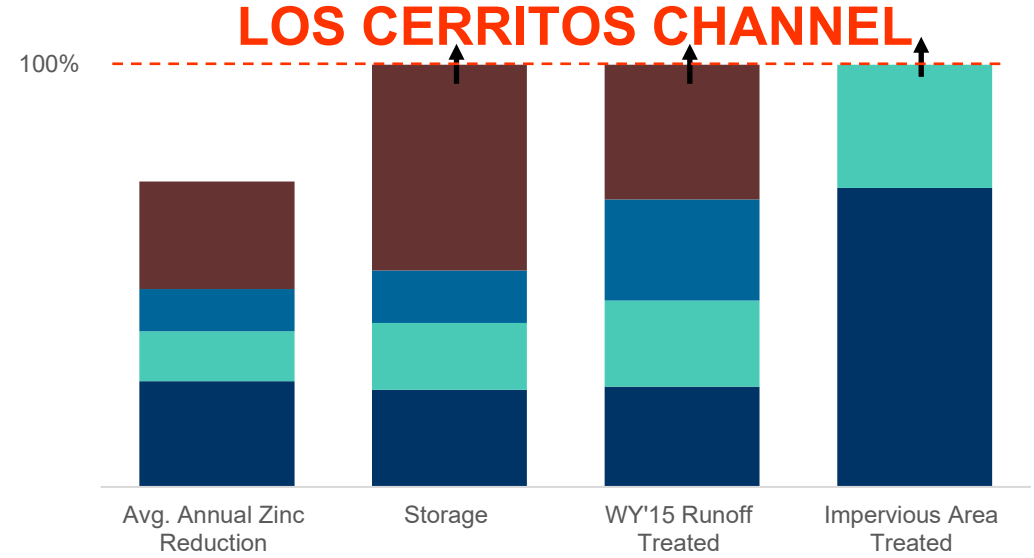
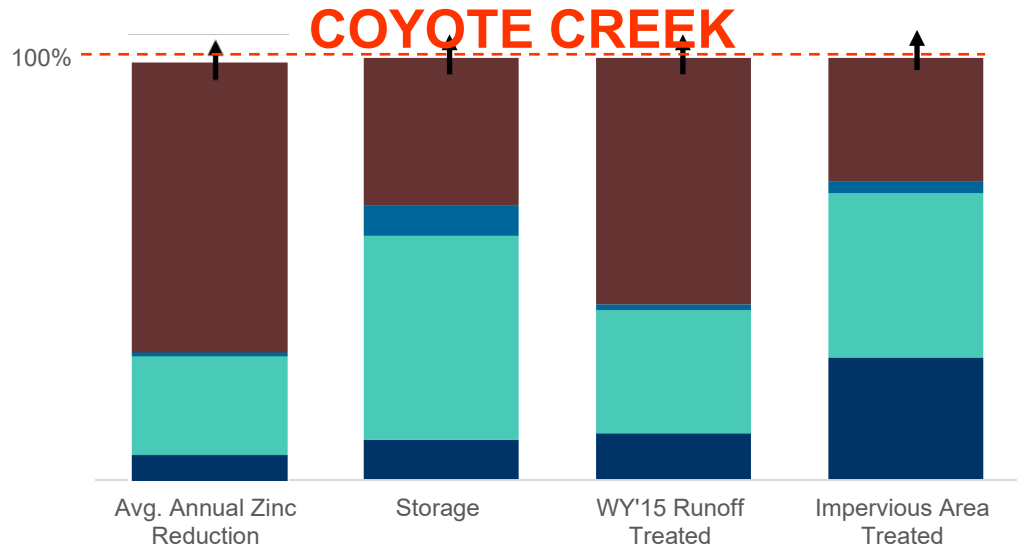
Maintenance-Friendly Project Opportunities





Progress Towards Goal

■ Year 5 Projects ■ SCWP Funded ■ Existing ■ All the Rest



Gateway Area Pathfinding Analysis

Assessment Area Layer On Off Distributed Project Layers On Off Regional Project Layers On Off Jurisdictional Boundaries On Off

Select an Assessment Area
No category selected

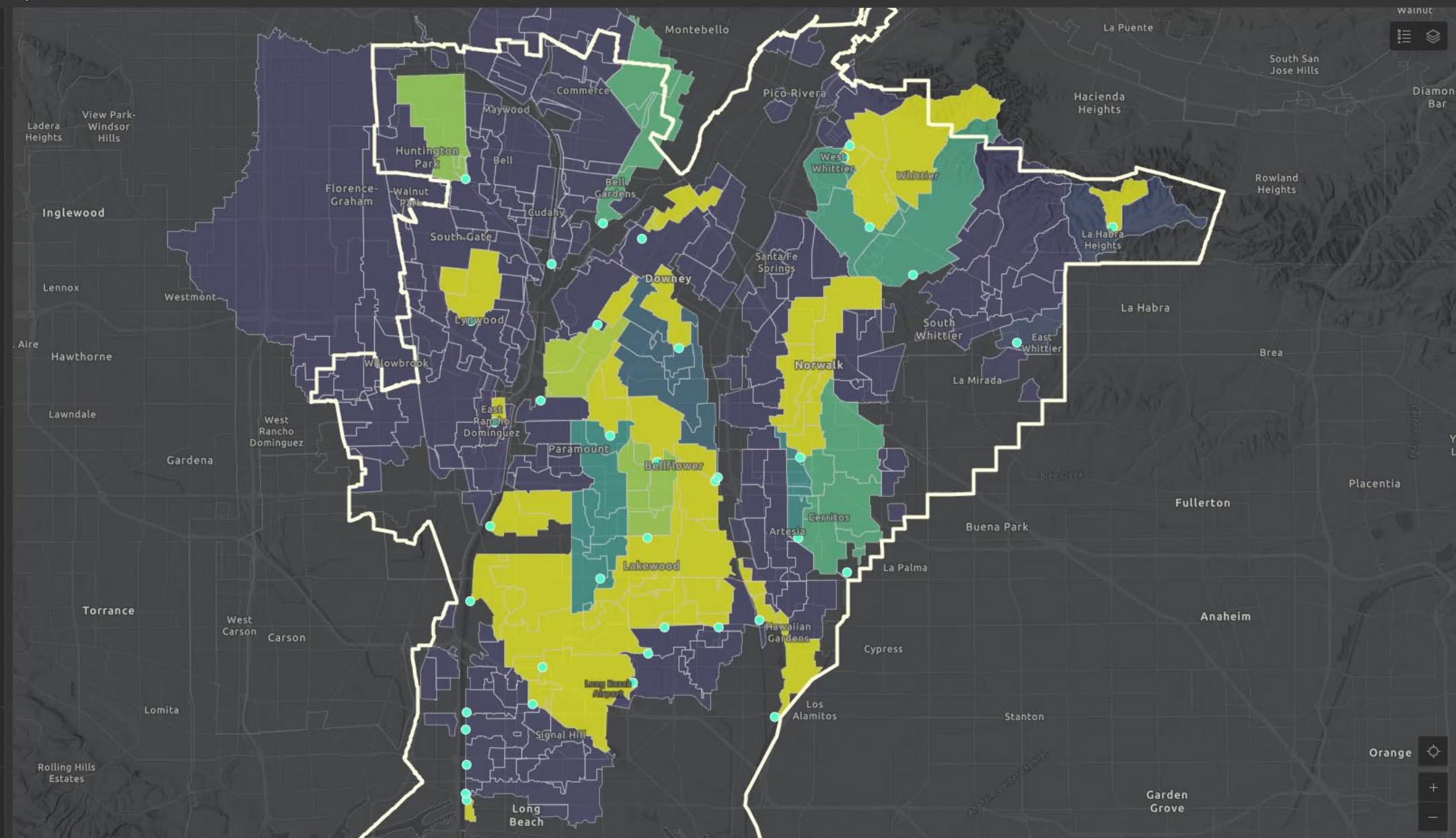
Select a Jurisdiction
No category selected

- Norwalk
- Paramount
- Signal Hill
- South Gate
- Unincorporated
- Whittier

Select a Project Tier Level
Baseline Project

- Top Tier
- 2nd Tier
- 3rd Tier
- Lowest Tier
- Baseline Project

Maintenance Friendly?
No category selected



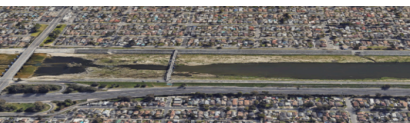
Find These Resources at: gatewaywater.org

MEMO
TO: Gateway Water Management Authority
FROM: Craftwater Engineering, Inc.
SUBJECT: Gateway Area Pathfinding Phase 2 Year 5 SCWP Project Context

This memo presents the initial results of Phase 2 of the Gateway Area Pathfinding Study, conducted on behalf of the Gateway Groups (Lower LA River, Lower San Gabriel River, and Los Cerritos Channel Watershed Groups). The results presented herein help to contextualize and compare the most recent SCWP Program submissions for Year 5 of the Program that will help decision makers better understand their options for regional stormwater capture in the context of previously funded or known constructed projects. Submitted projects from these Groups for Year 5 of the SCWP Program include:

- El Dorado Park Regional Stormwater Capture Project,
- Heartwell Park at Clark Channel Stormwater Capture Project,
- Independence Park Runoff Capture Facility,
- Lynwood City Park Stormwater Capture Project
- Reservoir Park Stormwater Capture Project, and
- Sotomayor Park Multi-Benefit Stormwater Capture Project.

Detailed in this memo are the potential runoff capture and water quality benefits for each project by itself and in the greater context of other SCWP Program funded projects or known constructed projects that are part of the overall watershed management system. Results have been summarized in a way to present a useful understanding of how each project would contribute to the net overall water quality benefits for the respective watersheds. These are provided with project-specific details and summarized for a programmatic evaluation of tradeoffs. For additional context, project contributions toward Watershed Management Plan goals and metrics are computed. Also included are separate Fact Sheets for each project, providing quick references for the Group and potential for each of these projects to contribute to the overall goals of the Gateway Groups efforts to create positive watershed outcomes.




craftwater San Diego | Los Angeles
 engineering, inc. 858.729.0943 | craftwaterinc.com

MEMO
TO: Gateway Water Management Authority
FROM: Craftwater Engineering, Inc.
SUBJECT: Gateway Area Pathfinding Phase 2 Stormwater Investment Plan Considerations
DATE: October 2024

This document (1) puts into context a process of project evaluation that was begun in Phase 1 of the Gateway Area Pathfinding (GAP) Study funded through the Safe, Clean Water Program (SCWP), (2) sheds light on the various options available to the participating agencies, and (3) points to the next generation of projects to potentially pursue. Initial deliverables in Phase 1 and 2 of this effort provided insight to help understand the path, showing how existing or under-construction projects contribute to overall watershed goals, the present, providing context to help weigh project options in Years 4 and 5 of the SCWP funding rounds, and the future, pointing to future opportunities and contextualizing these using a range of metrics to help guide project developers and decision makers to the most impactful projects and areas of the Lower San Gabriel River and Lower Los Angeles River Watershed Areas. This memo focuses on the future and considerations in taking these next steps. Key deliverables are as follows:

- Stormwater Investment Plan Considerations** – This memo presents key data, assumptions, and summaries of the current state of these watersheds and what may be the next great projects to pursue.
- Filterable Project Workbook** – A simple, filterable worksheet has been provided as a snapshot of all of the data contained in the Memo to help evaluate project options in a tabular manner.
- Updated Project Opportunity Dashboard** – Projects, metrics, and locational information are aided by spatial and visual representation that provides the opportunity for exploration and fitting to explore the next great projects and how they relate to those already in place or slated to be soon.

These deliverables together can provide a wealth of information to evaluate potential project benefits pursuant to overall watershed goals. As planning is an ever-evolving process, the information contained within these resources has the potential to be adapted further to respond to evolving regional emphases, needs, goals, and challenges. Funding for this study has been provided in full or in part from the Los Angeles County Flood Control District's Safe, Clean Water Program.



craftwater San Diego | Los Angeles
 engineering, inc. 858.729.0943 | craftwaterinc.com

Gateway Area Pathfinding Analysis

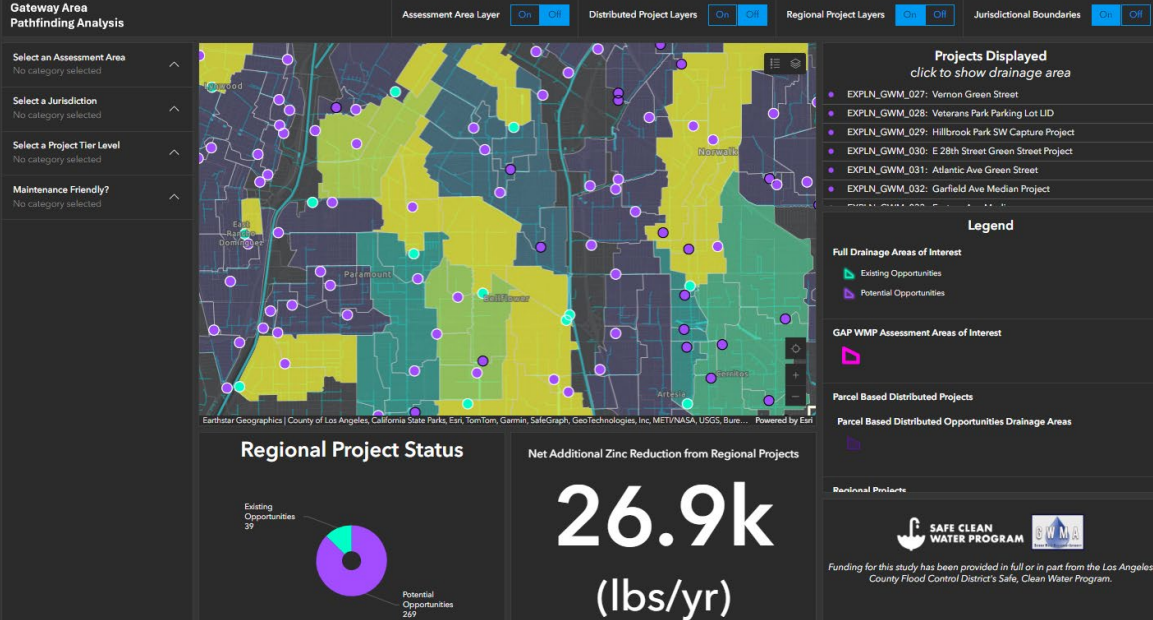
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 Distributed Project Layers: No category selected
 Regional Project Layers: No category selected
 Jurisdictional Boundaries: No category selected

Select an Assessment Area: No category selected
 Select a Jurisdiction: No category selected
 Select a Project Tier Level: No category selected
 Maintenance Friendly?: No category selected

Regional Project Status
 Net Additional Zinc Reduction from Regional Projects
26.9k (lbs/yr)

Existing Opportunities: 59
 Potential Opportunities: 269

SAFE CLEAN WATER PROGRAM
 Funding for this study has been provided in full or in part from the Los Angeles County Flood Control District's Safe, Clean Water Program.



Heartwell Park at Clark Channel Stormwater Capture Project, City of Long Beach

Storage Volume: 30.0 ac-ft
Diversion Rate: 100 cfs (BI0009 Unit 3 Line A)
Treatment: 15.68 cfs pumped filtration
Additional Features: Natural recirculation stream, wetland cells, native tree/shrub plantings

WMP CONTEXT

WMP Metric	Los Cerritos	Los Cerritos Baseline Target
Structural	148.0k ac-ft	244.9k ac-ft
Volume	2,246 ac-ft (WY15)	3,625 ac-ft (WY15)
Treated Area	6,495 acres	7,751 acres

WATERSHED CONTEXT

NET Project Water Quality Benefits:
 386 lb. Zinc reduction
 \$6,221 per lb. reduced

SAFE CLEAN WATER CONTEXT

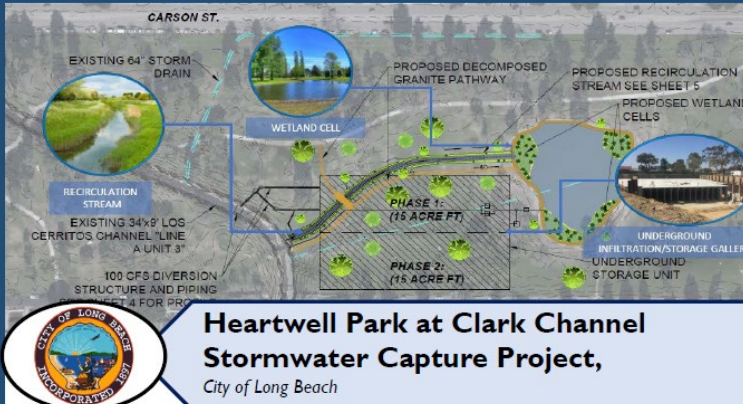
Score	Project Criteria	Project Value(s)	Points
Water Quality Part 1 (City-Wetland)	Culture of an evergreen forest	Affirmative	20
Water Quality Part 1 (City-Wetland)	Tributary Size	>100 acres	20
Water Supply Part 2 (City-Wetland)	Unsanitary Project Catchment Area	\$1,403,243.18	2
Water Supply Part 2 (City-Wetland)	Avg. Annual Water Supply Premium	38 ac-ft	5
Other Scores	See SCWP Submission for Details		18
TOTAL			65

Project Description:
 Project Drainage: Heartwell Park at Clark Channel
 Project Volume: 30.0 ac-ft
 Project Treatment: 15.68 cfs pumped filtration
 Project Diversion: 100 cfs (BI0009 Unit 3 Line A)

Project Features:
 Recirculation Stream, Wetland Cell, Proposed Decomposed Granite Pathway, Proposed Recirculation Stream, Proposed Wetland Cells, Underground Infiltration/Storage Gallery, Underground Storage Unit.

PHASE 1: (15 ACRE FT)
PHASE 2: (15 ACRE FT)

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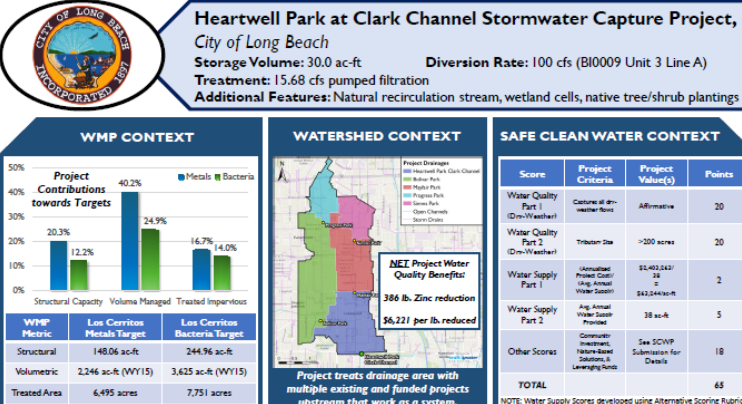
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SAFE CLEAN WATER PROGRAM
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Project ID	Project Name/Location	Assessment Area	Jurisdiction	Project Status	Project Classification	WQ Project Prior.	Maintenance Fr.
EXPLN_GWM_027	Vernon Green Street	LLAR	Vernon	Additional Opportunity	Additional Opp. - No Interaction w. Baseline	Top Tier	Y
EXPLN_GWM_028	Veterans Park Parking Lot LID	LLAR	Sail Gardens	Additional Opportunity	Additional Opp. - Upstream of Baseline	Lowest Tier	Y
EXPLN_GWM_029	Hillbrook Park SW Capture Project	LLAR	Signal Hill	Additional Opportunity	Additional Opp. - Upstream of Baseline	Lowest Tier	Y
EXPLN_GWM_030	E 28th Street Green Street Project	LLAR	Signal Hill	Additional Opportunity	Additional Opp. - Upstream of Baseline	Lowest Tier	Y
EXPLN_GWM_031	Atlantic Ave Green Street	LLAR	Lynwood	Additional Opportunity	Additional Opp. - No Interaction w. Baseline	Lowest Tier	Y
EXPLN_GWM_032	Garfield Ave Median Project	LLAR	Commerce	Additional Opportunity	Additional Opp. - Upstream of Baseline	2nd Tier	Y
EXPLN_GWM_033	Eastern Ave Median	LLAR	Commerce	Additional Opportunity	Additional Opp. - Upstream of Baseline	Lowest Tier	Y
EXPLN_GWM_034	Throeway Park Phase 2 SW Project	SEER	Downey	Additional Opportunity	Additional Opp. - Upstream of Baseline	3rd Tier	Y
EXPLN_RAA_035	Long Beach Junior Golf Course	LCC	Long Beach	Additional Opportunity	Additional Opp. - No Interaction w. Baseline	2nd Tier	Y
EXPLN_RAA_037	Paramount Blvd. Green Street	LCC	Lakewood	Additional Opportunity	Additional Opp. - Upstream of Baseline	Lowest Tier	Y
EXPLN_RAA_039	Reservoir Park	LCC	Signal Hill	Baseline Project	Baseline Project	Baseline Project	Y
EXPLN_RAA_041	South PV Channel LACFD 3	LCC	Long Beach	Additional Opportunity	Additional Opp. - Downstream of Baseline	Top Tier	N
EXPLN_RAA_042	Alport Water Capture	LCC	Long Beach	Existing Project	Baseline Project	Baseline Project	Y
EXPLN_RAA_043	Transmission Easement 4	LCC	Lakewood	Additional Opportunity	Additional Opp. - Upstream of Baseline	3rd Tier	N
EXPLN_RAA_044	South PV Channel LACFD 1	LCC	Long Beach	Additional Opportunity	Additional Opp. - Downstream of Baseline	Top Tier	N
EXPLN_RAA_045	Milstar High School	LCC	Long Beach	Additional Opportunity	Additional Opp. - Downstream of Baseline	2nd Tier	Y
EXPLN_RAA_047	David Burdham K-8 School	LCC	Long Beach	Additional Opportunity	Additional Opp. - No Interaction w. Baseline	Top Tier	Y
EXPLN_RAA_048	John Marshall Middle School	LCC	Long Beach	Additional Opportunity	Additional Opp. - No Interaction w. Baseline	Top Tier	Y
EXPLN_RAA_050	Lakewood Golf Course Driving Range	LCC	Lakewood	Additional Opportunity	Additional Opp. - No Interaction w. Baseline	2nd Tier	Y
EXPLN_RAA_051	Artesia Blvd & Lakewood Blvd	LCC	Bellflower	Additional Opportunity	Additional Opp. - Upstream of Baseline	Lowest Tier	Y
EXPLN_RAA_052	Monroe Elementary School	LCC	Lakewood	Additional Opportunity	Additional Opp. - Upstream of Baseline	Lowest Tier	Y
EXPLN_RAA_053	Somerset Construction IS	LCC	Bellflower	Additional Opportunity	Additional Opp. - Upstream of Baseline	Lowest Tier	Y
EXPLN_RAA_055	DeForest Park	LLAR	Long Beach	Existing Project	Baseline Project	Baseline Project	Y
EXPLN_RAA_056	Dominguez Gap	LLAR	Long Beach	Existing Project	Baseline Project	Baseline Project	Y
EXPLN_RAA_057	Dilla Park	LLAR	Paramount	Additional Opportunity	Additional Opp. - No Interaction w. Baseline	2nd Tier	Y
EXPLN_RAA_058	LA River Powerline Easement	LLAR	Long Beach	Additional Opportunity	Additional Opp. - No Interaction w. Baseline	3rd Tier	Y
EXPLN_RAA_059	Albion Blvd & County Ave	LLAR	Paramount	Additional Opportunity	Additional Opp. - No Interaction w. Baseline	Lowest Tier	Y
EXPLN_RAA_060	Southern Ave & Farmwood Ave.	LLAR	Long Beach	Additional Opportunity	Additional Opp. - No Interaction w. Baseline	Lowest Tier	Y
EXPLN_RAA_062	Los Cerritos Park	LLAR	Long Beach	Additional Opportunity	Additional Opp. - No Interaction w. Baseline	Lowest Tier	Y
EXPLN_RAA_064	South Gate Park (North)	LLAR	South Gate	Additional Opportunity	Additional Opp. - No Interaction w. Baseline	2nd Tier	Y
EXPLN_RAA_065	Yorba Burke John Ram Park	LLAR	Lynwood	Additional Opportunity	Additional Opp. - No Interaction w. Baseline	3rd Tier	Y
EXPLN_RAA_066	Bonita St & Laurel Ave	LLAR	Downey	Additional Opportunity	Additional Opp. - No Interaction w. Baseline	3rd Tier	Y
EXPLN_RAA_067	Castana Row	LLAR	Long Beach	Additional Opportunity	Additional Opp. - No Interaction w. Baseline	3rd Tier	Y
EXPLN_RAA_068	E Anaheim St & Walnut Ave	LLAR	Long Beach	Additional Opportunity	Additional Opp. - Upstream of Baseline	Lowest Tier	Y
EXPLN_RAA_069	Atlantic Ave & Artesia Blvd	LLAR	Long Beach	Additional Opportunity	Additional Opp. - No Interaction w. Baseline	Top Tier	Y
EXPLN_RAA_070	McCallum Ave & Salt Lake Ave Maintenance Yard	LLAR	Long Beach	Additional Opportunity	Additional Opp. - No Interaction w. Baseline	3rd Tier	Y
EXPLN_RAA_071	Hollywood Park	LLAR	South Gate	Additional Opportunity	Additional Opp. - Downstream of Baseline	Top Tier	N
EXPLN_RAA_072	Jane Adams ES	LLAR	Long Beach	Additional Opportunity	Additional Opp. - Upstream of Baseline	Lowest Tier	Y
EXPLN_RAA_074	Hollywood Park	LLAR	South Gate	Additional Opportunity	Additional Opp. - No Interaction w. Baseline	3rd Tier	Y
EXPLN_RAA_077	Thomas Starr King ES	LLAR	Long Beach	Additional Opportunity	Additional Opp. - No Interaction w. Baseline	Lowest Tier	Y
EXPLN_RAA_078	William Logan Stephens HS	LLAR	Long Beach	Additional Opportunity	Additional Opp. - No Interaction w. Baseline	Lowest Tier	Y

Study Closeout Presentation: Hosted October 24, 2024

**GATEWAY WATER
MANAGEMENT AUTHORITY**

is pleased to offer a

FREE VIRTUAL WORKSHOP

Gateway Area Pathfinding (GAP) Stormwater Planning Considerations

Join us to learn about the scientific study and database created to help understand:

- The past - showing how existing and projects under construction contribute to overall watershed goals;
- The present - providing context to help weigh project options in Years 4 and 5 of the Safe Clean Water Program funding rounds; and
- The future - looking at opportunities for consideration using a range of metrics to help guide project developers and decision makers to the most impactful projects and areas of the Lower San Gabriel River and Lower Los Angeles River Watershed Areas.



THURSDAY, OCTOBER 24, 2024



10:00 AM - 11:00 AM PDT

REGISTER HERE





**Outcomes were praised by
watershed managers as useful
tools to inform planning**



**How do we continue to get
value from these resources?**



Phase 3: Putting Resources to Use

(Pending funding by LSGR Watershed Management Group)

Identify Adaptive Goals & Emphases



What's important and what projects are next?

Update Analysis, Metrics, and Tools



How can we measure and evaluate project options?

Communicate Progress & Prioritization



How are we doing and what makes sense next?

SCWP/Funding Context & Tradeoffs Evaluation

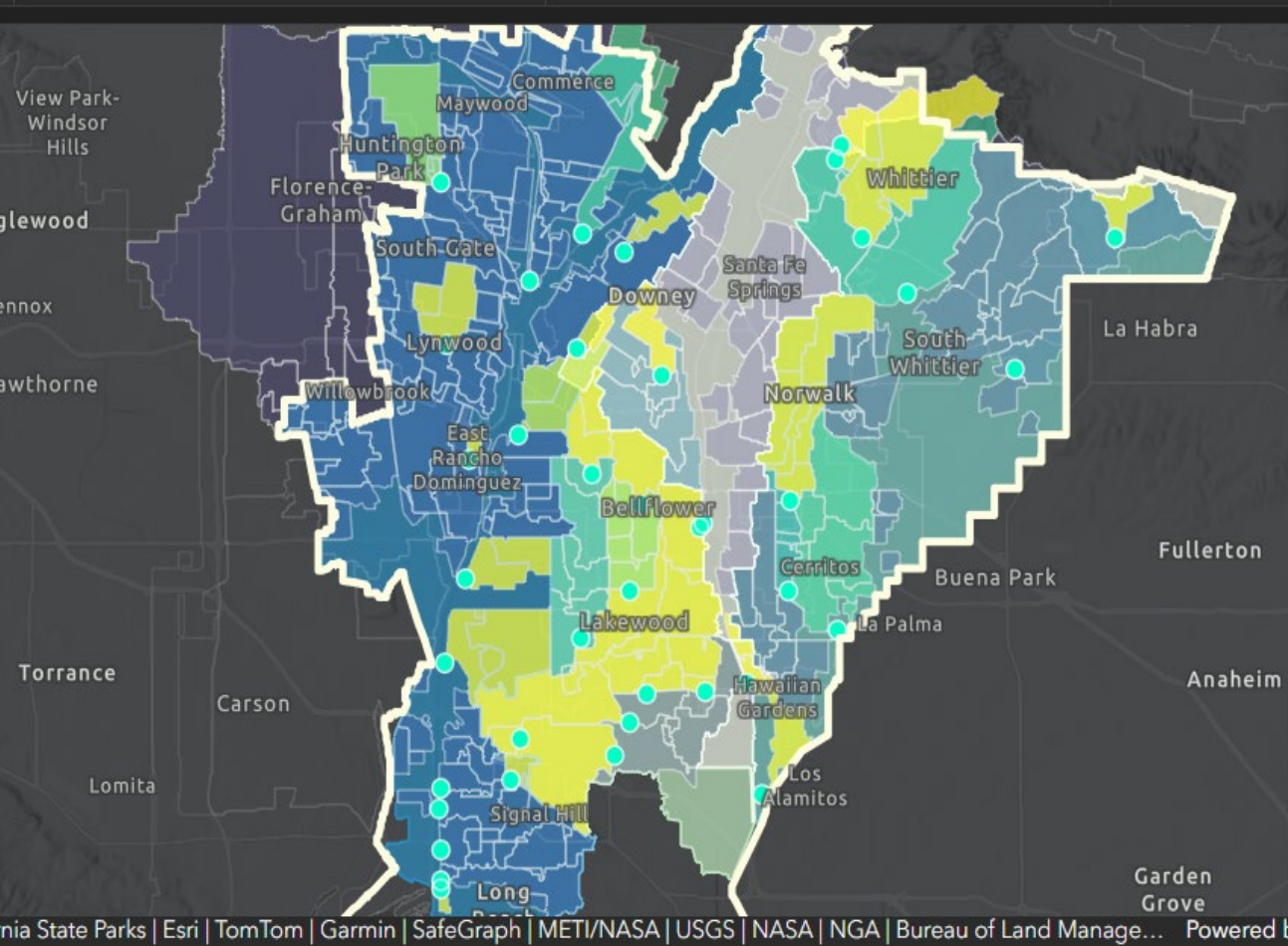


How do we prioritize our choices for progress?



Insight on What's Being Done

- Insight into how existing and proposed projects advance watershed goals.
- Keep members aligned on progress and gaps.
- Concise, comparative formats/tools to support decision-making.
- Engagement to understand evolving priorities and constraints.



Regional Project Status



Existing Opportunities
39

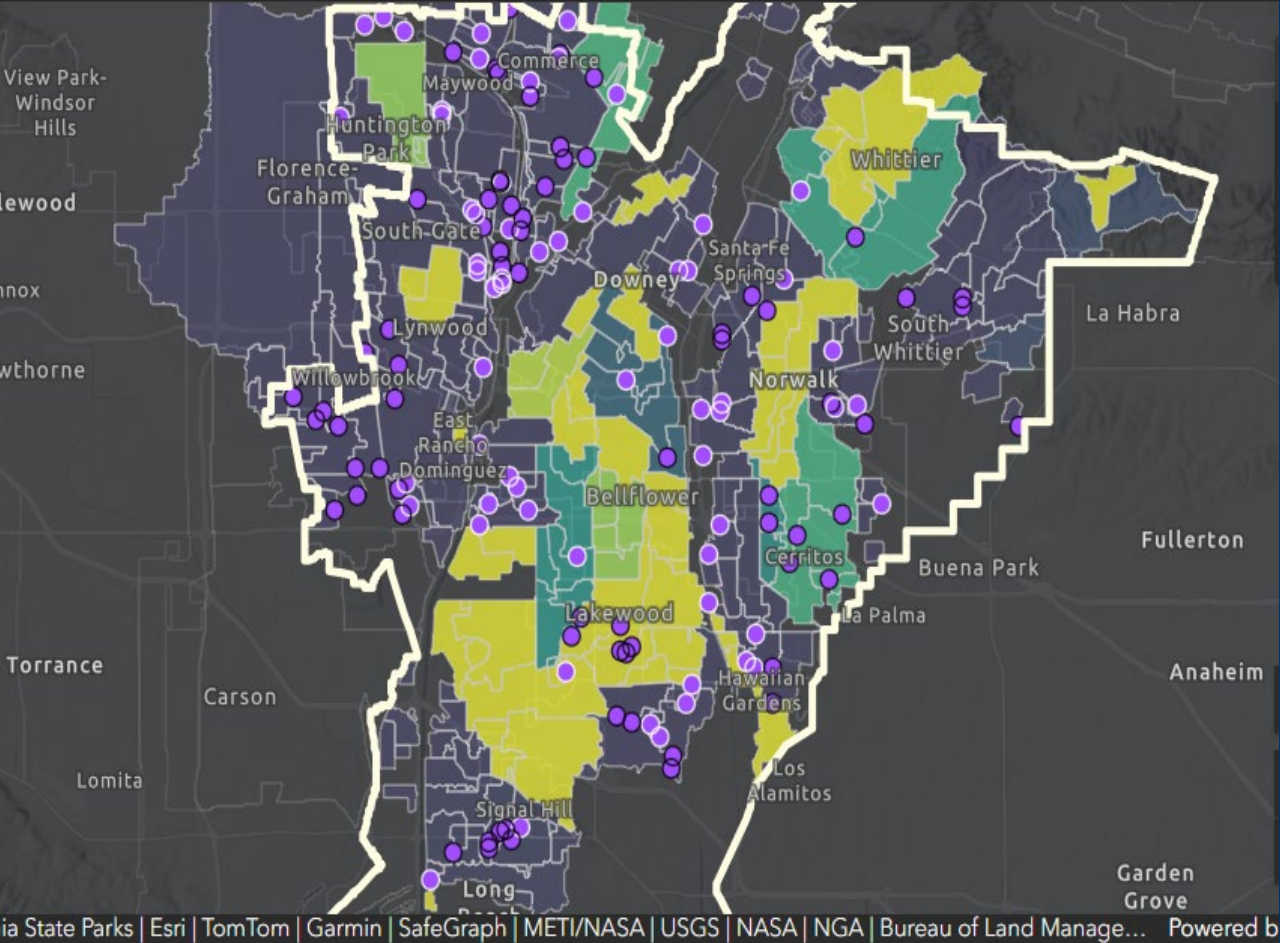
Net Additional Zinc Reduction from Regional Proj

4.7k
(lbs/yr)



Foresight on What Could Be Done Next

- Identify new opportunities and analytics to clarify future investment directions.
- Prepare targeted, next-step analyses to answer emerging planning questions.
- Highlight project-specific net benefits and tradeoffs to inform SCWP decisions.
- Adapt evaluation metrics and analysis to reflect shifting programs and policies.



Regional Project Status

Net Additional Zinc Reduction from Regional Proje



Potential Opportunities
135

18.4k (lbs/yr)

GAP Resources: gatewaywater.org



CRAFTWATER

SCIENCE • STRATEGY • ENGINEERING

Brad.Wardynski@craftwater.com