



SAFE CLEAN WATER PROGRAM

Lower San Gabriel
River Watershed

October 10, 2023
Watershed Coordinator
Update



PRESENTED BY:

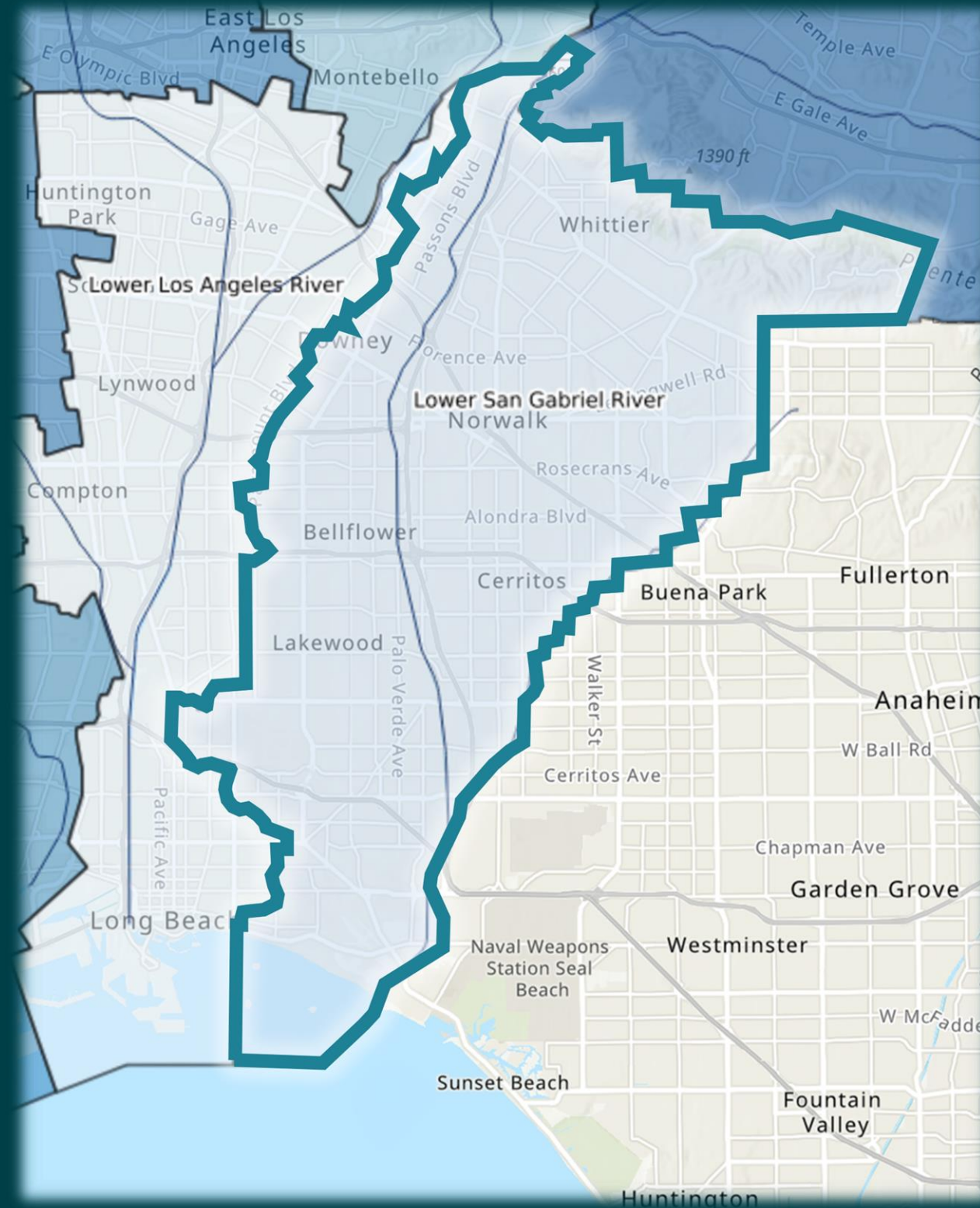
OhanaVets, Inc.
Lower San Gabriel River
Watershed Coordinator



LSGR – Watershed & Member Agencies

The Lower San Gabriel River “LSGR” Watershed Area represents the lower portion of the San Gabriel River starting at Whittier Narrows. It extends 20 miles ending at the Pacific Ocean.

LSGR is in the Gateway Region of Los Angeles County and includes 15 cities and unincorporated LA County in whole or in part.



- Artesia
- Bellflower
- Cerritos
- Downey
- Hawaiian Gardens
- La Habra Heights
- La Mirada
- Lakewood
- Long Beach
- Norwalk
- Paramount
- Pico Rivera
- Santa Fe Springs
- Signal Hill
- Whittier
- Unincorporated LA County

PASSED AS 'MEASURE W' IN 2018

CAPTURE IT

Increase water supply

CLEAN IT

Reduce volume of trash that reaches waterways and the ocean

MAKE IT SAFE

Eliminate toxins and chemicals from our waterways

MAKE IT FOR EVERYONE

Provide community benefits

VISION:

By modernizing our 100-year-old water system, we can better protect public health and our environment, and maximize a cleaner, locally controlled water supply.

HOW?

Through the funding of:

multi-benefit
stormwater &
urban runoff capture
projects

WHO?





Workshops/Meetings

- ☑ **LSGR Watershed Community Small Scale Program Concept – June, July, August, and September**
- ☑ **Neighborhood Small Scale Stormwater Projects in Long Beach – August 28th**
- ☑ **Downey School District – School Site Stormwater Upgrades – September 21st**
- ☑ **Infrastructure Justice for LA – September 22nd**

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**Community
Engagement**

Gather input on community needs that SCW projects can help fulfill

Education Events

- ☑ Groundwater Festival at WRD – **May 6th**
- ☑ Touch-a-Truck at Whittier City Hall – **May 20th**
- ☐ Earth Walk City of Lakewood – **March 2024**
- ☐ Earth Day LA County Sanitation Districts - **April 2024**

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Public Education

Educate the public about SCWP projects in their communities





Photos of Educational Events

WRD
WATER REPLENISHMENT DISTRICT

WE'RE BACK!

13th Annual
GROUNDWATER FESTIVAL
Treasure Beneath Our Feet

- Mye -
3rd Grade - Intensive Learning Center

The Water Replenishment District (WRD) is proud to present the 13th Annual Groundwater Festival on Saturday, May 6, 2023. Please join us for this family friendly event full of activities, educational booths, food, and prizes!

WHERE
WRD
4040 Paramount Blvd.
Lakewood, CA 90712

WHEN
Saturday,
May 6, 2023
10:00 AM - 2:00 PM

FOOD, FACE PAINTING, AND MORE!

For more info please contact Shane Hardy at (562) 275-4228 or via email at shardy@wrd.org

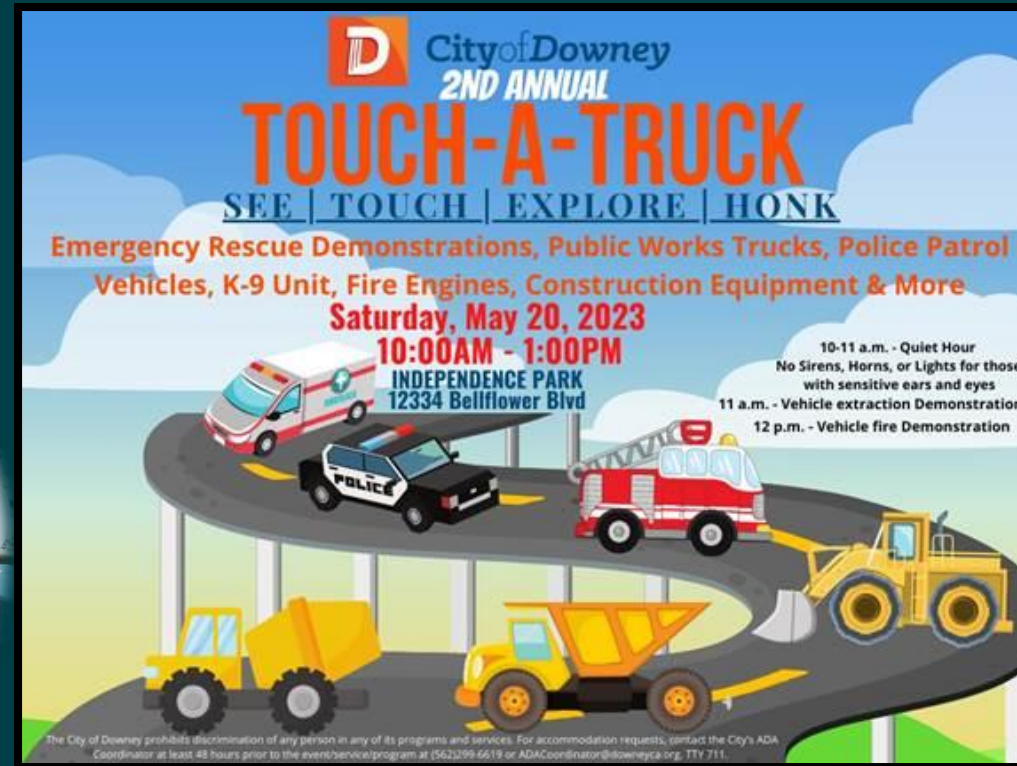
BOARD OF DIRECTORS

 Joy Langford Division 1	 Robert Katherman Division 2	 John D. S. Allen Division 3	 Sergio Calderon Division 4	 Vera Robles DeWitt Division 5	 Stephan Tucker General Manager
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4040 Paramount Blvd., Lakewood, CA 90712 | www.WRD.org | [WRDsocial](https://www.facebook.com/WRDsocial)



Photos of Educational Events



LSGR WASC Prioritization Criteria

- In 2022 LSGR WASC requested WC help to develop consensus on how to define certain SCWP elements not otherwise defined.
- Goal: Assist LSGR WASC in decision-making to help meet the priorities of the LSGR and SCWP.

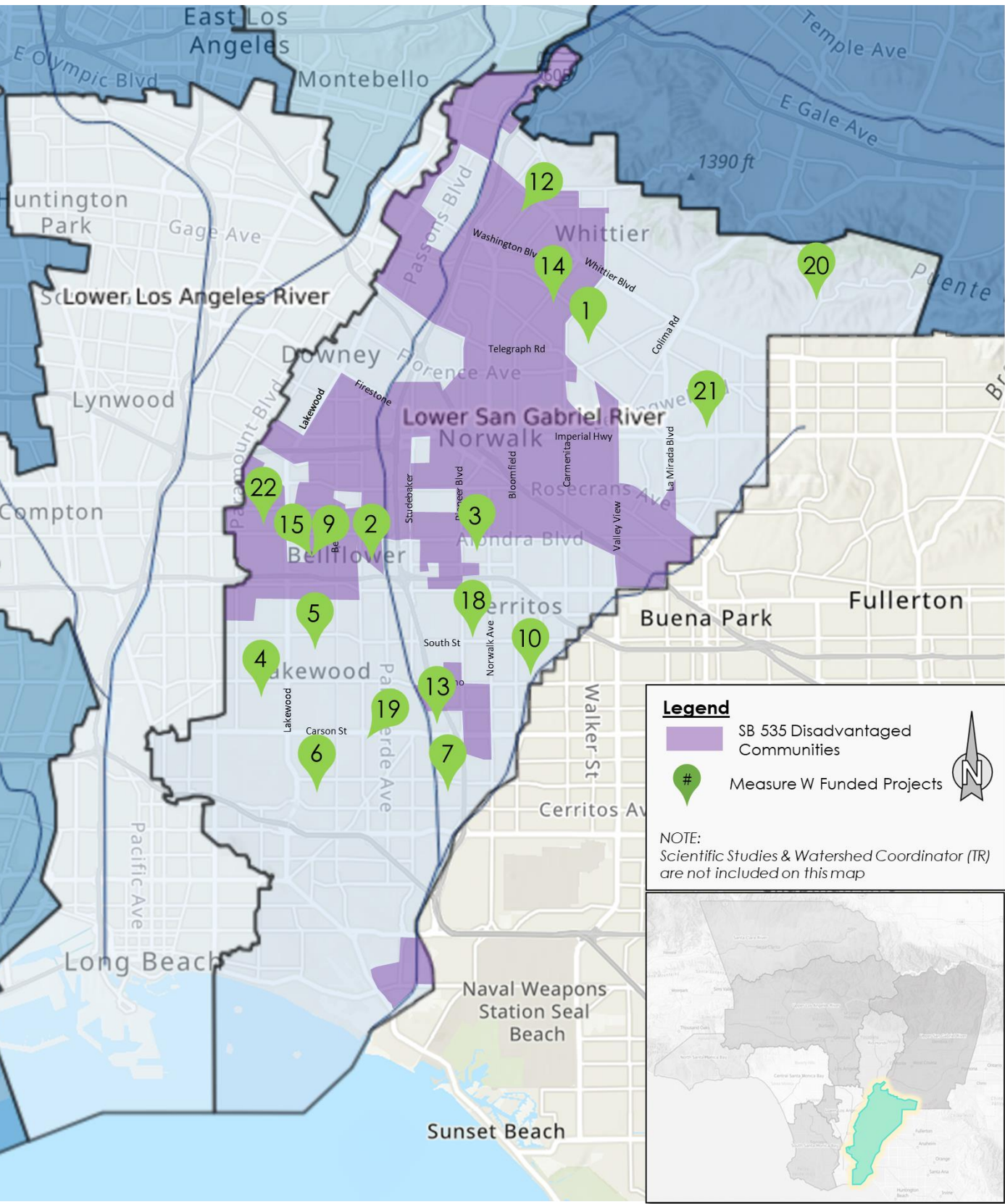
Lower San Gabriel River Watershed Area Steering Committee "LSGR WASC" Prioritization Criteria

The LSGR WASC has developed the following prioritization criteria to guide decisions that will help meet the priorities for the LSGR watershed area in its annual Stormwater Investment Plan (SIP). The criteria below applies only to LSGR WASC and will be used to evaluate projects deemed eligible by the Safe Clean Water Program (SCWP) scoring criteria. The prioritization criteria below is considered a guidance tool and is not binding. It may be modified as needed by the LSGR WASC at any time.

MINIMUM CATCHMENT AREA?		
1.	Should Minimum Catchment Area for Projects be Considered?	Consideration will be on a case-by-case basis.
PROJECT SIZE DEFINITIONS?		
2.	Small-sized Project Definition?	Construction Costs less than \$1M
3.	Medium-sized Project Definition?	Construction Costs between \$1M to \$10M
4.	Large-sized Project Definition?	Construction Costs over \$10M
MINIMUM FUNDING MATCH?		
5.	Projects which prioritize Nature-Based Solutions	Consideration will be on a case-by-case basis; WASC requests good faith effort to find funding match.
6.	Projects with DAC benefits	Consideration will be on a case-by-case basis; WASC requests good faith effort to find funding match.
7.	Small-sized Projects (less than \$1M)	Request 10% minimum funding match
8.	Medium-sized Projects (\$1M to \$10M)	Request 15% minimum funding match
9.	Large-sized Projects (>\$10M)	Request 20% minimum funding match
RESERVING FUNDS?		
10.	Reserving funds for Small-sized Projects	Reserve up to \$1.5M for Small-sized Projects each year; if reserved funds are not needed in any given year, they will be applied to other eligible projects.
11.	Reserving funds for O&M Funding	If a project intends to utilize SCWP regional funding to support ongoing O&M, the SCWP construction funding application should identify the intent and need prior to construction award. This will allow for the project's O&M funding needs to be prioritized and considered for future O&M funds. Additional funds may also be reserved annually for non-SCWP funded construction projects.
FUNDING CAPS?		
12.	Funding Award Caps for Construction Project requests?	No maximum funding cap.
13.	Funding Award Cap for O&M requests?	Consideration will be on a case-by-case basis.



LSGR – SCWP PROJECTS FUNDED AND UNDER CONSIDERATION



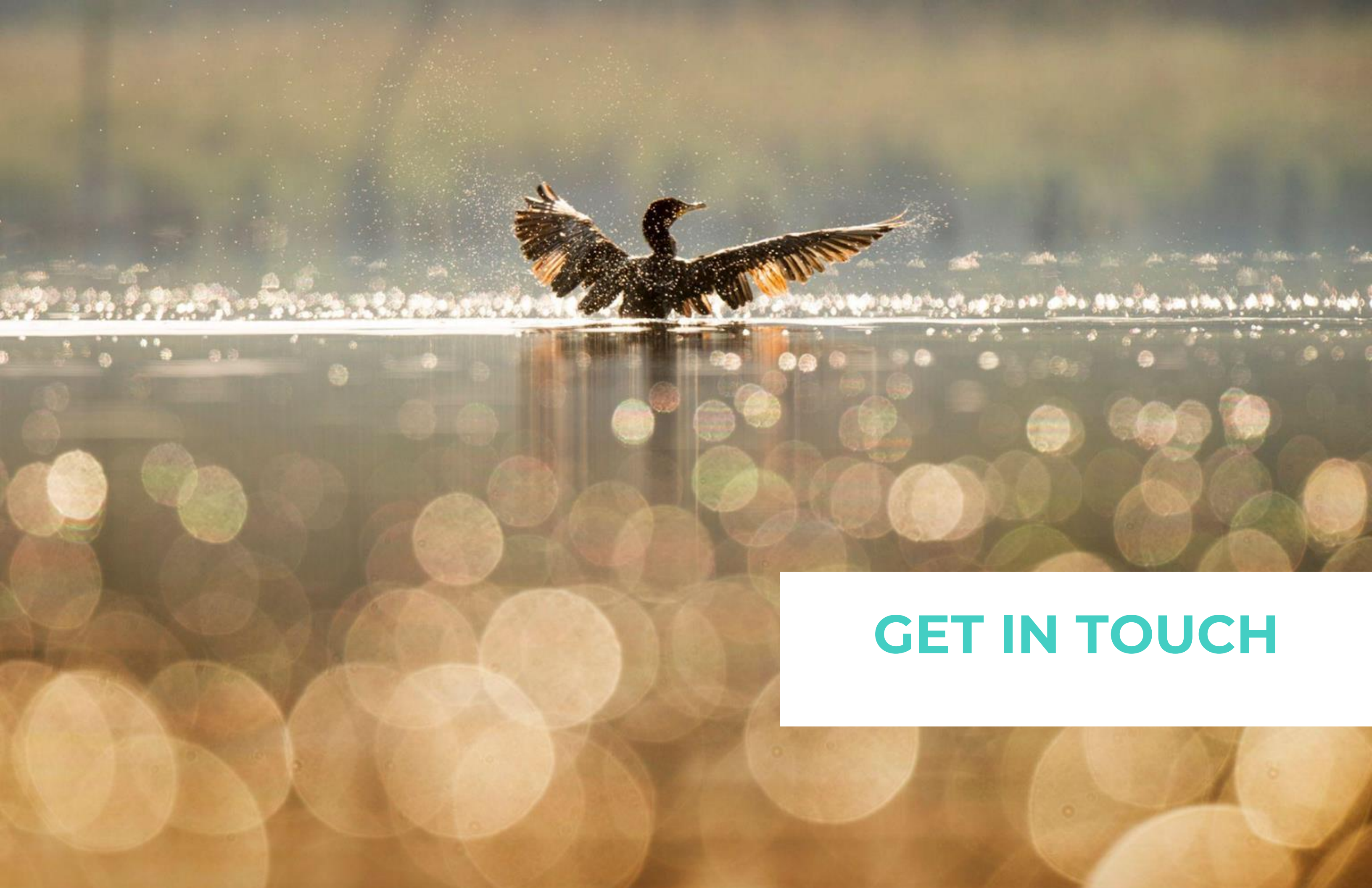
Project Name	DAC Benefit	BMP Type	Planning/Design	Construction	O&M	Technical Resource/ Scientific Study	Cost Share	Measure W Funding	SIP Year	Project Developer
			\$M	\$M	\$M	\$M	\$M	\$M		
1 Adventure Park Multi-Benefit Stormwater Capture	N	D		\$ 13.5			\$ 15.0	\$ 13.5	20-21	Unincorp. County Area of Whittier
2 Caruthers Park	Y	I			\$ 0.9		\$ 13.0	\$ 0.9	20-21	Bellflower
3 Hermosillo Park	Y	I	\$ 4.1	\$ 16.0				\$ 20.1	20-21	Norwalk
4 Bolivar Park	Y	I			\$ 1.3		\$ 11.0	\$ 1.3	20-21	Lakewood
5 Mayfair Park	Y	T			\$ 1.3		\$ 15.0	\$ 1.3	20-21	Lakewood
6 Skylinks Golf Course at Wardlow Stormwater Capture Project	N	T	\$ 2.7	\$ 7.8				\$ 10.4	20-21	Long Beach
7 El Dorado Regional Project	Y	T	\$ 3.0				\$ 0.1	\$ 3.0	20-21	Long Beach
8 Watershed Coordinator	N/A	TR				\$ 1.0		\$ 1.0	20-21	LACFCD
9 Bellflower Simms Park Stormwater Capture	Y	T	\$ 2.1				\$ 5.6	\$ 2.1	21-22	Bellflower
10 Cerritos Sports Complex	Y	T	\$ 2.4					\$ 2.4	21-22	Cerritos
11 Gateway Area Path Finding Analysis	N/A	SS				\$ 0.1		\$ 0.1	21-22	GWMA
12 Sorensen Park Multi-Benefit	Y	TR				\$ 0.3		\$ 0.3	21-22	LA County PW
13 Lakewood Equestrian Center	Y	T	\$ 1.1				\$ 0.4	\$ 1.1	22-23	Lakewood
14 York Field Stormwater Capture	Y	I	\$ 1.9				\$ 0.6	\$ 1.9	22-23	Whittier
15 Bellflower Simms Park Stormwater Capture	Y	T		\$ 13.7			\$ 0.9	\$ 13.7	22-23	Bellflower
16 Gateway Area Path Finding Analysis Ph 2	N/A	SS				\$ 0.2		\$ 0.2	22-23	GWMA
17 Microplastics in LA County Stormwater	N/A	SS				\$ 0.2	\$ 0.1	\$ 0.2	22-23	Dr. A. Gray, UC Riverside
18 Artesia Park Urban Runoff Capture	Y	T	\$ 1.6					\$ 1.6	23-24	Artesia
19 Heartwell Park at Palo Verde Channel Stormwater Capture	N	T	\$ 1.5	\$ 1.8				\$ 3.3	23-24	Long Beach
20 La Habra Heights Stormwater Treatment and Reuse	Y	BF		\$ 0.7				\$ 0.7	23-24	La Habra Heights
21 La Mirada Creek Park	N	BR		\$ 5.8			\$ 1.0	\$ 5.8	23-24	La Mirada
22 Progress Park Stormwater Capture	Y	I	\$ 2.2				\$ 2.2	\$ 2.2	23-24	Paramount
23 Regional Pathogen Reduction	N/A	SS				\$ 1.0		\$ 1.0	23-24	GWMA
24 Targeted Human Waste Source Reduction Strategy	N/A	SS				\$ 0.5		\$ 0.5	23-24	GWMA
Total			\$22.6	\$59.3	\$ 3.4	\$ 3.3		\$ 88.6		

LEGEND
 BMP Type: BF=Biofiltration; BR=Bioretention; D= Diversion to Sanitary Sewer; I = Infiltration Facility; T = Treatment Facility; TR = Technical Resource; SS = Scientific Study
 Located in SB 535 Disadvantaged Communities



QUESTIONS? DISCUSSION?





GET IN TOUCH



Clean Water Vision

Community Outreach
Ideas?

Project Ideas?

Partnership
Ideas?

Get Involved! Share your ideas with us!

Sign up for Lower San Gabriel River
Watershed Area Information and Events!

Visit us at:

cleanwatervision.com

Email us at:

lsgr@ohanavets.com

Follow us on social media!

[@lsgrwatershed](https://www.instagram.com/lsgrwatershed)

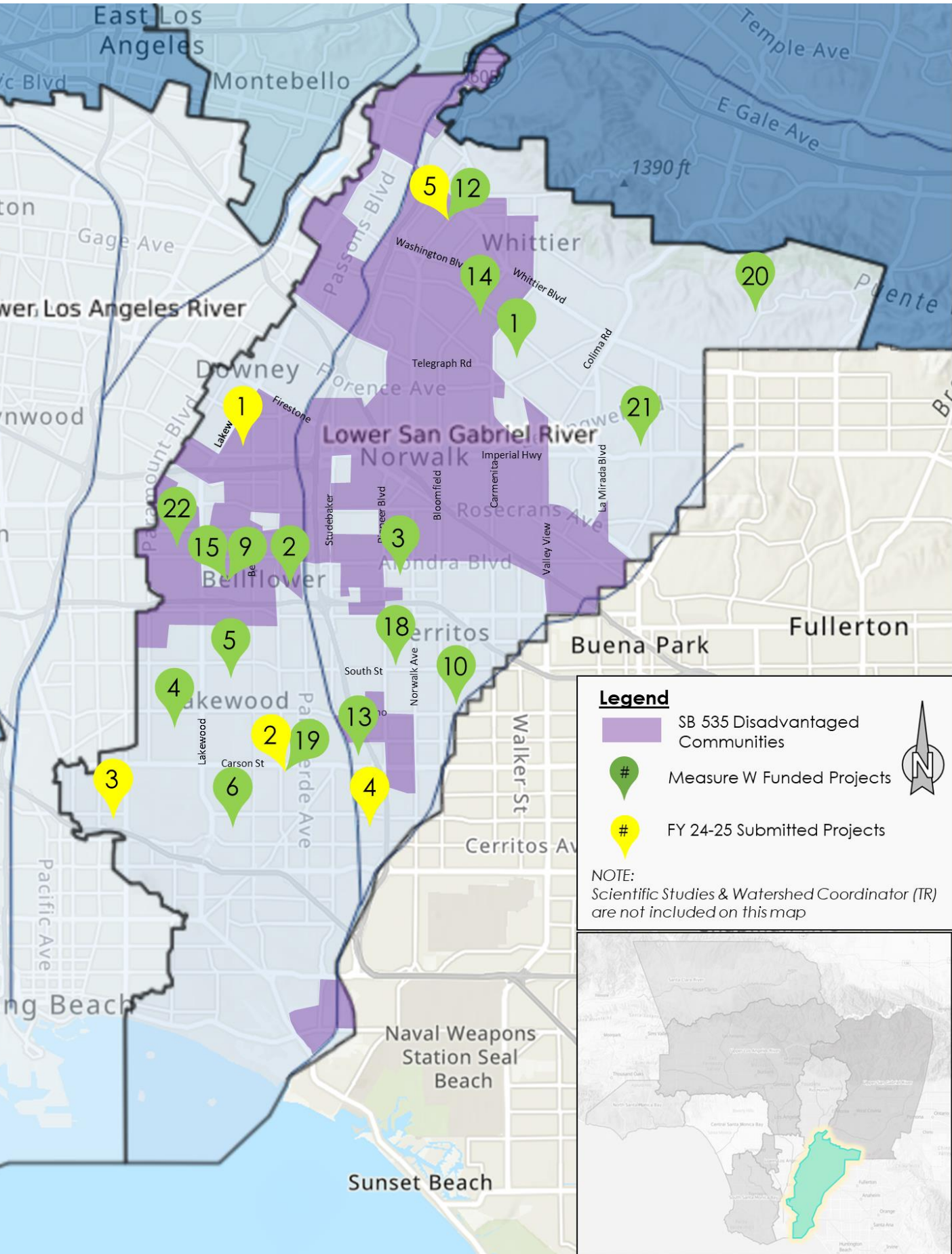


SAFE CLEAN WATER L.A.

THE END



LSGR – FY 24-25 PROJECTS APPLICATIONS



Legend

- SB 535 Disadvantaged Communities
- Measure W Funded Projects
- FY 24-25 Submitted Projects

NOTE:
Scientific Studies & Watershed Coordinator (TR) are not included on this map

Project Name	DAC Benefit	BMP Type	Planning/Design	Construction	O&M	Technical Resource/ Scientific Study	Cost Share	Measure W Funding	Estimated Score	Project Developer
			\$M	\$M	\$M	\$M	\$M	\$M		
1 Independence Park Runoff Capture Facility	Y	I	\$ 1.6					\$ 1.6	72	Downey
2 Heartwell Park at Palo Verde Channel Stormwater Capture	N	i	\$ 2.9					\$ 2.9	66	Long Beach
3 Reservoir Park Stormwater Capture Project	N	I	\$ 1.0	\$ 5.7				\$ 6.7	69	Signal Hill
4 El Dorado Park Regional Stormwater Capture Project	N	BF/D		\$ 37.4				\$ 37.4	64	Long Beach
5 Sorensen Park Multi-Benefit Stormwater Capture Project	Y	I	\$ 1.6					\$ 1.6	67	LA County PW
Total			\$ 7.1	\$43.1	\$ -	\$ -		\$ 50.2		

LEGEND
 BMP Type: BF=Biofiltration; BR=Bioretention; D= Diversion to Sanitary Sewer; I = Infiltration Facility; T = Treatment Facility; TR = Technical Resource; SS = Scientific Study
 Located in SB 535 Disadvantaged Communities

LSGR WATERSHED AREA FY24-25 PROJECT APPLICANT INDEPENDENCE PARK RUNOFF CAPTURE FACILITY



Regional stormwater capture facility at Independence Park.

PROJECT LEAD: City of Downey

BMP TYPE: Infiltration Facility

LOCATED IN DISADVANTAGED COMMUNITY(DAC)? Yes

BENEFITS DAC? Yes

PRELIMINARY SCORE: 72

TOTAL MEASURE W FUNDING REQUEST: \$1,310,458

FUNDING YEAR AMOUNT

Year 1 \$1,310,458 (Design)

COST SHARE? No

TOTAL CONSTRUCTION COST: \$11,937,061

DRAINAGE AREA CHARACTERISTICS	
REGIONAL WATER MANAGEMENT PLAN	Lower San Gabriel River Watershed
TOTAL DRAINAGE AREA	560 AC Downey (100%)
INFILTRATION RATE	0.5 in/hr
APPROX. DEPTH TO GROUNDWATER	52 ft BGS
MODELED AVERAGE ANNUAL RUNOFF VOLUME	223.7 acre-ft

WATER QUALITY IMPROVEMENT	
PRIMARY POLLUTANT (ZINC) POLLUTANT REDUCTION	144.218 lb/yr (90.47%)
SECONDARY POLLUTANT (COPPER) POLLUTANT REDUCTION	36.158 lb/yr (89.26%)
DESIGN DIVERSION RATE	28.34 CFS
STORAGE CAPACITY FOR SUBSURFACE STORAGE STRUCTRE	4.45 acre-ft (1.45 MG)
24-HOUR CAPACITY	8.57 acre-ft
CONSTRUCTION COST ESTIMATE	\$10,670,055

- PROJECT FEATURES:**
- Captures water from 560 acres
 - Bioswale and Permeable Pavement
 - Reduce Heat Island Effect
 - Improve Water Quality
 - Improve Park Facility

The site plan shows the facility layout at Independence Park, bounded by Bellflower Blvd to the west and Dunrobin Ave to the east. Key features include:

- 4.2 AC-FT UNDERGROUND INFILTRATION BASIN:** A large rectangular structure for water storage and infiltration.
- NEW NATIVE VEGETATION:** Landscaping with local plants to enhance the park's ecosystem.
- .25 AC-FT BIORETENTION BASIN:** A pond-like structure for water treatment and storage.
- Storm Drains:** B10615 Storm Drain to the north and B13150 Line A Storm Drain to the east.
- Diversion Lines and Pre-treatment:** Structures to divert runoff from the storm drains into the facility.
- Outlet Lines and Post-treatment:** Structures to manage water after treatment.
- Proposed and Existing Trees:** Locations for new and current vegetation.
- Limit of Work:** The boundary of the construction area.

Additional facility details shown in images:

- PARKING LOT WITH PERMEABLE PAVEMENT AND PLANTER BOXES:** A paved area designed for water infiltration.
- DECOMPOSED GRANITE PATH:** A sustainable, permeable walking path.
- NEW FIELD LIGHTING:** Modern lighting fixtures for the park's field.

LSGR WATERSHED AREA FY24-25 PROJECT APPLICANT HEARTWELL PARK AT PALO VERDE CHANNEL STORMWATER CAPTURE PROJECT



Regional stormwater capture and filtration/sewer diversion facility located at Heartwell Park beneath the open space of the existing park.

PROJECT LEAD: City of Long Beach

BMP TYPE: Treatment Facility

LOCATED IN DISADVANTAGED COMMUNITY(DAC)? No

BENEFITS DAC? No

PRELIMINARY SCORE: 66

TOTAL MEASURE W FUNDING REQUEST: \$2,864,4725

FUNDING YEAR **AMOUNT**

Year 1 \$2,864,472 (Design)

COST SHARE? No

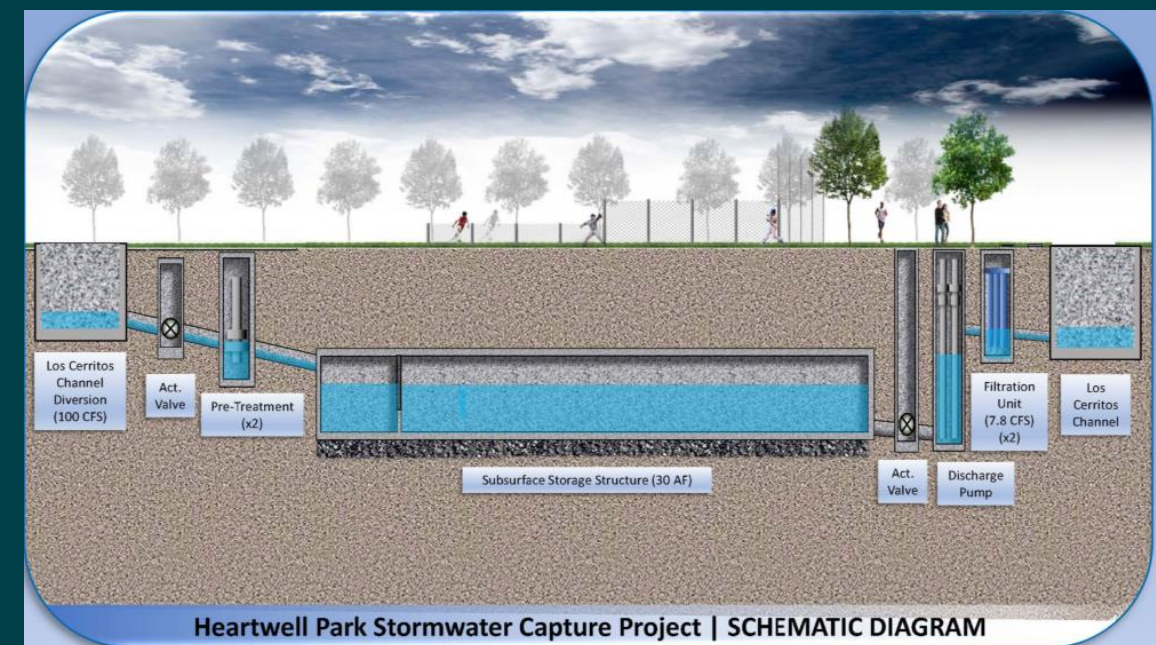
TOTAL CONSTRUCTION COST: \$11,956,920

PROJECT FEATURES:

- Captures water from 1,881 acres
- Enhance/Restore Park Space
- Improves Public Access to Waterways
- Enhance Recreational Opportunities
- Reduce Heat Local Island Effect
- Increase Tree Count



WATER QUALITY IMPROVEMENT	
Primary Pollutant Zinc Reduction Achieved (% Zn reduction)	111 lb/yr (92.5%)
Secondary Pollutant Copper Reduction Achieved (% Cu reduction)	26.6 lb/yr (90.5%)
Design Diversion Rate	100 CFS
Storage Capacity for Subsurface Storage Structure	30.0 ac-ft (9.78 MG)
24-Hour Capacity	61.10 ac-ft
Construction Cost Estimate	\$42,833,433



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LSGR WATERSHED AREA FY24-25 PROJECT APPLICANT RESERVOIR PARK STORMWATER CAPTURE FACILITY

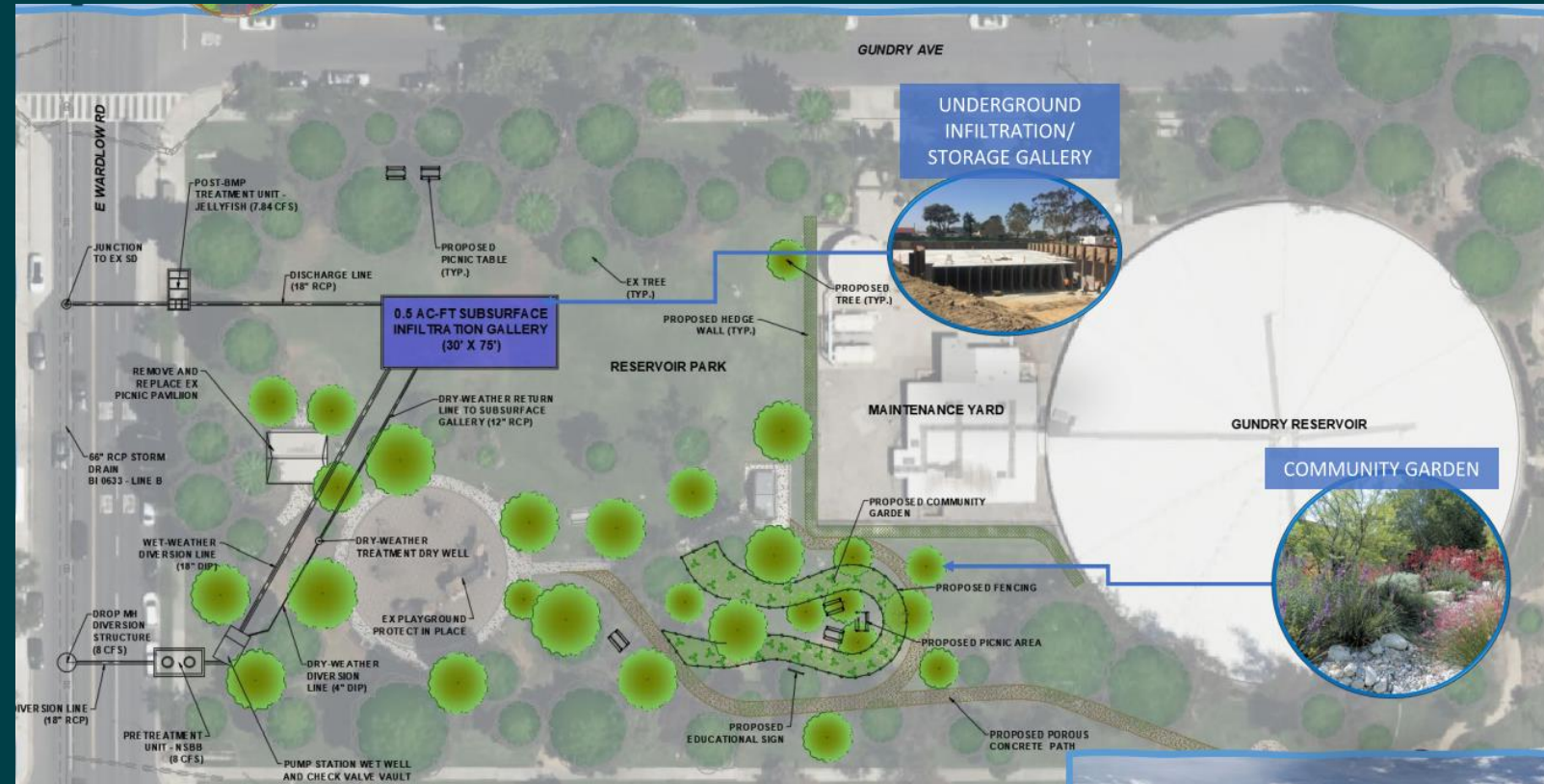


Regional stormwater capture, infiltration/filtration facility, and new park equipment/community garden at Reservoir Park.

PROJECT LEAD:	City of Signal Hill
BMP TYPE:	Infiltration Facility
LOCATED IN DISADVANTAGED COMMUNITY(DAC)?	No
BENEFITS DAC?	No
PRELIMINARY SCORE:	69
TOTAL MEASURE W FUNDING REQUEST:	\$6,676,878
FUNDING YEAR	AMOUNT
Year 1	\$951,843 (Design)

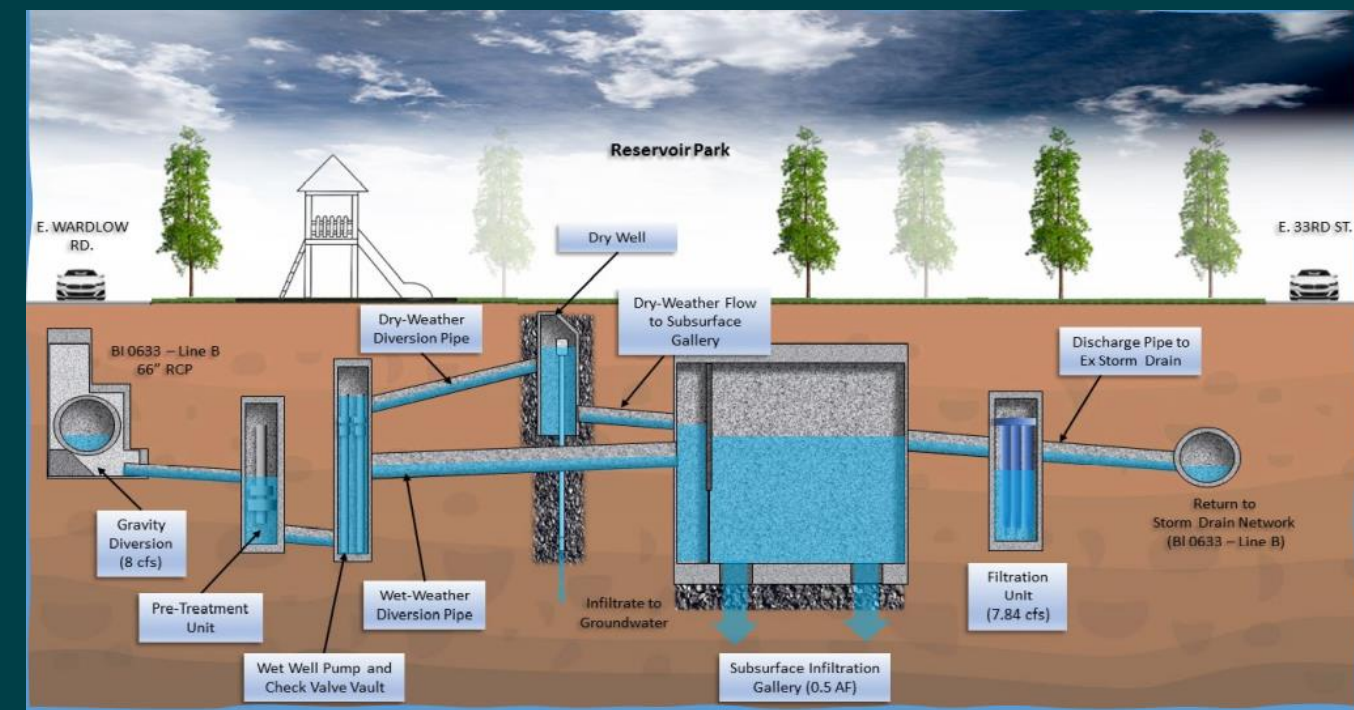
COST SHARE?	No
TOTAL CONSTRUCTION COST:	\$5,725,035

- PROJECT FEATURES:**
- Captures water from 184 acres
 - Additional Shading
 - Reduce Heat Island Effect
 - Improve Water Quality
 - Improve Park Facility



DRAINAGE AREA CHARACTERISTICS	
REGIONAL WATER MANAGEMENT PLAN	Los Cerritos Channel Watershed
TOTAL DRAINAGE AREA	183.6 AC Signal Hill (42.8%) Long Beach (57.2%)
INFILTRATION RATE	0.3 in/hr
GROUNDWATER BASIN BELOW SITE:	Central Basin
MODELED AVERAGE ANNUAL RUNOFF VOLUME	78.6 acre-ft

WATER QUALITY IMPROVEMENT	
PRIMARY POLLUTANT (ZINC) POLLUTANT REDUCTION	36.34 lb/yr (80.03%)
SECONDARY POLLUTANT (COPPER) POLLUTANT REDUCTION	9.29 lb/yr (81.21%)
DESIGN DIVERSION RATE	8 CFS
STORAGE CAPACITY FOR SUBSURFACE STORAGE STRUCTRE	0.5 acre-ft (0.16 MG)
24-HOUR CAPACITY	16.08 acre-ft
CONSTRUCTION COST ESTIMATE	\$5,125,487



LSGR WATERSHED AREA FY23-24 PROJECT APPLICANT EL DORADO REGIONAL STORMWATER CAPTURE PROJECT



Regional stormwater capture, surface ponds, diversion to sanitary sewer, and filtration facility at El Dorado Regional Park

PROJECT LEAD: City of Long Beach
BMP TYPE: Biofiltration, Diversion to Sanitary Sewer

LOCATED IN DISADVANTAGED COMMUNITY(DAC)? No

BENEFITS DAC? No

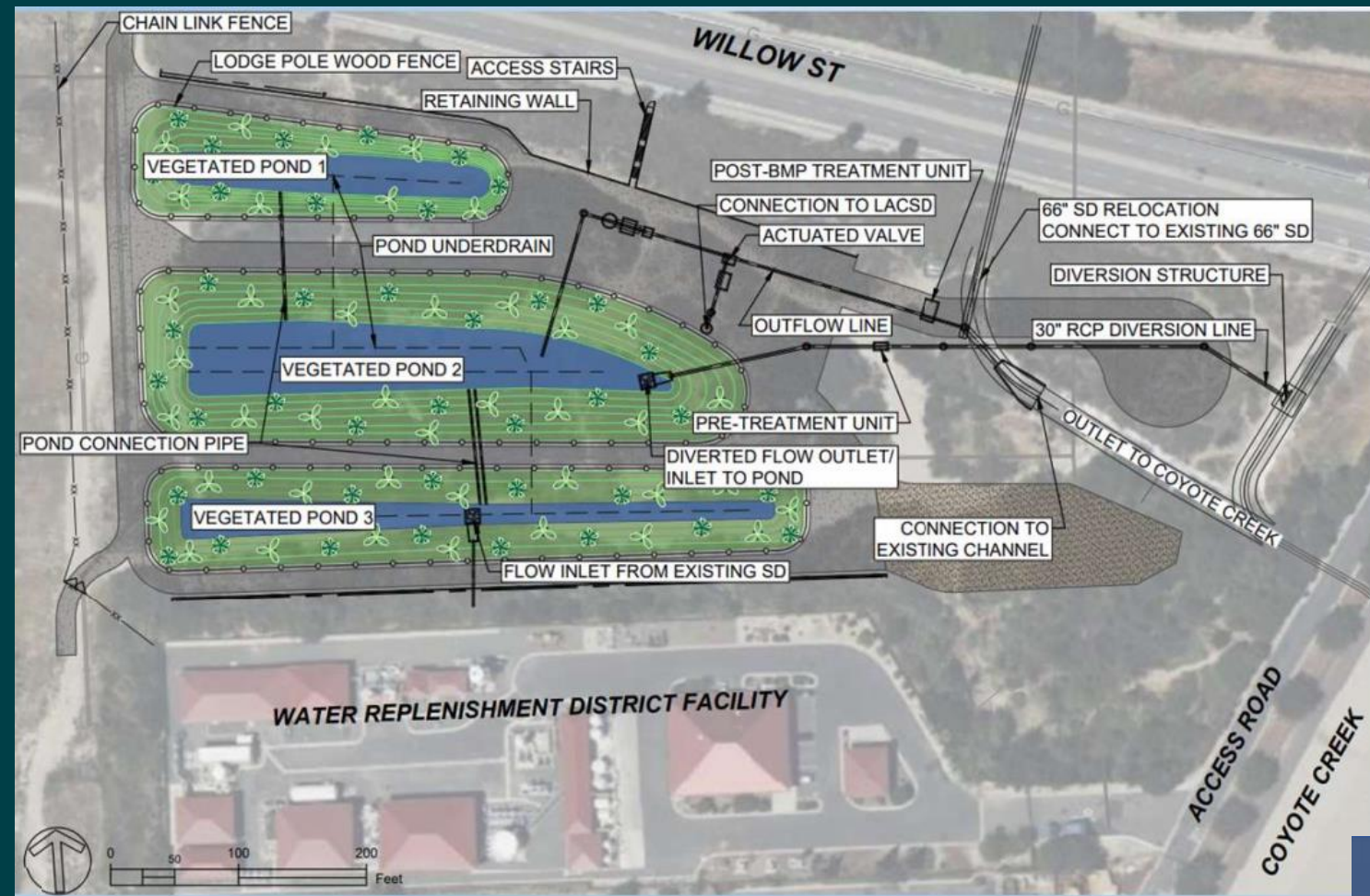
PRELIMINARY SCORE: 64

TOTAL MEASURE W FUNDING REQUEST: \$37,386,870

FUNDING YEAR	AMOUNT
Year 1	\$9,346,718 (Const)
Year 2	\$9,346,718 (Const)
Year 3	\$9,346,717 (Const)
Year 4	\$9,346,717 (Const)

COST SHARE? No

CONSTRUCTION COST: \$37,386,870



PROJECT FEATURES:

- Captures water from 2,874 acres
- Improves Water Quality
- Increases Shade and Trees
- Reduces Heat Island Effects
- Enhance Habitat Space

DRAINAGE AREA CHARACTERISTICS	
REGIONAL WATER MANAGEMENT PLAN	Lower San Gabriel River Watershed
TOTAL DRAINAGE AREA	2874 AC Long Beach: (15%) Artesia: (15%) Cerritos: (26%) Hawaiian Gardens: (16%) Lakewood: (23%) Norwalk: (5%)
APPROX. DEPTH TO GROUNDWATER	12 ft BGS
MODELED AVERAGE ANNUAL RUNOFF VOLUME	1211 acre-ft

WATER QUALITY IMPROVEMENT	
TRIBUTARY DRY WEATHER FLOWS CAPTURED (%)	100%
DRY WEATHER BMP TRIBUTARY SIZE	2,874 acres
DESIGN DIVERSION RATE	20 CFS
STORAGE CAPACITY FOR SURFACE STORAGE STRUCTRE	10.3 acre-ft (3.36 MG)
ESTIMATED AVERAGE DRY WEATHER FLOW RATE	0.04 cfs
CONSTRUCTION COST ESTIMATE	\$37,386,870

LSGR WATERSHED AREA FY24-25 PROJECT APPLICANT

SORENSEN PARK MULTI-BENEFIT STORMWATER CAPTURE PROJECT



The project will involve construction of a stormwater storage and infiltration facility at Sorensen Park, in unincorporated South Whittier.

PROJECT LEAD:	LA County PW
BMP TYPE:	Infiltration
LOCATED IN DISADVANTAGED COMMUNITY(DAC)?	Yes
BENEFITS DAC?	Yes
PRELIMINARY SCORE:	67
TOTAL MEASURE W FUNDING REQUEST:	\$1,616,592
FUNDING YEAR	AMOUNT
Year 1	\$1,616,592 (Design)
COST SHARE?	No

TOTAL CONSTRUCTION COST: \$32,231,833

PROJECT FEATURES:

- Captures water from 617 acres
- Increase Water Supply
- Improves Stormwater Quality
- Enhances Habitat or Park Space
- Increases Shade and Trees
- Reduces Heat Island Effects



Potential BMPs

- Infiltration Gallery
- Bioretention
- Biofiltration
- Bioswales
- Drywells
- Permeable Pavement

Proposed Feasibility Study

- Geotechnical Investigation
- Contamination Assessment
- Preliminary Design Plans
- Hydrology Analysis
- Identify suitable BMPs



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