

Housekeeping and Logistics

2-hour workshop

We will ask for input twice during the workshop
using [mentimeter.com](https://www.mentimeter.com)

Q&A discussion toward the end of meeting

Add to zoom chat

Spanish translation is provided

The slides and our answers to questions received
during Q&A will be posted.



Community Norms



- Stay present as much as possible
- Ask questions
- Be solutions oriented



Agenda

- 1) Overview of the Metrics and Monitoring Study (MMS or Study)
- 2) Regional Program Municipal Benefits
- 3) Municipal Program Reporting / Improving Metrics
- 4) Question and Answer
- 5) Wrap up and Goodbye



Municipal Stakeholder Workshop

For the Metrics & Monitoring Study
of the Safe, Clean Water Program

May 23, 2023





- Improve water quality
- Increase drought preparedness through stormwater capture
- Improve public health
- Invest in multi-benefit infrastructure

- Prioritize nature-based solutions
- Provide disadvantaged community benefits
- Leverage other funding



- Provide a spectrum of project sizes
- Encourage innovation
- Invest in independent scientific research
- Provide proportional funding

- Ensure adaptive management
- Promote green jobs
- Provide ongoing operations and maintenance of projects

The Goal of the MMS is to:

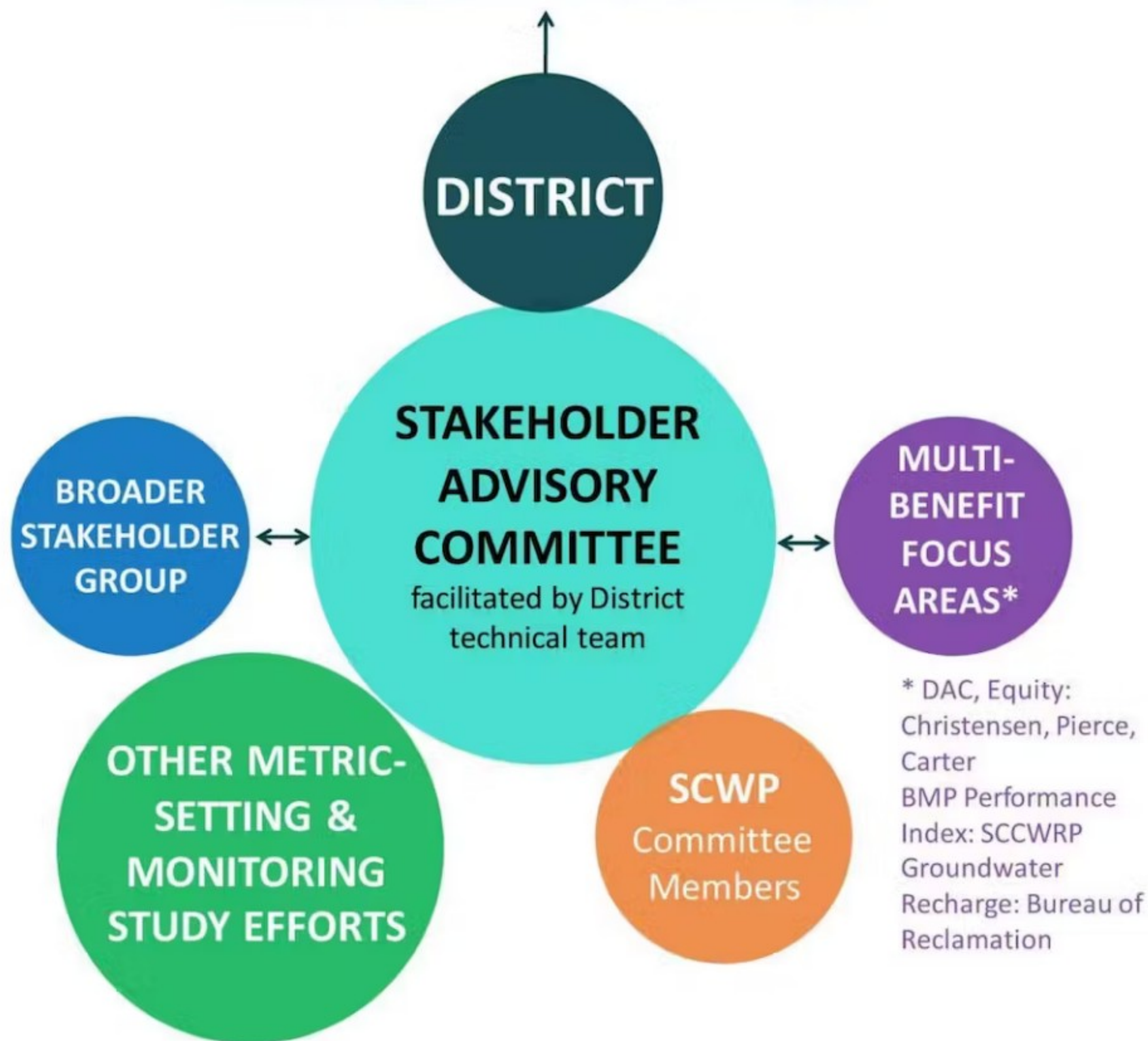
Develop program methods, metrics and monitoring criteria to inform tracking, planning, reporting and decision making within specific areas of the SCWP





Overview of the MMS

STUDY RESULTS & TOOLS TO ASSIST WITH
DEVELOPMENT OF PROCEDURES & GUIDELINES



- Is a stakeholder driven process
- Will help inform the adaptive management process



Overview of the MMS





What is a metric?

A metric is a measurement of the state of something, or of a trend over time or space.

An indicator is one or many metrics that together are taken to represent the status or trend of something.

Metrics --> Relative Humidity, Temperature, Wind Speed, Wind Direction

Indicator --> Percent Chance of Rain

Application --> Do I need an umbrella today?

Metrics --> Tire pressure in pounds per square inch (PSI)

Indicator --> Dashboard tire pressure warning light

Application --> I may need to add air to the tires.



Existing Evaluation Metrics

101

Approved and recommended

Infrastructure Program Projects representing

over

\$1.2 billion

in investments through

FY26-27

(\$670M of SCWP

Regional Program

dollars)

Capture stormwater from over

222,000 acres

Provide an increase in total 24-hr storage capacity of

4,070 AF

Provide an increase in annual average stormwater capture of

56,915 AF

Leverage other funding nearing

\$542M

Investments benefitting disadvantaged communities

\$343M

Are being implemented across

47 Municipalities



REGIONAL PROGRAM


Municipal Benefits

MUNICIPAL PROGRAM

Reporting & Tracking



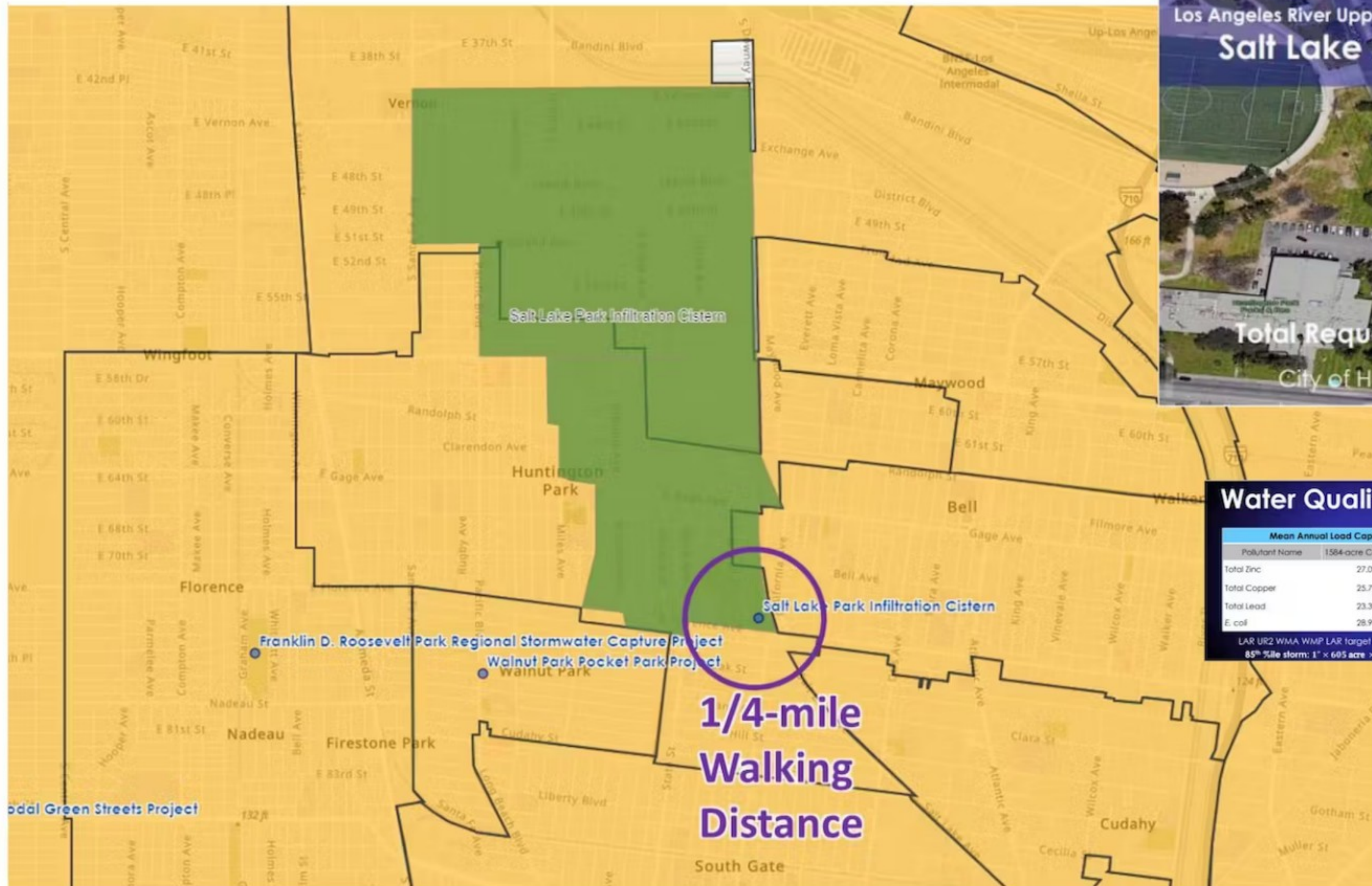
LA County Flood Control District Code Section 16.05.D.1.e.
“**[The Regional Program within the Infrastructure Program]**
Shall be programmed, to the extent feasible, such that each
Municipality receives **benefits in proportion to the funds**
generated within their jurisdiction, after accounting for
allocation of the one hundred ten percent (110%) return to
[disadvantaged communities]”

A large, light blue arrow pointing downwards from the word "benefits" in the text above to the text below.

Refresher: Water Quality, Water Supply, and Community Investment Benefits



Tributary Areas & Regional Benefits



Los Angeles River Upper Reach 2 Watershed Management Area (LAR UR2 WMA)
Salt Lake Park Infiltration Cistern Project

Total Request: \$28,000,000
 City of Huntington Park

Water Quality Benefits

Mean Annual Load Capture (SCWP Module)		
Pollutant Name	1584-acre Catchment	605-acre Catchment
Total Zinc	27.0%	60.3%
Total Copper	25.7%	59.2%
Total Lead	23.3%	55.4%
E. coli	28.9%	55.7%

LAR UR2 WMA WMP LAR target E. coli load reduction 29%
 85th %ile storm: 1" x 605 acre x ft/12" x 2/3 = 34 ac-ft

Water Supply Benefits

- Divert wet & dry flows from 9.5' x 7' RCB and 69" RCP
- Hydrodynamic separation pretreatment
- Deliver flows to 32 acre foot park cistern
- Infiltrate 550 ac-ft annually into Central Basin aquifers

Future/current catchment: 605/1,584 acres
 24-hour runoff capture capacity: 34 acre-feet

Project Benefits

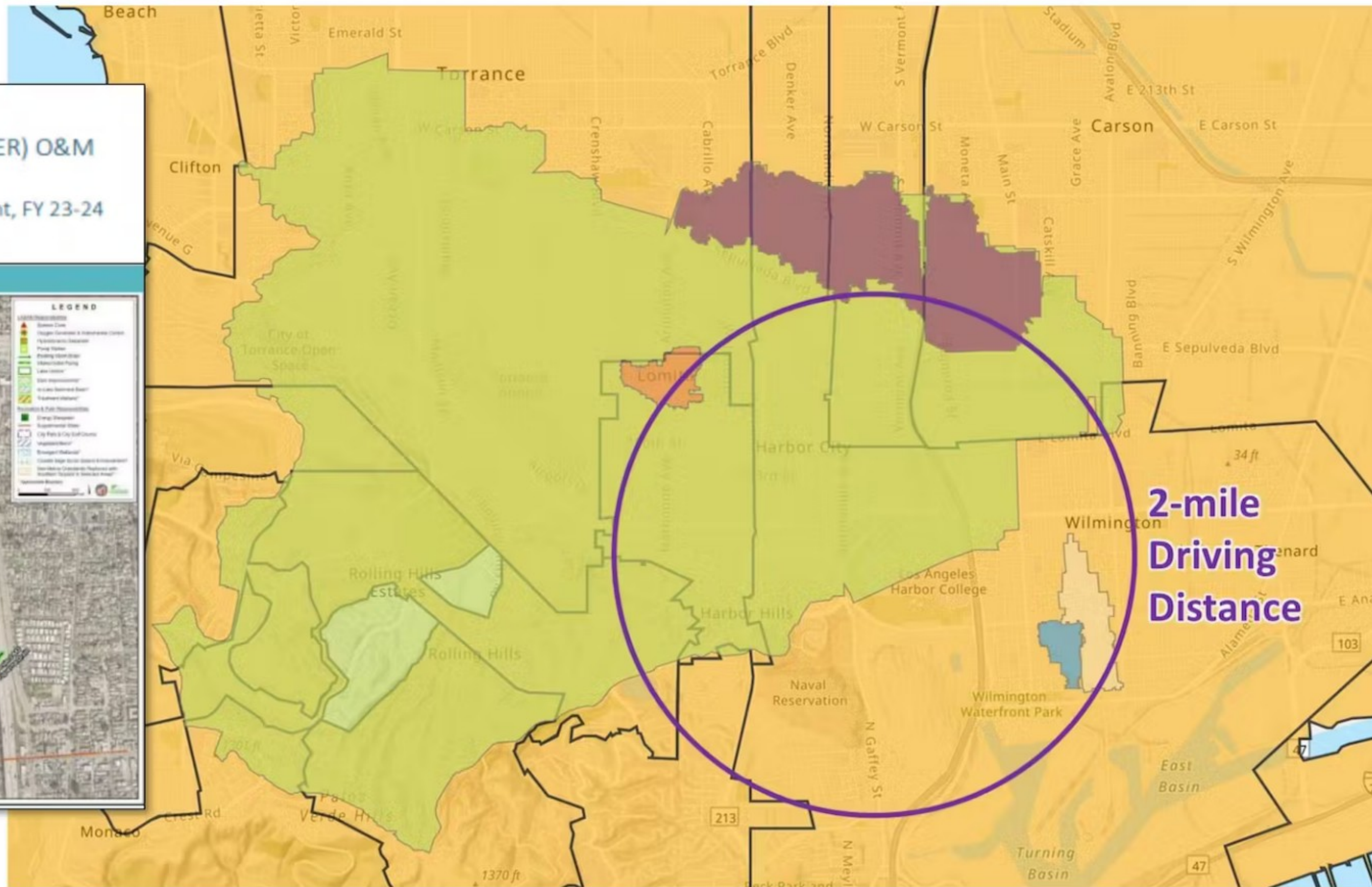
- Nature Based Solution**
 Supports ongoing riparian restoration, provides recharge, improves stream water quality, flood management, the energy demand.
- ERC Investment Benefits**
 Huntington Park (California) is a 70% Minority-Owned Business Enterprise (MOBE) and a 75% Disadvantaged Business Enterprise (DBE).
- Local Support**
 From People, Community, and Companies, and various support organizations, LAR UR2 WMA MOBE to help in implementation of similar projects. (MOCB & CIP) "Best Functional Solution!"



Tributary Areas & Regional Benefits

Machado Lake Ecosystem Rehabilitation (MLER) O&M Infrastructure Program Executive Summary
 SSMB, City of Los Angeles Sanitation and Environment, FY 23-24

Project Details



**2-mile
Driving
Distance**

Polls - Round 1

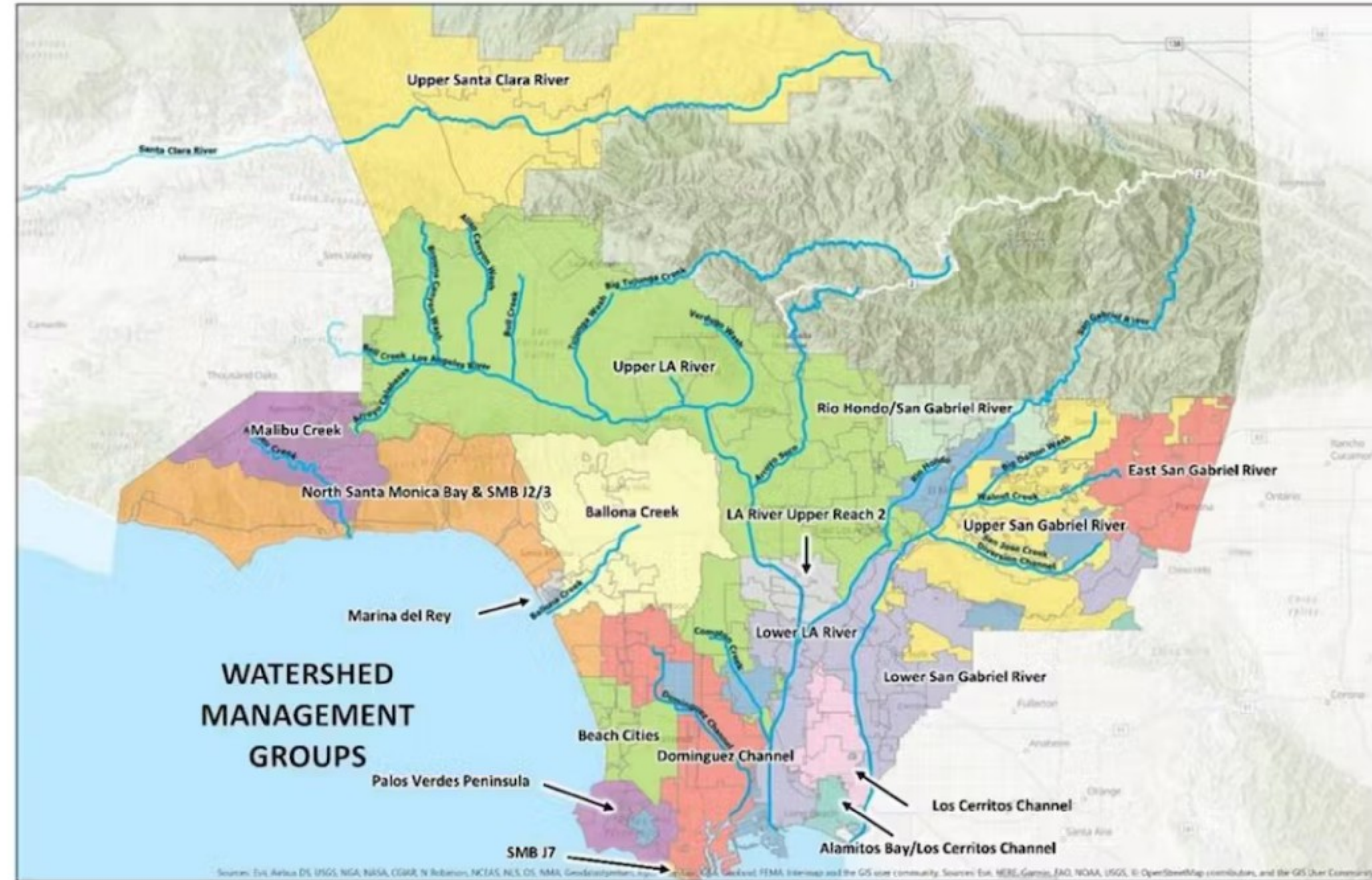
Projects outside your city or WMIG





MMS Team Ideas: Water Quality Benefits

- Each Watershed Management Program (WMP) has unique water quality metrics
- MMS is exploring metrics that align with WMPs but can be compared across each SCW Program Watershed Area
 - E.g., heavy metals reduction by SCWP-funded projects in each Watershed Management Area





MMS Team Ideas: Water Supply Benefits

- Water supply benefits may apply regionally and/or at groundwater-basin-scale
- MMS is evaluating potential Water Supply Benefits based on fate of potential capture at Watershed Area- and groundwater basin-scale

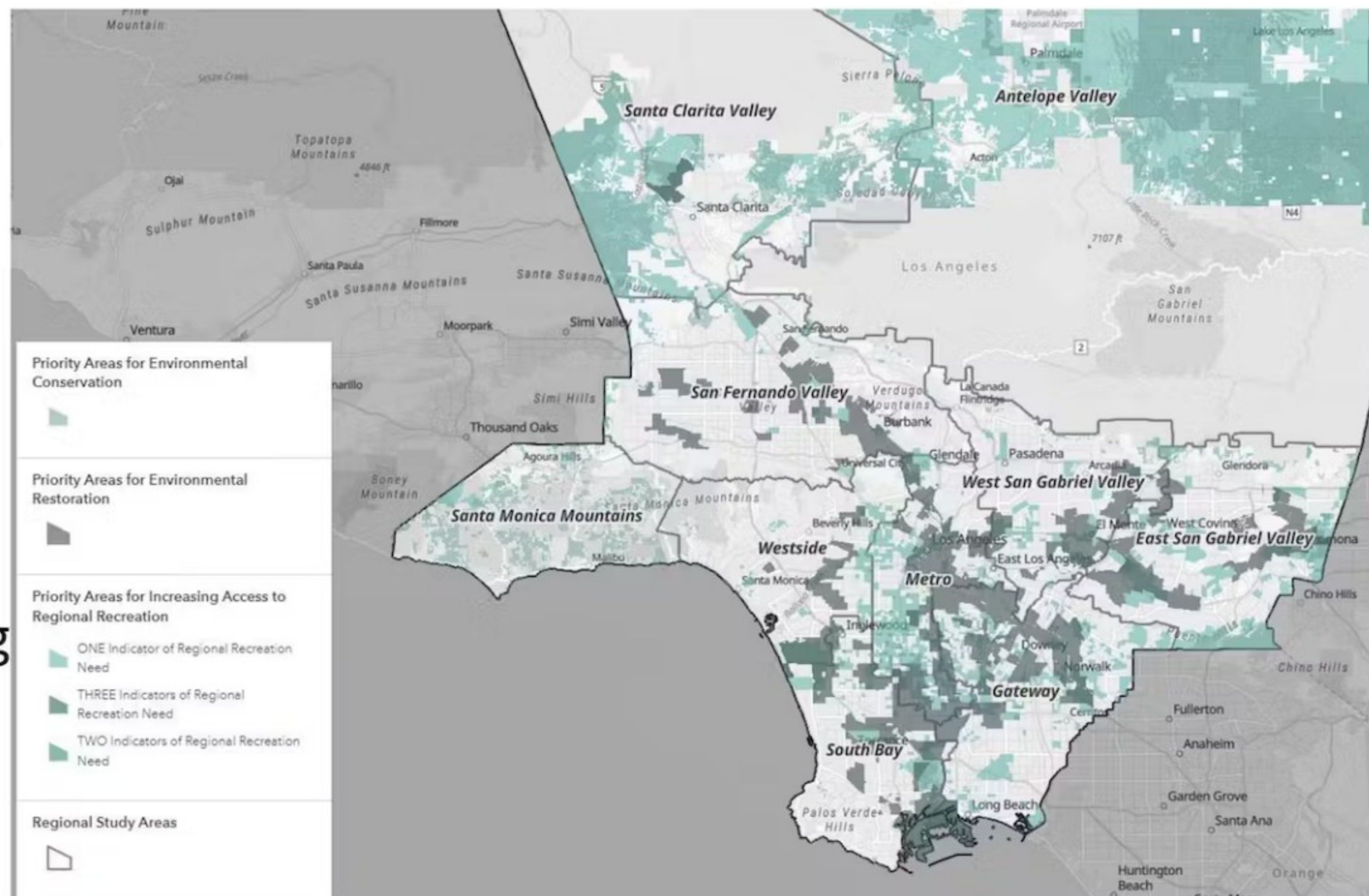


MMS not addressing water rights or effective delivery of water to aquifers – reference ongoing study by Flood Control District and Bureau of Reclamation



MMS Team Ideas: Community Investment Benefits

- MMS is recommending development of a "living database of community voice"
- Database used to verify what Community Investment Benefits are sought by communities
- Once known, the benefits sought can be used in metrics about accomplishments, and for planning
- Additionally, MMS testing metrics/methods to attribute benefits based on walking/driving distances





REGIONAL PROGRAM

Municipal Benefits

MUNICIPAL PROGRAM

Reporting & Tracking



Municipal Program Reporting Overview

ANNUAL PLAN

Descriptions of activities anticipated to be funded & Program Goals achieved. **No metric data.**

- Projects
- Programs
- O&M activities
- Stakeholder and Community Outreach activities
- Monitoring for Projects Completed using SCW funds
- Budget

ANNUAL REPORT

Descriptions of funded activities & Program Goals achieved. Currently includes **basic quantitative metrics.**

- Project/Program Descriptions
- SCW Goals (descriptive only)
- Metrics
 - Hydrology
 - Pollutant % Removal
- Community Benefits (Y/N)
- Vector Minimization
- ISI Status

Polls - Round 2 Reporting Process





Metric Profiles for Regional Program

Paraphrased Goals

1. Community Investment Benefits
2. Disadvantaged Community Benefits
3. Proportional Municipal Benefits
4. Water Quality
5. Water Supply
6. Leverage Other Funding
7. Nature Based Solutions
8. Multiple Benefits
9. Spectrum of Project Sizes
10. Adoption of New Technology
11. Independent Scientific Research
12. Adaptive Management
13. Green Jobs & Career Pathways
14. Ongoing O&M
15. Community Engagement*



*Community Engagement is added as a goal for the purposes of metrics development based on the 2022 Interim Guidance and UCLA's whitepaper on CIB.



Water Supply Benefit

Current Reporting:

- Annual volume captured and treated (acre-ft)
- Water reuse components (Y/N)
- Onsite use components (Y/N)

Proposed Improvements:

- Parse all volumes by fate (acre-ft)
 - Treated on-Site (flow through)
 - Infiltrated (over aquifer or non-aquifer zones)
 - Used on-Site
 - Diverted for treatment (existing or future planned treatment plant)
 - Diverted for reclamation (existing or future planned reclamation facility)

Water Quality Benefit

Current Reporting:

- Primary pollutant reduction (%)

Proposed Improvements:

- Primary pollutant reduction (load and %)
- Secondary pollutants?



CIB: Improved flood management, mitigation

Current Reporting:

- Description
- Improve Flood Management, Conveyance and mitigation (Y/ N)

Possible Improvements: If yes...

- Type of flood issue mitigated
 - Surface Ponding (Pluvial)
 - Riverine Flooding (Fluvial)...
- Method of mitigation:
 - Peak flow reduction
 - Improved conveyance...
- Mitigation Ratio
 - e.g. Storage volume to resolve/storage volume provided
- Economic damages (\$)
 - Estimated with project
 - Estimated without project



Annual Reports – "Datafy"

"The City has **mitigated flooding** by improving the stormdrain lines, reconstructing the damaged inlets into catch basins and connecting them to underground infiltration chambers designed with a **volume capacity** to mitigate the flooding issues (13,860cf). This **improves the water quality** of runoff that collects pollutants produced by vehicular traffic and enters the stormdrain system untreated. It also **increases vehicular and pedestrian safety during storm events** by preventing flooding conditions from occurring."

Water Supply:

Annual volume Infiltrated (non-aquifer zone): 0.5 acre-ft.

Primary Pollutant Reduction: 50 lbs/yr

Flood Management

- Type of flood issue mitigated: Localized ponding
- Method of mitigation: Offline storage,
- Mitigation Ratio: 100%
 - Storage volume to resolve: 13k ft³
 - Storage volume provided: 13k ft³
- Economic damages (\$) - If Known
 - Estimated with project: \$0
 - Estimated without project: \$100k



CIB: Create, enhance, or restore parks / habitats

Current Reporting:

- Description
- Yes / No

*"..the projects propose **improvements** to City facilities. This includes pedestrian paths and **improved recreational areas and park grounds**. Additional **improvements to landscaping** will help communities mitigate and adapt to the effects of climate change by **creating shade and greenspace**, reducing heat island effect..."*

Proposed Improvements:

- If Yes, Net area of park/habitat (acres)
 - Created (e.g. 0.5 acres)
 - Enhanced (e.g. 1.2 acres)
 - Restored

*All values parsed by new surface types e.g.:

- Accessible Park:
 - Hardscape (e.g. 0.5 acres)
 - Turf
- Native Habitat
 - Groundcover (0.2 acre)
 - Shrub (e.g. 1 acre)
 - Tree canopy (0.3 acre)
- Non-native habitat...



CIB: Reduce Urban Heat

Current Reporting:

Does Project Increase Shade or # of Trees (Y/N)

*"..the projects propose **improvements** to City facilities. This includes pedestrian paths and **improved recreational areas and park grounds**. Additional **improvements to landscaping** will help communities mitigate and adapt to the effects of climate change by **creating shade and greenspace**, reducing heat island effect..."*

Proposed Improvements: If yes,

- Net # of new trees planted
 - Parse by species planted and removed
 - e.g. 10 coast live oak planted, 1 sycamore removed
 - Canopy calculated within module
- # and net area (acres) of new manmade shade structure (e.g. 3, 0.05 acres)
- Net change in hardscape (e.g. -0.2 acres)



Project Stages

Project Stage	Data and Data Gathering
Planning → Submittal	<ul style="list-style-type: none">• Project Metadata• Estimate Project Metrics (WQ, WS, CI, NBS etc...)
Design → Construction	<ul style="list-style-type: none">• Confirm/Update Metadata• Confirm/Update Project Metric Estimations
Post Construction (Y1-3)	<ul style="list-style-type: none">• Field, Remote Sensed and other Project Data (e.g. Maintenance logs, O&M spend...)• Evaluate Projected v. Actual Performance

**Define Project &
Estimate Performance**

**Confirm Project &
Estimations**

**Measure & Compare
Performance**



Nature Based Solutions

Current Reporting:

- Does the project implement or mimic natural processes(Y/N)
- Does the Project utilize natural materials (Y/N)

Proposed Improvements:

Evaluation against all 6 NBS categories

Examples:

Vegetation and Green Space:

- % Project coverage by climate appropriate vegetation
- % Project coverage by native vegetation

Increased Permeability:

- Net Paved Area Removed (sqft)
 - Parsed by surface types installed and removed

Vegetation and Green Space

CLASS	DESCRIPTION
GOOD	Use of climate-appropriate vegetation (groundcover, shrubs, and trees) / green space 5%-15% covered by new climate-appropriate vegetation
BETTER	Use of native, climate-appropriate vegetation (groundcover, shrubs, and trees) / green space 16%-35% covered by new native vegetation
BEST	Establishment of plant communities with a diversity of native vegetation (groundcover, shrubs, and trees) / green space that is both native and climate-appropriate More than 35% covered by new native vegetation

Increased Permeability

CLASS	DESCRIPTION
GOOD	Installation of vegetated landscape – 25%-49% paved area removed Redesign of existing impermeable surfaces and/or installation of permeable surfaces (e.g. permeable pavement and infiltration trenches)
BETTER	Installation of vegetated landscape – 50%-74% paved area removed Improvements of soil health (e.g., compaction reduction)
BEST	Installation of vegetated landscape – 75%-100% paved area removed Creation of well-connected and self-sustained natural landscapes with healthy soils, permeable surfaces, and appropriate vegetation



Green Jobs and Career Pathways

Current Reporting:

- Descriptive Only

"The goal to promote green jobs and career pathways will be achieved by the Project through hiring engineering consultants to conduct preliminary engineering investigations, geotechnical engineering analysis,..."

Proposed Improvements:

- Estimated portion of SCW funds applied to labor (\$)
 - Parsed by Project phase and job classification (e.g. Design Phase ; \$90,000 Civil Engineering, \$35,000 Geotechnical Engineering)
- Estimated FTE by job classification: Calculated within module
 - e.g. 0.5 FTE Civil Engineering, 0.2 FTE Geotechnical Engineering
- # of people trained (# and training type)



CIB: Responsiveness to Community Stated Needs

Current Reporting:

- None

Proposed Improvements:

- Letters of support from community organizations and members (#)

Living Database of Community/Tribe Stated Needs

- How many community/tribe stated needs are addressed by the project? (#), and what are they.

Community Engagement

Current Reporting:

- Descriptive Only

Proposed Improvements:

- Good / Better / Best Framework for Community Engagement (from 2022 Interim Guidance)
- Input from Tribes? (Y/N) How was input sought? (drop down list including other)
- Was Tribal feedback received (Y/N) What input was received?



Copmmunity Engagement: Good, Better, Best Framework

	Good	Better	Best
Engagement Level	<ul style="list-style-type: none">• Inform• Consult	<ul style="list-style-type: none">• Involve• Educate• Learn	<ul style="list-style-type: none">• Collaborate• Incorporate• Partner
Example Activities	<ul style="list-style-type: none">• Fact Sheets• Open Houses• Presentations• Videos• Focus Groups• Public Comment• Social and Local Media• Surveys• Polling	<ul style="list-style-type: none">• House Meetings• Workshops• Community Forums• Canvassing• Response to Community Comment• Document Understanding and Commitment to Relationships	<ul style="list-style-type: none">• MOUs, Support Letters (Tribes, CBOs, Elected Officials)• Community Driven Planning• Open Planning Forums w/ Citizen Polling• Workforce Dev.• Volunteerism Activities



Annual Reports: Programs and Non-Structural Projects

Example Programs

- Urban Runoff Monitoring and Reporting
- Community Outreach Events
- Studies (e.g. Trash Generation Studies, water quality...)
- NPDES and MS4 Consulting
- SCWP support activities (WASC, ROC etc...)
- Regional Infrastructure Planning
- Staff Funding (Water Quality Admin and Coordination, Operations, SCWP Support Activities, WASC, ROC etc...)
- Membership dues

Example Non-Structural Projects

- O&M of Existing Projects:
What types of metrics should count to SCWP Outcomes?
 - e.g. Water quality - yes
 - e.g. New tree canopy - no
- O&M: Stormdrain repair
- Vector Control
- Street Sweeping

Question and Answer



What Comes Next?





What comes next for the Metrics & Monitoring Study

- The Q&A from this public workshop
 - Every question will get a written answer, a summary will be posted to the site.
 - Your contributions will influence the ongoing work of the MMS team, and
 - Will be shared with the MMS Stakeholder Advisory Committee at their next meeting
- Status - Metrics and Monitoring Study
 - Two upcoming workshops, Summer 2023
 - Completion in Fall 2023
- Status - SCWP
 - Mid-year 5 with most recent round of Stormwater Investment Plans approved by Regional Oversight Committee
 - Call for projects closing in July
 - Biennial review pending in late 2023
- As always email at SafeCleanWaterLA@pw.lacounty.gov

A person is shown in profile, pointing at a whiteboard. The whiteboard is covered with numerous sticky notes, some of which have handwritten text and diagrams. The person's hand is visible, pointing towards the board. The background is slightly blurred, showing a window with blinds.

Thank you!