Using Watershed Science to Build Consensus and Maximize Benefits of L.A. County's Safe Clean Water Program

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Accelerate Resilience L.A. (ARLA) convened the Working Group and Technical Team, and thanks them for their hard work and dedication on its SCWP Working Group Project.

ARLA engages in capacity building, cross-sector collaboration, and community engagement to advance multi-benefit approaches that are key to developing individual and collective climate resilience. https://acceleratela.org/



Glossary

Acronym	Description		
ARLA	Accelerate Resilience L.A.		
Board	L.A. County Board of Supervisors		
ВМР	Best Management Practice		
CAD	Computer-Aided Design		
Caltrans	California Department of Transportation		
CBO	Community-Based Organization		
CIB	Community Investment Benefit		
CIMIS	California Irrigation Management Information System		
CIP	Capital Improvement Project		
CSCI	California Stream Condition Index		
CSMB	Central Santa Monica Bay		
CTR	California Toxics Rule		
DAC	Disadvantaged Community		
ECL	Effluent Concentration Limit		
EWMP	Enhanced Watershed Management Program		
FTE	Full-Time Equivalent		
GIS	Geographic Information Systems		
GWMA	Gateway Water Management Authority		
HRU	Hydrologic Response Unit		
IRWMP	Integrated Regional Water Management Plan		
LACFCD or District	L.A. County Flood Control District		
LARIAC	L.A. Region Imagery Acquisition Consortium		
LARWQCB	L.A. Regional Water Quality Control Board		
LLAR	Lower L.A. River		
LSGR	Lower San Gabriel River		
LSPC	Loading Simulation Program in C++		
MAL	Municipal Action Level		
Metro	L.A. County Metropolitan Transportation Authority		



Glossary

Acronym	Description
MMS	Metrics and Monitoring Study
MS4	Municipal Separate Storm Sewer System
NBS	Nature-Based Solution
NGO	Non-Governmental Organization
NSMB	North Santa Monica Bay
O&M	Operations and Maintenance
Ordinance	Los Angeles Flood Control District Code Sections 16 "Los Angeles Region Safe, Clean Water Program and Special Parcel Tax to Provide for Stormwater and Urban Runoff Capture and Reduced Stormwater and Urban Runoff Pollution" and 18 "Safe, Clean Water Program Implementation Ordinance"
OWLA	OurWaterLA
Project	ARLA's SCWP Working Group Project
Projects Module	Online portal where applicants submit information related to the Feasibility Study Guidelines and other data required for scoring by the Scoring Committee
RH	Rio Hondo
ROC	Regional Oversight Committee
SCAPE	Stream Classification and Priority Explorer
SCCWRP	Southern California Coastal Water Research Project
SCOPE	Strategic Concepts in Organizing and Policy Education
SCR	Santa Clara River
SCWP or Program	Safe Clean Water Program
SGVCOG	San Gabriel Valley Council of Governments
SIP	Stormwater Investment Plan
SLIDE	Simplified Landscape Irrigation Demand
SRC	Stormwater Retention Credit
SSMB	South Santa Monica Bay
SUSTAIN	System for Urban Stormwater Treatment and Analysis IntegratioN
Technical Team	ARLA's consultants, including Craftwater Engineering, Emergent Strategy, and Earth Economics



Glossary

Acronym	Description
TMDL	Total Maximum Daily Load
TNC	The Nature Conservancy
ULAR	Upper L.A. River
USGR	Upper San Gabriel River
UWMP	Urban Water Management Plan
WASC	Watershed Area Steering Committee
WHAM	L.A. County's Measures W, H, A, and M
WMA	Watershed Management Area
WMMS	Watershed Management Modeling System
WMP	Watershed Management Program



Vision

Safe Clean Water Program

The Safe Clean Water Program (SCWP or Program) promised L.A. County voters a multi-benefit approach to address a variety of water-related issues by improving water quality, increasing drought preparedness, prioritizing Nature-Based Solutions (NBS), providing Disadvantaged Community (DAC) Benefits, and promoting green jobs, among others. The SCWP is expected to generate \$250-\$300 million per year to fund stormwater infrastructure projects. This magnitude of investment holds the promise to significantly advance these goals, including climate resilience, in L.A. County.

Investing in water as a valuable resource



Figure 1. Schematic representing the value of water.



Figure 2. Key themes from listening sessions.

Purpose

The Need

To meet its diverse goals, SCWP scoring criteria, processes, and guidelines were initially developed to incentivize projects that simultaneously address water, environmental, MS4 compliance, and social issues. However, the first two SCWP funding cycles of Stormwater Investment Plans (SIP) featured extensive committee debate and public comments concerning the balance of these goals. This public debate illuminated the need for an assessment of the extent to which SCWP guidance, criteria, structure, and processes are successfully driving meaningful progress toward the fourteen SCWP Goals.⁴

Accelerate Resilience L.A. (ARLA) created this project to help address this need. As part of ARLA's SCWP Working Group Project (Project), ARLA convened an influential group of stakeholders called the Working Group to build consensus around definitions and metrics for balanced watershed projects. The Project utilized a robust and collaborative scientific approach to identify metrics that represent select SCWP Goals and analyzed the potential of different project types in a pilot watershed to accomplish the overarching SCWP Goals collectively and equitably. The effort aims to maximize attainment of SCWP Goals and to consider opportunities to leverage investment and benefits of other regional infrastructure efforts.

To ensure that the Project captured a wide range of viewpoints, early in the Project fifteen listening sessions were conducted with a subset of key stakeholders, consisting of participants from the L.A. County Board of Supervisors' (Board) offices, the Regional Oversight Committee (ROC), the Scoring Committee, and the Watershed Area Steering Committees (WASCs). The listening sessions were used to gather feedback on perceptions and values about SCWP Goals, definitions of SCWP success, and input on metrics to inform the Working Group and maximize the impact and applicability of the final recommendations.

⁴ L.A. County Flood Control District (LACFCD) Ordinance (Ordinance) §18.04





Figure 3. Alhambra Wash existing conditions.



The Working Group Process

Year-Long Data-Based and Facilitated Process | 2/3 of municipal permittees in L.A. County Represented | 55 NGOs represented

To maximize the benefits of the SCWP, and get to the heart of many of the issues raised, ARLA saw the need to bring both non-governmental organizations (NGOs) and municipalities to the table to collaborate and give creative, realistic input. An influential team of three NGO and three municipal representatives was established, known as the Working Group. Together, the Working Group members and their broader constituencies represent 2/3 of the municipal permittees in the Region. At each meeting, ARLA and its consultants (the "Technical Team") and a panel of technical advisors would present research and analysis around key SCWP issues, then facilitate Working Group discussion, debate, and voting on specific recommendations. A representative from the L.A. County Flood Control District (District) also participated in every meeting as an expert advisor on the SCWP and a non-voting member of the Working Group. This process was used to (1) prioritize which SCWP Goals warrant additional guidance, (2) recommend initial metrics to accurately assess those Goals, (3) agree on how different project types can advance each metric, (4) pilot test initial metrics by virtually simulating them across a 15-square-mile slice of L.A. County, and (5) facilitate voting on final recommendations.

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Figure 4. Working Group participating entities.



COUNTY

The Working Group Process



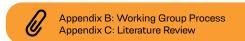
Figure 5. The Working Group process.

Consensus on Goals and Metrics

Before recommending strategies to maximize SCWP benefits, the Working Group's inaugural task was to develop an initial list of balanced, strongly defined, predictable, and monitorable metrics-including the spatial scales at which each metric applies-for evaluating SCWP Goals. Through surveys and robust discussion, the Working Group first came to a consensus on which SCWP Goals could benefit from refined and specific metrics or methods.⁵ Then, between January 2021 and January 2022, ARLA and the Technical Team facilitated meetings to foster an environment in which the Working Group could build trust and collectively define meaningful, quantitative metrics for measuring progress and success of the Working Group's prioritized SCWP Goals. Where Goals were more philosophical in nature, the Working Group utilized results of the modeling to inform programmatic recommendations surrounding those Goals. The Working Group agreed that effective metrics must be:

- (1) modellable to inform planning and prioritization
- (2) **monitorable** to allow measurement of success and adaptable over time, and
- (3) spatial to identify who benefits.

⁵ Working Group prioritized Goals are those in which recommendations or analysis required Working Group agreement on specific metrics or analytical methods. The Working Group came to a consensus that prioritized Goals include all of the fourteen SCWP Goals with the exception of H. Innovation, I. Scientific Research, and L. Adaptive Management (shown in Figure 6).



Safe Clean Water Program Goals E. Invest in A. Water an Iterative Multi-benefit Quality Planning and Process to B. Water F. Prioritize Supply/ Nature-Based Solutions Drought M. Promote C. Improve Public Health Jobs/Career G. Spectrum of (Community Pathways **Project Sizes** Investment Program Funds Benefits) N. Ensure H. Adoption of Operations and D. Leverage New Maintenance **Funding** for Projects

Figure 6. Fourteen SCWP Goals (§18.04 of Ordinance). Note: Working Group prioritized Goals are framed in orange.

Consensus on Goals and Metrics

Water Quality Goal

- Total Long-Term Pollutant Load Captured
- 85th Percentile, 24-Hour Storm Event Volume
- Wet Day Long-Term Pollutant Load Captured
- Frequency Exceeding Numeric Water Quality Objectives
- Attainment of Biological Objectives
- Recreational Facility Closures



Water Supply Goal

- Magnitude of New Water Captured
- Magnitude of Water Use Offset
- Relative Water Demand Augmented or Offset

Community Investment Benefits Goal

- Access to Green Space/Recreation
 - People Within Walking Distance to Park/Green Space
 - New Green Space Added Per Person With Access
- Tree Canopy
 - Change in Tree Canopy Coverage
- Pervious Land Cover
 - Change in Area of All Pervious Land Uses
 - Change in Area with Groundcover
- Native Vegetation
 - Change in Area of Native Vegetation
- Flood Management
 - Peak Flow Rate Reduction
- Local Economy
 - New Full-Time Equivalent (FTE) Jobs Added



Figure 7. Example of mapping Working Group-selected metrics to prioritized SCWP Goals.



Selection of Pilot Watershed

To test the efficacy of the Working Group's initial metrics, and evaluate how different SCWP implementation scenarios could "move the needle" on those metrics in the real world, the Working Group selected the Alhambra Wash as a pilot watershed. The Alhambra Wash was chosen because it was a manageable size for conducting detailed computer simulations (15 square miles), and it showcased a representative spectrum of physical and social conditions present in L.A. County (including a range of paved versus vegetated surfaces, different land use types, a wide range of household income levels, and variable park access). Although the pilot watershed only captures a small sliver of L.A. County's diverse opportunities and constraints, it provided a valuable virtual sandbox to scientifically inform Working Group recommendations, and to develop methods that could be applied throughout other SCWP Watershed Areas. This is known as the Pilot Analysis.



Appendix D: Metric Definitions and Model Assumptions
Appendix E: ARLA's SCWP Benefit-Cost Analysis Tool

Watershed Statistics

15

square miles

53

% population in DACs

57

% impervious

2.4

acres per 1k residents of local and regional recreation parks

The Pilot Watershed: Alhambra Wash

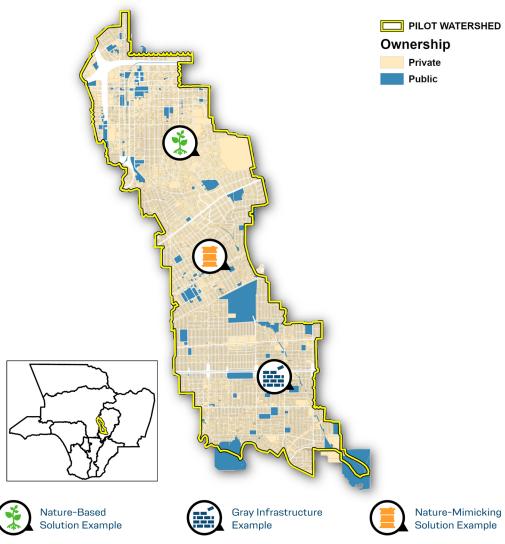


Figure 8. Alhambra Wash pilot watershed.



Finding Hypothetical Opportunities

During the Pilot Analysis, the Alhambra Wash watershed was screened for hypothetical project opportunities. The Working Group defined project opportunities as either multi-benefit **stormwater capture projects** or **surface improvements**. While surface improvements only capture the rainwater that falls directly on them, stormwater capture projects are designed to intercept and manage runoff from a contributing drainage area larger than just the footprint of the project (whether that be onsite or offsite). As such, the Working Group chose the following types of stormwater capture projects—Nature-Based Solutions, Nature-Mimicking Solutions, and Gray Infrastructure—and adopted the definitions below.

Nature-Based Solutions: Vegetated control measures usually designed to manage onsite surface runoff prior to entering a storm drain, such as rain gardens, bio(in)filtration, tree wells, parkway basins, and cisterns that irrigate/overflow to vegetation. Control measures, such as constructed wetlands, are examples of Nature-Based Solutions that can manage runoff from an offsite tributary area. [Representative BMP Type for Modeling: Distributed Rain Gardens]

Nature-Mimicking Solutions: Unvegetated projects that capture runoff and infiltrate into existing soils, such as infiltration basins/spreading grounds, infiltration galleries, infiltration trenches, and permeable pavement. Bioreactors or low flow diversions that only divert to the sewer network should not be included unless there are associated planted materials. These projects can manage either onsite or offsite runoff. [Representative BMP Type for Modeling: Infiltration Galleries]

Gray Infrastructure: Unvegetated projects that capture and store runoff before discharging to the sewer for reclamation or filter and discharge back to an open channel. **[Representative BMP Type for Modeling: Storage-to-Sewer or -Filter]**⁶





Figure 9. Examples of rain gardens (top) photo by Adam Thomas c/o TreePeople and infiltration galleries (bottom).



⁶ Note that the Working Group's definitions differ from current SCWP Ordinance definitions.

Finding Hypothetical Opportunities

For the Pilot Analysis, the Working Group categorized surface improvements into tree canopy, groundcover, native vegetation, permeable pavement, and new park/green space access; these surface improvements could be paired with any of the stormwater capture projects to amplify overall benefits relative to the Working Group's metrics.

Change in Tree Canopy Coverage: Native tree canopy added to parcels and road rights-of-way where space is currently available to plant.

Change in Area of All Pervious Land Uses: Conversion of impervious surfaces to permeable pavement or gravel to maintain current use while allowing rainfall infiltration.

Change in Area with Groundcover: Conversion of bare ground to native groundcover.

Change in Area of Native Vegetation: Conversion of existing groundcover to native groundcover.

People Within Walking Distance to Park/Green Space: Provision of public access to new park or green space previously not accessible.

A total of 28,000 hypothetical project opportunities were identified in the pilot watershed and iteratively modeled across a range of combinations (e.g., 100 percent NBS, 100 percent Gray Infrastructure, 100 percent Nature-Mimicking Solutions, and various blended scenarios) using custom-built watershed models. Modeling was conducted for a 50-year period to simulate long-term implementation scenarios. This first-of-its-kind analysis enabled the Working Group to quantitatively evaluate how different investment decisions advance the Working Group's metrics, and subsequently the goals of the SCWP.

To account for the distinct ways that Water Quality, Water Supply, and Community Investment Benefits accrue to certain beneficiaries, the Working Group came to a consensus on the spatial scales for different types of benefits (Figure 10). Whereas Water Quality and Water Supply Benefits accrue on a regional scale by benefiting everyone within a watershed, sewershed, or drinking water service boundary, Community Investment Benefits accrue on a more local scale depending on the type of improvement (e.g. one-half mile walking radius for a park greater than three acres). These spatial scales allowed the Working Group to estimate the project and Program beneficiaries arising from different implementation scenarios to test whether benefits are accrued equitably-whether to Disadvantaged Communities, municipalities, or others-as required by the SCWP Ordinance.

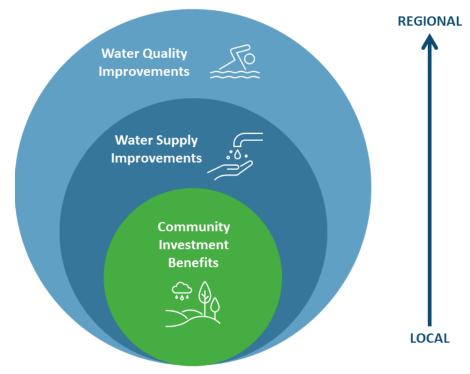


Figure 10. Spatial scales of Water Quality, Water Supply, and Community Investment Benefits.



Technical Findings

Considering that the Pilot Analysis modeled numerous combinations of project types using multiple metrics across three primary SCWP Goals (Water Quality, Water Supply, and Community Investment Benefits), the Working Group needed a clear and logical tool to visualize patterns and distill data-driven recommendations from the complex model results. A new type of chart was therefore conceptualized to plot the unique "signature" of the watershed across the spectrum of project implementation scenarios.

The intent of the watershed signature chart is to compare the magnitude of Water Quality, Water Supply, and Community Investment Benefits that may arise from investing a set amount of funds in various portfolios of project types.

To develop the watershed signature, watershed model results were summarized for different hypothetical project implementation scenarios (e.g., building all Gray Infrastructure projects, building all Nature-Based Solutions, or building different combinations of project types) over a long-term period. For this analysis, it was assumed that \$125 million of Regional Program funds could be available to the Alhambra Wash (treating the pilot watershed as a hypothetical proxy for a full Watershed Area) over a 50-year period, not including funds that could be leveraged from the County's other measures, such as Measures H, A, and M. Hypothetical projects were programmed into the \$125 million 50-year budget based on pollutant removal cost-effectiveness, as all Measure W projects are required to have a water quality treatment component. Once the portfolio of projects under different feasible project implementation scenarios were determined, the total amount of benefits were estimated using the metrics agreed upon by the Working Group.

The watershed signature was created by selecting the most representative metric of the Water Quality and Water Supply Goals for assessing watershed-scale benefits, which were Wet Day Long-Term Pollutant Load Captured and Magnitude of New Water Captured, respectively; all Community Investment Benefit metrics were aggregated into a single measure of Change in Monetized Community Investment Benefits. The results from each metric were

normalized against the respective best-performing metric within each project implementation scenario so that the cumulative and relative benefits from each implementation scenario could be compared side-by-side and "stacked" for comparison. Each Goal was considered equally as important for this analysis. When the total benefits are stacked (depicted on the vertical axis) for each implementation scenario (shown along the horizontal axis), the watershed signature is drawn (see Figure 11).

Each watershed throughout L.A. County should produce its own unique signature, because the types, sizes, and performance of hypothetical project opportunities are governed by a watershed's unique attributes, including different land use types, land availability and ownership (public and private), population, infrastructure network configuration, and soil conditions. Within the Alhambra Wash, for example, the Working Group found that investing in a blend of distributed Nature-Based Solutions (rain gardens) and regional Gray Infrastructure projects (storage-to-sewer or -filter) yielded the most overall benefits per the Working Group's metrics; whereas, investing only in regional infiltration galleries or storage-to-sewer or -filter projects yielded the least overall benefits. The watershed signature helped elucidate that Nature-Mimicking infiltration gallery projects may not perform as efficiently as Gray storage-to-sewer or -filter projects in the Alhambra Wash due to relatively low infiltration rates.

The watershed signature can be used to inform investment decisions by suggesting which scenarios maximize benefits and meet local hydrological needs in that particular watershed.



Technical Findings

Alhambra Wash Watershed Signature

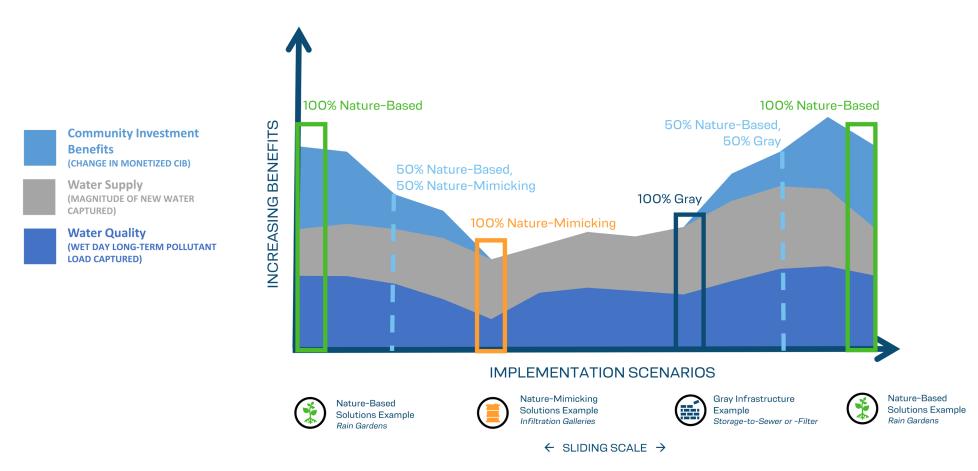


Figure 11. Customized development of a watershed signature for the Alhambra Wash. The horizontal axis of the watershed signature represents different blends of implementation scenarios ranging from 100 percent investment in rain gardens, infiltration galleries, or storage-to-sewer or -filter projects, and various blends of project types. The vertical axis of the watershed signature represents the magnitude of benefits arising from different project portfolios.



Recommendations Overview

Building Blocks for Recommendations

To translate the Pilot Analysis findings into specific and supported recommendations, the Working Group first established common ground around key themes, or "building blocks," that were illuminated by the analyses and key experts. The building blocks were agreed upon through the Working Group's consensus-building process, and each was rooted in two main pillars: (1) using a watershed approach and (2) identifying needs and benefits. Each building block (Figure 12) forms the basis of the programmatic recommendations.

The first pillar—using a watershed approach—is crucial to effective management of stormwater and urban runoff to break out of silos of traditional engineering management of stormwater. The status quo-where agencies work individually to manage their jurisdictional runoff-can lead to creating oversized projects, missed co-funding opportunities, and fewer benefits to the public. With this key pillar, the Working Group recognized that water knows no political boundaries and that everyone plays a role in being environmental stewards of the watershed whether it be via residential cisterns, green corridors, or stormwater infrastructure underneath a park. In essence, it is important to recognize the inter-related roles that all types of projects play in watershed management; therefore, projects should be planned in a coordinated fashion. The Working Group agreed on the following building blocks under this pillar:

 Stormwater is defined by watersheds: Stormwater and stormwater projects are inherently defined by watersheds (or project drainage areas) that are not governed by political (i.e. Council District), jurisdictional (i.e. City/County), or land ownership (i.e. public/private) boundaries.

- **Each watershed has its own signature:** Each watershed has unique characteristics and conditions and therefore requires watershed-specific approaches to maximize Program Goals.
- Stormwater project implementation is nested and cumulative: Stormwater implementation over large geographic areas (i.e. watersheds) and timelines builds upon benefits (no single project delivers all). With watershed-wide management, the SCWP benefits will grow (and accelerate) over time.

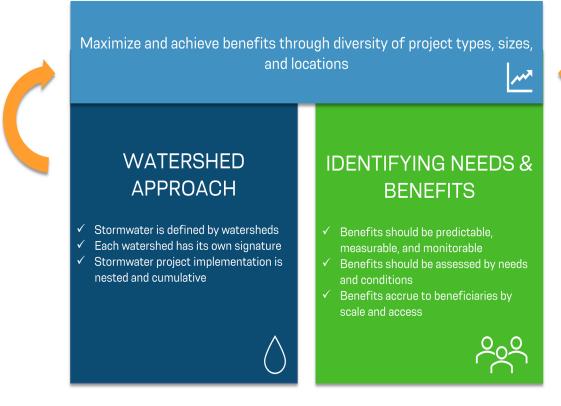


Figure 12. Building blocks for programmatic recommendations.



Recommendations Overview (cont.)

Building Blocks for Recommendations

In addition, while the watershed and geospatial modeling data allowed the Working Group to analyze the magnitude and type of benefits as well as the populations to whom benefits accrue, two critical pieces were missingdetermining who decides the challenges and opportunities to be tackled by SCWP projects and implementing processes to ensure SCWP projects reflect the needs and values of the communities they are meant to serve. Through the second pillar-identifying needs and benefits-the Working Group came to an agreement that needs vary across the County, and recognized the importance of pinpointing the unique needs and benefits for each community. For example, while one community may have sufficient trees and parks and therefore values regional water quality projects to tackle impending environmental compliance deadlines, another community may not have sufficient green spaces for residents to visit, and thus values the implementation of green infrastructure to enliven their communities. Differences in need will affect the perception of what is the most efficient use of SCWP funds in each community. The Working Group agreed on the following building blocks under this pillar:

- Benefits should be assessed by needs and conditions: All benefits (regardless of type) should be assessed or calculated based on the current needs within respective watersheds.
- Benefits should be predictable, measurable, and monitorable: Project benefits must be predictable (modellable) and physically measurable and monitorable to ensure benefits are realized long term.
- Benefits accrue to beneficiaries by scale and access: Benefits from stormwater projects are governed by the type of benefit (i.e. Water Quality, Water Supply, and Community Investment Benefit), the scale of the respective benefit (i.e. project, neighborhood, region/watershed), and who has access to the benefit.

The implementation of the six aforementioned building blocks will result in the delivery of the final building block to achieve and maximize benefits through diversity of project types, sizes, and locations.

Programmatic Recommendations

Starting from the building blocks in Figure 12, the Working Group came to a consensus on twenty-two (22) programmatic recommendations to clarify and maximize the benefits of the SCWP. The Working Group wanted to ensure that real progress can be made in the near term and that the SCWP can be meaningfully and adaptively managed over time for maximum benefits, so the programmatic recommendations were structured in a purposeful manner, as described below.



Scalable and Flexible for Entire Region: Because the outcomes of this Pilot Analysis were based on findings from a small area of L.A. County, the Working Group ensured that the recommendations include specific suggestions to test and customize metrics and methods across other Watershed Areas.



Actionable: It is important to the Working Group that the recommendations can be put into action, so each includes a tactical operationalization plan with specific action items.



Trackable and Measurable: To provide accountability, each action item is paired with a responsible party and specific timeline.



Defined Implementation Pathway: The Working Group also wanted to ensure that all recommendations are feasible and pragmatic within the structure of the SCWP Ordinance; therefore, the process/authority to implement each recommendation and potential funding sources is identified. Per the District, the three potential processes for implementation of the recommendations are:

- Through the Ordinance (Sections 16 and 18) for changes that require (a) Board approval and voter approval or (b) only Board approval (most language and structure changes);
- 2. Through Ordinance-required supplemental guidance for changes that require (a) 30-day public notice before adoption by the District Chief Engineer or (b) only adoption by the District Chief Engineer; and,
- 3. Through additional guidance for changes requiring District development and approval (in conjunction with the Board, ROC, and stakeholders, as appropriate).



Recommendations Overview (cont.)

Programmatic Recommendations

The programmatic recommendations span a variety of technical and non-technical topics, and may be definitions-based, process-based, or outcomes-based. All of the recommendations build upon each other to maximize the impact of Program funds, so the Working Group recommends that all aspects—and how they are operationalized—be strongly considered for future guidance, management, and adaptation of the Program. The Working Group's recommendations are organized by theme in Figure 13.

Several overarching principles were evident as the Working Group developed the recommendations, including that project scoring criteria and WASC prioritization of projects should be adapted to prioritize investment in the most efficient projects to maximize overall program benefits, instead of forcing every project to meet every Program Goal. In other words, the focus should be on investing funds in projects that collectively meet local needs, provide Community Investment Benefits where they are needed, and improve water quality and augment local water supply where they are most efficient. Investing in the most cost-effective water quality/supply projects maximizes Program benefits, and stretches limited funding to meet Community Investment Benefits needs. Additionally, distributed Nature-Based Solutions are a key element needed to meet Program Goals. The Pilot Analysis revealed that new strategies and programs are needed to fully leverage opportunities on private property (see Recommendation 19).

Additionally, many of the recommendations highlighted how the Program framework can provide additional benefits by meaningfully addressing equity issues, including the following:

- · Recommendation 5: Create a Community Engagement Program
- · Recommendation 6: Conduct Needs Assessments
- Recommendation 7: Expand Technical Assistance
- · Recommendation 9: Prioritize Nature-Based Solutions
- · Recommendation 10: Create a Countywide Definition of Equity
- Recommendation 11: Analyze Supplemental DAC Indicators
- $\boldsymbol{\cdot}$ Recommendation 13: Calculate DAC Benefits by Population
- Recommendation 14: Include DAC Benefits in Scoring
- · Recommendation 18: Incentivize WHAM Coordination
- Recommendation 19: Create a Private Property Incentive Program



Recommendations Overview

Programmatic Recommendations

Programmatic Recommendations

Define clear metrics and definitions

- 1. Develop Local Metrics
- Refine NBS/Nature-Mimicking Definition
- 3. Expand Water Supply Benefits

Determine right tools and data

- 16. Model Project Interactions
- 17. Build Potential Project Portfolio

Determine what is technically possible and what the needs are

- 4. Create Watershed Area Signatures
- Create Community Engagement Program
- 6. Conduct Needs
 Assessments
- 7. Connect Community Engagement to Technical Resources Program
- 8. Clarify Scoring for Engagement
- 9. Prioritize NBS

Expand opportunities and coordination

- 18. Incentivize WHAM Coordination
- Create a Private
 Property Incentive
 Program
- 20. Create a Robust
 Workforce
 Development Program

Assess who benefits

- 10. Create Clear Equity Standards
- Analyze and Select Supplemental DAC Indicators
- 12. Quantify Benefits at Appropriate Spatial Scales
- 13. Calculate DAC Benefits Using Population
- Include DAC Benefits in Scoring

Set local targets

15. Set Watershed Area Targets

Calibrate scoring

21. Test Alternative Scoring Criteria

Monitor and verify progress

22. Develop a Monitoring Program for the SCWP

Figure 13. Working Group programmatic recommendations.



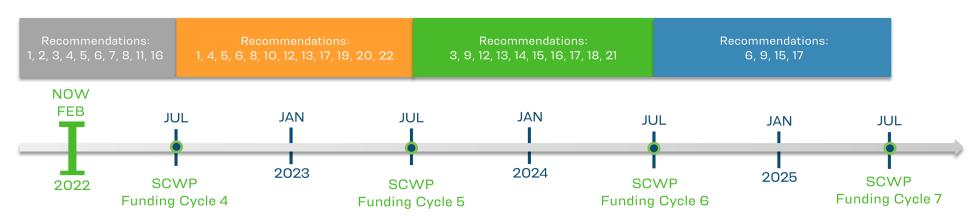
Next Steps

The Working Group's recommendations suggest a variety of specific action items for various SCWP committees, as well as the District. As the District leads the Metrics and Monitoring Study (MMS), develops interim SCWP guidance, and supports the ROC with biennial reporting, the key recommendations from ARLA's SCWP Working Group Project can serve as one consensus-based and scientifically-driven source of input to inform decision making. Meanwhile,

ARLA and the Working Group will continue to engage with stakeholders throughout the County to share the results and identify additional opportunities for collaboration.

It is the Working Group's hope that the process and recommendations presented herein can guide L.A. County to a more climate-resilient future.

TIMELINE FOR ARLA'S SCWP WORKING GROUP RECOMMENDATIONS* 2022-2025**



^{*} Some recommendations have multiple milestones.

Figure 14. Safe Clean Water Program Timeline: 2022-2025.



^{**} Many of the timelines described in these recommendations relate to the timing of the L.A. County Flood Control District's multi-year Metrics and Monitoring Study, the timing of which is subject to change.

Working Group Recommendations

Note to reader: Many of the timelines described in these recommendations relate to the timing of the L.A. County Flood Control District's Interim Guidance anticipated in April 2022, and the District's multi-year Metrics and Monitoring Study, the timing of which are subject to change. The Working Group requests that the following recommendations be reviewed and considered in both of these District-led initiatives.

WORKING GROUP RECOMMENDATION 1 **DEVELOP LOCAL METRICS**

RECOMMENDATION:

By July 2022 (or in alignment with the Metrics and Monitoring Study schedule), build from the Working Group's list of metrics for quantifying Program and project benefits and customize metrics to each Watershed Area's unique needs and conditions.

CONTEXT:

Stakeholders and various Safe Clean Water Program (SCWP or Program) committee members have called for the development of science-based metrics to set expectations and adequately track progress related to the SCWP Water Quality, Water Supply, and Community Investment Benefits Goals. The Technical Team facilitated meetings to foster an environment in which the Working Group could build trust to collectively define metrics that are meaningful for measuring progress and success of SCWP Goals. The process is illustrated in Figure 15 and was developed to help Working Group members select appropriate, quantifiable metrics that could not only be modeled but also monitored at relevant spatial scales. While quantitative metrics can provide a way to clearly measure SCWP progress, the Working Group also acknowledged the importance of qualitative metrics, which could be defined through the Needs Assessment Initiative (see Recommendation 6). Refer to Appendix B—Working Group Process for details.

To note, several proposed community investment metrics, such as air quality improvement, carbon sequestration, and urban heat island effect, were deemed infeasible to model or measure at key spatial scales needed for the Pilot Analysis (i.e., project- or neighborhood-level). The Working Group agreed on proxies to indirectly quantify those metrics; for example, the Working Group agreed that the benefits of trees and vegetation would indirectly quantify the aforementioned metrics. For metrics for which proxies were not available, such as reduction of localized urban flooding, the Working Group identified potential scientific studies to better inform future metrics.

The Working Group-recommended metrics are just one source of input for comprehensive Program-level and project-level metrics to be developed for each Watershed Area as part of the District's Metrics and Monitoring Study. The Working Group agreed upon the following metrics to quantify the benefits

of modeled projects on a project or Program scale, specifically for the Alhambra Wash, based on the data available at the time of the Pilot Analysis. While some metrics can be modeled and measured at both the project and Program scales, some metrics can only be modeled and measured at the Program scale (e.g., biological objectives or recreational facility closures) due to the lack of higher resolution data. It is important to emphasize that benefits should be measured relative to baseline conditions for each metric, and should be reported as a net benefit in order to account for any negative impacts of constructing a project.

Water Quality Goal

- Total Long-Term Pollutant Load Captured
- 85th Percentile, 24-Hour Storm Event Volume
- Wet Day Long-Term Pollutant Load Captured
- Frequency Exceeding Numeric Water Quality Objectives
- Attainment of Biological Objectives
- Recreational Facility Closures

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Water Supply Goa

- Magnitude of New Water Cantured
- Magnitude of Water Use Offset
- Relative Water Demand Augmented

Community Investment Benefits Goal Access to Green Space/Recreation

- People Within Walking Distance to Park/Green Space
- New Green Space Added Per Person With Access
- Tree Canopy
 - Change in Tree Canopy Coverage
- Pervious Land Cover
 - Change in Area of All Pervious Land Uses
 - · Change in Area with Groundcover
- · Native Vegetation
- Change in Area of Native Vegetation
- Flood Management
 - Peak Flow Rate Reduction
- Local Economy
 - New Full-Time Equivalent (FTE) Jobs Added



Figure 15. Examples of mapping Working Group-selected metrics to prioritized SCWP Goals.



WORKING GROUP RECOMMENDATION 1 DEVELOP LOCAL METRICS

Table 1. Working Group Metrics

SCWP Goal	Metric	Units	Project-Level	Program-Level
Water Quality	Total Long-Term Pollutant Load Captured	pounds per year	X	Х
	85th Percentile, 24-Hour Storm Event Volume	acre-feet per event	X	X
	Wet Day Long-Term Pollutant Load Captured	pounds per year	X	X
	Frequency Exceeding Numeric Water Quality Objectives	%		X
	Attainment of Biological Objectives	units vary		Х
	Recreational Facility Closures	days per year, days per season		X
Water Supply	Magnitude of New Water Captured	acre-feet per year	X	Х
	Magnitude of Water Use Offset	acre-feet per year	X	X
	Relative Water Demand Augmented or Offset	%		X
Community Investment Benefits	Change in Tree Canopy Coverage	square feet	X	X
	Change in Area with Groundcover	square feet	X	X
	Change in Area of All Pervious Land Uses	square feet	X	X
	Change in Area of Native Vegetation	square feet	X	X
	People Within Walking Distance to Park/Green Space	# or % of population	X	X
	New Green Space Added Per Person With Access	acres per person	Х	Х
	Peak Flow Rate Reduction	cubic feet per second	Х	
	New Full-Time-Equivalent (FTE) Jobs Added (Differentiated Between Capital Planning/Design/Construction and Long-Term Operations/Maintenance)	FTEs	Х	Х





RELEVANT SCWP GOALS A. B. C



RELATED ROC QUESTIONS 14, 20



AREAS OF ALIGNMENT AND RELATED RESOURCES

- Integrated Regional Water Management Plan
- L.A. County Water Plan
- · L.A. River Master Plan
- Watershed Management Programs



PROCESS/AUTHORITY TO IMPLEMENT

Additional guidance: changes requiring LACFCD development/approval (in conjunction with stakeholders, ROC, and Board, as appropriate)



District Program, District-led Metrics and Monitoring Study

OPERATIONALIZING THIS RECOMMENDATION

DISTRICT

- Develop initial draft Program- and project-level metrics for each Watershed Area via the Metrics and Monitoring Study.
 - » Consider how to metricize active versus passive recreational facilities, improving existing green spaces versus creating new green space, etc.

DISTRICT AND CHIEF ENGINEER: APPLICATION/FEASIBILITY STUDY

- As watershed-specific metrics are being developed through the Metrics and Monitoring Study, require project proponents to provide the following quantitative information in the interim to better quantify Community Investment Benefits.
- » Change in number of trees, change in tree canopy coverage, change in area with groundcover, change in area of native vegetation, and change in area of all pervious land uses, with supporting Geographic Information Systems (GIS)/Computer-Aided Design (CAD) files with proposed locations of improvements and documentation of measurements
- » Amount of new, publicly accessible park/green space created
- » Number of projected planning/design, construction, and operations/maintenance jobs (see Appendix D—Metric Definitions and Model Assumptions for example formulas)

WATERSHED AREA STEERING COMMITTEES (WASCs) or DISTRICT: SCIENTIFIC STUDY

- Develop a scientific study to monetize Water Quality Benefits (consider partnering with interdisciplinary faculty at academic institutions; see Appendix E—ARLA's SCWP Benefit-Cost Analysis Tool).
- · Develop a scientific study to evaluate the spatial scale of job creation benefits.
- Develop a scientific study to determine a methodology for modeling localized, urban flooding. The District should create best practices
 for municipalities for localized flooding data collection/relevant attributes needed to inform a future urban flooding model specific to
 the County. Flood Factor, a free online tool created by the non-profit organization First Street Foundation, can be one of the tools
 used to quide this research area.

TIMELINE

- May 2022*: Complete project-level metrics customized to local needs as part of the Metrics and Monitoring Study.
- July 2022*: Complete Program-level metrics as part of the Metrics and Monitoring Study.
- July 2022*: Add quantitative metrics for Community Investment Benefits to the Application/<u>Feasibility Study</u>
 <u>Guidelines</u> for the 4th SCWP funding cycle.
- July 2022*: In conjunction with the Metric and Monitoring Study's Stakeholder Advisory Committee, develop a
 list of potential scientific research areas that would advance the state of watershed science and inform adaptive
 management of the SCWP.
- July 2023*: Roll out metrics specific to each Watershed Area to use in the scoring criteria, for WASC target setting, and for project proponents.
 - *Timelines subject to change in alignment with the Metrics & Monitoring Study schedule.



WORKING GROUP RECOMMENDATION 2

REFINE NATURE-BASED SOLUTIONS/NATURE-MIMICKING DEFINITION

RECOMMENDATION:

By April 2022 (or in alignment with the District's next release of Guidance on Nature-Based Solutions), re-define the SCWP's current definition of Nature-Based Solutions to differentiate Nature-Based Solutions and Nature-Mimicking Solutions.

CONTEXT:

Currently, the SCWP defines Nature-Based Solutions (and Nature-Mimicking) as:

a Project that utilizes natural processes that slow, detain, infiltrate or filter Stormwater or Urban Runoff. These methods may include: relying predominantly on soils and vegetation; increasing the permeability of Impermeable Areas; protecting undeveloped mountains and floodplains; creating and restoring riparian habitat and wetlands; creating rain gardens, bioswales, and parkway basins; and enhancing soil through composting, mulching, and planting trees and vegetation, with preference for native species. Nature-Based Solutions may also be designed to provide additional benefits such as sequestering carbon, supporting biodiversity, providing shade, and improving quality of life for surrounding communities. Nature-Based Solutions include Projects that mimic natural processes, such as green streets, spreading grounds and planted areas with water storage capacity.

This broad definition leaves much open to interpretation about what classifies as a Nature-Based Solution and has created confusion for project proponents and WASCs. Benefits cannot be differentiated and maximized, and projects cannot be prioritized accordingly, without clearer definitions. The Working Group selected representative project types for modeling Nature-Based Solutions versus Nature-Mimicking Solutions. Members agreed that a key distinction between the two project types is that Nature-Based Solutions explicitly use both vegetation and soils as part of the ultimate treatment process or end use. whereas Nature-Mimicking Solutions can add vegetation as part of aboveground surface improvements, but only use soils as part of the final treatment process. For example, a cistern that captures runoff and discharges to a dry well would be considered Nature-Mimicking, because it replicates depressional storage and infiltration of a natural landscape; however, it would be considered a Nature-Based Solution if a cistern was used to irrigate vegetation and overflowed to a vegetated rain garden, because vegetation is a primary element in the treatment end use of captured runoff.

This distinction enabled the Working Group to see benefits related to each project type more clearly; whereas Nature-Based Solutions can provide Water Quality, Water Supply, and Community Investment Benefits as part of the treatment process, Nature-Mimicking Solutions only provide Water Quality and Water Supply Benefits if no above ground surface improvements are added.



Figure 16. Examples of rain gardens (left) photo by Adam Thomas c/o TreePeople and infiltration galleries (right).





RELEVANT SCWP GOALS



RELATED ROC QUESTIONS 6



AREAS OF ALIGNMENT AND RELATED RESOURCES N/A



PROCESS/AUTHORITY TO IMPLEMENT

- Ordinance-required supplemental guidance: changes requiring 30day public notice before adoption by LACFCD Chief Engineer
- Additional guidance: changes requiring LACFCD development/approval (in conjunction with stakeholders, ROC, and Board, as appropriate)



District Program

OPERATIONALIZING THIS RECOMMENDATION

DISTRICT

- Collect stakeholder feedback and consider updating the Ordinance definition of Nature-Based Solutions and the Nature-Mimicking Solutions matrix with the following guidance. Ensure such updates are carried forward in the annotation of the Nature-Based Solutions matrix as well as the table that maps identified needs/project types/outcomes in the <u>Interim Nature-Based Solutions</u> <u>Programming Guidelines</u> released in May 2021. Potential clarified guidance could include:
- » Nature-Based Solutions: Practices where vegetation serves as a primary treatment mechanism or endpoint for captured runoff (including irrigation)
- » Nature-Mimicking Solutions: Unvegetated practices that capture runoff and infiltrate into native soils
- » Can be augmented with vegetated surface improvements
- » Previously categorized Nature-Based Solutions such as permeable pavement and infiltration basins would now be in this category
- · Update the modeling assumptions for Nature-Based Solutions versus Nature-Mimicking Solutions as specified below:
 - » Nature-Based Solutions: Vegetated control measures usually designed to manage onsite surface runoff prior to entering a storm drain, such as rain gardens, bio(in)filtration, tree wells, parkway basins, and cisterns that irrigate/overflow to vegetation. Control measures, such as constructed wetlands, are examples of Nature-Based Solutions that can manage runoff from an offsite tributary area.
 - » Nature-Mimicking Solutions: Unvegetated projects that capture runoff and infiltrate into existing soils, such as infiltration basins/spreading grounds, infiltration galleries, infiltration trenches, and permeable pavement. Bioreactors or low flow diversions that only divert to the sewer network should not be included unless there are associated planted materials. These projects can either manage onsite or offsite runoff.

TIMELINE

April 2022 (or in alignment with the District's next release of Guidance on Nature-Based Solutions): Update
definitions through the District Guidance.



WORKING GROUP RECOMMENDATION 3 EXPAND WATER SUPPLY BENEFITS

RECOMMENDATION:

By April 2022, clarify the definition of Water Supply Benefits to include any infiltrated water and environmental water.

Q CONTEXT:

The SCWP defines Water Supply Benefits in the Ordinance as "an increase in the amount of locally available Water Supply, provided there is a nexus to Stormwater or Urban Runoff capture. Activities resulting in this benefit include, but are not limited to, the following:

- · Reuse and conservation practices,
- Diversion of Stormwater or Urban Runoff to a sanitary sewer system for direct or indirect water recycling,
- · Increased groundwater replenishment or available yield, or
- · Offset of potable water use"

The language "...but are not limited to..." opens the door for interpretation about which additional activities count as a Water Supply Benefit, as the state of science surrounding Water Supply Benefits is still evolving through studies (e.g., Evaluating Low Impact Development and Surface Water - Groundwater Interactions in the Los Angeles Basin conducted by the District and U.S. Bureau of Reclamation). Although the definition includes some ambiguity, the Feasibility Study Guidelines clarify that projects must demonstrate that infiltrated water is reaching a managed, usable groundwater aquifer with confirmation by the managing agency. The guidelines also state that stormwater that is treated and released to a storm drain or receiving water should not be considered as a benefit unless tributary to a groundwater recharge facility or to facilitate augmentation of reclaimed water. There has been public debate as to whether these clarifications are overly restrictive, particularly for projects located over shallow, currently unmanaged aquifers, or projects that could meet downstream environmental/biological water needs.

Through the Working Group process, a survey was sent to the Working Group regarding outstanding discussion needed to clarify Water Supply Benefits, such as groundwater replenishment and environmental water needs. Overall, the Working Group agreed that infiltrating stormwater into a shallow groundwater aquifer should be counted as a Water Supply Benefit, especially given that industrial/process wells may extract from a low, unconfined aquifer. Currently, the District prefers to only count infiltration as a Water Supply Benefit if the water is reaching a deep, managed confined aquifer used for drinking Water Supply. In addition, the Working Group brought up the need to consider the

sustenance of inland and coastal ecosystems throughout the County, and how runoff may help sustain or augment such needs. Currently, the District does not consider this a Water Supply Benefit. These recommendations would provide more flexibility for what is interpreted as a Water Supply Benefit across all Watershed Areas.



District Program





RELEVANT SCWP GOALS



RELATED ROC QUESTIONS 1, 5



AREAS OF ALIGNMENT AND RELATED RESOURCES

- Integrated Regional Water Management Plan
- · L.A. County Water Plan
- · L.A. River Master Plan
- L.A.River Environmental Flows Project



PROCESS/AUTHORITY TO IMPLEMENT

- Ordinance-required supplemental guidance: changes requiring 30day public notice before adoption by LACFCD Chief Engineer
- Additional guidance: changes requiring LACFCD development/approval (in conjunction with stakeholders, ROC, and Board, as appropriate)

OPERATIONALIZING THIS RECOMMENDATION

DISTRICT

- Provide additional guidance to interpret shallow groundwater as a Water Supply Benefit.
- · Provide additional guidance to include environmental water needs as a Water Supply Benefit.

WATERSHED AREA STEERING COMMITTEES (WASCs) or DISTRICT: SCIENTIFIC STUDY

• Develop a scientific study to be conducted by biologists and other experts in related science disciplines throughout the County at key receiving water bodies to assess the environmental water needed by site-specific aquatic organisms. Aquatic organisms that may be of importance to a river/tributary ecosystem may depend on a certain magnitude of baseflow in the channel.

TIMELINE

- April 2022: Update interpretation of definitions through the District Guidance.
- July 2024: By SCWP funding cycle 6, update definition and interpretation of Water Supply Benefits in Feasibility Study Guidelines.



WORKING GROUP RECOMMENDATION 4 CREATE WATERSHED AREA SIGNATURES

RECOMMENDATION:

By May 2023, develop a watershed signature for each Watershed Area to understand the scope of what is technically feasible and inform strategies to balance goals.

CONTEXT:

The SCWP defines a Watershed Area as "the regional hydrologic boundaries as depicted on maps maintained by the District for the SCW Program, that are established in consideration of topographic conditions and other factors." Within the SCWP, there are nine <u>Watershed Areas</u>.

Watershed Areas have unique attributes, including different land use types, land ownership (public and private), population, infrastructure network configuration, and hydrogeological conditions; thus, the unique conditions of each watershed warrant watershed-specific approaches, such as different types and sizes of projects. It is imperative to understand what is technically possible within each Watershed Area to define appropriate metrics and benchmarks for success. It is difficult to evaluate the most efficient use of funds, and where and how projects can contribute toward meeting local needs, if one does not know what is technically possible within defined watershed boundaries. Therefore, targets and resulting strategies should be community- and watershed-specific, because cost-effectiveness varies by community need, project. watershed context, and metric. Watershed models can be used to analyze this potential by virtually assessing the impacts of different hypothetical project implementation scenarios (e.g., building all Gray Infrastructure projects, building all Nature-Based Solutions, or different combinations of project types) over a long-term period across the watershed.

Based on the metrics recommended by the Working Group (see Recommendation 1), the types and scope of feasible project scenarios that yield the maximum potential Water Quality, Water Supply, and Community Investment Benefits in each Watershed Area are described herein as the "watershed signature".

In the Alhambra Wash, the watershed signature demonstrated that investing Infrastructure Program funds in a blend of distributed rain gardens and regional Gray Infrastructure projects yielded the most overall benefits; whereas, solely spending on regional infiltration galleries or storage-to-sewer or -filter projects yielded the least overall benefits (not including surface improvements, which can yield additional Community Investment Benefits). Figure 17 displays the watershed signature for the Alhambra Wash and highlights several implementation scenarios which

provide varying levels of overall benefits. As shown, Nature-Mimicking infiltration gallery projects were less efficient than Gray storage-to-sewer or -filter projects. In the Alhambra Wash this is due to relatively lower infiltration rates. The watershed signature will also help to identify which scenarios contribute toward meeting Ordinance requirements, including, but not limited to, the 110 percent Disadvantaged Community (DAC) Benefits requirement (see Recommendations 9 and 13).

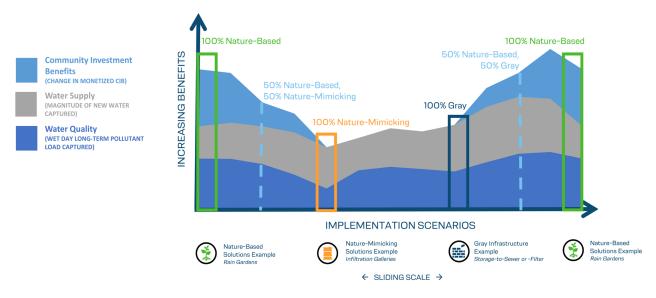


Figure 17. Alhambra Wash watershed signature with various implementation scenarios highlighted to demonstrate the range of benefits.





RELEVANT SCWP GOALS A, B, C, G, I, L



RELATED ROC QUESTIONS 2.5



AREAS OF ALIGNMENT AND RELATED RESOURCES

- Watershed Management Programs
- Los Angeles Basin Study
- LADWP Stormwater
 Capture Master Plan



PROCESS/AUTHORITY TO IMPLEMENT

Additional guidance: changes requiring LACFCD development/approval (in conjunction with stakeholders, ROC, and Board, as appropriate)

FUNDING SOURCE:

District Program, District-led Metrics and Monitoring Study

OPERATIONALIZING THIS RECOMMENDATION

DISTRICT

- Determine the maximum available/potential leveraged funds from Measure W for each Watershed Area over a specific time period. The theoretical maximum potential for Water Quality, Water Supply, and Community Investment Benefits is capped by the amount of funds available. The Alhambra Wash Pilot Analysis ("Pilot Analysis") assumed a hypothetical 50-year budget prorated based on Regional Program revenues. At the Watershed Area scale, the budget could be estimated based on annual Regional Program funds, less the amount already earmarked in Stormwater Investment Plans (SIPs) and the amount forecast to be spent on scientific studies.
- Via the District's Metrics and Monitoring Study, screen the Watershed Areas for different hypothetical distributed and regional project opportunities. These should include a spectrum of project solutions ranging from 100 percent distributed Nature-Based Solutions (on parcels and rights-of-way) that manage onsite runoff to 100 percent regional projects that manage off-site runoff, and all of the different funding combinations of distributed and regional projects in between. To ensure the analysis considers a financially feasible portfolio of projects that considers watershed-specific needs, the number of projects simulated should be based on funding opportunities determined in the previous step. Ensure that the watershed signatures are developed with a systems approach that considers project interactions (Recommendation 16).
- Model various project funding combinations to evaluate how different investment/implementation scenarios advance Water Quality, Water Supply, and Community Investment Benefits metrics, and subsequently the Goals of the SCWP. While many metrics can be used to track progress relative to each SCWP Goal (see Recommendation 1), the metrics must be aggregated or the most representative metric of each Goal may be used to develop the watershed signature, so that Goals can be normalized and compared cumulatively.
- Conduct a sensitivity analysis, which is a data-driven investigation of the extent to which certain variables in model assumptions impact outcomes. Conducting a sensitivity analysis provides an in-depth review of all the variables, and ensures that predicted outcomes and recommendations are robust, reliable, and certain under an array of potential conditions. Key variables to analyze include:
 - » Capital and operations and maintenance costs for distributed projects
 - » Private property project implementation rates
 - » Variability of infiltration rates into native soil
 - » High-throughput engineered filter media
 - » Selective land uses/properties (e.g. schools, only in DACs, etc.)
- · Communicate the key findings to the WASCs to inform the technical aspect of the WASC targets (see Recommendation 15).

WASC

• Once signatures are developed, select a preferred scenario from the Watershed Signature that meets needs identified through the Needs Assessment Initiative (see Recommendation 6) and satisfy Ordinance requirements (i.e. will meet the 110 percent DAC Benefits requirement): also see Recommendation 15 for WASC target-setting recommendations.

TIMELINE

- March 2022: Via District-led Metrics and Monitoring Study, begin watershed opportunity assessment of all nine Watershed Areas to develop underlying data for watershed signatures.
- May 2023: Complete the watershed signatures for all nine Watershed Areas



WORKING GROUP RECOMMENDATION 5 CREATE COMMUNITY ENGAGEMENT PROGRAM

RECOMMENDATION:

By September 2022, design and implement a Community Engagement Program.

CONTEXT:

The Working Group agreed that understanding community needs is integral to maximizing the Goals of the SCWP—so much so that they included it as one of two pillars setting the foundation for these recommendations: (1) Using a watershed approach and (2) Identifying needs and benefits. Identifying local needs and planning projects to meet those needs is not only a best practice, but an efficient way to meet Program Goals and deliver results to voters. To date, the approach to community engagement within the SCWP has been limited. Public Education Programs have not yet launched, and the ROC identified a need for more consistent standards for engagement in order to achieve the SCWP Goals. To inform recommendations related to Community Engagement, the Working Group relied on subject–matter experts from Strategic Concepts in Organizing and Policy Education (SCOPE), USC's Equity Research Institute and OurWaterLA (OWLA) partners.

The proposed Community Engagement Program reimagines the County and SCWP's approach to community engagement, and builds upon best practices from prior community engagement efforts in the region, including the *L.A. County Parks Needs Assessment* and the Proposition 1 Disadvantaged Community Involvement Program. See the flowchart (Figure 18) for an overview of the proposed program.

FUNDING SOURCE:

A portion of the 20 percent of SCWP Public Education Program funds within the District Program should be dedicated for the Community Engagement Program. (The Community Engagement Program should be one program funded within this category, but should not preclude other Public Education Programs from being developed.)

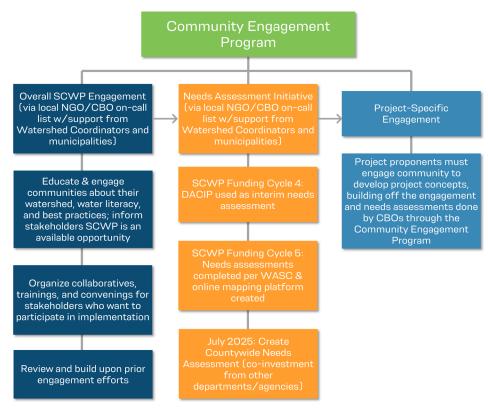


Figure 18. Flowchart of proposed Community Engagement.





RELEVANT SCWP GOALS C, E, J,L



RELATED ROC QUESTIONS 26, 29



AREAS OF ALIGNMENT AND RELATED RESOURCES

- <u>USC ERI Measures Matter</u> Report
- SCOPE's Our Water Our Voice Report



PROCESS/AUTHORITY TO IMPLEMENT

Additional guidance: changes requiring LACFCD development/approval (in conjunction with stakeholders, ROC, and Board, as appropriate)

OPERATIONALIZING THIS RECOMMENDATION

DISTRICT

- By September 2022, design, create, and implement the Community Engagement Program and determine the structure and administration of the program, including contracting or grant mechanisms.
- The goals of the Community Engagement Program should include, but are not limited to, the following:
 - » Educate and engage communities around their watershed, water literacy, and multi-benefit stormwater best management practices
 - » Foster diverse and dynamic knowledge communities with relevant, contextualized, and intersectional learning
 - » Ensure community engagement efforts are sustained over the lifecycle of SCWP projects and over the lifecycle of the overall SCWP
 - » Manage conflicts in a transparent manner with a trusted process
 - » Elevate grassroots and community voices
- Utilize local Community Based Organizations (CBOS) to lead community engagement and needs assessments for the SCWP in coordination with the Watershed Coordinators and municipalities.
- · Identify a program administrator to administer funds to CBOs via grants or contracts.
- Issue a stand-alone Request for Proposals (RFP) to develop an on-call list of Non-Governmental Organizations (NGOs)/CBOs
 to conduct community engagement, needs assessments, facilitation and technical support, and project implementation and
 monitoring.
- Conduct surveys and needs assessments to determine existing barriers to participation and establish guidelines by which NGOs/ CBOs can incentivize individuals to participate in community engagement activities.
- Develop community engagement training materials to be available to District program staff, committee members, and project proponents (see Recommendations 8).
- · Conduct regular process and outcome evaluations throughout the program implementation and monitoring processes.

CBOs/NGOs

- · Lead community engagement activities including, but not limited to:
 - » Engage community members in SCWP implementation and educate about the SCWP as an available opportunity to fund multi-benefit stormwater projects
 - » Organize collaboratives, trainings, and convenings that assist with the learning curve for stakeholders who want to participate in implementation but do not know how
 - » Review what engagement has been done before to determine what can be learned from prior efforts
- » Gather information about community strengths, needs, and priorities. Information about needs should not be limited to just the SCWP in order to inform leveraging opportunities

- April 2022: Incorporate the goals of the Community Engagement Program into the District Guidance on community engagement.
- September 2022: Create and launch the Community Engagement Program.



WORKING GROUP RECOMMENDATION 6 CONDUCT NEEDS ASSESSMENT

RECOMMENDATION:

By July 2023, create a Needs Assessment Initiative as part of the Community Engagement Program.

CONTEXT:

The Working Group agreed that benefits should be tied to the current needs within respective watersheds. In 2016, L.A. County completed a robust Parks Needs Assessment that laid the groundwork for making important planning and investment decisions about parks infrastructure in L.A. County. Through that process, community members were engaged to discuss the needs and priorities for park amenities in their areas. Recently, similar efforts, such as the Proposition 1 Disadvantaged Community Involvement Program (DACIP), also known as the "Greater LA County Community Needs Assessment," have been launched to ensure Disadvantaged Communities have a voice in Integrated Regional Water Management (IRWM) planning efforts. Building on those best practices, the proposed Needs Assessment Initiative will help identify the unique community strengths and needs within each watershed to inform SCWP investments.

FUNDING SOURCE:

A portion of the 20 percent of SCWP Public Education Program funds within the District Program.

OPERATIONALIZING THIS RECOMMENDATION

DISTRICT

- Engage local CBOs to lead a Needs Assessment Initiative to document community strengths, needs, and priorities with strategic direction and support from the Watershed Coordinators and municipalities. Completed needs assessments should inform implementation of both the Regional and Municipal Programs. However, the timing of the Needs Assessment Initiative should be aligned with the Regional Program.
- By SCWP funding cycle 5, CBOs should conduct needs assessments for each WASC
 in coordination with the assigned Watershed Coordinator(s) and municipalities.
 Prioritize DAC areas first. Augment the DACIP needs assessments if needed to ensure
 robust needs assessments are compiled. Then, complete needs assessments for nonDAC areas.
- Create a mapping platform to help stakeholders understand community needs and technical feasibility. Priority for development and rollout should be in DAC areas.
- » Develop the platform in consultation with key stakeholders and coupled with a comprehensive community engagement effort to ensure map layers reflect community wisdom
- » Incorporate technical information about each watershed signature into the mapping platform so project proponents can match need with feasibility
- » Ensure the platform includes multiple data layers (similar to CalEnviroScreen), including Water Quality, park locations, L.A. County's Climate Vulnerability Assessment, overlays with the Parks Needs Assessment, etc.
- Create and utilize a template for the needs assessments with standardized questions
 that go beyond water issues so that the needs assessments can be used to encourage
 leveraged funding from other L.A. County programs for projects that meet other
 community needs. When talking with the community, facilitators should clearly explain
 what types of projects and amenities the SCWP can fund, and that other projects or
 amenities that are not eligible for SCWP funds may qualify for funding from other
 sources.
- Update needs assessments every five years to ensure data stays current.
- Share completed needs assessments on the SCWP website so project applicants can access information to inform project proposals.
- Incorporate the Needs Assessment Initiative into the District Guidance on community engagement.





RELEVANT SCWP GOALS C, J



RELATED ROC QUESTIONS 14, 15, 24



AREAS OF ALIGNMENT AND RELATED RESOURCES

- L.A. County Parks Needs Assessment
- OurCounty Plan (Strategy #11A)



PROCESS/AUTHORITY TO IMPLEMENT

Additional guidance: changes requiring LACFCD development/approval (in conjunction with stakeholders, ROC, and Board, as appropriate)

OPERATIONALIZING THIS RECOMMENDATION

WATERSHED COORDINATORS

• Provide strategic direction and support to on-call CBOs, develop a checklist of key needs based on the needs assessment (e.g., recreational amenities, flooding issues, etc.), and present findings to the WASCs for use in creating and prioritizing Watershed Area specific targets (see Recommendation 15).

WASCSs

• Use the checklist of strengths and needs from the Needs Assessment Initiative to help set priorities for Watershed Area specific targets.

SCORING COMMITTEE

 Use the Needs Assessment Initiative checklist to verify if proposed projects include components that, when executed, address one or more key needs identified in the needs assessment. Award points in accordance with Recommendations 8 and 21.

ROC

• Review Needs Assessment Initiative checklists and assess if SIPs effectively meet community needs.

COUNTY

• As part of the implementation of the OurCounty Plan Strategy 11A, the County should adopt a Countywide needs assessment (covering Countywide issues, rather than Program-specific issues and modeled after the DACIP) to inform broader funding decisions for Measures W, H, A, and M (WHAM) and other investment/funding sources. Use the WASC needs assessments to inform the Countywide assessment.

- April 2022: Incorporate the Needs Assessment Initiative into the District Guidance on community engagement.
- July 2022: Beginning in SCWP funding cycle 4, require WASCs to use DACIP as a proxy needs assessment.
- July 2023: By SCWP funding cycle 5, complete needs assessments for each Watershed Area, prioritizing DACs.
- July 2025: In partnership with other County agencies, create a Countywide needs assessment.
- July 2028: Update Watershed Area needs assessments every five years.



WORKING GROUP RECOMMENDATION 7

CONNECT COMMUNITY ENGAGEMENT TO TECHNICAL RESOURCES PROGRAM

RECOMMENDATION:

By September 2022, expand technical assistance to maximize the benefits of the SCWP.

CONTEXT:

The Working Group reviewed findings from the USC Equity Research Institute (ERI) report, *Measures Matter*. The report found that access to training and technical assistance is needed to ensure equitable implementation of County funding measures, including providing technical assistance to support community engagement efforts. The Working Group agreed that expanding the existing approach to technical assistance would benefit SCWP implementation. For example, the scopes of work for Technical Assistance Teams currently do not include a task for community engagement. As a result, feasibility studies can be completed for project concepts that do not reflect community input. Technical Assistance Teams should be required to consider community feedback as part of the feasibility study process.

FUNDING SOURCE:

District Program

OPERATIONALIZING THIS RECOMMENDATION

DISTRICT

- Modify the scopes of work for the County Technical Assistance Teams to include a
 task for community engagement. When evaluating project feasibility, the Technical
 Assistance Teams should coordinate with community engagement teams and talk
 to community members to ensure the project can meet the needs identified through
 engagement efforts (including the Needs Assessment Initiative).
- Create technical partnerships with universities, CBOs, and field experts and establish funding set-asides using some of the ten percent (10%) of revenue allocated for the District Program to engage technical partners to provide in-depth technical assistance/coaching (including grant writing, planning, development, and community engagement) for project proponents that need extra assistance.
- In partnership with experts in this field, provide more robust training on measuring displacement vulnerability and displacement avoidance best practices for project proponents, committee members, and program administrators as part of their suite of pre-submittal workshops.



RELEVANT SCWP GOALS



AREAS OF ALIGNMENT AND RELATED RESOURCES N/A





PROCESS/AUTHORITY TO IMPLEMENT

Additional guidance: changes requiring LACFCD development/approval (in conjunction with stakeholders, ROC, and Board, as appropriate)

TIMELINE

 September 2022: Connect Community Engagement Program to Technical Assistance, Create Technical Partnerships, and Provide Training on Displacement Avoidance.



WORKING GROUP RECOMMENDATION 8 CLARIFY SCORING FOR ENGAGEMENT

RECOMMENDATION:

By July 2023, adjust scoring to better address community engagement and ensure projects meet needs.

CONTEXT:

The existing SCWP scoring matrix provides up to four points for local support (three percent of current scoring criteria). However, the Working Group agreed that points for community engagement should be increased in order to ensure SCWP projects are supported by the voters and taxpayers who fund the Program, and that they meet community needs. Robust community engagement requires meaningfully integrating community-identified needs and assets into decisions and increasingly elevating community voices. Higher standards for project-specific community engagement are also needed to ensure project developers meaningfully engage the communities affected by SCWP projects. SCOPE identified the **Spectrum of Community Engagement to Ownership model**, created by Rosa González of Facilitating Power in partnership with Movement Strategy Center, as an effective framework for community engagement. The tool is a zero-to-five scale that distinguishes among projects that simply share information, projects that invite and are responsive to community input, and projects that give decision-making power and ownership to local residents. The Working Group also referred to best practices from the County's Measure A grants program and the California Climate Investments Program when developing this recommendation.

Proposed Scoring Rubric: During Application/Feasibility: In order to advance, projects must meet a minimum "Yes/No" criteria for community engagement by demonstrating that they have completed initial engagement activities to Level 2 ("Consult") on the Spectrum of Community Engagement to Ownership model. During Scoring: Projects that advance will be awarded up to a maximum of 10 points, per Table 2.

Table 2. Summary of project scoring for projects that advance past application/feasibility.

Points	Criteria
Award 2.5 points for documented community engagement completed prior to application submission that reaches Levels 3, 4, or 5 on the Spectrum	» Letters from involved community leaders, NGOs/CBOs, individuals, and elected representatives stating their support for the project. All letters of support should describe how they were engaged in the process.
of Community Engagement to Ownership model. Prior engagement will be assessed based on the submitted community involvement documentation. Project proponents should provide the following:	» Minutes from meetings, including attendees and their affiliations (if applicable), photos, or other documentation.
 Award 2.5 points for planned community engagement that reaches Levels 3, 4, or 5 on the Spectrum of Community Engagement to Ownership model. 	» Applicants are required to submit a community engagement and monitoring plan that fits within the Spectrum of Community Engagement to Ownership model as part of the application process. Engagement plans should include budgets and mechanisms for reporting back to the SCWP committees in their proposals. If the Community Engagement Plan includes activities from Levels 3-5 ("Involve/Collaborate/Defer to") on the Spectrum of Community Engagement to Ownership model, the project will receive the points.
 Award 2.5 points for projects that have worked with a local CBO/NGO to shape the proposed project. 	» Applicants can demonstrate this by providing a letter of support from the CBO/NGO that represents community members that will be impacted, explaining how they contributed to shaping the proposed project.
Award 2.5 points for projects that meet community needs:	 Step 1: Identify the population Project proponents must use tools (see Recommendation 12) to determine the population benefitting from their project (via applicable service areas)
	 Step 2: Identify the needs Use needs assessments to determine needs in each Watershed Area SCWP funding cycle 4 – Use DACIP SCWP funding cycle 5 and beyond – Use needs assessments from the Needs Assessment Initiative (see Recommendation 6)
	 Step 3: Verify that benefits provided directly address an identified need Using the Needs Assessment Initiative checklist, award points if the project includes components that, when executed, address one or more key needs identified in the needs assessment



WORKING GROUP RECOMMENDATION 8 CLARIFY SCORING FOR ENGAGEMENT

Stance toward	0	1	2	3	4	5
community	IGNORE	INFORM	CONSULT	INVOLVE	COLLABORATE	DEFER TO
Impact	Marginalization	Placation	Tokenization	Voice	Delegated Power	Community Ownership
Community Engagement Goals	Deny access to decision-making processes	Provide the community with relevant information	Gather input from the community	Ensure community needs and assets are integrated into process and inform planning	Ensure community capacity to play a leadership role in implementation of decisions	Foster democratic participation and equity by placing full decision-making in the hands of the community; bridge divide between community and governance
Message to Community	"Your voice, needs, and interests do not matter"	"We will keep you informed"	"We care what you think"	"You are making us think (and therefore act) differently about the issue"	"Your leadership and expertise are critical to how we address the issue"	"It's time to unlock collective power and capacity for transformative solutions"
Activities	 Closed-Door Meetings Misinformation Systematic Disenfranchisement 	Fact SheetsOpen HousesPresentationsBillboardsVideos	Public CommentFocus GroupsCommunity ForumsSurveys	 Community Organizing & Advocacy House Meetings Interactive Workshops Polling Community Forums 	 MOUs with Community-Based Organizations Community Organizing Citizen Advisory Committees Open Planning Forums with Citizen Polling 	 Community-Driven Planning Consensus Building Participatory Action Research Participatory Budgeting Cooperatives

Figure 19. Modified Spectrum of Community Engagement to Ownership model, originally created by Rosa González of Facilitating Power in partnership with <u>Movement Strategy Center.</u>





RELEVANT SCWP GOALS C, E, J, L



RELATED ROC QUESTIONS 15. 27. 32



AREAS OF ALIGNMENT AND RELATED RESOURCES

- SCOPE's Our Water Our Voice Report
- California Climate Investments
- Measure A Grants
 Administration Manual



PROCESS/AUTHORITY TO IMPLEMENT

- Ordinance-required supplemental guidance: changes requiring 30day public notice before adoption by LACFCD Chief Engineer
- Additional guidance: changes requiring LACFCD development/approval (in conjunction with stakeholders, ROC, and Board, as appropriate)

FUNDING SOURCE:

District Program



OPERATIONALIZING THIS RECOMMENDATION

DISTRICT

- Adopt the Spectrum of Community Engagement to Ownership model as guidance to project proponents about how to conduct meaningful engagement, and adopt the proposed scoring rubric into Feasibility Study Guidelines.
- Develop community engagement training materials through the Community Engagement Program to be available to District program staff, committee members, and project proponents during each open call for projects as well as after project selection during SCWP funding cycle 4 and beyond.
- During each open call for projects, host a training for project proponents in partnership with Watershed Coordinators and CBOs with expertise in these areas. The event should be used to share best practices for community outreach/engagement to help project proponents understand what constitutes "good" engagement.

DISTRICT AND CHIEF ENGINEER: APPLICATION/FEASIBILITY STUDY

- As part of the Feasibility Study Guidelines, require submission of a community engagement plan that fits within the Spectrum
 of Community Engagement to Ownership model. Community engagement plans should include budgets, types and amount of
 engagement, and mechanisms for reporting back to the SCWP committees in their proposals. Project proponents should build
 funding for these activities into each project's program budget. Projects that are awarded funds should be monitored to verify that
 engagement has occurred (see Recommendation 22) as proposed.
- · Require submission of documentation for prior community engagement.
- Ensure project proponents attend at least one training as part of the Feasibility Study Application requirement.

PROJECT PROPONENTS

- Review publicly-available community engagement data and needs assessments from the SCWP website (for SCWP funding cycle 4, DACIP; for funding cycles 5 and beyond, WASC needs assessments).
- Communicate with NGOs/CBOs involved with the community engagement process and needs assessment within the appropriate Watershed Area.
- Prior to submitting an application, complete initial engagement activities to at least Level 2 ("Consult") on the *Spectrum of Community Engagement to Ownership* model and prepare appropriate documentation of engagement activities. Prepare a community engagement plan describing future engagement, including budgets, and types and amount of engagement.
- · When possible, coordinate with local NGOs/CBOs to shape the proposed project.

- February 2022: Include this recommendation in the draft District Guidance on community engagement released for public comment.
- April 2022: Adopt the proposed Community Engagement scoring through the District Guidance and incorporate into the Feasibility Study Guidelines.
- May 2022: Develop community engagement training materials as part of the project proponents informational
 sessions for project proponents in SCWP funding cycle 4; these materials should be refined in upcoming funding
 cycles as more information about the DACIP and Needs Assessment Initiative is gathered.
- July 2022: Provide access to DACIP findings on the SCWP website.
- May 2023: Publicize Needs Assessment Initiative results under each WASC's page on the SCWP website.



WORKING GROUP RECOMMENDATION 9 PRIORITIZE NATURE-BASED SOLUTIONS

RECOMMENDATION:

When setting WASC targets, use Nature-Based Solutions to exceed DAC Benefit requirements, maximize watershed benefits, and meet local needs.

CONTEXT:

The current process for determining whether Nature-Based Solutions are prioritized is **passive**. contrary to the Ordinance language in which one of the SCWP Goals is to explicitly "prioritize Nature-Based Solutions." There is currently no effective mechanism, process, or timeframe for prioritizing Nature-Based Solutions in the current Program besides scoring criteria (13 percent of total points). However, as mentioned in Recommendation 2, and noted by the Scoring Committee, the current Ordinance definition for Nature-Based Solutions is subjective, making it easier for project proponents to stretch the definition to claim points. (Scoring points are awarded on a nominal basis, with five points given to each part of the Nature-Based Solutions definition. This has resulted in subjective interpretation and does not reflect the magnitude of benefits obtained using Nature-Based Solutions. In addition, the current scoring conflates project types and outcomes (benefits). which results in double counting in the scoring criteria. Furthermore, the point range is non-linear and not directly proportional to benefits obtained from using Nature-Based Solutions.)

When comparing individual project types, the Working Group's Pilot Analysis demonstrated that Nature-Based Solutions were the most cost-effective type of project (compared to Gray Infrastructure or Nature-Mimicking Solutions alone) to achieve total benefits in the Alhambra Wash because they are multi-benefit solutions that provide Water Quality, Water Supply, and

Community Investment Benefits. The study suggested that implementing a blend of distributed Nature-Based Solutions and regional Gray projects—where they are most cost-effective—helps to further maximize total benefits beyond implementing just one single project type everywhere. The Pilot Analysis of Alhambra Wash also suggested that robust implementation of Nature-Based Solutions is needed to attain and exceed the Ordinance-required DAC investment requirements.

Alhambra Wash Watershed Signature

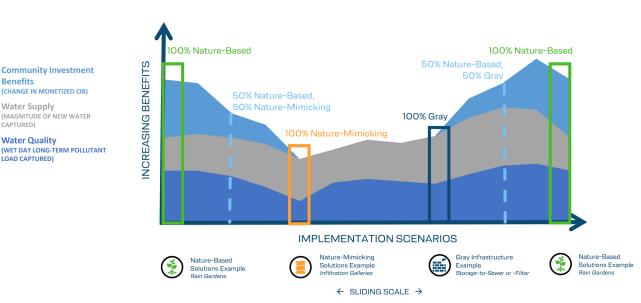


Figure 20. Alhambra Wash watershed signature with various implementation scenarios highlighted to demonstrate the range of benefits.





RELEVANT SCWP GOALS



RELATED ROC OUESTIONS 6, 7, 8, 9



AREAS OF ALIGNMENT AND RELATED RESOURCES N/A



PROCESS/AUTHORITY TO **IMPLEMENT**

Additional guidance: changes requiring LACFCD development/approval (in conjunction with stakeholders, ROC, and Board, as appropriate)

OPERATIONALIZING THIS RECOMMENDATION

DISTRICT

- · Adopt the distinction in Nature-Based Solutions vs. Nature-Mimicking Solutions definitions as outlined in Recommendation 2.
- · In alignment with Recommendation 4, via the Metrics and Monitoring Study, define for each Watershed Area what project portfolios may meet needs and Program requirements (i.e. meet the 110 percent DAC Benefit requirement).
- · Provide guidance to ensure WASCs select a preferred scenario from the watershed signature that provides enough Nature-Based Solutions to exceed DAC Benefit requirements and WASC targets (align with Recommendation 13).
- · Publicize WASC targets on the SCWP website under each WASC's webpage so that project proponents are incentivized to submit NBS projects for consideration.

WASCs

- Encourage the use of NBS whenever applicable and feasible to help support and achieve Water Quality, Water Supply, Community Investment Benefits, and DAC Benefits.
- · Incorporate the table on page 6 of 21 of the Interim Nature-Based Solutions Programming Guidelines into materials distributed during the Call for Projects to guide project applicants on what types of Nature-Based Solutions can be used to provide certain benefits for identified needs/desired outcomes. (See Recommendation 21, regarding scoring updates.)



FUNDING SOURCE:

District Program

- July 2024: Beginning in SCWP funding cycle 6, require WASCs to start setting Watershed Area targets based on completion of the watershed signature and results from the Needs Assessment Initiative. Ensure that WASCs select a preferred scenario based on which scenarios meet Program requirements by using Nature-Based Solutions.
- July 2025: Every year beginning in July 2025, require WASCs to adapt prioritization and create guidance for the balance of project types to be submitted to meet long-term targets.



WORKING GROUP RECOMMENDATION 10 CREATE CLEAR EQUITY STANDARDS

RECOMMENDATION:

By April 2023, adopt a Countywide definition of equity.

CONTEXT:

Currently, equity is not consistently defined, and is considered independently and inconsistently across complementary regional efforts. In the context of the SCWP, it is difficult to create, track, and monitor DAC Benefits without a consistent definition of equity and equitable outcomes. In July of 2020, the L.A. County Board of Supervisors adopted a new Anti-Racism, Diversity, and Inclusion (ARDI) Initiative to develop an anti-racist L.A. County policy agenda. The Board issued several directives, including the development of a strategic plan and underlying policy platform as well as the establishment of an ARDI organizational unit within the Chief Executive Office (CEO) dedicated to implementing the plan. The ARDI Strategic Plan will include three separate but interrelated plans to reflect: (1) a roadmap detailing how to move the County and its 37 departments to be more equitable, more inclusive, and more just; (2) a strategy for the County to lead the State in equitable policy development and a framework for its 88 cities and 80 school districts; and (3) an approach. incorporating national best practices, articulating how ARDI can implement the strategic plan and policy agenda over time. Aligning with the ARDI Strategic Plan is one way to promote equitable implementation of the SCWP.

FUNDING SOURCE:

District Program, District-led Metrics and Monitoring Study

TIMELINE

- April 2023: Adopt a Countywide definition of equity developed by the ARDI unit.
- June 2023: As part of the Metrics and Monitoring Study, develop transactional and transformational equity metrics to guide SCWP implementation.



RELEVANT SCWP GOALS



RELATED ROC QUESTIONS 13

OPERATIONALIZING THIS RECOMMENDATION

BOARD OF SUPERVISORS

- Adopt a Countywide definition of equity that has been developed by the ARDI unit through a participatory process with CBOs and equity stakeholders.
- Oversee development of the Countywide definition of equity and associated equity standards and metrics as part of the *ARDI Strategic Plan*.
- · Ensure the definition achieves the following:
 - » Aims to close social disparities and ensure equitable outcomes for County programs by addressing procedural, distributional, and structural aspects of equity
 - » Includes environmental justice and public health criteria in equity definitions and guidelines
 - » Includes equity standards and metrics that address the past, present, and future aspects of equitable implementation

DISTRICT

- As part of the Metrics and Monitoring Study, engage equity advocates to assess how SCWP can help meet the equity standards identified in the ARDI Strategic Plan, and develop transactional and transformational equity metrics to guide SCWP implementation.
- Structure committee meetings to ensure equitable outcomes. This includes consideration of language and technology access needs and partnership with CBOs for outreach and meeting access.



PROCESS/AUTHORITY TO IMPLEMENT

Additional guidance: changes requiring LACFCD development/approval (in conjunction with stakeholders, ROC, and Board, as appropriate)



AREAS OF ALIGNMENT AND RELATED RESOURCES

- OurCounty Plan Definition of Equity
- <u>USC ERI Measures</u> <u>Matter Report</u>
- Metro Measure M Equity Platform Framework
- ARDI Strategic Plan



WORKING GROUP RECOMMENDATION 11

ANALYZE AND SELECT SUPPLEMENTAL DAC INDICATORS

RECOMMENDATION:

By May 2022 (or in alignment with the Metrics and Monitoring Study schedule), determine whether median household income is the right indicator for DACs or whether pollution burden counts or other metrics of economic, health, and environmental inequity should be applied.

CONTEXT:

The current SCWP definition of "Disadvantaged Community" ("DAC") is a Census Block Group that has an annual median household income of less than eighty percent (80%) of the Statewide annual median household income (as defined in Water Code section 79505.5). However, basing the definition on income alone may not account for other economic, health, and environmental inequities that impact access to clean, affordable water. To augment its understanding of DAC issues, the Working Group invited Dr. Greg Pierce (codirector of the UCLA Luskin Center for Innovation and Director of the Human Right to Water Solutions Lab) to serve as an expert advisor. During Working Group discussions, Dr. Pierce informed the Working Group that, outside of the water sector, CalEnviroScreen is used to define DACs at the census tract level based on the top 25th percentile of pollution burden counts. The Working Group did not have the opportunity to explore alternative standards for characterizing DACs during the Alhambra Wash Pilot Analysis, so the Working Group agreed that this topic warrants further research and local engagement.



RELEVANT SCWP GOALS



AREAS OF ALIGNMENT AND RELATED RESOURCES

- CalEnviroScreen
- Environmental Justice Screening Methodology
- OurCounty Plan

RELATED ROC QUESTIONS
19



PROCESS/AUTHORITY TO IMPLEMENT

Additional guidance: changes requiring LACFCD development/approval (in conjunction with stakeholders, ROC, and Board, as appropriate)

FUNDING SOURCE:

District Program, District-led Metrics and Monitoring Study

OPERATIONALIZING THIS RECOMMENDATION

DISTRICT

Analyze whether median household income is the right indicator for DACs or whether
pollution burden counts, Environmental Justice Screening Methodology (EJSM), or
other metrics of economic, health, and environmental inequity are better indicators
during the Metrics and Monitoring Study as part of the scoped Disadvantaged
Community Benefits and Community Enhancement White Paper.

- October 2021: District begins developing a Disadvantaged Community Benefits and Community Enhancements White Paper through the Metrics and Monitoring Study.
- May 2022 (or in alignment with the Metrics and Monitoring Study schedule): District completes the Disadvantaged Community Benefits and Community Enhancements White Paper through the Metrics and Monitoring Study.



WORKING GROUP RECOMMENDATION 12

QUANTIFY BENEFITS AT APPROPRIATE SPATIAL SCALES

RECOMMENDATION:

By July 2024, provide guidance to project proponents to quantify Water Quality, Water Supply, and Community Investment Benefits at appropriate spatial scales.

CONTEXT:

While the *Feasibility Study Guidelines* currently require applicants to report on the expected magnitude of benefits of their project proposals for certain SCWP Goals, the spatial scale of Water Quality, Water Supply, and Community Investment Benefits and to whom those benefits accrue are not currently considered nor defined. It is crucial to understand the project and Program beneficiaries in order to ensure that benefits are accrued equitably—whether to municipalities, disadvantaged communities, or others—as required by the Ordinance.

The Working Group agreed that different benefits accrue at different spatial scales. For example, with regard to water quality and water supply, respectively, treating stormwater upstream or at its source will improve downstream receiving water quality conditions (e.g. beaches, etc.) for everyone to enjoy, and water saved by using local water supply will reduce reliance on imported water from the State Water Project or the Colorado River in the future. Therefore, Water Quality and Water Supply Benefits accrue on a regional scale, whether it be by Watershed Areas, groundwater recharge basin areas, drinking water/sewershed service areas, or other regional context; however, Community Investment Benefits are realized locally by people in the community, and therefore have smaller service areas. According to the Working Group's recommended metrics, Community Investment Benefits primarily accrue through planting new trees and vegetation and providing new park space to serve the local population, and the Working Group agreed that each of these improvements influences the surrounding population at different scales. The Working Group agreed on the following scales of influence, or "service areas," for parks, trees, and vegetation:

- Parks: Service area should be between one-quarter to two miles walkable or drivable distance (using the walkable road network) depending on park size
 - » 6,000 square feet to 3 acres (pocket or small park) = one-quarter mile service area
 - » 3 to 10 acres (medium park) = one-half mile service area
 - » 10+ acres (large park) = two mile service area
- Trees/Vegetation: Service area should be 100 feet radius, regardless of the road network



Figure 21. Illustration of how different benefits accrue to beneficiaries at different spatial scales.

The population newly served by various projects can then be objectively estimated by intersecting these service areas with census data (disaggregated to the parcel-scale). Although this method provides greater clarity on who may benefit from new projects compared to the current "all-or-nothing" approach, the Technical Team acknowledges that the method is only as accurate as the available data and does not capture the full extent of unquantifiable benefits from new projects. Because the method uses residential census data, it only estimates benefits to people where they live, but not also to where people work. Note that the Working Group also agreed that newly created jobs and reduced flooding provide Community Investments Benefits, but more information is needed to estimate the service areas and population served by these types of improvements.





RELEVANT SCWP GOALS A, B, C, J



RELATED ROC OUESTIONS

18.19



AREAS OF ALIGNMENT AND RELATED RESOURCES

_.A. County Parks Needs Assessment



PROCESS/AUTHORITY TO IMPLEMENT

Additional guidance: changes requiring LACFCD development/approval (in conjunction with stakeholders, ROC, and Board, as appropriate)



OPERATIONALIZING THIS RECOMMENDATION

DISTRICT

- Test and gather public feedback on quantifying benefits at different spatial scales during the Metrics and Monitoring Study.
- · By SCWP funding cycle 6, create a refined raster depicting population, using the County's most recent population census data, and make it publicly available for project proponents' use. This new spatial dataset will help project proponents and the District more efficiently estimate the population served by new projects, because the current census-block-level data are relatively coarse for this analysis. The data layer should be a shapefile or raster and should be at a high resolution (recommend 3 feet by 3 feet).

DISTRICT AND CHIEF ENGINEER: APPLICATION/FEASIBILITY

- · By SCWP funding cycle 6, develop guidance and tools to help project proponents compute the scale of benefits and associated beneficiaries from their projects.
 - » Provide clarification regarding the appropriate Water Quality and Water Supply service areas to use for calculating the beneficiaries to whom Water Quality and Water Supply Benefits accrue
- » For calculating new access to green space, utilize ArcGIS' Service Areas tool from the Network Analyst extension to create the walksheds. The following information is needed:
 - ArcGIS Online Street Network (provided within ArcGIS)
 - Proposed access point(s) where the community will be able to enter the green space
- » For calculating access to trees/vegetation, the following information is needed:
 - Latitude/longitude of centroid of each proposed improvements
 - Utilize ArcGIS' Buffer tool to create a 100 feet buffer for each
- » Utilize ArcGIS' Select by Location tool to select the population that lies within the respective service areas of the improvements.

SCORING COMMITTEE

Verify applicants' supporting documentation and calculations regarding the service areas and benefitted population estimates.



District Program, District-led Metrics and Monitoring Study

- March 2023: Begin evaluation and engagement on spatial scales for metrics during the Metrics and Monitoring
- May 2023: Complete evaluation and engagement on spatial scales for metrics during the Metrics and Monitoring Study.
- July 2024: Complete creation of population raster and provide guidance in SCWP funding cycle 6 regarding tools to help project proponents compute the scale of benefits and associated beneficiaries from their projects.



WORKING GROUP RECOMMENDATION 13

CALCULATE DAC BENEFITS USING POPULATION

RECOMMENDATION:

By July 2024, provide guidance that the DAC 110 percent determination for projects providing DAC Benefits should be calculated proportional to population served and the magnitude of the benefits, rather than by investment.

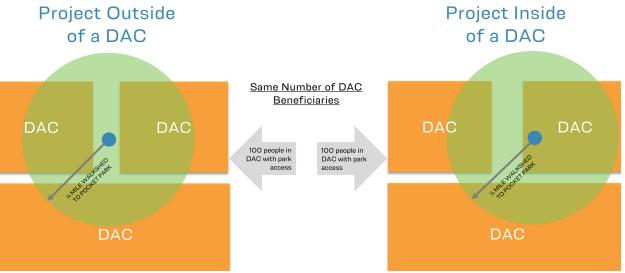
CONTEXT:

It has long been established within the Los Angeles Region that environmental inequities negatively impact the public health and quality of life of communities, especially Disadvantaged Communities and communities impacted by racial injustices. Section 18.04.J of the SCWP Ordinance states that the Program shall "provide DAC Benefits, including Regional Program infrastructure investments, that are not less than one hundred ten percent (110%) of the ratio of the DAC population to the total population in each Watershed Area." However, this prescription implies that benefits are proportional to investments, which is not always the case. Under the current approach, the 110 percent DAC Benefit minimum allocation is calculated by project funding amounts requested from the SCWP for each SIP proportional to the DAC population ratio of each Watershed Area. During the WASC prioritization process, WASCs determine on a binary basis whether a project—and all of its associated funding—is providing a DAC Benefit based on responses received in the Feasibility Study Application.

This approach does not consider how benefits accrue to people living in DACs, nor the magnitude of the benefits accrued to DACs.

The Pilot Analysis and Working Group discussion concluded that—consistent with the definition of "DAC Benefit" in the SCWP Ordinance—all three major types of SCWP Program Goals (Water Quality Benefits, Water Supply Benefits, and Community Investment Benefits) should each constitute a DAC Benefit. However, benefits should accrue to people living in DACs based on the relevant scale and access (see "service areas" described in Recommendation 12), regardless of whether the project is located within the Census-block limits of the DAC. For example, if a vacant lot located just outside of a DAC were retrofitted with new park amenities, trees, and stormwater capture features, these benefits would accrue to the people living in the adjacent DAC who now have access to these benefits. This concept is demonstrated in the Alhambra Wash in Figure 22, where a new green space or an upgraded existing green

Figure 22. Conceptual park project demonstrating benefits serving DAC populations.
Representation of how benefits to a DAC population should be considered based on the scale of benefits to the population benefitted not the location of the project.





CONTEXT (CONT.):

space that is outside the boundary of a DAC could hypothetically benefit approximately 100 people living in the adjacent DAC within the one-quarter mile service area.

On the contrary, locating projects within DAC boundaries does not necessarily equate to adequate accrual of benefits to DAC beneficiaries if not thoughtfully planned (for example, a Gray Infrastructure project located within a DAC will provide Water Quality and Water Supply Benefits to those within and outside of the DAC, and will not alone meaningfully contribute to Community Investment Benefits).

The Technical Team also performed a sensitivity analysis to assess how a park project's location impacts the number of potential beneficiaries based on the service areas. The team found that locating park projects solely in DACs benefits a higher percentage of DAC beneficiaries relative to the total population; however, the total number of beneficiaries is less than if park projects were built both inside and outside of a DAC boundary. It is acknowledged that this recommendation is site-specific; the results in the Alhambra Wash are impacted by the size and location of potential park spaces. In the Alhambra Wash, there are larger parcels that could be converted into green space outside of DACs, whereas potential parcels that could be converted within DACs are generally smaller in size, thus, the service areas are smaller and less DAC population is benefitted. This Pilot Analysis demonstrated that measuring DAC Benefits based on population served could potentially "unlock," and enable project proponents to leverage, underutilized opportunities adjacent to DACs by more objectively estimating who would directly benefit from the new projects (whereas under current Program guidance, it is uncertain whether such projects definitively provide DAC Benefits). Regarding site-level improvements, such as trees and vegetation, it is more advantageous to locate trees and vegetation within DACs. This is because the service areas of trees and vegetation are smaller, thus, the benefits are realized locally.

FUNDING SOURCE:

District Program, District-led Metrics and Monitoring Study

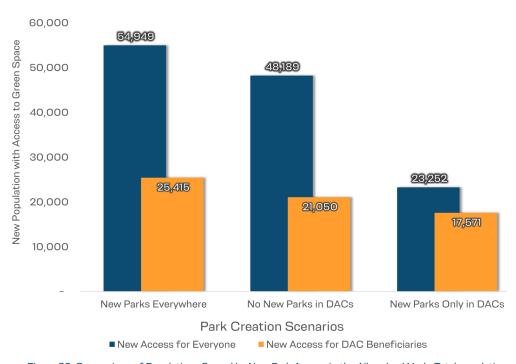


Figure 23. Comparison of Populations Served by New Park Access in the Alhambra Wash. Total population served (blue) and DAC population served (orange) by hypothetical new parks implemented throughout the Alhambra Wash pilot watershed; building parks everywhere benefited the most people (both inside and outside of DACs) because more opportunities with large service areas were available.





RELEVANT SCWP GOALS A. B. C. J



RELATED ROC QUESTIONS 13, 16, 17, 18, 20, 21, 24, 25



AREAS OF ALIGNMENT AND RELATED RESOURCES

L.A. County Parks Needs Assessment



PROCESS/AUTHORITY TO IMPLEMENT

Additional guidance: changes requiring LACFCD development/approval (in conjunction with stakeholders, ROC, and Board, as appropriate)

OPERATIONALIZING THIS RECOMMENDATION

DISTRICT

- Build a tool to calculate the 110 percent minimum target for each WASC based on benefits per population with access to standardize the procedure on a watershed basis and avoid double counting (it would not be accurate to simply add numbers from project proponents' applications).
- Stress test the proposed methodology of calculating the 110 percent minimum allocation during the Metrics and Monitoring Study.
- Provide guidance and examples on how project proponents can provide DAC Benefits through their proposed projects. Whereas
 park projects can be located both inside and outside of a DAC and still benefit a high magnitude of DAC beneficiaries, site-level
 improvements such as trees and vegetation should be located within DACs due to their smaller service areas.

DISTRICT CHIEF ENGINEER: APPLICATION FEASIBILITY

- Require project proponents to provide the following spatial data (either in shapefile format or through an online mapping tool) in the Feasibility Study Guidelines to calculate the 110 percent minimum allocation and track progress based on benefits per population with access:
 - » Latitude/longitude of parcel(s) implementing stormwater improvements
- » Proposed access points of parcel if creating new green space that the public would newly have access to
- » Latitude/longitude of centroids of proposed improvements, including:
 - Trees, with buffers to represent size of canopy
 - Groundcover
 - Native vegetation
- · Require project proponents to provide a detailed explanation of whether project location in DACs was considered or not considered

SCORING COMMITTEE

 Verify applicants' supporting documentation and calculations regarding the service areas and benefitted population estimates (see Recommendation 14 for potential DAC Benefits scoring considerations).

WASCs

• Review the District's findings to assess progress toward the 110 percent minimum allocation and adjust WASC targets (see Recommendation 15), where appropriate, in order to attract the types of projects needed to meet their target.

ROC

• Provide oversight in ensuring each Watershed Area's SIPs are on track to meet the 110 percent target, and if not, provide corrective actions for helping WASCs stay on track.

- March 2023: Begin evaluation and engagement on spatial scales for metrics and proposed DAC 110 percent allocation calculation method during the Metrics and Monitoring Study.
- May 2023: Complete evaluation and engagement on spatial scales for metrics and proposed DAC 110 percent allocation calculation method during the Metrics and Monitoring Study.
- July 2024: Complete creation of population raster and provide guidance in SCWP funding cycle 6 regarding tools to help project proponents compute the scale of benefits and associated beneficiaries from their projects.
- July 2024: Build tool for WASCs to calculate progress toward the 110 percent allocation.



WORKING GROUP RECOMMENDATION 14 INCLUDE DAC BENEFITS IN SCORING

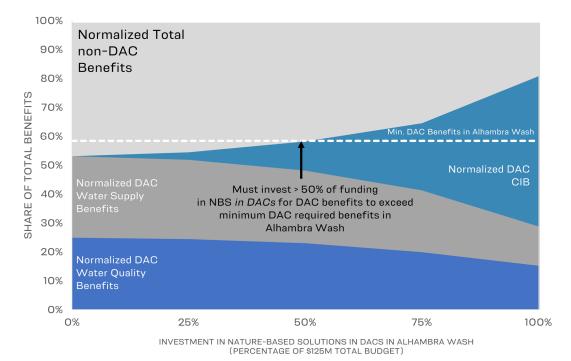
RECOMMENDATION:

By July 2024, provide additional priority points for projects providing Community Investment Benefits specifically to DACs (proportional to DAC population served) to incentivize a robust pipeline of DAC Benefits.

CONTEXT:

The current process for determining whether projects are providing DAC Benefits is **passive**, contrary to the Ordinance language, which requires that WASCs take an active approach to ensuring that their SIPs provide 110 percent DAC Benefits proportional to the DAC population ratio in each Watershed Area. Under the current approach, WASCs will determine on a binary basis whether a project is providing a DAC Benefit based on responses received in the Feasibility Study Application. However, points are not explicitly awarded via the scoring criteria to projects that demonstrate they are providing benefits to DACs. There is essentially no effective mechanism or process for encouraging investments that provide benefits that accrue to DACs in the current Program, nor that encourage project applicants to provide actual, meaningful benefits to DACs.

The modeling results shown in Figure 24 demonstrated that in the Alhambra Wash—under the assumptions and recommendations herein regarding the relevant scale of benefits, and applying no additional surface improvements—it would be necessary to invest more than 50 percent of funding in NBS in DACs for DAC Benefits to exceed 58 percent of total benefits per population with access (58% = 110% * DAC population ratio of pilot watershed). In essence, the service areas of CIB would need to provide benefits to a higher ratio of DAC beneficiaries compared to the rest of the population. This would require CIB to be localized to serve DACs. Note that this example does not consider surface improvements, which can also increase CIB; however, NBS were found to be more cost-effective than surface improvements in this Pilot Analysis because NBS can simultaneously provide Water Quality, Water Supply, and CIB whereas surface improvements primarily provide CIB alone



MORE NBS IN DACs

Figure 24. Benefits attributed to DAC population versus total population under various levels of rain garden implementation in DACs. Total normalized benefits (sum of dark blue, Gray, and light blue bars) exceed the minimum DAC benefit allocation (white line) when approximately half of funding is invested in rain gardens located specifically in DACs.







RELATED ROC QUESTIONS

13, 17, 18, 20, 24, 25

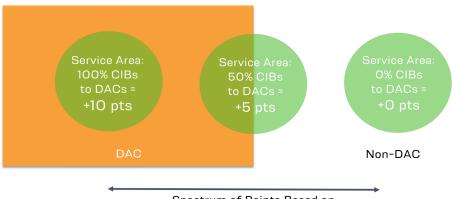


AREAS OF ALIGNMENT AND RELATED RESOURCES



PROCESS/AUTHORITY TO IMPLEMENT

- Ordinance-required supplemental guidance: changes requiring 30day public notice before adoption by LACFCD Chief Engineer
- Additional guidance: changes requiring LACFCD development/approval (in conjunction with stakeholders, ROC, and Board, as appropriate)



Spectrum of Points Based on % DAC Population Served

Figure 25. Example for assignment of DAC priority points. Conceptual example of how DAC priority points could be awarded for projects providing DAC CIB, based on service areas and relative DAC population served. The green areas represent hypothetical service areas of new projects that provide CIB (i.e., service area of new vegetation and/or new park/green space).

OPERATIONALIZING THIS RECOMMENDATION

SCORING COMMITTEE

• Grant priority "bonus" points for DAC CIB. A proposed equation could be: 10 points x (Project CIB to DACs/Total Project CIB) where the spectrum of points would be based on the percentage of DAC population served for a project (see Figure 25 for example calculation). Note that this relates to DAC priority scoring, not necessarily a method for calculating DAC Benefits (Recommendation 13).

DISTRICT AND CHIEF ENGINEER: APPLICATION/FEASIBILITY

Provide equations and tools to project proponents for calculating the DAC priority points for input into the Projects Module, an
online portal where applicants submit information related to the Feasibility Study Guidelines and other data required for scoring by
the Scoring Committee.

FUNDING SOURCE:

District Program, District-led Metrics and Monitoring Study

TIMELINE

 July 2024: Incorporate DAC priority points into the Feasibility Guidelines by SCWP funding cycle 6 after testing of spatial scales for metrics and method for calculating DAC Benefits through the Metrics and Monitoring Study.



WORKING GROUP RECOMMENDATION 15 SET WATERSHED AREA TARGETS

RECOMMENDATION:

By July 2024, set long-term Watershed Area-specific targets based on local needs, local conditions, and local benchmarks, and then annually evaluate progress toward those targets to ensure the desired balance of project types and benefits is being achieved on a long-term basis.

CONTEXT:

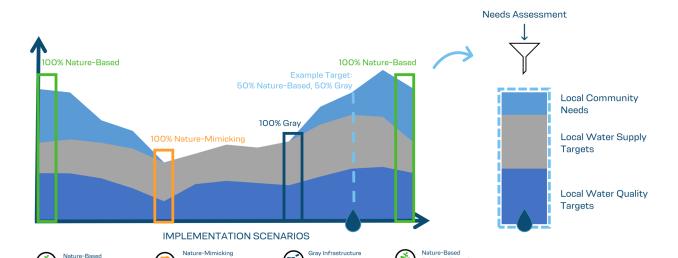
In order to determine the most efficient and effective use of funds, WASCs must first understand what is technically possible and locally needed within the watershed. Therefore, it is crucial to ensure that local targets are set using the fundamental pillars of these recommendations driven by: (1) a watershed approach and (2) needs and benefits. WASCs should determine the most efficient use of funds to balance the multiple Goals of the SCWP and address the needs of a specific Watershed Area utilizing a balanced approach derived from the watershed signature (what is technically possible; see Recommendation 4), in combination with the needs assessment (what is locally desired; see Recommendation 6). Too often, technical plans and corresponding targets have been implemented in silos without the needed community engagement to ensure that the plans are **action-oriented, will get implemented by the responsible parties**, and are likely to have the **community**

Solutions Example

← SLIDING SCALE →

backing the projects. If the recommendations in this study are enacted, WASCs and other governing bodies will have data (both the technical signature/modeling and the socially-driven needs assessment) to create truly holistic watershed-specific and community-driven targets, and monitoring strategies to ensure the targets are being met to create the desired cumulative impact on the watershed and its inhabitants. These WASC targets should be publicly advertised before each Regional Program call for projects so that project proponents understand what types of projects will be prioritized for funding to meet long-term needs.

The Technical Team demonstrated ways WASCs could set long-term targets based on the watershed signature and hypothetical needs assessments, as shown in Figure 26.



Example

Solutions Example

Rain Gardens

Figure 26. Use watershed signature and needs assessments to develop WASC targets. WASC longterm targets could be set based on local drivers, needs, and Program requirements (DAC 110% investment and proportional benefits to municipalities) and then cross-referenced with the watershed signature to determine what blend of project types can help achieve those needs.



Solutions Example









PROCESS/AUTHORITY TO IMPLEMENT

Additional guidance: changes requiring LACFCD development/approval (in conjunction with stakeholders, ROC, and Board, as appropriate)

OPERATIONALIZING THIS RECOMMENDATION

DISTRICT

 Hire a facilitator or train Watershed Coordinators to help each WASC create Watershed Area-specific targets based on technical (watershed signature) and needs assessment findings.

DISTRICT AND CHIEF ENGINEER: APPLICATION/FEASIBILITY STUDY

- Update the Feasibility Study Guidelines to require that each submission include quantitative metrics to demonstrate project achievement toward the WASC targets using the tools outlined in Recommendations 4, 9, and 15.
- Encourage project proponents to develop project proposals based upon the WASC targets in order to improve likelihood of project selection.

WASCs

- Set Watershed-Area targets (see Figure 26) regarding the type (Nature-Based Solutions, Nature-Mimicking Solutions, and Gray Infrastructure), size (regional or distributed), and general locations of projects that are a priority for the Watershed Area based on the preferred scenario from the watershed signature that meets Program requirements (i.e. 110 percent DAC Benefits requirement) and needs assessments described in Recommendation 6.
- Every year, based on the progress to date, WASCs should recalibrate their prioritization and create guidance for the balance of project types to be submitted as well as locations to prioritize over the upcoming year in order to stay on track. Each Watershed Area should have a publicly-accessible map (in conjunction with the SCWP Map) displaying the existing and planned projects, as well as what drainage areas are yet to be covered by projects.
 - » Example: If a WASC determines that Community Investment Benefits are being accrued at a slower rate than they would like them to be, a WASC may issue guidance calling for projects with distributed, Nature-Based Solutions to be submitted in the upcoming year, with information on where such solutions may be needed according to the watershed signature and needs assessment. The WASCs would work closely with the Watershed Coordinators and Community Engagement Program Administration Coordinator to highlight the need for distributed solutions/green infrastructure and perform outreach accordingly.

WASC (CALL FOR PROJECTS)

 Materials distributed with each call for projects should include the targets for each WASC (based on watershed signature and needs assessments.

ROC

Monitor WASC progress toward goals and document the progression in the biennial SCW Program Progress Reports.

FUNDING SOURCE:

District Program

- July 2024: Beginning in SCWP funding cycle 6, require WASCs to start setting Watershed Area targets based on completion of the watershed signature and data from the Needs Assessment Initiative.
- July 2025: Every year beginning in July 2025, require WASCs to adapt prioritization and create guidance for the balance
 of project types to be submitted to meet long-term targets.



WORKING GROUP RECOMMENDATION 16 MODEL PROJECT INTERACTIONS

RECOMMENDATION:

By July 2024, update Project Module to ensure that nested projects (via hydrology and hydraulics) are jointly considered and analyzed.

CONTEXT:

To date, projects submitted through the SCWP have been viewed in isolation within the Projects Module and not in a watershed context that would consider coordination between upstream and downstream existing or planned projects. This has presented challenges during the Scoring Committee process, with several applicants applying for funding for projects located in series (within nested drainage areas) and considered "oversized" (designed in excess of the 85th percentile, 24-hour storm), and therefore, not an efficient use of taxpayer funds. Watershed science has indicated the need for considering BMPs in a systems framework rather than in isolation, with upstream and downstream distributed and regional BMPs working together to reduce pollutant loads in receiving water bodies. Accounting for upstream or downstream projects within the same drainage area ensures projects are "right-sized," coordinated, and cost-effective.

The example in Figure 27 illustrates two projects modeled within the Alhambra Wash and the associated benefits considered in both isolation and in a systems framework. The drainage area for Regional Project 2 envelopes the drainage area for Regional Project 1 (i.e., Project 1 is "nested" within the area managed by Project 2). When Regional Project 1 is built upstream of Regional Project 2, the average annual pollution captured by Project 2 decreases by 17 percent and annual runoff volume capture decreases by 52 percent because the upstream project is capturing and "robbing" the downstream project of runoff. Note that the total pollutant capture increases with construction of both projects (stormwater project implementation is nested and cumulative), but the downstream project could be sized smaller in consideration of the benefits provided by the upstream project.

It is therefore essential to consider how and when runoff and pollutants are intercepted by projects located in series. Ensuring coordination in sizing nested projects will stretch tax dollars by guaranteeing projects are not overbuilt given upstream and downstream considerations.

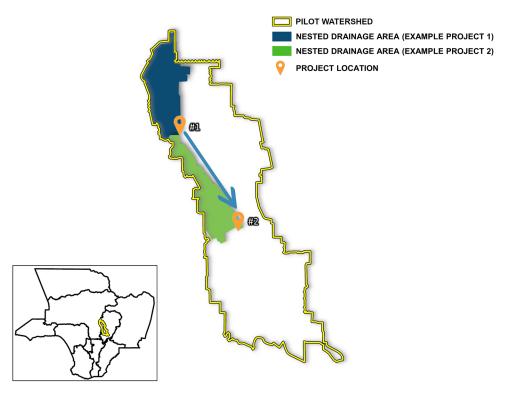


Figure 27. Example schematic of two projects nested within the same watershed. Projects in series must be considered within a watershed context to appropriately assess project performance and benefits.





RELEVANT SCWP GOALSA, B, I



RELATED ROC QUESTIONS 3 4



AREAS OF ALIGNMENT AND RELATED RESOURCES

Watershed Management Programs



PROCESS/AUTHORITY TO IMPLEMENT

Ordinance-required supplemental guidance: changes requiring 30-day public notice before adoption by LACFCD Chief Engineer

OPERATIONALIZING THIS RECOMMENDATION

DISTRICT

- Within the <u>Spatial Data Library</u>, create a library of existing built, funded, or proposed stormwater-related projects to display on the
 publicly available <u>SCWP Map</u>, whether or not submitted to the SCWP's Infrastructure Program or through municipalities' Municipal
 Program, and whether or not funded by the SCWP (can also include WHAM projects with stormwater-related elements). This library
 should be updated annually as more planned projects come through the SCWP.
- · Adjust the Projects Module to account for interdependent projects by creating nested drainage areas for each project.
- For every project in the Spatial Data Library, create nested/full drainage areas to feed into the Projects Module. Drainage areas should be updated accordingly every year as the project library receives more built, funded, or proposed projects from applicants and be made publicly available on the SCWP Map.

DISTRICT AND CHIEF ENGINEER: APPLICATION/FEASIBILITY

- Require project proponents to provide latitude/longitude of project, drainage area GIS shapefile or delineation via a web mapping tool, and relevant BMP parameters, such as inflow rate, storage capacity (geometric dimensions of footprint), and outflow rate in a consistent format.
- Before applying, require project proponents to review the library of existing and planned projects within the module and consider how the proposed project interacts with others when developing project applications.

WATERSHED COORDINATORS

 Collaborate with project proponents prior to submittal to address conflicting projects located in series and encourage coordination to right-size nested projects.

SCORING COMMITTEE

 During the annual scoring process, consider the modeling results from the nested Projects Module as well as what the project proponent has reported in their application. The Scoring Committee should evaluate how well the project applicant has sized their BMPs with respect to upstream and downstream considerations, and the screening process should be intended to filter projects that are overbuilt and not cost-efficient.

FUNDING SOURCE:

District Program, District-led Metrics and Monitoring Study

- July 2022: By SCWP funding cycle 4, update Spatial Data Library and SCWP Map with existing built, funded, or proposed stormwater projects. This dataset should be agnostic to whether projects were funded by SCWP.
- July 2024: By SCWP funding cycle 6, adjust the baseline model behind the Projects Module to account for nested projects. The Scoring Committee should start considering nested results in their evaluation by funding cycle 6.



WORKING GROUP RECOMMENDATION 17 BUILD POTENTIAL PROJECT PORTFOLIO

RECOMMENDATION:

By July 2025, create a robust list of potential project opportunities specifically tuned to meet Watershed Area needs.

CONTEXT:

In many Watershed Management Programs (WMPs), the Reasonable Assurance Analyses (RAAs) set jurisdictional- and subwatershed-scale targets for stormwater project implementation that provided Watershed Management Groups an initial pathway toward compliance. Many cities' WMP project commitments are costly and vaguely prescribed, with recipes for compliance stating a blanket volume of project capacity to be implemented by certain dates, without specifying where such projects should go and the feasibility of such projects. Such vague recommendations do not ensure that plans will be achievable, provide meaningful benefits, or integrate well with other ongoing programs. Some Watershed Management Groups and agencies are actively developing watershed master plans to address these challenges by identifying the most cost-effective project opportunities so that WMP requirements can be simplified, customized to jurisdictions' needs and values, and integrated with ongoing programs in the region. Similar project opportunities lists could help inform decisionmaking by WASCs and project proponents by offering an understanding of the broad suite of potential projects that may be possible throughout a given Watershed Area.

While the Metrics and Monitoring Study will elucidate the broad categories of projects (distributed vs. regional) that can help to achieve certain benefits, specific project-level portfolios could further augment future decision making. These portfolios can provide a technical basis—in conjunction with the needs assessment—to help guide WASCs to determine and prioritize the best strategies and timeframes to stay on track with selected WASC targets (Recommendation 15), and to provide project proponents with a robust pipeline of potential, high-impact projects for consideration. The project opportunity portfolios could also be shared with the public, stakeholders, and Watershed Coordinators to gain feedback on what types of projects are wanted/needed, and to inspire submissions of those projects for Regional funding. Several such studies and plans are currently being conducted through the SCWP Regional Program's Scientific Studies Program.

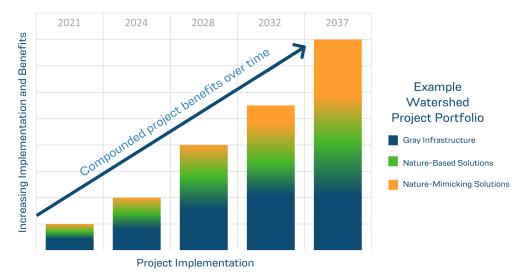


Figure 28. Schematic of compounded project benefits over time: Illustration showing how benefits accrue over time as more projects are implemented utilizing a project portfolio. The distribution of the projects—between Gray, Nature-Mimicking, and Nature-Based—will be determined via the watershed signatures and the development of the potential project portfolios.







RELATED ROC QUESTIONS 2, 3, 11



AREAS OF ALIGNMENT AND RELATED RESOURCES

- Integrated Regional Water Management Plan
- Watershed Management Programs
- LADWP Stormwater Capture Master Plan
- preSIP Scientific Study
- Gateway Area Pathfinding (GAP) Analysis Scientific Study



PROCESS/AUTHORITY TO IMPLEMENT

Additional guidance: changes requiring LACFCD development/approval (in conjunction with stakeholders, ROC, and Board, as appropriate)

OPERATIONALIZING THIS RECOMMENDATION

DISTRICT

- By SCWP funding cycle 7, develop a working library of initial project opportunities for each Watershed Area. The identification of
 potential project opportunities should be driven by what is technically possible (see Recommendation 4) and also through communitydriven, grassroots project sourcing supported by the Watershed Coordinators (see Recommendations 5, 6, and 7). This library of
 potential opportunities should be displayed on the publicly available SCWP Map and be updated annually.
- Leveraging outcomes of the Metrics and Monitoring Study, conduct a study to translate each WASC's targets and available funding into potential project portfolios for consideration by communities and project proponents. The project portfolios should include regional project opportunities (e.g. surface infiltration, subsurface infiltration, diversion to sanitary sewer), green street opportunities, road rights-of-way opportunities (e.g. vegetated curb extensions, curb cuts to enable stormwater capture in parkways/medians, and subsurface infiltration infrastructure), distributed opportunities (e.g. rain gardens, cisterns, permeable pavement), and other improvements that address local needs, as determined through the needs assessments.
- By SCWP funding cycle 6—while project portfolios are being developed—leverage watershed signatures for each Watershed Area to
 highlight, at a census tract level, opportunity areas that may be more appropriate for distributed solutions versus regional solutions
 based on criteria, such as lack of land space, etc. These opportunity areas should be made publicly accessible on the SCWP Map so
 that project proponents know where to propose solutions to help meet local targets.
- Cross-reference new submitted projects with the project portfolio. Update the candidate library every six months based on community-sourced opportunities and collaboration with other programs that are actively developing project pipelines (like WMPs).

WATERSHED COORDINATORS

· Compile geospatial data on the type and location of proposed community-driven projects to be entered into the candidate library.

FUNDING SOURCE:

District Program, District-led Metrics and Monitoring Study, Regional Program (Scientific Studies Program)

- July 2023: Leverage results of the preSIP and GAP Analysis for the Upper Los Angeles River (ULAR)/Rio Hondo (RH)
 WASCs and Lower Los Angeles River (LLAR)/Lower San Gabriel River (LSGR) WASCs, respectively, to build project
 portfolios.
- July 2024: In the interim (until all project portfolios are complete), leverage watershed signatures to identify initial areas (on a census tract level) that may be more appropriate for distributed solutions versus centralized solutions to be made publicly accessible on the SCWP Map.
- July 2025: By SCWP funding cycle 7, complete project portfolios for the Central Santa Monica Bay (CSMB), North Santa Monica Bay (NSMB), Santa Clara River (SCR), South Santa Monica Bay (SSMB), and Upper San Gabriel River (USGR) WASCs and upload results for all Watershed Areas to make publicly accessible via the SCWP Map.



WORKING GROUP RECOMMENDATION 18 INCENTIVIZE WHAM COORDINATION

RECOMMENDATION:

Incentivize County agencies to co-plan, co-fund, co-implement, co-maintain, and co-monitor WHAM projects to cost-effectively achieve and maximize benefits in a diversity of locations.

Renefits

CONTEXT:

In recent years, L.A. County voters have approved tax measures not only for multi-benefit stormwater management projects via the SCWP (Measure W), but also for housing and services for homeless residents of L.A.County (Measure H), parks and open spaces (Measure A), and transportation (Measure M), generating an estimated total of \$1.6 billion annually. (Note, some of these tax revenues may have declined due to the COVID-19 pandemic.) These measures are collectively and colloquially known as WHAM, an acronym for voterapproved taxes that could have a transformative impact in Los Angeles, especially in the County's most underinvested communities, which have not benefited equitably from past infrastructure investments.

The Working Group's mini-WHAM analysis found that intentional collaboration among County WHAM agencies could generate new project opportunities, reduce duplication of effort, and maximize use of SCWP funds. Measures H, A, and M provide opportunities to unlock new geographies as potential SCWP project sites (see Figure 30), expand project benefits, and leverage funding for SCWP projects.

The Alhambra Wash Pilot Analysis, for example, demonstrated that leveraging an additional \$40 million from Measure A for co-located park amenities could significantly boost Community Investment Benefits across the full spectrum of project scenarios (Figure 29).

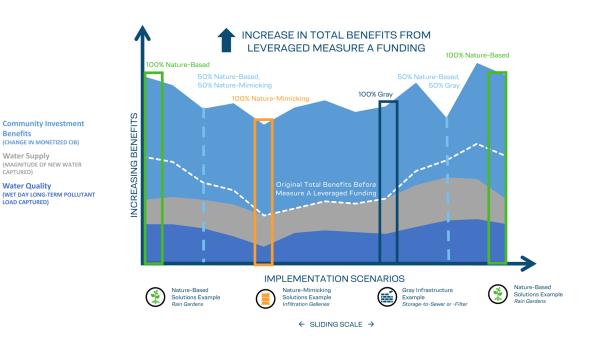


Figure 29. Alhambra Wash watershed signature with leveraged Measure A funding. The Alhambra Wash Pilot Analysis demonstrated that Community Investment Benefits in particular can be substantially amplified if Measure A funding were leveraged in coordination with Measure W.



WORKING GROUP RECOMMENDATION 18 INCENTIVIZE WHAM COORDINATION

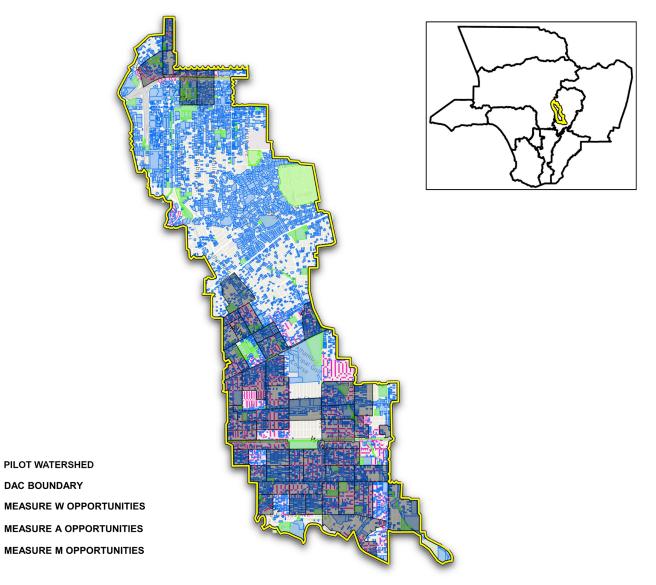


Figure 30. Potential WHAM project opportunities in the Alhambra Wash. The Working Group's Pilot Analysis demonstrated that there are substantial overlapping geographic and funding opportunities between Measures W, A, and M; the map above highlights potential project opportunities associated with each funding measure.



RELEVANT SCWP GOALS D. E



RELATED ROC QUESTIONS N/A



AREAS OF ALIGNMENT AND RELATED RESOURCES

- WHAM Taskforce Workplan
- · Measure A
- Measure H
- Measure M



PROCESS/AUTHORITY TO IMPLEMENT

Ordinance-required supplemental guidance: changes requiring 30-day public notice before adoption by LACFCD Chief Engineer

OPERATIONALIZING THIS RECOMMENDATION

DISTRICT

- Identify areas Countywide, using a combination of spatial analysis (via the Metrics and Monitoring Study) and stakeholder engagement with County WHAM agencies, that can be leveraged for funding through Measures W, H, A, and M. Utilize geospatial modeling to identify key locations to help achieve other agencies' goals:
 - » Measure A: Prioritize existing parks or parcels where green, recreational spaces can be created
- » Measure M: Prioritize Metro-owned transportation corridors or opportunities through street improvement projects (e.g., pairing road improvements with green street elements on rights-of-way)
- By SCWP funding cycle 6, add potential locations that can leverage WHAM funding on the publicly available <u>SCWP Map</u> and to the <u>Spatial Data Library</u> to help WASCs set Watershed Area-specific targets and help project proponents, watershed coordinators, and communities discuss and create potential WHAM projects.

DISTRICT AND CHIEF ENGINEER: APPLICATION/FEASIBILITY STUDY

Update scoring criteria to better incentivize leveraged funding (see Recommendation 21).

WASCs

 Take the District's findings above into account when setting long-term Watershed Area-specific targets and prioritize opportunities for co-funded projects when developing SIPs.

ROC

Monitor the progress of the County's WHAM Taskforce and recommend strategies to co-plan, co-design, co-build, and co-monitor WHAM projects in tandem with other County departments and agencies. The ROC should also consider opportunities to synchronize SCWP Goals with other measures' goals.

WATERSHED COORDINATORS

 Help project proponents identify opportunities to co-plan projects in coordination with other County departments and agencies where possible and act as a liaison between project proponents and staff from relevant County departments and agencies.

SCORING COMMITTEE

• Refer to Recommendation 21, Test Alternative Scoring, to determine how leveraging funding can maximize benefits and cost effectiveness across Regional Program implementation.

FUNDING SOURCE

District Program

TIMELINE

 July 2024: By SCWP funding cycle 6, add potential locations that can leverage WHAM funding to the SCWP Map and Spatial Data Library.



WORKING GROUP RECOMMENDATION 19

CREATE A PRIVATE PROPERTY INCENTIVE PROGRAM

RECOMMENDATION:

By mid-2023, the District should develop and implement a Full-Cost Direct Incentive Program providing construction and long-term O&M funding to private landowners who implement and maintain Nature-Based Solutions (including cisterns serving vegetation) on their properties.

CONTEXT:

To achieve Total Maximum Daily Load (TMDL) objectives, Enhanced Watershed Management Plans (EWMP) across the County indicate a need for undertaking projects on private land. In the Upper L.A. River and Ballona Creek watersheds, respectively, 31 percent and 52 percent of the TMDL compliance pathways were derived from projects on private property. Despite this, EWMPs rarely, if ever, identify specific approaches to delivering projects on private land. Further, the Working Group has identified distributed Nature–Based Solutions on private parcels as a key component of a balanced portfolio of projects to achieve Water Quality, Water Supply, and Community Investment Benefits, and to comply with Ordinance–required DAC investments.

Additionally, projects on private property can be more cost-effective compared to public projects, presenting an opportunity to maximize the effectiveness of SCWP funds and accelerate TMDL compliance if these privately-held opportunities can be efficiently utilized. In several regions across the U.S., stormwater retrofits on private property are being delivered at a fraction of the cost of public projects like green streets and public park retrofits. In Philadelphia, the Greened Acres Retrofit Program (GARP), a direct incentive program covering the full cost of large-scale private stormwater retrofits, is delivering stormwater management capacity at about 60 percent of the cost of public projects. In Washington DC, private stormwater retrofits that generate Stormwater Retention Credits (SRCs) typically cost up to 70 percent less than public projects.

However, currently there are no realistic pathways to deliver significant numbers of such projects within the County. While private landowners are eligible to apply for grant funding under the SCWP, there are barriers to entry, particularly for small- to medium-sized land owners, such as the requirement for projects to be incorporated into Watershed Management Plans, and the cost of initial design and approval by a licensed professional engineer. Further, the \$0.025 cent per impervious square foot tax credit available to private landowners is not large enough to incentivize project delivery. In a recent unpublished study by The Nature Conservancy, it was estimated that an incentive would need to

be closer to \$2.50 to \$3.00 per impervious square foot to cover both construction and long-term O&M for large Nature-Based Solutions on private land. Coincidentally, this is similar to the average cost of first funding cycle SCWP projects that applicants described as "infiltration facilities."

For the Alhambra Wash Pilot Study, the Working Group agreed to a long-term private parcel retrofit adoption rate of 50 percent over a 50 year period (an average of 0.2 percent per year, or 50 parcels per year in the Alhambra Wash pilot watershed. If 2,483 parcels with 1,026 impervious acres (50 percent of the most cost-effective parcels) were retrofitted with onsite capture over 50 years, then the annual cost of the program would be \$2.2M to \$2.7M per year using the \$2.50 to \$3.00 per impervious square foot incentive suggested above; however, the assumptions used in the Pilot Analysis suggested that parcels could be retrofitted for a long-term programmatic cost closer to \$1.50 per impervious square foot managed (\$1.4M per year to retrofit 2,483 parcels with 1,026 impervious acres), which is competitive with the projects proposed during the first funding cycle of the SCWP. Additional analysis would be needed throughout other areas of the County to justify specific incentive rates.

Another potential benefit to funding smaller stormwater projects on private land is that construction and maintenance jobs are more likely to come from a local labor force. As such, direct incentive funds will help support local small businesses and contribute to building community-centered stormwater infrastructure workforces. Additionally, these same labor pools could be trained to participate in the monitoring, verification, and enforcement tasks associated with the Program.

1. Full study available from The Nature Conservancy upon request







RELATED ROC QUESTIONS
10. 21



AREAS OF ALIGNMENT AND RELATED RESOURCES

- Greened Acre Retrofit Program (GARP), Philadelphia. PA
- LADWP's Home Energy Improvement Program and Commercial Direct Install Program



PROCESS/AUTHORITY TO IMPLEMENT

Additional guidance: changes requiring LACFCD development/approval (in conjunction with stakeholders, ROC, and Board, as appropriate)

FUNDING SOURCE

To be determined

OPERATIONALIZING THIS RECOMMENDATION

DISTRICT

- Create the Full-Cost Direct Incentive Program and determine the overall structure, costs, eligibility, and granting mechanisms. The program should be administered by the County or a third-party administrator.
- Determine the appropriate funding source for the program among the Regional, Municipal, or District Programs. Consider creative funding mechanisms, such as establishing a grants program and leveraging participants in the workforce development program to facilitate direct installations.
- Develop program requirements to ensure projects advance SCWP Goals and issue guidance to program participants.
- Review best practices and lessons learned from existing programs, such as those mentioned above in the Context section.
- · Consider various implementation pathways, including:
- » Allowing project proponents to aggregate residential retrofits into a neighborhood-scale proposal to achieve economies of scale in terms of project design, construction, and maintenance. These projects can include direct installations
- » Developing a list of qualified landscape installers and contractors (including CBOs/NGOs) that allows individuals to request services through the District and receive services from a qualified contractor. Ensure that individuals who wish to build or maintain the improvements themselves can still receive the incentive with proper oversight and verification. Offering direct installations for projects in DAC areas. This should be considered for both aggregated projects and individuals via the two pathways described above
- The goals of the Full-Cost Direct Incentive Program should include, but not be limited to, the following:
- » Foster equity in how funds are made available to project applicants, and in how funds are distributed between Watershed Areas and municipalities, including:
 - Consider allocating program funds related to implementation for DACs
 - Offering direct installations for projects in DAC areas
- » Maximize program delivery outcomes for Water Quality, Water Supply, and Community Investment Benefits
- » Optimize for the total funds committed to the program, and the scale of individual incentives (\$/acre managed) to maximize outcomes, cost-effectiveness, and participation through tracking of project costs and outcomes.
 - While the Working Group recommends a Full-Cost Direct Incentive, the District could also consider paying less than the total cost (e.g., 90 percent) and requiring program participants to provide the remaining cost (e.g., 10 percent).
 - Additionally, for commercial and industrial properties, the District could consider encouraging program participants to capture offsite runoff and provide public access to green space where feasible and appropriate
- Support municipalities and communities in sourcing and delivering projects to improve program uptake, including informing landowners about the program, creating standard grant contracts, and developing standard plans easily approved by the County's 88 cities to create a project pipeline.
 - » Ideally, approval/permitting processes for implementing rain gardens and similar infrastructure on private land could be waived by participating municipalities if adapted to local permitting requirements
- Identify the cost to deliver Water Quality, Water Supply, and Community Investment Benefits on private land as compared to other types of projects delivered under the SCWP. This could allow for gradual adjustment of the program in terms of level(s) of funding, and types and scales of projects funded, including tiers of incentives to account for project scale and types of benefits delivered.





OPERATIONALIZING THIS RECOMMENDATION (CONT.)

- Determine oversight and enforcement needs, including the potential to engage the new green workforce to verify that projects are maintained.
- Determine whether incentive recipients need to grant an easement, or other appropriate mechanism, to the County to allow for as-needed maintenance.

WASCs

• When setting Watershed Area targets based on the watershed signature, consider the opportunities available through the Full-Cost Direct Incentive Program, including the number of private parcels that are viable for retrofits.

ROC

• Monitor the District's progress to develop, launch, and administer the program.

WATERSHED COORDINATORS AND CBOs/NGOs

- · Watershed Coordinators and CBOs/NGOs may play an important role in developing community interest and sourcing projects by:
 - » Informing community members that the SCWP is an available source of funding for multi-benefit stormwater projects on private land
 - » Organizing collaboratives, training sessions, and convenings that assist with the learning curve for stakeholders who want to participate

SCORING COMMITTEE

- · Scoring should differ depending on the selected implementation pathways:
 - » Aggregated residential retrofits at the neighborhood scale should be scored as part of the Regional Program
 - » Individual retrofits through qualified landscape installers and contractors should be waived from scoring under the Regional Program

- January 2023: Create program outline (administration, funding amount, DAC set-aside, eligibility, and implementation options) informed by discussions with other municipalities who have implemented successful private property incentive programs and circulate for public comment.
- July 2023: Finalize the program structure, requirements, and guidance to establish the incentive program.
- July 2023: By SCWP funding cycle 5, establish and launch the Full-Cost Direct Incentive Program.



WORKING GROUP RECOMMENDATION 20

CREATE A ROBUST WORKFORCE DEVELOPMENT PROGRAM

RECOMMENDATION:

Create and implement a robust Workforce Development Program for high quality operations and maintenance (O&M) to ensure benefits are consistently achieved for SCWP projects.

CONTEXT:

The SCWP Ordinance requires a local workforce job training program "which will provide certification classes and vocational training at the community level for the construction, inspection, operation and maintenance of Stormwater or Urban Runoff management and Multi-Benefit Projects," including instruction regarding applicable design concepts, and educational programs where "not less than twenty percent (20%) of District Program funds shall be allocated for these Programs." Given the explicit inclusion of this Program element into the Ordinance (including a dedicated funding stream for its creation and administration), the importance of this SCWP goal is clearly established. Further, the Ordinance points to the need for a career pathway for these jobs, given the emphasis on certification and vocational training.

The Working Group has acknowledged the following critical elements related to developing a green, local workforce:

- Successful long-term implementation of individual projects and the SCWP overall requires a skilled, local workforce to ensure quality construction and comprehensive operations and maintenance.
- Both the capacity (quantity and availability of jobs) and capability (range of skills and trades) of a skilled workforce are required, and both must be addressed.
- The projected accelerated implementation and the wide diversity of project types must be clearly understood to ensure a skilled workforce is ready to deliver throughout the ramp up and evolution of the SCWP.
- The full range of required skills and trades (qualifications and job classifications) must be considered when developing a workforce training program.

Cross training a workforce provides resilience (where workers are cross trained to be adaptable to market conditions and needs) and sustainability for jobs (where there is consistent work to ensure stable career pathways).

Given the Ordinance context, the acknowledgements by the Working Group, and the significant regional investment in infrastructure (Measure W combined with other significant regional investments), the need for a workforce training program is clear and established.

FUNDING SOURCE:

District Program, Educational Programs



Figure 31. The Value of Workforce Development. Skilled workers are the foundation for successful projects and achievement of benefits across multiple scales (from neighborhoods to the larger region).





RELEVANT SCWP GOALS H, M, N



RELATED ROC OUESTIONS N/A

AREAS OF ALIGNMENT AND RELATED RESOURCES



- Safe Clean Water Program, Workforce Development Literature Review. Estolano Advisors
- Jobs Standards Primer/ Briefing Report, LAANE



PROCESS/AUTHORITY TO **IMPLEMENT**

Additional guidance: changes requiring LACFCD development/approval (in conjunction with stakeholders, ROC, and Board, as appropriate)

. OPERATIONALIZING THIS RECOMMENDATION

DISTRICT

- · Establish a job training and certification program to create a career pathway for the SCWP workforce and accept applicants beginning in January 2023. As part of the program development, create a program framework to ensure that key program elements are defined and outlined early, including:
 - » Job training and certification program definitions and outcomes;
 - » Scope and extent of training (who gets trained, type of training, timing of training, etc.); and
 - Intended employers for the trained workforce
 - Note: it is expected that all anticipated (current and future) project types will be included in the workforce development and training program and that the full lifecycle of the infrastructure will also be addressed
- · Calculate the pipeline for regional job needs (to encompass SCWP and other Measures such as H, A, M where there is synergy) by June 2022. This process should include a review of previous funding cycles of project submissions (including project size, quantity, project types, etc.) plus a projection for future needs.
- By June 2022, perform an assessment of all existing training programs (or components of these programs) in the L.A. region that can be leveraged and ensure that regional partners (including other Departments or organizations) can be established early in the process.
- · Establish a tracking mechanism for quarterly submissions of workforce hires and release the quarterly submissions publicly, beginning with SCWP funding cycle 5 projects.
- · By January 2023, establish local workforce hiring requirements (minimum percentages for hired and trained labor utilization on projects) to achieve goals for all County-led work and SCWP project submissions.
- · By SCWP funding cycle 5, establish O&M standards for the types of maintenance and frequency requirements, and establish maintenance agreements for projects (for any new standards), to ensure that there is consistency in long-term project performance across SCWP implementation.
- · By SCWP funding cycle 5, establish requirements to train and hire inspectors to assess SCWP projects on a regular basis to ensure that projects are functioning and providing the benefits as designed (and outlined in the project applications).

DISTRICT AND CHIFF ENGINEER: APPLICATION/FEASIBILITY

· Beginning with SCWP funding cycle 5 projects, establish requirements for project submissions (design phase) to calculate the number of potential jobs using a calculation tool to be provided by SCWP.

SCORING COMMITTEE

 Beginning with SCWP funding cycle 5 projects, incorporate scoring updates, for project submissions related to local jobs, to include criteria to weight local job commitments for construction.

- September 2022: Calculate the pipeline for regional job needs and perform an assessment of existing regional job training programs.
- January 2023: Establish a job training and certification program (and begin accepting applicants) and establish utilization requirements for all projects.
- July 2023: Beginning with SCWP funding cycle 5 projects, establish requirements for project submissions (design phase) to calculate the potential number of jobs and incorporate scoring updates for workforce utilization (construction phase); establish a tracking mechanism for quarterly submissions of workforce hires; establish O&M standards and maintenance agreements; and establish requirements to train and hire inspectors for long-term monitoring.



WORKING GROUP RECOMMENDATION 21 TEST ALTERNATIVE SCORING CRITERIA

RECOMMENDATION:

Test alternative scoring criteria and frameworks to better align project screening and prioritization with local values and needs, and incentivize projects that support WASC targets.

CONTEXT:

Under the current scoring criteria, regional and distributed projects are evaluated against a "one-size-fits-all" framework. In addition, the metrics used to evaluate projects are not necessarily quantitative, tied closely to Program Goals, or proportional to the benefits generated. Some metrics may provide an advantage to regional projects and vice versa with distributed projects. The Scoring Committee released a draft with recommendations to improve the scoring criteria process as

well as metrics used to score projects, but many of those recommendations are still outstanding.

A number of the preceding recommendations developed by the Working Group have a direct bearing on project scoring and prioritization. To initially test how these recommendations could translate into scoring criteria updates, the Technical Team evaluated three hypothetical project sites and two types of projects (regional Gray and distributed Nature-Based Solutions, see Figure 32) under an array of alternative scoring schemes as well as against the current scoring criteria.



Figure 32. Alternative scoring framework for different project types. Alternative scoring frameworks were tested for three sites and different project types for each site; the figure above shows the sites and hypothetical project scores under the current SCWP scoring criteria. For the purposes of the following examples, it is assumed that all NBS projects are located in Disadvantaged Communities (and thus the spatial scale of the CIB only encompasses the DAC population).



CURRENT SCORING FRAMEWORK

Table 3 applies the current scoring criteria specified in the SCWP Feasibility Study Guidelines to the example project types and sites. Under the current scoring criteria, the Gray Infrastructure projects would be recategorized as "Dry Weather" projects due to their inability to capture the 85th percentile design storm whereas the NBS projects would still be categorized as "Wet Weather" projects since they are designed to capture the 85th percentile design storm.

Table 3. Current scoring framework as specified in the SCWP Feasibility Study Guidelines.

Catagory/Goal	Current		Gra	ay	NBS	
Category/Goal	Metric	Points	Park & Ride	Well Lot	Well Lot	School
	Wet Weather					
	\$/24-hr vol. managed	50	0	0	11	11
Water Quality	% reduction of inflow		0	20	30	30
water Quality	Dry Weather					
	100% dry weather capture	40	20	20	20	20
	Dry weather drainage area managed		20	20	10	10
Water Supply	\$/ac-ft	25	13	13	0	0
water suppry	ac-ft/yr		12	12	0	0
Community Investments	# of CIB provided	10	2	2	5	10
Nature-Based Solutions	"Level of natural"	15	0	0	10	10
Leverage Funds and Community Support	% funding matched	10	0	0	0	0
	Demonstrated support	10	0	0	0	0
DAC Benefits						
Total		110	67	67	56	61



ALTERNATIVE SCORING EXAMPLES

The alternative scoring examples that were reviewed with the Working Group included the following, and the example scoring criteria and outcomes for each hypothetical project are shown below. Example calculations are available in the Metric Definitions and Model Assumptions Document (Appendix D).

EXAMPLE 1. Update metrics, retain weights, clarify community engagement.

- 1. The scoring criteria are synchronized with the Working Group's recommended metrics so that projects can be assessed using clearly defined, locally-relevant metrics.
- For Water Quality, Water Supply, and Community Investment Benefits, the metrics used to normalize based on cost-effectiveness are proposed to be Wet Day Long-Term Pollutant Load Captured, Magnitude of New Water Captured, and monetized Community Investment Benefits, respectively.
- To better account for the value of leveraged funding, any funding match is subtracted from the project costs. Using this approach, the 10 points from the "Leverage Funds and Community Support" would now address the justified community engagement, per Recommendation 8. For the purpose of these examples, it was assumed that no funds were leveraged and no community engagement has been completed.
- 2. Scoring criteria are normalized to total project costs so that every project is compared on the basis of costs and benefits, rather than just total benefits.

- Evaluating project priority on the basis of cost-effectiveness enables all projects to be compared
 equitably to ensure the best use of SCWP funds; additionally, awarding points proportional to costeffectiveness provides a logical and structured approach to value project benefits, as compared to
 relying on scoring benchmarks that might favor larger or smaller projects.
- To assign points to normalized metrics, hypothetical scoring distributions were established based on benchmarking the range of potential projects modeled for the Pilot Analysis, but this could also be done using projects submitted to the SCWP during each round (similar to "grading on a curve"); for example, the projects that provide the best Water Quality Benefits per dollar (90th percentile performance or higher) would receive the maximum points, whereas projects that provide average (50th percentile) Water Quality Benefits per dollar would receive half points.

Table 4. Example scoring metrics and outcomes for the hypothetical projects under Example 1. Under this example, it is clear that the "well lot" Gray project is not as cost-effective as the "park & ride" Gray project. Where two Gray projects might have performed equally under the current scoring criteria (due to re-categorization of many Gray projects to dry weather if not capturing the 85th percentile, 24-hour storm), Alternative Scoring Example #1 allows one to see distinctions in cost-effectiveness between two projects.

Category/Goal	Example 1		Gray		NBS	
Category/Goal	Metric	Points	Park & Ride	Well Lot	Well Lot	School
Water Quality	Wet Weather Impairment Redux Efficiency Wet Day Long-Term Pollutant Load Captured/\$	50	50	30	50	50
	Dry Weather Impairment Redux Efficiency % days with dry weather flow eliminated/\$	40				
Water Supply	New Water Capture Efficiency ac-ft/\$	25	25	10	15	10
Community Investments	CIB Value Delivery Efficiency Monetized CIB metrics/\$	10	0	0	8	10
Nature-Based Solutions	Better define NBS vs Nature-Mimicking	15	0	0	15	15
Leverage Funds and Community Support	Leveraged funding deducted from costs	10				
	Better define engagement/robust support (Rec. 8)	10	0	0	0	0
DAC Benefits						
Total		110	75	40	88	85



ALTERNATIVE SCORING EXAMPLES (CONT.)

EXAMPLE 2. Update metrics, retain weights, clarify community engagement, add DAC priority points, consolidate NBS-CIB.

The second example applies the same assumptions as Example 1, but also offers 10 priority points for projects that serve DACs with CIB (per Recommendation 14). This example also consolidates points between Nature-Based Solutions and Community Investment Benefits (25 points overall) so that projects can be assessed based on how well projects yield desired outcomes and benefits (instead of simply based on what type of project is implemented). The updated relative percentage between scoring categories is illustrated below.

Table 5. Example scoring metrics and outcomes for the hypothetical projects under Example 2. Because the two NBS projects are located in Disadvantaged Communities and thus provide local Community Investment Benefits, they receive an additional ten points.

Catagory/Goal	Example 2		Gray		NBS	
Category/Goal	Metric	Points	Park & Ride	Well Lot	Well Lot	School
Water Quality	Wet Weather Impairment Redux Efficiency Wet Day Long-Term Pollutant Load Captured/\$	50	50	30	50	50
	Dry Weather Impairment Redux Efficiency % days with dry weather flow eliminated/\$	40				
Water Supply	New Water Capture Efficiency ac-ft/\$	25	25	10	15	10
Community Investments	CIB Value Delivery Efficiency Monetized CIB metrics/\$	25	0	0	20	25
Nature-Based Solutions	Better define NBS vs Nature-Mimicking					
Leverage Funds and Community Support	Leveraged funding deducted from costs	10				
	Better define engagement/robust support (Rec. 8)	10	0	0	0	0
DAC Benefits	DAC CIBs / Total CIB	+10	0	0	10	10
Total		110 (+10)	75	40	95	95



EXAMPLE 3. Update metrics, calibrate weights to watershed needs, add 10 priority points for community engagement and DAC benefits.

The third option applies the same assumptions as Example 2, but hypothetically adjusts the weights and available points of each category to balance the value of the three major Goals (equally weighted). Adjustments of weights should be informed by the Needs Assessment Initiative.

Table 6. Example scoring metrics and outcomes for the hypothetical projects under Example 3. The reallocation of points to weight more toward Community Investment Benefits results in lower scores for Gray projects, as they do not intrinsically provide Community Investment Benefits without additional surface improvements.

Catagory/Goal	Example 3	Gra	ау	NBS		
Category/Goal	Metric Points F		Park & Ride	Well Lot	Well Lot	School
Water Oralia	Wet Weather Impairment Redux Efficiency Wet Day Long-Term Pollutant Load Captured/\$	34	34	20	34	34
Water Quality	Dry Weather Impairment Redux Efficiency % days with dry weather flow eliminated/\$	34				
Water Supply	New Water Capture Efficiency ac-ft/\$	33	33	13	20	13
Community Investments	CIB Value Delivery Efficiency Monetized CIB metrics/\$	33	0	0	26	33
Nature-Based Solutions	Better define NBS vs Nature-Mimicking					
Leverage Funds and Community Support	Leveraged funding deducted from costs	+10				
Leverage runus and Community Support	Better define engagement/robust support (Rec. 8)	+10	0	0	0	0
DAC Benefits	DAC CIBs / Total CIB	+10	0	0	10	10
Total		100 (+20)	67	34	90	90



EXAMPLE 4. Update metrics, calibrate weights to targets, add 10 priority points for community engagement and DAC benefits.

The fourth option calibrates scoring weights and available points to align with hypothetical long-term targets derived from the watershed signature and targets (per Recommendation 15). For this example, it is assumed that a certain scenario from the watershed signature is selected (e.g., 50 percent Nature-Based Solutions and 50 percent Gray Infrastructure), which provides Water Quality, Water Supply, and Community Investment Benefits in a ratio of 40 percent, 40 percent, and 20 percent (for example, see the "slice" of the watershed signature extracted as an example target in Recommendation 15, in which the distribution of benefits follows this weighting). This would theoretically incentivize the submission of projects that drive the Program toward the long-term targets.

Table 7. Example scoring metrics and outcomes for the hypothetical projects under Example 4.

Catagory/Goal	Example 4	Gra	ay	NBS		
Category/Goal	Metric Points		Park & Ride	Well Lot	Well Lot	School
Wester Quellin	Wet Weather Impairment Redux Efficiency Wet Day Long-Term Pollutant Load Captured/\$		40	24	40	40
Water Quality	Dry Weather Impairment Redux Efficiency % days with dry weather flow eliminated/\$	40				
Water Supply	New Water Capture Efficiency ac-ft/\$	40	40	16	24	16
Community Investments	CIB Value Delivery Efficiency Monetized CIB metrics/\$	20	0	0	16	20
Nature-Based Solutions	Better define NBS vs Nature-Mimicking					
Leverage Funds and Community Support	Leveraged funding deducted from costs	+10				
Leverage runds and Community Support	Better define engagement/robust support (Rec. 8)	+10	0	0	0	0
DAC Benefits	DAC CIBs / Total CIB	+10	0	0	10	10
Total		100 (+20)	80	40	90	86



EXAMPLE 5. Update metrics, calibrate weights to project types and needs, add 110% for community engagement and DAC benefits.

The final example applies the same assumptions as the preceding examples, but calibrates scoring weights and points to both long-term goals (Example #4) and is specific to expectations of each project type. This enables projects to be assessed based on what types of benefits are reasonable to expect for each project type; for example, Gray projects would be assessed primarily based on their efficiency at capturing and treating water and pollutants (not providing Community Investment Benefits) resulting in a 50 percent-30 percent-20 percent allocation of points for the Water Quality, Water Supply, and Community Investment Benefits categories, respectively, whereas Nature-Based projects would be assessed based more heavily on their efficiency at delivering Community Investment Benefits along with Water Quality Benefits and—to a lesser extent—Water Supply Benefits resulting in a 35 percent-25 percent-40 percent allocation of points for the Water Quality, Water Supply, and Community Investment Benefits categories, respectively. Hybrid projects in conjunction with the scenario selected from the watershed signature (e.g., 50 percent NBS and 50 percent Gray) would have a 40 percent-40 percent-20 percent allocation of points for the Water Quality, Water Supply, and Community Investment Benefits based on the ratio of benefits expected from such a scenario.

Table 8. Example scoring metrics and outcomes for the hypothetical projects under Example 5.

Category/Goal	Example 5					Gray		BS
Category/Goar	Metric	NBS Points	Hybrid Points	Gray Points	Park & Ride	Well Lot	Well Lot	School
Water Quality	Wet Weather Impairment Redux Efficiency Wet Day Long-Term Pollutant Load Captured/\$	35	40	50	50	30	35	35
Water Quality	Dry Weather Impairment Redux Efficiency % days with dry weather flow eliminated/\$	35	40	50				
Water Supply	New Water Capture Efficiency ac-ft/\$	25	40	50	50	20	15	10
Community Investments	CIB Value Delivery Efficiency Monetized CIB metrics/\$	40	20	-	0	0	32	40
Nature-Based Solutions	Better define NBS vs Nature-Mimicking	_	_	_	_	_	1	_
Leverage Funds and Community Support	Leveraged funding deducted from costs	+10	+10	+10				
	Better define engagement/robust support (Rec. 8)				0	0	0	0
DAC Benefits	DAC CIBs / Total CIB	+10	+10	+10	0	0	9	9
Total		100 (+20)	100 (+20)	100 (+20)	100	50	82	85



The Pilot Analysis demonstrated that tuning the scoring metrics to align with the Working Group-recommended metrics (Recommendation 1) more clearly, quantitatively, and defensibly differentiates and prioritizes project benefits and cost-effectiveness. The analysis also suggested that the weighting (i.e., the points awarded for each category of benefits) can be calibrated in a structured way to better incentivize projects desired by each WASC as they advance toward their long-term targets. Additionally, the scoring can be used to better prioritize between two projects of the same type (e.g., Gray to Gray) that would have otherwise scored similarly under the current rubric, but are clearly differentiated under the alternative rubrics (allowing for a more efficient use of tax funds). The Working Group recommends starting with **Alternative Scoring Example #2** as an initial step to refining the scoring criteria.

Finally, Recommendation 15 suggests that the WASC should set targets to prioritize the level of investment in different project types prior to scoring (also see Recommendation 9 regarding prioritizing Nature-Based Solutions); this means that the scoring framework should not necessarily be used to compare different project types, but rather to select the highest value projects within each category (per agreed-upon metrics). In other words, the scores for Nature-Based Solutions projects should only be compared to other Nature-Based Solutions projects, and Gray projects should only be compared to Gray projects.

Figure 33 illustrates how the alternative scoring examples better differentiate the total benefits provided by the hypothetical projects (based on the Working Group's recommended metrics and the assumed weight of each scoring category), and can be used to better inform project prioritization.

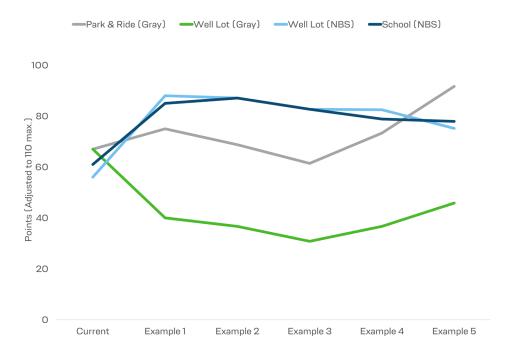


Figure 33. Comparison of scores between hypothetical projects under each of the alternative scoring examples; moving from left to right, the scoring frameworks are tuned more specifically to project types and hypothetical watershed targets.











PROCESS/AUTHORITY TO IMPLEMENT

Ordinance-required supplemental guidance: changes requiring 30-day public notice before adoption by LACFCD Chief Engineer



OPERATIONALIZING THIS RECOMMENDATION

DISTRICT

- Via the Metrics and Monitoring Study, develop and test alternative scoring and prioritization approaches customized to each Watershed Area's conditions, needs, and targets. These approaches may include the ones listed in this recommendation as well as others, but the Working Group recommends starting with Alternative Example #2.
- Develop tools to help WASCs and project proponents score projects under new criteria.

DISTRICT AND CHIEF ENGINEER: APPLICATION/FEASIBILITY

 Update the Feasibility Study Guidelines (and potentially Watershed Area Steering Committee Operating Guidelines and Scoring Committee Operating Guidelines) to reflect the updated scoring criteria and to incorporate updated outcomes relevant to governing roles.

WASCs

· Utilize new District tools to support WASC prioritization of projects.

SCORING COMMITTEE

· Utilize new District tools to support project scoring.

FUNDING SOURCE:

District Program, District-led Metrics and Monitoring Study

TIMELINE

July 2024: By SCWP funding cycle 6, provide updated scoring criteria in the Feasibility Study Guidelines to more
closely align with local WASC technical targets and needs. Update WASC and Scoring Committee Operating
Guidelines if needed to align with roles related to the updated scoring criteria.



WORKING GROUP RECOMMENDATION 22

DEVELOP A MONITORING PROGRAM FOR THE SCWP

RECOMMENDATION:

Develop specific metrics to quantify, track, and monitor progress for the SCWP. Use monitoring to inform adaptive management of the SCWP.

CONTEXT:

The current SCWP reporting process includes only intermittent project reporting by applicants, WASCs, the ROC, and the District. Under the current approach, no mechanism exists to track performance for individual projects or the overall Program over time. The current dashboards that are available display claimed benefits from project applicants rather than monitored benefits that represent the actual project performance conditions (immediately after construction and over time). Additionally, the current tracking simply allows for a single snapshot in time but does not allow for the SCWP project conditions or SCWP overall benefits to be tracked in aggregate to show long-term progress. The Working Group has acknowledged the importance of ensuring that the investments made over time deliver on the benefits that are expected to be achieved. Further, the Working Group has emphasized the importance of tracking progress within each Watershed Area to ensure that Municipal Program and Regional Program goals are achieved and there is transparency on reporting and progress. With increased tracking and visibility, an adaptive management approach can be integrated at periodic intervals to ensure balanced and cost-effective implementation.

FUNDING SOURCE:

District Program, District-led Metrics and Monitoring Study

Regional Program Transfer Agreement Requirements

Year	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June
Y20-21		_				\$					<u>ци.</u>	
Year 1				Agreements Available	****	Ψ					4411	
FY21-22				= ¢		lih.						
Year 2		Ц <u>а.</u>		= \$	<u> </u>	<u></u>		L <u>III.</u>			<u> </u>	
FY22-23				\$		lılı.						
Year 3		<u> </u>		Φ Φ	<u> </u>	<u> </u>		<u> </u>			L <u>lan.</u>	
FY23-24				# \$		LIL.						
Year 4		<u> </u>		— D	<u> Lian</u>	<u> i.i.</u> 東		<u> </u>	FYs 20-21, 21,-22, 22-23		L <u>.</u>	
FY24-25		1		= *		<u></u>						
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FY25-26						<u>.ll.</u>						
Year 6		L <u>lan.</u>		= \$	<u> </u>	 		<u> </u>			<u> </u>	8
FY26-27				I		<u>ılı.</u>		1.1				
Year 7		<u> </u>		= \$	L <u>iu.</u>	<u> </u>		<u> </u>	FYs 23-24. 24-25. 25-26		<u> </u>	

Figure 34. Regional Program Transfer Agreement Requirements. The SCWP requires a variety of reporting and tracking to ensure that the projects and the Program achieve the results expected. At recurring intervals, a variety of reports and submissions are required as shown in the graphic. Ensuring regular reporting and tracking overtime will allow for transparency and adaptive management.



Biennial

Report





RELATED ROC QUESTIONS 10. 21



AREAS OF ALIGNMENT AND RELATED RESOURCES

Coordinated Integrated Monitoring Programs



PROCESS/AUTHORITY TO IMPLEMENT

Ordinance-required supplemental guidance: changes requiring 30-day public notice before adoption by LACFCD Chief Engineer

OPERATIONALIZING THIS RECOMMENDATION

DISTRICT

- Beginning with SCWP funding cycle 5:
 - » Establish annual reporting. Via the Metrics and Monitoring Study, develop specific guidelines and templates for both Program and project monitoring. Progress toward the watershed signature "target" should be updated annually to incorporate the projects that have been programmed and account for the nested impacts. Annual reporting will help inform WASCs on what has been implemented in the previous year and how to prioritize investments in the types of projects needed in subsequent years. The reporting module should track progress relative to the possible benefits elucidated from the targets and the associated implementation scenarios prioritized by the WASCs to balance the needs and goals in their Watershed Areas. (The implementation scenarios correspond to given scenarios from the watershed signature, representing the types of project solutions that WASCs have determined that help them attain the targets and meet the unique needs of their Watershed Areas.)
 - The reporting process and models to account for nested impacts should be updated to account for nested impacts on Water Quality and if Water Supply drainage areas overlap. (Watershed-wide benefits accrued through SCWP funds are currently calculated by adding drainage areas, pollutant load reductions, etc. reported by the project proponents rather than calculated rather than calculated using a watershed approach where project interactions and nested interactions are considered)
 - » Establish baseline pollutant loads, runoff, and community conditions that existed prior to implementation of the SCWP, so that reporting of watershed-wide benefits accrued through SCWP funds will be calculated relative to what has already been done.
 - » Establish requirements to train and hire inspectors to assess SCWP projects on a regular basis to ensure that projects are functioning and providing the benefits as designed (and outlined in the project applications) (per Recommendation 20). This information should be incorporated into the monitoring platform and annual reporting.
- » Consider opportunities to engage the community in monitoring efforts through citizen science or community stewardship.
- » Ensure that project-specific monitoring includes tracking to ensure community engagement activities are completed as proposed.
- » Provide additional technical support and guidance, as needed, to inform Ordinance-required reporting.

TIMELINE

 July 2023: By SCWP funding cycle 5, establish annual reporting and baseline pollutant loads, runoff, and community conditions.



ROC Question Index

The ROC guiding questions for Water Supply and NBS come from the <u>workbook</u> shared at the January 28, 2021 ROC meeting while the guiding questions for DACs and community engagement come from the <u>workbook</u> shared at the February 25, 2021 ROC meeting.

ROC Question ID	Theme	ROC Question/Context
1	Water Supply	Discussion: To what extent is there a need to refine the interpretation of "Water Supply Benefits" for the purpose of creating Program guidance? What, if anything, should be refined?
2	Water Supply	"Predominance of Thought": Because the ability to provide a benefit to the Region's water supply is not equal in all Watershed Areas—not all have large volumes of runoff during storms or hydrogeologic conditions that allow surface infiltration to managed aquifers—the goal of increasing regional drought preparedness through increased water supply could be evaluated with relative water supply potential in mind.
3	Water Supply	"Predominance of Thought": Consideration should be given to adjacent or interacting projects where one project may impact the other but currently is not, or cannot, be fully accounted for in the application and review process.
4	Water Supply	Topic for potential guidance: Projects claiming future Water Supply Benefits that rely on future integrated projects to be implemented.
5	Water Supply	Topic for potential guidance: Projects that may have no opportunity for stormwater capture/recharge as "supply."
6	Nature-Based Solutions	Issue Statement: The NBS definition allows proponents and WASCs to each make separate judgments on some specifics of what counts as NBS and whether NBS is being prioritized. Some suggest that, in line with the matrix of NBS Best Management Practices included with the Fund Transfer Agreements, a standard vocabulary and additional guidance to improve the interpretation, utilization, and prioritization of NBS may be useful.



ROC Question ID	Theme	ROC Question/Context
7	Nature-Based Solutions	The application of NBS in Program implementation should emphasize the multiple benefits provided using NBS, rather than simply the presence of NBS strategies, with a focus on realizing the Program goals outlined above. This refines the intent of NBS for the project developer and the WASC away from the basic presence of NBS strategies and toward achievement of benefits.
		Application column adds: Implementation of this approach would require demonstration that benefits, including Water Supply Benefits, Water Quality Benefits, and Community Investment Benefits, have been provided using NBS, where applicable, as the implementation strategy. This approach is intended to maintain flexibility between WASCs to emphasize specific Program Goals as priorities, depending on the conditions in that Watershed Area.
8	Nature-Based Solutions	Potential Processes (page 12) - Incorporate the NBS matrix into WASC project evaluation, with an additional layer that incorporates benefits. Note: Application column adds "Project developers would input data into the Projects Module and self-evaluate their Projects through an NBS filter using the matrix. After the Scoring Committee confirms the NBS evaluation, WASCs can incorporate it as one of the considerations for weighing projects against each other."
9	Nature-Based Solutions	Prioritizing NBS Implementation (page 12): Refining review and evaluation of those projects to ensure NBS projects advancing SCWP Program Goals are competitive (WASCs are already asked to prioritize NBS, with more detail expected in SCWP funding cycle 3 guidance)
10	Nature-Based Solutions	Evaluating completed projects via reporting and progress tracking (already taking place).
11	Nature-Based Solutions	Prioritizing NBS Implementation (page 12): Cultivating a robust pipeline of NBS projects while recognizing that there may also be cases where a non-NBS alternative may be preferential, if justified.
12	Nature-Based Solutions	Discussion (page 12): What other methods can/should the District employ to prioritize NBS?

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13	DAC	Potential Principles for Program Guidance: A key outcome of the SCWP DAC policies is directed investment to benefit communities that are, and have been, underinvested in. All benefit categories, and dollars spent within the SCWP, when they achieve benefits to DACs shall count toward the 110 percent determination.
14	DAC	Potential Principles for Program Guidance: SCWP projects claiming to provide DAC Benefits under the DAC provisions should demonstrate that they meet identified community needs, and actively avoid and/or mitigate any harms that may result from project implementation (e.g. displacement of community members).
15	DAC	Discussion (page 8): What is the best way to identify community needs and subsequently demonstrate that such needs are being met?
16	DAC	What additional suggestions do you have for creating a shared understanding of the SCWP DAC benefits provisions?
17	DAC	Future Guidance Objectives (page 9): The activities and/or outcomes considered beneficial under the DAC Benefit definition and by which the applicants and WASCs can claim and defend a DAC Benefit.
18	DAC	Future Guidance Objectives: How to quantify the contributions of projects, within and outside of Disadvantaged Communities, for the purpose of determining compliance with the 110 percent DAC investment provisions.
19	DAC	Future Guidance Objectives: Identification of DAC geographies of greatest need, by Watershed Area.
20	DAC	Future Guidance Objectives: Criteria and metrics for assessing the DAC Benefits of projects, including Community Investment Benefits, Water Quality Benefits, Water Supply Benefits, and issues that are beyond the current "DAC Benefit" definition, like job creation, local hiring, and living wages (but which could potentially fall under the umbrella of CIB).
21	DAC	Best practices for verifying the presence of a DAC Benefit, both inside and outside of DAC census boundaries (e.g. support letters, quantitative tools, reference to needs assessments).
22	DAC	Future Guidance Objectives: Best practices, realistic expectations, and meaningful processes for anti-displacement measures by project developers.

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ROC Question ID	Theme	ROC Question/Context
23	DAC	Future Guidance Objectives: Evaluation framework for gauging impacts to DACs over time and how to strengthen them, including qualitative and quantitative indicators.
24	DAC	Potential Guidance for DAC Benefit Definition (page 10): Disadvantaged communities have diverse needs, ranging from community-based enhancements to capital and maintenance infrastructure investments to address deficits. Consistent with the definition of "DAC Benefit" in the SCWP Ordinance, the three major types of SCWP Program benefits are: Community Investment Benefit Water Quality Benefit Each of the above can constitute a DAC Benefit. Project developers could demonstrate (and governance committees determine) the extent to which a project provides a DAC Benefit using a combination of quantitative and/or qualitative measures.
25	DAC	Potential Guidance for Quantifying DAC Benefit: Projects within (or substantially within, per the discretion of the WASC, a DAC): Assuming a DAC Benefit is verified, a project located within a DAC will be judged as providing benefit to that community, and its entire budget will be supportive of the 110 percent return policy.
26	Community Engagement	Potential Principles for Upcoming Program Guidance: In developing guidance on community engagement, the District will be guided by several principles: A consistent standard for executing and evaluating community engagement must be developed to avoid subjectivity. To the extent feasible, project proponents receiving funding through the SCWP will be expected to execute robust community engagement upon receipt of funding. There is a clear link between the successful delivery of meaningful project benefits, especially DAC Benefits, and the execution of robust community engagement, which must be institutionalized through Program guidance.
27	Community Engagement	Future Guidance Objectives: How projects should be scored for community engagement, potentially linked to both engagement prior to submission as well as engagement planned for after funding is awarded.

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ROC Question ID	Theme	ROC Question/Context
28	Community	Future Guidance Objectives: How to document that community engagement or support has
	Engagement	occurred.
29	Community	Future Guidance Objectives: Best practices for community engagement (what "good"
	Engagement	community engagement looks like in the SCWP, and when it should take place).
30	Community	Future Guidance Objectives: Recommendations for refining the documentation and
	Engagement	demonstration of community outreach, engagement, and support.
31	Community	Future Guidance Objectives: Metrics and indicators for evaluating community engagement
	Engagement	efforts over time and how to strengthen those efforts.
32	Community	Additional Outreach and Engagement Processes: Provide guidance for project developers
	Engagement	that clarifies specific expectations for high-quality community engagement activities
		(pre-submission to the SCWP and after award of any funds) based on professional best
		practices, guidance/input received to date, and benchmarking and existing analyses from
		cities and other project developers, the Our Water L.A. (OWLA) Coalition, the Movement
		Strategy Center, the Mujeres De La Tierra Engagement Project, the Institute for Sustainable
		Infrastructure Envision (QL3.1), and the Los Angeles County Public Works Communication
		Plan.
33	Community	Additional Outreach and Engagement Processes: To establish common terminology for the
	Engagement	scaling and quality of community engagement, one potential approach would be to adapt a
		community engagement matrix.