

SAFE CLEAN WATER PROGRAM SCIENTIFIC STUDY PROPOSAL QUESTIONNAIRE

1. Proposal identification information and summary of the project goals.

Title: **Community Garden Stormwater Capture Investigation**

Proposing Organization: **Los Angeles Community Garden Council**

Your summary of the Project Goals and Objectives:

The proposal reviewers agree that the goal of this project is to identify existing community gardens in L.A. County that are optimally suited to serve as implementation sites for BMPs, and to develop BMP design concepts for multiple sites across multiple watersheds where runoff capture/treatment could be optimized.

2. Are the objectives clearly stated? What portion of the objectives need more clarification?

The reviewers disagree on whether the objectives are clearly stated. Two reviewers said the objectives are generally clear, while the third said the objectives are not entirely clear. One of the reviewers who indicated the objectives are generally clear said they would have liked to see more clarity on how candidate sites will be ranked and prioritized, while the other reviewer described the objectives as clear but too brief. The third, more critical reviewer said the number of watersheds to be studied is not clear – either 7 or 14, depending on where in the proposal you read – nor is there clarity around how the sites will be analyzed and what kinds of design criteria will be used.

3. How do the project goals directly support a nexus to increasing stormwater or urban runoff capture and/or reducing stormwater or urban runoff pollution?

The reviewers disagree on how effectively the project supports the SCWP's goals of increasing stormwater or urban runoff capture and/or reducing stormwater or urban runoff pollution. Two of the reviewers expressed doubts, while the third reviewer expressed confidence. Of the two reviewers who expressed doubts, one questioned whether a lack of BMP concept designs for community gardens is the limiting factor and the cause of more BMPs not being built, and also questioned whether, as a result of having concept designs, more BMPs would actually be implemented in L.A. County. The other reviewer who expressed doubts pointed out that no BMPs will actually get built by the end of the project, although with additional future funding for implementation, the reviewer expressed optimism that the project could be impactful. The third reviewer expressed confidence in the proposal's potential management impact, commending the proposal for considering both site characteristics and the buy-in of community garden leaders in selecting BMP sites.

4. What is (are) the overarching technical approach element(s) of the proposed project as you understand them (not necessarily the same as the elements described in the proposal)?

The proposal reviewers agree that the proposal consists of the following steps: (1) compile basic information for about 750 community gardens in L.A. County, (2) narrow down these sites to a much smaller number of candidate sites using screening criteria, (3) visit the candidate sites to collect field information, (4) develop conceptual designs for implementing BMPs at a subset of the

candidate sites, and (5) develop materials to support future efforts to secure the necessary funding to implement the BMP concept designs.

5. Has the proposal provided sufficient information to describe the technical approach for each element? If not, what information is missing?

All three reviewers expressed concerns about the lack of detail in the technical approach. One reviewer noted the lack of information about what site selection criteria will be used – specifically, if volume of stormwater the site is capable of capturing would be considered. A second reviewer noted that the proposal writer had skipped or provided little information in multiple key subsections, including neglecting to specify site selection criteria and threshold cutoffs. The third reviewer expressed concerns about the feasibility of obtaining some types of data for various sites, and the lack of detail on the role of the [SCWP] Coordinator .

6. Is the technical approach sound? If not, what do you recommend should be done to improve the technical approach of the proposed project?

All three reviewers expressed concerns about the technical soundness of the proposal. One reviewer deemed the technical gaps to be “significant,” noting that the proposal should have offered much more specificity around what the final concept designs will look like, what types of BMPs will be considered, and what field data will be collected. A second reviewer said that the proposal’s plan to rely on existing, publicly available soil survey data would be a mistake, as these data are “notoriously inaccurate.” The third reviewer expressed concerns about the lack of detail on BMP sizing requirements and feasibility evaluations at the sites where concept designs will be created.

7. How achievable are the study’s stated technical objectives, especially within the proposed timeframe and budget?

All three reviewers agreed that the study’s timeframe and budget seem reasonable, although one reviewer said they are “somewhat unsure” about taking this stance due to insufficient technical details in the proposal. The other two reviewers said the timeframe was reasonable and that the budget might be larger than necessary.

8. What are the greatest technical risks that you foresee the proposing agency facing when implementing the project?

All three reviewers agreed that the project could experience significant technical risks, although the reviewers had difficulty pinpointing these risks and providing solutions because of the lack of technical detail in the proposal. One reviewer questioned whether narrowing down the sites during the screening process will result in a viable list of candidate sites, and also whether the site selection data to be collected will identify all relevant site-specific factors that the project team will need to know when preparing its concept designs (and moreover, that managers will need to know to sign off on the design plans). A second reviewer expressed concerns about improper soils or groundwater elevation data sets resulting in multiple candidate sites identified through the evaluation process being ultimately disqualified during the concept design stage. The third reviewer expressed concerns that the proposal does not explicitly identify all of the data sets that

will be collected, noting that the quality of these data sets will determine the feasibility of the project itself.

9. Please describe the linkages between the project’s technical objectives and the types of decisions that stormwater managers will make based on the project’s outcome(s)? Will the technical achievements provide stormwater managers useful linkages that extend beyond this study?

The reviewers disagreed on whether the study will produce results useful to stormwater managers. Two of the reviewers expressed doubts, with one noting that it remains unclear whether the BMP concept designs developed through this project will actually be implemented, and the other reviewer noting that with no plan for data collection presented, the proposal is unlikely to advance management practices. The third reviewer expressed confidence in the proposal’s potential management impact, noting that the study will give managers a list of sites that are appropriate for implementing BMPs.

10. Please provide any additional technical perspectives you would like to share.

All three reviewers provided additional perspectives expressing doubts about the technical underpinnings of the proposal. One reviewer said that the proposal should have discussed the positive impact of “green jobs” creation, and provided more detailed cost justification, especially given that some watersheds have many more community gardens to evaluate than others. A second reviewer expressed disappointment that the proposal did not highlight how much stormwater could be captured if the BMP concept designs to be developed via this study were to all be eventually implemented; the second reviewer also noted that many of the sites – being former housing plots – are likely to be above street level, which would require implementing BMPs requiring disruptive excavation work. The third reviewer simply expressed disappointment at the lack of technical detail in the proposal.

11. Please answer each of the following questions by selecting one of the following five answer choices: *Excellent, Very good, Adequate, Inadequate or Not applicable because of insufficient information.* Please add an explanation to accompany your answer choice (or refer to the question number above for appropriate context and rationale):

- a. How well do the proposal objectives address the County’s goals of increasing stormwater or urban runoff capture and/or reducing stormwater or urban runoff pollution?

Two of the reviewers rated the proposal’s objectives as being “adequate” for addressing SCWP goals, but simultaneously used their rating to criticize the proposal, with one reviewer noting that community gardens may not be optimal BMP locations in the first place and may not have sizeable-enough watersheds to justify placing BMPs in them, and the other characterizing the project’s final products as “underwhelming for the total budget proposed.” The third reviewer provided a “Not applicable because of insufficient information” rating.

- b. How well do you think the technical approaches will achieve the study objectives and stated outcomes?

All three reviewers rated the chances of the project achieving its stated outcomes as “adequate.” One of the reviewers did not elaborate, while the other two reiterated their concerns about the lack of technical detail.

- c. Technical experience and qualifications of the study team?

All three reviewers provided a “Not applicable because of insufficient information” rating, with one explicitly calling out the fact that no information was provided for any members of the project team, except for the proposal writer.

SAFE CLEAN WATER PROGRAM SCIENTIFIC STUDY PROPOSAL QUESTIONNAIRE

1. Proposal identification information and summary of the project goals.

Title: **Microplastics in LA County Stormwater**

Proposing Organization: **University of California Riverside**

Your summary of the Project Goals and Objectives:

The reviewers agree that the project's overarching goal is to develop standardized methods for monitoring microplastics in urban streams and to collect baseline monitoring data for L.A. County rivers and streams. Specifically, the project will compare two different measurement methods – one cheaper and more rapid, and the other more costly but known to produce more accurate results. The project also will seek to estimate microplastic loadings – key numerical data that will be used to build regional understanding of the source, fate and transport of plastic pollution. The project is part of a series of ongoing microplastics monitoring, modeling and analysis projects by the study team.

2. Are the objectives clearly stated? What portion of the objectives need more clarification?

All three reviewers agreed that the study's objectives are clear. Two of the reviewers offered suggestions for further improving clarity, including more details about the sampling plans, modeling, as well as about why there is unevenness in the number of samples to be collected at each site during different years.

3. How do the project goals directly support a nexus to increasing stormwater or urban runoff capture and/or reducing stormwater or urban runoff pollution?

All three reviewers agreed that the project effectively supports the SCWP's goals of increasing stormwater or urban runoff capture and/or reducing stormwater or urban runoff pollution. All reviewers emphasized that this study constitutes foundational research to understand microplastics contamination in rivers and streams, noting that managers cannot effectively intervene to reduce microplastics pollution until they understand how much is present and how it is entering and traveling through stormwater systems. The baseline data from this project will be critical for evaluating future management action success. Finally, two reviewers commented on the positive aspects of developing a standardized sampling method that could be used throughout L.A.

4. What is (are) the overarching technical approach element(s) of the proposed project as you understand them (not necessarily the same as the elements described in the proposal)?

The reviewers agreed that the key technical elements of the study are: (1) Conduct field sampling using two different, previously developed methods to gather data on microplastic fluxes, (2) estimate microplastics fluxes via established modeling techniques, (3) compare results from the two methods and (4) integrate the data into regional watershed modeling.

5. Has the proposal provided sufficient information to describe the technical approach for each element? If not, what information is missing?

All three reviewers agreed that, on the whole, sufficient information was provided describing the study's technical approaches. However, all three reviewers cited things they would have preferred to see more information on. Two reviewers expressed a preference for more details on how the flux modeling portions will be done. Although the third reviewer explicitly stated that the modeling work is "well-described". The third reviewer, asked for an explanation of how the proposal's authors decided to use a specific analytical technique for identifying tire wear particles.

6. Is the technical approach sound? If not, what do you recommend should be done to improve the technical approach of the proposed project?

All three reviewers agreed that the technical approach for the sampling methods portion of the study is sound. The reviewers disagreed on whether the modeling portion of the study is sound: Two expressed confidence that the modeling portion is technically sound, while the third said it was difficult to make this determination because of a lack of detail.

7. How achievable are the study's stated technical objectives, especially within the proposed timeframe and budget?

All three reviewers expressed general optimism that the study's objectives are achievable within the proposed timeframe and budget, although two of them caveated their assessments by saying they would have preferred to see a breakdown of costs by task to have more confidence that the budget will be appropriate.

8. What are the greatest technical risks that you foresee the proposing agency facing when implementing the project?

All three reviewers identified technical risks, but they said that none of these risks would be insurmountable or would be likely to derail the project. One reviewer said that an unavoidable risk is the prospect of insufficient rain events during the planned sampling period. A second reviewer noted the logistical difficulty of having a sampling team ready to deploy within minutes of a "first-flush" rain event. And the third reviewer said identification and analysis of microplastics in a laboratory can often take more time than is allocated, especially in stormwater where there are likely to be a lot of [microplastic and non-microplastic] particles.

9. Please describe the linkages between the project's technical objectives and the types of decisions that stormwater managers will make based on the project's outcome(s)? Will the technical achievements provide stormwater managers useful linkages that extend beyond this study?

All three reviewers agree that the study has direct and important links to stormwater management. One reviewer characterized the information that will be provided by the study as "extremely useful." Two reviewers stated that the monitoring will help to establish estimates of microplastic loads providing information about the magnitude of stormwater loads relative to other pathways, establish baseline loads against which future loads assessment may be compared, and help establish grounds for potential concern. All three reviewers also agreed that the vetting of the two candidate monitoring methods is likely to pave the way for establishment of routine microplastics monitoring initiatives for the region's rivers and streams.

10. Please provide any additional technical perspectives you would like to share.

Two of the reviewers provided additional comments. One reviewer commended the study design as being the most robust microplastics monitoring study of its kind that they've come across, and suggested that the study could be further strengthened by comparing the two monitoring methods to a third method (a single depth-integrated sample at the thalweg), provided additional funding could be secured. The other reviewer suggested that the study reconsider the method that the study is planning to use for monitoring tire wear particles, but characterized it as a "small" suggestion because the authors can adjust the method to optimize as the study progresses.

11. Please answer each of the following questions by selecting one of the following five answer choices: *Excellent, Very good, Adequate, Inadequate or Not applicable because of insufficient information.* Please add an explanation to accompany your answer choice (or refer to the question number above for appropriate context and rationale):

- a. How well do the proposal objectives address the County's goals of increasing stormwater or urban runoff capture and/or reducing stormwater or urban runoff pollution?

Two reviewers rated the proposal's objectives as being "excellent" for addressing SCWP goals, while the third reviewer gave a "very good" rating and did not elaborate further.

- b. How well do you think the technical approaches will achieve the study objectives and stated outcomes?

Two reviewers rated the chances of the study's technical approach achieving its stated outcomes as "excellent." The third reviewer gave a "very good" rating and cited concerns about the method that will be used to identify tire wear particles as the reason for not giving the highest possible rating.

- c. Technical experience and qualifications of the study team?

All three reviewers rated the study team's capabilities as "excellent."

SAFE CLEAN WATER PROGRAM SCIENTIFIC STUDY PROPOSAL QUESTIONNAIRE

1. Proposal identification information and summary of the project goals.

Title: **Regional Pathogen Reduction Study**

Proposing Organization: **Gateway Water Management Authority**

Your summary of the Project Goals and Objectives:

The reviewers agreed that the overarching goal of this project is to develop targeted, science-informed management strategies for remediating the specific sources of human fecal pollution in L.A. County watersheds that pose the greatest human health risks. Specifically, the study will leverage recent scientific advances in fecal pollution tracking and fecal risk assessment to: (1) determine the sources of fecal pollution that pose the greatest human health risks during both dry and wet weather, (2) identify beaches and other recreational water bodies where these risks are greatest, and (3) develop management actions for combatting fecal pollution in the highest-risk areas.

2. Are the objectives clearly stated? What portion of the objectives need more clarification?

The reviewers agreed that the study's goals are clearly stated. One reviewer was unequivocally positive in their assessment, while the other two reviewers caveated their assessments. Of the latter two reviewers, one said that while the goals were clearly stated, the goals were unrealistic (see Question 6). The second of the latter two reviewers said that the proposal lacks important details in how specifically the objectives will be achieved, although this reviewer simultaneously suggested that this lack of clarity will resolve itself once the technical team begins gaining internal clarity via a stakeholder engagement process.

3. How do the project goals directly support a nexus to increasing stormwater or urban runoff capture and/or reducing stormwater or urban runoff pollution?

The reviewers disagreed on the likelihood of the study supporting the SCWP's goals of increasing stormwater or urban runoff capture and/or reducing stormwater or urban runoff pollution. Two of the reviewers expressed confidence and optimism about the project's management impact, noting that the project is likely to produce information that directly informs how fecal pollution is managed. The third reviewer expressed significant doubts about the project's ability to influence management actions – a consequence of what the third reviewer characterized as potentially erroneous assumptions baked into the study design. Specifically, the third reviewer noted that the proposal's lack of detail in the methods sections casts doubt on the technical rigor of the study design. This third reviewer also expressed skepticism about whether high-risk fecal sources can be "clearly identified," and whether viable stormwater BMPs presently exist to effectively target the high-risk sources.

4. What is (are) the overarching technical approach element(s) of the proposed project as you understand them (not necessarily the same as the elements described in the proposal)?

The reviewers agreed that the study's technical elements will consist of: (1) collecting water samples from beaches, rivers, creeks and channels across L.A. County, (2) using both legacy fecal

pollution detection methods and next-generation molecular methods to measure fecal indicators, fecal genetic markers, viruses and other pathogens, (3) estimating human health risks at beaches and other recreational water bodies and (4) developing a management tool and management plans for addressing the highest-risk human fecal contamination sources.

5. Has the proposal provided sufficient information to describe the technical approach for each element? If not, what information is missing?

The reviewers disagreed on whether the proposal adequately describes the study's technical approach. One reviewer said the technical approach is sufficiently described and reiterated that any information gaps will be filled via stakeholder engagement. The other two reviewers said the technical approach is not sufficiently described. Both of the latter two reviewers said information is woefully lacking about the molecular methods for detecting fecal contamination, how health risk assessment work will be performed on the water-quality constituents that are measured, and how stormwater BMPs will be selected to target the highest-risk sources. These two reviewers noted that the success of the project will be dependent on getting all of these key aspects of the study right. One of the latter two reviewers also noted that when it comes to optimizing stormwater BMPs to remove human viruses and other pathogens, the science itself remains "very poorly understood."

6. Is the technical approach sound? If not, what do you recommend should be done to improve the technical approach of the proposed project?

The reviewers disagreed in their assessment of the soundness of the study's technical approach. One reviewer expressed confidence that the technical approach is sound and offered no caveats. A second reviewer said that not enough information was provided to evaluate the technical approach itself, citing multiple potential shortcomings with the study's methods, including whether the study will properly account for human behavior and how the study will account for pathogen concentrations that could fall below detection limits. The third reviewer was even more critical of the study's technical approach, noting that the chance of the study succeeding as designed is "unrealistic" and suggesting that the study be redesigned to focus on assessing risk at beaches first, then moving upstream into the watershed "in a much more focused and targeted manner."

7. How achievable are the study's stated technical objectives, especially within the proposed timeframe and budget?

The reviewers disagreed about how achievable the study's objectives are within the proposed timeframe and budget. One reviewer expressed full optimism about the timeframe, and did not explicitly comment on the budget. A second reviewer expressed cautious optimism about the study's timeframe and budget, but noted that the proposal's lack of technical detail makes it "difficult" to properly assess the timeline and budget. The third reviewer, while not explicitly commenting on the budget or timeline, was the most pessimistic, noting that the study's ability to measure fecal constituents will depend on the qualifications of the team tasked with performing this work – qualifications that were not sufficiently described in the proposal. The third reviewer also reiterated that the science remains too underdeveloped for managers to identify and implement specific stormwater BMPs that will reliably remove human fecal contamination.

8. What are the greatest technical risks that you foresee the proposing agency facing when implementing the project?

All three reviewers identified technical risks that could affect the study's success. While one reviewer said that the greatest technical risk is simply that the project will not be completed on time, the other two reviewers agreed that the greatest technical risk will lie in the qualifications of the study team, which was not explicitly described in the proposal. Both of these latter two reviewers stressed that the consequences of using an unqualified study team for this type of work could be profound. One reviewer explained that the data obtained "might be highly variable or inaccurate" and, moreover, "not suitable" for conducting human health risk assessments. The other reviewer noted that it is "very easy" to misuse fecal pollution data and risk assessment analyses; this reviewer also stressed that measuring pathogens in water "is like looking for a needle in a haystack."

9. Please describe the linkages between the project's technical objectives and the types of decisions that stormwater managers will make based on the project's outcome(s)? Will the technical achievements provide stormwater managers useful linkages that extend beyond this study?

The reviewers disagreed about whether the study will produce results that are relevant and directly applicable to stormwater managers. Two of the reviewers expressed confidence that the project will be directly used to inform decision-making, citing the study's potential to understand which specific fecal contamination control measures to implement across L.A. County, as well as which specific fecal parameters should be monitored going forward to optimally manage human health risks. The third reviewer stated they are "very dubious" that the study will be used to inform management decisions, noting that the study is unlikely to produce actionable management recommendations because human fecal pollution in watersheds is too ubiquitous and diffuse, and because the science remains underdeveloped to advance viable stormwater BMP solutions that effectively address this pervasive contamination challenge.

10. Please provide any additional technical perspectives you would like to share.

All three reviewers provided additional comments. One reviewer complimented the overall study design, noting its potential to "greatly increase knowledge" about fecal contamination sources and removal strategies. A second reviewer reiterated previously expressed concerns about how the ubiquitous, diffuse nature of fecal contamination is likely to put inherent limitations on the study's ability to viably identify stormwater BMPs that will effectively control fecal contamination. And the third reviewer reiterated the importance of ensuring the study design is technically rigorous, including by properly accounting for pathogen concentrations that are below detection limits, by using a full suite of methods to detect fecal contamination, and by using robust data analysis and risk assessment methods.

11. Please answer each of the following questions by selecting one of the following five answer choices: *Excellent, Very good, Adequate, Inadequate or Not applicable because of insufficient information*. Please add an explanation to accompany your answer choice (or refer to the question number above for appropriate context and rationale):

- a. How well do the proposal objectives address the County's goals of increasing stormwater or urban runoff capture and/or reducing stormwater or urban runoff pollution?

The reviewers disagreed in their assessment of how effectively the study will address SCWP goals. Two reviewers gave "excellent" and "very good" ratings, respectively, with both reviewers expressing confidence that the study will provide managerially actionable insights. The third reviewer gave an "inadequate or not applicable because of insufficient information" rating, reiterating concerns about "no real technical details" in the study and the lack of broader management context for the study.

- b. How well do you think the technical approaches will achieve the study objectives and stated outcomes?

The reviewers disagreed in their assessment of the likelihood of the study's success. One reviewer gave a "very good" rating and did not elaborate further. The other two reviewers offered a more pessimistic outlook, providing "inadequate" and "not applicable because of insufficient information" ratings, respectively. Both of the latter two reviewers said too little information was presented in the study to properly assess its likelihood of success, especially a lack of information on the study team's qualifications.

- c. Technical experience and qualifications of the study team?

The reviewers disagreed in their assessment of the study team's capabilities. One reviewer gave a "very good" rating and did not elaborate further. The other two reviewers expressed reservations about the study team. One of the latter two reviewers gave an "inadequate" rating and reiterated concerns about the lack of specifics presented in the proposal regarding the study team's qualifications. The other reviewer, who gave a "not applicable because of insufficient information" rating, expressed reservations about the fact that the study team will be assembled "via stakeholder engagement" after the project gets underway; this reviewer, however, noted the background information presented in the proposal is solid and will put the study team on a solid scientific foundation – at least initially.

SAFE CLEAN WATER PROGRAM SCIENTIFIC STUDY PROPOSAL QUESTIONNAIRE

1. Proposal identification information and summary of the project goals.

Title: **Gateway Area Pathfinding Analysis (GAP Analysis) - Phase 2**

Proposing Organization: **Gateway Water Management Authority**

Your summary of the Project Goals and Objectives:

The reviewers agree that the overarching goal of this study is to take a data-driven approach to determining which specific potential future BMP projects in the Gateway Area watershed area should become implementation priorities to achieve maximum watershed-scale benefits. This Phase 2 study builds on previously funded Phase 1 work to develop technically rigorous methods for determining these implementation priorities; now the methods are ready to be implemented across a larger geographic area during Phase 2. The Phase 2 project will work to understand how various potential BMP projects could synergistically interact to achieve the greatest water-quality improvements – a task that will include identifying all potential BMP projects not already identified, and then using a series of modeling analyses to prioritize among all identified candidates.

2. Are the objectives clearly stated? What portion of the objectives need more clarification?

All three reviewers agreed that the study's objectives are clearly stated, although all three reviewers offered relatively minor suggestions for areas to that could be clearer, including rewording some of the specific project objectives to flow more logically, providing more details on the scope of the BMP projects that will be considered, and clarifying whether the BMP projects will be evaluated more on their ability to improve water capture or water quality.

3. How do the project goals directly support a nexus to increasing stormwater or urban runoff capture and/or reducing stormwater or urban runoff pollution?

All three reviewers agreed that the project effectively supports the SCWP's goals of increasing stormwater or urban runoff capture and/or reducing stormwater or urban runoff pollution. Each reviewer offered comments affirming the strength of the anticipated management impacts of this work. One reviewer noted that the project's "tight integration" with watershed management planning in the region will help ensure beneficial outcomes. A second reviewer commended the study's focus on maximizing use of taxpayer dollars, and expressed confidence that the study will effectively help the Gateway Area "tee up" funding for implementing priority BMP projects. The third reviewer commended the study for taking a "system-of-projects" approach to evaluating and prioritizing BMP implementations, instead of evaluating each project in a silo.

4. What is (are) the overarching technical approach element(s) of the proposed project as you understand them (not necessarily the same as the elements described in the proposal)?

The reviewers agreed that the main elements of the study's technical approach consist of: (1) using a combination of modeling, geospatial mapping and field surveys to identify all potential BMP projects, including all specific sites, (2) using modeling to turn individual potential projects on and off in the Gateway Area to understand which combinations of projects will lead to the

most positive benefits, and (3) identifying a list of priority projects based on the scenario analyses via an iterative modeling process that also considers cost.

5. Has the proposal provided sufficient information to describe the technical approach for each element? If not, what information is missing?

All three reviewers commended the overall technical approach described in the proposal – in particular, the methodical way that the proposing organization responded to comments received by the reviewers of its Phase 1 proposal. At the same time, all three reviewers pointed to multiple specific technical aspects that they would have liked to see clarified, including more detailed explanation of the analysis methods, the range of different types of BMP projects that will be considered, how the scenario analyses will be conducted to identify optimized combinations of BMP projects, how the study will define the clean-water goals it will work toward, and how costs associated with different BMP projects will be estimated.

6. Is the technical approach sound? If not, what do you recommend should be done to improve the technical approach of the proposed project?

All three reviewers expressed confidence that the technical approach is sound and will appropriately build on an existing SCWP-funded project. At the same time, all three reviewers offered suggestions for improving the technical approach. One reviewer suggested including uncertainty analysis during the modeling analysis work. A second reviewer suggested providing more transparency for what appears to be “some sort of proprietary modeling scheme” by the proposing organization, and defining how cost estimates for the various BMP projects will be determined. And the third reviewer recommended convening a technical advisory committee to review all of the project’s analyses and findings.

7. How achievable are the study’s stated technical objectives, especially within the proposed timeframe and budget?

All three reviewers expressed confidence that the budget is reasonable to achieve the study’s goals, with one reviewer adding that the return on investment for this project is “likely high.” The reviewers did not agree on whether the timeframe is reasonable. One reviewer expressed confidence the timeframe will be reasonable, while the other two reviewers expressed doubts, with one saying the timeline could be a “pipe dream” and the other saying the timeline “seems ambitious” and will be dependent on when the project is actually funded.

8. What are the greatest technical risks that you foresee the proposing agency facing when implementing the project?

All three reviewers identified technical risks associated with this project, although they caveated their assessment by noting that the identified risks are inevitable and/or will not fundamentally derail the project. One reviewer said the greatest risk will be uncertainty in the modeling simulations that could result in less water-quality improvements than anticipated. A second reviewer said the data inputs that go into the modeling work – particularly site-specific conditions like soil and utilities – are “often wrong” and noted that the only way to manage these risks would be to do more analysis than the study calls for. The third reviewer noted that after all of the analysis and scoring work is complete, multiple priority BMP projects could be ruled out during

the engineering analysis stage – an unfortunate outcome because, once the project’s priorities are developed, the project has no feedback loop to reassess these priorities later.

9. Please describe the linkages between the project’s technical objectives and the types of decisions that stormwater managers will make based on the project’s outcome(s)? Will the technical achievements provide stormwater managers useful linkages that extend beyond this study?

All three reviewers agreed that the study will produce results that are relevant and directly applicable to stormwater managers, although they were not all on the same page about how much of an impact the results will have on managers beyond the study area. While one reviewer expressed optimism that other watersheds could readily adopt the study’s modeling techniques, a second reviewer pointed out that the project has no tangible products or data sets that a stormwater manager outside the study area “can pick up and utilize in another watershed.” (The third reviewer did not weigh in on the project’s utility beyond the Gateway Area.)

10. Please provide any additional technical perspectives you would like to share.

While one reviewer provided no additional comments, the other two reviewers offered additional technical perspectives. One reviewer commented that the project has a “very good chance of success” and noted that the study team has the technical capabilities to incorporate uncertainty analysis into its modeling work, even though the project scope does not call for uncertainty analysis. The second reviewer commented that the proposal overall feels “amorphous and not grounded in the local watershed,” and that maps and other materials to orient the reader to the watershed area would have been helpful.

11. Please answer each of the following questions by selecting one of the following five answer choices: *Excellent, Very good, Adequate, Inadequate or Not applicable because of insufficient information.* Please add an explanation to accompany your answer choice (or refer to the question number above for appropriate context and rationale):

- a. How well do the proposal objectives address the County’s goals of increasing stormwater or urban runoff capture and/or reducing stormwater or urban runoff pollution?

One reviewer rated the proposal’s objectives as being “excellent” for addressing SCWP goals, while the other two reviewers gave a “very good” rating. The latter two reviewers said they did not give the proposal the highest possible rating because of reservations about some technical aspects of the proposal: One cited a lack of information about the total number of BMP projects that will or could be implemented from this work, and the other cited the fact that analyses of the BMP projects will be limited to incorporating project “typology” data only, as opposed to data unique to each individual BMP project, which would be preferable.

- b. How well do you think the technical approaches will achieve the study objectives and stated outcomes?

The reviewers disagreed on the likelihood of the study achieving its objectives. One reviewer gave an “excellent” rating. A second reviewer gave a “very good” rating and said that the study’s lack of uncertainty analysis for the modeling was the reason it did not receive a higher rating. The third reviewer gave an “adequate” rating and stated that they did not rate the proposal higher because of a lack of specifics on how the modeling will be conducted.

- c. Technical experience and qualifications of the study team?

All three reviewers rated the study team’s capabilities “excellent” and had only positive things to say about the study team, including that the study team has a demonstrated track record of success doing this type of work.

SAFE CLEAN WATER PROGRAM SCIENTIFIC STUDY PROPOSAL QUESTIONNAIRE

1. Proposal identification information and summary of the project goals.

Title: **Community-Centered Optimization of Nature-Based BMPs Starting with the Gaffey Nature Center Facility**

Proposing Organization: **SEITec (Shahriar Eftekharzadeh)**

Your summary of the Project Goals and Objectives:

The proposal reviewers agree that the goal of this project is to use an existing L.A. County biofiltration BMP as an experimental site to evaluate optimal configurations for this type of BMP – including different plant varieties – with the results used to inform design criteria for other L.A. County nature-based BMPs.

2. Are the objectives clearly stated? What portion of the objectives need more clarification?

The proposal reviewers disagree on whether the objectives are clearly stated. One reviewer said the objectives are clear, but a little too broadly stated in some sections. The other two reviewers said that the objectives lack specificity about how the study will be conducted, including which specific aspects of BMP performance will be optimized through the study.

3. How do the project goals directly support a nexus to increasing stormwater or urban runoff capture and/or reducing stormwater or urban runoff pollution?

The reviewers disagree on how effectively the project supports the SCWP's goals of increasing stormwater or urban runoff capture and/or reducing stormwater or urban runoff pollution. Two reviewers expressed confidence that the study aspirations are well-intentioned to answer these questions, while the third reviewer said the proposal lacks clarity on this nexus – specifically, expressing concerns about how the study will contribute to optimizing filtration practices in the region.

4. What is (are) the overarching technical approach element(s) of the proposed project as you understand them (not necessarily the same as the elements described in the proposal)?

All three reviewers agree that the technical approach will consist of: (1) engaging with stakeholders to develop a study design that encompasses different possible configurations and maintenance regimes for a biofiltration site, (2) collecting and analyzing field data, and (3) preparing a report that offers best-practices guidance on how to build similar systems elsewhere.

5. Has the proposal provided sufficient information to describe the technical approach for each element? If not, what information is missing?

All three reviewers agree that the proposal does not adequately describe the technical approach. One reviewer said the proposal “significantly lacks” information on where, how and how much data will be collected. A second reviewer said the technical approach is “weak” and lacking “in many areas,” noting that the proposal takes a “laundry list approach” to describing the study objectives instead of offering clear focus. The third reviewer expressed particular concern about

the lack of specificity regarding how different configurations described in the proposal will be assessed.

6. Is the technical approach sound? If not, what do you recommend should be done to improve the technical approach of the proposed project?

All three reviewers expressed concerns about the soundness of the technical approach, with two concluding that it is unsound and the third saying there isn't enough information to make such a determination. The first reviewer said the approach "does not seem to be well-suited" to answer the questions set forth in the proposal, and rhetorically asked if there is a social science component to the study that the proposal writer inadvertently overlooked. The second reviewer recommended "a complete rewrite" with a more narrowly defined set of study objectives. The third reviewer pointed to specific apparent flaws in the technical approach, including a technically problematic choice to use the metal zinc as a proxy for tracking other metals, and an approach to comparing multiple different configurations that – if implemented as described – would not be scientifically sound.

7. How achievable are the study's stated technical objectives, especially within the proposed timeframe and budget?

All three reviewers expressed concerns about the achievability of the technical objectives. One reviewer said that the lack of a detailed approach makes it difficult to evaluate if the budget is reasonable, although this reviewer also noted that the five-year study timeframe seems "reasonable." A second reviewer deemed the budget "excessive." And the third reviewer said the achievability of the proposal hinges on the study design, which lacks clarity.

8. What are the greatest technical risks that you foresee the proposing agency facing when implementing the project?

All three reviewers cited significant technical risks associated with the proposal. One reviewer expressed concerns about the lack of technical detail. A second reviewer suggested the proposal writer may not have the experience and knowledge necessary to conduct a technically rigorous study. And the third reviewer identified a significant technical flaw in the study design: The proposing organization is planning to operate the hydrological cells to be monitored in series, when they actually would need to be operating in parallel.

9. Please describe the linkages between the project's technical objectives and the types of decisions that stormwater managers will make based on the project's outcome(s)? Will the technical achievements provide stormwater managers useful linkages that extend beyond this study?

All three reviewers expressed doubts that the study will produce results useful to stormwater managers. One reviewer complimented the proposal writer's well-intended aspirations for the study, but said that these aspirations ultimately are not likely to be achievable. A second reviewer said it "appears unlikely" the project will deliver a good return on investment. And the third reviewer said too little detail is offered to engender confidence that the project will inform management decision-making.

10. Please provide any additional technical perspectives you would like to share.

Two of the reviewers provided additional comments that were critical of the proposal. One reviewer advised against funding this proposal, noting that the budget is “exorbitant.” The other reviewer said the study should be rethought to clarify project tasks and suggested that the study could be improved by assessing multiple sites instead of just one.

11. Please answer each of the following questions by selecting one of the following five answer choices: *Excellent, Very good, Adequate, Inadequate or Not applicable because of insufficient information.* Please add an explanation to accompany your answer choice (or refer to the question number above for appropriate context and rationale):

- a. How well do the proposal objectives address the County’s goals of increasing stormwater or urban runoff capture and/or reducing stormwater or urban runoff pollution?

Two of the reviewers rated the proposal’s objectives as being “adequate” for addressing SCWP goals, and reiterated their concerns about the proposal’s lack of specificity. The third reviewer gave an “inadequate” rating.

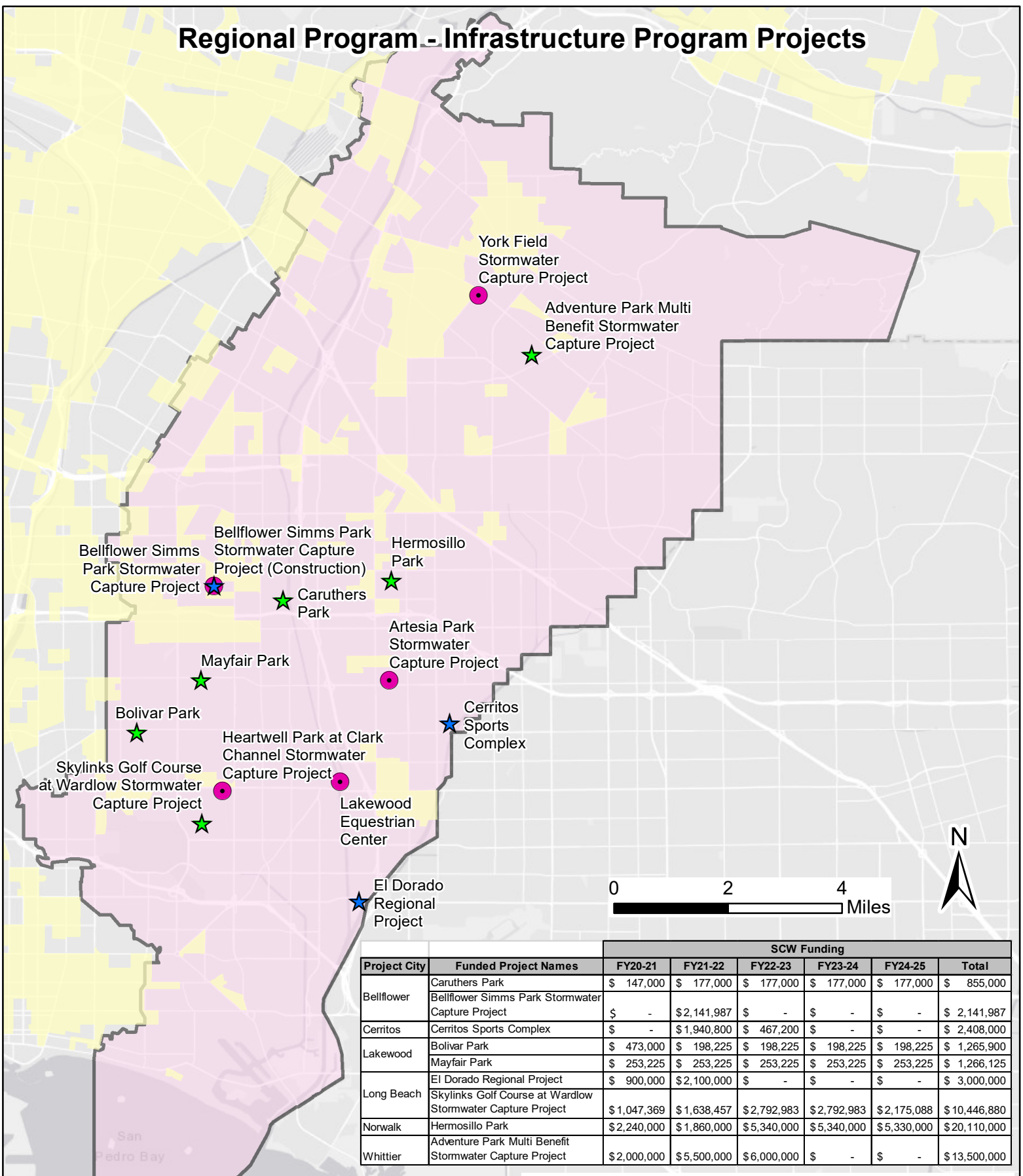
- b. How well do you think the technical approaches will achieve the study objectives and stated outcomes?

All three reviewers rated the chances of the project achieving its goals “inadequate.”

- c. Technical experience and qualifications of the study team?

Two of the reviewers rated the study team’s qualifications “not applicable because of insufficient information,” and the third reviewer rated the qualifications “inadequate.”

Regional Program - Infrastructure Program Projects



Project City	Funded Project Names	SCW Funding					Total
		FY20-21	FY21-22	FY22-23	FY23-24	FY24-25	
Bellflower	Caruthers Park	\$ 147,000	\$ 177,000	\$ 177,000	\$ 177,000	\$ 177,000	\$ 855,000
	Bellflower Simms Park Stormwater Capture Project	\$ -	\$ 2,141,987	\$ -	\$ -	\$ -	\$ 2,141,987
Cerritos	Cerritos Sports Complex	\$ -	\$ 1,940,800	\$ 467,200	\$ -	\$ -	\$ 2,408,000
Lakewood	Bolivar Park	\$ 473,000	\$ 198,225	\$ 198,225	\$ 198,225	\$ 198,225	\$ 1,265,900
	Mayfair Park	\$ 253,225	\$ 253,225	\$ 253,225	\$ 253,225	\$ 253,225	\$ 1,266,125
Long Beach	El Dorado Regional Project	\$ 900,000	\$ 2,100,000	\$ -	\$ -	\$ -	\$ 3,000,000
Long Beach	Skylinks Golf Course at Wardlow Stormwater Capture Project	\$ 1,047,369	\$ 1,638,457	\$ 2,792,983	\$ 2,792,983	\$ 2,175,088	\$ 10,446,880
Norwalk	Hermosillo Park	\$ 2,240,000	\$ 1,860,000	\$ 5,340,000	\$ 5,340,000	\$ 5,330,000	\$ 20,110,000
Whittier	Adventure Park Multi Benefit Stormwater Capture Project	\$ 2,000,000	\$ 5,500,000	\$ 6,000,000	\$ -	\$ -	\$ 13,500,000



SAFE CLEAN WATER PROGRAM

Lower San Gabriel River Watershed Area

- ★ Funded Projects - Constructed or Funded for Construction
- ★ Funded Projects - Design Only
- FY22-23 Considered Projects
- Disadvantaged Community Census Block

Safe, Clean Water Program

Programming of Partial Funding



ATTACHMENT A: Funding Reduction Concurrence (FRC) FORM

The purpose of this FRC form is to demonstrate an IPPA's or SSA's willingness and ability to complete a project or study with a lesser amount than the amount requested in its application ("partial funding"), in order for the project or study to be recommended in a Stormwater Investment Plan for partial funding. The partial funding award must not negatively impact the score achieved by the initial application or result in any changes to the project's or study's scope or benefits as identified in the application and submitted Feasibility Study, if applicable. The IPPA or SSA is required to submit a FRC form to facilitate the partial funding process.

Project/Study Name	Bellflower Simms Park Stormwater Capture Project
Project/Study Lead	City of Bellflower
Watershed Area(s)	Lower San Gabriel River

Brief description of why and how the funding request included in the application is being reduced (e.g. Project or Study will be phased, more information has become available, additional leveraged funding was secured, etc.):

The City of Bellflower has programmed and budgeted park improvements at Simms Park. Also, this project is critical for the City to address the milestones established in the LCC Watershed Management Plan. The City of Bellflower has budgeted in its Fiscal Year 2022-23 Budget, the following funds that will be allocated towards the construction of the Simms Park Stormwater Capture Project.

- 1. Bellflower, Measure W, Municipal Funds \$ 400,000
- 2. Bellflower, Measure A \$ 500,000
- 3. Bellflower, Public Project Fund \$2,000,000
- Total Fiscal Year 2022-23 Budget \$2,900,000

Safe, Clean Water Program

Programming of Partial Funding



Revised Eligible Expenditure Projections:

Funding Year	Fiscal Year	Amount	Description/Phase
1	2022-23	\$ 2,635,561	Advertise, Bid, and Award Const Contract, and mobilization
2	2023-24	\$5,515,570	Construction Year 2
3	2024-25	\$5,515,570	Construction Year 3, including final field approval
4			
5			
Future Funding			
TOTAL		\$13,666,700	

A: Total Original SCW Funding Request	\$15,666,700
B: Total Revised SCW Funding Award	\$13,666,700
C: Shortfall (A-B)	\$2,000,000

Compensation plan for shortfall – Include evidence of the status (must be assurance of timely secured funds for WASC to consider partial funding award) and amount of each additional funding source to ensure completion of all activities proposed in the application and submitted Feasibility Study, if applicable (cost share, grants, SCW Municipal Program funds, subsequent SCW funding request, etc.). Also, include description of the which elements will be funded by this SCW funding request and by funds outside this SCW funding request to demonstrate all elements are funded. For phased projects or studies, provide information on additional funding sources to complete all activities proposed in the phased scope of work (if any).

Compensation for shortfall will be addressed by the City with local match funding during the first year Construction Funding, Year 1

Safe, Clean Water Program

Programming of Partial Funding



If applicable, provide a description and justification of any de minimis scope changes that will maintain or increase the Project Score or improve the Scientific Study. De minimis scope changes should be within the parameters and design of the project or study scope identified in the submitted Feasibility Study or Scientific Study application and any associated additional cost, in addition to the shortfall from the original request, must be covered by other non-SCWP funds.

Since the City will provide matching funds from its local sources, the project scope will still meet the performance expectations based on the Safe, Clean Water Scoring received for this project.

I confirm that partial funding award will not negatively impact the achieved score or result in changes to Project or Study scope or benefits provided as described in the application and submitted Feasibility Study, if applicable. YES

If Project or Study is to be considered in phases, I understand that funding for future phases is not guaranteed, and that submission of a new application is required for funding for future phases not shown in the current SIP, and that annual funding is at the discretion of the WASC, ROC, and ultimately the Board of Supervisors. YES N/A

Name Bernardo Iniguez, Public Works Manager

Organization City of Bellflower

Signature 

Date 3/8/21

Programming of Partial Funding

Purpose

Los Angeles County Flood Control District Code Section 18.07.B.2.g states that activities included in a Stormwater Investment Plan (SIP) should typically be recommended (i.e., programmed) to receive funding for their total estimated cost or requested need. Experience to-date in the program reveals that there may be circumstances that warrant flexibility to allow Watershed Area Steering Committees (WASCs) to recommend a lesser amount than the amount requested in an Infrastructure Program Project Applicant's (IPPA's) or Scientific Studies Applicant's (SSA's) application ("partial funding"). The purpose of this guidance is to describe the process to address partial funding awards, providing flexibility to the WASCs during the development of SIPs.

Project and Study Eligibility

This guidance will address partial funding awards for IPPA's and SSA's that applied during each current SIP cycle. This guidance does not change the ability for WASCs to program the award of a request for full funding over a series of program years.

Process

During the SIP development and programming phase, the WASCs are authorized to recommend partial funding (for each current budget year or future projections) only if the IPPA or SSA demonstrates, to the satisfaction of the WASC, a willingness and ability to complete the full project or study scope identified in the application and submitted Feasibility Study, if applicable, with Safe, Clean Water Program (SCWP) partial funding.

Any IPPA that receives partial funding as described in this guidance will be required to assert and demonstrate that the project scope as described in the project application and submitted Feasibility Study will still be achieved using outside funding to fill the gap left by the partial award. This is required to maintain the applicability of the SCWP project score, which is allocated because of the scope and budget of a submitted project. A project can be awarded partial funding for a complete design phase, where a subsequent construction phase (or phases), once funded, would achieve the submitted benefits and therefore retain the SCWP score. However, a partial award that would diminish the scope of a project and therefore reduce the SCWP score of that project is not allowed – this situation would require the revised project to be resubmitted for scoring in the next program year.

Any SSA that receives partial funding as described in this guidance will be required to assert that the study scope as described in the study application will still be achieved using outside funding to fill the gap left by the partial award.

This programming of partial funding will be initiated by the WASC when an offer of partial funding is made to an IPPA or SSA. The IPPA or SSA will need to concur that the circumstance are applicable, confirm capabilities in accordance with this guidance, and accept the offer for partial funding. Once the WASC decides to offer partial funding, SCWP staff will engage with the IPPA or SSA to complete a Funding Reduction Concurrence (FRC) form and collect supporting documentation to share with the WASC. The

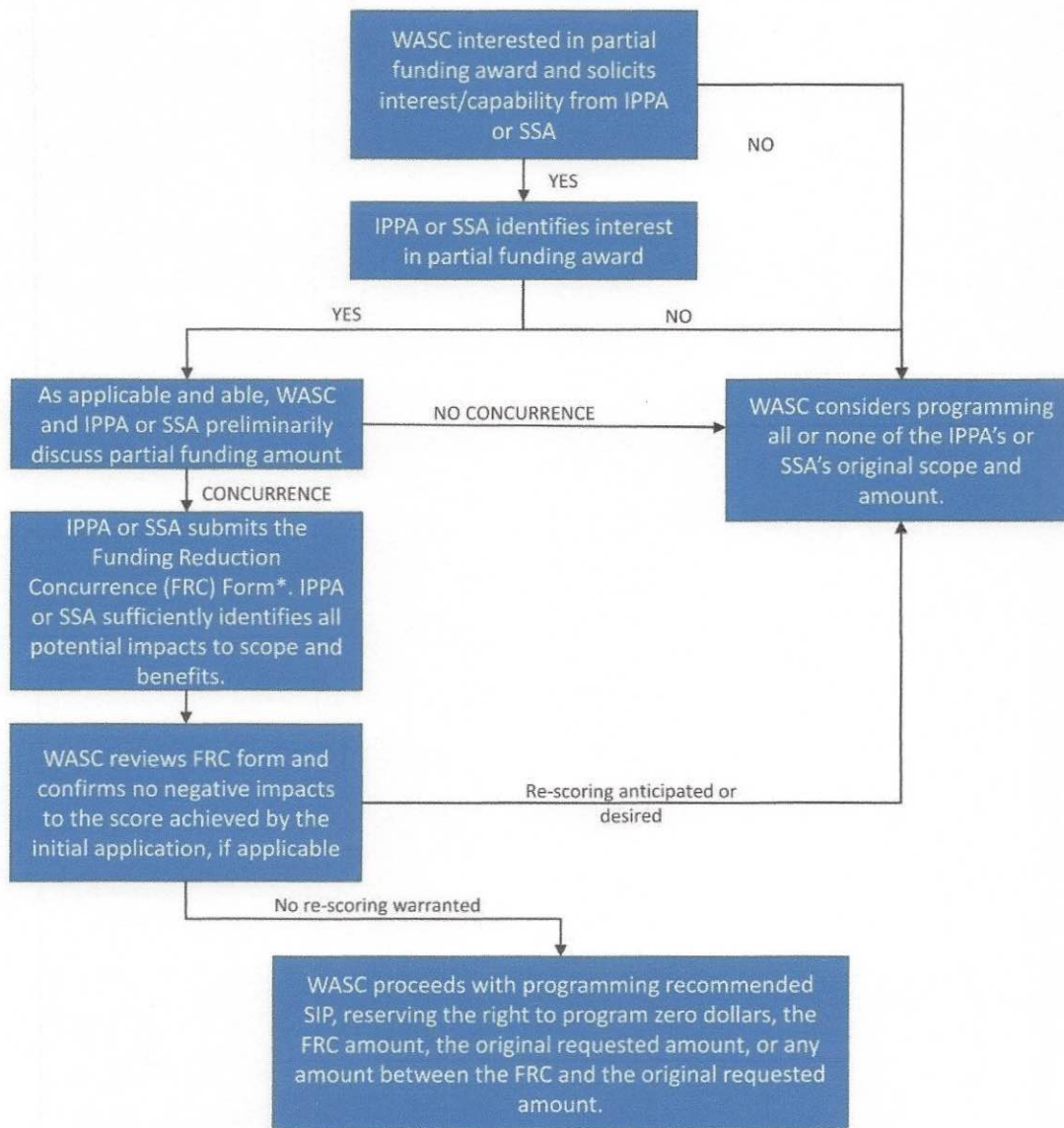


FRC process will allow IPPAs and SSAs to clarify details and provide justification for the partial funding award before the WASC considers it for inclusion into a Stormwater Investment Plan.

The partial funding award should not result in ANY reduction to the scope or benefits of (or the score assigned to) the project or study as identified in the application (and as submitted in the Feasibility Study, if applicable). De minimis additions to the scope that would be anticipated to increase the project score or improve the study may be considered through the FRC process, provided that the applicant demonstrates, to the satisfaction of the WASC, that any additional cost, in addition to the shortfall from the original request, will be covered by other funds and the project or study will be fully completed. The WASC may elect to recommend funding in any amount between the amount stated in the FRC and the amount requested in the project's or study's application.

Once the WASC reviews the FRC and recommends a partial funding award for the project or study, the FRC becomes an attachment to the SIP.

See Figure 1 and Attachment A for the Flowchart and the FRC form.



* - FRC form is due at least one week before the WASC meeting. WASC to defer further discussion regarding programming the subject project or study in the recommended SIP until next meeting

Figure 1: Flowchart for Partial Funding recommendation for projects and studies in each current SIP cycle.



ATTACHMENT A: Funding Reduction Concurrence (FRC) FORM

The purpose of this FRC form is to demonstrate an IPPA’s or SSA’s willingness and ability to complete a project or study with a lesser amount than the amount requested in its application (“partial funding”), in order for the project or study to be recommended in a Stormwater Investment Plan for partial funding. The partial funding award must not negatively impact the score achieved by the initial application or result in any changes to the project’s or study’s scope or benefits as identified in the application and submitted Feasibility Study, if applicable. The IPPA or SSA is required to submit a FRC form to facilitate the partial funding process.

Project/Study Name	Heartwell Park at Clark Channel Stormwater Capture Project
Project/Study Lead	Los Cerritos Channel Watershed Management Group
Watershed Area(s)	Lower San Gabriel River

Brief description of why and how the funding request included in the application is being reduced (e.g. Project or Study will be phased, more information has become available, additional leveraged funding was secured, etc.):

The Los Cerritos Channel (LCC) Watershed Group is requesting for DESIGN PHASE funding for the Heartwell Park at Clark Channel Stormwater Capture Project. The initial SCW Application request was for \$2.8 Million for Design Phase and \$21 Million for Design and Construction of the first phase (15-AF Facility) of the Heartwell Park at Clark Channel Stormwater Capture Project.

The LCC Watershed Group has re-evaluated this request and would like to advance this project with the Design Phase in order to develop and refine the project details to pursue additional grant funding. The Design Phase will include Community Outreach and Community Engagement activities, additional site investigations, environmental documentation, and design documents.

This approach will enable the LCC Watershed to leverage the design funds and future grant funding sources to pursue future Safe, Clean Water Program funding for the Construction Phase.

Revised Eligible Expenditure Projections:

SCW Program

Programming of Partial Funding



Funding Year	Fiscal Year	Amount	Description/Phase
1	FY 2022-23	\$1,410,500	Community Outreach, Design Investigations, Design Plans (30)
2	FY 2023-24	\$1,410,500	Environmental Planning (CEQA), Final Design Plans (60/90/100)
3			
4			
5			
Future Funding			
TOTAL			

A: Total Original SCW Funding Request	\$23,874,000
B: Total Revised SCW Funding Award	\$2,821,000
C: Shortfall (A-B)	\$21,053,000

Compensation plan for shortfall – Include evidence of the status (must be assurance of timely secured funds for WASC to consider partial funding award) and amount of each additional funding source to ensure completion of all activities proposed in the application and submitted Feasibility Study, if applicable (cost share, grants, SCW Municipal Program funds, subsequent SCW funding request, etc.). Reliance on subsequent Regional Program funding is not a guarantee and is therefore discouraged. Also, include description of the which elements will be funded by this SCW funding request and by funds outside this SCW funding request to demonstrate all elements are funded. For phased projects or studies, provide information on additional funding sources to complete all activities proposed in the phased scope of work (if any).

The project, will be designed to meet the performance objectives stated in the Safe, Clean Water Project Application. The LCC Watershed Group intends to leverage these design funds to provide the details required to pursue grant funding for construction of the facility. Any grant funds obtained will be leveraged to pursue Construction Phase funding for this project under the Safe, Clean Water Program. Construction of this facility has been included in the LCC Watershed Management Program and the LCC Watershed Group is committed to completing this project.

If applicable, provide a description and justification of any de minimis scope changes that will maintain or increase the Project Score or improve the Scientific Study. De minimis scope changes should be within



the parameters and design of the project or study scope identified in the submitted Feasibility Study or Scientific Study application and any associated additional cost, in addition to the shortfall from the original request, must be covered by other non-SCWP funds.

The Design phase will further refine the analysis and design details included in the Feasibility Study. The Design phase will further enhance the anticipated performance of this project and provide more detailed information, additional non-SCWP funds, for a future Safe, Clean Water application for the Construction Phase.

I confirm that partial funding award will not negatively impact the achieved score or result in changes to Project or Study scope or benefits provided as described in the application and submitted Feasibility Study, if applicable. YES

If Project or Study is to be considered in phases, I understand that funding for future phases is not guaranteed, and that submission of a new application is required for funding for future phases not shown in the current SIP, and that annual funding is at the discretion of the WASC, ROC, and ultimately the Board of Supervisors. As such, I understand citing the assumption of additional Regional Program Funds alone is strongly discouraged. If future phases are not funded through the Regional Program, I remain committed to securing additional funding sources to ensure completion of all activities proposed in the application and submitted Feasibility Study such that benefits claimed are fully realized. YES N/A

Name Richard Watson

Organization Richard Watson & Associates
on behalf of the LCC Watershed
Management Group

Signature *Richard A. Watson*

Date 03/07/2022