

## SAFE CLEAN WATER PROGRAM SCIENTIFIC STUDY PROPOSAL QUESTIONNAIRE

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

Title: **Ground truth: guiding a soils-based strategy for impactful nature-based solutions**

Proposing Organization: **Tree People**

Your summary of the Project Goals and Objectives:

**While one of the proposal reviewers did not provide a response, the other two proposal reviewers agreed that the overarching goal of this project is to build foundational understanding of the capacity of soils in the Lower Los Angeles River area to support stormwater management goals, so that these insights can be used to model soil performance across the area, and ultimately to optimally manage soil as a nature-based solution for protecting ecosystem health in conjunction with centralized, engineered stormwater management installations.**

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

**The reviewers generally agreed that the objectives are clearly stated. Two of the reviewers were unequivocal in their assessment, while the third offered two specific areas requiring clarification: (1) whether the project's runoff mitigation goals are realistic, given existing low impact development solutions already incorporate many of the design principles proposed by the project, and (2) the project's intention to evaluate only initial soil performance for study sites, and not long-term performance, especially performance degradation over time.**

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 agree 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 three reviewers commended the project for focusing on how to tap into an underutilized local resource as a nature-based solution for improving stormwater management.**

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 agreed that the proposal consists of the following basic elements: (1) analyze soil profiles in the Lower Los Angeles River area to understand how soils can mitigate the adverse effects of runoff, (2) use the data to model how changes to soil management practices would influence soils' effectiveness as a nature-based solution, and (3) propose optimized designs for soil management initiatives based on modeling insights.**

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

**All three reviewers identified areas where important information is missing about the proposal's technical approach. One reviewer characterized the overall proposal as providing a "very superficial" level of detail, noting that tasks and subtasks are not listed and descriptions of the modeling work, budget and schedule are inadequate. A second reviewer offered a more positive**

assessment, saying most technical components are “adequately described” but expressed concerns about the lack of detail about how the modeling work will be conducted. The third reviewer listed multiple areas that were inadequately described about the properties of the soils being studied, including soils under impervious surfaces, soils that have been amended or enhanced as nature-based solutions, and soils impacted by earthworks.

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

**Two reviewers expressed general satisfaction with the technical soundness of the proposal, while the third reviewer did not answer this question. The two reviewers who were generally satisfied caveated their answers, with one reviewer expressing concerns about how much the non-soils part of the project would replicate insights already gleaned from previous studies, and the other reviewer expressing doubts about whether the data that will be collected through the project will be adequate to draw the conclusions the project intends to draw.**

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

**The reviewers did not agree on how achievable the study would be within the planned timeframe and budget. Two reviewers expressed optimism, although one reviewer caveated their assessment by noting that potential obstacles could include obtaining access to sampling sites and obtaining necessary data from prior studies. The third reviewer was more uncertain based on the lack of information provided, stating that the project budget information provided was minimal and does not appear to allow sufficient time or anticipate sufficient budget.**

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 faces technical risks. The three reviewers all discussed whether potentially high variability in soil performance and/or insufficient data collection would impede the project’s ability to generate useful data to feed into the subsequent modeling work. Additionally, two reviewers expressed doubts about whether the modeling results could be extrapolated to sites across the watershed area. The third reviewer added that the method being used to measure water storage is not an established method.**

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 project will produce results useful to stormwater managers and offered no caveats. The reviewers expressed optimism that the project will improve understanding of soil performance for urban stormwater management, and will produce useful management guidance on how to intervene effectively to optimize soil performance.**

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

**While one reviewer did not provide additional perspectives, the other two reviewers offered comments. One reviewer lauded the project team, describing them as “clearly technical experts” and expressing confidence that the study will be technically rigorous. The second reviewer offered a recommendation to the project team, encouraging them to work with a landscape architect early on to ensure appropriate native plants/ecosystems are selected for the study.**

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 “excellent” for addressing SCWP goals, with both extolling the potentially significant environmental benefits of this project. The third reviewer rated the proposal as “adequate” for addressing SCWP goals, critiquing the proposal for suggesting that L.A. County should shift its focus from more traditional stormwater management practices to more nature-based solutions, without proposing during the study to directly compare the long-term performance of nature-based solutions to more traditional engineered solutions. The third reviewer also expressed concerns that much of the project’s insights from the non-soils parts of the project could be duplicative of insights already gleaned from prior studies and experience conducting watershed-scale modeling and developing off-the-shelf designs.**

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

**Two of the reviewers rated the chances of the project achieving its stated outcomes as “very good” and expressed general confidence in the project and the study team. The third reviewer rated the chances of the project achieving its stated outcomes as “adequate,” expressing concerns about potential obstacles that may not be on the project team’s radar including permitting and turnover of student workers.**

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

**Two reviewers rated the study team as “very good,” and the third reviewer rated the study team as “excellent.” All three reviewers provided comments expressing their faith in the expertise and competency of the study team.**