SAFE CLEAN WATER PROGRAM SCIENTIFIC STUDY PROPOSAL QUESTIONNAIRE

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

Title: Additional Funding Request to Support the LRS Adaptation Addressing the LA River Bacteria TMDL for the ULAR Watershed Management Group

Proposing Organization: San Gabriel Valley Council of Governments

Your summary of the Project Goals and Objectives:

The reviewers agreed that the study's goal is to identify the sources of fecal contamination in the Upper Los Angeles River that pose the greatest human health risks, and to identify targeted management strategies for efficiently reducing these sources. The study represents Phase 2 of a previous SCWP-funded study that began the process of identifying major fecal contamination sources in the watershed. Phase 1 developed a framework for identifying high-risk sites and conducted an initial round of monitoring and analysis. Phase 2 of the project will fill in data gaps through additional monitoring, plus refine management strategies for addressing the highest-priority areas. The study also aims to conduct stakeholder outreach and to develop materials to guide other stormwater managers in taking a similar, targeted approach to remediating elevated human fecal contamination levels in watersheds.

- 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 and do not require additional clarification, with one reviewer complimenting the objectives for being "logically laid out."
- 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. One reviewer noted that the project has the potential to not only reduce fecal contamination, but also to "eliminate dry-weather flows that likely contain additional pollutants." A second reviewer noted that the project's focus on inventorying fecal contamination sources represents "the first step in mitigating pollution control." The third reviewer applauded the project's potential to generate data that are "critical to identifying locations and sources of pollution."
- 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 agreed that the project's technical approach consists of: (1) conducting waterquality monitoring to understand which tributaries are contributing the highest human fecal contamination levels, (2) identifying human waste sources in proximity to high-risk sites through sanitary surveys, mapping and stakeholder engagement, and (3) developing targeted management strategies for remediating sources that pose the highest human health risk.
- 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 the proposal sufficiently describes the technical approach and did not elaborate further.

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 is sound. Two of the reviewers complimented the project for deriving its study design from methods outlined in the California Microbial Source Identification Manual, which offers best-practices guidance for how to identify fecal contamination sources. One of these reviewers also noted that the study's monitoring design is effective because it can be adapted over time as data and information are collected from individual monitoring sites.

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

All three reviewers agreed that the project is achievable within the proposed timeframe and budget. Only one of the reviewers offered a caveat to this assessment, expressing "concern" that the proposing organization's request for Phase 2 funding could indicate that not all of the Phase 1 objectives were achieved.

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

One reviewer said they do not anticipate "any major technical risks" and expressed full confidence in the study's achievability. The other two reviewers identified potential technical risks. One of the latter two reviewers said that not all study objectives may be achievable within the project timeframe. The second of the latter two reviewers said that the study's plan to analyze and compare two different indicators of fecal contamination – the genetic marker HF183 and fecal indicator bacteria – could present data interpretation challenges since other researchers have found the relationship between these two indicators to be "highly variable." This same reviewer, however, expressed confidence that the project's plans to identify sewer lines, homeless encampments, illicit connections, and other specific potential sources of fecal contamination should provide important context, helping to mitigate potential challenges associated with interpreting the water-quality data.

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 has strong and direct linkages to stormwater management and decision-making processes. One reviewer said the project could lead to managers using "different techniques" to remove bacteria from runoff. A second reviewer suggested the project could serve as a template that could be replicated by other watersheds facing similar challenges with bacterial TMDL compliance. The third reviewer said the project is likely to be able to lead to viable solutions for remediating multiple potential types of fecal contamination.

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

Two reviewers provided additional perspectives. One reviewer reiterated a previously expressed concern that if Phase 1 of the project was not successfully completed, it would cast doubt on the achievability of the study's Phase 2 goals. The second reviewer complimented the study design for offering "a very practical and effective approach" for identifying and prioritizing among the highest-risk sites.

- 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 three reviewers disagreed in their assessment of how effectively the project addresses SCWP goals. One reviewer gave an "adequate" rating and did not elaborate further. A second reviewer gave a "very good" rating and suggested that the density of sampling during the study may not be adequate to fully address SCWP goals. The third reviewer gave an "excellent" rating and complimented the study for working to create viable management strategies for addressing bacterial TMDLs.

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

The three reviewers disagreed in their assessment of the likelihood of the study achieving its goals. Two reviewers gave an "excellent" rating, with one of these reviewers expressing confidence that the project will "ultimately inform mitigation strategies." The third reviewer gave an "adequate" rating and did not elaborate further.

c. Technical experience and qualifications of the study team?

The three reviewers disagreed in their assessment of the study team's qualifications. Two reviewers gave an "excellent" rating, with one of these reviewers complimenting the study team for being familiar with collecting water-quality data to identify fecal contamination sources. The third reviewer gave an "adequate" rating and did not elaborate further.