## SAFE CLEAN WATER PROGRAM SCIENTIFIC STUDY PROPOSAL QUESTIONNAIRE

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

## Title: Pollutant Source Characterization Study

Proposing Organization: City of Los Angeles

Your summary of the Project Goals and Objectives:

The four reviewers are in agreement that the project goal is to improve understanding of pollutant sources and inform more effective implementation of structural and source control BMPs in LA County. More specifically, the objectives entail improving water quality model configuration and supporting BMP planning with better choices as to structural and source control BMPs. The data set will be enhanced with stormwater sampling at key locations throughout the County at distinctly defined Hydrologic Response Unit (HRU) sites so as to render more accurate information about specific points on the mapping software than what it demonstrates now. The current data is over 20 years old, they assert, and it conflates different types of land uses together, rendering much information inaccurate with respect to stormwater runoff characteristics. The hydrologic response Units are smaller geographic units specifically defined as rooftop, roadway, and landscaped, among other specific characterizations of smaller land areas. Furthermore, the data set will be used to guide stormwater program managers and stakeholders about the selection, siting, and implementation of structural and source control BMPs.

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

The four reviewers agreed the objectives are clearly stated. They say the key aspect is updating the land use runoff characterization dataset used with the WMMS 2.0 software in LA County. The data set will be enhanced with stormwater sampling at critical locations throughout the County at distinctly defined Hydrologic Response Unit (HRU) sites. One reviewer states that clarification is needed concerning the methodology for collecting land use runoff data. Another feels that no further clarification is needed. Another asks about whether consideration was given to additional or emerging contaminants that may be a priority for stakeholders.

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 four reviewers agree that the project links having updated datasets relating to stormwater runoff characteristics with better choice-making as per source control and structural BMPs that reduce runoff 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)?

The four reviewers agreed that by getting monitoring accomplished at specified HRU sites, new data could be entered into the WMMS 2.0 database to recalibrate the software and thus obtain better characterizations of runoff contaminants at given areas of the County. They have also indicated that the study proposes to include additional pollutants in the sampling to add additional

information to the database beyond what it currently contains. The study will take constituents into account and add more discreetly described (generally smaller) locations with more significant intervals of sampling. The precise method, locations, and constituents to be analyzed would be developed in the work plan (Task 1), says one reviewer.

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

Information regarding the technical approach is clear, in large part, say two of the reviewers. Two others say that the information provided is insufficient to understand how this study will be conducted. One reviewer noted that screenshots of how the results of a search would change with the updated dataset would be helpful to the evaluator.

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 indicated that the technical approach is sound, and two said it was not. One reviewer who said the approach is sound says that the planned updated dataset based on focused monitoring should cause the WMMS 2.0 software to provide more accurate characterizations of stormwater runoff pollutants in any given area. Another reviewer, faulting the technical approach, says that it is unclear how the training would occur for participants engaged in this study. Another reviewer concerned about the technical approach says that the PFAS and microplastics are not mentioned in the proposal. This reviewer says these two pollutants are of significant concern with respect to water quality and public health. This would be an excellent opportunity to collect data on these pollutants in stormwater and as accumulations, says this reviewer.

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

Four reviewers agree on the assessment that this study is not achievable to them because much detail concerning how this study would be carried out concerning all aspects of the timeline is not clear. One reviewer notes that the plan for getting monitoring and reporting done over three years is clear and a little ambitious but achievable from a planning standpoint. The amounts the project director and personnel would receive for their contributions are not clear. Would the project director be covered for released time for a regularly contracted position? Another reviewer notes that the tests are laudable, but it's unclear whether there is enough budget to train new personnel. Another reviewer says that there is considerable potential for schedule overruns and insufficient time to achieve components of the study, and that reviewer also mentions issues concerning training of the participants and having enough time and funding for the project writeup is not clear on the methodology and timeline for workforce development as well as impacts on the budget.

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

The four reviewers noted that there are serious concerns with respect to the training of the workforce. One reviewer states concern about adequate training of personnel who would conduct the sampling and perform the data entry/reporting. Another reviewer states that risk is the

question of the validity or the representation of data if time and budget are insufficient to cover proper workforce development. Yet another reviewer notes that this study will be challenged by having enough personnel to carry out all of the planned sampling events. This reviewer asks about what Plan B might be.

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

The reviewers noted that as long as the dataset becomes more accurate with respect to stormwater quality characterizations in terms of specific pollutant loading expectations, stormwater manager choices as to structural and source control BMPs could become more appropriate in areas selected via the use of WMMS 2.0. The value of the updated and recalibrated software depends on how much or how often stormwater managers make use of it. One reviewer notes that the completed work would give stormwater. Another reviewer comments that new data would provide for better modeling planning, design implementation, and monitoring of BMPs in the future. This reviewer also states that the results could lead to more effective stormwater policies among the permittees.

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

One reviewer notes that having a complete data set to work from in the WMMS 2.0 model seems to be an essential element for an effective stormwater program, and this project helps toward that end. Another reviewer states that to be determined is the extent to which stormwater managers actually use the WMMS 2.0 software while making decisions about BMPs to install. Two reviewers did not add additional information.

- 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?

'Adequate' was the assessment of three of the reviewers as to how well The objectives serve county goals. One evaluation was 'very good' with the caveat that it only has value if the permittees act on the data.

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

Two reviewers assessed the technical approaches as 'inadequate', citing issues with the amount of detail provided to demonstrate how this study would be completed to render the results usable. One reviewer says that this technical approach would be 'excellent' if personnel needs are met and, the work plan is clear. If the sampling and

data collection are performed as described, the objectives are de facto achieved since this is essentially a data-gathering exercise. Another reviewer says the technical approach is 'very good' if the study goals are met.

c. Technical experience and qualifications of the study team?

The assessments were mixed as to the technical experience and qualifications of the study team. Clearly, the proposer is highly qualified for this study, says one reviewer. This study depends upon many personnel to carry out the various aspects of the study, and very little information is provided about the expertise of the personnel who would be charged with carrying out the multiple aspects of this study, says another reviewer.