SAFE CLEAN WATER PROGRAM SCIENTIFIC STUDY PROPOSAL QUESTIONNAIRE

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

   Title: Assessment and Treatment of Contaminants of Emerging Concern

   Proposing Organization: Stillwater Sciences

   Your summary of the Project Goals and Objectives:

   Across the three reviews, reviewers generally agreed that the primary goal of the study is to characterize the occurrence, spatial and temporal variability, and potential treatment of selected contaminants of emerging concern (CECs), including PFAS, bifenthrin, fipronil, and 6PPD-quinone, in stormwater and dry-weather flows across portions of the North Santa Monica Bay, Upper Los Angeles River, and Lower Los Angeles River watersheds. Reviewers noted that the study seeks to address a significant regional data gap by generating baseline information on CEC concentrations, evaluating the potential effectiveness of existing SCWP-funded BMPs, and providing recommendations for future and retrofit BMPs that may better address these pollutants. Reviewers also noted that the resulting dataset is intended to support future watershed modeling and inform stormwater management and infrastructure planning decisions.

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

   Reviewers **generally agreed** that the study objectives are clearly stated and well organized. Most reviewers found the objectives straightforward and aligned with the stated goals of characterizing CEC risks, prioritizing locations for BMP implementation, and informing future treatment strategies. **However, one reviewer noted that additional clarification regarding how the effectiveness of existing BMPs will be evaluated**, particularly with respect to experimental design and site selection, would strengthen the proposal.

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?

   Reviewers generally agreed that the study supports the SCWP nexus by addressing stormwater and urban runoff pollution through improved understanding of CEC occurrence and treatment. While reviewers consistently noted that the study does not directly implement BMPs or increase stormwater capture, most agreed that the project indirectly supports SCWP goals by providing data and recommendations that can inform future capture, treatment, and reuse projects and improve the design and performance of SCWP-funded infrastructure.

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)?

   Reviewers agreed that the technical approach is centered on a multi-year water quality monitoring program involving grab sampling during storm events and dry-weather conditions, laboratory analysis of targeted CECs, and subsequent spatial and temporal data analysis. Reviewers noted that the study also proposes to sample downstream of selected SCWP-funded BMPs, where feasible, to assess potential treatment effectiveness and to inform future BMP recommendations.

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

   Most reviewers agreed that the proposal provides sufficient information to understand the overall technical approach. However, multiple reviewers identified areas where additional detail would improve confidence in the results. These included clearer definition of storm-event sampling timing,

clarification of whether sampling will occur during or after storm events, and explanation of how sampling design will capture potential first-flush or transient concentration effects. Some reviewers also noted that additional detail regarding flow data availability and how BMP effectiveness will be isolated from confounding factors would strengthen the proposal.

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

   Reviewers **expressed mixed views** regarding the technical soundness of the approach. Some reviewers considered the proposed grab-sampling strategy and analytical methods to be sound and appropriate for characterizing CEC occurrence. **Other reviewers raised concerns that reliance on grab samples without flow-weighted composite sampling or consistent flow measurements may limit the ability to estimate representative concentrations or loads, particularly for evaluating BMP effectiveness and event-scale variabilit**y. These reviewers suggested that modifications to the sampling design could improve the robustness and interpretability of results

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

   Reviewers generally agreed that the study objectives related to baseline characterization of CEC concentrations are achievable within the proposed timeframe and budget. **However, there was less agreement regarding the achievability of objectives related to evaluating BMP effectiveness**. Some reviewers noted that achieving these objectives may require adjustments to the sampling design or a narrower scope to ensure that conclusions regarding BMP performance are supported by the data.

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

   Reviewers identified several technical risks associated with the study. Commonly cited risks included challenges related to storm-event sampling logistics, variability in CEC concentrations over storm hydrographs, limited availability of flow data, and analytical challenges such as detection limits and laboratory capacity for certain CECs. Some reviewers also noted safety considerations and practical challenges associated with storm sampling and, if adopted, more intensive sampling approaches.

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 reviewers agreed that the study has the potential to provide useful information for stormwater managers. Reviewers noted that the results could inform identification of CEC hotspots, prioritization of future BMP locations, evaluation of whether existing BMP designs are effective for CEC treatment, and consideration of adaptive or enhanced treatment strategies. Reviewers also indicated that, if appropriately designed, the dataset could support future modeling and planning efforts related to water quality, reuse, and infrastructure optimization.

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

    No additional technical perspectives were noted.

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?

Reviewers generally rated this criterion as Very Good to Excellent, reflecting strong relevance to runoff pollution reduction and indirect support of stormwater capture and reuse goals.

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

Ratings varied, ranging from Excellent to Inadequate. Reviewers who rated the approach lower cited concerns related to sampling design, representativeness of grab samples, and the ability to evaluate BMP effectiveness without additional flow-based data or experimental controls.

c. Technical experience and qualifications of the study team?

Ratings ranged from Adequate to Not Applicable due to insufficient information. While some reviewers noted the proposing organization's strong reputation and experience, others **indicated that limited detail on individual team qualifications constrained their assessment**.