SAFE CLEAN WATER PROGRAM SCIENTIFIC STUDY PROPOSAL QUESTIONNAIRE

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

Title: **Bacteria Source Identification and Implementation Study**

Proposing Organization: **City of Agoura Hills**

Your summary of the Project Goals and Objectives:

All three reviewers agree that the overarching goal of the study is to identify and address human fecal contamination sources in the Malibu Creek Watershed (MCW) to protect public health. Specific objectives include identifying high-risk receiving waters and MS4 discharges contributing to human fecal contamination and using this data to prioritize BMPs and Low Flow Diversions (LFDs).

Two reviewers highlighted the importance of the study's alignment with public health priorities, while one reviewer noted a lack of clarity regarding how the "implementation" phase in the study title would be addressed. This reviewer recommended including detailed steps for applying study findings to BMP deployment beyond LFDs.

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

Two reviewers agreed that the objectives are clearly stated and focus effectively on identifying contamination sources posing the greatest public health risk. However, the third reviewer raised concerns regarding the ambiguity around the study's implementation phase and the criteria to define and prioritize high-risk locations. Clarity on the practical applications of findings and specific timelines for these implementations is recommended.

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 reviewers agreed that the study goals align with reducing urban runoff pollution by identifying human fecal contamination sources and prioritizing targeted actions. One reviewer emphasized that the study supports SCWP goals by providing essential data to locate and mitigate high-risk sources, while another highlighted its potential to enhance compliance with the Bacteria TMDL and MS4 permits.

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 identified the following key technical elements:

1. **Sampling and Analysis: Collecting water samples from receiving waters and MS4 discharges during dry and wet weather.**
2. **Pathogen Testing: Using advanced techniques to analyze fecal indicator bacteria (FIB), pathogens, and human-specific markers such as HF183.**
3. **Risk Prioritization: Developing risk maps to guide BMP placement and LFD implementation.**
4. **Coordination: Aligning with the Malibu Creek Watershed Coordinated Integrated Monitoring Program (CIMP) to maximize efficiency.**

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

The reviewers found the technical approach lacking in detail. Two reviewers noted the absence of a clear sampling plan, including the number and frequency of samples required to achieve statistical confidence. Another reviewer suggested that a baseline for defining high-risk factors should be established and that the study should include an analysis of additional contaminants such as PFAS and nutrients for a more complete understanding of water quality.

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 assessed the technical approach as sound but suggested several enhancements:

- **Baseline Risk Criteria: Define clear thresholds for pathogens and indicators to identify high-risk locations.**
- **Expanded Pollutant Analysis: Include analyses for additional pollutants like nutrients and PFAS.**
- **Sampling Strategy: Develop a robust sampling and data analysis framework that considers variability across seasons and locations.**

The third reviewer rated the approach as marginally sound, citing concerns about the ambitious scope relative to the proposed budget and timeline.

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

Two reviewers deemed the objectives achievable within the three-year, $450,000 budget but noted potential risks related to sampling logistics and laboratory costs. The third reviewer expressed skepticism, suggesting that focusing exclusively on dry-weather monitoring could improve feasibility and statistical robustness.

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

The reviewers identified several risks:

1. **Sampling Challenges: Achieving sufficient sample frequency and geographic coverage.**
2. **Data Interpretation: Providing accurate interpretation of pathogen data to identify high-risk areas.**
3. **Weather Variability: Managing fluctuations in dry and wet weather conditions that could impact sampling schedules.**
4. **Budget Constraints: Balancing the scope of analyses with the available budget.**

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 agreed that the study will provide actionable insights for stormwater managers to:

- **Prioritize areas for BMPs and LFDs.**
- **Design effective pathogen mitigation strategies.**
- **Support compliance with regulatory requirements such as the Bacteria TMDLs and MS4 permits.**

One reviewer highlighted the potential for the study to inform broader watershed management practices beyond the Malibu Creek Watershed.

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

The reviewers offered the following additional perspectives:

1. **The study could benefit from including testing for additional TMDLs and emerging contaminants to expand its applicability.**
2. **A focus on adaptive management strategies would provide flexibility as data are collected and analyzed.**
3. **Collaboration with academic institutions or specialized labs could enhance the technical rigor of pathogen and indicator analyses.**

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 objectives as "very good," citing their direct alignment with SCWP goals. The third reviewer rated the objectives as "adequate," noting that while the goals are clear, implementation details need refinement.

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

    Two reviewers rated the approach as "very good" but recommended clarifying sampling metrics and incorporating additional pollutants. The third reviewer rated it as "marginally sound," emphasizing the need for a narrower focus and robust sampling design.

    c. Technical experience and qualifications of the study team?

    All reviewers marked this section as "not applicable" due to insufficient information about the study team's qualifications in the proposal.