SAFE CLEAN WATER PROGRAM SCIENTIFIC STUDY PROPOSAL QUESTIONNAIRE

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

Title: **NSMB Stream Ecological Stressors Assessment**

Proposing Organization: **Herrera Environmental Consultants**

Your summary of the Project Goals and Objectives:

All three reviewers agree that the primary goal of the study is to assess historical and current stream flow conditions in the North Santa Monica Bay (NSMB) watershed to better understand ecological stressors affecting California Steelhead and other aquatic species. The study aims to:

- **Compile and analyze historical hydrological data.**
- **Assess ecological stressors on stream habitats, focusing on Steelhead trout.**
- **Predict future flow conditions using climate change scenarios.**
- **Provide recommendations to improve stream health and guide restoration efforts in the context of stormwater management.**

One reviewer emphasized that the project's foundational data could inform broader water use and policy decisions in the region.

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

   Two reviewers found the objectives clearly stated, while one highlighted areas needing clarification. Specifically:

   - **The third objective, predicting future flow conditions, requires more detail on how hydrological models will work and the assumptions involved.**
   - **Further explanation of how data gaps and inconsistencies in historical records will be managed is needed.**

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 agreed that the project indirectly supports stormwater management goals by identifying ecological stressors and providing benchmarks for stream restoration. These benchmarks could guide future efforts to increase stormwater capture and reduce pollutant loads. One reviewer noted that the study would help assess unintended consequences of current water use and stormwater policies.

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 technical elements:

   1. **Historical Data Compilation: Collecting data from sources like USGS, NOAA, and local agencies to establish a baseline of stream flow conditions.**
   2. **Ecological Stressor Assessment: Analyzing historical flow data to evaluate changes in ecological stressors affecting Steelhead trout.**

3. **Future Flow Projections: Using climate change models to predict future hydrological conditions and their impact on stream health.**
4. **Management Recommendations: Providing guidance for stream restoration and policy development based on study findings.**

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

   All reviewers noted that the technical approach lacks detail in key areas:
   - **Data Quality and Integration: How will the study address gaps, inconsistencies, and missing data in historical records?**
   - **Modeling Methods: What specific models or methodologies will be used for projecting future flow conditions?**
   - **Spatial and Temporal Scope: The resolution and timeframe of the data to be analyzed are not clearly defined.**

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

   The reviewers found the technical approach fundamentally sound but requiring improvement in the following areas:
   - **Detailed Methodology: Provide a clearer framework for integrating historical and modern data, including quality control measures.**
   - **Data Dependency: Address risks associated with limited or unreliable historical data by incorporating alternative approaches, such as paleoflow modeling.**
   - **Broader Variables: Include factors like sediment transport and fire impacts to create a more holistic assessment of ecological stressors.**

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

   Two reviewers expressed concerns about the achievability of the objectives given the 8-month timeline and $52,000 budget. They noted that:
   - **Locating, obtaining, and cleaning historical data will likely require more time and resources than allocated.**
   - **The study's scope may need to be narrowed to verify deliverables are met within the constraints.**

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

   The reviewers identified several technical risks:
   1. **Data Limitations: Insufficient or incomplete historical data could undermine the study's findings.**
   2. **Integration Challenges: Difficulties in correlating historical data with modern**

metrics may limit the study's applicability.

3. **Lack of Recommendations: The absence of actionable recommendations in the current proposal may reduce the study's practical utility for stakeholders.**

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's findings will provide foundational data to:

- **Prioritize streams for restoration based on historical ecological stressors.**
- **Inform policies related to water use, stormwater management, and habitat conservation.**
- **Guide MS4 permittees in assessing the impact of programs like irrigation runoff control and dry-weather flow diversions.**

One reviewer cautioned that without clear recommendations, the study risks being perceived as an academic exercise rather than a practical tool for decision-making.

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

The reviewers offered the following insights:

- **The study should explicitly include sediment transport and fire impacts as critical factors affecting stream health.**
- **Expanding the timeline and budget could allow for a more complete analysis and actionable recommendations.**
- **Incorporating stakeholder input early in the process could align the study's outcomes with practical needs.**

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?

    One reviewer rated the objectives as "very good," emphasizing their potential to inform policy decisions. The other two rated them as "adequate," citing the indirect connection between the study's goals and tangible stormwater management outcomes.

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

    Two reviewers rated the technical approaches as "adequate," while the third found them "inadequate," noting significant gaps in the methodology and reliance on historical data of uncertain quality.

    c. Technical experience and qualifications of the study team?

    Two reviewers rated the team's qualifications as "excellent," citing Herrera Environmental Consultants' experience in hydrologic studies and ecological assessments. The third reviewer rated them as "adequate," expressing concerns about the lack of specific examples of relevant past projects in the proposal.