

SAFE CLEAN WATER PROGRAM SCIENTIFIC STUDY PROPOSAL QUESTIONNAIRE

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

Title: **Fire Effects Study in the ULAR Watershed Management Area**

Proposing Organization: **San Gabriel Valley Council of Governments**

Your summary of the Project Goals and Objectives:

All three reviewers are in agreement that the study's overall goal is to better understand how wildfires in the upper L.A. and Rio Hondo watersheds trigger pollution loading impacts in downstream receiving waters. Specifically, the study's goal is to develop and/or integrate pollution loading models that explain the relationships between wildfires and downstream water-quality impacts. The modeling is intended to support improved management practices for the area, including compliance with TMDLs for various contaminants and optimization of BMP performance, especially in the face of climate change.

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

The reviewers agree that the study objectives are generally clear, but all of the reviewers caveated their assessment by pointing out that key information was omitted. One reviewer focused on the proposal's lack of clarity about which contaminants will be measured and how. A second reviewer questioned whether the study's objectives are clearly linked to the proposed work, noting that "many details are missing" and that "the task at hand is very ambitious." The third reviewer focused on the lack of information about how the budget will be spent and the study's expected outcomes.

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 disagree on how effectively the project supports the SCWP's goals of reducing stormwater or urban runoff pollution. One reviewer said the project "may help" reduce runoff pollution, especially given the project's strong support from both managers in the area and the L.A. Regional Board, but this reviewer noted that success will depend on "how the results are integrated into decision-making." The second reviewer said the project "might indirectly contribute" to the SCWP's goals, but the proposal "lacks the level of detail needed" to make such a determination. The third reviewer said the proposal identifies "no nexus" between the project and SCWP goals, and questioned why the project does not involve post-fire evaluations of BMPs in the area, including to track clogging issues.

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 agree that the study's technical approach consists of gathering historical monitoring data on pre-fire pollution loading in the upper L.A. and Rio Hondo watersheds, conducting monitoring in the area to collect post-fire pollution loading data, and then using all of the data to develop a model that estimates how wildfires will impact runoff water quality. A separate study component will analyze stream bioassessment data to better understand the

impacts of fire on bottom-dwelling invertebrate communities. All three reviewers offered criticisms of the project's technical approach. One said the proposal would have been "more convincing" if it had included more detail on how the study will be conducted. A second reviewer said data collection steps were "poorly described" and the model's development was "not described" at all. The third reviewer said the models that will be used were "never stated," and observed that the study should have included plans to evaluate the impacts of more fires due to climate change.

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

The reviewers agree that the proposal lacks sufficient information to understand how all of the technical elements would be implemented. All three reviewers created a list of key elements that are missing. One reviewer provided a six-item list that centers around "specifics on monitoring, site selection, and modeling." The second reviewer provided a three-item list focusing on how the monitoring data will get used, how the models will get used, and whether the study is likely to result in management actions for improving water quality. The third reviewer provided a five-item list in which they lamented "Where to start?"

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 are not in agreement about whether the approach is technically sound. One reviewer said that the "general" technical approach is "fine," but then noted that a number of specifics "need fleshing out." The other two reviewers said the technical approach is not sound. One of these reviewers cited "insufficient detail" about a number of key areas, including providing evidence that the proposed model is capable of predicting water quality. The other reviewer said the proposal should have included an "annotated study plan."

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

The reviewers agree that the proposal's lack of key details limits their ability to evaluate whether the project can be completed within the stated timeframe and budget. One reviewer said the proposed budget should have included more specificity about how many samples will be collected for which constituents. The second reviewer said they have "significant concerns" due to insufficient explanations of the study design. The third reviewer said there was "very little" to go on to assess the achievability of the project.

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

The reviewers disagree on whether it's possible to assess the project's technical risks. One reviewer said there is "not enough information" in the proposal to assess risks. The other two reviewers each provided a three-item list about the project's biggest technical risks. Their lists, which had some overlap, include the feasibility of the models working as proposed, the feasibility of distinguishing post-fire water-quality impacts from other impacts, the ability to

conduct the study if no fires occur in the area, and the risk that newly collected monitoring data will not meaningfully expand on insights provided by previous analyses of post-fire monitoring data.

9. Are there clear linkages between the project’s technical objectives and the types of decisions that stormwater managers will make based on the project’s outcomes? Will the technical achievements provide stormwater managers useful linkages that extend beyond this study?

The reviewers disagree about the degree to which the project has linkages to management and the degree to which findings could be applicable beyond the study area. One reviewer was pessimistic, noting that “not many linkages” were discussed, except for BMP designs – and the discussion was lacking in this area. The second reviewer said the project has “superficial” linkages, noting that the project has support from a consortium of government agencies and thus has the potential to have “lasting value” for the area. The third reviewer echoed the second reviewer’s comments about broad management support for the project, but noted that the project lacks a “cost-benefit analysis” component to help managers make practical BMP decisions based on project findings.

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

All three reviewers offered additional perspectives. One reviewer reiterated that “not enough technical information” was available to assess the proposal. The second reviewer said the proposal would have been “more convincing” if it didn’t “try to tackle everything at once” in terms of the number of constituents to be monitored. The third reviewer said the study’s approach is “generally sound,” but said additional “key details” are needed in a number of areas to “increase confidence” that the project can deliver on its goals.

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. Feel free to add an explanation to accompany your answer choice:

- 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 of the reviewers rated the proposal’s objectives as being “inadequate” at addressing SCWP goals, with one of these reviewers noting that the study does not address “urban” runoff at all, but rather how upland burned areas can impact water quality in downstream urban areas. The third reviewer gave a “very good/adequate” rating, noting that if the study “yields the promised results,” it could improve managers’ ability to “anticipate the impacts of fire and climate change on water quality and benthic ecosystems.”

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

The reviewers disagreed in their rating of how well the study will achieve its objectives. One reviewer gave a “very good/adequate” rating, although this reviewer noted the omission of “many critical details.” The second reviewer gave an “inadequate” rating, noting that there is

“not enough detail” to make such a determination. The third reviewer simply gave an “insufficient information” rating.

- c. Technical experience and qualifications of the study team?

The reviewers disagreed in their assessment of the qualifications of the study team. Two reviewers gave an “insufficient information” and “inadequate” rating, respectively, and cited the proposal’s lack of specificity about the study team’s qualifications. The third reviewer said they think highly of Wood Environment and Infrastructure, noting the firm has a “long record of successful stormwater sampling,” but this reviewer said they were less familiar with Wood’s modeling work.