

## **SAM Behavior Change Study: Mockup Website Input Categories**

*Final version December 2, 2021*

The website will have two functionalities. The first will be to catalog existing behavior change studies in water quality and stormwater, with the ability for a user to upload information from their report. The second will be a decision support function where users can input the characteristics of up to three different campaigns they are considering implementing. The intent is to help users walk through the various components they might consider in deciding which campaign to adopt and implement. This document describes the data fields and questions asked for each of these two functionalities.

### *Inputs for Existing Study*

#### Sec 1. General Information

- 1. Jurisdiction Name & Department:** Name of the jurisdiction and department within the jurisdiction that is responsible for the behavior change study. This will often be the NPDES Permittee.
- 2. Jurisdiction Contact:** Name of primary contact for the study at the responsible jurisdiction.
- 3. Other Agencies Involved:** Other agencies, such as consultants or partnering programs, who assisted with the study.
- 4. Other Agency Contact(s):** Primary contacts for the other agencies involved with the study.
- 5. Study Name:** Name of the study.
- 6. Report Authors:** List all authors who contributed to the study report.
- 7. Year Study Published:** List the published date of the study. Format: MM/YYYY.
- 8. Report:** Upload a copy of the final study report. Format: PDF.
- 9. Abstract:** Copy and paste an abstract of the study report.
- 10. Journal:** If the study was published in a peer-reviewed journal, type full citation. Otherwise, blank.
- 11. URL:** study URL
- 12. Uploaded by:** Name of person providing information (this may be "WSU Staff" since many initial studies will be coded by WSU)

#### Sec 2. Study Information

- 1. Study Location:** List the city and state where the study took place.
- 2. Target Pollutant Group, if Applicable:** If the study targeted a specific pollutant, select from the provided list of groups. These are Bacteria (e.g. coliforms), Nutrients (e.g. phosphorus), Heavy metal, Toxic chemical (pesticide, household cleaner, etc), Automotive-related pollutant (tire, oil leaks, cleaning products, etc), and stormwater runoff reduction. Leave blank if a specific pollutant was not targeted.
- 3. Target Behavior Change:** Describe briefly in words the targeted behavior change that is focused on in the study.
- 4. Target Behavior Change Category:** Select the behavior change category that best fits the targeted behavior focused on in the study.
- 5. Target Audience:** Describe briefly in words the target audience focused on in the study.

- 6. Target Audience Category:** Select the target audience category that best fits the target audience focused on in the study. Categories are General Public, School-aged Children, Contractors, Businesses, Engineers, Other (specify)

### Sec 3. Campaign

- 1. Campaign Location:** List the area where the campaign took place. This may not always encompass the exact area as the study. For example, the campaign may have taken place in all of King County, but the study authors only evaluate its effects in the city of Seattle.
- 2. Description of Campaign Material:** Describe the campaign material and how it was distributed. For example, fliers with facts about the negative impacts of pet waste handed out to neighborhood residents.
- 3. Campaign Material Example:** Upload example(s) of the campaign material. Format: PDF.
- 4. Were financial incentives provided?** If so, briefly describe.
- 5. Was the campaign material validated or pre-tested?** Briefly describe how the campaign materials underwent a validation or pre-test process, such as gathering feedback on interpretation and/or messaging. If no validation, write “none”. (For WSU coders, if information not provided, write “don’t know”)

### Sec 4. Evaluation Methods

- 1. Was the success of this campaign evaluated?** Yes or No . If No, skip remainder of section.
- 2. Was data collected before the campaign to assess pre-intervention behavior?** Yes or No
- 3. Was data collected among a control group?** Yes or No. A control group would be people who are would otherwise belong to the target audience but were not exposed to the campaign.
- 4. Were water quality data collected as part of the evaluation?** Yes or No. If no, skip next question.
- 5. (If water quality data were collected).** Describe the water quality data collected.
- 6. Was behavior change assessed through independent observation?** Yes or No. If no, skip next question.
- 7. (If behavior was observed).** Briefly describe how behavior was observed, including a description of how many times observations were made (i.e. sample size), where, and by whom.
- 8. Was behavior change assessed through reports by participants?** Yes or No. If no, skip to question 16.
- 9. How was data collected from participants?** Surveys, focus groups, website/social media (check all that apply)
- 10. Were data collection instruments validated?** Yes or No. This could include using focus groups to validate a survey by gathering feedback on interpretation and/or messaging, pretesting a survey with a small sample, or using an instrument that has already been validated in another study or location. Skip next question if “No”. (For WSU coders, enter “No information” if study did not provide details)
- 11. How were instruments validated?** Describe process.
- 12. What Data Quality Indicators (DQIs) were addressed?** Briefly list. DQIs are qualitative and quantitative measures that are used to characterize the aspects of quality data that focus on minimizing error and improving the accuracy of the data with the intent of establishing the

trustworthiness of the results. DQIs include: **Validity, Reliability, Objectivity, Credibility, Transferability, Completeness, and Integrity.**

13. **Instrument Example:** Upload example(s) of the instrument(s). Format: PDF. **Location:** Where was data collected, such as a specific type of business, parks, residential neighborhoods? For multiple data collection approaches, list separately.
14. **Sample size.** How many participants were observed, surveyed, etc? For multiple data collection approaches, list sample sizes separately.
15. **Data Collection Date Range:** List the data collection start date and completion date. Format: MM/YYYY.
16. **Data cleaning.** Describe any data cleaning process, including records dropped because of missing or incomplete data or study drop-out.
17. **Statistical analysis:** Describe any statistical analysis conducted, including any hypothesis testing.
18. **Results:** Briefly describe the key results of the study.

#### Sec 5. Lessons learned

1. In a few sentences, are there other lessons learned from this study that were not captured in the questions above that you would want to share with the community of practitioners in behavior change for water quality?

## *Inputs for Program Comparison*

### Program Purpose and Problem

1. **Program Title:** List the title of the behavior change program.
2. **Problem Addressed:** List the problem the desired behavior change addresses, such as water quality issues due to pet waste.

### Target Behavior

1. **Target Behavior:** Briefly describe the targeted behavior that is to be measured as part of the behavior change program.
2. **Is the behavior an “end-state” behavior?** An end-state behavior is one that cannot be further subdivided. For example, the behavior “practicing proper dumpster management” can be further divided into other behaviors such as picking up garbage around the dumpster or closing the dumpster lid; therefore, “practicing proper dumpster management” is not an end-state behavior. “Closing the dumpster lid” is an example of an end-state behavior. Select yes or no.
3. **Can the behavior be measured?** Is there a way to measure the behavior so the effectiveness of the campaign can be assessed? Is it feasible to have a third-party evaluator observe the behavior?
4. **What gap or need for action will this behavior change fill?** List the gap or need.

### Situational Analysis

1. **Is data available to show percent of people not engaging in the targeted behavior?** Select yes or no.
2. **Generally, are most people able to enact the behavior?** Select yes, maybe, or no.
3. **What are the barriers to enacting the behavior?** List the barriers that may prevent someone from enacting the behavior.
4. **What is the likelihood that barriers could be addressed as part of the program?** Very likely, somewhat likely, not likely.
5. **If people were aware of the benefits of doing so, to what degree would people be willing to enact the behavior?** Select Very willing, somewhat willing, not willing/resistant.
6. **Have prior and similar efforts been undertaken in your community?** Select yes or no.
7. **What political issues, if any, are surrounding this work?** List any political issues surrounding the potential campaign.

### Target Audience

1. **Target Audience:** Briefly describe the target audience for the behavior change program.
2. **What research, if any, was performed to select the target audience/support target audience choice?** List any research that was performed to select the target audience, such as a literature search or review of similar studies previously conducted.

### Water Quality & Flow Control

1. **What is the targeted pollutant?** Select the targeted pollutant, if applicable, from the provided list (see above for list of options). *If the behavior change program is focused on flow control or LID, select “Flow Control/LID”.*
2. **What evidence is there that the behavior will reduce that pollutant and/or improve stormwater flows? What is the source of evidence?** List any evidence from research or similar studies and provide source.
3. **Are there additional water quality benefits?** If a behavior change is expected to improve water quality beyond the answer to #1 above, list it here.

### Community Impact

1. **To what degree can equity issues be addressed with this behavior change?** Select low, medium, or high.
2. **Will enacting the behavior have any negative impact on the community?** Select yes, maybe, or no.
3. **Is the behavior (or improvements from it) visible to the community?** Can the community see the improvements if the behavior is enacted? For example, if the targeted behavior “picking up pet waste in public parks” is enacted, the community may be able to see and experience cleaner parks. Select yes or no.
4. **What level of support will this behavior have from the community?** Low, medium, or high.
5. **What other policies/initiatives of the community/jurisdiction does the behavior support, if any?** List any other policies or initiatives the behavior may support, such as community plans or local stormwater policies.

### Resources

1. **What are the possible partnership opportunities, if any?** List any potential partnerships, such as those that would provide assistance with campaign implementation, data collection, or funding.
2. **Would this program qualify for a grant?** Select yes or no.
3. **What community partners would be willing to advocate for this work, if any?** List all potential community partners that would help with campaign development and implementation.
4. **Are materials/tools/instruments available from previous studies?** Are there materials that can be reused from previous studies (e.g. fliers or other marketing materials appropriate for your target audience), or data collection instruments (e.g. surveys) to assist with campaign implementation or behavior change measurement? Type yes or no. If yes, list available materials.
5. **Have available materials/tools/instruments been validated or pre-tested?** If materials from previous studies are available, have they undergone a validation or pre-test process, such as gathering feedback from focus groups or a data collection trial? Select yes or no.