

Task 4.5 Sustaining the Behavior Change Website

June 22, 2022

Joe Cook

The goal of this deliverable is to “Develop a 1-3 pg. plan that would identify funding needs to maintain the website and add additional studies nationwide in a systematic and quality-controlled manner.” The current version of the website is at www.waterbehaviorchange.org. Below we outline a) what we project the annual workload to be to maintain the website, b) the estimated cost of sustaining this workload, and c) a position description that contains the key technical skills needed and that could be used to recruit a worker. Note that the project PI Joe Cook has a 37% Extension appointment (with a focus on stormwater and green stormwater infrastructure), so the tasks in maintaining the website that can be fulfilled by him can be covered as part of his regular Extension duties. Cook is familiar with how to maintain the codebase.

Annual Workload

Site design will be finalized using funds from this SAM project. We anticipate that any subsequent efforts towards the website will be comprised of a) marketing, b) quality-controlled study additions, c) and addition of new resources.

Marketing can be done on as-needed basis by Cook to groups such as Pacific Northwest Social Marketing Association, the National Municipal Stormwater Alliance, and other stormwater- or social-marketing focused professional groups. It may involve writing 1 – 2 blogposts for the Washington Stormwater Center’s listserv. We estimate this workload at approximately 2 days (16 hours) per year.

It is hard to anticipate how many new behavior change campaigns in stormwater or water quality will need to be added to the site on an on-going basis. This is also related to a website design decision that we will need to be finalized with our TAC: should the site focus only on evaluations of full campaigns (as the site currently does), or should it include earlier stage formative research studies examining barriers or doing audience research? If the focus is on evaluations only, we might anticipate 1-2 new studies being added per month. We estimate that it would take 2-3 hours per new study. This involves a) reading and coding the study, b) possibly contacting the study author’s for clarifications, and c) filling information into the code template and pushing it to the website. This implies approximately 4-6 hours per month, or 9 days per year. In the short-run, this could be accomplished by Cook. The workload would increase substantially if we included formative research studies, and would imply a large “start-up” cost to find and code existing formative studies. The workload would also increase if, for example, the Dept of Ecology required permittees to post their permit-required evaluations to the site (which we would welcome).

The addition of new resources that come available (new papers, web resources, courses) requires only updating the codebase of the website. We estimate this to take approximately one hour, and might occur once per quarter.

In total, then, we estimate the annual to maintain and slowly grow the website to be 2 days per year (marketing) + 9 days per year (additions) and 0.25 days per year (resources), or 11.25 days per year. Assuming 250 days per year, this is approximately $11.25/250 = 5\%$ FTE.

Estimated Cost

As noted above, Cook has been trained on how to update the codebase of the site and can perform the tasks above as part of his Extension appointment. Should the workload increase or Cook no longer be able to dedicate his time to the site, one option would be to hire an undergraduate with the technical skills (described below). The student would also familiarize themselves with social marketing and our coding definitions, and would be supervised by Cook or another stormwater- or behavior-change focused specialist to maintain quality. An upper range for an undergraduate (which might be needed to attract her to the position) is approximately \$20 per hour in 2022. Assuming she worked only on the study addition tasks, this would imply approximately 9 days x 8 hrs/day = 72 hours per year, or \$1,440.

Another option would be to hire a dedicated web developer, though this would need to be in conjunction with another project since the needs for this site are much less than 1 FTE. We estimate that junior web developers in lower-cost living areas like Pullman and Spokane range from \$70-85,000 per year out of school. Taking the upper limit and adding 34% for fringe benefits, this would imply approximately $\$113,900 * 0.05 \text{ FTE} = \$5,695$ per year.

Position Description

We constructed the following position description to help staff identify the skills needed to maintain the codebase of the website:

“Required languages to be familiar with Javascript/Typescript, React, and html/CSS. Some experience in web development or design recommended. Knowledge of libraries such MUI or Chakra along with the ability to modify library elements would be ideal. Relative competence with the tools Github, Firebase and Excel is expected.”