

SAM E&O Behavior Change Project, IAA C2100054

WSU-OCI (Joe Cook PI)

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Deliverable 2.1: Key informant interview questions and contact list

In each of the key informant interviews, we used the following questions as our base for discussion. Not all questions were covered in all interviews because of time constraints.

- What stormwater behavior change campaigns do you currently run or are in planning?
- How did you decide on which campaign to adopt? How much was driven by a particular pollutant or by prior campaigns?
- How did you design the campaign? How were materials devised? Was information from other jurisdictions or campaigns used?
- Do you evaluate the campaign? If so, how? What metrics do you use to measure the campaign? Is the evaluation used in subsequent decisions? If so, how?
- In your view, what are the key constraints now for E&O campaigns?
- In your view, what are the key opportunities for E&O campaigns?
- What would you most want to learn from or about other jurisdictions' E&O campaigns?
- What would you like to see come of this SAM behavior change project?

We contacted the following key staff to request an interview.

Table 1. Staff contacted and interviewed

Name	Jurisdiction	Phase	Interviewed?
Mary Rabourn	King County	Ph. I	Yes
Andrea Logue	Clark County	Ph. I	Yes
Susan McCleary	Olympia	Ph. II	Yes
Emily Hegarty	Bellingham	Ph. II	Yes
Laura Haren	Kent	Ph. II	Yes
Jason Quigley	Skagit County	Ph. II	No
Cammy Mills	Kitsap County	Ph. II	Yes
Christy Lovelace	Shoreline	Ph. II	Yes
Melanie May	Auburn	Ph. II	No
Jessica Shaw	Wenatchee	Ph. II	Yes
Ann Marie Pearce	Thurston County	Ph. I	Yes
Sarah Norberg	Tacoma	Ph. I	Yes
Peggy Campbell	Snohomish County	Ph. I	Yes
Julie Colehour	C&C	n/a	No
Heidi Keller	Heidi Keller Consulting	n/a	No
Nancy Hardwick	Hardwick Consulting	n/a	No

Deliverable D2.2 Summary of interviews

Why: The purpose of the interviews was to learn more about how behavior change campaigns, required under Phase I and Phase II MSR4 permits, are run by cities and counties in Washington State (particularly the Puget Sound). In particular, we asked about how campaigns are chosen, and how they are administered. See “interview questions” on previous page. The responses in these interviews also helped us to develop and refine questions for a nationwide survey of behavior change staff.

Who: Prof. Joe Cook (WSU School of Economics) and Wisnu Sugiarto (PhD student, WSU School of Economics) conducted eleven interviews in June-August 2021. Each interview took approximately one hour. Many interviewees are considered regional leaders in education and outreach programs and are trained and enthusiastic about the use of “community-based social marketing” approaches in behavior change campaigns.

Six key lessons from interviews

- 1. This SAM project should focus squarely on behavior change (BC) campaigns.** The permits require that jurisdictions create “education and outreach” (E&O) programs to a) build general awareness, b) effect behavior change and c) create stewardship opportunities (Phase I permit section S5.C.11; Phase II Western Washington S5.C.2). In most conversations, we discussed jurisdictions’ awareness programs (e.g. storm drain stenciling, K-12 curriculum) and stewardship programs (e.g. volunteer water quality monitoring). Although it is relatively easy to monitor outputs such as storm drains stenciled or volunteer hours logged, their impact on behavior and water quality is harder to quantify. It is likely that behavior change campaigns benefit from higher levels of overall awareness and pro-environmental attitudes: for example, a pet waste campaign is more likely to induce dog owners to scoop waste when they already understand that water quality is an important concern. Indeed, some interviewees felt that the three components (awareness, stewardship, and behavior change) were intertwined. We hope to investigate whether evidence supports this in our review of the literature, but we plan to carefully distinguish behavior change campaigns from awareness and stewardship programs in our survey work. This is also consistent with our scope of work.
- 2. The specific behavior change campaign chosen by a jurisdiction is often selected due to staffing, budget or history considerations -- rather than the result of a pollutant-drive approach.** Some interviewees mentioned that when their permit cycle required a decision on a behavior change (BC) campaign such as expanding an existing campaign or starting a new one, they (or their predecessor) opted to continue with an existing campaign because it was a “known”. This seemed more likely in jurisdictions with fewer FTE devoted to E&O campaigns. Other interviewees mentioned choosing a commercial dumpster lid-closing campaign because of the regional [Dumpster Outreach Group](#) initiative led by Bellevue. As discussed below, some participants believe regional coordination could make campaigns more effective; others participated because it allowed a small staff to “piggyback” on the efforts of the larger group, including the hiring of a social marketing consultant.
- 3. Interviewees viewed the need for evaluation studies differently.** Some expressed the sentiment that “we know it works”. They welcomed further evaluations to help demonstrate campaign effectiveness and build more political and funding support for behavior change campaigns. Others

felt that behavior change campaigns should be more data-driven and based in quantitative social science (discussed more below) with measurable outcomes and well-designed studies. Some mentioned the importance of complementary regulatory enforcement action as the “stick” to behavior change campaigns’ “carrot”. Phase I and Phase II (Western WA) jurisdictions are now required to “follow social marketing practices and methods, similar to CBSM, and develop a campaign that is tailored to the community, including the development of a program evaluation plan.”. Several interviewees saw this requirement as an important opportunity for the field to conduct more high-quality evaluations. Some interviewees mentioned the need for financial and political support to do more long-term follow-up studies to examine whether campaigns caused durable behavior change. Such studies are rare.

4. **Regional collaboration on BC campaigns is both valuable and valued.** The EPA’s Phase II [factsheet](#) encourages this regional collaboration, and it is specifically mentioned as a compliance option in the permits. As already noted, some jurisdictions felt they could benefit from economies of scale in implementing the regional dumpster campaign. As was done in the regional “Don’t Drip and Drive” or dumpster lid campaigns, materials could be developed as a group and the costs could be shared. Another interviewee pointed out that since many residents move between Puget Sound jurisdictions for home, work and recreation, regional collaboration can enhance the effectiveness of messaging and campaigns. This may also be true for the dumpster-lid campaign since businesses may have locations in several jurisdictions.

Regional collaboration also raises the possibility for creative evaluation strategies, as could be used in the dumpster-lid campaign. For example, if all implementing jurisdictions included comparison groups (discussed more below), the regional team could explore different campaign configurations or messaging alternatives in different jurisdictions and assess which had the largest impact. Alternatively, if allowed by permit, campaign implementation could be staggered over time, with monitoring happening both in the jurisdictions where the campaign is underway and those where it is planned in the future. The later-adopting jurisdictions could then serve as a control group used for comparison. The demise of the [Sound Behavior Index](#), implemented by Western Washington University and Puget Sound Partnership, was mentioned by one interviewee as an important missed opportunity for tracking behaviors across the region over time. One interviewee saw a potential downside in regional collaboration if the decision-making process for which campaign to select is not transparent and inclusive.

Finally, many interviewees mentioned that Stormwater Outreach for Municipalities (STORM) is a valuable venue for sharing expertise, including the group’s library.

5. **The quality of existing evaluations could be improved, but this will likely require additional financial and staff resources.** This is a tentative conclusion based solely on conversations and may evolve as our team evaluates public-available evaluations from WA and nationwide. There are three core concerns.

The first is **credible outcome measures**. This was brought up most frequently by interviewees as a challenge. Many studies rely on self-reported behavior, and this is indeed the only path possible for

many types of BC campaigns where it is infeasible to directly observe behavior, like pet owners picking up poop in private yards or contractors dumping carpet cleaning chemicals down the toilet of a residential home. But other studies show that observation is possible but can be labor-intensive. The pet waste campaigns in both Kirkland and Clark County employed direct observation (counts) of poop to examine whether campaigns to provide messaging, poop bags, etc. were effective and for how long. Some jurisdictions in the regional dumpster initiative have staff driving by businesses that have received the BC messaging to directly observe whether dumpster lids are closed. According to social marketing principles, outcome measures should also be non-divisible and “end state” (engaging in the behavior produces the desired outcome).

The second area is tracking **counterfactuals or “control” groups**. Control groups came up during discussions of program evaluation in roughly half of the interviews, particularly among those who had more expertise in CBSM or training in natural sciences. Most evaluations collect baseline data on participants to measure how much the campaign changes behavior. But collecting before- and after- data for comparison groups who did not participate in the campaign helps rule out that other factors that happened concurrently with the BC campaign are what led to behavior change. For example, a natural yard care campaign might ask residents to reduce fertilizer use because of phosphorus runoff contributing to harmful algal blooms in a nearby lake. It might do this through yard care workshops or incentive campaigns with the target group and not with the control group. Suppose, by chance, an algal bloom happened at the same time as these BC activities. Even non-participants (the control group) might reduce fertilizer use because the issue of lake pollution was suddenly much more salient, particularly if the bloom received widespread media attention. Evaluators of the BC campaign might over-estimate the impact of the BC workshops and incentive campaigns.

The third area is that **campaign participants may not be a representative sample of the overall population**. From an evaluation perspective, this is important because it is likely that people who participate in workshops, for example, are those who are already amenable to the change in behavior, perhaps because of pro-environmental attitudes. The risk is in assuming that a campaign that successfully changed their behavior is scalable to a larger section of the population. For example, some interviewees mentioned that some natural yard care projects tend to attract primarily older and relatively affluent homeowners. One interviewee mentioned another reason it is important: the intersection with equity concerns. This interviewee mentioned the need for BC campaigns to include more audiences of color, those with lower-incomes or those who don't speak English as a first language (which are both mentioned in the NPDES permit). These groups, and local organizations representing them, could also be more involved in choosing which types of behavior change campaigns to implement.

The **benefits of improved evaluation** are clear. One interviewee mentioned that the phrase “measurable impacts” is very “sellable” to elected officials and managers. Another described a virtuous circle where a manager was willing to risk “failing” by pairing a high-quality evaluation with a novel CBSM approach. When the evaluation showed success, it was easier to make the case for hiring more staff with CBSM experience.

But the **costs of evaluation** are also clear. Nearly all interviewees mentioned the staff time necessary to do evaluations, and in some cases the lack of training in techniques. Improving evaluations requires additional resources, which can be difficult to advocate for. One interviewee mentioned that receiving a grant that specifically required more rigorous CBSM methods “tied my hands” to enable a higher-quality evaluation that the interviewee’s boss didn’t support. Another interviewee mentioned an inherent challenge in explaining CBSM concept to upper-level managers and elected officials. CBSM works by focusing on a very specific behavior in a very specific audience by addressing specific barriers to change, but elected officials naturally want campaigns that benefit as many of their constituents as possible. Returning to an earlier point, there is also the possibility that evaluations will show that some BC campaigns are not working or are not very cost-effective ways of improving water quality.

6. Finally, **BC campaigns seem to heavily rely on consulting firms for advice.** Many interviewees mentioned using the services of a consulting firm, particularly to help with campaign evaluation and surveys. Given the shortcoming of existing evaluations described above, it might seem that these firms could be providing more sound advice. We also heard, however, that consultants often encourage jurisdictions to do more rigorous evaluations, but these are ultimately ruled out because of staff time requirements. Improving access to online tools and repositories like [STORM's](#) or [EPA's](#) may reduce reliance on using consultants to design campaigns, and we hope the guidance provided as part of this SAM project will help jurisdictions conduct high-quality evaluations on their own or determine when a consultant and higher-level evaluation is needed. Program evaluation is also now a core skill taught in Masters of Public Administration and Masters of Public Policy programs. Collaboration with other city or county staff with training (but with no knowledge of social marketing, stormwater or water quality) may also enable better program evaluation without a substantial increase in staff time.