SAM Behavior Change Program Study TAC Meeting #4

Date: March 28, 2022
Time: 1:00-2:30 PM

1:00-1:05   **Welcome/Meeting Overview** - Laurie

1:05-1:20   **Task 5 Guidance E&O effectiveness evaluation** – Aimee
- Guidance Document and Report Template
  - Summary meeting with ECY /TAC
  - Report Template/Checklist pilot testing

1:20-1:35   **Task 2.5 Studies linking SW to water quality** – Ani
- Annotated Bibliography update

1:35-1:55   **Task 2.4, Task 3, and Task 4** - *Joe*   Commented [AN1]: 20 minutes
- Task 2.4 Web Survey/responses
- Task 3 Effectiveness of E&O tools update
- Task 4 Website Decision Support Tool Overview of website and plan moving forward

1:55-2:05   **Wrap Up** - Laurie
- Schedule Updates
- TAC Tasks

Next TAC meeting: around May 16, 2022 1:00 – 2:30 PM

Stormwater Education & Outreach:

Addressing Challenges Through Behavior Change & Incentives, and Permittee Guidance for Evaluating the Effectiveness

TAC MEETING #4

MARCH 28, 2022

Agenda

- Welcome/Meeting Overview

- Task 5 Develop E&O Guidance Evaluation & Report Template
  - Draft Report Template – Discuss where TAC assistance is needed
  - Update on next steps

- Task 2.5 Studies linking stormwater to water quality
  - Annotated Bibliography update

- Task 2.4, Task 3 & Task 4
  - Web survey/survey responses
  - Assessing effectiveness E&O Tools nationwide
  - Develop website decision-support tool

- Wrap up

Task 5
Report Template Goal

- Streamline report writing
  - Suggested organization for writing
  - What the permit requires in the report
  - The basic information Ecology would like in the report
  - Suggestions for content typically part of the evaluation process
  - Checklist companion: step-by-step process for evaluation (not included)
  - Reference to additional assistance in the Evaluation Guidance Manual

- Assist with RFQ/RFP development
  - Understand what Consultant needs to do
  - Assist with developing RFQ/RFP content

D5.4 Report Template DRAFT FINAL.docx

Task 5
E&O Guidance Evaluation & Report Template
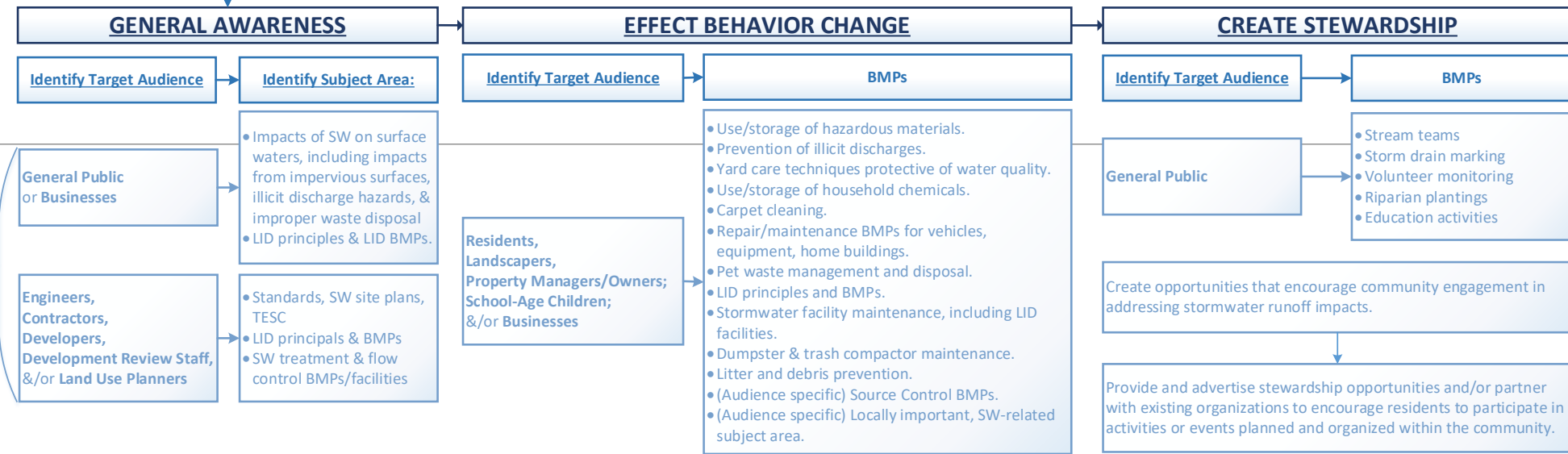
TAC Feedback for Project

- Provide tools to enhance E&O programs and more "turn-key"

- Provide scalable tools

- Learn how to implement successful programs

- **Tools to determine if behavioral campaigns are effective.**

- Keep the process simple

- Denote differences between permit required sections vs other items
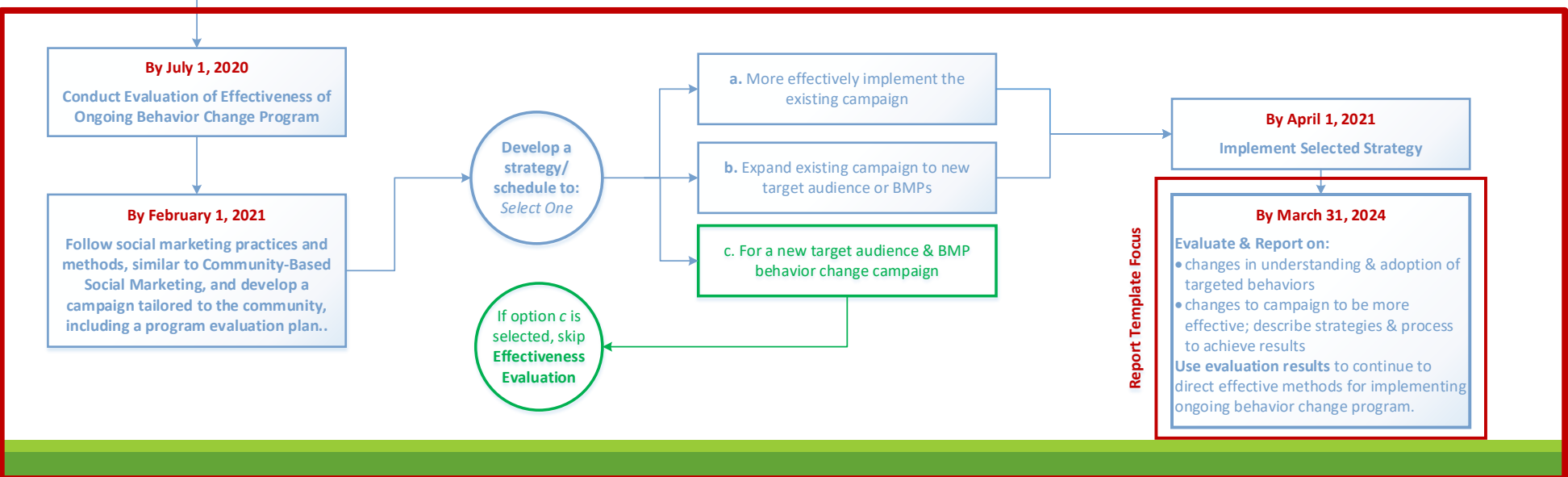
- Use exact permit language

D5.4 Report Template DRAFT FINAL.docx

MINIMUM PERFORMANCE MEASURES

- Implement E&O program for the area served by the MS4.
- Program shall be based on local WQ information & target audiences characteristics to identify high priority target audiences, subject areas, and/or BMPs.
- Based on target audiences demographic, consider delivering selected messages in language(s) other than English, as appropriate for the target audience.

GENERAL AWARENESS

Identify Target Audience

Identify Subject Area:

EFFECT BEHAVIOR CHANGE

Identify Target Audience

BMPs

CREATE STEWARDSHIP

Identify Target Audience

BMPs

Phase I – Address all Target Audiences
Phase II – Select one Target Audience

General Public or Businesses

- Impacts of SW on surface waters, including impacts from impervious surfaces, illicit discharge hazards, & improper waste disposal
- LID principles & LID BMPs.

Engineers, Contractors, Developers, Development Review Staff, &/or Land Use Planners

- Standards, SW site plans, TESC
- LID principals & BMPs
- SW treatment & flow control BMPs/facilities

Residents, Landscapers, Property Managers/Owners; School-Age Children; &/or Businesses

- Use/storage of hazardous materials.
- Prevention of illicit discharges.
- Yard care techniques protective of water quality.
- Use/storage of household chemicals.
- Carpet cleaning.
- Repair/maintenance BMPs for vehicles, equipment, home buildings.
- Pet waste management and disposal.
- LID principles and BMPs.
- Stormwater facility maintenance, including LID facilities.
- Dumpster & trash compactor maintenance.
- Litter and debris prevention.
- (Audience specific) Source Control BMPs.
- (Audience specific) Locally important, SW-related subject area.

General Public

- Stream teams
- Storm drain marking
- Volunteer monitoring
- Riparian plantings
- Education activities

Create opportunities that encourage community engagement in addressing stormwater runoff impacts.

Provide and advertise stewardship opportunities and/or partner with existing organizations to encourage residents to participate in activities or events planned and organized within the community.

By July 1, 2020

Conduct Evaluation of Effectiveness of Ongoing Behavior Change Program

By February 1, 2021

Follow social marketing practices and methods, similar to Community-Based Social Marketing, and develop a campaign tailored to the community, including a program evaluation plan..

Develop a strategy/ schedule to:
Select One

a. More effectively implement the existing campaign

b. Expand existing campaign to new target audience or BMPs

c. For a new target audience & BMP behavior change campaign

If option *c* is selected, skip **Effectiveness Evaluation**

By April 1, 2021

Implement Selected Strategy

Report Template Focus

By March 31, 2024

Evaluate & Report on:
- changes in understanding & adoption of targeted behaviors
- changes to campaign to be more effective; describe strategies & process to achieve results

Use evaluation results to continue to direct effective methods for implementing ongoing behavior change program.

Task 5
E&O Guidance Evaluation & Report Template

- **TAC Review - Questions to Improve Report Template**
  - What is helpful and what does not
  - Glossary vs defined where applicable in template?
  - Too much detail or too little: provide examples of each
  - Examples in template: helpful or not? Should there be more?
  - Is the template too complicated? If complicated provide suggestions for simplifying. Could reduce to checklist
  - Discuss permit requirements, how they are presented, and extent of the requirements.

D5.4 Report Template DRAFT FINAL.docx

Task 6
Training Manual

- Applying website decision-support tools

- Examples that demonstrate application of developed

- Guidance for selecting/applying effectiveness analysis methods

- Format for "just in time training" or for classroom style training

- Estimated length is approximately 25 pages

What information is missing that you would have liked?
Include in final white paper: outline of what is still
needed; use to justify future SAM projects.

Task 5

Next Steps

- TAC Review - Draft Template – *3/28 to 4/11*

- Consultant Update Template – 4/12 to 4/26

- TAC Review - Draft Evaluation Guidance – 5/1-5/31

- TAC Pilot Testing Report Template – 5/1 to 5/31

- Consultant Finalize Report Template & Evaluation Guidance – *6/30/2022*

D5.4 Report Template DRAFT FINAL.docx

Task 2.5: Annotated Bibliography

Prioritizing stormwater
pollutant risks: an annotated
bibliography

Anand D. Jayakaran, Ph.D., P.E.
Washington State University

March 28, 2022

The need to prioritize

Historically, prioritization around the 303d/TMDL framework

Emerging contaminants

Environmental justice

Methods – 9 studies summarized (so far)

1. 2007 - Prioritizing pollutant risk - a European framework
2. 2012 - Prioritizing the risk posed by stormwater pollutant sources
3. 2016 - Prioritizing heavy metals risk
4. Prioritizing toxic metals and PAH risk
5. 2018/2020 - Oregon pollutant toxicity ranking database
6. 2019 - The need to consider exposure and toxicity when assessing pollutant mixtures
7. 2019 - Stormwater as a source of mixed contaminants
8. 2020 - Need for re-examining pollutant sources in stormwater
9. 2021 - Tire wear breakdown products in stormwater

Take home (for now)

Stakeholder input is key

Conversation shifts from TSS and BOD to metals mid-2010

PAHs and vehicles start to dominate (last 5 years)

Pollutant mixtures – not single analytes

Pollutant sources – roads and industrial sources

Next steps

Environmental justice – a couple of key works

A succinct summary for future use

Tasks 2.4, 3 and 4 (Joe)

- **Task 2.4** (*survey of E&O staff*): final version w/ full survey stats in TAC "Documents to review" folder under Meeting 4. No further input requested (though still welcome!).

- **Task 3.2** (*lit review & database of BC studies*): still addressing comments and finalizing. No further input requested.

- **Task 4** (*website*):

  - Final "mockup" (pdf) in TAC Docs folder (Task 4.2).

  - Beta site is now live but incomplete (Task 4.3)

  - Will request your feedback in **mid-April** via a short Qualtrics survey and ask you to share widely in your network (Task 4.4).

  - Website long-term funding and transition planning (Task 4.5) ~**June**

Wrap Up & Next Steps
Next Meeting May 16, 2022, Review and Updates

- Discuss how Pilot Testing is going

- Initial comment on evaluation guidance document

- Draft Whitepaper & Training Manual TAC Review early June

- Estimate Project Completion June 30, 2022

TAC Attendance:

Jessica Shaw, Cammy Mills, Aislin Gallagher, Eric Lambert, Trey George, Peggy Campbell, Laura Haren

Team:

Joe Cook, Aimee Navickis-Brasch, Francesca White, Ani Jayakaran, Laurie Larson-Pugh

Task 5 – **Report Template** – Aimee Navickis-Brasch

Aimee reviewed and led the discussion regarding TAC comments on the Draft Report Template. A summary of key discussion points is as follows:

- Awareness, behavior change, and stewardship do not flow from one to another in the permit.
  - Suggestion splitting box on flow chart for each.
- Put 'select one' on the line that leads over from the circle to the boxes in flow chart.
- Effectiveness evaluation should be at the starting point of the flow chart.

Next Steps

- TAC has two weeks to read through outline and provide feedback. 3/28-4/11
- Consultant include TAC comments into Template 4/12-4/26
- TAC review draft evaluation guidance 5/1-5/31
- TAC Pilot Testing 5/1-5/31
- Aimee to follow up with Peggy offline re: flow chart.
- Develop Final Report Template & Evaluation Guidance – 6/30/2022

Task 6– **Training Manual** – Aimee Navickis-Brasch

- Decision support tools
- Focus on highlighting what is helpful and what is not.

Task 2.5 **Annotated Bibliography** – Ani Jayakaran

Presented the Prioritizing stormwater pollutant risks: an annotated bibliography historical framework, emerging contaminants and inclusion of Environmental Justice. Provided summary of 9 studies chronologically.

- How is it anticipated permittees will use the annotated bibliography?
  - Help inform how the framework was developed.
  - There may be other ways to justify prioritizing pollutants besides the permit.
- Permittees have struggled with what pollutants to focus on.
  - Appreciates work helping with the first step of selecting a pollutant.
- The document provides a historical look at how these pollutants became an issue.
- Nice to have another framework to figure out how to approach selecting pollutants effectively.
- No jurisdiction does the exact same type of monitoring
  - Suggest tying information back to where there may be a local monitoring application.

○ Multifactor to consider environmental justice, pollutant, target audience, etc.
- Permittees want to figure out how to tie emerging pollutants to environmental justice.
- TAC suggested a review of 2024 Permit Ad Hoc white papers for western Washington code list and permit targets.

Next Steps
- Summary for TAC review
  ○ Include how to tie stormwater pollutants to environmental justice
  ○ Review environmental justice studies
- Outline ideas for future research studies

Task 2.4, 3, and 4 - Review of behavior change tools nationwide – Joe Cook

Task 2.4 Survey of E&O Staff
- Report and survey summary in share one drive folder.
- If TAC members are interested in survey results, contact Joe directly.
- No further input is requested.

Task 3.2 Lit review and database of behavior change studies
- Addressing TAC comments and finalizing.
- No further input is requested.

Task 4 Website Decision Support Tool
Reviewed the final mockup in pdf and beta site.
- Program is the E&O umbrella and the campaign is the actual campaign.
- Replace 'program' with 'campaign' throughout the site.
- Suggest pollutant column comes before audience column.
- Consider including environmental justice as a target audience.
- General Audience does not make sense to include in a social marketing campaign.
- Use the Phase I permit to guide audience choices.
- For Campaign Selection - add 'unsure' option to the yes or no response questions.
- The question regarding marketing media matrix does not fit into social marketing.
- Alphabetize or group similar organizations.

Next Steps
- TAC will receive a short survey in mid-April to share with their networks.
- Develop long-term funding and transition plan for decision tool.

Next TAC meeting May 16th.