

# Public Education and Outreach (WWA Phase II)

Preliminary draft “fact sheet”

## I. Introduction

The Washington Department of Ecology (Ecology) is working on reissuing the Western Washington Phase II Municipal Stormwater Permit. Ecology has prepared preliminary draft sections of permit language and is accepting informal comments on these sections until **11:59 p.m. January 15, 2018**. **Send your comments to:** <http://ws.ecology.commentinput.com/?id=tkx29>

Or mail hard copies to:

Municipal Stormwater Comments  
WA Department of Ecology  
Water Quality Program  
PO Box 47696  
Olympia, WA 98504-7696

## II. Proposal

Ecology proposes to revise the “Public Education and Outreach” (Ed &O) permit section in the Phase I (Special Condition S5.C.10) and Western Washington Phase II Municipal Stormwater Permits (Special Condition SSC.1.). While the proposed changes to both Permits are similar, this document is tailored to the proposed changes for the Phase II Permit. The revisions focus on providing clarity to the components that make up the public education and outreach program:

1. general awareness,
2. behavior change, and
3. stewardship opportunities.

The general awareness and stewardship sections stay largely the same as in the 2013 permit, with language added to help clarify how many audiences and BMPs must be targeted, and how to create stewardship opportunities. The behavior change section is revised and clarified to set specific expectations for the process that must be followed in order to encourage changes in behavior.

## III. What are the proposed permit changes?

**S5.C1.** Introductory paragraph: revised the formatting and added language to clarify the three-prong approach to the public education and outreach program, each component (e.g. building awareness, behavior change, and stewardship) was included in the 2013 permit. Additional language to emphasize and clarify how the program can be a regional effort as well as an individual permittee program.

**S5.C.1.a:** Specific language changes to clarify requirements, and that the selection of target audiences and subject areas must be based on addressing a local water quality priority.

S5.C.1.a.i: Language clarifications that this is the “general awareness” requirement, and the minimum level of effort.

S5.C.1.a.i.(a): Revisions to clarify target audiences and subject areas. Subject area : *impacts of illicit discharges and how to report them* was removed as this topic is a requirement of the IDDE section.

S5.C.1.a.ii: Language clarifications that this is the “behavior change” requirement, and the minimum level of effort.

S5.C.1.a.ii.(a): Revisions to clarify target audiences and BMPs. General public, was removed as a target audience as this category is too broad to focus a behavior change program. Behavior change programs should target a more specific audience so that it is easier to discern barriers and opportunities for the desired behavior. Target audiences were combined in this section for clarity. Source control BMPs is added a BMP to promote.

S5.C.1.b: Requires a new evaluation of the on-going behavior change program to determine program effectiveness and the next steps. Using this evaluation, Permittees will design the next iteration of the program using community-based social marketing methods to develop a strategy and schedule. Three different options to proceed are offered:

*i. Develop a strategy and schedule to more effectively implement the existing program, or*

This option is to refine the existing, ongoing, behavior change program with the *inclusion* of community based social marketing methods. This includes, if not part of the program already, a plan to evaluate the effectiveness of the program *going forward*.

*ii. Develop a strategy and schedule to expand the existing program to a new target audience or BMPs; or*

This option is to expand the existing, ongoing behavior change program to a new audience with the same BMP, or same audience but a new BMP may be a better fit or more effective at achieving the desired behavior change.

*iii. Develop a strategy and schedule for a new target audience and BMP behavior change campaign.*

This option is to develop a new approach for the behavior change program, focusing on a new audience and BMP than the existing program.

Solely relying on providing information is not adequate to changing the behavior of individuals. Community-based social marketing is a Best Management Practice to promoting and achieving behavior change. Community-based social marketing uses tools and findings from social psychology to discover the perceived barriers to behavior change and ways of overcoming these barriers (McKenzie-Mohr 2011). Community-based social marketing is pragmatic and generally involves:

- identifying the barriers for a specific demographic (target audience) to a desired behavior
- developing and piloting a program to overcome these barriers

- implementing the program across a community
- evaluating the effectiveness of the program

S5.C.1.c: provides the date by which the strategy developed under S5.C.1.b must begin to be implemented. This does not necessarily mean when a new or refined program must roll out to the target audience, but may include the start of a survey or focus groups of the target audience or other early tasks that inform the behavior change program.

S5.C.1.d: Provides the due date to report on the effectiveness of the strategy and any potential changes to improve effectiveness of the behavior change program. This provision provides time for the program to develop and be implemented, with time to evaluate and report on the effectiveness of the behavior change program – or how well did the target audience receive the message and change their behavior to the desired actions?

Please consider and comment on whether the timeframe provided above in this preliminary draft is appropriate and compliance with this schedule is feasible. If not, please explain.

S5.C.1.e: Describes the stewardship element of the program. Revisions added for clarification.

#### IV. Why these proposed changes to Ed & O?

Ecology received input from Permittees, the regional education and outreach group- STORM, and environmental groups, which recommend changes to the education and outreach program. Significant issues raised include:

- the need to focus the program on known local water quality problems,
- refine the Phase I behavior change section – specifically because this section of the permit requires significant time and resources to create and implement behavior change campaigns for each of the target audiences and best management practices (BMPs). The requirement to address the full list was diluting the effectiveness of the program overall.

After considering the comments, existing permit language, as well as permit submittals related to the education and outreach programs, Ecology finds it important to align the Phase I and Phase II permit requirements so that partnerships between Phase I and Phase II permittees can continue to leverage resources, as well as provide consistent programs to the regions. The preliminary permit language clarifies that the selection of the target audiences and topics be based on local water quality issues. In order to instill consistency in the process for implementing a behavior change campaign, community-based social marketing, a best management practice for establishing behavior change, is called out specifically as the process to follow.

#### V. Resources on CBSM

- [Getting Your Feet Wet with Social Marketing](#)  
by Jack Wilbur, Utah Department of Agriculture and Food

- [Community Based Social Marketing](#) - based on the book by Doug McKenzie-Mohr
- [Tools of Change](#) - offers specific tools, case studies, and a planning guide for helping people take actions and adopt habits that promote health and/or are more environmentally-friendly.
- [Social Norms: An Underestimated and Underemployed Lever for Managing Climate Change](#) by Vladas Griskevicius, University of Minnesota, Robert B. Cialdini, Arizona State University, and Noah J. Goldstein, University of Chicago -This paper reviews numerous field experiments to "harness the power of social norms to influence pro-environmental behavior."
- [Social Marketing Strategies for Stormwater Business Outreach: Summary of Recent Research in the Puget Sound Region: Assistance for Developing and Implementing Local Programs](#) - This report summarizes findings from six different formative research projects recently completed in the Puget Sound region focusing on business practices that can pollute stormwater runoff. The report includes a summary of recommended and not recommended outreach strategies that have been tested through surveys, interviews, and focus groups as well as some that have been piloted and evaluated.

## VI. References

McKenzie-Mohr, D. 2011. Fostering Sustainable behavior: an introduction to community-based social marketing, 3<sup>rd</sup> edition. New Society Publishers, Gabriola Island, B.C.

## 1. Public Education and Outreach

The SWMP shall include an education and outreach program designed to:

- Build general awareness about impacts from, and methods to address and reduce stormwater runoff;
- Effect behavior change to reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater impacts; and
- Create stewardship opportunities.

~~reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater impacts and encourage the public to participate in stewardship activities. The education program may be developed and implemented locally or regionally. Permittees may meet these requirements individually or as a member of a regional group. Regional collaboration on general awareness or behavior change programs, or both, includes Permittees developing a consistent message, determining best methods for communicating the message, and when appropriate, creating strategies to affect behavior change.~~ Each Permittee that chooses to participate in regional collaboration shall implement what is developed regionally at their local jurisdiction.

**Commented [AD1]:** This language may be more appropriate for Fact Sheet.

The minimum performance measures are:

- a. Each Permittee shall ~~provide~~ implement an education and outreach program for the area served by the MS4. ~~The program shall be designed to educate target audiences about the~~ The program design must be based on local water quality and demographic information to identify high priority target audiences, subject areas, and/or BMPs, stormwater problem and provide specific actions they can follow to minimize the problem.
  - i. General awareness. To build general awareness, Permittees shall select ~~from the following~~ at a minimum one target audiences and one subject areas from either (a) or (b):
    - (a) Target audiences: General public (including school age children), and businesses (including home-based, and mobile businesses). Subject areas:
      - General impacts of stormwater on surface waters.
      - Impacts from impervious surfaces.
      - ~~Impacts of illicit discharges and how to report them.~~
      - Low impact development (LID) principles and LID BMPs.

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<sup>1</sup> New Permittees shall begin implementing the requirements of S5.C.1 no later than **August 1, 2015.**

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- Opportunities to become involved in stewardship activities.
- (b) Target audiences: Engineers, contractors, developers and land use planners. Subject areas:
  - Technical standards for stormwater site and erosion control plans.
  - LID principles and LID BMPs.
  - Stormwater treatment and flow control BMPs/facilities.
- ii. Behavior change. To effect behavior change, Permittees shall select, at a minimum, from the following one target audiences and BMP~~(s)~~:
  - (a) Target Audiences: ~~General public~~ Residents, landscapers, property managers/owners, ~~(which may include school age children)~~, businesses (including home-based and mobile businesses). BMPs:
    - Use and storage of automotive chemicals, hazardous cleaning supplies, carwash soaps and other hazardous materials.
    - ~~Equipment maintenance.~~
    - Prevention of illicit discharges.
  - ~~Residents, landscapers and property managers/owners~~
    - Yard care techniques protective of water quality.
    - Use and storage of pesticides and fertilizers and other household chemicals.
    - Carpet cleaning and auto repair and maintenance.
    - Vehicle, equipment and home/building maintenance.
    - Pet waste management and disposal.
    - LID principles and LID BMPs.
    - Stormwater facility maintenance, including LID facilities.
    - Dumpster and trash compactor maintenance.

**Commented [BA3]:** Mentioned in a later bullet. Strike.

**Commented [BA4]:** Combine with other use and storage BMP, above?

**Commented [BA5]:** Why are these combined?

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- (Audience specific) Source control BMPs (refer to S5.C.X).

b. No later than April 3+0, 2020 [~nine mos from eff. Date], each Permittee shall conduct a new evaluation of the effectiveness of the ongoing behavior change program (required under S5.C.1.a.ii of the 2013-2018 Permit). Permittees shall document lessons learned and recommendations for which option to select from S5.C.1.b.i-iii.

**Commented [BA6]:** Consider including milestones without dates

Based on this evaluation, [within 18 months from eff. date] by February 1, 2021, each Permittee shall use community-based social marketing methods<sup>2</sup> or an equivalent methodology, including the development of a program evaluation plan), or equivalent, to:

**Commented [BA7]:** Use broader definition of social marketing

- Develop a strategy and schedule to more effectively implement the existing program, including a program evaluation plan, or equivalent; or
- Develop a strategy and schedule to expand the existing program to a new target audience or BMPs, including a program evaluation plan, or equivalent; or
- Develop a strategy and schedule for a new target audience and BMP behavior change campaign, including a program evaluation plan, or equivalent.

**Commented [BA8]:** Establish different dates for C & D based on which option pursued?

c. No later than April 1, 2021, begin to implement the strategy developed in S5.C.1.b.

b.d. No later than March 31, 2024, evaluate and report on the changes in understanding and adoption of targeted behaviors resulting from the implementation of the strategy and any changes planned to the program in order to be more effective; describe the strategies and process to achieve the results.

**Commented [AD9]:** Is this a second evaluation within this permit cycle?

**Commented [BA10]:** Suggested changes for the future?

<sup>2</sup> Community-based social marketing: A systematic way to change the behavior of communities to reduce their impact on the environment. Realizing that providing information is usually not sufficient to initiate behavior change, community-based social marketing uses tools and findings from social psychology to discover the perceived barriers to behavior change and ways of overcoming these barriers.

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Note to reader: Please consider and comment on whether the timeframe provided above is appropriate and compliance with this schedule is feasible. If not, please explain.

~~e.~~ Stewardship. Each Permittee shall create stewardship opportunities and/or partner with existing organizations (including non-permittees) to encourage residents to participate in activities or events planned and organized within the community, such as: stream teams, storm drain marking, volunteer monitoring, riparian plantings, and education activities.

~~d.~~ Each Permittee shall measure the understanding and adoption of the targeted behaviors for at least one target audience in at least one subject area. No later than February 2, 2016, Permittees shall use the resulting measurements to direct education and outreach resources most effectively, as well as to evaluate changes in adoption of the targeted behaviors.<sup>3</sup> Permittees may meet this requirement individually or as a member of a regional group.

<sup>3</sup>By no later than August 1, 2017, new Permittees shall begin using the results of measurements to direct education and outreach resources more effectively, as well as to evaluate changes in adopted behaviors.