



City of Bothell™

2017 Summary Report

Public Education and Outreach Program



Christi Cox
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Introduction

Most polluted stormwater runoff is caused by the everyday actions of people that live, work, travel through, or visit our area. While difficult, changing peoples' daily habits is more effective than attempting to clean up these pollutants after they've reached our streams.



Children learning about how water flows through a watershed

Goal

The education and outreach program's goal is to reduce or eliminate behaviors and practices that cause or contribute to polluted stormwater runoff.

Overview

Social marketing – using marketing to change behaviors for the good of the individual and community – has been used for over forty years in the realms of social services, public safety, and disease prevention (e.g. *Click it or Ticket*, *This is your Brain on Drugs*, and *Five-a-Day*). Social marketing combines standard marketing with social science and other practices to help determine the best way to motivate someone to change a regular habit. City of Bothell has chosen to use

various social marketing strategies to change individual behaviors that pollute our local waterways.

The number of people you reach combined with the amount of times you reach them plays a key role in establishing and maintaining the change in individual behaviors. In Bothell, we began implementing broad outreach strategies in 2008 to provide understanding and education about several different water pollution issues. We wanted to give our residents, businesses, and the general public a clear view of the water pollution issues facing our community and establish a level of basic understanding about polluted stormwater runoff, pollution control, the flow of water, and the water cycle.



Parr Creek planting event for Martin Luther King, Jr. day of service

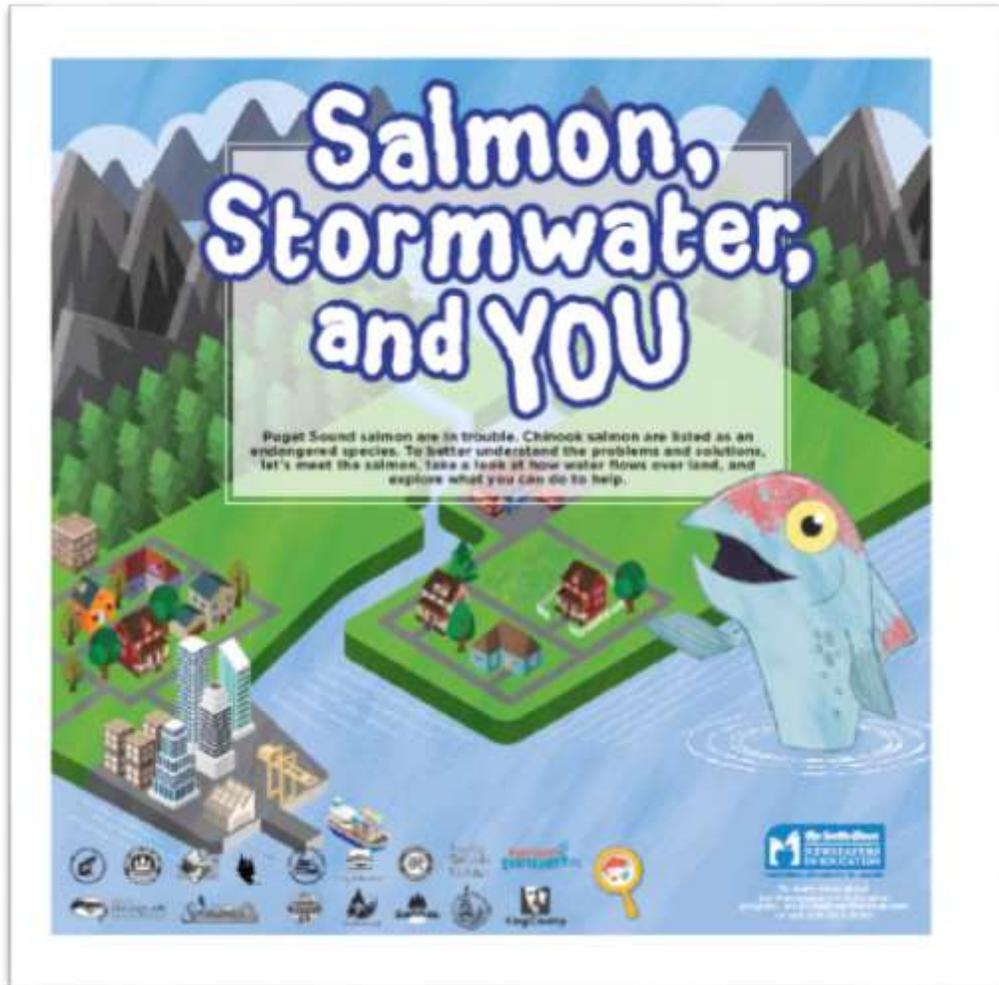
For 2017, we provided broad education to local target audiences through a variety of outreach media. Types of outreach included:

- Bothell Cable News (BCTV)
- Bothell Bridge
- Newspaper inserts in Bothell Reporter, The Seattle Times, etc.
- Press releases
- City website
- City e-news
- Regular posts on City social media sites (Facebook and Twitter)
- Water education presentations
- Workshops
- City-sponsored and private events
- Volunteer events
- Community newsletters
- Utility vehicle signs
- Banners and stationary signs
- Online web ads
- YouTube videos
- Earned media interviews and articles

The City of Bothell will continue using these outreach media sources in 2018 to ensure our audience receives our messaging repeatedly through a variety of means.

We conducted broad regional awareness messaging in 2017 in accordance with the Stormwater Outreach for Regional Municipalities (STORM) coalition and the Puget Sound Starts Here (PSSH) campaign at www.pugetsoundstartshere.org. This allowed the City to align messaging with 90+ surrounding county and city governments, 100+ businesses, and 400+ non-profits, and provide better outreach through a combined and consistent regional message. City of Bothell also co-chaired the STORM coalition to ensure limited funding resources were used effectively and topics were applicable for smaller jurisdictions. The Stormwater

Outreach Group (known as the SOGgies) conducted sub-regional outreach. The SOGgies is made up of the cities of Bothell, Kirkland, Redmond, Shoreline, Bellevue, Sammamish, Kenmore, Issaquah, Lake Forest Park, Clyde Hill, Newcastle, and Seattle. These cities chose to pool funding for sub-regional messaging efforts and evaluation to reduce production costs and leverage larger jurisdictional resources.



Regional stormwater messaging

The City will continue to be an active participant in STORM and SOGgies in 2018 to provide essential input and direction on the region's future outreach efforts. The City will also continue to promote the PSSH campaign to raise awareness of individual impacts to Puget Sound and further regional messaging.

Targeted Outreach Programs

Natural Yard Care

Target audience: *Bothell residents located within Snohomish County with a parcel size under an acre (2015).*

Goals for success: *To reduce and potentially eliminate the use of chemical fertilizers and pesticides on residential lawns and gardens and provide information on protective yard care techniques.*



Natural yard care workshop

The City chose to partner with Snohomish County and sixteen other cities for 2014-2015 to implement and evaluate the County's slightly different behavior change workshop model against the technical assistance program model in Thurston County, and the King County neighborhood workshop model we've been using since 2010. The Snohomish County program was offered to randomly selected landowners with lots under an acre in size within the Snohomish County portion of Bothell. All homeowners were entered into a database and 1,000 homes were

randomly selected to participate. These homeowners received two mailers inviting them to participate in a series of workshops. Basic differences in the Snohomish program from the King County program include:

- Mailer solicitation was conducted at random instead of by geographic neighborhood location
- A much larger target group was selected
- Zero door-to-door canvassing took place
- There were only three touch points instead of seven
- Different mailers were used with slightly different graphics
- The workshops took place in a central church location outside of Bothell instead of a community center within City limits
- Online registration was changed
- Information packets were not given out
- No refreshments were provided
- Master gardeners were used to answer questions
- Different speakers were utilized for a few of the talks
- Different consulting firm was used

Evaluation between the various models found that a hybrid of workshops and demonstrations should generate the highest rate of behavior change. Regional participants will meet in 2018 to determine the best way for all of us to utilize the information and develop the most effective program for our respective jurisdictions.

The final report for the Natural Yard Care program evaluation is available at www.bothellwa.gov/stormdocs.

Pet Waste

Target audience: *Bothell residents that own at least one dog.*

Goal for success: *To reduce the amount of pet waste left on public and private property.*

Within Bothell, the North and Swamp Creek watersheds have been listed on the 303 (d) list of impaired water bodies for fecal coliform bacteria and

dissolved oxygen by the Department of Ecology (Ecology) since 1996. For this reason, Bothell has conducted a more robust program to reduce and eliminate known non-point sources of fecal coliform such as pet waste, failing septic, sewage, and bird feeding.

For pet waste, past surveys (most recent in 2012) have shown that picking up pet waste has been established as a social norm among Bothell residents, so we were able to adapt our efforts to maintain this awareness and move to enforcement. In 2011, we established a pet waste ordinance that made leaving pet waste on public and private property a punishable offense and a \$250 fine (see BMC 6.16.011 and 8.06.240).

In 2015, we worked with our animal control officer to conduct targeted education and outreach concerning the right to enforce in problem parks, neighborhoods, and public spaces.

In 2016-17, we continued outreach efforts, met with Parks staff to ensure the pet waste park stations were available in every park, and began working with our Capital Improvement staff to try and increase pet waste stations and trash receptacles in our downtown area.

Because outreach is a continuum, we need to revisit it in order to maintain established behaviors. In 2018, we will continue to promote the appropriate best management practice among our resident target audience. We will also work with staff to determine the best way to encourage dog owners to scoop the poop, bag it, and place it in the trash on public and private property.



Pet owner showing the proper BMP

Youth Stormwater Education

Target audience: *All Bothell K-12 grade children attending public school.*

Goal for success: *To educate our Bothell students concerning their individual impacts on their local water, direct storm drain connections to local waterways, and basic knowledge concerning polluted stormwater runoff and the water cycle.*

The City of Bothell began contracting in 2009 with the non-profit organization, Nature Vision, Inc., to administer water education courses to all service area schools. These classes are tailored to provide water education courses that meet teachers' Essential Academic Learning Requirements (EALR). Nature Vision solicits teachers electronically using a water education flyer, and several classrooms sign up for programs averaging over 2,000 Bothell students each year. In order to be sure the stormwater messages are reaching the students' parents, a stormwater flyer and return postcard with stormwater education activities are given to all students and teachers (in both hard copy and electronic formats). The flyer and postcard provide an opportunity for parents to work with their children to understand and quantify their individual stormwater impacts.

Nature Vision conducts a three-tiered evaluation strategy each year to determine student retention of information, understanding, and teacher satisfaction over time.

In 2014-15, the City also worked with the Puget Sound Partnership (PSP) and the Pacific Education Institute (PEI) to create new stormwater classroom curriculum that meets the new common core and next generation education standards, and helps students prepare for the new testing requirements. This way, stormwater education can be incorporated into the general education requirements ensuring more students receive stormwater messaging at a more in-depth level.

In 2016-17, the City worked with PEI, IslandWood, and King County to administer a regional Ecology grant allowing us to pilot the new curriculum in the classroom, develop additional learning tools for the various modules,

offer additional teacher training, and develop a similar curriculum tailored to Eastern Washington.



Youth at Watershed Festival learning about wetlands as filters

For 2018, the City will again work with Nature Vision to continue offering stormwater presentations in the classroom. We will again work with PEI and IslandWood to offer teacher trainings and in-classroom assistance for curriculum adaptation, and to develop additional learning tools as necessary for the various modules to encourage adoption of the new regional curriculum.

Spill Hotline Assessment

Target audience: *Small quantity hazardous waste businesses that use products that can contribute to stormwater pollution (restaurants, auto repair, multi-family, etc.) within Bothell city limits.*

Goals for success: *To determine whether the businesses knew about the spill hotline number, the need to report spills to the City, and their level of knowledge about business practices potentially contributing to stormwater pollution in Bothell.*

In 2009, City of Bothell established a local spill hotline for businesses and residents to report spills. In 2017, to spread awareness and encourage use of the hotline, we partnered with Blue Environmental Associates (BEA) to conduct a survey of small quantity hazardous waste-generating businesses located in Bothell. We wanted to understand businesses' knowledge of the spill hotline number, their spill response preparedness, their barriers to reporting a spill, and how the City could improve its outreach about spill response.

In 2017, BEA worked with 53 different businesses to conduct in-person interviews. They mainly focused on automotive, mobile construction, food service, industrial, and warehouse businesses. Survey results indicated that about half of the businesses knew it was their responsibility to address outdoor spills, and they knew they had materials on-site to clean up spills. However, about one-third of the businesses were not aware of their responsibilities about spill response. These results made us realize we need to look more closely at our outreach efforts for businesses.

We publicize the spill hotline number on our utility trucks, on City of Bothell's website, on our printed outreach materials, in local publications like The Bridge, at events like Sustainamania, and City Hall's lobby. We also provide the number to some businesses during outreach visits, and during spill response to try to prevent the same party from having another spill.



Spill hotline number on City of Bothell utility truck

In 2018, we will increase our efforts to publicize the spill hotline number and make it easier to find. We will feature it more frequently on social media, seek internal approval to add it to our website's homepage, and make it a more prominent element of our technical assistance visits. We will use our asset management tracking system, Lucity, to more accurately track how many spills are being reported through the hotline. We will also encourage internal staff to use the hotline number to report spills.

Environmental Stewardship Opportunities

Target audience: *Interested volunteers and residents interested in learning more about stream ecology and maintaining streambanks to improve habitat function.*

Goals for success: *To engage residents in taking care of our local streams and increase the amount of riparian structure, input, and shading along Bothell rivers, creeks, streams, lakes, and wetlands.*



Planting and invasive removal event along the Sammamish River

The City partnered with King Conservation District from 2012 to 2017 to conduct a riparian enhancement project with a Rose Foundation grant. The project allows students, teachers, businesses, and the general public to learn about stream planting and participate in planting native trees and shrubs around Parr Creek in the North Creek Business Park.

In 2016, WRIA-8 stopped funding the Salmon Watcher program. Several longstanding concerned volunteers from various cities, including Bothell, requested that the program continue without regional funding. Bellevue and Bothell took over management of the program, hosted trainings, and worked with volunteers to continue the program efforts. We will continue this viable program in 2018 as long as we can determine a way to capture the data and report local findings, and if Bellevue continues to participate.

Hazardous Materials Use, Storage, and Disposal

Target Audience: *All Bothell residents that utilize hazardous products.*

Goals for success: *To increase the awareness of household hazardous materials, to teach proper BMPs for using, handling and storing materials, to increase the use of proper disposal sites, and to reduce the amount of hazardous materials our residents are using wherever possible.*

The City has been participating in hazardous waste outreach for a number of years through funding from the Local Hazardous Waste Management Program (LHWMP). Bothell has offered several collection events and provided outreach at every Bothell festival to encourage proper use, storage, and disposal of hazardous household chemicals and materials. From 2011 to 2017, we gave vouchers to Bothell residents that requested them so that they could drop off hazardous materials at the Shoreline Transfer Station free of charge. Our garbage and recycling hauler, Recology Cleanscapes, established a store so residents and businesses could drop off hazardous materials for collection and purchase items to assist them with proper handling, storage, and disposal. We established curbside collection to further encourage proper recycling and disposal. All residents were sent one event mailer, several flyers, and two articles to provide reminders and the following education and information:

- Articles detailing Wastemobile dates, curbside recycling, and proper hazardous waste use, handling, and disposal information were published in the Bothell Bridge and Bothell Reporter.
- A recycling event mailer was sent to all Bothell residences offering information on every program available such as the Wastemobile dates, the Take-it-Back program, recycling events, Waste Watchers, Shoreline Transfer Station, the Recology Store, curbside collection, City facilities that will accept certain waste, as well as information on use, handling, and storage of all household hazardous chemicals.

- A bill insert was provided to all Waste Management (contracted hauler within areas annexed from King County in 2012) customers detailing disposal dates, curbside collection, and our spill response hotline number.
- Flyers were given to the local Senior Center to provide information and solicit participation for the Wastemobile disposal dates among seniors.
- Videos were broadcast showing how easy it is to use the Wastemobile.
- Regular social media posts provided tips and tricks for better use, reuse, handling, and disposal of hazardous materials.

All mailers sent people to our website for more information and offered LHWMP as an additional resource.

More education on use, handling, and storage will continue in 2018 through continued mailers, articles, collections, vouchers, and educational workshops through grant funding. More assistance with disposal will take place through free disposal opportunities with the Wastemobile, curbside collection, and drop-off options at the Recology Store in Bothell.

Our Surface Water Program Coordinator for Illicit Discharge Detection and Elimination (IDDE) conducted business outreach in 2017 by focusing on companies that generate small quantities of hazardous waste while working and conducting business within Bothell. We offered and will continue offering technical assistance and training on-site to ensure proper application, handling, safety, and disposal of hazardous products in 2018.



Recology Store and Wastemobile advertisements in Bothell Bridge

Illicit Discharge Identification, Education, and Reporting

Target audience: *Bothell businesses most likely to have a spill occurrence (restaurants, landscaping companies, auto repair and maintenance) and the general public.*

Goal for success: *To reduce the amount of pollutants entering our stormwater system from spills and illicit discharges.*

This program is currently being administered by our Surface Water Program Coordinator for Illicit Discharge Detection and Elimination, who is funded by an Ecology grant. This position is designed to encourage the use of proper BMPs to reduce the amount of improperly disposed materials by small quantity hazardous material generators through direct outreach and technical assistance.

We are also educating staff and the public through outreach media, trainings, and incentive items with the spill hotline number (key chains, magnets, window clings, etc.) and will continue to publicize the spill hotline number through new and existing channels.



Site visit at Bothell Operations Center discussing desired BMPs

Vehicle Leaks

Target audience: *The general public who live near or drive through Bothell.*

Goals for success: *Reduce the amount of oil and mechanical fluids released on Bothell roads due to vehicle leaks, and provide education for what to do if a spill occurs.*

This program was run through a regional effort by the STORM group known as the Don't Drip and Drive Campaign. Advertising was conducted regionally through a grant and all participating shops agreed to honor free inspections and repair coupons through December 2017. City of Bothell staff met with every auto body shop in Bothell and personally asked them to participate in the program. Our efforts in 2018 will depend on regional participation with the program.



Maintenance inspection photo from vehicle leaks program



Low Impact Development (LID)

Target audience: *City staff, developers, and the general public.*

Goal for success: *To increase the awareness, understanding and acceptance of LID techniques among key staff and the general public.*

Low impact development (LID) techniques involve educating several different groups, including City staff and elected officials. The techniques add an element of complication due to lack of clear and consistent language, individual site conditions, maintenance concerns, and the fact that each technique requires extensive education and expertise to ensure successful design, installation, and maintenance. Further complications occur because most techniques require using a professional contracting company or consulting group for design review, site review, and proper installation.

We have several booklets available for the public from Washington State University (WSU) Extension that provide great information on all aspects of

building a rain garden, including detail design, placement, size, planting zones, and a list of native plants to suit each type of yard constraints.

From 2011 to 2013, we offered workshops on LID techniques in the fall and spring at the location of our demonstration rain garden (Bothell Regional Library) so the public could view a working garden, begin to understand how they function, and collect information for their own property needs. We also completed a guide that walks Bothell residents through each approved LID technique and provides resource materials for them to complete each of the techniques on their own property.

For 2014, we received a grant from Ecology to create a demonstration neighborhood within the Queensborough watershed in an effort to reduce localized flooding and stream bank erosion, and to educate residents on these practices. Unfortunately, all designs proved to be infeasible due to high groundwater tables, liability concerns, and site constraints.

For 2015, we worked with Stewardship Partners to review and purchase a maintenance manual for new homeowners with facilities on their property.

For 2016, we hired a consultant to help us review all City of Bothell development codes and determine which principles and techniques we can incorporate into our codes and design standards. We worked internally to prepare and include staff in the review process, and externally to understand the community's wants and needs and to engage them in a dialogue before adopting the code revisions and design changes.

For 2017, we reviewed our literature and conducted research regionally to determine a common set of terms and definitions to use.

For 2018, we plan to work regionally to create materials that are relevant for a variety of audiences and encourage adoption of the desired LID behaviors.

Conclusion

The City has an active education and outreach program designed to reduce and eliminate behaviors and practices that cause or contribute to adverse stormwater impacts. We also encourage the public to participate in stewardship activities both locally and regionally. Staff are tracking our outreach efforts and maintaining records of current public education and outreach activities and budgets in accordance with State requirements.