

Protect Our Waters (POW) Community and Youth Programs

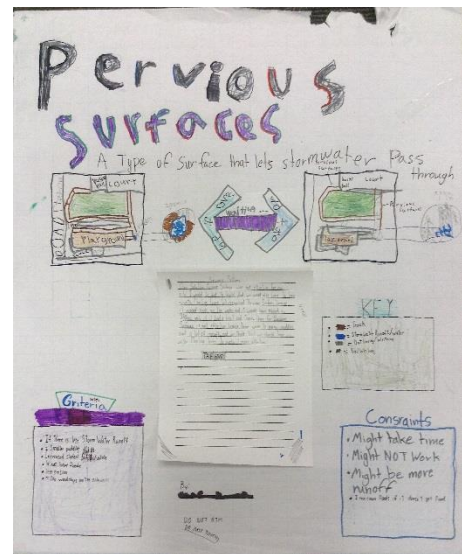
This program educates the general public as well as youth and school-age children about the impacts of stormwater flows into surface waters and the impacts associated with impervious surfaces. The program includes teacher training, curriculum resources, field trips and community service/service learning activities as well as general public outreach.

Seattle Public Utilities (SPU) has partnered with Seattle Public Schools (SPS) to identify existing curriculum areas where applied stormwater issues can support and enrich student learning. As a result, local geographic references, stormwater-related content and new lessons have been added to elementary science curriculum. In addition, field trips tie the investigation of an applied problem - the impacts of stormwater on a real stream - to classroom content (either the Land and Water science kit or Community Waters unit). The field trips bring children to a local urban stream where they explore hydrologic concepts and the impacts of urbanization on lotic systems. Community service and service learning opportunities, such as storm drain stenciling, extend the reach of this content into the adult community and build a personal stewardship ethic.



In 2018, the Community Waters science unit was taught in 60 classrooms at 25 Seattle Public Schools. 1083 of those students participated in a focused investigation of a stormwater engineering project at either Carkeek Park, Thornton Creek Water Quality Channel, High Point or Be'er Sheva Park. In addition, 2409 students and 371 adults attended urban watershed fieldtrips related to Salmon in the Schools at Seattle Creeks. Several years of teacher surveys have indicated that participating teachers see increases in student understanding of the impacts of stormwater and impervious surfaces. Thirty-three teachers attended professional development related to integrating stormwater lessons into their classroom curriculum.

Working with the Seattle School District provides an opportunity to reach a diverse geographic audience and engage students with direct, applied learning. The program links closely with current school science curriculum to reinforce target messages and illustrate concepts with real, local examples.



In 2018, programs for the general public included direct education, social marketing, partnerships, inclusive engagement and personal stewardship strategies to promote behavior change and understanding about water quality and watershed health. SPU provided public tours of creek watersheds and stormwater projects, staffed public festivals and events and supported volunteer storm drain stenciling activities. Over 700 people took the online "Pledge to Protect Our Waters", which highlights stormwater BMPs and participants make a commitment to act. One example is to pledge to use a carwash. SPU also supported public stewardship programs such as Salmon Stewards, a volunteer

67- 2018 Public Education and Outreach Report

docent effort which engaged 5,366 creek visitors on stormwater-related issues, and collaborated with regional Tribes to produce Salmon Homecoming reaching over 1000 students.

In addition, SPU supported GSI programs for the public including bi-monthly meetings of the Green Infrastructure Partnership (GrIP) (a collaborative green stormwater infrastructure forum) and partnered to implement the annual Green Infrastructure Summit.

Automotive Maintenance Program (AMP)

In 2018, SPU continued to educate residents and the general public about the impacts of vehicle fluids on stormwater quality through our free Auto Leaks Workshops. The goal of each four-hour workshop is to remove barriers for BMP adoption and create the connection between clean water and vehicle maintenance. All participants receive a Vehicle Maintenance Kit after completion of the workshop .

In 2018, 61 vehicle owners participated in 12 auto leaks workshops offered to the public. To increase workshop participation and raise awareness, SPU continued to partner with King County, Futurewise, the Washington Department of Ecology, the City of Burien, and other community-based agencies/institutions in the region. In 2018, this broader regional effort, known as Don't Drip & Drive – a multi-year, multi-strategy behavior change campaign grant funded by the Washington Department of Ecology – with financial matching from SPU and other listed partners – implemented an array of outreach and education activities, as well as ongoing planning and regional coordination. Specific activities performed include targeted community outreach in Spanish and English. Key regional outcomes from Phase III of the Don't Drip and Drive campaign, completed in 2018, include the following: 27,200 vehicle owners reached, 8,650 vehicles with leaks detected, 4,250 leaking vehicles repaired, expanded campaign promotion through various advertising and outreach channels and upgraded website information to include Spanish language content (<https://fixcarleaks.org/>).



Car Wash Program

The 2017 Car Wash Coupon Program in partnership with the Puget Sound Car Wash Association (PSCWA) ended in 2018. The Environment & Conservation section of SPU's public-facing website promotes car washing best management practices and links to charity car wash alternatives promoted by the Puget Sound Car Wash Association and Brown Bear Car Wash.

STORM/Puget Sound Starts Here (PSSH)

In 2018, the City continued to participate in STORM (Stormwater Outreach for Regional Municipalities) strategic planning and program activities. SPU supports STORM as an active member of the Steering Committee and, in addition, participates in the Central Sound Stormwater Outreach Group (SOG). In 2018, SPU, along with support from the regional STORM coordinator, led a collective of 36 jurisdictions in a campaign to develop and air a series of TV and digital media commercials with a focus on three select stormwater BMP's: pet waste pick-up, auto leak repair, and pesticide reduction. The commercials ran a total of 805 times on premium TV channels and were delivered 252,021 times within online, digital streaming content. Target audiences viewed and interacted with streaming ads for a total of more than 1,952 hours, and a promotional partnership with The Weather Channel increased campaign exposure through the delivery of 116 additional airings. All three commercials were translated into top-tier

languages: Spanish, Vietnamese, and Korean. SPU staff also regularly shared examples of programs and materials with other municipalities (both Phase I and Phase II permittees) through STORM, and the City continued to include the PSSH brand and website address on many related outreach materials. SPU co-leads and manages the popular PSSH Facebook page which focuses on stormwater BMPs for cars, pets, yard care and home cleaning. In 2018, the City completed its participation in planning and developing a comprehensive update to the PSSH website, a wide-ranging resource for regional and Seattle residents interested in combating the effects of stormwater pollution on their local waterways, as well as further development of the STORM Resource Reservoir, a tool designed for jurisdictional and NGO outreach professionals to showcase and share materials and toolkits from vetted, successful outreach and behavior change programs originating in and around Puget Sound.



Doo Diligence Pet Waste Program

The Doo Diligence Pet Waste Program is a city-wide outreach program that promotes Best Management Practices (BMP's) and educates the general public about the impacts of pet waste on water quality. In 2018 the program's community outreach created new partnerships with 8 pet stores, 8 animal clinics and 12 apartment building managers, distributed 293,440 mutt-mitt baggies, increased the number of pet waste dispenser location sites to 91 and distributed 1,000 pet waste brochures. A city-wide map of dispenser locations was up-dated and posted on the web page. The program continues its strong partnerships with Seattle Animal Control, Seattle Parks, Neighborhood Community Groups, Apartment Building Managers, King County, Pet Stores and Animal Clinics.

Trees for Seattle (previously Seattle reLeaf)

Trees for Seattle is a citywide interdepartmental program that focuses on increasing and maintaining healthy tree cover. Trees for Seattle has four focus areas: Tree Ambassador volunteer work, Trees for Neighborhoods tree planting, public communications, and interdepartmental and community partnerships. Trees for Seattle is an appropriate BMP for educating the public about landscaping and buffers and it engages residents in the stewardship and restoration of the urban forest canopy. In 2018, Trees for Seattle engaged 1,458 people through our events. We supported 1,310 volunteer hours,

67- 2018 Public Education and Outreach Report

increased our monthly e-newsletter distribution from 2,600 to 3,000 people, engaged 747 people through social media, and answered 305 technical support inquiries via phone and email.

Trees for Seattle’s Tree Ambassador work engages Seattle residents in urban forestry. Tree Ambassador volunteers attend small-scale landscape renewal projects to care for existing mature trees and lead public tours of neighborhood trees. In 2018, Trees for Seattle engaged 628 people in these events. 2018 events included 17 Tree Walks and 27 community work parties.



The Trees for Neighborhoods project builds a healthier, greener Seattle by engaging residents in planting trees on private residential property. In October and November 2018, residents planted 1,000 trees at 508 households in neighborhoods across Seattle. Trees included evergreens, Pacific Northwest natives, fruit, and power line friendly trees. All participants attended a tree planting and care workshop before picking up their new trees—86% reported learning something new about tree planting and 99% said that they would recommend us to others. Volunteers planted 23 trees for 11 elderly and disabled residents not physically able to plant trees on their own. Regular watering reminders were sent via email and postal mail to all past participants during the dry summer months to increase tree survival. Past participants were also offered workshops on proper structural pruning of young trees. In 2018, field crews surveyed all 679 street trees planted by program participants in 2014, 2015, and 2016. Collected data showed a 93% survival rate for 2014 trees, a 91% survival rate for 2016 trees, and a 95% survival rate for 2017 trees. (2015 trees were not surveyed.) The field crew provided each surveyed household feedback on their tree care practices, leaving each resident a tree health report with individualized notes and care instructions. Overall, since 2009, Trees for Neighborhoods has helped residents plant over 9,300 trees across the city.



In 2018, we continued to incorporate results from the 2014 planting workshop effectiveness evaluation into the Trees for Neighborhoods project through our workshops, watering and care email reminders, and providing direct, individualized feedback on care practices to past participants during field evaluation data collection.

RainWise

The RainWise program provides education to the general public, homeowners, landscapers and property managers about low impact development techniques, with a focus on the installation of rain gardens and cisterns. In 2018, the program implemented the following educational/technical elements to raise awareness about Green Stormwater Infrastructure (GSI), including stormwater treatment and flow control:

- Posted rain garden designs, plant lists, maintenance guidelines, and other information and brochures on various GSI techniques on the City of Seattle and King County's website, <http://www.700milliongallons.org/>. This website explains the City's goal to manage 700 million gallons of polluted runoff per year with green stormwater infrastructure (GSI) by 2025. It also educates property owners about GSI techniques they can use on their property and explains the RainWise rebate program.
- Held two RainWise training workshops for contractors. To date over 100 individual contractors have been trained, and more than 61 businesses have participated contractors in the RainWise rebate program with 25 contractors actively involved in performing installations in 2018.
- In partnership with King County, hosted or participated in more than 50 events, reaching more than 1600 people, across Seattle to share information on stormwater issues and management techniques.



Sustainable Yard and Home Education Program

The Sustainable yard and Home Education Program (SYH) is supported by SPU Solid Waste and Water Supply funding as well as SPU Drainage funding and the Local Hazardous Waste Management Program in King County. The NSB Program has two components: the Master Composter Sustainability Steward (MCSS) volunteer training and outreach program, and the Garden Hotline (which answers phone and email requests, and also conducts classes especially for underserved and ESL audiences). The SYH program provides outreach and education on Natural Yard Care (including pesticide and fertilizer reduction) and on RainWise techniques (LID and GSI) for the general public, residents, property owners and landscape professionals.

In 2018, the Master Composter Sustainability Steward program conducted three multi-day trainings for volunteers: one in the Spring for a diverse group of English-speaking MCSS volunteers, one in fall for diverse P-Patch Program volunteers in SE Seattle, and in Spanish and English for El Centro de la Raza low-income gardeners. The newly trained volunteers joined the existing volunteer cadre in completing 1,099 hours of outreach and making 8,555 customer contacts on Natural Yard Care and RainWise at community events, demonstrations, and classes around Seattle.

The Garden Hotline serves all of King County through additional funding from the county-wide Saving Water Partnership and the Local Hazardous Waste Management Program in King County. The Garden



Garden Hotline staff – school waste-reduction game.

Hotline responded to 8,529 public requests for information on Integrated Pest Management (IPM), plant selection, soil building, RainWise, and other resource conservation issues. 75% percent of the Garden Hotline contacts were with residents within the City of Seattle, and 25% in King County outside Seattle.

Besides phone and email contacts, the Hotline conducted 174 classes and outreach events, with 78% of event contacts provided in underserved, immigrant, or communities of color. Hotline staff also wrote articles for community media, updated factsheets and guides, and assisted in preparing materials for translation. In an October 2018 survey of Hotline customers, 86% said that the information provided by the Garden Hotline

helped them to change their yard and garden practices.

Seattle Green Business Program (formerly Resource Venture Program)

SPU funds the Seattle Green Business Program, a free technical assistance program that provides targeted outreach to Seattle businesses. SPU just executed a new five-year contract to deliver site-specific technical assistance to businesses. Through this program, SPU develops and updates targeted outreach materials in multiple languages and implements SPU's Spill Kit Incentive Program, which provides spill kits and assistance in developing a spill plan to participating businesses. In 2018, SPU distributed and developed spill management plans for 210 businesses. SPU also contributes to EnviroStars, a regional green business recognition program that rewards businesses that implement wastewater, stormwater, and Fats, Oils and Grease (FOG) best management practices (BMPs), along with other green business BMPs.

Sustainable Landscaping Professional Development

This program is a series of well attended professional workshops (and supporting guides and web content) which target the specified behaviors and practices in the permit (low impact development (LID) techniques: including sustainable site design, soil BMPs and retention of native vegetation, plant selection and maintenance options that reduce pesticide and fertilizer use, and Natural Drainage/LID strategies for on-site stormwater management, and stormwater treatment and flow control). These workshops target permit audiences including engineers, design professionals, landscape contractors (including non-English speakers), developers, builders, permitting and inspection staff, and land use planners. The program is built on survey and focus group work with these professionals and customers. Professionals who attend the workshops incorporate LID techniques into their designs and pass on information to the homeowners, landscapers and property managers that they work with.

In 2018 the program conducted 24 training events, in collaboration with professional organizations and local governments, which were attended by a total of 1,724 professionals: landscape and building contractors, developers, landscape architects and designers, engineers, architects, inspection and permitting staff, and outreach trainers. While the funding comes from several sources, most training events focused on LID and Green Stormwater Infrastructure design, construction, and maintenance, IPM and other chemical-reduction maintenance practices, soil best practices, and construction site erosion and sediment control. In 2018 one English and one Spanish-language professional classes were

developed in webinar format to make them available for remote learning by professionals around the region.

2018 also brought progress in professional standards and certification. The national Sustainable Sites standards which we helped develop (www.sustainablesites.org – the site and landscape equivalent of the LEED green building standards) added a number of new projects around the US and expanded its professional training and credentialing program. Washington’s ecoPRO Sustainable Landscape Professional (<https://ecoprocertified.org>) entered its fifth year with two more week-long trainings and certification for landscape installation and maintenance professionals. SPU is a founding and technical advisory member of both those programs, which are shaped by concepts, BMPs, and training materials developed here; refer to www.seattle.gov/util/landscapeprofessionals.