

**Summary, Measurement and
Assessment of Education and
Outreach Programs**

Attachment B14

City of Tacoma Public Outreach & Education Efforts for Stormwater in 2009

Program Summary and Measurement

Program/Tool	Update	Measurement	Opportunities
<p>Programs</p> <p>Make a Splash Grant program <i>\$50,000 set aside for grants of up to \$2,500. Activities must be related to surface water education, protection or restoration efforts.</i></p>	<p>This year we were able to award the full amount of available grant money, as well as diversify the types of projects being funded. Extra effort was given to seeking out opportunities within the business community, and we were pleased to award three grants that would benefit this audience directly. Two grants were funded to pay for cigarette butt cans in business districts, and a local nonprofit was awarded funds to pay for spill kits as part of a spill prevention and outreach/education effort to local businesses</p>	<p>The Make A Splash grant program has been able to diversify and increase its field of applicants over the years. In 2003, 17 applications were submitted for a total request of \$33,000 and 16 of those (\$31,000) were granted. In 2009, there were 39 applications for a total request of \$90,807, of which 24 were granted (capped at \$50,000).</p>	<p>Increasing individual grant maximum to \$4,000 in hopes of increasing project diversity and effectiveness.</p> <p>Continue to seek new audiences.</p> <p>Expanding physical limitations of projects beyond City limits to any project located within a watershed that directly impacts water flowing into or out of Tacoma's storm system, or for benefit of educating City residents.</p>
<p>EnviroChallengers <i>Two environmental educators visit Tacoma classrooms and attend community events to spread surface water, wastewater, garbage and recycling messages.</i></p>	<p>EnviroChallengers began using the new Surface Water Investigation game in their lessons during 2008-09. Other new lessons include: water cycle, Jeopardy and Quest for Less of a Mess.</p>	<p>During the 2008-2009 school year, our two EnviroChallenger educators taught approximately 482 lessons in 41 schools throughout Tacoma, reaching an estimated 12,050 students. (This number is down from the previous year's 660 lessons due to one of our educators being out for medical reasons for an extended period.) They also represented City of Tacoma Environmental Services at more than 30 community events in 2009.</p>	<p>Continue to educate Tacoma youth and the community at large about issues related to surface water, wastewater, garbage and recycling. The two educators continue to seek out new and innovative ways to get Environmental Services' messages across.</p> <p>In 2010, teachers are being surveyed to solicit input and gauge satisfaction with the EnviroChallenger program.</p>
<p>Business Source Control Outreach</p>	<p>Continuing efforts to educate</p>	<p>In 2009, the City of Tacoma's Environmental Compliance team</p>	<p>Develop additional educational materials for Source Control Inspectors</p>

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	<p>business owners on Source Control BMPs during spill/complaint responses and regular business inspections. The intent is to make business owners and property managers more aware of the importance of regularly maintaining their onsite stormwater system and best management practices to help protect local waterways and reduce stormwater pollution.</p>	<p>provided information regarding Source Control best management practices to 2,895 sites. In 2008, the team visited 2,551 sites.</p>	<p>to use with businesses.</p>
<p>Clean Bay Car Wash Kits <i>Available to the public at no charge to ensure that dirty wash water from fundraising car washes is discharged to the sanitary sewer to be treated instead of entering our local lakes, streams and Puget sound via the stormwater system.</i></p>	<p>This year, one permanent location utilized the Clean Bay Car Wash Kit.</p> <p>The Tacoma News Tribune ran an article on the kits (8/10/09).</p> <p>Several West Coast jurisdictions inquired about the car wash program.</p> <p>When kits are checked out, a site visit is performed by a city staffer who goes over operation, set-up and education about water quality and sewer systems.</p>	<p>In 2009, there were 9 events that utilized the car wash kits, and more than 300 cars confirmed washed.</p> <p>In 2008, more than 10 events and more than 300 cars confirmed washed; in 2007, 8 confirmed events and 176 cars washed; in 2006, 2 confirmed events and more than 20 cars washed. These statistics only reflect number of car wash kits checked out and do not include statistics for sites with car wash kits available year-round on site.</p>	<p>We are exploring the possibility of shifting responsibility of the Clean Bay Car Wash kits in order to enhance related outreach efforts related to car washing in general. We will also be exploring ways to increase participation in the program, as well as inform groups about car wash coupon fundraising opportunities and stormwater pollution issues surrounding car washes.</p>
<p>Pet Waste Program <i>Information-based education about proper pet waste disposal and the problems pet waste causes for surface water.</i></p>	<p>Continued to put pet waste messages in surface water Web site, EnviroTalk and utility bill inserts. Also, included pet waste messages in new surface water education materials, including a booth display and distributed Puget Sound Starts Here educational posters.</p>	<p>See survey assessment information below.</p>	<p>Plan to continue education and outreach efforts, including more strategic cobranding of pet waste messages with the Puget Sound Starts Here campaign.</p> <p>For the next ES survey, will explore ways to quantify answers from pet owners vs. non-pet owners.</p>

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<p>Curb Marking Program Partner with Citizens for a Healthy Bay and Pierce Conservation District's stream team in coordinating volunteer effort to label storm drains with curb markers</p>	<p>We partner with the nonprofit Citizens for a Healthy Bay to run our curb marking program. We provide supplies and help with promotion, and they coordinate the volunteers. Locations of the curb markers are mapped and input into the City's GIS system.</p>	<p>In 2009, CHB helped coordinate marking 460 drains in the Wapato Lake area, and another 811 drains throughout the year for a total of 1,271 drains marked. In 2008, CHB coordinated six curb marking projects for a total of 762 drains marked.</p>	<p>Continue marking drains with the goal of having every drain in Tacoma marked. Plan to supplement curb marking with watershed signage to identify nearest waterbody where stormwater discharges.</p>
<p>Natural Yard Care Continue to spread the word through regular Environmental Services efforts such as the EnviroHouse exhibits, booth displays, etc. Also partnering with Health Department's grant-funded natural yard care program, and coordinating closely with Tacoma Water and their natural yard care efforts.</p>	<p>Through our partnership with the Tacoma-Pierce County Health Department we hosted a series of 3 workshops targeting the Wapato Lake watershed, in order to raise awareness and change behaviors to reduce fertilizer application as a source of nutrients to the lake. Tacoma Public Utilities Water Division, Environmental Services and the Tacoma-Pierce County Health Department coordinated a series of workshops in the Northeast Tacoma neighborhood which is a target customer area for TPU water conservation efforts.</p>	<p>Wapato Lake watershed workshop attendance was low, with only 8 to 11 people at each of three workshops. We expect part of this was due to lack of interest in this particular watershed, and limited advertising methods available due to the limited target audience. The Northeast Tacoma workshops averaged 15 people per workshop, for a total of 31 different individuals who signed the roster.</p>	<p>Continue efforts and partnerships with the Tacoma-Pierce County Health Department and Tacoma Water to encourage Tacoma residents to incorporate natural yard care into their habits, as well as understand how their actions can affect the environment. In 2010, we will work on helping to coordinate "Garden Parties" to offer more hands-on workshops in a "Pampered Chef" style of setting, in people's homes. We will also continue our general education efforts through City publications. We are exploring how to reach out to parents of young children as an untapped audience that might have an interest in natural yard care techniques.</p>
<p>Household Hazardous Waste Disposal Program</p>	<p>Continuing to spread the word through Environmental Services publications and website.</p>	<p><i>In 2009, there were 4,634 City of Tacoma and 3,623 Pierce County customers who turned in household</i></p>	<p>Continue to educate public about need for proper disposal and where they can take their hazardous wastes.</p>

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<p><i>City of Tacoma and Pierce County residents may dispose of household hazardous waste at the City's collection facility free of charge. Customers must show proof of residency with a current photo ID.</i></p>		<p><i>and hazardous waste at the facility, for a total of 8,257 customers, 176 tons diverted and 44 tons recycled.</i></p>	
<p>Puget Sound Starts Here (PSSH) Campaign <i>The campaign's purpose is to educate residents about how their daily actions affect surface water quality, and empower them to make good choices throughout their day in order to keep pollution out of our local surface water resources.</i></p>	<p>The City is participating with neighboring cities and counties, the Department of Ecology, and the Puget Sound Partnership in a regional stormwater education campaign, Puget Sound Starts Here.</p>	<p>(Please refer to the "campaign by the numbers" portion of the STORM annual report attached.) Activities in 2009 included a television advertising campaign, creation of a campaign website, social media efforts and the beginning of cobranding efforts throughout the region.</p> <p>Tacoma is taking an active role in this campaign, and the regional STORM effort, including serving on the STORM Core Committee, the PSSH campaign leadership team, producing the "PSSH Report," contributing \$5,000 in cash toward the PSSH website, and more.</p> <p>Co-branded stormwater pollution prevention messages in City EnviroTalk newsletter and utility bill inserts with campaign key messages.</p>	<p>Continue to cobrand stormwater pollution prevention messages with the PSSH campaign.</p> <p>Explore ways to extend the PSSH campaign within Tacoma, and while working with other Pierce County jurisdictions and organizations.</p> <p>Work with local university students to create viral videos using the PSSH campaign messages.</p> <p>Explore ways for EnviroChallenger program to tie into "Drain Ranger" concept from the PSSH campaign.</p>

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Communication Tools

<p>EnviroKids Web site <i>General education on stormwater, wastewater and solid waste that is targeted to youth.</i></p>	<p>Continued to update with educational information. This site contains environmentally themed projects, activities and other information for kids, and also displays the winners of our annual EnviroKids poster contest.</p>	<p>89,423 views of the website in 2009, nearly double 2008's 53,100 views.</p>	<p>Continue to update and enhance. In 2010, the EnviroKids poster contest will be focused on stormwater pollution prevention and cobranded with the PSSH campaign.</p>
<p>Surface Water Management Web site <i>Includes information about Surface Water Management services and rates, the NPDES Municipal Stormwater Permit, the Surface Water Management Manual and permitting requirements, general best management practices to prevent stormwater pollution, and more.</i></p>	<p>Continuing to update surface water pages and information as we have it. Updated with link to Puget Sound Starts Here campaign.</p>	<p>Not available.</p>	<p>Continue to update and enhance. Planning comprehensive update to surface water web pages in 2010 and 2011.</p>
<p>Tacoma EnviroNews listserv <i>Environmental issues listserv</i></p>	<p>Continued to moderate e-mail listserv for public to post environmental information related to environmental issues, events, and job or volunteer opportunities.</p>	<p>Approximately 250 people on the listserv including City employees, City Council members, local nonprofit organizations and other interested citizens.</p>	<p>Continue to maintain.</p>

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<p>EnviroTalk Newsletter Quarterly newsletter mailed to 53,000 single family and duplex homes in Tacoma to educate about surface water, wastewater and solid waste messages.</p>	<p>Specific subjects covered that address stormwater topics: - Natural yard care - Proper pet waste disposal - Make a Splash surface water grants (Surface water education, protection and restoration) - Auto leaks - Water pollution hotline - Car washing - Storm drain awareness - Low-impact development - Cigarette butt litter - Curb marking - General stormwater messages - West Nile virus prevention - Soil amendments - Street sweeping - Puget Sound Starts Here facts and campaign - Tree planting</p>	<p>According to our 2009 ES Customer Satisfaction Survey, 49% of respondents read the EnviroTalk newsletter and 42% report not recalling seeing the information. Only 9% reported intentionally not reading it. 2007 EnviroTalk survey shows that the newsletter has high readership. There is also a noticeable increase in web hits and calls to advertised phone numbers when inserts are distributed.</p>	<p>Continue to utilize communication tool to advertise stormwater and other Environmental Services messages. We are working to regularly cobrand our surface water messages with the Puget Sound Starts Here campaign.</p>
<p>Utility bill inserts Bimonthly insert distributed to 125,000 customers.</p>	<p>Cobranded stormwater pollution prevention messages with PSSH campaign messages. Specific stormwater subjects covered are: - Make a Splash grant program - Natural yard care - Car washing - Pet waste disposal - Water pollution hotline - Keep storm drains clear - Plant trees - Flood prevention - Vehicle leaks</p>	<p>Noticeable increase in calls to water pollution hotline and other advertised phone numbers when inserts are distributed. According to our 2009 ES survey, 53% of people report that they read utility bill inserts.</p>	<p>Continue to utilize communication tool to advertise stormwater and other Environmental Services messages. We are working to regularly cobrand our surface water messages with the Puget Sound Starts Here campaign.</p>

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<p>TV Tacoma City-run cable channel</p>	<p>Appearances on CityLine interview show and also worked with TV Tacoma on special features.</p> <p>In 2009 we distributed a video to City staff explaining illicit discharges and how to report them.</p> <p>We also run the Puget Sound Starts Here ads at least once each day.</p>	<p>Not available.</p>	<p>We will be continuing to work with TV Tacoma on stormwater education opportunities and features, as well as PSA projects.</p>
<p>TV Tacoma SCALA pages Bulletin board style postings broadcast via Click! Cable TV.</p>	<p>Posted several surface water related messages, including West Nile Virus, Make a Splash grant announcements and others.</p>	<p>Not available.</p>	<p>Continue to utilize.</p>

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Partnerships			
<p>EnviroHouse <i>Hands-on showcase of green building and natural landscape ideas, materials and techniques that create a healthy home. Demonstrates rain barrels, native plants, rain gardens, pervious pavement, natural yard care techniques, "pin" foundations, and other surface water-related best management practices in action.</i></p>	<p>- Continued to publicize EnviroHouse and messages such as stormwater and other vehicles through city communication media. - Onsite rain garden continues to mature. - Added a raised-bed food garden in 2009.</p>	<p>1,119 visitors in 2009; 1,100 visitors in 2008.</p>	<p>Always looking for innovative ways to fine-tune or add educational and inspirational displays to the EnviroHouse. Planning to install additional pervious pavement demonstrations and small-scale rain garden to enhance LID elements.</p>
<p>Regional Community Partnerships</p>	<p>Participating in regional conservation groups such as: -Pierce Conservation District -Chamber/Clover Creek Watershed Council -Puyallup River Watershed Council -Puget Sound Partnership - NPDES Municipal Stormwater Permittee coordinators -interagency inspector forums -Pierce County ECONet (regional Education, Communication and Outreach Network) -Stormwater Outreach for Regional Municipalities (STORM), the group of stormwater professionals initiated by King County in response to NPDES</p>	<p>In 2009, Tacoma enhanced its role as a local leader in stormwater management by:</p> <ul style="list-style-type: none"> • Beginning to moderate the South Sound Phase II NPDES Permit Coordinators Group. • Becoming a member of the STORM and PSSH campaign leadership teams. 	<p>Continue.</p>

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	requirements		
<p>Local Community Partnerships</p>	<p>Working with the Pierce Conservation District Stream Team and Citizens for a Healthy Bay, which help interested Tacoma community groups organize storm drain stenciling and curb marking efforts. **The Stream Team also leads other programs such as wetland and stream bank cleanups and revegetation projects, educational workshops and tours for the public.</p>	<p>NA</p>	<p>Continue.</p>
<p>Wapato Lake Outreach and educational efforts within the Wapato Lake watershed regarding stormwater issues and recruiting volunteers to help monitor and keep up lake restoration efforts. We are partnering with the UW Tacoma for these efforts.</p>	<p>Entered into Memorandum of Understanding with the University of Washington to collect and evaluate lake water and nutrient budget data to help develop a long-term surface water management plan for the Wapato watershed.</p> <p>Additionally, Public Works responded to, cleaned, investigated and assessed a sanitary sewer overflow (SSO) which entered Wapato Lake January 7-9, 2009.</p>	<p>Installed watershed specific curbmarkers on all public catch basins (597 of 606).</p> <p>Conducted three public Wapato watershed classroom learn and study events.</p> <p>Six public presentations of nutrient source control and dynamics of the Wapato Watershed.</p>	<p>The 2010 Lakes mgmt conference will be held in Tacoma.</p> <p>Participate in source control legislative actions, SB6289 phosphorus in turf fertilizer reduction.</p>
<p>Promotion of Water Pollution Hotline Publicize the water pollution hotline operated by Citizens for a Healthy Bay (with support from Environmental Services)</p>	<p>Environmental Services is promoting the telephone number on the City's website, in City publications, signage at eight parks and other locations in Tacoma, as well as other areas around Commencement Bay.</p> <p>Key tags with the water pollution hotline were distributed at the Clean, Green Boating Fair.</p>	<p>57 calls in 2009, 63 calls in 2008. Numbers have dipped the last couple years, primarily in the number of people calling from boats. Early 2010 numbers are trending higher.</p>	<p>Exploring additional ways to promote the number and what should be reported, such as perhaps adding the number to watershed signs we plan to install.</p> <p>In 2010, the pollution hotline will be displayed prominently on CHB's new bay patrol boat.</p>

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	<p>The number is also promoted by Citizens for a Healthy Bay on their website and other materials.</p>		
<p>Washington Conservation Corps A six-person crew of volunteers sponsored by Environmental Services to help maintain our stormwater facilities; work on City-owned habitat enhancement areas; and participate in a variety of stormwater outreach and education efforts.</p>	<p>The WCC crew participated in: Native planting on restoration sites, providing public education, working with many local community groups to further their environmental efforts, providing emergency flood response, and performing water quality testing of local streams.</p>	<p>Not available.</p>	<p>Continue.</p>

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Potential Program Enhancements			
<p>Stormwater Pollution Prevention Push</p>	<p>2009 Environmental Services Customer Survey results still show the majority of citizens do not know where their stormwater runoff goes.</p>	<p>NA</p>	<p>The Surface Water Section plans to enhance awareness that 1) stormwater is not treated, 2) what goes down the storm drain flows directly to local lakes, streams, rivers and Puget sound, 3) residential sources are a major source of pollution in Puget Sound, and 4) what actions residents can take to reduce their impact on stormwater pollution. The plan is to use existing outreach tools, tie in messages with the regional Puget Sound Starts Here campaign whenever possible, and pursue new and creative marketing methods to try to increase the awareness of Tacoma residents regarding stormwater pollution and empower them to do their part in preventing it.</p>
<p>Celebrate Successes</p>	<p>We will work to better publicize successes of existing programs and Make a Splash grant projects. We will also explore ways to partner in order to better offer better rewards, recognition and incentives, especially to businesses implementing outstanding stormwater best management practices.</p>	<p>NA</p>	<p>Continue.</p>
<p>Encourage Low-Impact Development (LID) Practices <i>Encourage low-impact development</i></p>	<p>- Working with TAGRO and WSU Soil Extension to explore creation of a special rain garden soil mix to be used as part of a Do-it-yourself rain garden program.</p>	<p>NA</p>	<p>-Continue to explore opportunities and ways to promote and encourage low-impact development. - Develop public information workshops,</p>

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<p><i>practices and explore ways to encourage residents and businesses to implement LID practices, such as rain gardens, pervious pavement, and preserving native vegetation and open space.</i></p>	<p>- Promoting rain gardens in our city literature, website, working on demonstration rain gardens, etc.</p>		<p>incentives or rebates, streamlining the permitting process for LID projects.</p>
<p>Better Education Tools for Environmental Compliance Staff and Permit Center</p>	<p>Working with staff on materials that can be used to better educate and inform businesses and homeowners during onsite inspections or when responding to spills and complaints. Created a comprehensive residential flooding brochure among other materials.</p>	<p>NA</p>	<p>Explore ways to work with Citizens for a Healthy Bay in their program to provide environmental audits to businesses and facilitate sustainable business practices. Create handouts, brochures and website content promoting low impact development techniques and clarifying stormwater management permit requirements.</p>
<p>Street Sweeping Program Communication</p>	<p>In 2007, the Environmental Services Transmission Division took over the City of Tacoma's street sweeper program giving extra attention to keeping debris out of our stormwater system in addition to keeping our city streets clean. Our fleet includes three street sweepers that work to hit every street at least twice throughout the year (more often for arterials). The first incarnation of the program communication efforts included</p>	<p>NA</p>	<p>Program changes currently being planned for fall 2010 include reworking the sweeping schedule to be able to identify the exact day people can expect street sweepers to come by (rather than a week) as well as better ways to communicate street sweeping messages and remind people of their assigned street sweeping days.</p>

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<p><i>Internal Partnering for Stronger Messages</i></p>	<p>letting customers know what week the sweepers would be on their street through a combination of postcard alerts, street signage and regularly updated Web site information</p>	<p>NA</p>	<p>Continue efforts to strengthen ES messages through internal program partnerships.</p>
<p>Urban Forestry Partner with the City's enhanced Urban Forestry Program to encourage retention of forests and mature trees.</p> <p>Tacoma Public Utilities Increase partnership opportunities with Public Utilities Water Conservation Program to better encourage natural yard care practices, use of native plants and minimizing landscape watering.</p>	<p>Community gardens The City is taking a more active role in local community garden efforts. Such land use reduces stormwater runoff and offers a way to educate about natural yard care methods.</p> <p>Community Based Services The vision of the Community Based Services Program is to participate in the stewardship of safe, clean and attractive neighborhoods through sustainable and co-produced partnerships with citizens and neighborhood groups. We are working to harness this network to better educate citizens about our surface water management messages.</p> <p>Neighborhood Councils Tacoma's Neighborhood Council Program offers a way for community members to band together to improve their immediate surroundings through their partnership with each other and the City. We plan to increase outreach</p>		

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			<p>efforts to these groups.</p>
<p>Enhance Website Information</p>		<p>NA</p>	<p>Improve surface water education on the City of Tacoma website by making information more complete, easier to understand and easier to navigate about topics such as the Surface Water Management Manual, Low Impact Development techniques, how to spot and report illicit discharges, "Puget Sound Starts Here" campaign messages, and other stormwater best management practices.</p>

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Overall Program Assessment

Utilizing the City of Tacoma "Environmental Services Customer Survey" from October 2009 (and previously from 2005 and 2002) and the Pierce County Public Works and Utilities "Stormwater Runoff: Public Attitudes, Awareness and Behavior" draft report from February of 2009, we were able to make some assessments about non-point source pollution stormwater awareness and behavior in the City of Tacoma.

The 2009 Environmental Services survey was weighted differently than in years past. For the more recent survey, answers were weighted to more accurately reflect the homeowner vs. renter ratio in Tacoma. In some cases, the answers between the two groups varied significantly.

Brief details about those surveyed:

Environmental Services Customer Survey (October 2009): Telephone survey of 402 Tacoma Environmental Services customers for a margin of error of +/-5%. The 2009 survey weighted the results to better match Tacoma renter vs. homeowner statistics. Previous surveys did not do this, which likely resulted in more accurate numbers but also caused some noticeable shifts in some questions where homeowners were more likely to know certain information or more likely to participate in certain behaviors than renters.

Pierce County survey (February 2009): A total of 1,177 people were surveyed for the overall county survey. In Tacoma, the sample was a telephone survey of 275 residents and a maximum margin of error of +/- 6%.

Some observations when comparing survey data:

Car washing

ES survey: In 2009, 73% reported that they took their car to a commercial car wash at least sometimes, with 25% reporting that they always took their car to a commercial car wash. Also, 66% reported that they never washed their car on the lawn compared with 62% in 2005 and 71.5% in 2002. 85% report that washing your car at a commercial car wash is at least somewhat effective in protecting the environment, while only 70% think that washing your car on the lawn helps to protect the environment.

Pierce County survey: Only 35% in Tacoma reported washing their car at home. 56% reported taking their car to a commercial car wash. Of the people who wash their car at home, 35% reported that the washwater ran into the stormwater system; 46% reported the water ran into a grassy surface.

Assessment: While the majority of residents are exhibiting proper behaviors, there is definitely room for continued education efforts, both about proper behavior as well as the impact of the improper behavior. Also, while there is the argument that not everyone can afford to take their car to a commercial car wash, nearly three-quarters of the survey respondents show that they do go to commercial car washes at least sometimes, and people are more likely to believe that taking their car to the car wash is the proper environmentally responsible behavior.

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Pet waste

ES survey: In 2009, the number who said that they thought disposing of pet waste in the toilet or garbage helped to protect the environment was 81% compared with 87% (2005) and 74% (2002). Some of the dip in this number could be attributed to the weighting of results to better represent the homeowner vs. renter statistics in Tacoma. The number who reported that they “never” disposed of pet waste in the toilet or garbage was 44%. However, this may represent respondents who did not own pets.

Pierce County survey: AWARENESS: 18% considered pet waste to be a significant contributor to stormwater pollution, but a total of 62% considered it at least a slight contributor. BEHAVIOR: 71% in Tacoma reported they always pick up after their pet when on walks; for a total of 85% picking up pet waste at least most of the time. 49% in Tacoma said they pick up pet waste on their own property at least daily, and an additional 30% reported picking up pet waste on their own property at least weekly. Only 10% leave it on the ground. Of those in Tacoma who pick up pet waste, 79% reported they disposed of pet waste in the garbage; an additional 3% flushed it down the toilet; 12% reported that they compost it.

Assessment: In future ES surveys, it might be prudent to segment answers between pet owners and those who don't own pets. In the ES survey, if we assume that the majority of the 44% who “never” dispose of pet waste properly do not actually own pets, then the number who do at least frequently dispose of pet waste in the toilet or garbage would increase to 78.5%, which falls in line with the results in the Pierce County survey. Awareness and behavior appear to be generally increasing over time.

Disposing of hazardous wastes properly

ES survey: In 2009, 50% reported always disposing of household hazardous waste at the landfill drop off site and 77% reported using it at least sometimes. 95% of those surveyed considered proper disposal of hazardous waste to be environmentally beneficial. In 2005, nearly 50% participated in the Household Hazardous Waste Program compared with fewer than 30% in 2002.

Pierce County: In Tacoma, 81% of do-it-yourself car maintenance people reported disposing of used antifreeze and motor oil correctly. Also in Tacoma, 87% reported that oils and other fluids were at least a somewhat significant source of water pollution. 50% reported it to be a significant source. 75% believed that improper disposal of Household Hazardous Wastes were a significant source of stormwater pollution (likely because many of them do dispose of the waste properly).

Assessment: Tacoma's Household Hazardous Waste Program, where residents can dispose of hazardous waste at no additional charge, appears to be successful and a growing number of residents are aware of and utilizing the program. Residents also seem to understand that this is an important behavior in order to protect the environment.

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Natural yard care

ES survey: In 2009, 97% reported thinking that using natural lawn care practices were an effective way of protecting the environment and 87% said that they at least sometimes use natural yard care practices; 36% reported to “always” use natural yard care practices. This is an increase in residents using natural yard care practices, compared with 81% in 2005 and 70% in 2002. The percent of people mulching their grass clippings has also increased to 61%, up from 54% in 2005 and 46% in 2002.

Pierce County survey: Found that a total of 89% in Tacoma believe pesticides and fertilizers from yards to be a significant or small contributor to stormwater pollution. Pesticides and fertilizers was one of two “most significant” contributors. The survey showed that Tacoma residents were mostly likely to use organic fertilizer “a lot,” with 10% reporting such frequency. Just 4% reported frequent use of chemical fertilizer; 3% reported using a lot of weed killer; less than 1% reported using pesticides frequently. 59% reported never using pesticides; 45% reported never using chemical fertilizer; and 36% reported never using weed killer.

Assessment: Natural yard care education efforts appear to be working. In particular, the City has worked to promote mulching mowers the past few years, which appears to have been effective.

General stormwater awareness

ES survey: In 2009, 45% reported that stormwater goes into the nearest body of water without treatment, 41% thought it went to a treatment plant and 13% said they did not know. In 2005, 45.5% of folks knew that stormwater goes directly into the nearest body of water, compared with approximately 34% in 2002.

Pierce County survey: 48% in Tacoma reported that they knew stormwater is not treated.

Assessment: Inconclusive, but recent Pierce County survey appears consistent with previous and regional findings. Awareness of whether stormwater is treated is stalled at just under 50% and needs additional effort. This misconception is being addressed regionally, and we plan to work on the message locally as well.

Emergency flood response

ES Survey: 76% of customers rated the City of Tacoma’s Emergency Flood response services as excellent or good, with an additional 20% rating it as Fair. Only 4% rated emergency flood responses as poor. These ratings are higher than the national average.

Assessment: The City had put a lot of focus into enhancing its flood response program in the years between the 2005 and 2009 surveys, so it was good to see the positive numbers. This shows we’re in the right direction, and hopefully our continued program enhancements and communications will be reflected in future surveys as well.

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Surface water/stormwater management

ES survey: Customer satisfaction with general surface water/stormwater program management has continued to increase over time. 76% rated the utility as either excellent or good. Placed onto a 100 point scale in order to compare with past surveys, 2009 showed a 4-point general satisfaction increase over 2005 and a 10-point increase over 2002. Scores were: 2009, 62; 2005, 58; 2002, 52. Reasons given for customers surface water utility ratings included "general good city services" (41%); "flooding in my area/poor drainage" (8%); "no flooding in my area/good drainage" (7%); "services have improved over time" (5%); "generally poor city services" (2%); "cost is too high" (2%); and "services have declined over time" (1%). Other verbatim responses varied, but often touched on these themes.

Assessment: These numbers correlate strongly with the emergency flood management response satisfaction rates, showing how strongly customers link these two areas together. Combined with the common complaint from customers who don't always understand what their surface water rates are paying for, this survey question points to a need to better communicate what the Surface Water Utility does, and what customer rates pay for. We are currently exploring ways to better communicate surface water efforts, messages and programs as a package so that people get a clearer picture of what they are paying for, and better understand the value of these efforts.

Low impact development awareness and incentives

ES Survey: As part of our 2009 survey, we asked our customers about their awareness of "Low Impact" stormwater management practices. About half were at least somewhat aware of practices such as rain barrels (56%) and native plant landscaping (46%) as methods of on-site stormwater management, while permeable pavers (31%), rain gardens (29%) and green roofs (27%) were lesser known terms. We also asked customers how likely certain incentives would be in encouraging them to update their drainage system to manage stormwater onsite. With the exception of "public recognition" (40%), the list of incentives got a positive response of approximately three-quarters of respondents with surface water rate reduction (78%) and discounted building materials (77%) coming in at the top of the list of incentives. Grants and low interest loans (71%) and free design assistance or "how to" workshops (71%) were close behind.

Assessment: There is a lot of opportunity to educate our customers about low-impact development practices, and a significant amount of willingness to participate in LID activities if the City is willing and able to offer financial incentive. While customers will likely discover that any surface water rate reduction would not cover the costs of LID practices, it would perhaps be a good "attention-getter" as part of a package of incentives to consider as we move forward in encouraging the implementation of low-impact development practices especially retrofit activities. We will continue to explore this as we work to encourage low-impact development efforts.

Street sweeping program

ES Survey: As part of our 2009 survey, we asked customers how they rated the street sweeping program. Results showed that 63% rated the program good or excellent, with 83% satisfaction if we include the fair rating. 17% rated the program poor, which is below the national benchmark comparison.

City of Tacoma Public Outreach & Education Efforts for Stormwater in 2009

Assessment: Considering the relative small size of our program (a three-sweeper fleet and minimal staffing) and the limited time the program has been operating, the lower satisfaction rating for this program was not surprising, especially considering this is one of the more tangible services that people were asked to rate. The findings did help illustrate the need for more resources and help focus decisions behind "phase two" of the current incarnation of the street sweeping program. Program changes currently being explored include reworking the sweeping schedule to be able to identify the exact day people can expect street sweepers to come by (rather than a week) as well as better ways to communicate street sweeping messages and remind people of their assigned street sweeping days. We hope to roll out the next phase before the fall leaf season.

Other

Customers were also surveyed about its stewardship efforts other surface water programs, including the Make a Splash grant program, water pollution reporting hotline, Clean Bay Car Wash kits and storm drain marking program. Results came in generally positive, with more than three-quarters of respondents rating the programs at excellent or good. Clean Bay Car Wash kits had the highest "excellent" ratings, and the Make a Splash grant program was lowest in "excellent" ratings, but had a large amount of "good" ratings.

Assessment: People seem to respond best to more tangible programs, whether they've used them or not (such as the Clean Bay Car Wash kits). We plan to explore ways to strengthen our outreach related to these programs. The Make a Splash grants high ratings, but lower "excellent" ratings show support, but that there is definitely room to grow in showcasing the activities that are funded through this program to show its value. Ways to better communicate these stories and efforts will be explored.