

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

**Attachment B16**

## Program Summary and Measurement

Program/Tool	Update	Measurement	Future
<b>Programs</b>			
<p><b>Make a Splash Grant program</b>  <i>\$50,000 set aside for grants of up to \$2,500. Activities must be related to stormwater education, protection or restoration efforts.</i></p>	<p>This year we funded a demonstration rain garden among other projects.</p>	<p>In 2008, nearly \$35,000 was granted for 15 different stormwater-related projects throughout Tacoma.</p>	<p>Working on ways to diversify the grantees by encouraging businesses to apply for things like cigarette butt cans, on-site spill kits and implementing low-impact development practices.</p>
<p><b>Clean Bay Car Wash Kits</b>  <i>Assists fundraising car washes with keeping soapy water out of the stormwater system.</i></p>	<p>We currently have two dedicated locations where car wash kits are available year round. This year, one kit was checked out during summer and fall to a Boy Scout troop. 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 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 22 cars washed. These statistics are only for checked out statistics, not for sites where the kits are available year-round on site.</p>	<p>Program seems effective and valuable. We plan to continue this effort, in addition to encouraging people to wash their car at a commercial car wash or on their lawn.</p>
<p><b>EnviroChallengers</b>  <i>Two environmental educators who visit Tacoma classrooms and attend community events to spread surface water, wastewater, garbage and recycling messages.</i></p>	<ul style="list-style-type: none"> <li>- A new Surface Water Investigation game and lesson were developed and completed. This lesson is designed for use in middle schools to make students aware of the City's surface water system, how it works and how to protect it. This lesson also generates interest in environmental careers.</li> <li>- Developed a new cutaway model which shows the difference between the City's surface water and wastewater system (designed to make people aware of these</li> </ul>	<p>During the 2007-2008 school year, the EnviroChallengers taught approximately 660 lessons, participated in 32 special school events and after-school programs to reach an estimated 19,000 students. During 2008, the EnviroChallengers also represented City of Tacoma Environmental Services at 30 community events.</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>

## City of Tacoma Public Outreach & Education Efforts for Stormwater in 2008

	<p>two services and make them “feel good about it.” Also educates about the differences between the two systems and what kinds of things individuals can do to maintain the environmental health of the systems.</p>		
<p><b>EnviroHouse</b> <i>Hands-on showcase of green building and natural landscape ideas, materials and techniques that create a healthy home.</i></p>	<ul style="list-style-type: none"> <li>- Continued to publicize EnviroHouse and messages such as stormwater and other messages through city communication vehicles, as well as advertising in local media.</li> <li>- Onsite rain garden beginning to mature. Educational signage was added, and additional materials were created regarding rain gardens and natural yard care.</li> </ul>	<p>1,100 visitors in 2008</p>	<p>Always looking for innovative ways to fine-tune or add educational and inspirational displays to the EnviroHouse.</p>
<p><b>Pet Waste Program</b> <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 EnviroTalk and utility bill inserts. Also, included pet waste messages in new surface water education materials, including a booth display and an educational flyer.</p>	<ul style="list-style-type: none"> <li>- Awareness is measured through a customer service survey that measure customer awareness and opinion of stormwater, wastewater and solid waste services and program awareness. This survey is done approximately every three years. Results for the current survey efforts should be available for the next reporting period.</li> <li>- We also participated in Pierce County’s stormwater-specific survey in early 2009, in which we oversampled Tacoma-specific behaviors and attitudes. ** <i>County survey showed that</i></li> </ul>	<p>We are looking into partnership possibilities to increase awareness of the program through signage and “poo stations,” especially in parks, business districts and other areas well-traveled by dog walkers.</p>

**City of Tacoma Public Outreach & Education Efforts for Stormwater in 2008**

		<p><i>71% of Tacoma dog owners always pick up after their dogs while on walks, and 79% pick up dog waste from the backyard at least weekly. Only 10% say they never pick up from their backyards.</i></p> <p>- Past surveys have also shown that our Environmental Services newsletter and utility bill inserts are also effective ways of getting messages out.</p>	
<p><b>CAN It Cigarette Butt Litter Prevention Pilot Program</b>  <i>Pilot program to help reduce littered cigarette butts and educate smokers on the harmful effects of cigarette butt litter.</i></p>	<p>33 businesses within the study area participated in some degree. There were also 16 public cigarette butt receptacles. Also, personal ashtrays, posters, business cards and handbill flyers were distributed throughout the study. A website was also created to support the efforts.</p>	<p>Cigarette butts were counted throughout the year, and sediment traps were pulled in March/April to be analyzed. Cigarette butt counts showed some improvement, including March counts being halved from 2007 to 2008. Not enough data to know how effective, but people were seen using the cigarette butt cans frequently, and many businesses from outside the pilot program area were wishing they could participate and asking where they could get butt cans. Results from the sediment traps are unavailable at this time.</p>	<p>Currently considering "next step" options, including general education as well as possible expansion of the brand in key areas throughout the City. Business districts (especially those with high numbers of restaurants) are a key area we're looking into partnering with.</p>
<p><b>Household Hazardous Waste Disposal Program</b>  <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</i></p>	<p>Continuing to spread the word through Environmental Services publications.</p>	<p>Sample statistic: 26,600 gallons of waste oil collected at the Household Hazardous Waste Facility. (Total of 67,959 gallons of waste oil collected through the program.)</p> <p><i>Other numbers not</i></p>	<p>Continue to educate public about need for proper disposal and where they can take their hazardous wastes.</p>

## City of Tacoma Public Outreach & Education Efforts for Stormwater in 2008

<i>proof of residency with a current photo ID.</i>		<i>available at this time.</i>	
<b>Northwest Natural Yard Days/Natural Yard Care</b>	<ul style="list-style-type: none"> <li>- Continuing to spread the word through regular Environmental Services publications, booth displays, etc. Also partnering with Health Department's grant-funded natural yard care program.</li> <li>- Also participated in regional Northwest Natural Yard Days promotions.</li> </ul>	<ul style="list-style-type: none"> <li>-- 51 individuals attended at least one of the three spring natural yard care workshops at the Point Defiance Zoo.</li> <li>-- 39 attended at least one of two fall workshops at the Tacoma Nature Center.</li> <li>-- Presence at several community events.</li> </ul>	Continue efforts and partnerships to encourage Tacoma residents to incorporate natural yard care into their habits, as well as understand how their actions can affect the environment.
<b>Curb Marking Program</b> 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	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.	In 2008, CHB coordinated six curb marking projects for a total of 762 drains marked.	Continue marking drains with the goal of having every drain in Tacoma marked.
<b>Communication Tools</b>			
<b>Utility bill inserts</b> Bimonthly insert distributed to 125,000.	<ul style="list-style-type: none"> <li>- Stormwater subjects specifically covered:</li> <li>- Natural yard care</li> <li>- Proper disposal of yard waste (to prevent clogged storm drains)</li> <li>- Car washing, and charity car wash kits</li> <li>- West Nile virus</li> <li>- What utility rates pay for</li> <li>- Curb marking</li> <li>- Scoop the poop</li> <li>- Make a Splash grant program</li> <li>- Soil amendments</li> </ul>	Noticeable increase in calls to water pollution hotline and other advertised phone numbers when inserts are distributed.	Continue to utilize communication tool to advertise stormwater and other Environmental Services messages.
<b>EnviroTalk</b> Quarterly newsletter mailed to 53,000 single family and duplex homes in Tacoma.	Stormwater subjects specifically covered: <ul style="list-style-type: none"> <li>- Water pollution hotline (and what to look for)</li> <li>- West Nile virus</li> <li>- Cigarette butt litter</li> </ul>	2007 survey shows that the EnviroTalk newsletter has high readership. There is also a noticeable increase in web hits and calls to advertised	Continue to utilize communication tool to advertise stormwater and other Environmental Services messages.

## City of Tacoma Public Outreach & Education Efforts for Stormwater in 2008

	<ul style="list-style-type: none"> <li>prevention</li> <li>- Curb marking</li> <li>- Natural yard care and natural landscaping</li> <li>- Soil amendmets</li> <li>- Car washing/charity car wash kit</li> <li>- Household hazardous waste disposal</li> <li>- Rain gardens</li> <li>- Pet waste</li> <li>- Make a Splash stormwater grants</li> <li>- Only rain in the drain messages</li> <li>- Street sweeping</li> <li>- Does stormwater get treated? message</li> <li>- General stormwater education messages</li> <li>- Fix the leak</li> </ul>	phone numbers when inserts are distributed.	
<b>Tacoma EnviroNews listserv</b> <i>Environmental issues listserv</i>	Continued to moderate e-mail listserv for public to post environmental information.	Approx. 200 people on the listserv.	Continue to maintain.
<b>EnviroKids website</b> General education on stormwater, wastewater and solid waste that is targeted to youth.	Continued to update with educational information.	53,100 visitors to website in 2008.	Continue to utilize.
<b>TV Tacoma SCALA pages</b> Bulletin board style postings broadcast via Click! Cable TV.	Posted several surface water related messages, including West Nile Virus, Make a Splash grant announcements and others.	NA	Continue to utilize.
<b>TV Tacoma</b> City-run cable channel	Appearances on CityLine interview show and also worked with TV Tacoma on special features, including how our stormwater teams track nonpoint source pollution.	NA	In 2009 we will be distributing a video to City staff explaining illicit discharges and how to report them. We will be continuing to work with TV Tacoma on stormwater education opportunities and features, as well as PSA projects.

**City of Tacoma Public Outreach & Education Efforts for Stormwater in 2008**

<b>Partnerships</b>			
<b>Regional Community Partnerships</b>	Participating in regional conservation groups such as the Pierce Conservation District, Chamber/Clover Creek Watershed Council, Puyallup River Watershed Council, City land use planning efforts, and habitat restoration projects within the City limits.	NA	Continue.
<b>Local Community Partnerships</b>	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.	NA	Continue.
<b>STORM Regional Campaign</b> Regional stormwater education and outreach coalition headed up by King County.	Participating with STORM, represented on campaign and steering committees. -Attended regional educational opportunities, including research and social marketing workshops - Helped with brainstorming for upcoming STORM educational campaign. - Participating in program and information sharing between permittees.	NA	- Regional television and social marketing campaign should be kick-started in 2009/2010. - Continue to share revised and new programs with fellow Phase 1 and Phase 2 permittees.
<b>Pierce County NPDES permittees</b>	Began meeting occasionally with	NA	Continue to work with neighborhood cities

## City of Tacoma Public Outreach & Education Efforts for Stormwater in 2008

	<p>other permittees to share ideas and resources. As part of this effort, we teamed up with Pierce County and the other jurisdictions on a county-wide stormwater survey, for which we oversampled Tacoma to 6%.</p>		<p>and the county on outreach and education, and research efforts, when appropriate.</p>
<h3>Additional efforts</h3>			
<p><b>Washington Conservation Corps</b></p>	<p>The WCC crew participated in: Earth Day community planting event, community planting at Celebration Park, assisted the Native Plant Society, assisted Metro Parks, provided cigarette butt litter education to Public, assisted with the Water Festival by Tacoma-Pierce County Health Department, assisted Friends of the Hylebos, provided public education at the annual Puyallup Fair information booth.</p>	<p>NA</p>	<p>Continue.</p>
<p><b>Business Source Control Outreach</b></p>	<p>Continuing efforts to educate business owners on Source Control BMPs during spill/complaint responses and regular business inspections.</p>	<p>In 2008, 2551 sites were provided information regarding Source Control BMPs.</p>	<p>Develop additional educational materials for Source Control Inspectors to use with businesses.</p>
<p>Original idea: Citizen Stewardship Program</p> <p>Implementation: <b>Friends of Wapato Lake</b> Outreach and educational efforts within the Wapato Lake watershed regarding stormwater</p>	<p>The original project was dependent upon a local nonprofit's grant application, which was not accepted. However, we have begun partnering with Metro Parks, UW Tacoma and the Health Department to invigorate the</p>	<p>- 100 people attended the first "Wake Up Wapato" event. - 20 people signed up at the event to be Friends of Wapato Lake</p>	<p>Another Wake Up Wapato event and accompanying outreach and education are planned for this spring.</p>

## City of Tacoma Public Outreach & Education Efforts for Stormwater in 2008

<p>issues and recruiting volunteers to help monitor and keep up lake restoration efforts.</p>	<p>neighborhood surrounding Wapato Lake. There has been some public outreach already, including a "Wake Up For Wapato" event, Tacoma News Tribune and Tacoma Weekly articles, lake signage and curb marker program and the creation of "Friends of Wapato Lake."</p>		
<p><b>Newsletter Outreach</b></p>	<p>Still exploring options. The intent was to find ways to better reach the non-single-family-home population.</p>	<p>NA</p>	<p>Continue.</p>
<p><b>Enhance Website Information</b></p>	<p>Continuing to update surface water pages and information as we have it. Specific recent enhancements include pages on street sweeping, cigarette butt litter, and growing information on low-impact development.</p>	<p>NA</p>	<p>Continue.</p>
<p><b>Carrots: Celebrate Successes</b></p>	<p>Beginning to explore possibilities of partnering with several local entities to offer better rewards, especially to businesses.</p>	<p>NA</p>	<p>Continue.</p>
<p><b>Encourage Low-Impact Development (LID) Practices</b></p>	<ul style="list-style-type: none"> <li>- Working with Building and Land Use to simplify the permitting process surrounding LID.</li> <li>- 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.</li> <li>- Promoting rain gardens in our city literature, website, working on demonstration rain</li> </ul>	<p>NA</p>	<p>Continue to explore opportunities and ways to promote and encourage low-impact development.</p>

## City of Tacoma Public Outreach & Education Efforts for Stormwater in 2008

	gardens, etc.		
<b>Better Education Tools for Environmental Compliance Staff</b>	Creating handouts as needed. Created smoke testing informational handouts; created a general stormwater education brochure; updated stormwater flooding brochure.	NA	Continue to create materials as needed.

### Overall Program Assessment

Utilizing the City of Tacoma “Environmental Services Customer Survey” from March of 2005 (and previously from 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 preliminary though largely inconclusive measurements regarding non-point source pollution stormwater awareness and behavior in the City of Tacoma. However, the 2009 version of the Tacoma Environmental Services Customer Survey (which includes surface water, wastewater and solid waste information), will not be conducted until later this summer. That survey should offer a more easily comparable measurement.

#### **Brief details about those surveyed:**

**Environmental Services Customer Survey (March 2005):** Telephone survey of 403 Tacoma Environmental Services customers for a margin of error of +/- 5%..

**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%. NOTE: The report used was a draft report, and there may be some corrections in the final of both the audience surveyed and the results.

Some observations when comparing similar data in the two different surveys:

#### **Car washing**

ES survey: In 2005, 62% reported that they never washed their car on the lawn compared with 71.5% in 2002. The biggest increase in positive behavior was that people who washed their car on the lawn “once in awhile” increased from 4.8% in 2002 to 11.7% in 2005.

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: Inconclusive. This appears to show an increase in behavior of people either washing their car on the lawn or taking it to a car wash. But there is definitely room for continued education efforts.*

#### **Pet waste**

ES survey: In 2005, the number who reported that they “never” disposed of pet waste properly dropped from 50% in 2002 to 27.1% in 2005. Also, the number who “always” disposed of their waste in the garbage or toilet increased from 31.5% in 2002 to 45.5% in 2005.

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.

## **City of Tacoma Public Outreach & Education Efforts for Stormwater in 2008**

*Assessment: Awareness and behavior appear to continue to be increasing in the right direction, though there is still room for improvement.*

### **Disposing of hazardous wastes properly**

ES survey: In 2005, nearly 50% participated in the Household Hazardous Waste Program compared with under 30% in 2002. Approximately 80% were aware of the program in 2005, compared with 66.5% 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: Inconclusive, but appears positive.*

### **Natural yard care**

ES survey: In 2005, fewer reported thinking that lawn care practices had an impact on the environment than in 2002. In 2005, 77.5% believed lawn care practices had an either somewhat of an impact or a significant impact on the environment, compared with 84.3% 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: Shows that yard care awareness appears to have rebounded and likely increased, and that Tacoma area definitely has a lot of natural yard care practitioners.*

### **General stormwater awareness**

ES survey: 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.*