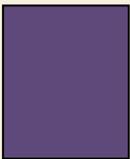


# Stormwater Business Education Template: Focus Group Report

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**Prepared for Kitsap County Public Works  
Surface & Stormwater Management  
Program and Project Partners**

**Funded by Washington Department of Ecology  
Grant Number G1000479**

Cunningham Environmental Consulting  
Bainbridge Island, WA

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# 1. Project Overview

## *Introduction*

The Stormwater Business Education Template is one of 15 projects funded by the Washington Department of Ecology under the grant program, Municipal Stormwater Grants of Regional or Statewide Significance. This project will develop and test the effectiveness of education activities targeted at commercial businesses to raise stormwater awareness and provide simple behavior changes to improve water quality. The product will be a template that can be customized for use by all jurisdictions within Washington State.

Kitsap County is the lead agency on this project. The project partners represent jurisdictions from eastern Washington (Asotin County), and western Washington, both Puget Sound (Kitsap County, King County, City of Everett) and non-Puget Sound (City of Vancouver) Their perspective on how business activities impact stormwater will help guide the template design.

This Focus Group Report is one of several steps taken to reach our goal. This report documents the exploration of barriers and motivators for businesses with automotive and vehicle fluids to control polluted stormwater and the outcome of testing various products and images.

## *Methodology and Participant Profile*

Three focus groups were moderated by Rita Cohen of The Gilmore Research Group with 18 business owners and managers during the period October 1-14, 2010. The groups represented three distinct regions of the State, as listed below:

- ◆ Tri-Cities (Richland, Kennewick, Pasco) – eastern Washington
- ◆ Mt. Vernon/Burlington (Skagit County) – western Washington, Puget Sound
- ◆ Centralia/Chehalis (Lewis County) – western Washington, non-Puget Sound

The original plan was to hold a focus group in Asotin County in eastern Washington. We were not able to recruit the desired number of participants from the small pool of businesses available. To supplement the representation of views from eastern Washington, we held 1 on 1 phone interviews with two Asotin County business owners. Their views are incorporated into the focus group findings.

Owners and managers from businesses were recruited from a list of business sectors that typically handle automotive and equipment fluids, as listed below.

Automobile dealers	Gasoline stations
Boat maintenance and repair businesses	Charter bus companies
Other motor vehicle dealers	Automotive equipment rental and leasing
Outdoor power equipment stores	Automotive repair and maintenance

## 2. Key Findings

### *Awareness of Stormwater and Local Waterways*

-  Water bodies factor into a sense of place. Participants mentioned major rivers, sloughs, irrigation ditches, lakes and Puget Sound as surface water features close to their business.
-  Participants thought that the waterbodies are healthy, mostly because these waters support fish, wildlife and plants, and people swim and fish in them.
-  Nearly all participants could accurately identify the photo of the storm drain grate.
-  Most participants knew that stormwater runoff entered into local waterways without first going to a treatment plant.

### *Awareness of Activities that Affect Runoff*

-  The business owners are aware of activities that can cause polluted stormwater runoff and are also aware that polluted runoff should not be entering the storm drains.
-  Businesses have systems in place to clean up spills and frequently mentioned use of spill kits, absorbent rags and kitty litter. They were less likely to mention proper storage and containment, and avoiding vehicle washing and pressure washing as steps for reducing pollution in runoff.
-  Training of employees about how to properly store automotive fluids and handle spills is infrequent or non-existent, which creates a disconnect between business owner expectations and employee practices. Franchises of corporations have more structured procedures and employee training than small, independent businesses.

### *Motivators and Barriers to Managing Runoff*

-  Participants were either motivated by concern for the environment, future generations, and drinking water, or by avoidance of fines or liability from spills.
-  Nearly two-thirds ranked “not knowing what to do” as one of the top three reasons for businesses not always managing runoff.

### *The Message and Compelling Images*

-  **Only Rain Down the Drain** was the most popular tagline because of the cadence, alliteration, and simplicity of the message.
-  Participants favored posters that conveyed the message quickly. Those posters had a catchy tagline, bold graphics, and minimal text.

-  Publicizing a spill reporting hotline was viewed negatively by many participants who thought they would be victimized by tattletales, or be labeled as one.

### ***Outreach Products***

-  The top three rated items were the spill bucket, posters and on-site training.
-  The most popular posters were the 4C's, the Bellevue posters, and The Drain is Just for Rain on-line newspaper ad that was made into a poster for the focus groups.

### ***Incentives to Properly Manage Stormwater Runoff***

-  Discount coupons for spill buckets were viewed positively by many participants, as was public recognition through some form of advertisement in the newspaper, radio or website.
-  Warning tickets were viewed very negatively.

### ***The Direct Mailer Template***

-  This received the lowest average rating of 11 possible products designed to educate automotive businesses about stormwater best practices.
-  The bottom line was that business owners or their assistant who reviews the mail would glance at the mailer, probably read the back, and then toss it.

### ***The Messenger***

-  Participants from all three regions thought the local city or county public works department is the most credible messenger.
-  Some participants expressed anti-government sentiments and would like agencies to acknowledge business owner's efforts to comply with environmental regulations. Many cited that roads contribute far more pollutants to the stormwater system than do individual automotive businesses.

### ***Gathering Input from Rural Communities***

-  Holding focus groups in smaller, rural communities can be challenging because of the small pool of targeted businesses. We found that 1 on 1 phone interviews, including mailing the handout packet in advance, were as effective as focus groups in gathering opinions and attitudes about stormwater practices.

## 3. Detailed Findings

### *Awareness about Stormwater Issues*

Most of the participants recognized the photo of the storm drain and knew that runoff ends up in local waterways. Three participants thought that the stormwater goes to a treatment plant and one did not know where it went. Most voiced a strong connection to specific local waterways, including major rivers (Snake, Clearwater Columbia, Yakima, Skagit, Chehalis, Cowlitz, Skookumchuck), irrigation canals, sloughs, lakes, and Puget Sound. Most believe these water bodies are healthy because they support marine life, and the shores support vegetation and wildlife.

Participants were aware of practices that affect runoff on their business sites and mentioned oil and gas residue from vehicles, and leaking antifreeze that gets washed into the storm drain when it rains, pouring automotive fluids on the ground, and occasional spills. Many knew that washing vehicles outdoors should be done on gravel or unpaved surfaces. There was less awareness about the effects of pressure washing on stormwater runoff.

Overall, the business owners are aware of the need to contain automotive fluids and to clean up any spills using absorbent rags or kitty litter. Managers of businesses that are owned by large corporations were more likely to have procedures in place for minimizing any polluted runoff and have employee training programs.

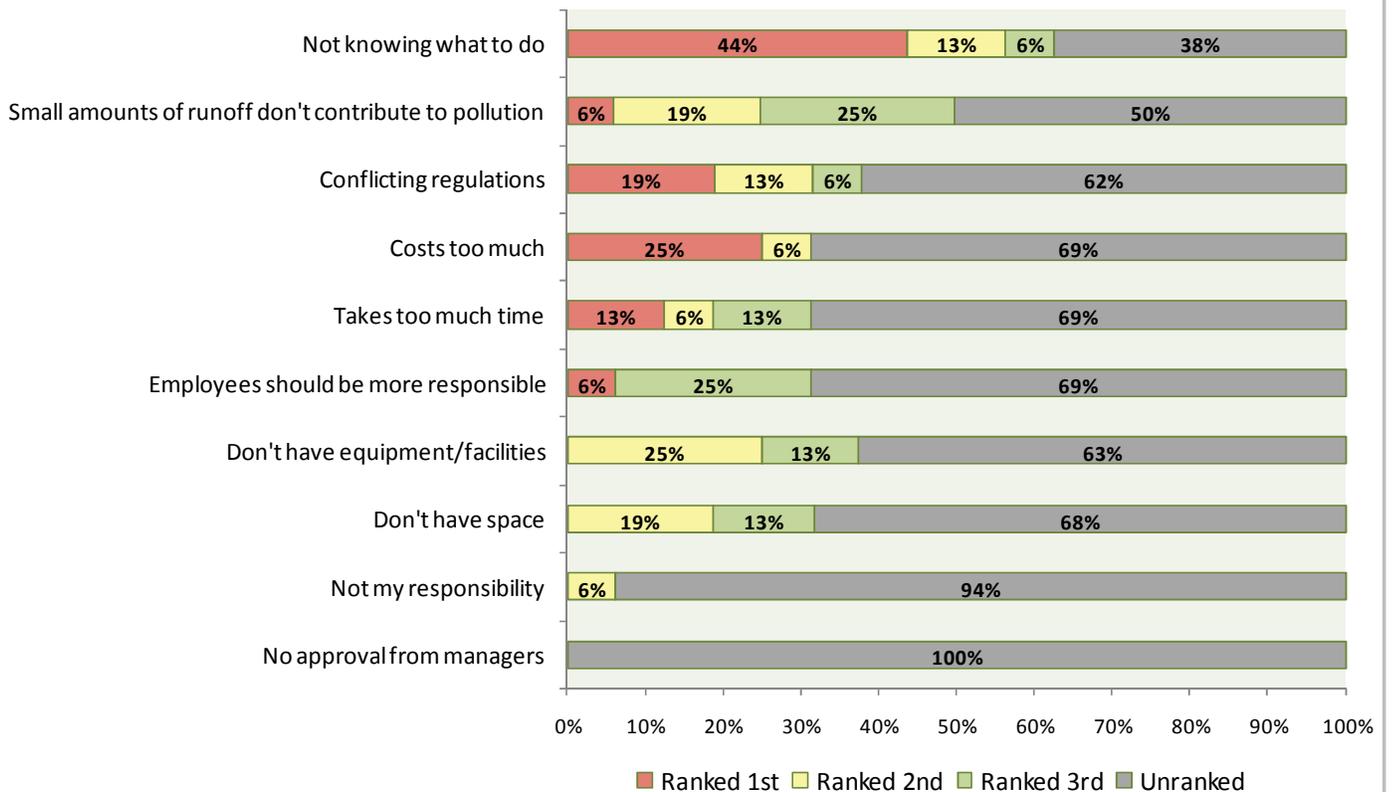
### *Motivators and Barriers to Managing Runoff*

All of the participants expressed the desire to do the right thing and not contribute to stormwater pollution. The motivators fell into two categories – concern about environmental degradation, and avoiding the costs a spill might incur to their business. The motivators listed below were echoed by several participants.

- The need to have safe drinking water
- Public relations with customers
- Concern for the environment
- Care about future generations
- Concern about liability
- Regulators can track where the spill originated
- Potential for fines and going out of business

The major barrier was “not knowing what to do” about managing runoff, mentioned by more than 3 in 5 of all participants and by nearly half as the #1 reason. Cost was mentioned by 1 in 4 as the #1 reason. Half said that “not believing small amounts of runoff from my site contribute to water pollution” as a top 3 reason. The bar chart shows the top three barriers listed by all participants.

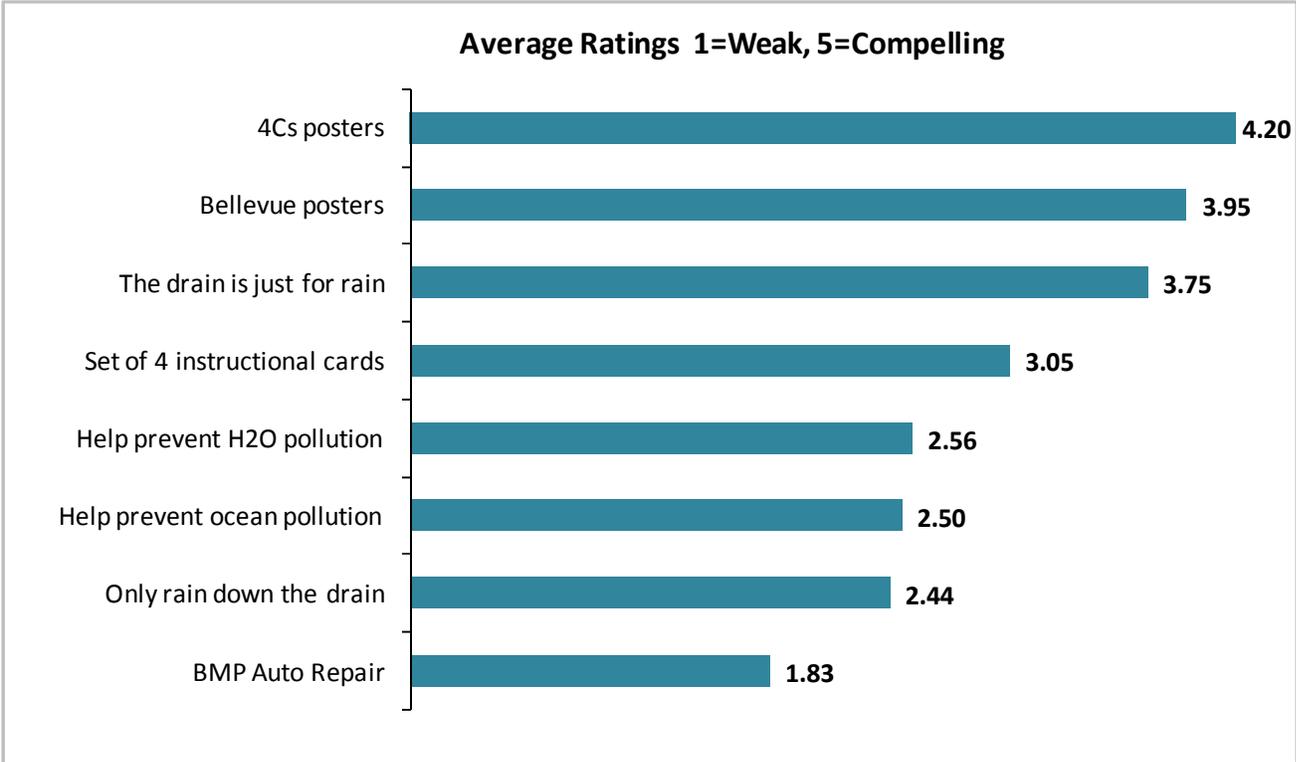
## Reasons Why Businesses May Not Always Manage Runoff



### Taglines and Posters

We tested three taglines and asked participants to pick the one they liked best. Although they are similar, they have all been used in stormwater campaigns in Washington State. **Only Rain Down the Drain** was the favorite tagline. Participants liked the simplicity, cadence and alliteration. Some thought that the tagline needed to be in context showing a picture of a storm drain. A few participants thought that the drain needed to be qualified as a storm drain and preferred **The Storm Drain is Just for Rain**. No one favored **The Drain is Just for Rain**.

Participants were shown eight posters targeted to automotive businesses and a set of four instructional cards as an alternative to posters. In general, they preferred the 11x17 poster size which was used in the focus groups to a larger format. The average ratings for each image are presented below.



The most popular posters were those that featured bold graphics, a catchy tagline, and minimal text.



## The 4 C's Poster

The 4C's poster was developed as part of this project, incorporating the research conducted behind the creation of the Bellevue posters. We showed another version of the 4C's poster, designed in landscape format and showing both the "do" and "don't" behaviors. This version of the poster was preferred to the simpler portrait format poster by most participants. They thought it was more logical to read from left to right rather than up to down, as in the portrait version.



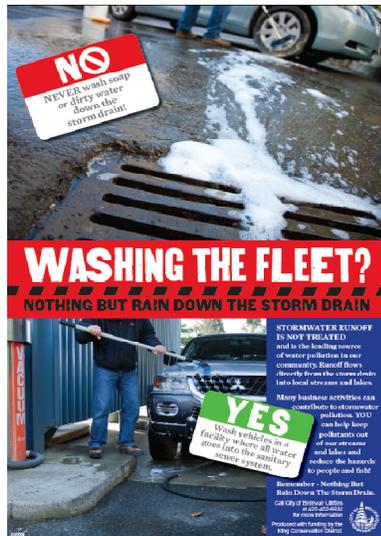
Participants had this to say about the 4C's poster:

- Easy to understand about what to do at a glance
- Simple, effective
- Good for my business
- Great – will remember the message
- Good size, easily read and understood
- Appealing to the mind
- Simple, gives clear instruction

Certain features of this poster were less liked. Participants did not like the reporting hotline and wanted the Yes and No captions to be more prominent, and use the universal symbol for "No".

## The Bellevue Posters

We showed two posters developed by the City of Bellevue, WA, the *Spill Something?* (shown above) and *Washing the Fleet?* (shown below)



Participants had this to say about the two Bellevue posters:

- Clear pictures, easy to understand the point
- Attention getting, bright
- Quick to read
- Good color, great visibility
- These posters are truly excellent and they get the point across

## The Drain is Just for Rain Poster

This isn't exactly a poster; it was developed by Kitsap County as an online animated newspaper ad. We blew up the image to poster size for the focus group. Similar to the other top-rated images, participants liked the simple, direct message. This image evoked opinions on both ends of the scale. While some really liked the direct message and lack of color, others did not like the starkness of the image. The reporting hotline was one aspect of this image that participants did not like. They thought it would invite customers or others to tattletale on their business.

Below are comments on this image:

- Very clear and concise
- Simple
- Most compelling except for the reporting hotline
- Short and to the point

## The Instructional Cards

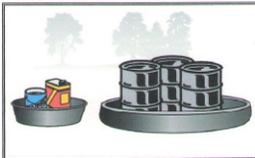
These cards were developed by the City of Vancouver, WA and are designed to be hung up in the shop for quick reference. They are small enough to be easily mailed. Participants had a mixed reaction to these. While some thought they were useful and liked the design, others thought they would end up in a file cabinet and forgotten.

**CONTAINMENT** City of Vancouver - Surface Water Management

### Smaller containers and temporary containment

Potentially polluting vehicle fluids include petroleum/diesel products, anti-freeze, solvents, grease, brake and transmission fluids, detergents, chemicals, paints, and acids.

Store cans and labeled drums in impervious secondary containment under a cover or indoors.



Secondary Containment System

Inspect secondary containment regularly for corrosion, dents, and indications of leaking.

Dangerous Waste materials that *do not* contain free liquids can be stored in a designated area, sloped, elevated or otherwise protected from stormwater run-on.

[www.cityofvancouver.us/waterprotection](http://www.cityofvancouver.us/waterprotection)

**VANCOUVER WATERS**  
OURS TO PROTECT

**SPILLS** City of Vancouver - Surface Water Management

### What To Do If You Have a Spill That:

**Stays on pavement or seeps into the ground or gravel – less than 5 gallons:**  
Safely cleanup the spill with absorbent material such as kitty litter, sawdust, or pads  
If absorbent used to capture spill isn't dripping waste, double-bag and place in dumpster

**Seeps into the ground or gravel – more than 5 gallons:**  
Safely stop the flow  
Report the spill to WA Dept of Ecology's regional spill line: 360-407-6300



**Flows across pavement into a storm drain:**  
Safely stop or redirect the flow and capture the spilled liquid  
Report the spill to WA Dept. of Ecology's regional spill line: 360-407-6300

**Threatens to enter a stream, river, pond or other surface water body:**  
Safely stop or redirect the flow and capture the spilled liquid  
You must call the Washington State Emergency Spill line: 1-800-258-5990

**Presents an immediate threat to the public health:**  
Evacuate the area  
Call 911 and Washington State Emergency Spill line: 1-800-258-5990

[www.cityofvancouver.us/waterprotection](http://www.cityofvancouver.us/waterprotection)

**VANCOUVER WATERS**  
OURS TO PROTECT

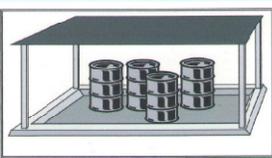
**CONTAINMENT** City of Vancouver - Surface Water Management

### Containment around drums of vehicle fluids

Potentially polluting vehicle fluids include petroleum/diesel products, anti-freeze, solvents, grease, brake and transmission fluids, detergents, chemicals, paints, and acids.

Store labeled drums in a designated covered area, bermed to contain leaks and spills.

The bermed area should be designed to capture 110% of the volume of the largest drum.



Covered and Bermed Containment Area

Drips and spills that collect on the pad should be captured and disposed properly.

Stormwater that collects in the bermed area should be pumped to sanitary, to a disposal vehicle, or to approved treatment such as an oil/water separator prior to discharge

[www.cityofvancouver.us/waterprotection](http://www.cityofvancouver.us/waterprotection)

**VANCOUVER WATERS**  
OURS TO PROTECT

**SPILLS** City of Vancouver - Surface Water Management

### Recommended Spill Kit Contents



Gloves, rubber boots, and eye protection for relatively non-hazardous materials - diesel, oils, hydraulic fluid

Loose granular absorbent material (floor sweep or kitty litter) and/or absorbent pads  
Broom, shovel, rope, containment booms/barriers, impermeable containers and plastic sheeting  
Duct tape for wrapping leaking lines, etc.  
Repair putty, auto body putty or similar material to patch holes in fuel tanks or lines  
Bags for waste pads, absorbents and other materials

[www.cityofvancouver.us/waterprotection](http://www.cityofvancouver.us/waterprotection)

**VANCOUVER WATERS**  
OURS TO PROTECT

Participants had these thoughts about the Vancouver cards:

- Lots of good information with good illustrations. Easy for employees to understand – Richland group
- These are appealing, easy to read and communicate important information. They could post them on the wall next to the time cards, in the employee manual, or in the MSDS manual. These are attractive and professionally done and may display them so customers can see them – Chehalis group
- While they have more information than the posters, it will take employees too long to read and they will most likely forget it – Burlington group

## The Less Popular Posters

Four other posters were shown that did not get a very positive response. Frequent reactions to these posters were: too wordy, too dark, information overload, not able to glance and get the message, and the graphics were too small. The BMP Auto Repair poster was the least popular and was the only one that exclusively used illustrations.



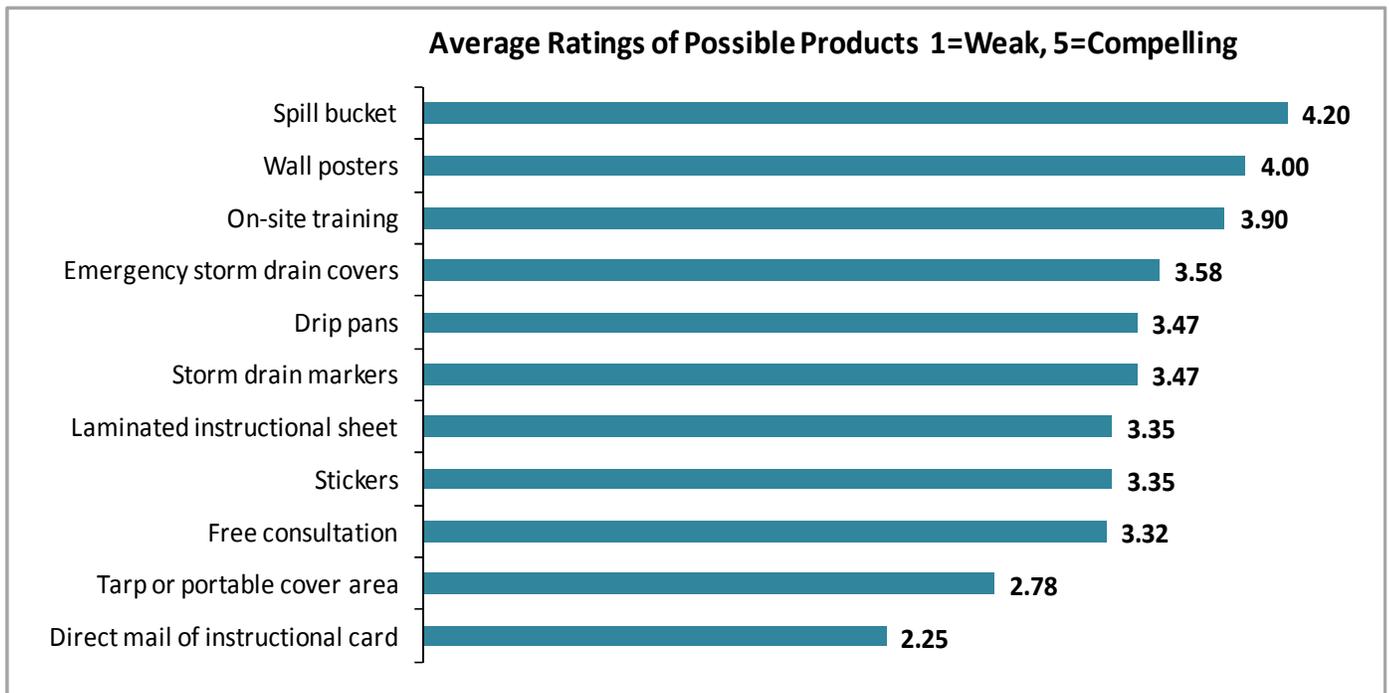
The features that participants liked about these posters were:

- Can see what not to do right away (Help Prevent Ocean Pollution)
- Good pictures of work activities (Help Prevent Water Pollution)
- Bi-lingual is positive, although in Washington State we would need to include about 10 languages; Spanish alone would not be sufficient (BMP Auto Repair)
- Header draws my eye (Only Rain Down the Drain)

## Outreach Products

The participants were given a list of possible products that could reinforce the message about positive stormwater practices and were asked to rate them, taking into account how useful each item would be for them and their employees to help reduce stormwater pollution.

The bar chart shows the top three rated items were the spill bucket, posters and on-site training. One suggestion was to have an orange spill bucket with the **Only Rain Down the Drain** tagline on it. The lowest rated items were a tarp or portable cover area and the direct mail card. Mid-rated items are shown in the range of 3.32 to 3.58.



Participants preferred in-person hand delivery of any outreach product. Receiving products through auto parts distributor or by mail would also work.

## Incentives and Disincentives

Participants were asked for their opinions about 1) discount coupons for spill buckets; 2) warning tickets or letters that included an insert about best ways to handle runoff; and, 3) public notices, such as recognizing businesses in a newspaper or website.

## What they liked

Many participants liked discount coupons for a spill bucket or better yet, receiving one for free. Some thought that most businesses already had spill buckets, or that they are not very expensive. However, spill buckets received the highest average rating among the 11 products.

Most participants liked recognition of businesses doing the right thing for the environment. Public recognition in a newspaper, radio, or website would provide value as consumers place a value on green businesses. Hanging a plaque on the wall had less value.

***What they did not like***

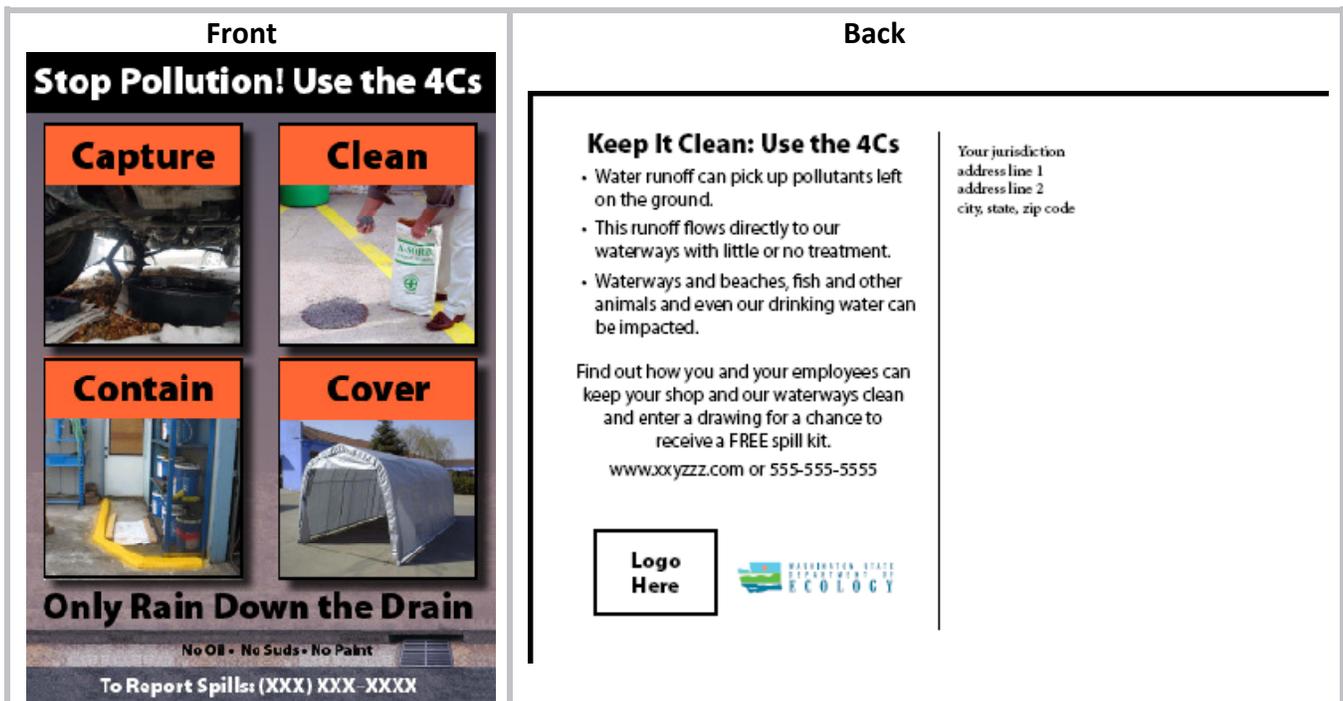
Warning tickets were viewed very negatively and many participants would be irritated and/or angry if they received one. They think that if an inspector points out an issue, they would correct the problem and a warning ticket would be unnecessary.

***The Direct Mail Template***

One of the objectives of this grant project was to develop and test a business mailer template designed to raise stormwater awareness in the business community, publicize a local spill hotline number, and provide a simple behavior change to improve water quality. The template would provide the basic information and could then be customized for local jurisdictions.

The core team members developed the 4C’s message. The concept and design was the product of previous tasks, including the Background Research Report, which reviewed and evaluated educational outreach materials targeted at businesses, and a social marketing brainstorming session.

We tested a mailer based on the concept of the 4Cs – Capture, Clean, Contain, Cover - at the focus groups. While the 4Cs poster received the highest average rating, the mailer received the lowest average rating of 11 possible products designed to help change practices in the handling of automotive fluids.



### ***What went wrong?***

The bottom line was that business owners would glance at the mailer, probably read the back, and then toss it. They would not think of posting it or showing it to their employees.

Participants were offended by the offer to enter a drawing for a chance to receive a free spill kit. They took a jaundiced view about entering a drawing and saw it as a come-on to sell something or get on an unwanted phone or email list. They also would not visit a website advertised on the card. Some participants did not like seeing the Department of Ecology logo and thought that if they responded, it would identify their business as a potential polluter.

After receiving negative feedback in the first focus group, we asked the subsequent groups if it would make a difference to incorporate references to local waterways. No, it did not.

### ***Who is the Most Credible Messenger***

Local city or county public works departments were seen mostly as supportive of businesses and were viewed as credible messengers. Local government is responsible for stormwater inspections, manages the drains on public property and works with businesses on compliance issues. A couple of participants from eastern Washington were skeptical about any stormwater program, as they think the programs are designed for western Washington communities that experience significantly higher rainfall.

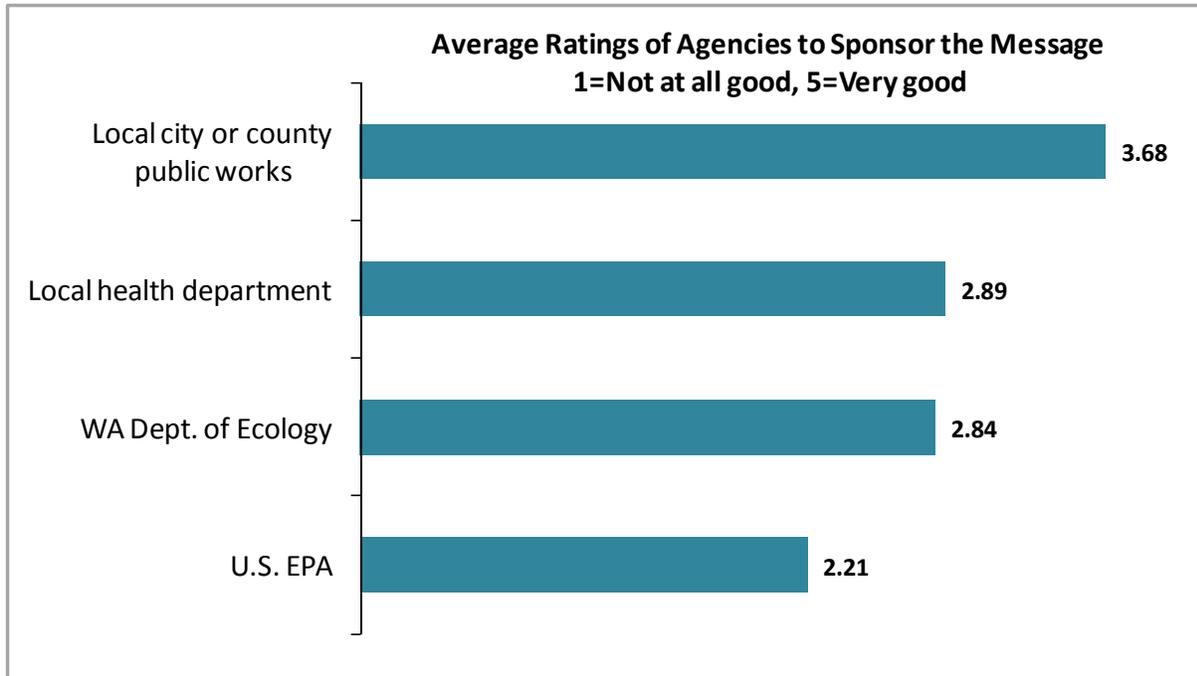
Local health departments as the messenger did not seem like a good fit for automotive businesses. Participants viewed health departments as regulating restaurants and being more concerned about human health than water quality.

Participants were mixed about the Department of Ecology, but in general, think they are a credible source. Some think Ecology is familiar with their geographic area and would be supportive, while others see them strictly as regulators.

There was a general consensus during the discussion that U.S. EPA would not be a good messenger as they are viewed as a regulatory agency in the other Washington.

The Department of Ecology and EPA were viewed more positively in the ratings by participants in eastern Washington and the Chehalis/Centralia area.

The Burlington/Mt. Vernon area is in the Puget Sound Region, so we asked that group about the Puget Sound Partnership as a possible sponsor. No one at that focus group had heard of the Puget Sound Partnership.



## 4. Recommendations

- 📄 The 4C's concept and design was well received but not in the form of a direct mailer.
- 📄 Educational outreach should be targeted not only at business owners but also employees.
- 📄 Test distribution of the 4C's poster (landscape format) through different distribution channels, e.g. auto parts suppliers, in-person, and by mail.
- 📄 Modify the 4C's poster to emphasize the Good and Bad behaviors, and insert the word "We" in front of "Use the 4C's" to have businesses take both responsibility and credit for their best management practices.
- 📄 Consider eliminating the reporting hotline on this poster.
- 📄 Include the logos of city and county public works departments. Leave off or de-emphasize the Department of Ecology logo.
- 📄 Use the tagline ***Only Rain Down the Drain***
- 📄 Consider discount coupons for spill buckets that could be sold through auto parts suppliers.