



Western Washington University
Western CEDAR

Salish Sea Ecosystem Conference

2014 Salish Sea Ecosystem Conference
(Seattle, Wash.)

Apr 30th, 3:30 PM - 5:00 PM

Don't Drip & Drive- Greasing the Skids with Social Science to Prevent Vehicle Leaks

Stef Frenzl

Snohomish County Public Works. Surface Water Management, stef.frenzl@snoco.org

Follow this and additional works at: <https://cedar.wwu.edu/ssec>



Part of the [Terrestrial and Aquatic Ecology Commons](#)

Frenzl, Stef, "Don't Drip & Drive- Greasing the Skids with Social Science to Prevent Vehicle Leaks" (2014).
Salish Sea Ecosystem Conference. 33.

<https://cedar.wwu.edu/ssec/2014ssec/Day1/33>

This Event is brought to you for free and open access by the Conferences and Events at Western CEDAR. It has been accepted for inclusion in Salish Sea Ecosystem Conference by an authorized administrator of Western CEDAR. For more information, please contact westerncedar@wwu.edu.

**Don't
Drip & Drive**



Don't Drip & Drive: Greasing the Skids with Social Science to Prevent Vehicle Leaks

**Salish Sea Conference
April 30, 2014**

STORM

Stef Frenzl
Snohomish Co

Doug Rice
King Co

Tiffany O'Dell
Pierce Co

King Co ECO Net

Heather Trim
Futurewise



The Problem

Petroleum-based oil, grease, transmission, power steering, brake and windshield fluids

- significant toxic pollutants reaching Puget Sound waters through stormwater runoff





The Problem

Ecology estimates 7 million quarts of motor oil are dripped on roads and parking lots in the Puget Sound basin every year.





Our Goal

To decrease the threat from vehicle leak pollution in the stormwater system





Vehicle Leaks: A Complex Issue

Approaches to solving this problem

- Behavior changes
 - maintain vehicle and fix leaks when found
- Regulatory changes
- Industry changes

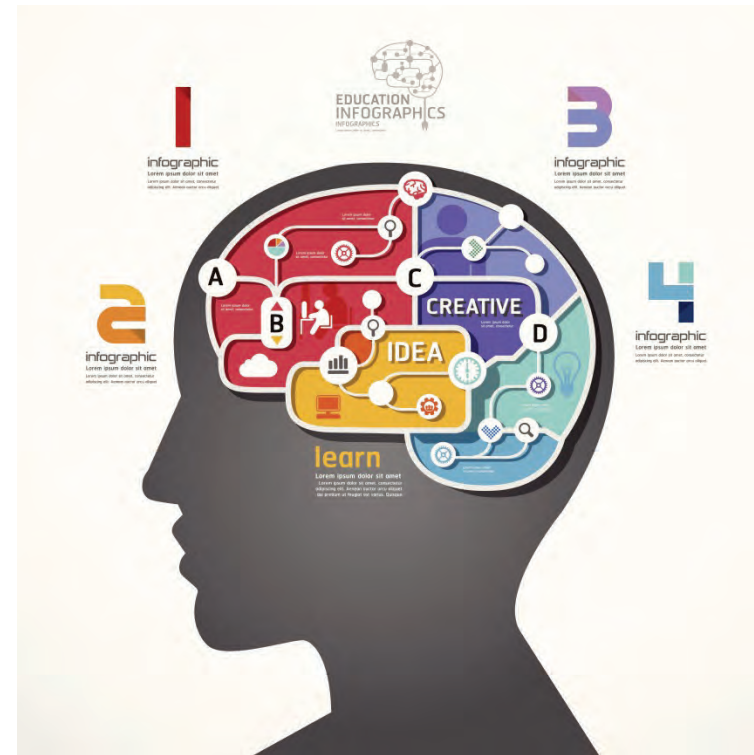




Applicable Findings From Social Science Research

“Sticky” messages are simple, unexpected, concrete, credible, emotional, and tell a story.¹

Use injunctive norms to provide information that the behavior is approved of²



1. Heath, Chip, Dan Heath. (2008). *Made to Stick: Why Some Ideas Survive and Others Die*. Random House. New York.
2. Cialdini, R.B., Reno, R.R., & Kallgren, C.A. (1990). “A focus theory of normative conduct: Recycling the concept of norms to reduce littering in public places.” *Journal of Personality and Social Psychology*. 58, 1015-1026.



Applicable Findings From Social Science Research

Overwhelm can result in
non-action¹

“Opt-out” programs result in
greater participation²



1. Iyengar, Sheena S. and Mark R. Lepper. When Choice is Demotivating: Can One Desire Too Much of a Good Thing? *Journal of Personality and Social Psychology*, 2000, Vol. 79, No. 6, 995-1006
2. Johnson, Eric J. and Goldstein, Daniel G., Defaults and Donation Decisions (December 2004). *Transplantation*, Vol. 78, No. 12, pp. 1713-1716.



Target Audience

- Vehicle owners 25 years of age or older
- Income of \$40,000 or more
- Vehicle is more than 2 years old
- Know or suspect they have a leak
- “Fix it for me” group
- Likely to fix leak when they know they have one



Targeted Market Research

How does our target audience respond?



Surveys & Focus Groups

- Barriers
- Motivators
- Marketing Strategies
- Messages



Barriers to Fix Leaks

- **Cost**
- **Lack of knowledge**
 - of how vehicle functions
 - what to ask a mechanic
- **Fear of being taken advantage of**
- **Time/hassle**
- **Forget- not a priority**
- **Don't believe it's a problem**





Motivators to Fix Leaks

This is
why I care

Primary

- Reliability
- Safety
 - while driving
 - kids and pets
- Maintain value
(when selling car)

Secondary

- Protect the environment



Campaign Elements To Overcome Barriers

1. Raise Awareness

- Cute and “uplifting” brand
- Messaging- address motivators & barriers
- Leak detection blitz events

2. Influence Behavior- Get Leaks Fixed

- Website with tools
- Repair shop incentives and discounts
- Test more messages & intervention strategies

Raise Awareness: Vehicle Leak Testing Blitzes



“We’ll test your car for leaks and give you the results... unless you opt out”



Influencing Behavior: Website- Addressing Barriers

- **Searchable map of participating repair shops**
- **Consumer aids**
 - What to ask a mechanic
 - Tool to identify drip type
 - Diagrams-how vehicles function
 - Consumer rights info
- **Information/videos on how leaks impact:**
 - Life of vehicle, safety, pets, children & Puget Sound's Health



Campaign Phase 2: Which strategies provide the best return on investment?

- Window cling reminder
- Pledge & call backs
- Onsite mechanic at workplace
- For employer to host- mobile mechanic company or mechanic concierge service
- \$100 discount to repair leaks



Influencing Behavior: Testing Intervention Strategies



3-month post-intervention survey

- Evaluate effectiveness of intervention strategies
- Obtain demographics and psychographics
- Provide recommendations for future campaign phases





Take Home Messages

- Campaigns that use social science are more likely to be effective
- Know your target audience's barriers and motivators and develop your campaign to address them
- Integrate research as a part of your campaign to maximize results

Thank you! Any questions?



Stef Frenzl
Communication Specialist
Snohomish County SWM
Stef.frenzl@snoco.org
425-388-6466

