Successful Source Control
Through Behavior Change

Dave Ward
Puget Sound Partnership

Tiffany O’Dell
Pierce County

---

**Problem**

**Educate**

**A Miracle Occurs**

**Desired Outcome**

---

<table>
<thead>
<tr>
<th>Innovators</th>
<th>Early Adopters</th>
<th>Early Majority</th>
<th>Late Majority</th>
<th>Laggards</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5%</td>
<td>13.5%</td>
<td>34%</td>
<td>34%</td>
<td>16%</td>
</tr>
</tbody>
</table>

---

Information & education (SHOW ME)

Social marketing approaches (HELP ME)

Regulations & legal interventions (MAKE ME)
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Show Me&quot;</td>
<td>Education</td>
<td>Education</td>
<td>Persuasion</td>
<td></td>
</tr>
<tr>
<td>&quot;Help Me&quot;</td>
<td>Environment</td>
<td>Marketing</td>
<td>Exchange</td>
<td></td>
</tr>
<tr>
<td>&quot;Make Me&quot;</td>
<td>Enforcement</td>
<td>Law</td>
<td>Authority</td>
<td></td>
</tr>
</tbody>
</table>

### Social Marketing

Influencing public behaviors for good

- Information & education (SHOW ME)
- Social marketing approaches (HELP ME)
- Regulations & legal interventions (MAKE ME)

- Early Adopters: 13.5%
- Early Majority: 34%
- Late Majority: 34%
- Laggards: 16%

- Innovators: 2.5%

**Social Marketing**

- Cuck it up Ticket
- 30
- Eat a Day
- Don't mess with Texas
- Seafood Watch
- Drive Hammered Get Nailed
Education helps people to know things
Social Marketing helps people to do things

Social Marketing is about the practices and behaviors that can help clean water and habitat
(It is not about advertising)
MARKETING is EXCHANGE

The Process

1. Formative research
2. Strategy/intervention
3. Trial
4. Measure, evaluate, refine
5. Broad implementation

1. Evidence
2. Hypothesis
3. Test
4. Validate hypothesis
5. Apply knowledge

Why Social Marketing?

- Proven results in other fields (health, disease prevention, safety)
- Established methods
- Established, growing infrastructure
- In the long run it’s more efficient than conventional education
Social Marketing Benchmark Criteria

Relevance to NPDES

BEHAVIOR
BEHAVIOUR

Specific
End-state
Non-divisible
Measurable
Time-bound
Time-bound

SEGMENTATION
Hybrid car drivers have higher income, much higher than the average car buyer.

- Hybrid owner incomes are $100,000 a year versus $85,000 a year for the average buyer.
- A 2007 survey of Prius drivers, found 71 percent of respondents earned more than $100,000 per year.

Hybrid drivers are a few years older than the average car buyer—closer to 50 rather than the average age of 40.

- Auto industry marketing shows that only 2 percent of hybrid owners are 24 or younger;
- 29 percent are between 45 and 54; 33 percent are 55 and older.
Antonella, the guiding personality for the Ford Verve

Natasha, the personality model for the Lincoln C

610,000 residents
234,000 households
36,000 streamside properties
18,000 streamside landowners
14,000 individual streamside landowners
Target Audience – Dog Owners

Desired Behavior
Pick-up regularly and dispose in trash

Partial Behavior
Pick-up regularly but do not dispose properly

Contrary Behavior
Pick-up irregularly or not at all

Reinforce behavior
Frequent

Correct behavior
Frequent

Introduce behavior

Target Audience

Dog Owners by Pick-up Method
(quantity)

<table>
<thead>
<tr>
<th>Method</th>
<th>At least weekly</th>
<th>At least monthly</th>
<th>Irregularly</th>
<th>Not at all</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Place waste in trash</td>
<td>35,384</td>
<td>5,285</td>
<td>1,149</td>
<td>-</td>
<td>41,817</td>
</tr>
<tr>
<td>Compost/bury</td>
<td>19,750</td>
<td>3,217</td>
<td>2,068</td>
<td>-</td>
<td>25,044</td>
</tr>
<tr>
<td>Place waste in toilet</td>
<td>2,068</td>
<td>689</td>
<td>230</td>
<td>-</td>
<td>2,987</td>
</tr>
<tr>
<td>Other/DKNA</td>
<td>2,987</td>
<td>689</td>
<td>1,379</td>
<td>-</td>
<td>5,055</td>
</tr>
<tr>
<td>Leave waste in yard</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>9,191</td>
<td>9,191</td>
</tr>
<tr>
<td>Total dog-owning</td>
<td>60,108</td>
<td>9,880</td>
<td>4,025</td>
<td>9,191</td>
<td>84,094</td>
</tr>
</tbody>
</table>

Target Audience – Dog Owners

- Dog Owners – Total: 84,094
  - Leave waste in yard: 9,191
  - Other/DKNA: 2,987
  - Place waste in toilet: 2,068
  - Compost/bury: 19,750
  - Place waste in trash: 35,384

Total dog-owning households: 84,094
Response

“It is rare these days to see such caring on the part of government.”

“…a touch of empathy toward the many issues that can bewilder streamside landowners.”

“It gave me information to make more competent decisions about my property.”

“Interesting concept: That government agencies would actually work with me.”

“It was evident that you were there to help serve as a source of information and a contact, and that you were not there to judge current individuals practices or viewpoints.”
THEORY

Problem → Educate → A Miracle Occurs → Desired Outcome

THEORY

Desired Outcome

A Miracle Occurs

Problem

Educate

Desired Outcome
DESIRED RESULT: Lower water temperature

Activity: Conduct workshops to motivate landowners to plant streamside trees

<table>
<thead>
<tr>
<th>Implementation Monitoring</th>
<th>Outcome: Landowners will plant streamside trees</th>
<th>Impact: Streamside trees will shade, which will reduce water temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of workshops, number of participating landowners</td>
<td>Did workshops motivate landowners to plant streamside trees?</td>
<td>Old water temperature actually drop when trees grew large enough to produce shade?</td>
</tr>
<tr>
<td>Immediate</td>
<td>2 years</td>
<td>10 – 20 years</td>
</tr>
</tbody>
</table>

MONITORING MEASURES

<table>
<thead>
<tr>
<th>Evaluation Timeframe</th>
<th>Number of workshops, number of participating landowners</th>
<th>Number of landowners who planted trees, number of trees planted, miles of streambank planted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediate</td>
<td>Did workshops motivate landowners to plant streamside trees?</td>
<td>Old water temperature actually drop when trees grew large enough to produce shade?</td>
</tr>
<tr>
<td>2 years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 – 20 years</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

EVALUATION

- Did landowners attend workshops?
- Did workshops motivate landowners to plant streamside trees?
- Did water temperature actually drop when trees grew large enough to produce shade?
Communications Strategy

<table>
<thead>
<tr>
<th>Direct Communication</th>
<th>Change Agent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vectors</td>
<td></td>
</tr>
<tr>
<td>Activists</td>
<td>Veterinarians</td>
</tr>
<tr>
<td>Police</td>
<td></td>
</tr>
<tr>
<td>Parents</td>
<td></td>
</tr>
<tr>
<td>Teachers</td>
<td></td>
</tr>
</tbody>
</table>

Target Audience: Children

COMPETITION
Surface Water Management's Watershed Stewards are your link to resources and information.

They can answer your questions about streams, water quality, and habitat.
They can provide advice, ideas, or just listen to you.

No charge. No inspectors. Just answers.

Name
Address
City State Zip
Phone Email

Please call me. I have questions!
I'd like to schedule a free visit from a watershed steward!
Put me on your mailing list for classes and workshops!
I have a drainage problem.
I need to learn about stream issues.
I have erosion problems.
I'm concerned about water quality.

Washington Conservation Corps crew at work at Snow Creek, WA.
EXCHANGE

Washington Conservation Corp crew at work at Snow Creek, WA
METHODS MIX

Methods Mix:
1. Product
2. Price
3. Place
4. Promotion
8 questions to ask about any behavior change program:
1. What is the desired behavior?
2. What is the target audience?
3. How is the program oriented to the audience?
4. What behavioral theories inform and support the intervention?
5. What competes for the audience’s attention?
6. What actionable insights came from the audience research?
7. What is exchanged from the audience’s point of view?
8. What mix of methods, beyond raising awareness, are used to bring about behavior change?