

EPA NONPOINT SOURCE POLLUTION FOCUS GROUPS FINAL REPORT

Abstract

The Environmental Protection Agency (EPA) Nonpoint Source Management Partnership (NSMP) issued a contract to LISBOA, Inc. to conduct eight focus groups to better understand the attitudes, beliefs, feelings, and motivations of the general public toward nonpoint source pollution. Information obtained from respondents during these groups would be used to determine key messages, multimedia materials, credible intermediaries and messengers, a media outreach plan, and ways to overcome both real and perceived barriers to communication. The eight groups were scheduled in Salt Lake City, Philadelphia, Seattle and Atlanta. Two groups, segmented by age, were conducted at each site. One included 20-35 year olds; and the other 36-60 year olds.

Almost no participants were familiar with the term “nonpoint source pollution,” and none could recall a public awareness campaign addressing the problem. Most said that the term seems non-descriptive and even confusing, and does not imply this is a pollution problem caused primarily by public behaviors. Many of the attendees were surprised to learn that they had already adopted a large number of nonpoint pollution prevention behaviors, however they were largely unaware that these behaviors collectively were reducing pollution caused by stormwater runoff. Most agreed that EPA should consider using a different term to describe this type of pollution, and preferably one that clearly emphasized “personal responsibility” for the problem.

The participants said that EPA should publicize the problem using primarily television and radio venues, although print media such as billboards and bus/subway transit ads. They recommended specific programming such as morning drive time and talk radio, television new magazines (e.g., 20-20, Dateline), evening video news releases, and the evening weather report. They indicated that most print is passé, and noted that they would likely not use the Internet to obtain information about the problem.

At some of the study sites, the younger respondents opined that when they were in school, the educational system did not seem to emphasize conservation and pollution prevention. They remarked that multimedia aimed at educating them must include production elements that uniquely target their age group. They cautioned that they pay little attention to generic messages that appeal to children and older adults. They suggested that ads for them should be bold, hard-hitting, irreverent (even “gross”) provocative, and feature youthful messengers. Music is also an important element for them. For many of the older adults, messages also can be bold and visceral, however a number of them indicated that these should be balanced with softer messages. Young children and animals can serve as effective messengers for this older age group.

Both the younger and older respondents suggested that it is important to demonstrate cause-and-effect relationships in all social marketing efforts. They said that simply being told about the problem is insufficient. They also need to be told specifically what actions they need to take to correct the problem. At the same time, they emphasized that they do not want to be told too many things at one time. The best approach is to identify one or two problems related to nonpoint source pollution, and then provide the corrective actions. Also, both age segments felt strongly that EPA should invest considerable resources in educating young children about the problem. These youngsters, in turn, would educate their family and friends, and also provide frequent pollution prevention reminders to adults.

Background

The Nonpoint Source Management Partnership (NSMP) is a collaborative effort between the U.S. Environmental Protection Agency (EPA) and States to identify, prioritize, and solve nonpoint source problems. The partnership has established seven workgroups to focus on nonpoint source needs. One of these, the Information Transfer and Outreach Workgroup, functions both to disseminate information about and promote behavior change with respect to nonpoint source problems and solutions. This Workgroup is interested in developing and implementing a research-based, audience focused social marketing campaign to promote personal responsibility toward preventing nonpoint source pollution around the home.

The NSMP proposed conducting a series of focus groups to better understand the attitudes, beliefs, feelings, and motivations of the general public toward nonpoint source pollution. Information obtained from respondents during these groups would be used to determine key messages, multimedia materials, credible intermediaries and messengers, a media outreach plan, and ways to overcome both real and perceived barriers to communication.

LISBOA, Inc. is a woman and minority-owned, SBA certified small and disadvantaged firm that has conducted numerous social marketing research and communication campaigns for EPA. LISBOA collaborated closely with EPA and the Information Transfer and Outreach Workgroup to develop and refine a focus group study plan to meet the key objectives of this study. The objectives were to determine the key social marketing messages and materials needed to not only inform the public about nonpoint source problems, but also motivate the public to act in a personally responsible manner to prevent this kind of pollution around the home.

Methods

LISBOA worked closely with the EPA Task Order Project Officer (TOPO) to develop a moderator guide (See Attachments). The focus group moderators used this guide to address important topics during the groups. The guide contained open-ended questions designed to promote discussion over the course of the group sessions. Also during the groups, the respondents were presented a variety of multimedia public service announcement concepts, and asked to offer their comments

EPA suggested conducting a total of eight focus groups at four study sites including Salt Lake City (UT), Seattle (WA), Philadelphia (PA), and Atlanta (GA). LISBOA established relationships with focus group facilities at these proposed sites.

LISBOA collaborated with EPA and the Workgroup to develop a respondent screener that specified the criteria for selecting the focus group attendees (Attachment 2). The primary group segmentation was age. At each site, one group was conducted with 21-35 year old participants, and one group with 36-60 year old respondents. A research assistant at each of the respective facilities selected worked with LISBOA to recruit fifteen participants for each group. Eligible participants were told they would receive a stipend of \$50 for participating in the two-hour session. Those selected for the study received confirmation letters, and were contacted by phone or e-mail the day before the scheduled focus group to ensure their attendance.

The LISBOA moderators used the discussion guide as the framework for conducting the groups. The moderator addressed all pertinent topics, and probed respondents to obtain the information needed to meet the study's objectives. At least fifteen minutes before the end of each session, the moderator conferred with the observers to determine if clarification was needed for any of the topics discussed.

The moderators developed structured topline summaries of key findings and observations at the end of each group (See Attachments). The research findings were reported discursively, often in the respondents' own words. The moderator reviewed videotapes of the focus groups. The raw data of the analysis included the words, phrases, sentences, and non-verbal responses of the respondents. The moderator looked for patterns emerging from the data to prepare this Final Report.

Key Findings – EPA Nonpoint Source Pollution Groups

Awareness of the Problem

Participants were unfamiliar with the term “nonpoint source pollution,” and found it to be confusing and non-descriptive. Also, they indicated that the term made them feel that there was nothing they could do personally to address the problem (i.e., nonpoint = no point).

“It doesn’t tell you anything.”

“It sounds like there’s nothing you can do.”

“It sounds like a non-blaming term.”

“Is it a code word for some government program?”

“You can’t say where the pollution comes from.”

“Stormwater runoff” was a more familiar term and concept, although most respondents viewed themselves as having a passive role with respect to this problem (e.g., stormwater runoff is most obvious during a hard rainfall). They suggested that it might be more effective to use a term that carries the implication of “personal water pollution”

“Stormdrain pollution, storm water pollution, or household water pollution.”

While some of the participants had heard the word “watershed”, few knew the definition of a watershed or could name their watershed. Most did not see the importance of understanding this term in order to understand the problem of nonpoint source pollution.

Respondents could not recall a public awareness campaign highlighting the problem of nonpoint source pollution. A number surmised that perhaps nonpoint source pollution is a new, or rapidly growing problem that EPA now wants to address.

Many people were already taking personal actions that prevent nonpoint source pollution (e.g., proper disposal of oil, solvents, and chemicals; elimination of pesticides and fertilizers), but were unaware that these actions actually addressed this problem.

“Of the 18-20 actions listed here, I’m doing maybe 60-70% of them. Is that unusually high?”

Many younger respondents indicated that they received little formal or informal education about conservation, pollution prevention, or other types of environmental stewardship. They added that the failure to emphasize these topics has resulted in them believing that modern technology must be adequate to address and correct any serious environmental issues.

“It’s like it dropped off when the ‘80s came. They kind of got away from it.”

“There’s a false sense of security. We don’t hear about it so we assume it’s fine.”

“It’s de-emphasized to the point where most people aren’t paying much attention to it.”

“Remember twenty years ago with recycling, Greenpeace, Earth Day? If lasted for a good five years, and then it trickled down. From the EPA standpoint, they can’t count on that (infrequency).”

“I definitely think it’s slacked off. There’s been no follow-through.”

In contrast, many of the older participants recalled both school coursework (e.g. ecology and conservation units) and public service announcements (Smokey the Bear, Woodsy Owl, and the Crying Indian) aimed at educating them about actions they could take to conserve the environment. The older respondents not only seemed more attuned to the multitude of environmental issues, but also were taking more voluntary personal actions to conserve resources and prevent pollution.

Respondents at some sites seemed far more aware and savvy about environmental issues than those at other sites. For example, both the younger and older Seattle respondents, while largely unaware of the term “nonpoint source pollution, mentioned a wide array of environmental concerns, and remarked that they believe people living in their area hear frequent messages about conservation and pollution prevention. Many of these messages, they said, relate to preserving the salmon’s river habitat.

“We are very big on recycling.”

“We have hazardous waste collection sites so people don’t dump their oil down the sewer.”

“I stopped using pesticides on the lawn entirely. My neighbors and I have talked about how close they are to Puget Sound and how pesticides can seep into the ground.”

“Saving the salmon is big here.”

“Do I need to buy the shrink-wrapped cardboard box when I need toothpaste? All I want is the tube.”

Concept Testing

Respondents generally agreed that a public awareness campaign targeting pollution prevention should include messages communicating both personal responsibility for the problem and personal actions that will ameliorate the problem. They remarked that messages describing this

problem in more general terms (e.g., a community problem) would not convey that personal action is the desired outcome of the initiative.

“You’ve got to bring it to the personal level, because it is an individual action that causes this.”

“Touch us personally. Show us the result of what each person has done to our water system.”

“It tells me to dispose of chemicals properly, but doesn’t lead me to action.”

“Tell me what I should do, and explain it to me. Instead of using fertilizer, use soil and compost.”

“Unless it happens to me it’s still someone else’s problem.”

At the same time, it’s important that messages are not “too ambitious” and try to communicate too much information and too many requests.

“Ads try to stick in twelve different things you can do. Why not just stick to one and tell us why we’re supposed to do it. Don’t just say ‘don’t so this.’ Tell us what we’re supposed to do.”

“Too much information at once doesn’t work. It needs to be a simple message, even if you’re discussing a complex issue.”

Messages should clearly and dramatically demonstrate the immediate cause-and-effect relationship between personal polluting behaviors and resulting nonpoint source pollution.

“Something that would work would show how what we’re doing effects a chain of events.”

“You’ve got to state the problem and have a solution. It’s almost one-to-one.”

“If you see before and after results of what you’re doing, it motivates you to do more.”

“Show motor oil, pesticides and waste going down a stormdrain. Then show everything funneling into a drinking glass.”

“Start with clear water at the top of a mountain and show how pollution affects it as it goes down.”

Messages aimed at educating a younger audience must include production elements that uniquely target their age group. They pay little attention to generic messages that appeal to children and older adults. They suggested that ads for them should be bold, hard-hitting, irreverent (even “gross”) provocative, and feature youthful messengers. Also, these messages do not have to be entirely believable (e.g., television PSA showing motor oil seeping from microwaved frozen fishsticks; animals talking about the disgusting polluted water). Music is also an important element for them.

“You’ve got to have images that tie into young people, like the Taco Bell dog.”

“You need to make it cool to wash your car on the lawn, and bring your oil to the gas station.”

“I think you’ve got to play off something that’s out there. Have Titanic hit a great big pile of trash, or oil cans.”

“Disgusting works; the grosser the better.”

“Britney Spears with a gas mask on.”

“For me, everything today has to be hot girls; bathing suits, Maxim, and beer commercials.

“Music gives you emotion.”

“Use something popular, like Blinky the Three Eye Fish from the Simpsons.

“Show a young star with blackened teeth holding a glass of dirty water.”

“The ‘Mother Earth’ thing doesn’t work.”

Messages linking nonpoint source pollution to adverse health consequences seem to be both attention-getting, relevant and motivating, particularly to younger respondents. These participants seemed particularly concerned when told that drinking water (both from treatment plants and commercial bottlers) is not routinely tested for certain contaminants. Also, they expressed concern over the relationship between nonpoint source pollution and food contamination. Messages relating nonpoint source pollution to contamination of recreation areas are also relevant and highlight that even if water treatment plants make your water safe to drink, this technology does not make the lake or river in which you swim any cleaner.

“Contaminated rivers leads to diseased fish leads to heath problems.”

“People aren’t interested unless something direct happens to them. Like if I drink the water, I’ll get sick. If it doesn’t happen to me, why would I be motivated?”

“It kind of hits you because it’s going into your body.”

“It has to hit home. It has to directly affect us. If you’re taking that into your body, it gives you the creeps, the chills.”

“Something’s not connecting at the end of all of these ads. There has to be an impact on health. If it has an effect on health, you’ll react.”

“Bring it down to a health issue. A seal or two dying doesn’t do it for me.”

Messages should challenge the common misconception that industry is the major contributor to river pollution. The respondents were generally surprised to learn that most river pollution is caused by the public, and offered that while people often view statistics with skepticism, a simple statement of fact can be persuasive.

“I always think that it’s Exxon’s or GE’s fault. I don’t think it’s ever brought out in the media reports that it’s us.”

“Until the big oil companies make sacrifices to develop new technologies, I don’t see the population going toward saving the environment.”

“The big companies are the big contributors to the majority of environmental problems.”

Messages suggesting that a person should talk to a “polluting” neighbor elicited mixed reactions. For example, while most agreed they would talk to a close neighbor or friend whom they observed dumping oil or solvents down a stormdrain, they would be reluctant to approach a person they did not know well. Some added that in these times, the other person might interpret a low-key approach as confrontational, and could react in an unpredictable (e.g., aggressive or violent) manner.

It is important to develop a series of interrelated multimedia messages with a single “look and feel.” For example, the respondents liked the recurring theme of the “Don’t Waste Utah” campaign. They remarked it would be effective to use television and radio public service announcements to “brand nonpoint source pollution, and then use established and recognizable messages and images on billboards, collateral materials, and premium items.

Outreach Venues

Radio and television were mentioned as the more preferred venues for providing the public with information about nonpoint source pollution. Many respondents said they do not take the time to read flyers, brochures, newspaper and magazine articles. Some noted that billboards are probably the most effective type of print communication. They reacted unenthusiastically to using the Internet as an educational venue, noting that they tend to use electronic communication for e-mail and entertainment.

“Use TV; everything else is advertised on TV.”

“Buy air time. They claim that advertising on TV sticks.”

“We’re all watching TV. We don’t want to stop to read.”

“When we get home we sit down and watch TV.”

“Try radio advertising, both AM and FM. You need to do it repetitive in order to brand it.”

“Print is passé; it’s sad but true.”

“The average person will not read in-depth, complex print with serious details.”

“I get mail like those pamphlets and sometimes will trash it before I read it.”

“You need to use print strategically with billboards and bus ads.”

Talk and news radio was mentioned as the best type of radio programming for information about nonpoint source pollution. Also, radio stations could offer pollution prevention tips during the traffic and weather reports. Education offered via television could include stories on programs such as Dateline, 60 Minutes, and 20-20; video news releases during the nightly news, and creative public service announcements featuring local and national personalities.

Many of the respondents make an effort every night to watch the area weather report, and oftentimes have a favorite forecaster. They remarked that nonpoint source pollution prevention tips from the meteorologist as part of the weather forecast could have a very positive impact on both awareness and behavior change.

“Tips would be attention-getting.”

“Tack it onto the weather.”

“Everyone watches the weather.”

“Present it through the meteorologists in a regular way, then people would tend to look forward to it.”

Both younger and older respondents emphasized the importance of EPA working with schools to develop and implement programs targeting young children with information about nonpoint source pollution. Such programs could explain the problem in simple and relevant terms, and describe the kinds of actions that kids and their family members can take to prevent this (and other) kinds of pollution. They said this would have a two-fold benefit. First, it would increase children’s awareness of the importance of pollution prevention and conservation as important matters. Secondly, children would probably assume an active role as environmental educators by bringing home this new information and convincing their caregivers, siblings, friends, and other family members to take positive actions to prevent pollution.

“You have to look at it over the long haul. Eventually every four year old will be a twenty year old.”

“You’re going to have an instant response with kids.”

“Kids have been very effective getting the ‘quit smoking’ message out.”

“Trying to affect short-term change with people like us [age group] is going to be very tough.”

“Your target should be a 30-year target. Train the people who are most trainable right now – kids.”

“Teach the kids and it will spread, they have a lot of impact and if they notice that you’re doing something you shouldn’t (like dumping your car oil) they’ll bring it up.”

ATTACHMENTS

Respondent Screener – EPA Nonpoint Source Pollution Groups

Note to Recruiter: recruit **two groups** of adult respondents

My name is () and I'm calling for LISBOA, Inc., a market research firm in Washington, DC. We are recruiting for an upcoming focus group in which participants will be asked to share their thoughts and feelings about pollution prevention and review some messages and materials about caring for the environment.

The group, which is scheduled for () at () a.m./p.m., will take place at () and last between ninety minutes and two hours. Participants will be paid \$50.00 for their time. Are you interested in attending? (if yes, continue; if no, thank and terminate). I need to ask you some questions to determine if you qualify to participate in the group.

Age

- 21-35, **Group 1**, continue
- 36-60, **Group 2**, continue

Sex

- male, at least 4 per group, continue
- female, at least 4 per group, continue

Race/ethnicity?

- non-Hispanic white; at least 6 per group, continue
- other; at least 3 per group, continue

Household Income

Note to recruiter: Use area demographics

- Below 50th percentile; at least 3 per group, continue
- At or above 50th percentile; at least 3 per group, continue

Note to recruiter: Ask the following five questions, and continue if the respondent answers yes to at least 2 out of 5.

1. Do you live at a residence where you are responsible, either personally or using a service, for lawn care such as mowing and fertilizing? yes no
2. Do you own a dog that spends time outdoors? yes no

3. Do you change your vehicles' motor oil at your home? yes no
4. Do you maintain an outdoor garden? yes no
5. Do you wash your car at home? yes no

Do you hold strong anti-environmental attitudes or feelings?

- no, continue
- yes, thank and terminate

Do you or any member of your immediate family work for the Environmental Protection Agency, U.S. Department of Agriculture/U.S. Forest Service, or any organization that deals primarily with environmental matters?

- no; continue
- yes; thank and terminate

Do you or any member of your immediate family work for a market research company?

- no; continue
- yes; thank and terminate

Have you participated in a focus group in the past six months?

- no; continue
- yes; thank and terminate

NAME: _____

ADDRESS: _____

TELEPHONE: _____ E-MAIL: _____

OCCUPATION: _____ GROUP ASSIGNMENT: _____

MODERATOR GUIDE

NONPOINT SOURCE POLLUTION FOCUS GROUPS

I. Warm-up

- Which environmental issues are of greatest importance to you?
- What are some personal actions you take to help protect the environment?
- What influenced you to take these actions?
- Which of your individual actions, if any has an impact on your water quality?

II. Overview

We've scheduled these focus groups because surveys and other research indicate that the general public has little information about **nonpoint source pollution**, which is a serious environmental problem. During the group, we're going to work together to develop some messages and strategies **aimed at changing personal behaviors** that contribute to nonpoint source pollution.

Definitions

Before we can do this, it's important that you understand what nonpoint source pollution is, and also become familiar with some of the terminology associated with this problem.

- A **watershed** is a land area that, due to its natural drainage pattern and geography, collects rainfall, snow melt, or irrigation that drains into a particular body of water.
- **Nutrients** are volatile and toxic organic compounds, such as fertilizers, that pollute a body of water. Nutrient management refers to actions designed to reduce nutrient runoff.
- **Nonpoint source pollution, also known as stormwater runoff**, occurs when water runs over land or through the ground in a watershed and picks up nutrients (pollutants) and deposits them into a body of water. It is the largest source of river pollution.

Key Facts

- Almost all Americans live in a watershed.
- Water is not a renewable resource.
- Rivers supply the majority of our drinking water.
- Tap water is rarely tested for animal waste and pollutants, and bottled water is not tested for safety and purity by the government.
- People's actions, rather than industrial sources, is the greatest source of river pollution.
- Nonpoint source pollution is the largest source of river pollution and water quality problems. This includes runoff from farm fields, lawns, roads, and parking lots.
- Sources of nonpoint source pollution include fertilizers, yard waste, pet waste, motor oil, paints and solvents, cleaning chemicals, and septic tanks
- Farms and cities in a watershed cause more water pollution than industrial facilities.

- Stormwater runs into local rivers, lakes, and streams without being treated by conventional treatment methods.
- Sixteen times more stormwater runoff is produced by a one-acre parking lot compared to a one-acre meadow.
- The major source of petroleum pollution in rivers, lakes, and bays is not from oil rigs, tankers, and refineries. It is from do-it-yourself oil changes and improper disposal of waste oil down drains.
- A person dumping a quart of oil down a storm drain creates an oil slick that covers two acres.
- Forty percent of the rivers and streams in this country are too polluted for fishing or swimming.

Personal Actions to Reduce Nonpoint Source Pollution

- Dispose household chemicals/solvents and motor oil safely and not down a drain or sewer.
- Inspect and repair leaky sewers and septic systems.
- Bury or flush pet waste.
- Minimize use of fertilizers.
- Eliminate pesticide use and use alternatives to chemical pesticides.
- Start a compost pile.
- Landscape with native plants rather than grass.
- Landscape with pest-resistant plants.
- When gardening on a steep slope, terrace and plant across the slope.
- Water lawns in the morning or evening when water evaporates slowly.
- Sweep lawn clippings and debris from patios and sidewalks instead of hosing them.
- Stabilize soil so that bare dirt is not exposed.
- Plant and/or retain trees and shrubs to stabilize shorelines.
- Wash your car on grass instead of the street.
- Minimize pavement on your property.
- Use porous products for driveways and yards.
- Crown and shape dirt/gravel driveways to shed water into vegetated areas.
- Re-route gutters so that rain does not go into the sewer system.

Previously Reported Barriers to Action

- People do not have enough time.
- People don't know how to help.
- People are not aware of the seriousness of the situation.
- People don't understand the problem involving storm drains and water quality?
- People don't understand the terminology.

Possible Motivations for Taking Personal Action

- Health concerns
- Protecting access to clean water.
- Protecting fish and wildlife.

- Protecting our national heritage.
- Protecting the scenic beauty of rivers
- Keeping restored waterfront in good condition.
- A shared, “family-friendly” educational experience for parents and children

What are the emotional “hot buttons” associated with nonpoint source pollution? What will grab your person’s attention? – probe for why they might care about water pollution, personal welfare, family/societal benefits, conservation of wildlife and natural resources

III. Concept Testing

Content

- What must be done to make information about nonpoint source pollution interesting, appealing and relevant to you?
- As we’ve been saying tonight, the goal of this group is to come up with ideas that will promote behavior change. What do you see as the best ways to get people to act on the basis of this new information?

Motivational Tools and Venues

Mascots/cartoon characters	Photos
Logos	Posters
Brochures	Displays
Billboards	Bumper Stickers
T-shirts and Promotional Items	Events
Multimedia PSAs and News Stories	Direct Mail
Educational Kits and Curricula	

Slogans [NOTE: This section was discontinued following the Salt Lake City groups]

Ending water pollution begins at your home
Water pollution is your dirty secret
Your actions can help keep our water clean
Take action today for clean water tomorrow
We all live down stream
What’s going on in your own backyard

Existing and Draft Materials

[Note to moderator: Show the respondents various visual concepts, one-at-a-time, and asked them to offer comments. Inquiries will include:]

- What is your immediate reaction to this?

- What does it say personally to you?
- What do you think is the intended message?
- How believable is the concept?
- How appealing is the concept? What, if anything would make it more appealing?
- How understandable is the concept? What, if anything would make it more understandable?
- What could be done to improve the concept?

[As appropriate, have the respondents rank order their preferences.]

- What is the best way to present information about nonpoint source pollution without raising antagonism or defensiveness?

IV. Outreach Strategies

- Which media venues do you most prefer for getting information about things you can do to protect the environment?
- How about non-media venues? – (Probe for reactions to grassroots efforts and what motivates them to become involved in community projects)
- What are the best venues to reach you and your neighbors with information about nonpoint source pollution?
- Which “windows of opportunity” are the best for communicating this information?
- Who are the most credible intermediaries and outreach partners for the providing information to the public?
- What are the best ways to conduct outreach to these intermediaries?

TOPLINE SUMMARIES

Nonpoint Source Pollution Focus Groups Topline Summary / Salt Lake City, UT 21-35 Year Olds

Environmental Concerns

The respondents cited numerous concerns or issues pertaining to the environment including clean rivers, air pollution, drinking water, city pollution, nuclear waste disposal, and litter.

Personal Actions

In response to their concerns, they have taken a number of personal actions. These included:

- *“Teach our kids about pollution and the environment.”*
- *“Walk rather than waste gas.”*
- *“I try not to litter.”*
- *“Get cars inspected.”*
- *“Clean up highways; pick up trash.”*

When asked to state some actions they take to reduce water pollution, one commented that she *“tried not to use chemicals in the yard, because that’s what washes down the gutters.”* Others could not think of any specific behaviors, with one commenting *“the water that comes to us (tap water) we can’t do much to.”*

Knowledge of Nonpoint Source Pollution

None of the respondents was familiar with the term “nonpoint source pollution.” After the moderator shared information about the problem and ways to remedy it, some of the respondents expressed their concerns over water quality in their area.

- *“Where I live its really gross water with minerals from the mines.”*
- *“Water is just so important for you to be well as a person and as a community.”*
- *“Living here in the desert, water becomes critical.”*
- *“It looks fine now; it’s good for us, but what about for our kids.”*

Others were less concerned about the seriousness of the problem.

- *“I think we’ve all grown up with the assumption that water goes down the mountain, gets treated and cleaned, and comes out your tap or shower.”*
- *“Water pollution just isn’t something you think of day-to-day.”*
- *“I don’t think I can do anything personally, and I wouldn’t be motivated to change much in that regard.”*

Some shared the perception when they were in school; the educational system did not emphasize conservation and pollution prevention.

- *“It’s like it dropped off when the ‘80s came. They kind of got away from it.”*
- *“They used to have Earth Day TV spots; show what was happening everywhere. You don’t see media about it as spread out as before.”*
- *“There’s a false sense of security. We don’t hear about it so we assume it’s fine.”*
- *“I always think that it’s Exxon’s or GE’s fault. I don’t think it’s ever brought out in the media reports that it’s us.”*
- *“It’s de-emphasized to the point where most people don’t pay much attention to it.”*

A number remarked that most people have probably never heard of nonpoint source pollution as a problem, and likely have no idea of the “very simple things you can do every day” to lessen it.

- *“I read some of the things (on the list) and I already do a lot of them.”*
- *“To me they’re just very obvious things.”*
- *“You need to let people know how simple it is.”*

Concept Testing

The respondents viewed a large number of public awareness print concepts. They agreed that the most effective ones were those that showed the way in which personal behaviors directly affect the environment. They added that print ads need to be short, concise, and to-the- point. They suggested using elements such as quick captions, one-liners, and unusual pictures and colors.

- *“It would work if it showed how what we’re doing causes a chain of events.”*
- *“Start with clear water at the top of a mountain and show how pollution affects it as it goes down.”*
- *“With too much I’m not going to read it.”*

Some recalled an effective anti-littering campaign, “Don’t Waste Utah.” The protagonist of the PSA campaign was modeled after the post-Apocalypse Mad Max film character.

- *“It was tied to a movie, and had a character we all liked. You automatically tied it to ‘this guy is really cool.’”*
- *“It’s like everyone waited every month to see what he did next.”*
- *“It was like if you littered you were a disgusting person.”*

The participants commented that most of the sample television PSAs had little impact. They added that none of the PSAs seemed targeted toward their age group,

- *“You’ve got to have images that tie into young people, like the Taco Bell dog.”*
- *“I think you’ve got to play off something that’s out there. Have Titanic hit a great big pile of trash, or oil cans.”*
- *“The ‘Mother Earth’ thing doesn’t work.”*

They also emphasized that television ads should also emphasize the cause and effect.

- *“The duck going down the storm drain shows the path where it goes.”*
- *“Show kids playing in water and someone upstream dumps something horrible down a storm drain, and it goes right to the kids.”*
- *“Contaminated rivers leads to diseased fish leads to heal problems.”*

The respondents also remarked that if spokespersons are selected, they should have unique appeal to their age demographic.

- *“Seinfeld and Kramer”*
- *“Britney Spears with a gas mask on.”*
- *“Show a young star with blackened teeth holding a glass of dirty water.”*
- *“Crocodile Man.”*
- *“Friends.”*
- *“Just use people in our own age group.”*

**Nonpoint Source Pollution Focus Groups
Topline Summary / Salt Lake City, UT
36 – 60 Year Olds**

Environmental Concerns

Water pollution	Auto emissions
Air pollution	Land cleared for mining and gravel pits
Noise	Everyone lives downstream
Overpopulation	Fossil fuels
Eco-terrorism	Littering
Trash/landfills	

Personal Actions

They remarked that they engage in a number of personal behaviors aimed at reducing pollution and conserving resources.

- *“I recycle.”*
- *“I use plants that don’t require as much water.”*
- *“Alter watering practices.”*
- *““Litter campaigns.”*
- *“Recycle turpentine, paints and oil.”*

They said that there a number of important factors that motivate them to take action.

- *“My dad when I was a kid.”*
- *“Civic pride.”*
- *“Gaining knowledge about desert landscaping.”*
- *“Recycling containers at homes.”*
- *“My spouse and one of my children got involved.”*
- *“During my first trip to Greece, I saw the trash along the roadways was two inches to two feet deep.”*

- *“The more you conserve water, the cheaper your water bill will be.”*

None of the respondents was familiar with the term nonpoint source pollution.” After the respondents were given some facts about the problem, they remarked that they found this new information to be very surprising and motivating. Many noted that what they read contradicts the commonly held assumption that business is the major contributor to water pollution. They further commented that it is important for people to understand that they can adopt a number of simple behaviors that can make a difference in the severity of the problem.

- *“The average consumer has no knowledge about this.”*
- *“If you see before and after results of what you’re doing, it motivates you to do more.”*
- *“My actions can make a difference, but which actions, and what difference do they make.”*

A number remarked that they are already engaging in many of the recommended behaviors

- *“Of the 18-20 actions listed here, I’m doing maybe 60-70% of them. Is that unusually high?”*
- *“A lot of this has been communicated to us in our water bills.”*
- *“I didn’t know everything I was doing was under nonpoint source pollution.”*

The attendees said that emphasizing adverse personal health effects related to nonpoint source pollution could be very motivating. In addition, they said messages should carry a personal “call to action.”

- *“People aren’t interested unless something direct happens to them. Like if I drink the water, I’ll get sick. If it doesn’t happen to me, why would I be motivated?”*
- *“You have to alarm people. Tell them how to fix it first, and the consequences if they don’t.”*
- *“You’ve got to bring it to the personal level, because it is an individual action that causes this.”*

Concept Testing

After viewing some of the print public information materials, the respondents remarked that for a print ad to be effective, you must be able to personally relate to, or even picture yourself in, the ad. They also noted that the ad should include simply state both the problem and the solution(s), and include a call to action.

- *“I have to identify with it, and do so immediately.”*
- *“I could see myself in each of those pictures and could see the end results (i.e., pollution) I don’t want.”*
- *“You’ve got to state the problem and have a solution. It’s almost one-to-one.”*
- *“It tells me to dispose of chemicals properly, but doesn’t lead me to action.”*
- *“You need to simplify the message. There’s too much small print.”*

The respondents said that most of the radio PSAs were unappealing. They added that effective spots must be catchy and stimulate strong visual images. The reaction to the television PSAs was also largely unenthusiastic. The respondents offered a number of suggestions for developing better PSAs.

- *“I’m very uncomfortable with ads telling me to tell someone else what to do. I want them to tell me what to do.”*
- *“Show me what to do, and show me fast.”*
- *“The last one made my head spin. Tell me just one or two things. You’re not going to cover eight things.”*
- *“Just say that anything you put in the ground goes into your water.”*
- *“Something’s not connecting at the end of all of these ads. There has to be an impact on health. If it has an effect on health, you’ll react.”*
- *“Unless it happens to me it’s still someone else’s problem.”*
- *“You can do things in a special effects manner to show people what can happen.”*

Nonpoint Source Pollution Focus Groups Topline Summary / Philadelphia, PA 21 – 35 Year Olds

Environmental Concerns

- Air pollution
- Water contamination
- Ozone depletion
- Municipal waste
- Rain forests
- Conservation of resources

Personal Actions

When asked about pro-environmental actions they take, they offered the following:

- Recycle
- Compost
- New orange cleaner
- Use recycled paper
- Turn water off when brushing teeth
- More efficient cars
- Park cleanup

The respondents had difficulty offering information about ways to reduce water pollution, noting that they view this as more an industrial problem.

- *“Personally, I can’t think of anything we might do in my family or home.”*
- *“I never really thought of this as an issue for myself.”*
- *“It appears more for the government to regulate it in terms of industries. Through the EPA, we as citizens look for the government to eliminate these concerns.”*
- *“The individual household, in the whole scheme of things, is so miniscule.”*

None of the respondents had heard of nonpoint source pollution. After reviewing some of the facts associated with the problem, they provided numerous comments.

- *“From my perspective, there are a lot of things here that can be done.”*
- *“A simple thing like watering the lawn in the morning or evening, most people do that.”*
- *“I can abide with everything else except watering my car on the lawn.”*

- *“To begin with, I wouldn’t do things like dump oil in good conscience.”*
- *“Porous products for driveways? Is concrete OK? I can see having my driveway concrete instead of tar.”*
- *“You have to look at the big picture. If you destroy the lakes and streams, you’re going to run out of food, of fish.”*

Many of the respondents, when asked, indicated that they did not get much formal education about pollution prevention and conservation.

- *“Remember twenty years ago with recycling, Greenpeace, Earth Day? It lasted for a good five years, and then it trickled down. From the EPA standpoint, they can’t count on that (infrequency).”*
- *“I definitely think it’s slacked off. There’s been no follow-through.”*
- *“I remember watching cartoons when I was a kid and they always threw in the crying Indian. It was powerful. You don’t see that anymore.”*

Possible Motivators

The respondents indicated that most effective ads have a powerful emotional connection.

- *“The Indian sitting on top of the hill with all that trash around, and the tear coming down his cheek got you emotionally involved.”*
- *“This is drugs, this is your brain on drugs. You break the egg, and that’s my brain splattered all over. Sizzling in the frying pan. It was blunt, simple, and very much to the point.”*
- *“Smokey the Bear. He looked really sad after the forest burned down. It made me not want to play with matches.”*
- *“Give a hoot, don’t pollute. That stuck with me about cleaning the environment. It had a catchy lyric.”*
- *“The Mitsubishi Eclipse tune. It’s catchy. No matter where I am I can hear it. I don’t even like the car, just the tune.”*

The attendees also offered that ads targeting their age demographic should contain certain elements.

“For me, everything today has to be hot girls; bathing suits, Maxim, and beer commercials.

- *“Music gives you emotion.”*
- *“Use something popular, like Blinky the Three Eye Fish from the Simpsons.”*
- *“I think for our age group, we’re all in a fast paced career minded mode. It has to be something we can do quick when we’re on the go.”*
- *“The message and the request has to be short and easy.”*

Some of the respondents indicated that the best use of social marketing funds would be to educate young children about nonpoint source pollution.

- *“You have to look at it over the long haul. Eventually every four year old will be a twenty year old.”*
- *“You’re going to have an instant response with kids.”*

The respondents were asked about the potential effectiveness of meteorologists as spokespersons for nonpoint source pollution. Almost all said they tune in the evening weather forecast, and agreed that the local forecaster could assume this role, providing a pollution prevention “tip of the day.”

Concept Testing

The respondents said that print advertising for their age group is largely ineffective. They added that they rely on radio and television for most educational information. They reacted favorably to the radio spots tested, as well as the “Fishsticks” and “Don’t Waste Utah” spots. Effective elements included disgusting visual images, humor, sound effects, and personal health relevance.

- *“It was funny; the dog putting his paws over his eyes, and kicking the guy out for littering.”*
- *“It kind of hits you because it’s going into your body.”*
- *“Disgusting works; the grosser the better.”*
- *“It has to hit home. It has to directly effect us. If you’re taking that into your body, it gives you the creeps, the chills.”*
- *“It scares you. It makes you think about the next time you dump something down the drain.”*

**Nonpoint Source Pollution Focus Groups
Topline Summary / Philadelphia, PA
36 – 60 Year Olds**

Environmental Concerns

Hazardous waste	Water purification
Pollution	Jet plane exhaust
Energy	Ozone depletion
Oil spills	Nuclear waste
Clean energy	TV and X-ray radiation
Not reforestation	Radon gas
Water safety	Indoor air quality
Chemicals on lawns	

Personal Actions

- Carpooling
- Recycling
- Indoor water purifier
- Less aerosol cans
- Using non-hazardous lawn chemicals
- Proper disposal of oil and paint
- Using biodegradable detergents
- Using proper pool chemicals

When asked about specific actions to prevent outdoor water pollution, the respondents mentioned the following:

- *“Don’t throw litter into the ocean.”*
- *“Don’t dump into storm drains. I recycle my oil at Pep Boys.”*
- *‘Keep my septic pumped’.*
- *“Don’t use lawn chemicals.”*

Knowledge of Nonpoint Source Pollution

None of the respondents was familiar with the term “nonpoint source pollution.” After reading a handout about the problem, some asked about the duration and the severity of the problem. Also, a number wanted to tie the problem back to big business.

- *“If people are the greatest source, where are they getting their products from – big business!”*
- *“Why doesn’t EPA force big companies to go back to reusables?”*
- *“How do you convince people to dispose of motor oil properly and use environmentally friendly fertilizers? Answer – restrict it; don’t let the manufacturers make something that will hurt the environment.”*

Possible Motivators

When asked how to motivate people to take positive actions, several of the respondents said that the problem should be framed as a health concern.

- *“Bring it down to a health issue. A seal or two dying doesn’t do it for me.”*
- *Be direct, and establish a health link.”*
- *“Can this have a lot to do with people dying from cancer? After reading this, I think it definitely can.”*

The respondents spontaneously provided numerous suggestions for marketing the nonpoint source pollution key messages to the public.

- *“Use TV; everything else is advertised on TV.”*
- *“But air time. They claim that advertising on TV sticks.”*
- *“Billboards, newspapers, and movies.”*
- *“People should get a little kickback for recycling their oil.”*
- *“You need to localize it. Philadelphia is different from other places. The problems in Utah are different from the problems here.”*
- *“Remember the ‘brain on drugs’ ad? It was very effective.”*
- *“Show someone spraying pesticides on a lawn, and then a baby sitting on the lawn eating a cookie.”*
- *“You need to get high powered advertisers to create an idea that’s very catchy.”*

Most agreed that any social marketing message must include a personal appeal.

- *“The message must be personal. Tie health to pollution, and it must make you think about your own family.”*
- *“The word ‘health’ in conjunction with pollution. Tie it up to your family.”*
- *“Your family is at a lake, and an oil-covered creature comes out of the water, only it’s your child.”*

Concept Testing

The respondents reacted positively to the “Fishsticks” PSA.

- *“That’s great.”*
- *“Oh yeah, that’s a real good one.”*
- *“It’s an eye catcher*
- *“It wakes you up. It shows what you throw away and that it comes back.”*
- *“It doesn’t have a lot of jargon.”*
- *“It scares you to see how much damage has already been done.”*
- *“There used to be a commercial where you turned on a faucet and sludge came out. It’s like that.”*
- *“If you ran this commercial as a movie trailer, you could then run it on TV and more people would recognize it.*

They also liked the “Don’t Waste Utah” spots, although they said that these *were “not as strong” as the “fishsticks” ad*. One recalled the PSA featuring the crying Indian, and remarked that *“you could feel the pain.”*

Finally, they offered positive comments in response to the ‘talking animals’ TV PSA.

- *“It was cute and adorable.”*
- *“It was like Dr. Doolittle.”*
- *“The only problem is that people might just look at it and laugh.”*

The radio spots tested were also attention getting, with one respondent commenting that *“I think this is a very appropriate time because there is a higher level of concern about what’s happening in the world.”*

They mentioned that print is not an appealing medium for them.

- *“We’re all watching TV. We don’t want to stop to read.”*
- *“When we get home we sit down and watch TV.”*
- *“I bet mail like those pamphlets and sometimes will trash it before I read it.”*

The respondents were asked about the potential benefit of using local meteorologists as spokespersons for the problem of nonpoint source pollution. Most said they watch the weather forecast every night, and remarked that it might be good for the meteorologist to provide a “tip of the day.”

- *“Tips would be attention-getting.”*
- *“Ninety percent of the time they (TV) won’t lose any advertisers based on the list of actions to take to prevent pollution.”*
- *“Present it through the meteorologists in a regular way, then people would tend to look forward to it.”*

The respondents concurred that EPA should consider changing the term “nonpoint source pollution.”

- *“It doesn’t tell you anything.”*
- *“It sounds like there’s nothing you can do.”*
- *“Stormdrain pollution, storm water pollution, or household water pollution.”*

**Nonpoint Source Pollution Focus Groups
Topline Summary / Seattle, WA
21-35 Year Olds**

Environmental Concerns

Air quality	Pesticides
Power generation	Cigarette butts
Water quality	Homelessness
Superfund cleanup	More roads
Oil spills	Overpopulation
Management of natural resources	Food supply and safety
Terrorist activity	Recycling
Bioterrorism	Alternate energy sources
Litterbugs	Waste

Personal Actions

Ride a bike	Electric mower
Bought a front load washer	Wash car infrequently
Use public transportation	Keep car serviced
Buy organic milk	Carpool
Shorter showers	Telecommute
Recycle	Drought tolerant landscaping
Low flow toilets	Don't water lawn
Pick up trash	Make house energy efficient

With respect to water conservation, they added the following:

Only flush when we have to
Use compost
Don't use chemicals or insecticides
Less laundry detergents
Organic based weed control
Biodegradable soap

Some of the respondents initially expressed their concern that until big companies do more to protect the environment, there is little personal impact they can have on the pollution problem.

- *“Until the big oil companies make sacrifices to develop new technologies, I don't see the population going toward saving the environment.”*
- *“The big companies are the big contributors to the majority of environmental problems.”*

- *“What you do personally is kind of mute.”*

Knowledge of Nonpoint Source Pollution

None of the respondents was familiar with the term “nonpoint source pollution.” A number offered their ideas of what the term might mean.

- *“It sounds like a non-blaming term.”*
- *“Is it a code word for some government program?”*
- *“You can’t say where the pollution comes from.”*

After reading a handout about nonpoint source pollution, they provided the following reactions.

- *“I see a lot of people who just don’t care. My neighbor wants his lawn perfect, and that’s more important to him than anything else.”*
- *“You’re trying to educate a society that doesn’t want to be educated.”*
- *“You have to do a hard sell, like ‘this is your brain on drugs.’”*
- *“Scare tactics, like how it’s going to affect your children; your legacy. You want their lives to be nice.”*
- *Powerful images will work better. For the average person, in order to be impressed, they have to be able to see it.”*
- *“Throw some money toward my oil change. Give me a coupon for five dollars off if I recycle.”*
- *“Ads try to stick in twelve different things you can do. Why not just stick to one and tell us why we’re supposed to do it. Don’t just say ‘don’t so this.’ Tell us what we’re supposed to do.”*
- *“Too much information at once doesn’t work. It needs to be a simple message, even if you’re discussing a complex issue.”*
- *“Whatever you tell us, it has to be convenient. Life is so fast paced; a lot of us can’t do things that are environmentally sound because life is like this (snaps fingers quickly). I didn’t have the time to drive my recycling somewhere, but then they brought it to my house.*
- *“There’s no education; there’s no connection.”*

- *“Education about the problem might help. I think there’s a lot of ignorance.”*
- *“Tell me what I should do, and explain it to me. Instead of using fertilizer, use soil and compost.”*
- *You need to take the political stigma out of the environment. It’s not just a bunch of hippies wearing Birkenstocks.”*
- *“Let people know that we have just identified the worst polluter of our water and streams, and it is you.”*

Outreach Venues

The respondents also suggested the best media venues for reaching their age group with messages about nonpoint source pollution.

- *“It should include billboards, because we’re always driving or commuting.”*
- *“I never have seen environmental commercials that show senior citizens or young single people like me, only families.”*
- *“Print is passé; it’s sad but true.”*
- *“The average person will not read in-depth, complex print with serious details.”*
- *“You need to use print strategically with billboards and bus ads.”*
- *“Try radio advertising, both AM and FM. You need to do it repetitive in order to brand it.”*

They also noted that ads must appeal specifically to their age group.

- *“You need to make it cool to wash your car on the lawn, and bring your oil to the gas station.”*
- *“Like Jennifer Aniston in ‘the more you know’ ads.”*
- *“Use the (Seattle) Mariners and Seahawks (professional teams).”*
- *“Sex always sells, and athletes sell.”*
- *“The milk ads with the mild moustache. These made a difference in dairy consumption, especially among teens.”*

The respondents indicated, when asked, that it would be useful to have the local meteorologists provide tips about ways to reduce nonpoint source pollution.

- *“It wouldn’t hurt. They’re pretty messengers.”*
- *“They could give a tip of the day.”*

Concept Testing

The respondents offered mixed reactions to the “Fishsticks” PSA.

- *“Oh yeah.”*
- *“That’s excellent.”*
- *“No it’s not. I hate it.”*
- *“I think the visual part was effective, but it doesn’t end with what to do.”*
- *“I didn’t really engage you until the fork went through the fishstick.”*

They reacted favorably to the “Don’t Waste Utah” spots.

- *“I think those are great.”*
- *“It displays a sense of caring and a moral and an ideology.”*
- *“This seemed more like a personal think (than the fishsticks ad).”*

One respondent commented that he could see the value in broadcasting both PSAs.

- *“You need both; a hard core scare and a story.”*

Another respondent offered a suggestion for a television PSA. The other respondents reacted with enthusiasm.

- *“Show motor oil, pesticides and waste going down a stormdrain. The show everything funneling into a drinking glass.”*
- *“Brown water, yeah. You can go with that.”*

The respondents were then shown the River Smart print PSA.

- *“It’s a nice image, but the text is too small.”*

- *“It doesn’t tell me what I can do.”*
- *“‘Be smart about the things you do’ is so vague.”*
- *“There has to be some kind of gravity and importance brought upon the subject.”*

The respondents emphasized that for a PSA to be effective, it must provide the target audience with specific behavioral choices or directions.

- *“The lynchpin is the alternatives. If you don’t have alternatives, than what are you going to do?”*

Nonpoint Source Pollution Focus Groups Topline Summary / Seattle, WA 36 – 60 Year Olds

Environmental Concerns

This group of respondents stated being concerned about their water quality, air quality, recycling, the depletion of the ozone layer, urban sprawl, use of pesticides, and “saving the salmon.”

Personal Actions

The respondents recycle yard waste, oil, paper, glass, and aluminum cans. A participant said she and her husband “*recycle [their] wood.*” Another participant explained that his wife designed a method to water their lawn with rainwater. “*We have three 55 gallon drums under our gutters in the yard. And we use the rise water from the washing machine to water our plants.*” When asked what made them to out of their way to create this system for their yard, he explained, “*initially the impetus was to save money. But now we have also stopped using pesticides.*” Another respondent mentioned her awareness of the amount of waste that results from packaging consumer goods.

- “*We are very big on recycling.*”
- “*We have hazardous waste collection sites so people don’t dump their oil down the sewer.*”
- “*I stopped using pesticides on the lawn entirely. My neighbors and I have talked about how close they are to Puget Sound and how pesticides can seep into the ground.*”
- “*Saving the salmon is big here.*”
- “*Do I need to buy the shrink-wrapped cardboard box when I need toothpaste? All I want is the tube.*”

Knowledge of Nonpoint Source Pollution

Most respondents were silent when asked what nonpoint source pollution is. One of the participants guessed it could be “*pollution from manufacturing.*” Another said he “*suspects it is when pesticides go into the water table and create pollution somewhere other than the pollution source.*”

The respondents seemed genuinely surprised at the list of facts / statements about the causes of nonpoint source pollution. The fact that one quart of oil creates a two-acre oil slick grabbed their attention. One of the participants said, “*that is so awful.*” Another respondent was interested to

learn that native plants are better filters of pollution* than grass. She added that she could see herself changing her lawn from grass to native plants.

Possible Motivators

Personalizing the problem of nonpoint source pollution was a motivator indicated by all participants. One of them said that Snohomish county was conducting a watershed study “*to pinpoint the sources of pollution*” in the county. He indicated that it would concern him to know that pollution in the area where he lives comes directly from his own community.

Other participants mentioned that well-known public service campaigns, like Smokey the Bear (“Only you can prevent forest fires”), were effective because they carried the sense of personal responsibility. Participants listed additional reasons why the campaign was effective:

- It was informative.
- The message was consistent and frequent (“we heard it all of our lives.”)
- It showed how to prevent forest fires (“use a shovel to smother the fire.”)
- It targeted children who, in turn, transmitted the message to their parents.

Some of the participants said that simply making the information available would motivate people. One of the participants felt that just showing the facts / statements that were read to them in the group would motivate persons to change their behavior, “many people don’t act simply because they don’t know.”

Another powerful motivation was the idea that persons need to leave an inheritance for their children and grandchildren. “If you want your grandkids to enjoy the earth, you have to do something about it now.” Along those lines, another participant stated, “a lot of people live for camping / hiking / fishing. Show them how their actions affect their lifestyle.”

Money can motivate a change in behavior. Examples given included “water bills go[ing] sky high if you don’t conserve water.” Another respondent felt that people should be “tariffed for overuse of water.”

Some respondents felt that people who promote nonpoint source pollution by their actions should be reported to a watchdog group, “*There should be a number to a local agency to report violators, and [the agency] could take care of it.*” Others, who were concerned that reporting “violators” could instigate violence, thought it would be easy enough for them to point out the wrong behavior and its consequences if they saw one of their neighbors doing it. One of them suggesting saying something like, “Did you know what [pollution-causing behavior] really does?” The respondents made it clear, however, they would only say that to a neighbor with whom they felt comfortable and safe talking to.

* The majority of respondents did not refer to nonpoint source pollution by its name. They would usually identify it simply as “pollution.”

Children were mentioned as possible motivators in two ways. First, as messengers of the pollution prevention message. Second, as the individuals who will grow up knowing to do and not to do in terms of keeping lakes and rivers pollution-free.

- *“Kids have been very effective getting the ‘quit smoking’ message out.”*
- *“Trying to affect short-term change with people like us [age group] is going to be very tough.”*
- *“Your target should be a 30-year target. Train the people who are most trainable right now – kids.”*

Although the respondents did not deny being concerned about their health, this did not seem to be a believable motivator. When prompted to comment on their health possibly being affected, a couple of them suggested using images of animals with birth defects caused by pollution. One of them mentioned using a “two-headed frog.” Another suggested showing a bird with a birth defect, and a statement attributing the defect to pollution caused by people.

Finally, many of the respondents agreed that the message should be short and concise. People need to feel that they can manage what they are being asked to do. An effective campaign *“has to show them what has been done, what the problem is.”* They will be overwhelmed by a long list of what they are doing wrong. *“We don’t want to be inundated w/ information,”* added one of the respondents.

Concept Testing

The participants were shown three public service announcements. The first is known as the “Fish sticks” PSA. It features a narrator who explains that most people are not aware that everything they dump down their drain comes back to them sooner or later. Meanwhile, the image is that of a plate of fish sticks being placed in a microwave. When they come out of the microwave and cut into, motor oil oozes out of the fish stick.

The respondents were taken by surprise by the oil oozing out of the fish stick, but on the whole agreed that a convincing message needs to be somewhat shocking to grab their attention. They suggested that a more effective PSA would suggest alternatives to dumping motor oil down the drain, followed by a phone number to call for more information. Some agreed that it would have been more effective if it included a scene of the person dumping oil down the drain, followed by the oil-oozing fish stick.

- *“It’s gross, but why is that more gross than dumping oil?”*
- *“It should be gross because that is what is happening.”*
- *“Maybe you should add a visual of the oil being dumped.”*

- *“Tell me what to do instead.”*
- *“Telling me not to pollute doesn’t solve the problem.”*
- *“I would expect to see a phone number where I can find out what to do instead.”*

The next PSA they viewed was the “Save Utah” series, featuring a “Mad Max” style character/hero who cleans up litter that has been tossed out of cars. The respondents liked how the ads were entertaining and communicated the message without “nagging.” Other comments included:

- *“The litter bag reminds people what they are supposed to do – it gave them an option.”*
- *“It’s entertaining – it gets people to watch it.”*

The last television PSA they viewed showed different animals in a lake / river scene making comments about pollution in their water. The animal’s comments lean on the humorous side – the last being a deer complaining that the water “tastes like doggy-doo.” The respondents indicated that humor is effective to address this issue, but their attention seemed to center on the large corporations shown at the end of the PSA who sponsored it. One of the participants said, *“[this issue] must be important if large corporations are sponsoring it.”*

The participants also listened to a radio PSA that has the sound of water in the background and a narrator that explains that anything one puts on the ground ends in the water supply. The respondents seemed interested in it, and said they would listen to it if it came on the radio.

Outreach Venues

Some respondents felt that direct mail is “passé,” but others felt they would effectively reach a good number of people. One of the participants recalled being impressed and paying attention to a nationwide Federal mailing in 1986 informing people about HIV/AIDS.

Placing the message on Internet banner displays did not grab this focus group’s attention. Newspapers and magazines did not have a strong impact, either.

Having a local television weather personality offer tips to prevent nonpoint source pollution seemed a possible effective venue for the message. A participant felt “it would help” to have the weather person announce the area’s “pollution level” on a regular basis. Another participants added, *“If you use a lot of different [local] celebrities, it shows that it is a collaboration.”* One of the respondents said that one of their local newspapers prints how much energy is being saved due to the population’s conservation efforts.

Nonpoint Source Pollution Focus Groups Topline Summary / Atlanta, GA 21 – 35 Year Olds

Environmental Concerns

The younger group of respondents in Atlanta are concerned about their water quality, air quality, global warming, industrial regulations on dumping and the use of pesticides, and how the food supply may be affected by pesticides.

Personal Actions

The respondents did not indicate taking a significant personal role in pollution prevention. Most did not see a connection between their actions and the quality of their water, but one of the participants commented, *“Where is it all going? It’s got to be contaminating our streams.”* Other statements included:

- *“I buy organic foods to avoid pesticides.”*
- *“There’s not much I can do but move for legislation to improve our sewer system, and install a water filtration system in my house.”*
- *“We are so wasteful. There is so much packaging.”*
- *“I have control over who I vote for. The government is the only one with the resources and scope to take action.”*
- *“I stopped using aerosol hair spray. I don’t have kids but I want to, and I don’t want them growing up having to wear masks.”*
- *“I try to pump gas after dark in the summer. When you go out when it’s hot here, like in July, you can’t breathe.”*

Knowledge of Nonpoint Source Pollution

The respondents were not familiar with the term “nonpoint source pollution.” Many had questions after reading the list of statements and facts, and most were surprised to know that industry is not the primary culprit to water contamination.

- *“A lot of this makes sense. I hadn’t thought of it.”*
- *“It really caught my attention that oil spots in parking lots go to streams.”*
- *“If I wash my car on grass, and the grass puddles up, it’s still going to go down the drain, so it’s still going to affect the water.”*

Possible Motivators

Some of the respondents felt that educating the public would motivate them to change their behavior. Others felt they would be motivated to action if they knew what to do instead of the damaging behavior. One of the participants felt that he might be motivated if he received some sort of benefit or compensation.

- *“Education would help. I didn’t know all of this.”*
- *“Show alternatives to the damaging behavior.”*
- *“How will it benefit me to clean up my area? Will I get a kickback on my taxes?”*
- *“When I take my oil to Jiffy Lube to be recycled, I could get 75 cents back and maybe some written information about the problem.”*

Another possible way to motivate people is to show them shocking or surprising visual images of the damage they may be contributing to. A couple of respondents cited the aftermath of the Exxon Valdez oil spill off the coast of Alaska. Another respondent felt an effective PSA was the one encouraging people to stop smoking. It showed images of body bags of people who have died as a result of smoking.

- *“The Valdez visuals were profound. The ducks dead in the water were sad.”*
- *“People need to see what is the alternative of NOT caring for the environment.”*
- *Touch us personally. Show us the result of what each person has done to our water system.”*

One of the participants warned of “politicizing” the message because it would “turn-off” people who do not want to affiliate themselves with a political party or ideology.

- *“Environmentalism is so politicized. Political undertones alienate people. Avoid the buzzwords like ‘environmentalist,’ ‘acid rain,’ ‘greenhouse.’ People automatically assume certain positions.”*

As in the other focus groups, the respondents felt that children would be effective motivators and messengers.

- *“Educate kids. They will tell their dads to throw away oil properly.”*
- *“It starts there [with children]. They will grow up knowing the right way.”*

- *“You have to change the culture. Right now we are [focused on] me, and getting things done fast.”*

Message Testing

The participants were shown the “Fish Sticks” PSA. It features a narrator who explains that most people are not aware that everything they dump down their drain comes back to them sooner or later. Meanwhile, the image is that of a plate of fish sticks being placed in a microwave. When they come out of the microwave and cut into, motor oil oozes out of the fish stick. Their reactions included:

- *“It didn’t show the person doing the bad deed.”*
- *“How about doing one where you can see the dad dumping oil down the drain and then his kid eats a fishstick with oil in it?”*
- *“It’s subtle, but it gets the message across.”*
- *“Seeing a picture is better than putting it in a pamphlet. A lot of people may not read the information.”*

The next PSAs the respondents saw were the “Save Utah” series. It features a “Mad Max” style character/hero who cleans up litter that has been tossed out of cars. The respondents did not comment much about this spot, but they laughed and seemed to enjoy it. A couple of them said it reminded them of the “Crying Indian” PSA. Another said it was *“very funny but spiritual.”* Another participant thought it would be more relevant and grab his attention if it showed a well-dressed man in downtown Atlanta driving a Mercedes.

The participants enjoyed the radio PSA with the sound of water in the background. Again, a narrator explains that anything one puts on the ground ends in the water supply. It effectively allowed them to picture what the narrator described. Some of their reactions included:

- *“It’s a visual reaction.”*
- *“It makes me think of the last time I swam in the lake.”*
- *“The sound of the water conjures up visual images.”*

Outreach Venues

The respondents were asked to suggest believable spokespersons. They did not have a preference, other than they be from the local area. One of them said she feels “so-so” about the believability of the EPA. Another participant added that the focus should not be on who delivers the message, but on what the message is.

- *“Use local politicians.”*
- *“You have to have different people because everyone trusts different people.”*
- *“Use universities as mouthpieces.”*
- *“Don’t focus on who is saying it!”*

Without the moderator’s prompting, some of the respondents suggested having a local television weather forecaster give reminders about pollution prevention.

- *“Tack it onto the weather.”*
- *“Everyone watches the weather.”*

Another participant suggested working with a local Atlanta man who posts pictures of *“stupid things people do”* on his website. The participants could not remember his name or the website, but felt it would be a great place to show pictures of people *“sweeping their lawn clippings down the storm drain.”*

Nonpoint Source Pollution Focus Groups Topline Summary / Atlanta, GA 36 - 60 Year Olds

Environmental Concerns

The participants in the second Atlanta focus group, and the last of the eight groups, listed many of the same pollution problems that concerned the participants in the other groups. Clean water, air pollution, noise pollution, deforestation and depletion of natural resources, garbage disposal, and depletion of the ozone layer were mentioned. Other concerns included “poisonous insecticides” and the presence of preservatives in the food supply.

Personal Actions

A couple of the participants recycle newspapers, aluminum cans, batteries, and paint. They were asked what they do that may affect the quality of their water. Their replies indicated that they only thought of ways to improve it – not that their actions could have a negative effect on their water quality.

- *“I recycle my old newspapers. There are bins outside the church. I recycle cans. Every three weeks they are picked up.”*
- *“I have special waste bins that divide newspapers and cans.”*
- *“I recycle batteries and paint. I found out about it by reading.”*
- *“I use water filters.”*
- *“I use purifiers.”*
- *“I purchase spring water.”*

When asked what could affect their water resources, only one person mentioned substances they personally use.

- *“You have to be cautious about using pesticides and fertilizers.”*

Knowledge of Nonpoint Source Pollution

No one knew what nonpoint source pollution is. All participants were surprised at what they learned from the list of statements and facts that was read.

- *“I’m puzzled about what nonpoint source is. Is it a broad term used to describe lots of things?”*
- *“I am confused about what is storm water run-off.”*

[In response to the statement that 40% of streams and rivers are polluted.]

- *“That’s bad.”*
- *“It’s is like an epidemic.”*
- *“You would think that kind of thing wouldn’t happen.”*

Possible Motivators

The participants felt that educating the public about nonpoint source pollution and what they need to do to prevent it would motivate them to change their behavior. They also suggested targeting children with the message. Other participants felt that individuals need to be forced into correct behavior and fined for breaking the law. Respondents also felt that the “scare factor,” showing people the ugly effects of polluting the water supply would be effective.

- *“Put an ad in a magazine or somewhere that can be posted, like bulletin boards in churches or groceries stores, that can tell people where to dump their recyclables.”*
- *“The problem is education, people don’t know any better and campaigning is needed.”*
- *“Something that gets kid’s attention. Cartoon characters like McGruff.”*
- *“Bring in the lawmakers.”*
- *“Hitting people with fines, that’s the only way people respond.”*
- *“Have a community meeting and discuss it in groups.”*
- *“Teach the kids and it will spread, they have a lot of impact and if they notice that you’re doing something you shouldn’t (like dumping your car oil) they’ll bring it up.”*
- *“Bring in a famous person to campaign that is highly respected.”*
- *“Use the scare factor (to influence people.) For example, have an ad where a person is going to get a glass of water and someone yells ‘Stop! And the experiments conclude that the water is undrinkable.’ ”*
- *“People are motivated when they know they can make a difference.”*
- *“The news may be a good way to get to the people.”*
- *“It has to be everywhere. In newspapers, radio, television, and the Internet.”*

All felt that public awareness efforts should have a local flavor. Some of their reasons included:

- *“Because it hits me personally, it impacts more locally.”*
- *“It makes the communities more involved.”*
- *“Have the Boy Scouts help out [with recycling] with the elders.”*
- *“Maybe starting at the top (nationally), then get more local so it hits closer to home after getting the initial message.”*

Concept Testing

“Fish Sticks” PSA.

The respondents enjoyed this PSA and understood the message. They did not think it was overly gross, and agreed that it’s surprise ending got their attention. One of the respondents suggested adapting the spot to show, “a lake that’s contaminated and when they catch the fish and eat it, show the people getting sick from eating the fish.”

- *“Very good!”*
- *“It gets your attention.”*
- *“It’s not too graphically strong at all.”*

“Save Utah” PSAs

The female participants really enjoyed this series of PSAs encouraging people not to litter. The male participants also enjoyed them, finding them humorous and entertaining.

- *“He’s cute!” [the lead actor.]*
- *“Now that gets a woman’s attention!” [male participant]*
- *“It has a story to it, so you give it more attention.”*
- *“I love the dog!”*
- *“Commercials shown in series work well.”*

Radio PSA with sound of water in the background

The respondents liked the PSA, and said they would listen to it if it played while they were driving. They said they would listen to it the next time they heard it come on, as well. One of them suggested not using the term “nonpoint source pollution” and simply calling it “pollution” because the former may be confusing to most listeners.

- *“Good, short and sweet.”*
- *“It’s short and to the point, and people would listen.”*
- *“Maybe use just the word pollution instead of non-point pollution.”*

Print PSAs

The respondents were shown a number of print PSAs developed in various states. There was not much of a reaction from them. One of the participants felt they were “cluttered with information. Information overload.”

Outreach Venues / Key Messages

The respondents listed the following outreach vehicles and messages as appropriate and potentially effective in disseminating the information about nonpoint source pollution.

- *“The US Surgeon General would be a good messenger.”*
- *“National talk shows.”*
- *“Not the mayor of Atlanta. No one listens to him.”*
- *“Protect the children’s future.”*
- *“Dumping oil and its affects.”*
- *“Mention that 40% of our streams are polluted. That will hit hard. It did to me.”*
- *“Messages that say that tap water will have the taste of pollutants caused by people.”*

Observer’s Questions

The observer wanted to know how familiar the respondents were with certain pollution education and prevention activities occurring in the state of Georgia. Specifically, she asked about “River’s Alive,” a state-wide cleanup effort in Georgia, and “Georgia Adopt-a-Street.” They were not familiar with “River’s Alive,” but were aware of the “Adopt-a-Street” program. The observer also wanted to know how credible a source the Environmental Protection Agency is to the participants. All said they see the EPA as a credible source of information regarding the environment and pollution.