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Research Report:

Soil Erosion Advertising Test

Prepared for:
Maine Department of Environmental Protection

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Background

For a number of years the Maine Department of Environmental Protection has provided outreach to educate the general public about the effect of soil erosion on water quality and it has assisted with the implementation of steps to reduce soil erosion. Soil Erosion is, in fact, the single largest contributor to water pollution. Unfortunately, past surveys have shown that most of public has little or no knowledge that soil erosion is an important pollutant.

In order to assess the opportunity to increase the level of the educational effort and change these perceptions, the Maine Department of Environmental Protection engaged Market Decisions and Burgess Advertising to conduct a “test market”. Research would be conducted to assist in the development of a campaign; communications materials would be developed and then implemented in a limited area. The results of this campaign would be evaluated and then used to estimate funding levels necessary for a statewide campaign.

A key constraint for the test was the budget, development of all materials, purchase of the media and pretest and post test market research needed to be completed at a cost of \$60,000.

All steps in the research were conducted with the active participation and input from the Maine Department of Environmental Protection staff. This includes development of the focus group discussion guide, review of the focus groups, selection of the test markets, development of the logo and tag line, development of the radio ads, development of the newspaper ads, and the development of direct mail pieces.

Summary of Results

1. The communications program achieved a high level of advertising awareness, 31% recalled the advertising on an unaided or aided basis.
2. The newspaper and radio advertising appeared to be the most effective. The direct mail did not appear to be at all effective.
3. The communications appeared to have had an important effect upon some of the target population. For the first time 12% of respondents mentioned soil erosion when asked about important sources of water pollution. Of those who recalled seeing the advertising almost 70% could describe a specific action that could be taken to reduce soil erosion.
4. Many who recalled the advertisements seemed to only vaguely recall specifics of the advertising. For example, many respondents said that they saw the ads on TV when no ads were run in this medium. Many could not recall what the advertising was about. We suggest that this lack of in-depth knowledge may be due to issue not being directly relevant to many in the target market. Individuals may be concerned about water pollution, concerned about soil erosion, but may not see what they can do about it.

Study Budget

The research and the campaign were designed around a limited budget. The funds available precluded the use of TV advertising, and some research that would normally have been conducted for such a campaign was omitted. All other materials were developed in such a way as to reduce expenses.

Of the total funds available for the study, \$37,000 or 62% was spent on developing or testing the communications campaign, the rest was spent on delivery of the communications - printing, mailing or purchasing the media for the campaign. In future efforts, expenses from the initial work might not need to be duplicated. A much greater percentage of the funds available might be used for direct advertising costs such as printing or purchasing media.

Study Component	Materials Development, Planning and Research	Budget program delivery (ex. media buy, printing, etc.)	Total Budget
Focus groups	\$ 8500		\$ 8500
Advertising management	\$ 6300		\$ 6300
Concept and Logo Development	\$ 5000		\$ 5000
Radio Advertising	\$ 3000	\$12000	\$15000
Print Advertising	\$ 3000	\$ 3500	\$ 6500
Direct Mail	\$ 2600	\$ 6300	\$ 8900
Media Placement		\$ 1200	\$ 1200
Post Advertising Research	\$ 8600		\$ 8600
Total	\$37,000	\$23,000	\$60,000

Test Market Selection

To conduct a test with the limited funding available, it was necessary to select a market that was representative of the state and could be economically reached. This meant that we could not afford a major market like the Portland area and a smaller market had to be reached with local media without "wasting" media dollars on areas that are not part of the test. The Augusta, Maine area seemed to best meet our requirements. It has a major newspaper serving the region and several stations that primarily service listeners in the area. Further, the Augusta area includes a mix of demographic groups and a mix of geographic areas from urban to rural that would allow us to understand the effects of advertising on different population groups and different areas.

Initial Market Research

Market Decisions had, in the past, conducted research on awareness of soil erosion for the DEP and it had found awareness to be very low or nil. Summaries of this research are contained in Appendix D. For the purpose of the market test, we would assume that the awareness of soil erosion as a pollutant matched the results from previous statewide surveys. Increases in awareness above this would be assumed to be a result of the campaign.

Consequently, we elected to spend the available funds on two focus groups rather than spending limited funds on a market pretest specifically for the Augusta area. These focus groups would provide insights into citizen perceptions, attitudes and behaviors with respect to soil erosion and water pollution and would be used to test initial ideas on communications materials.

Initial Market Research (Focus Group) Findings

Two focus groups were conducted, one in Portland on January 30, 2001, to test citizens from an urban/suburban area and one in Augusta on January 31, 2001 representing more rural/ suburban participants. Key findings were as follows.

- 1) Participants in the groups cared a great deal about the environment. They are, at least on the surface, very knowledgeable about environmental issues and sources of water pollution. They could readily talk about many different issues and types of water pollution – from ones that are very obscure to ones that are prominent national stories. The diversity of issues discussed was remarkable.

This suggests that communication on the importance of soil erosion, as a source of water pollution, would reach a receptive audience.

- 2) Participants get most of their information about pollution from the media – and they recognize the emphasis of the media on sensationalizing issues.

Information on water pollution from a credible source is likely to be well received.

- 3) Participants appear to be concerned about many environmental issues – and are not necessarily capable of sorting which issue is in fact the most important.

Credible information on what is most important to focus on in order to reduce water pollution will be well received.

- 4) Soil erosion is not “top of mind” as a source of water pollution. Most do not know it’s a problem.

Consumers are unlikely to make stopping soil erosion a priority if they don’t know it is a problem.

-
- 5) Participants can understand how soil erosion could be a major source of water pollution – but will need information from a credible source to fully believe it.

Assertions that soil erosion is an important source or is the number one source of water pollution will need to be backed up by evidence delivered from credible sources.

- 6) Either of two logos presented generates attention and gets important messages across. Participants liked the logo showing a river and fish because it created an emotional response for protection. Participants liked the logo with a tree because it dramatically showed eroding soil.

By modifying the logo with the fish and the river to also graphically show eroding soil, this presentation may offer the best of both.

- 7) The tag line “It’s a dirty secret, soil erosion is the #1 source of water pollution” effectively generates attention and interest on the issue.

It may be preferable to use more than one tag line – an attention getting one followed by one that emphasizes individual action.

- 8) Participants suggested that the actions they could take to reduce soil erosion were impractical and others were unclear.

It is likely that this campaign will be very effective in generating awareness. Citizens are concerned about the environment, receptive to information about causes of pollution and the creative materials are on target and will attract attention and generate interest. The decision to take action may flow naturally out of this campaign – without much effort. Thus, the campaign will beg the question: What should I do?

Communications Materials

The campaign was designed as a coordinated set of materials and advertisements. A logo and a tag line were developed to be used in all communications. The advertising was to be placed in three different media: newspaper, radio and direct mail to maximize the reach with residents and allow various forms of communication to reinforce each other.

Logo and Concept Statements

Logo and concept statements were developed to unify the various components of the campaign.

The logo provides visual cues that remind citizens that they are seeing messages about the same topic. In this case, to maximize the effectiveness of the campaign it was decided to develop a logo that directly reinforces the primary message of the campaign. The logo used includes images that were identified in the focus groups as being relevant and important.

The concept statement positions the key message of the campaign and was developed into a tag line, which serves as a verbal cue, to remind citizens about the most important theme of the campaign. Here again, various alternatives were tested in the focus groups. Since several other messages were seen to be effective in delivering specific messages, it was decided to use these as “headlines” in specific communications pieces. A new tagline was constructed to reinforce the image of the logo and unify all the messages used in individual ads.

Newspaper Advertisements

Three different newsprint ads were developed based on the comments made in the focus groups. Each of these ads was three columns by ten inches or approximately ¼ of a page. Copies of these advertisements are in Appendix A.

Radio Advertisements

A series of three 60-second radio spots were developed based on information from the focus groups. Scripts of these spots are contained in Appendix B.

Direct Mail Pieces

Four different “4 by 6” postcards were developed to reinforce the messages in print and radio. Copies of these cards are in Appendix C.

Media Placement

The newspaper advertisements, radio spots and direct mail pieces were inserted, aired or mailed in a four week period starting the week of June 4th and running through the week of June 25th. The campaign was complete before the 4th of July holiday period.

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Newspaper

The series of three newspaper ads were run in the Kennebec Journal with each advertisement running once a week over a four-week period.

Insertions	Circulation	Gross impressions
12	37,319	447,828

Radio

Advertising time was purchased on six radio stations and the three different spots were rotated and run a total of 775 times at a level rate over a four-week period.

Media analysis software indicates that 66% of the Adults age 25-55 in the Augusta area were reached an average of 23 times. The campaign yielded a total of 1540 gross rating points over the period. By all measures this was as very significant media buy. It is rare to purchase more media that this to cover a market, except exceptional circumstances.

Key Data for each station used in the campaign is as follows.

Station	Gross Ratings Points	Reach	Frequency	Fees	# Spots
WABK	475	23%	21x	\$ 2500	125
WBQX	30	5%	6x	\$ 800	100
WEBB	240	14%	17x	\$ 1700	150
WKCG	225	8%	28x	\$ 2000	125
WMME	345	25%	14x	\$ 1700	150
WTOS	225	16%	14x	\$ 2500	125
Total	1540	66%	23x	\$11200	775

Notes: "Gross Rating Points" are the total of the rating points for a given period - in this case four weeks. Each rating point is a percentage of the audience available that was in fact exposed to the advertisement. Reach refers to the percentage of the whole target population (not just those who listen to radio) that is reached by the advertising. Frequency is the number of times each individual in the target population was exposed to the ad.

Direct Mail

For the direct campaign, two towns rather than all of the Augusta Area were selected to receive the mail. This allowed us to test the efficacy of this approach without having to incur the cost of a campaign covering the whole area. Four separate direct mail pieces were sent, one each week to the approximately 2000 households in the towns of Monmouth and Litchfield.

During the follow-up telephone survey, the location of the respondent was recorded to allow us to see any difference in advertising awareness or recall of the messages in these towns.

Post Advertising Test

To determine the effects of the advertising, a telephone survey was planned for immediately after the end of the campaign. A survey instrument approximately 20 questions in length was developed to cover issues such as aided and unaided awareness of sources of pollution and aided and unaided awareness of advertising. In addition, we repeated questions asked in previous surveys on sources of water pollution. These questions tested unaided awareness of the most important causes of water pollution to allow a before and after comparison. A total of approximately 300 interviews were planned with 75 of those interviews to be completed in the Litchfield/Monmouth area in order to understand the additional effects of the direct mail effort.

Post Advertising Test Methodology

A total of 302 residents of the Augusta area and environs (with 73 respondents in Litchfield/and Monmouth) were interviewed over the telephone between July 10 and July 23, 2001. The interviewing began the Tuesday after the 4th of July holiday week to reach individuals that may have taken a vacation before and after the holiday itself.

Sample for the survey was randomly generated at Market Decisions using Genesys software and stratified to over-sample Litchfield and Monmouth. This increased the margin of error from what one would normally expect for a sample of 300, to +/- 6%. This margin of error means that we can be 95% certain that if we sampled the entire population, the responses would not vary more than six percentage points from the random survey. For the towns of Litchfield and Monmouth, the margin of error is considerably greater, approximately 11.55% +/-.

Sample for the survey included the following towns: Augusta, Chelsea, Farmingdale, Gardiner, Hallowell, Jefferson, Leeds, Litchfield, Manchester, Oakland, Pittston, Monmouth, Randolph, Readfield, Sidney, Wayne, West Gardiner, Whitefield, Windsor and Winthrop.

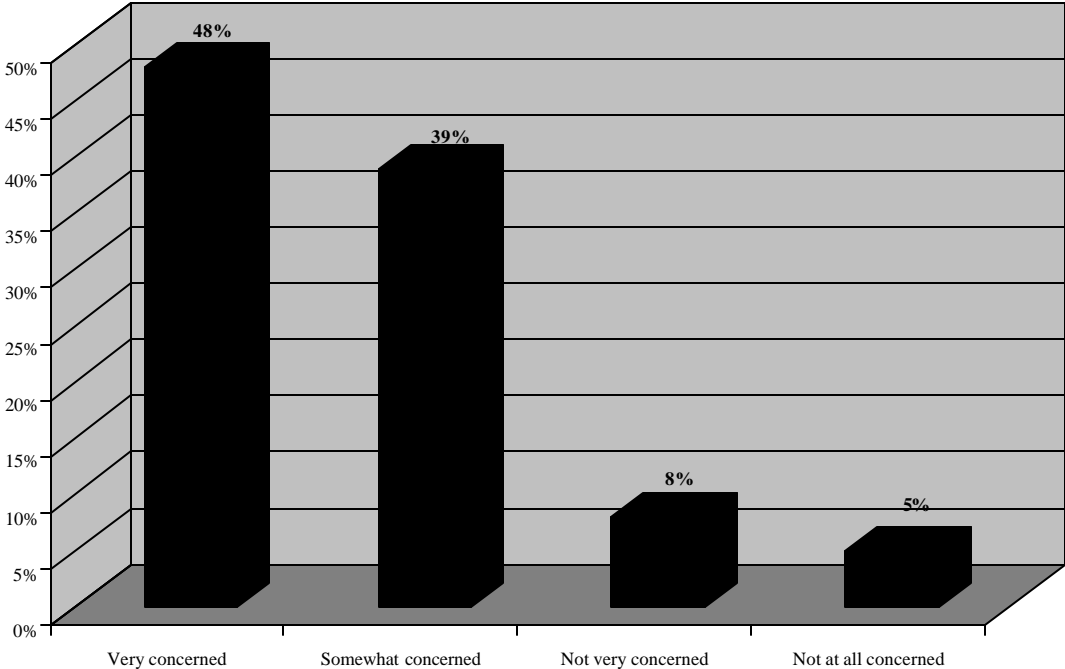
The survey was programmed on CATI (Computer aided telephone interviewing) software and ten surveys were pre-tested. Finding no survey issues, these surveys were added to the sample and the interviewing began.

A total of 2,483 numbers were contacted and 1,209 were found to be non-working or business numbers. Interviews were completed with 27% of the remaining eligible sample (Response Rate), with 17% of calls terminated or broken off (Refusal Rate). These performance figures are well within industry standards.

Post Advertising Research Findings

Almost half of all respondents are very concerned about the quality of waterways in Maine.

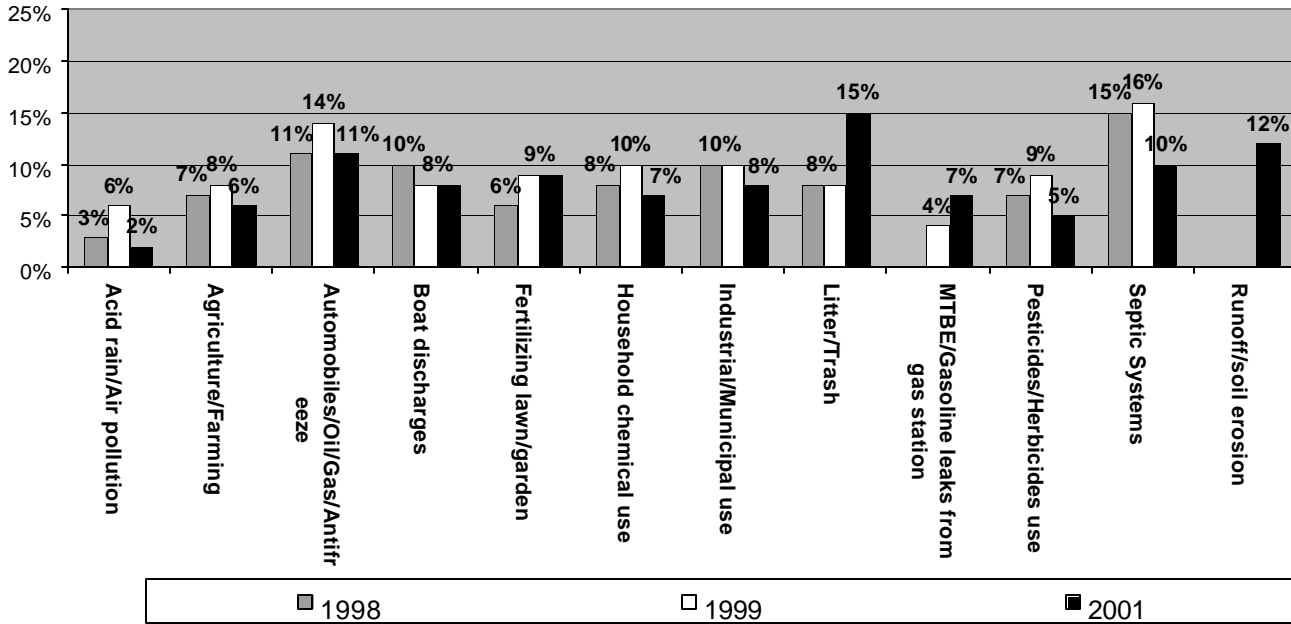
Q01. How concerned are you about the quality of our waterways in Maine?



Comments: This question was asked to determine if there is a predisposition among respondents to be interested in the topic of water pollution. This might bias responses to later questions. We found that concern about waterways is relatively consistent among all age groups, and income and educational categories. This finding is consistent with other research we have conducted in the past and it suggests that communications on environmental issues would find a ready audience.

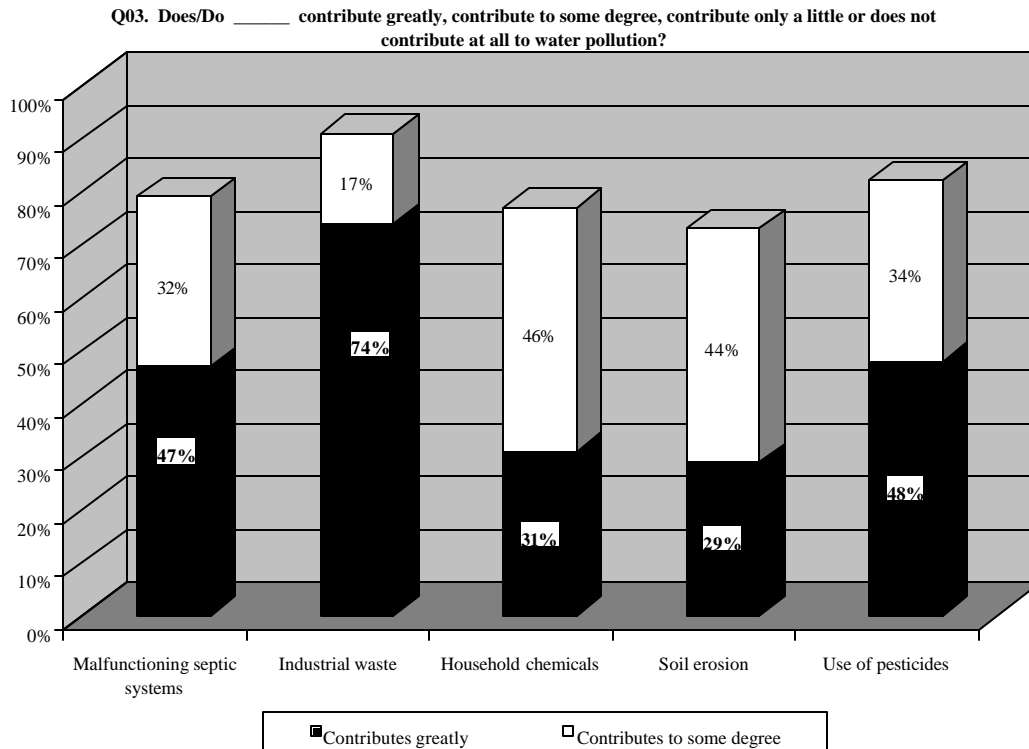
After the communications campaign, erosion and run off are frequently mentioned as contributors to water pollution.

q02 - What common practices in homes or communities, other than factories contribute towards pollution of our rivers, lakes and streams in the state?



Comments: This question provides information on citizens' top of mind awareness of the common practices that contribute to water pollution. This particular question has been asked in two prior statewide surveys in 1998 and 1999. The mentions of specific practices are relatively consistent from these two prior studies to the most recent survey completed in the Augusta area in 2001, with one notable exception. In the survey conducted for this study we see that erosion and runoff have, for the first time, been cited by significant numbers of respondents (12%) as contributors to water pollution. This suggests that the message on soil erosion was remembered by a significant number of respondents.

Almost three of four respondents say that soil erosion contributes to water pollution.



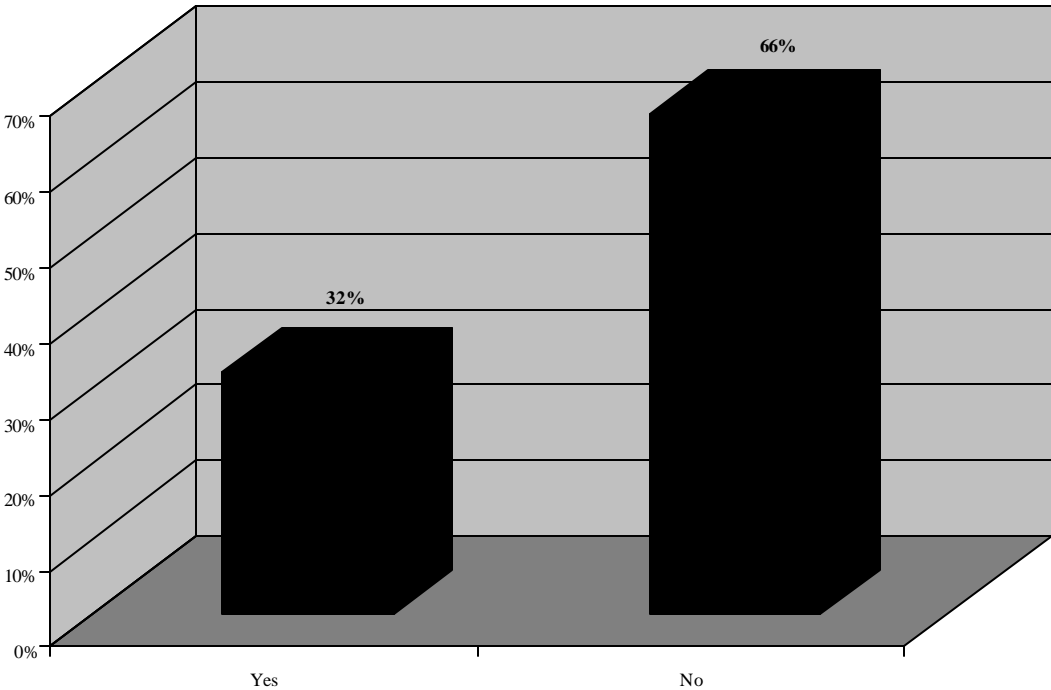
Comments: This series of questions tested aided perceptions of the contribution of specific pollutants to overall water pollution. Malfunctioning septic systems and industrial waste were cited most often as contributing to water pollution – by approximately 90% of respondents. Pesticides, household chemicals and soil erosion were cited less frequently – but still about three quarters of the time.

Soil erosion obviously did not emerge as the most often cited contributor to water. However the fact that it was as frequently mentioned as pesticides and household chemicals as a contributor to water pollution, is a significant change from what should be expected based on past research.

Attitudes and beliefs on the sources of water pollution have been shaped over many years, so it can be expected that preconceived opinions on the importance of sources remain. The advertising clearly generated awareness of soil erosion as a pollutant but it did not move beliefs to the point where soil erosion is understood to be the most important cause of water pollution. This will take time.

One in three respondents recalled seeing advertising regarding water pollution in the past 30 days.

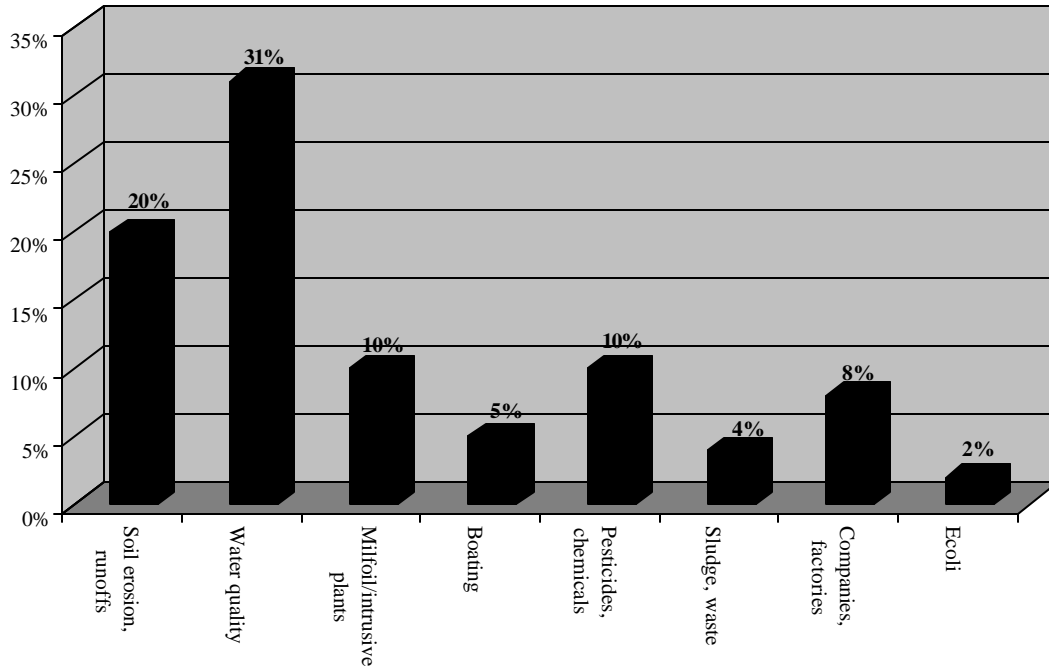
Q04. Have you seen, heard or read any advertising regarding water pollution in the past 30 days?



Comments: This measurement is of un-aided awareness of ANY advertising and is relatively high. There appeared to be little difference in awareness across demographic groups (age, income, education) or geography. There was no evidence that residents of Monmouth or Litchfield had higher awareness of advertising than elsewhere in the Augusta area.

About one in five respondents who recalled advertising remembered messages that directly related to soil erosion.

Q05. What have you seen or heard?

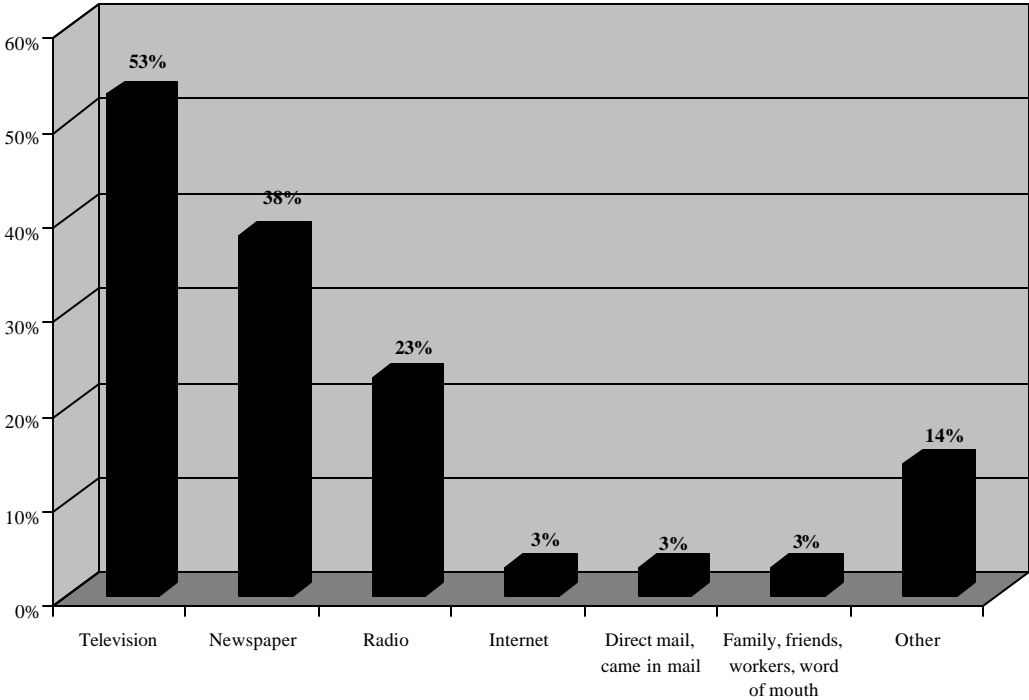


Comments: In this question respondents were asked an unaided question on what the advertising was about. Unaided questions are difficult for respondents to answer and for this reason, generally understate the actual awareness. Since the previous advertising asked about all advertising, this question helps to clarify if the soil erosion campaign was the one recognized.

Some 31% mentioned that they recalled a general message, water quality, while 20% specifically mentioned soil erosion. Milfoil or invasive plants was also recalled by a significant number of respondents (12%), reflecting both recent press on the topic and ongoing paid communications efforts. There were also responses mentioning advertising about pollution from factories and pesticides, although it was not known if there was any such advertising. This may show that perceptions developed over a long time are likely to be a part of citizen thinking for some time.

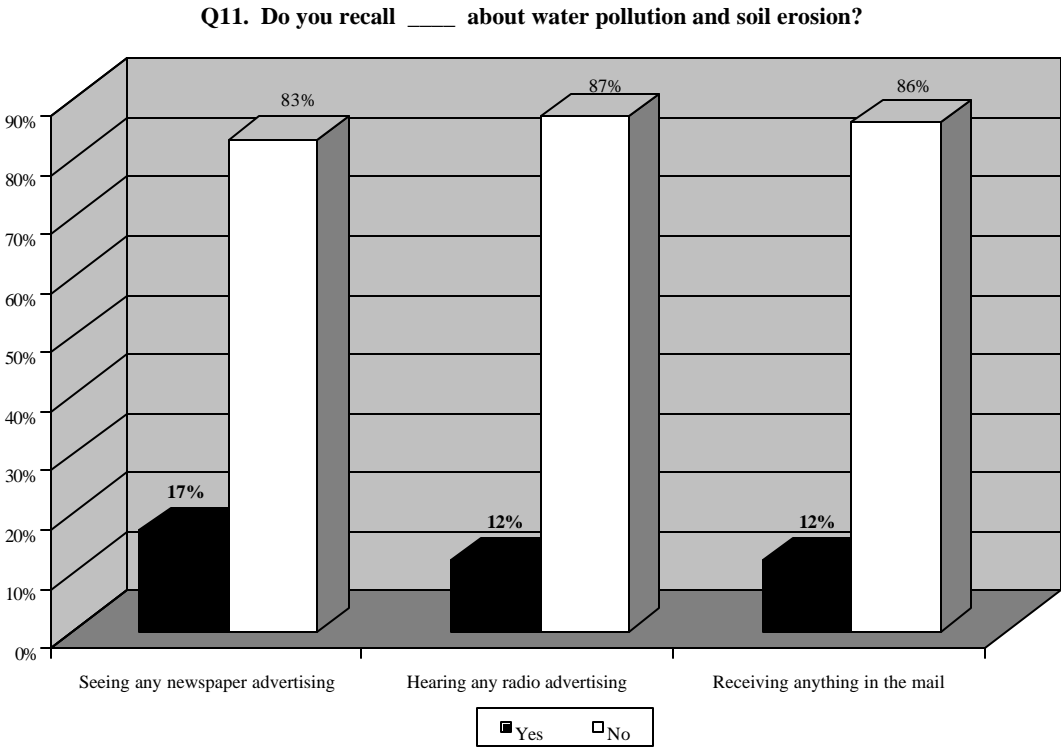
Most respondents recalled seeing advertising about water pollution on TV, with newspaper being the second most important source.

Q06. Where did you see or hear this?



Comments: While most respondents cited TV as the medium they saw advertisements on, there was no TV used for the soil erosion campaign. Respondents could have been thinking of news reports or advertising other than TV. After TV came newspapers with 38% of respondents recalling seeing advertising there. Some 27% recall hearing the ads on the radio. Only handful of respondents recalled seeing direct mail advertising and there was no discernable difference between Monmouth and Litchfield and other areas around Augusta.

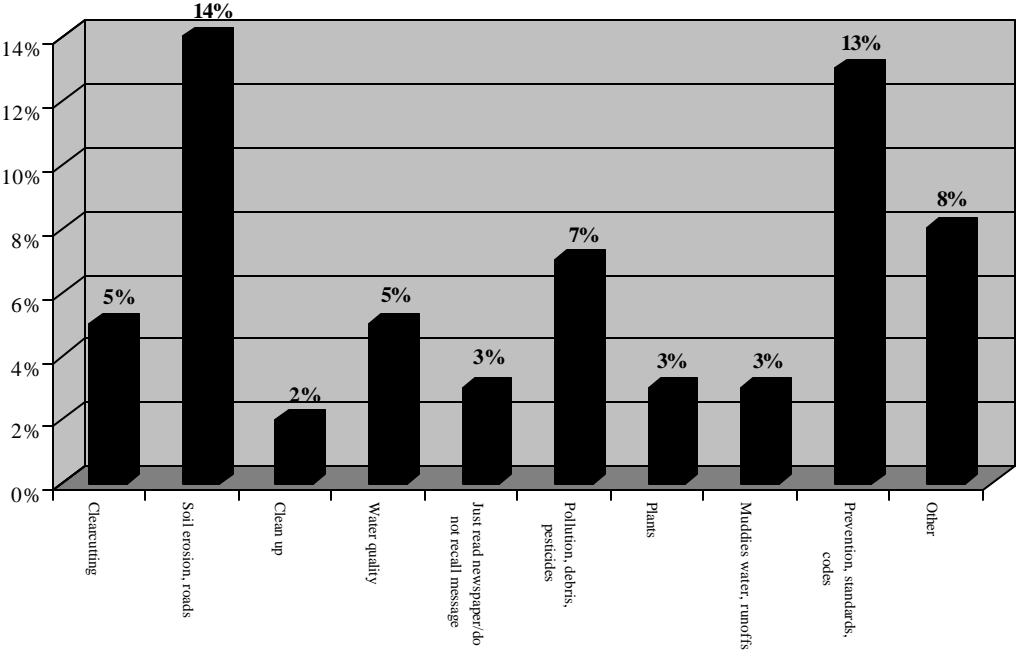
When asked specifically about seeing a type of advertising, most respondents most often recalled advertisements in the newspaper.



Comments: In this question, additional respondents that may have seen an advertisement on soil erosion are identified by asking specifically about recalling advertisements in the newspaper, on the radio and in the mail. Some 17% recalled seeing the print ads and 12% hearing the radio ads. In this case, some 12% recall seeing direct mail, including some who probably did not receive the material.

Of those who recalled advertising, the most common message recalled was about roads and preventing erosion.

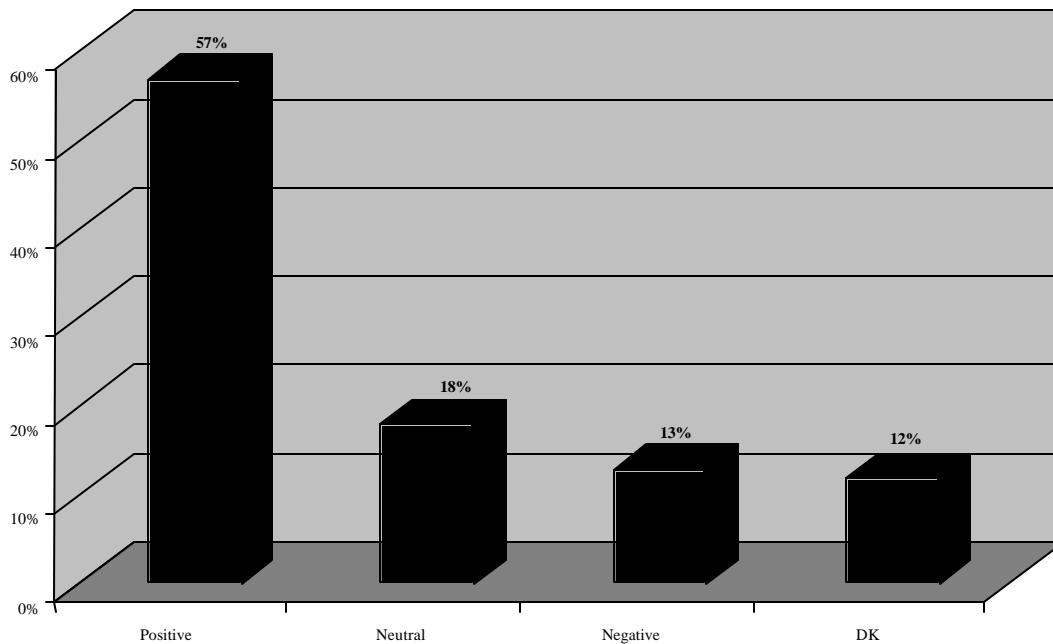
Q13. What was the message of any advertising about soil erosion and water pollution you remember from this advertising?



Comments: The largest percentage of respondents did not mention anything specific that they remembered about the advertising, but this is not unusual. With any open-ended question there are frequently a large number who do not respond. Of those who mentioned something specific, most comments seem to be directly related to the advertising.

Of those who saw advertising on soil erosion, some 57% were positive about the advertisements.

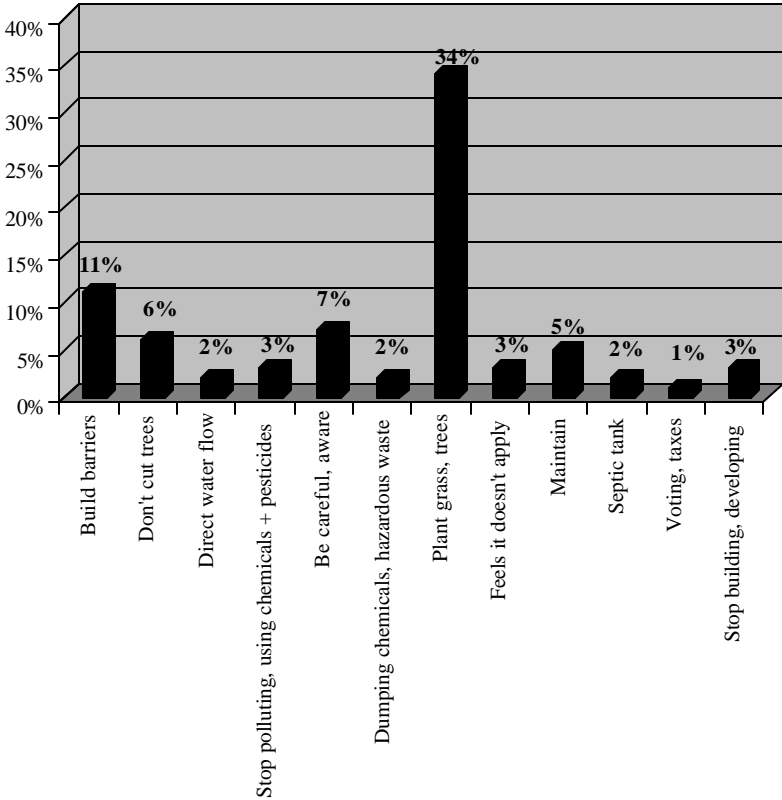
Q14. What were your feelings towards this message, would you say they were positive, neutral or negative?



Comments: While the majority of respondents were positive about the advertisements it is somewhat surprising that so many respondents (43%) were neutral, negative or didn't know. One would expect that a message that is of importance (as we know from the first question) would garner more support. Respondents may not understand what they can do about soil erosion, that is the call to action may not be relevant to them. It is also possible that they need more convincing that soil erosion is not natural – it is in fact, pollution. This may mean that advertisements may need to be more specific about what anyone can do and it may need to make a stinger case that pollution is not natural

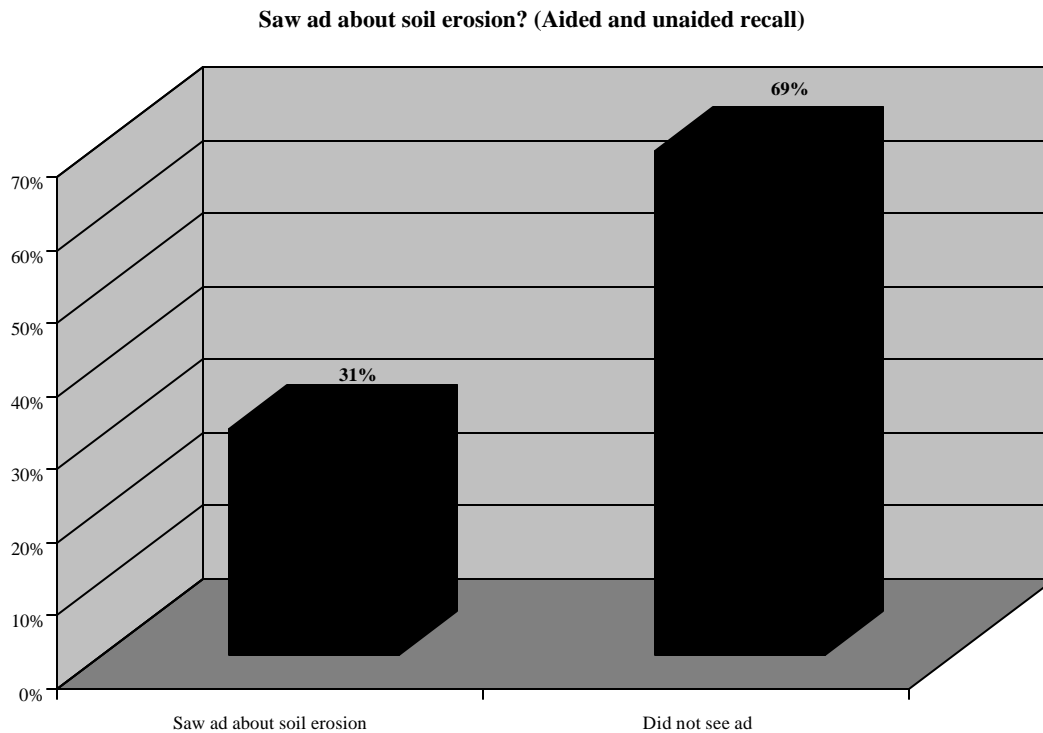
Of those who recalled advertising, almost seven of ten could describe a specific action they could take.

Q15. What is one thing you can do to reduce soil erosion?



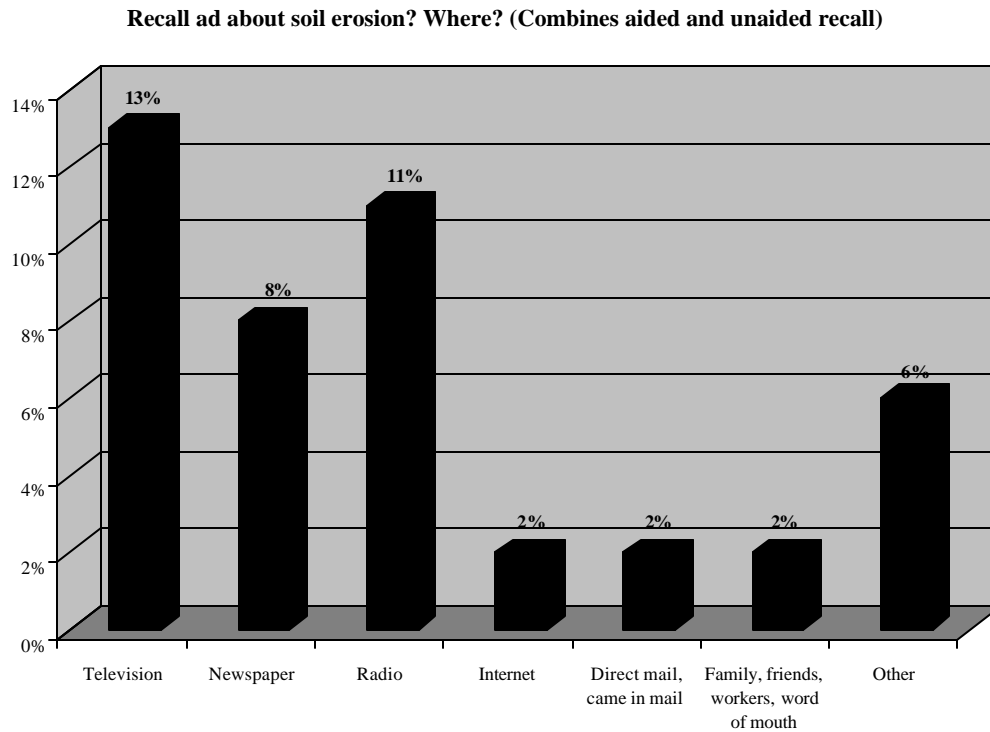
Comments: Some 67% of respondents could cite a specific and relevant action they could take to reduce soil erosion. This suggests that those that remembered the ads took away a message that is quite tangible and useful.

In total, almost a third of all respondents said that they recalled an advertisement on soil erosion.



Comments: This graph combines unaided recall of advertising on water pollution and soil erosion with aided recall of advertising. This recall reached 31% of respondents. Considering that this is a four-week program, this level of recall is quite reasonable. Very successful advertising over a longer duration sometimes reaches a recall of 50% or more. Most advertising never reaches a 20-25% level of recall.

Combining aided and unaided recall, radio advertising had the highest recall, followed closely by newspaper.



Comments: These responses combine aided and unaided recall. Although television advertisements on soil erosion was recalled most often, there were no advertisements run with this medium. This suggests that all recall data should be considered directional, that is, respondents may recall hearing or seeing something, but they may not be sure where they heard or saw it. Only a handful of respondents mentioned seeing a direct mail, a small number that suggests that this medium was not very effective.

If a message is not particularly relevant to an individual, that is they may not think the call of action applies to them, they are less likely to recall the specifics about an advertisement such as where they heard it. They may recall the advertisement in a general way, but not the details.

Post Advertising Test Summary and Discussion

The advertising appears to have been recalled by a significant number of respondents, with 31% combined aided and unaided recall. The ads also appear to have been memorable enough to add soil erosion to the list of items that individuals associate with water pollution. About 12% of respondents mentioned soil erosion “top of mind” as a source of water pollution and when specifically asked, over three quarters (77%) thought that soil erosion is an important pollutant. Past surveys have shown that awareness that soil erosion as an important pollutant is almost nil. In addition, a very high percentage of those who saw the advertisements (68%) could cite a specific and relevant action to take to reduce soil erosion. This suggests that the advertisements yielded very tangible results for those who recalled them.

This performance is especially notable given the short run of the advertisements – just four weeks. Even though the reach and frequency for this campaign was high, it is unusual to run a campaign for so short a period. Normally repetition of messages over a long period of time is necessary to achieve the desired effect and a lasting impression. Most advertising takes place in flights of 6-8 weeks and is repeated several times to have the maximum effect.

Effectiveness of mediums used for this advertising is more confusing. Many respondents thought that they saw the ads on television, when in fact no ads were run on this medium. As we mentioned earlier, it is not unusual for respondents to get a message but not recall precisely where they heard it. In this case, we suggest that a lack of listener/viewer involvement contributes to the confusion. That is, listeners and viewers may not see how the ads apply to them. This lack of relevance means that they do not pay as close attention as they might. They have heard the ads, but can only recall them vaguely.

Individuals also frequently respond where they expect to see advertisements. They actually could have seen an ad in three different places – perhaps adding to their confusion.

In spite of the success of the campaign, we see two important issues that need to be kept in mind in future campaigns.

First, the research and the focus groups have shown that individuals have strong preconceptions about what causes water pollution. They believe that industries are the major cause of water pollution – more often than they believe in other causes. In the focus groups, some respondents didn’t believe that soil erosion was the number one cause of water pollution, even after we told them so. Typically such strong preconceptions are difficult to change. Consequently, it is possible that gains made in this campaign will be lost if communication does not become routine.

Second, internalization of the message is made more difficult because many consumers may not think soil erosion is an issue that applies to them. If one is building a road or home, then an ad on the topic will be relevant but it may be put aside by all others who are not building homes or roads. If we wish to have ads remembered by a large portion of the population, then we will need to present messages that either appeals to everyone, or many more narrowly targeted messages that sum up to the whole.

The DEP may want to carefully reconsider its goals. Should it strive for knowledge of soil erosion as a pollutant among the entire population or should it focus changing the behavior of those who can truly make a difference as gardeners landscapers, those with camps, etc.? A broad campaign to the general public will necessarily have more waste - or reach more individuals that may have little to do with soil erosion. But such a broad campaign could fundamentally change the way people think about water pollution and there fore have lasting impact. It may be more effective to reach those who can have an impact on reducing soil erosion, but these folks are harder to find and therefore more costly to reach.

Advertising Effectiveness.

Some \$23,000 was actually spent on running, printing or mailing advertisements, if one subtracts out the one-time costs associated with developing the campaign. These are materials that can be reused. Almost one third of the population in our telephone sample recalled the advertisements. Projected to the entire population of the Augusta area, this suggests that approximately 16,430 individuals saw one or more of the advertisements. Thus it cost approximately \$1.40 to reach each individual that recalled seeing or hearing any advertisement.

As noted in the summary of the post advertising survey, respondents were more likely to say they recall newspaper ads than radio ads, and least of all the direct mail. Thus, the effectiveness of these media in developing recall may have varied considerably.

Overall Effectiveness

Total Population of the Augusta area 18 years of age and greater.	53,000	2000 Census for towns surveyed.
Percentage that recalled an advertisement on soil erosion.	31%	Total aided and unaided.
Total number of individuals in the target market recalled an advertisement on soil erosion.	16,430	
Cost of all advertising	\$23,000	
Cost for one individual "recall"	\$1.40	

Newspaper Effectiveness

Total Population of the Augusta area* 18 years of age and greater.	53,000	2000 Census for towns surveyed.
Percentage that recalled seeing an advertisement on soil erosion.	12%	Total aided and unaided. 48/302
Projected number of individuals in the target market recalled a newspaper advertisement on soil erosion.	6360	
Cost of newspaper advertising	\$3,500	
Cost for one individual "recall"	\$.55	

Radio Effectiveness

Total Population of the August area* 18 years of age and greater.	53,000	2000 Census for towns surveyed
Percentage that recalled hearing a	11%	Total aided and unaided.

radio advertisement on soil erosion (aided and unaided).		36/302
Projected number of individuals in the target market recalled a radio advertisement on soil erosion.	5380	
Cost of radio advertising.	\$12,000	
Cost for one individual "recall".	\$2.23	

Direct Mail Effectiveness

Total Population of the Monmouth/ Litchfield area, 18 years of age and greater.	5,020	2000 Census
Percentage that recalled seeing a direct mail advertisement on soil erosion.	5%	Total aided and unaided. 4/73
Total number of individuals in the target market who recalled a direct mail advertisement on soil erosion.	251	Target market was Litchfield and Monmouth
Cost of direct mail advertising.	\$6,300	
Cost for one individual "recall".	\$25.09	

Advertising Effectiveness Summary.

While it appears that newspaper was the most cost effective medium used, there are some problems with evaluating each component of advertising separately. Many times consumers cannot recall exactly where they heard or saw a specific message. To some extent, consumers respond to where they expect ads to have been placed rather than where they actually see them. This could be one reason many respondents cited TV as the place they saw an advertisement on soil erosion – even though such ads were never placed or run.

Advertising frequently works subtly and cumulatively. An ad placed in one medium reinforces a message from another and the more exposures to any ad, the more likely a consumer is to recall the message. For this reason we would caution against assuming that the newspaper ads were the most effective and therefore other media can be dropped completely in future campaigns. However, it does not appear that the direct mail effort was not at all effective. Recall of direct mail was low, and residents of Litchfield and Monmouth do not appear to be significantly more aware of advertisements or messages on soil erosion than residents of other areas.

The Department of Environmental Protection received seven inquiries by e-mail or 800 number from individuals that appeared to result from the advertising. Two of those inquires came from individuals that said they heard advertising on the radio and four said they received direct mail. None recalled the newspaper advertisements and one could not recall. This is, of course, a small sample, but direct mail followed by newspaper are normally best at generating an active response. It is rare to use radio to garner a direct response, since this medium requires writing down information, a difficult task in the time

an ad airs. While the intent of the advertisements was to generate awareness of soil erosion as a pollutant, not to generate a call to the DEP, the use of Direct Mail would be preferable if the objective changes from simply generating awareness to encouraging specific individuals to get more information.

Cost of a Statewide Campaign.

The per capita costs for the campaign in Augusta are probably reasonable approximations for potential per capita costs statewide. Costs per capital for more expensive media markets such as the greater Portland market may be higher, while costs for other markets may be lower. The figures below show the costs to reach each individual over the age of 18, assuming the cost to reach an individual with a message remains the same as in Augusta.

In the Augusta test, some 31% of the resident population actually recalled advertising on water pollution and soil erosion. If additional effectiveness is desired, the communications materials might be tested and adjusted or increased amounts of advertising can be purchased. Assuming that the relationship between dollars spent and recall is linear, then to double recall would double the expenses as shown in the fifth column of the chart below.

A reasonable budget, for a statewide campaign in probably between these two figures.

	Notes	Residents	Cost per	Total \$	Estimated costs to double recall
Per capita Costs/ Augusta	Direct mail, Newspaper and radio costs. Residents over 18.	53,000	\$.43	\$23,000	
Per capita Costs/ Maine	Direct mail, Newspaper and radio costs. Residents over 18.	974,000	\$.43	\$418,847	
Per capita Costs - Augusta	Newspaper and radio costs only, no direct mail. Residents over 18, 2000 census	53,000	\$.315	\$16,700	\$33,400
Per capita Costs - Maine	Newspaper and radio costs only, no direct mail. Residents over 18, 2000 Census.	974,000	\$.315	\$306,900	\$613,800