

SURVEY OF COLORADO RESIDENTS' AWARENESS AND UNDERSTANDING OF HOUSEHOLD-GENERATED POLLUTED RUNOFF

COLORADO WATER PROTECTION PROJECT

May 1998

EXECUTIVE SUMMARY

OBJECTIVES

Household-generated polluted runoff in urban areas is a significant contributor to the overall water pollution problem in Colorado. Household-generated pollutants, such as nutrients from garden fertilizers, pesticides, herbicides and animal wastes – and behaviors, such as the improper disposal of motor oil, antifreeze and other toxic chemicals – are negatively affecting the state's water quality.

In order to increase public awareness about the causes of and solutions to urban polluted runoff, the League of Women Voters of Colorado Education Fund will implement a comprehensive media campaign and supporting activities. This campaign will include basic information about urban runoff covering such topics as what behaviors lead to polluted runoff and how polluted runoff affects Colorado's water resources.

The telephone survey was designed to judge current awareness and understanding of household-generated polluted runoff. Based on input from the project's Technical Advisory Committee, three sources of polluted runoff were identified as having the most significance in urban and suburban areas of Colorado: pet waste, lawn and garden chemicals and automobile maintenance products. In addition, questions concerning incentives and barriers to changing polluting behaviors were included in the survey.

At the conclusion of the project, a similar survey will be administered to gauge the success of the educational efforts and determine future courses of action. The survey was designed to answer three basic questions about the project's success:

- Have we increased awareness of what "household-generated polluted runoff" is?
- Have we increased awareness of how polluted runoff enters local rivers, lakes and streams?
- Have we increased awareness that individuals can prevent some polluted runoff?

METHODOLOGY

Jim zumBrunnen at the Colorado State University Statistics Laboratory assisted in designing the survey and conducted the data analysis. The survey was developed with the assistance of Lorraine Schierer, of the Colorado Department of Public Health and Environment, Guy Long and Suzanne Snyder of Denver University, Karen Steeper at Corporate Communications Associates and Joe Conrad at Cactus Communications. Members of the Technical Advisory Committee reviewed the draft survey and provided comments.

During the month of January 1998, volunteers from thirteen local Leagues administered the survey to 618 residents throughout the state. The survey was translated and administered in Spanish to those respondents who spoke only Spanish.

MAJOR SURVEY RESULTS

- Fewer than one-half of the survey respondents knew that stormwater runs into local rivers, lakes and streams without being treated by conventional treatment methods.
- One-quarter of respondents thought that polluted runoff is not a problem in their communities.
- A majority of those surveyed did not feel that household activities are a significant contributor to polluted runoff.
- More than one-fourth of respondents said household-generated polluted runoff does not at all reduce their quality of life.
- One-fifth of the respondents answered that individuals could do a great deal to prevent household-generated polluted runoff.
- While many respondents knew that home lawn and garden fertilizers and pesticides have a detrimental effect on water quality, nearly one-fifth of them did not associate pet waste with water contamination.
- Almost one-fifth of respondents did not think that auto maintenance products are a cause of water pollution.
- Behavior-changing motivational factors receiving the highest response rate included a concern for human health, drinking water protection and the quality of the environment for future generations.
- Two clear barriers to changing behavior are a lack of information and inconvenience.
- From a list of fourteen options for the best way to receive information about polluted runoff, television and local newspapers topped the list.

URBAN NEEDS STUDY

In addition to the telephone survey, the League partnered with American Rivers to conduct three focus groups in Denver. Their purpose: to explore the views and values of ethnically-diverse communities regarding urban rivers and determine how to engage these groups in community-based restoration and stewardship efforts. This activity was funded by a grant from Coors Brewing Company.

League observers noted there was some understanding that household activities, such as pouring oil on the ground or down storm drains, could impact water quality. However, there was limited understanding of how storm drains work. Most participants also believed that stormwater runoff is treated prior to entering the local waterways.

Only a few participants mentioned trash, gasoline or soaps as being potential problems, and none mentioned other pollutants such as garden chemicals or paints. Participants saw a need for education, but focused on children and schools rather than adults. Some said that they applied work-related training about pollution prevention to their household practices.

There was a very strong feeling in all groups that environmental messages should not be targeted to particular ethnic groups. They felt this is insulting and unnecessary. To address these communities, messages should be inclusive and multicultural.

CONCLUSIONS

Significant numbers of Colorado residents are unaware that stormwater is not treated by conventional treatment methods before entering local lakes, rivers and streams. This is an important message to include in the education effort.

Many survey respondents do not feel that polluted runoff is a significant problem in their community, nor do they feel that household activities are a significant contributor to polluted runoff. The negative impact of household-generated polluted runoff on local rivers, lakes and streams should be a major component of the education campaign. Making the subject personally significant will be an important part of the effort.

Since a significant number of respondents already feel that they, as individuals, can have a positive impact on polluted runoff, this may not necessarily be a message that needs to be emphasized in the media campaign.

The media campaign should educate the public about the contribution of yard and garden chemicals and emphasize the hazards posed by pet waste and automobile products.

Lack of information and inconvenience were seen as barriers to changing pollution-generating behaviors. The media campaign, itself, will address the first concern. By focusing on the convenient nature of most behavior changes, the media campaign could eliminate the second barrier.

Television and local newspapers were identified by respondents as the best ways to receive information about polluted runoff. These are likely to be expensive methods of communicating with the public, and resources will have to be carefully allocated or new resources found to take advantage of this finding.