Kentucky Stormwater Survey Results

A Telephone Survey of Residents in MS4 Phase II Communities and Counties:

Assessing Knowledge, Attitudes, Behaviors, and Education Venues

Conducted for the Kentucky Transportation Cabinet
by the University of Kentucky Survey Research Center
2008-2009

KENTUCKY STORMWATER SURVEY OVERVIEW

The Kentucky Environmental Education Council and Kentucky Transportation Cabinet designed a telephone survey as part of the Kentucky Municipal Separate Storm Sewer Systems (MS4) Phase II program. The survey, which measured knowledge, attitudes, and behaviors of the general public concerning stormwater pollution issues and education venues, was administered by the University of Kentucky Survey Research Center. The purpose of the survey was to set baselines for MS4 Phase II permittees to use in measuring the progress of their Public Education and Public Participation Minimum Control Measures over the life of the 2008-2013 permits.

The survey was conducted in a total of 26 different MS4 Phase II regions between June 13, 2008 and January 31, 2009 to a random sample of 4,527 adults. Residents of 88 MS4 Phase II communities or counties were included in the survey. Survey results were reported to a total of 52 permitted communities and counties within the 26 regions surveyed. The results were reported for those communities which had a large enough sample size, based on community population, for the results to be valid.

The survey results provided in this report are the compiled results for all 26 regions surveyed. The results are presented in separate sections, categorized by knowledge, attitudes, behavior, and education venues. The compiled survey response rate of all 26 regions was 40.2%.

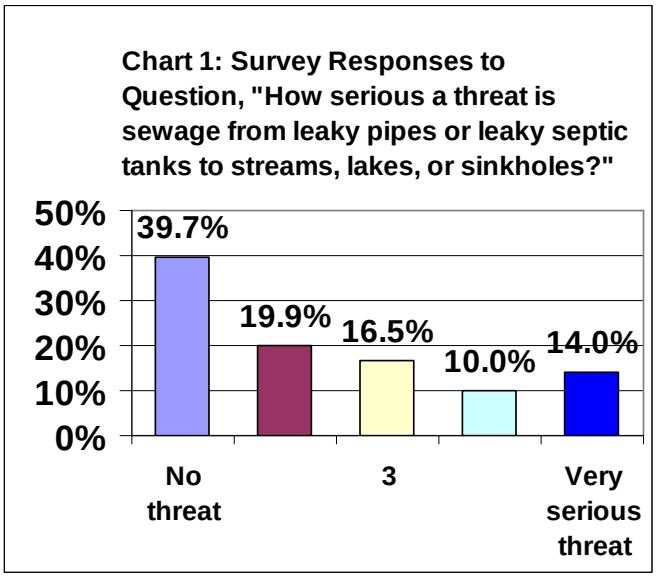
Results of the Kentucky Stormwater Survey

The survey questions were developed to measure basic knowledge about stormwater runoff pollution, attitudes about water quality and stormwater pollution, behaviors that help to prevent stormwater runoff pollution and venues that are effective for educating the public about water quality.

All percentages in the narrative have been rounded to the nearest decimal for easier reading.

STORMWATER KNOWLEDGE

The majority of respondents had a low level of knowledge about commonly known sources of stormwater pollution. Using a rating system of 1-5, in which one is "no threat" and five is a "very serious threat", respondents were asked to rate how serious of a threat a variety of materials were to streams, lakes, or sinkholes in their community. Only 16% to 26% of respondents rated the following materials as a threat to our waterways, as indicated by a 4 or 5 on the rating scale: fertilizers and pesticides (26%), sewage from leaky pipes or septic tanks (24%), pet waste (16%), and soil from construction sites (16%).

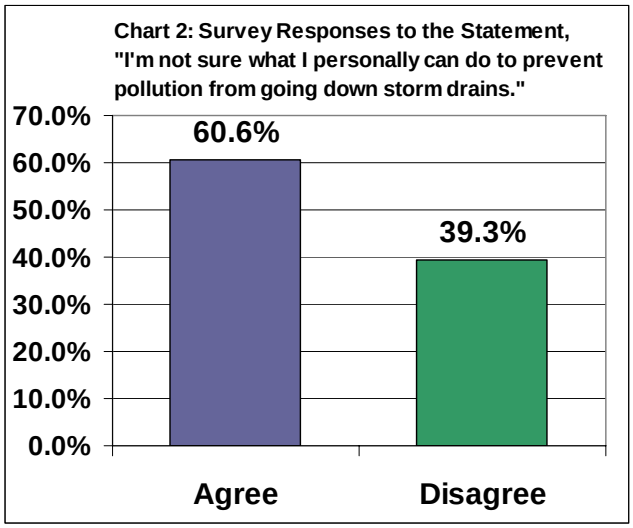


A greater percentage of respondents were knowledgeable about the impact of various materials disposed of in storm drains on water quality. Eighty seven percent of respondents knew that it is harmful to water quality to dispose of oil in a storm drain, 53% knew it was harmful to dispose of soapy water from washing cars or from a washing machine, and 40% knew it was harmful to dispose of leaves or grass.

Another question to measure knowledge about the sources of stormwater pollution asked respondents to agree or disagree with the statement that most stormwater pollution comes from a few big polluters. Fifty four percent of respondents incorrectly agreed with this statement. The leading source of water pollution is actually stormwater runoff pollution which all individuals and societal groups contribute to.

Respondents were asked questions which measured their knowledge about storm drain pipes and the treatment of stormwater. Only half of the respondents knew that water flushed down toilets and water that goes down storm drains does not flow into the same underground pipes. Similarly, only 49% of respondents knew that water that goes down storm drains is not typically treated at a wastewater treatment plant before it is released into the nearest river. Sixty two percent knew

that litter that goes down storm drains does not get filtered out before being released into streams.



In regard to knowledge about actions that protect water quality from stormwater runoff pollution, only 39% knew what they personally can do to prevent pollution from going down storm drains. Seventy two percent knew that shrubs and trees left along the banks of creeks streams, and lakes protect water quality.

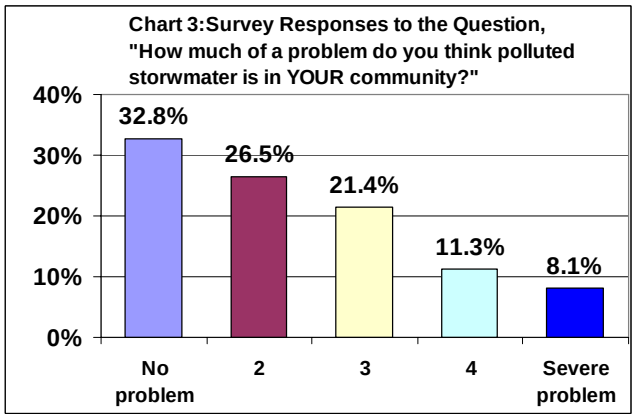
Fifty one percent of respondents reported that they knew who to contact if they wanted to properly dispose of paint, household chemicals, or motor oil. When asked who they would call, the top five answers were city government (21%), hazardous waste management (17%), county government (11%), retail store (10%), and recycling center (9%).

STORMWATER ATTITUDES

The attitude questions on the survey measured respondents' concern about water quality in their local area and their willingness to pay a stormwater fee. Surprisingly, over half of the respondents reported having a low level of concern about water quality and stormwater pollution in their local area, but almost half were willing to pay a stormwater fee.

In one question, respondents were asked to rate how concerned they were about the water quality in their local area by using a scale of 1-5, with 1 being "not at all concerned" and 5 being "extremely concerned". Thirty nine percent reported that they were "not at all" concerned with water quality in their local area, while another 16% reported a low level of concern as indicated by the number 2 on the rating scale. Only 16% were "extremely concerned, 11% had a high level of concern as indicated by the number 4 on the scale, and another 18% had a mid-range concern.

Another question measured the degree to which respondents were concerned about polluted stormwater in their community, by using a scale of 1-5, with 1 being "not at all concerned" and 5 being "extremely concerned". See Chart 3 for these survey results.

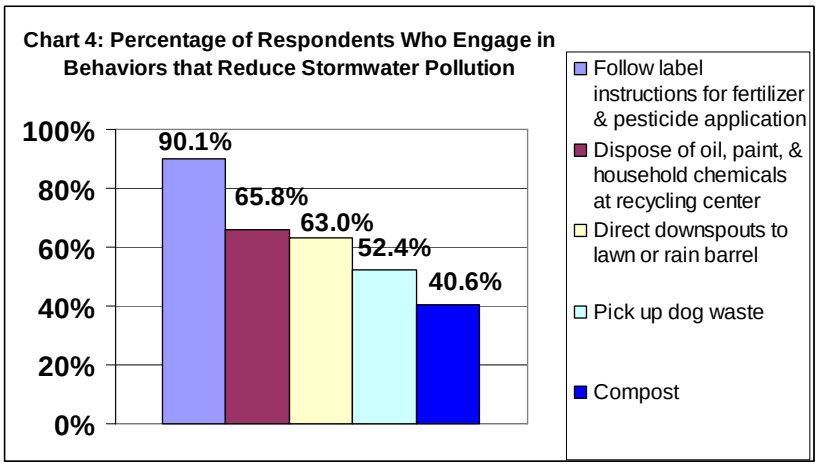


Forty five percent of respondents were willing to pay a monthly stormwater fee for the purpose of helping to solve

stormwater pollution problems in their communities. The largest percentage of respondents (41%) were willing to pay a monthly fee of $1.00 - $2.00. Another 27% were willing to pay $5.00-$6.00, 14% were willing to pay $3.00-$4.00, 10% were willing to pay $9.00-$10.00, 7% were willing to pay more than $10.00, and 1% was willing to pay $7.00-$8.00.

STORMWATER BEHAVIOR

The survey participants were asked whether they typically compost, dispose of used motor oil, paint cans or household chemicals at a recycling center or city/county clean up event, follow label instructions when applying fertilizers and pesticides, pick up their dog waste outside, and direct downspouts from roof onto lawn, garden, or into a rain barrel. These are activities that are known to prevent stormwater runoff pollution. See Chart 4 for these survey results.



Half of those surveyed reported that they typically wash their car on a paved driveway. This is an activity that causes stormwater runoff pollution as the soapy water goes directly into storm drains where it then flows into nearby waterways.

A very small percentage of respondents reported that they had volunteered for stormwater-related activities within the past year. Five percent reported that they had participated in a stream or lake cleanup event, 1% had done stream monitoring, and less than 1% served on a stormwater advisory committee or had participated in storm drain stenciling.

EDUCATION VENUES

A series of questions was asked to determine if and how residents were learning about stormwater pollution and to identify venues that would be effective for educating residents about stormwater runoff pollution. Thirty two percent of respondents reported seeing, reading, or hearing about ways to personally prevent pollution of water that flows into storm drains, streams, rivers, lakes, or sinkholes. The largest percentages of respondents reported that their source of information was the local newspaper (44%) and television (41%). Other sources of stormwater pollution information included community organization newsletters (10% of respondents), websites (8%), radio (7%), local business (7%), child-school material (3%), City Hall (2%),

road-signage/billboard (2%), storm drain stencils (.05%), and an advertisement (.05%) shown with previews at the movies.

Other sources of information the survey participants were asked about included stormwater slogans and material their child had shared from school. Nine percent of respondents reported that they had seen a stormwater logo or slogan in their community and 14% reported that their child had told them something they learned about stormwater or stormwater pollution at school.

The survey participants were asked to identify the most useful means of communication about how water quality can be improved. See Chart 5 for these results.