



Stantec | Southern Indiana Stormwater Public Awareness Survey

Management Summary Report

August, 2010

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Background and Methodology

Background and Methodology

Objectives

Horizon InSight was awarded a contract to complete a survey research project for Stantec that had clear objectives: to measure overall awareness and knowledge of issues surrounding Southern Indiana's regional water quality, stormwater management and water pollution.

The questionnaire to measure these objectives was developed by Horizon InSight in consultation with Stantec.

Sample/Methodology

A total of 451 interviews were completed by phone with residents in the Southern Indiana regional area defined by the client. Those included the communities of Clarksville, Floyd County, Jeffersonville, New Albany, Oak Park Conservancy District, Sellersburg and Madison.

Data files of addresses for each of the communities were electronically delivered and a random sample was taken from each one and prepared for calling.

A disproportionate number of interviews were completed in some communities to boost the number of interviews in some areas that would only have about 15 interviews if the sample selections were done proportionate to population. It is important to note that total results are weighted to represent the correct distribution by area. This method allows the findings to include the best of both worlds. The total represents the entire area while the individual communities have sufficient numbers to at least look at results, although some are small and are subject to larger sampling errors.

Background and Methodology

The total number of interviews completed by community are as follows:

<u>Community</u>	<u># of Interviews</u>	<u>Community</u>	<u># of Interviews</u>	<u>Community</u>	<u># of Interviews</u>
Clarksville	65	Jeffersonville	80	New Albany	101
Floyd County	85	Madison	40	OPCD	40
				Sellersburg	40

In the charts and graphs that display results by the communities, statistical differences are noted by a letter next to the percent. The letter identifies the community that has the statistical difference.

It is important to note that statistical difference testing is based on the response as well as the sample number. Those with smaller sample sizes are subject to the larger sampling error. Thus it is possible for two communities to have the same percent but only one of them to show a statistically discernible difference from another segment if the sample sizes are different.

Reporting

An overview of findings and implications are presented in a narrative format. These findings are based on the total region results. Graphics displaying results for all questions have also been developed for the total region. Most questions measuring overall awareness and knowledge have graphics that also display individual community responses. An excel data file has also been created.

Overall Summary: Key Insights and Implications

Overall Summary: Key Insights and Implications

Results from this study lead to an optimistic conclusion that the potential for the residents of this community to help with the problem of water pollution is not only likely but probable.

In the analysis of responses to multiple questions covering many facets of the problem, the findings suggest that with an increase in knowledge of the water pollution problems and how individuals can make a difference, the residents in these communities would be willing to be a partner to do more to help solve the problem.

To reiterate, the objectives of the study were simply to measure Southern Indiana communities' overall awareness of water quality and knowledge of issues surrounding the regional water quality and stormwater management.

The responses to initial questions measuring awareness and perception of the problem were the first indications that an education and communication campaign could be a key solution.

- Air Pollution was perceived to be a bigger pollution problem than water pollution for about half.
- One in five thought neither was much of a problem.
- About a third thought water pollution was the bigger problem.

Overall Summary: Key Insights and Implications

Other findings indicated they were aware of some issues with water quality.

- The majority only gave mediocre ratings of good or fair for the water quality in the lakes, rivers and streams in their community. They chose those response options rather than excellent or very good.
- There was little optimism of where the quality of water was headed. Most thought it was staying about the same and about a fourth thought it was getting worse.

Results from the questions that measured general knowledge about specific items or actions that affect water quality demonstrated a wide range of understanding or knowledge depending on the item.

- Almost everyone knew that the quality of water in the local streams in their communities affected the Ohio River.
- In contrast only a fourth knew used motor oil is often accepted at auto supply stores or gas stations.
- One area that may have the most potential impact is to increase the awareness that pet waste no matter where it is left on the ground will cause bacteria pollution in local streams, lakes and ponds. Only two-thirds answered that correctly and almost half of these residents had a dog.

Overall Summary: Key Insights and Implications

The largest perceived contributors to water pollution were illegal dumping, industrial facility discharges and sewage treatment discharges. In contrast, pet waste was viewed as a much smaller contributor to the problem.

Only two-thirds knew that stormwater goes directly into streams and rivers. The rest thought it was sent to a treatment plant or did not know what happened. Almost everyone knew it was illegal to put something into a stormwater or roadside ditch to dispose of it.

- About one in ten said they had seen or knew someone that has put lawn chemicals, motor oil or such in storm drains and ditches.
- Few knew the correct channel to report that action.

The importance of having water activities in their community was obvious.

- Every measure was rated extremely or very important. Those receiving the highest percent could be characterized as “the enjoyment of nature”.
- Those activities rated the highest included:
 - seeing different kinds of trees and other plant life near the water.
 - seeing all kinds of aquatic and wildlife there.
 - walking and relaxing around the water.

Overall Summary: Key Insights and Implications

Increasing awareness of how individual behaviors can make a difference will also be important.

- Approximately one in four thought that the way they take care of their homes and vehicles have only a little effect on the lakes, rivers and streams in their communities.
- When asked a series of questions about their behavior, many were already doing the proper thing. Encouragingly, most of those who were not doing so presently said they would be willing to change if they knew it would help water pollution.
- Albeit willingness doesn't always translate to behavior change, but it may with enough education about the consequences.

Findings from questions measuring car maintenance behavior were:

- About a fourth replace batteries at home
- While about one in seven change the oil at home
- And less than ten percent change transmission or other fluids at home.

The great majority of those who do these car maintenance activities at home dispose of the batteries or fluids correctly. The few who do not said they would be willing to change their behavior if they read or heard it would reduce water pollution.

Overall Summary: Key Insights and Implications

Those with cars were also asked questions measuring car washing behavior.

- About a fourth wash their vehicle at home and nine out of ten wash it on the driveway or some other gravel or paved area. They were asked if they would be willing to wash their vehicle on the grass if it would reduce water pollution.
- A little less than half said they would always do so, another fourth said they would do it sometimes. While about a third said they would not because they either thought it would be too inconvenient or they didn't believe it would really help that much.

Those with septic tanks (17% of those who lived in single family homes) were asked how often they have it inspected or serviced.

- Over a third of them said they do it only every six to ten plus years.
- The follow up question was presented to a very small sample size and results need to be viewed with extreme caution.
 - The few who presently only have it inspected six to ten plus years were asked if they would be willing to have it checked or serviced at least every 3 to 5 years.
 - A little more than half said yes and the rest thought it would be too inconvenient or expensive.

Overall Summary: Key Insights and Implications

Those who had a lawn or grassy area that they maintained were asked questions about their lawn maintenance behavior.

- For the great majority, lawn maintenance was done by someone in the household rather than by a lawn service.
- Most disposed of the grass properly. Six out of ten of those who do not now, said they would be willing to leave grass in their yard if it would help water pollution.
- Most had never had their soil tested for how much and what kinds of nutrients their grass needs. About half of those who had not said they would be willing to get it tested if it would help water pollution.
- Most said they do not water their grass at all and a fourth thought that they watered it less than most. Those who said they water it more than others or about the same were asked if they would be willing to cut back. Eight in ten said yes.
- A little less than half said they fertilize their lawns from time to time. About a fourth of those said they fertilize three or more times a year. When asked if they would be willing to cut back on that schedule if it would help water pollution, over three-fourths said yes.

Overall Summary: Key Insights and Implications

Several questions were asked about dog waste.

- Just under half (45%) said they had a dog that goes outdoors from time to time. And just under half of those (46%) said they usually leave their dog waste on the ground unless it is on someone else's property.
- Of those who said they usually pick up their dog waste and dispose of it, about ten percent did not dispose of it properly. When asked if they would be willing to change their behavior if it helped water pollution, six out of ten said yes.

There was good receptivity to several ideas of things that could be done to reduce pollution. Proactive organization of such activities or education in these areas would be very likely to pay off.

- Almost seven in ten said they would be very willing to dispose of hazardous household waste on a community collection day and a fourth said they already do that.
- About half either have already gotten involved or were willing to be involved with cleanup projects in the community for trash and litter collection.
- A fourth also said they have landscaped their yard with native plants and another half would be willing to do so.

Overall Summary: Key Insights and Implications

The need for expanded communication was reiterated as:

- Almost seven in ten said they had not seen, read or heard about things they could do to reduce storm water pollution in the last year.
- Of those who had, they were mostly likely to have seen it in the newspaper or a magazine.
- When asked to rate different communication methods to get the word out about how they could protect lakes, streams and rivers;
 - Television stories and ads were at the top of the list.
 - Those were closely followed by water or sewer inserts and newspapers and magazines.
 - The least favorable options were classes and workshops for communication.

These results lend credence to the statement at the beginning of this summary: the potential for the residents of this community to help with the problem of water pollution is not only likely but probable.

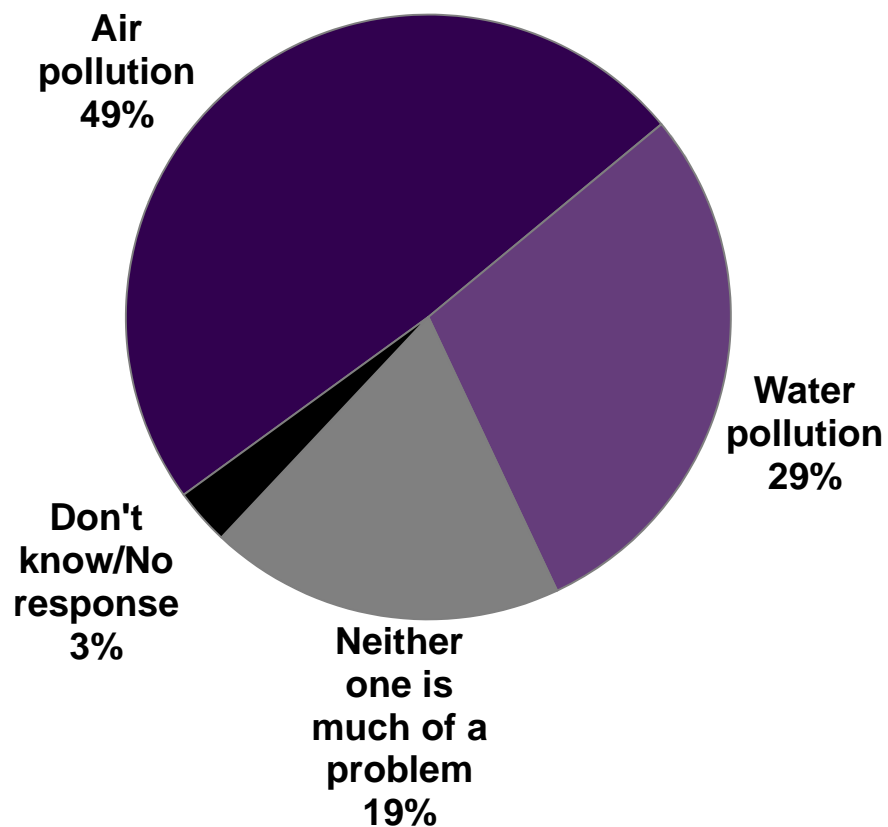
The conclusions and implications are that the potential to change behavior is large and communication and knowledge are the keys.

Detailed Results

Air Pollution is perceived to be a bigger pollution problem than water in these Indiana communities. One out of five think neither is much of a problem, one of the first indications that education can be a key solution. Without that knowledge the perception of "no problem" presents a challenge for openness to change bad habits.

Perceived Problem: Water Versus Air Pollution In The Community

Which of these two, water pollution or air pollution, do you think is a bigger problem in your community – or do you think neither is much of a problem there?



N = 451

The plurality in every area felt air pollution was more of a problem than water in their community. There were few statistical differences among communities.

Perceived Problem: Water Versus Air Pollution In The Community By Area

Areas	Air Pollution (%)	Water Pollution (%)	Neither is a problem (%)	Don't Know (%)	Base =
Clarksville (C)	45	29	20	6	(65)
Floyd (F)	48	24	26 _J	2	(85)
Jeffersonville (J)	51	35 _S	14	0	(80)
Madison (M)	50	35	15	0	(40)
New Albany (N)	51	28	17	4	(101)
OPCD (O)	45	35	18	2	(40)
Sellersburg (S)	50	20	23	7	(40)

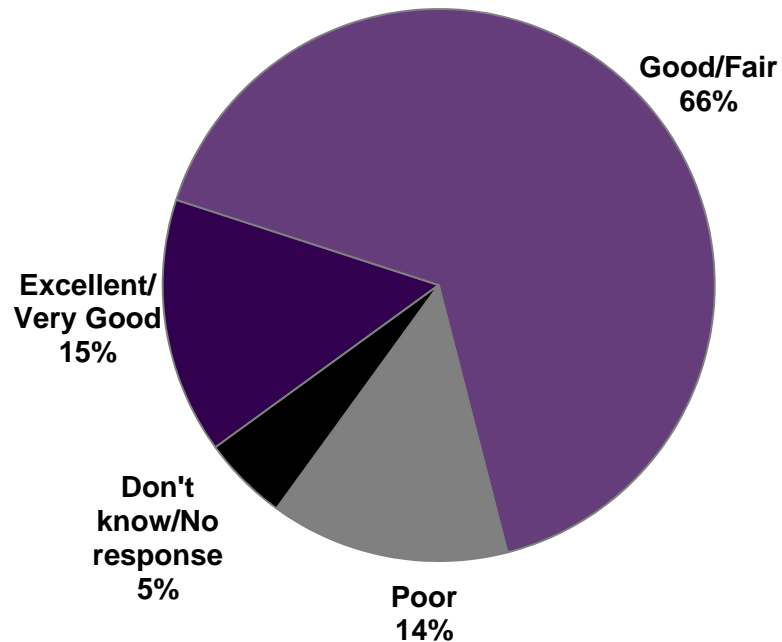
CFJMNOS If shown indicates a statistically discernible difference from the corresponding segment at the 90 percent confidence level.

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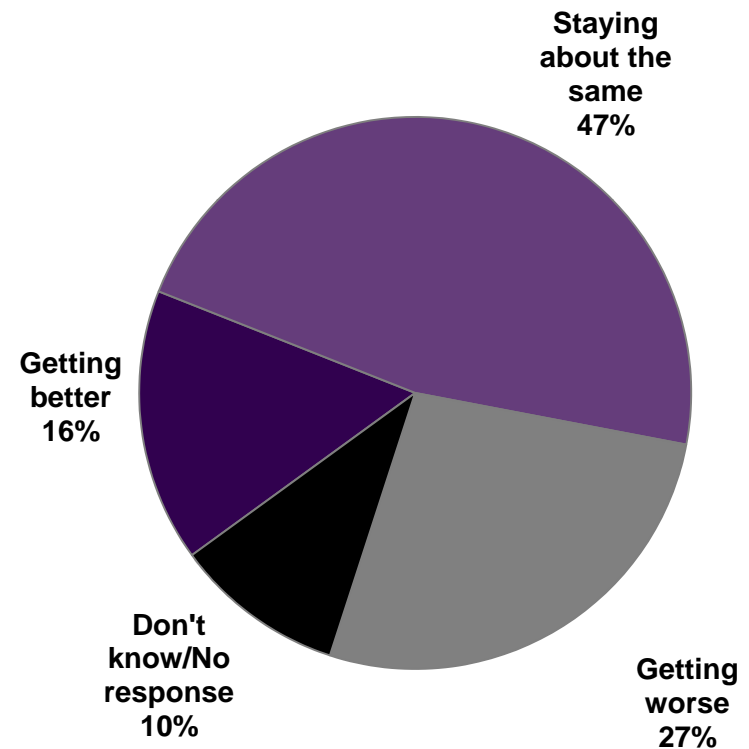
The majority gave a mediocre rating for the water quality in their community, choosing either good or fair as the response rather than an excellent or very good rating. There was not a lot of optimism evident about the present state or where it is headed, only about one in six gave water quality an excellent or very good rating and only about that many said the quality was getting better.

Water Quality In Your Community

How would you rate the water quality in the lakes, rivers and streams in your community at the present time?



Do you think the quality of the water in lakes, rivers and streams in the community where you live is...?



N = 451

N = 451

The highest percent of respondents saying their water quality was poor were those in the communities of Jeffersonville and Madison. About half in all communities thought the quality was staying the same while between a fourth and a third though it was getting worse.

Water Quality In Your Community

How would you rate the water quality in the lakes, rivers and streams in your community at the present time?

	Excellent/ Very Good (%)	Good/Fair (%)	Poor (%)	Don't Know (%)
Clarksville (C) n = 65	15	62	14	9
Floyd (F) n = 85	20	59	14	7
Jeffersonville (J) n = 80	13	67	19 _{NOS}	1
Madison (M) n = 40	12	60	25 _{NOS}	3
New Albany (N) n = 101	13	71	9	7
OPCD (O) n = 40	15	73	7	5
Sellersburg (S) n = 40	10	78 _{CFM}	8	5

Do you think the quality of the water in lakes, rivers and streams in the community where you live is...?

	Getting Better (%)	Staying the Same (%)	Getting Worse (%)	Don't Know (%)
Clarksville (C) n = 65	15	46	28	11
Floyd (F) n = 85	16	46	25	13
Jeffersonville (J) n = 80	17	44	30	9
Madison (M) n = 40	20	40	30	10
New Albany (N) n = 101	12	55	26	8
OPCD (O) n = 40	25 _N	40	25	10
Sellersburg (S) n = 40	15	50	28	7

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The chart below demonstrates how much knowledge the community has about items that affect water quality. It is ordered by the percent who answered the question correctly. Almost everyone knew the quality of the water in local streams affect the Ohio, in contrast only a few knew that auto supply stores or gas stations do accept used motor oil often.

N = 451

Knowledge of Water Quality Issues

<i>Would you agree or disagree with that statement or are you not sure one way or another?</i>	Percent Answered Correctly
The quality of water in local streams where you live affects the Ohio River.	90% Agreed
The supply of fresh water in Southern Indiana could disappear if not protected.	81% Agreed
Leaves and grass clippings can be placed in streets, ditches and catch basins to be washed away when it rains.	77% Disagreed
Pet waste, excess fertilizer and chemicals left on the ground will HARM the water ONLY IF YOU LIVE RIGHT NEXT TO A LAKE, STREAM OR RIVER.	72% Disagreed
Pet waste no matter where it is left on the ground will cause bacteria pollution in local streams, lakes and ponds.	66% Agreed
Contractors in your community are required by law to keep bare soil at construction sites from eroding into other areas.	61% Agreed
The local community has so many lakes, rivers and streams that fresh water is an UNLIMITED RENEWABLE SOURCE that will continue to REPLENISH itself with rain and snow.	56% Disagreed
Applying more than the recommended amount of fertilizer to your lawn will promote additional grass growth.	52% Disagreed
It is hard to recycle used motor oil because it is not often accepted at auto supply stores or gas stations.	24% Disagreed

The knowledge of which things and actions can affect water quality varied a lot by community.

Knowledge of Water Quality Issues: Percent Answered Correctly

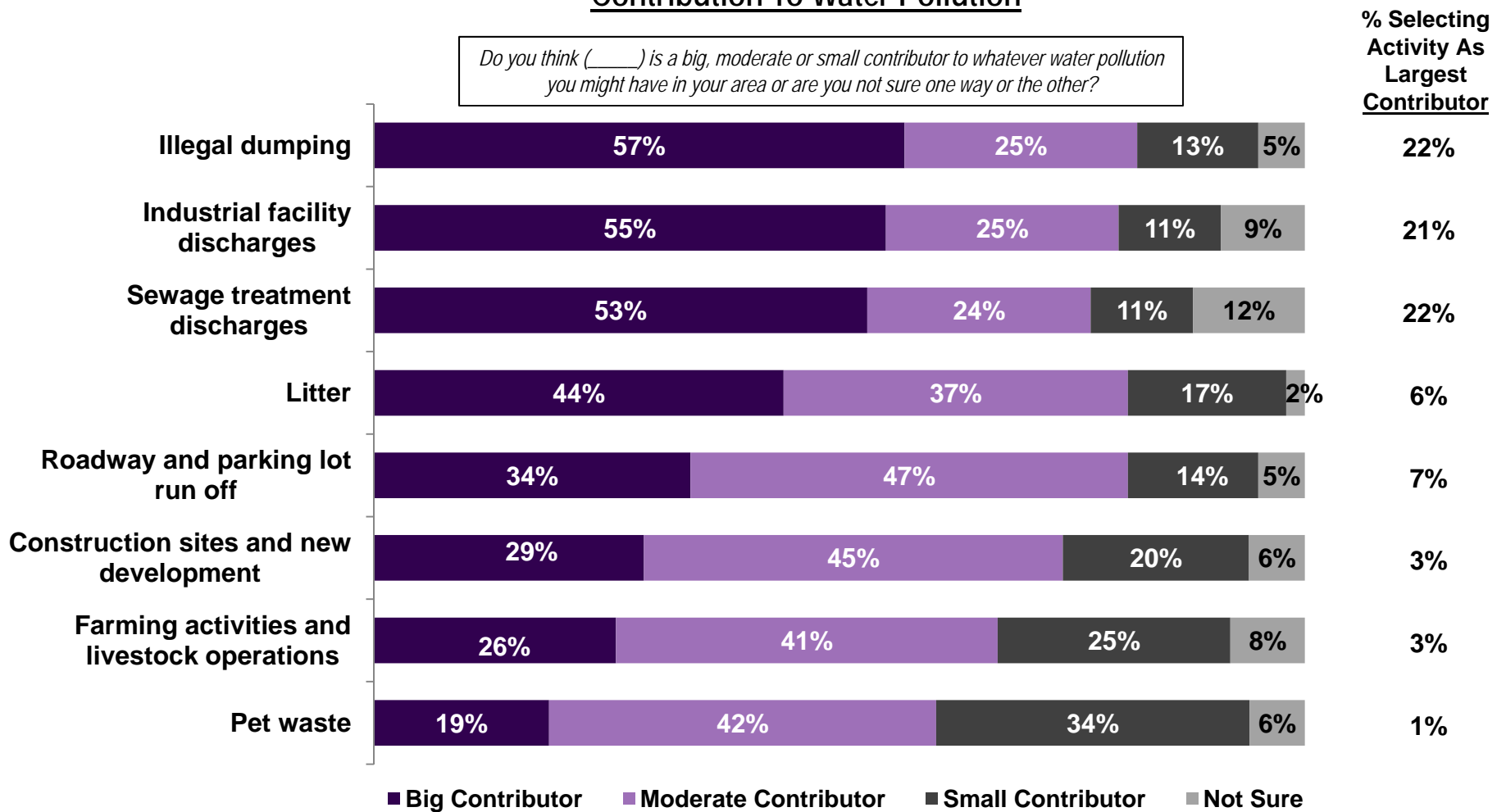
<i>Would you agree or disagree with that statement or are you not sure one way or another?</i>	Clarksville (C) (%)	Floyd (F) (%)	Jeffersonville (J) (%)	Madison (M) (%)	New Albany (N) (%)	OPCD (O) (%)	Sellersburg (S) (%)
The quality of water in local streams where you live affects the Ohio River.	95 _{JN}	88	86	95 _J	88	98 _{FJN}	93
The supply of fresh water in Southern Indiana could disappear if not protected.	83 _O	84 _O	81 _O	80	79 _O	65	83 _O
Leaves and grass clippings can be placed in streets, ditches and catch basins to be washed away when it rains.	79	69	79	70	82 _F	88 _{FMS}	73
Pet waste, excess fertilizer and chemicals left on the ground will HARM the water ONLY IF YOU LIVE RIGHT NEXT TO A LAKE, STREAM OR RIVER.	65	66	83 _{CFOS}	70	77 _{CFOS}	53	60
Pet waste no matter where it is left on the ground will cause bacteria pollution in local streams, lakes and ponds.	62	62	73	78 _{CFNO}	62	58	70
Contractors in your community are required by law to keep bare soil at construction sites from eroding into other areas.	49	61	61	55	68 _C	58	63
The local community has so many lakes, rivers and streams that fresh water is an UNLIMITED RENEWABLE SOURCE that will continue to REPLENISH itself with rain and snow.	46	55	66 _{CM}	50	57	53	53
Applying more than the recommended amount of fertilizer to your lawn will promote additional grass growth.	59 _S	49	61 _{MNS}	45	49	53	40
It is hard to recycle used motor oil because it is not often accepted at auto supply stores or gas stations.	31 _M	21 _M	28 _M	8	25 _M	30 _M	28 _M

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Over 50% said Illegal dumping, industrial facility and sewages discharges were big contributors to water pollution in their area. Those three were also the ones that had the highest percent when asked to select the activity that was the largest contributor. The percent choosing each was almost equally divided. Very few thought pet waste was a big contributor.

Contribution To Water Pollution

Do you think (____) is a big, moderate or small contributor to whatever water pollution you might have in your area or are you not sure one way or the other?



N = 451

More of Jeffersonville respondents identified Illegal Dumping, Industrial Facility Discharges and Litter as a large contributor than those in several communities. Sellersburg identified Roadway and Parking Lot Run Off as a bigger contributor than all other communities.

Contribution to Water Pollution

Do you think (____) is a big, moderate or small contributor to whatever water pollution you might have in your area or are you not sure one way or the other?

<i>% Selecting Activity as a Big Contributor*</i>	Clarksville (C) (%)	Floyd (F) (%)	Jeffersonville (J) (%)	Madison (M) (%)	New Albany (N) (%)	OPCD (O) (%)	Sellersburg (S) (%)
Sewage Treatment Discharges	57	57	64 _S	58	65 _S	58	43
Industrial Facility Discharges	60	52	71 _{FMS}	53	61	67	54
Illegal Dumping	66 _F	47	73 _{FN}	60	57	61	61
Litter	45	38	55 _{FMO}	33	46 _O	30	60 _{FMO}
Roadway and Parking Lot Run Off	36	36	34	32	35	32	55 _{CFJMNO}
Construction Sites and New Development	38 _{MO}	27 _M	36 _{MO}	14	31 _M	18	42 _{MO}
Farming Activities and Livestock Operations	33	24	31	26	29	25	26
Pet Waste	25	16	23	16	18	14	27

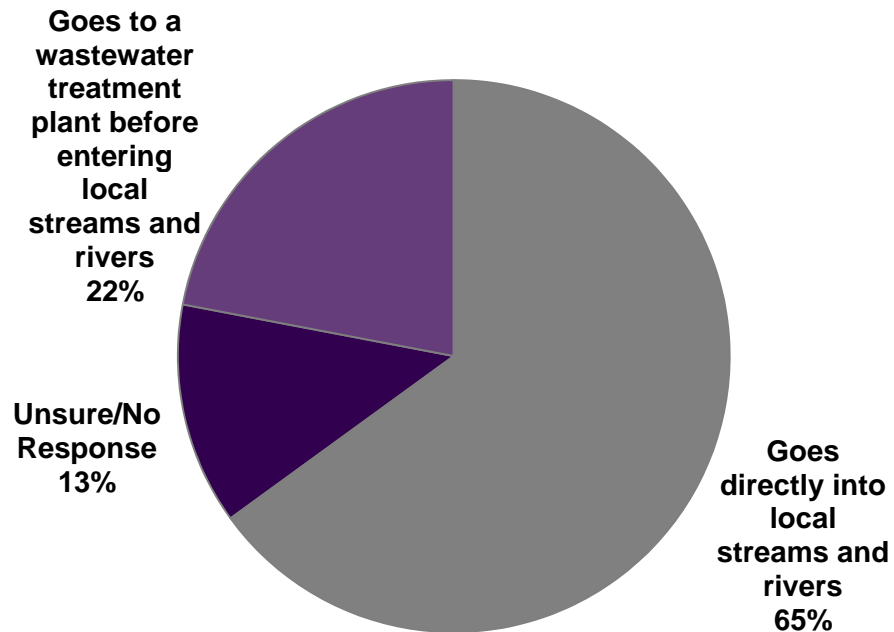
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Two-thirds knew that stormwater goes directly into streams and rivers and almost everyone knew that it was illegal to put something into a storm drain or ditch to dispose of it.

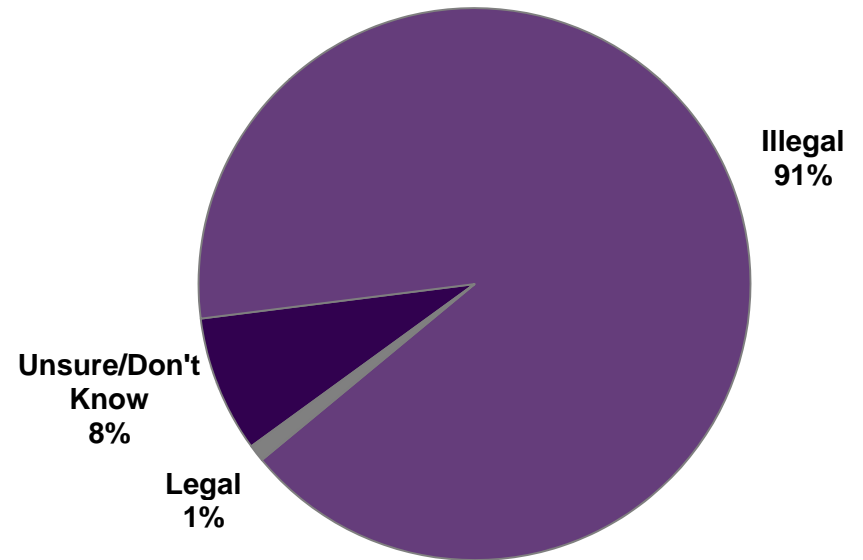
Stormwater and Storm Drains

To the best of your knowledge where does stormwater go after it enters a storm drain or roadside ditch in your community? Do you think the stormwater...



N = 451

Do you think it is legal or illegal in your community to put something into a storm drain or roadside ditch to dispose of it?

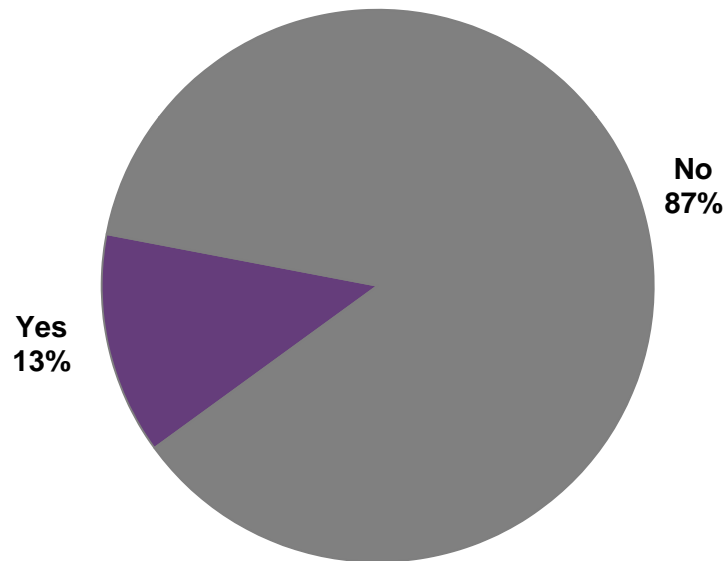


N = 451

Although only about one in ten said they had seen or knew of someone who had put lawn chemicals, motor oil or such into a storm drain, most were not sure who to call to report those type of activities. Only four percent said they would report it to the sewer department.

Stormwater and Storm Drains

Have you ever seen, or do you know of anyone who has put lawn chemicals, motor oil and such into storm drains or ditches?



N = 451

What do you think you should do if you see someone dumping something into a storm drain or ditch?

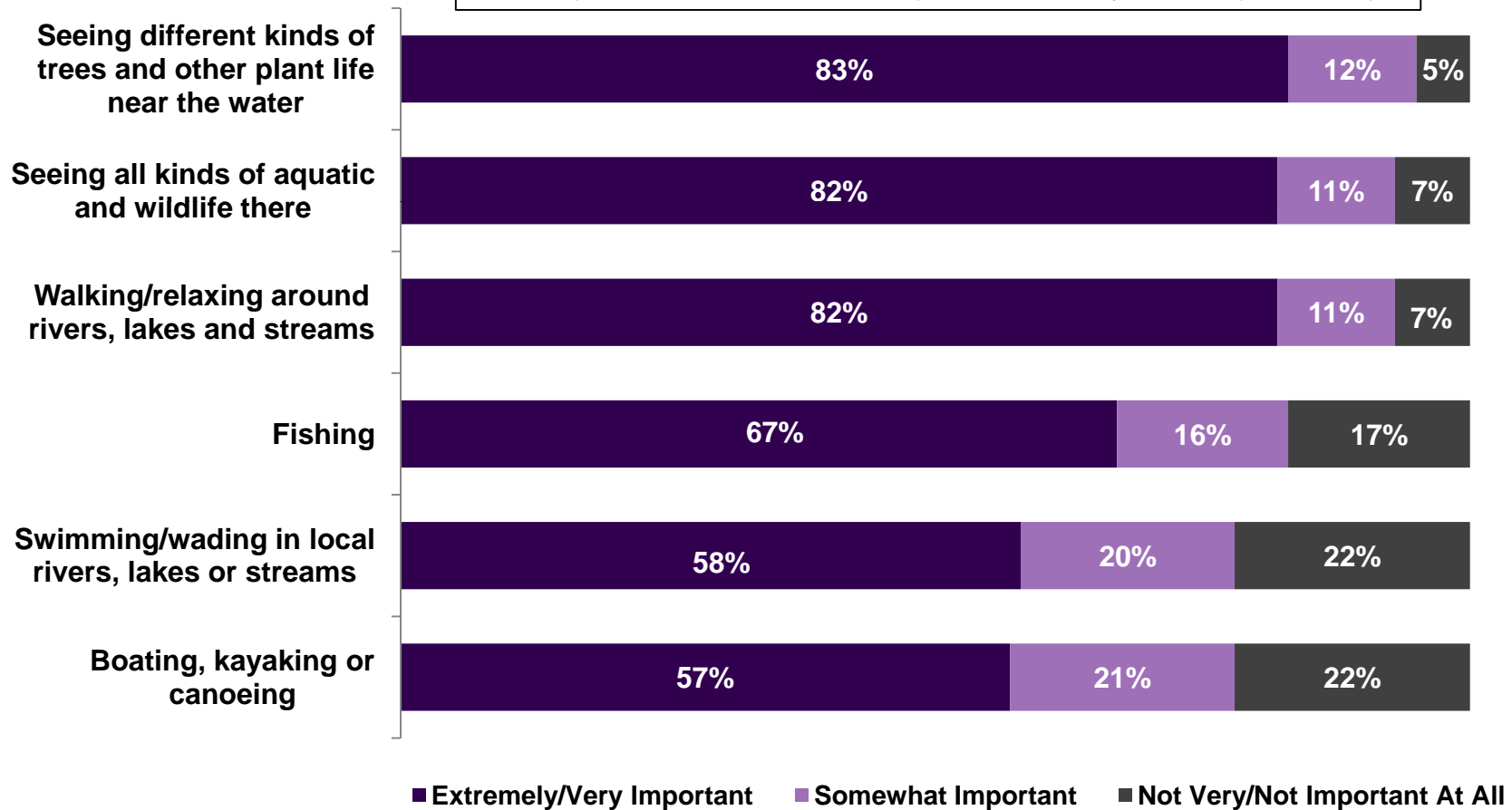
<u>Top 5 Responses</u>	<u>%</u>
Call/Notify the police/authorities	29
Approach them/Tell them not to do it	22
Report it (non-specific)/Not sure who to call	17
Call the EPA/Report them to the EPA	10
Report it to the sewer department	4

N = 451

The majority of people said all of the outdoor water activities tested were extremely or very important to them. Those that could be described best as enjoying the natural beauty and relaxing around the water had the highest importance ratings.

Importance of Outdoor Water Activities In Your Community

Now I'd like you to think about the things that people enjoy about the lakes, rivers and streams around your community. Please tell me how important it is to you to have these things available in your community.



N = 451

There were few significant differences by community in rating the importance of different outdoor water activities. However those in the OPCD area had the highest appreciation of walking and relaxing around the water while Floyd County residents stood out in their appreciation of seeing different trees and plant life near the water.

Importance of Outdoor Water Activities in Your Community % Extremely/Very Important

<i>Please tell me how important it is to you to have these things available in your community?</i>	Clarksville (C) (%)	Floyd (F) (%)	Jeffersonville (J) (%)	Madison (M) (%)	New Albany (N) (%)	OPCD (O) (%)	Sellersburg (S) (%)
Seeing different kinds of trees and other plant life near the water	79	92 _{CJNS}	78	83	83	85	78
Seeing all kinds of aquatic and wildlife there	71	89 _{CS}	81	83	83 _C	88 _{CS}	70
Walking/relaxing around rivers, lakes and streams	79	84	78	80	84	98 _{CFJMNS}	75
Fishing	63	71	61	70	69	78 _J	68
Swimming/wading in local rivers, lakes or streams	63	60	56	48	56	63	58
Boating, kayaking or canoeing	51	62	51	55	60	68 _{CJ}	50
Base =	(65)	(85)	(80)	(40)	(101)	(40)	(40)

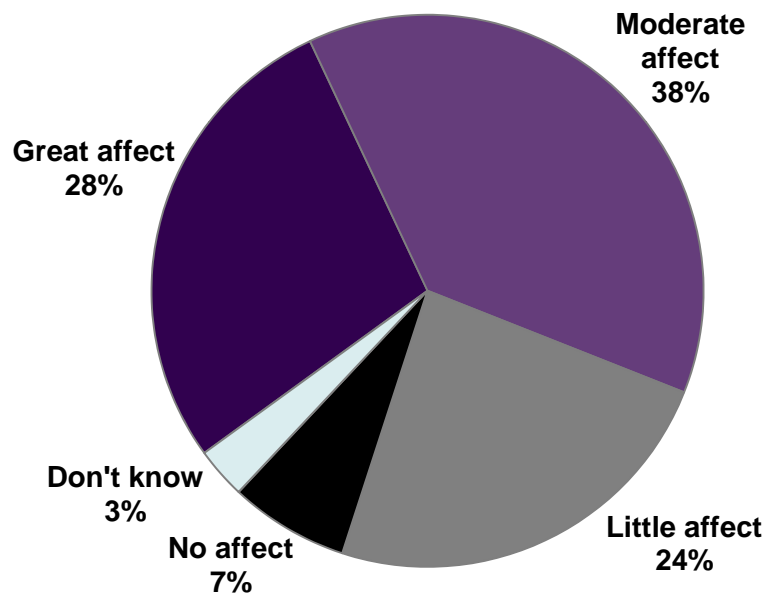
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The majority thought that the way they take care of their home and vehicles have only a moderate or little affect on the lakes, rivers and streams. Only about a fourth believed they had a great affect on it.

Personal Affect on Water Quality

How much do you think the way you care for your home and vehicles (e.g. lawn care, trash removal and pet care) affects the lakes, rivers and streams in your community?



	Great Affect (%)	Moderate Affect (%)	Little Affect (%)	No Affect (%)	Don't Know (%)
Clarksville (C) n = 65	29	36	20	9 _F	6
Floyd (F) n = 85	20	46 _{MS}	30	2	2
Jeffersonville (J) n = 80	35 _F	35	20	8	2
Madison (M) n = 40	33	27	27	8	5
New Albany (N) n = 101	27	42	23	6	3
OPCD (O) n = 40	25	33	28	10	5
Sellersburg (S) n = 40	35 _F	30	20	13 _F	2

N = 451

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There were a series of questions concerning the manner in which people take care of their vehicles, and dispose fluids, motor oil and batteries. The first question simply asked how many vehicles the household owned. The average number came to 2.3. Floyd County residents had the most vehicles and Madison had the least.

Number of Vehicles

<i>How many vehicles does your household own and maintain?</i>	<u>Total</u> (%)	Clarksville (C) (%)	Floyd (F) (%)	Jeffersonville (J) (%)	Madison (M) (%)	New Albany (N) (%)	OPCD (O) (%)	Sellersburg (S) (%)
None	1	1	1	1	2	2	0	0
One	24	28 _F	13	28 _F	40 _{FNOS}	23 _F	20	17
Two	47	49	50	45	38	47	48	48
Three or more	27	20	35 _{CM}	25	20	28	32	35 _C
Mean	2.3	2.1	2.6 _{CJM}	2.2	2.0	2.3	2.4 _M	2.5 _{CM}
No Response	1	2	1	1	0	0	0	0
Base =	(451)	(65)	(85)	(80)	(40)	(101)	(40)	(40)

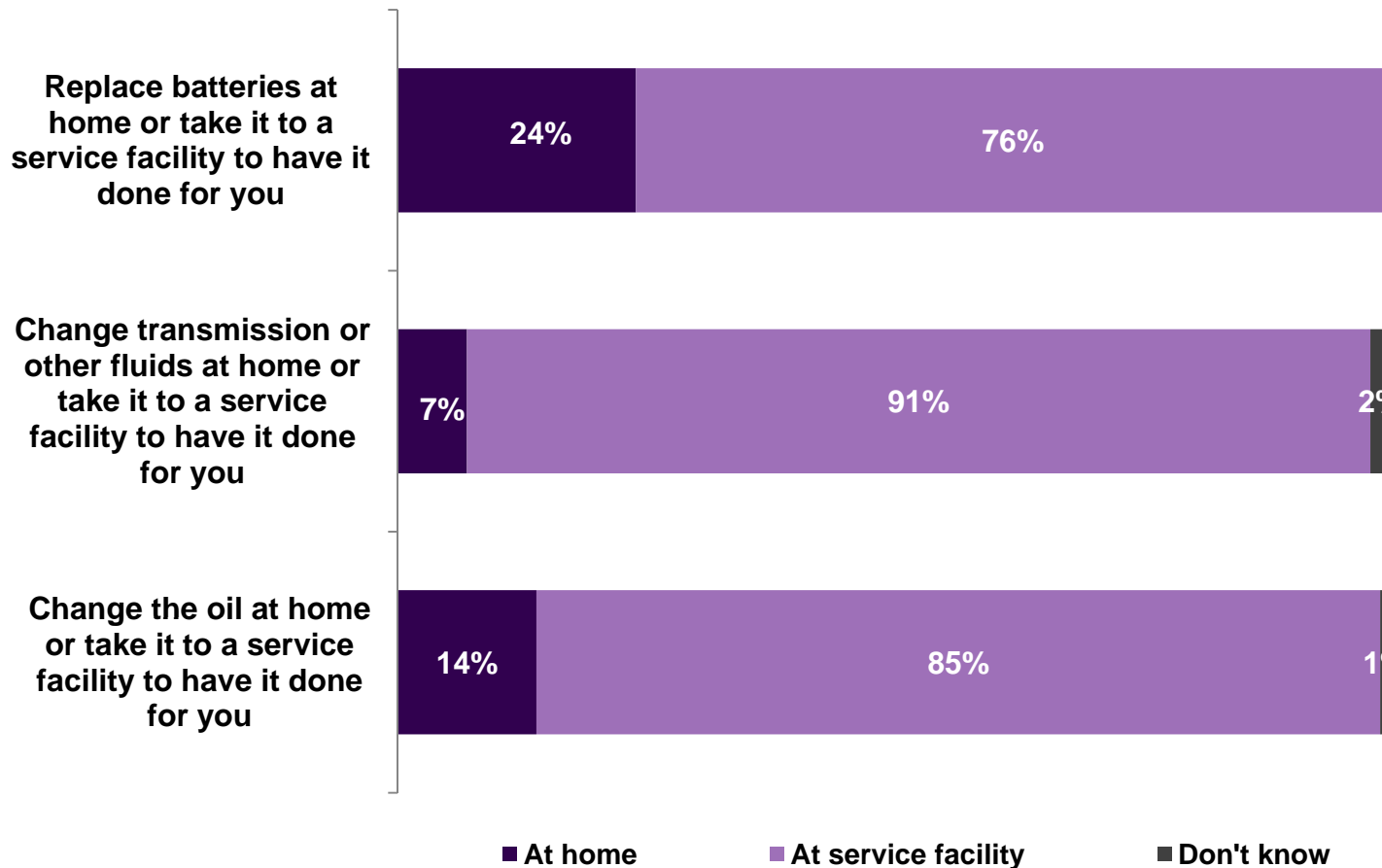
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About a fourth replace batteries at home, while one in seven change the oil at home. Fewer than ten percent change transmission or other fluids at home. The great majority of those who replace batteries at home dispose of them correctly. Most trade them in to save them on core charges, followed by those who recycle them.

Car Maintenance

Do you or does someone in your household usually...?



How do you usually get rid of the batteries?

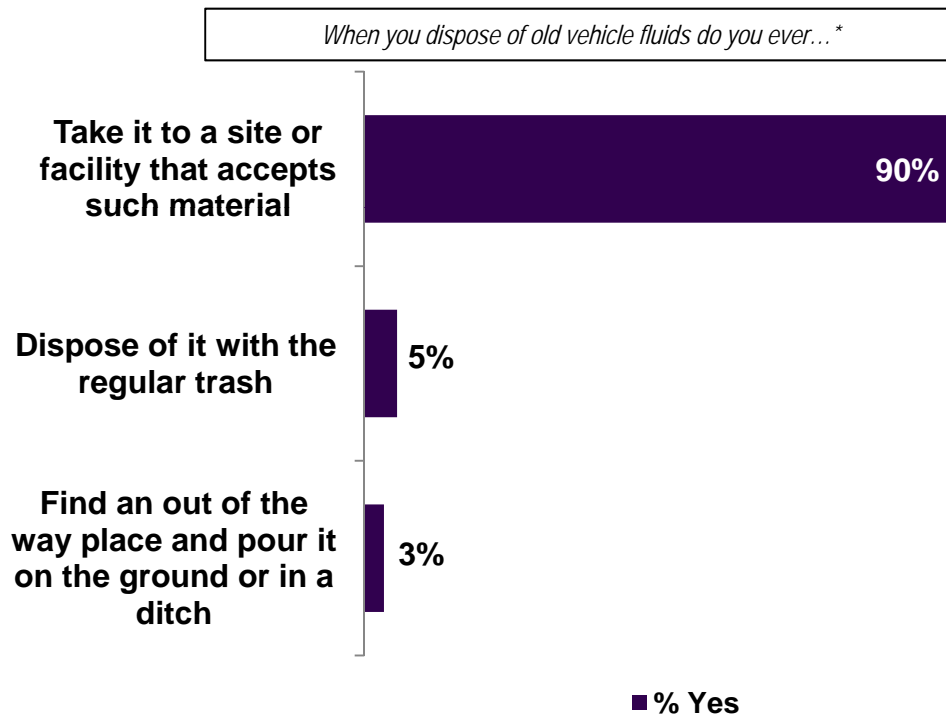
Top Responses	%
Trade it in/Save on core charge	61
Recycle them/Recycle center	16
Give it to Auto Zone/Return to service center	11
Still have them	2
Sell at junk yard/Sell to someone who buys used batteries	2
Base	109

* Less than 0.5 percent.

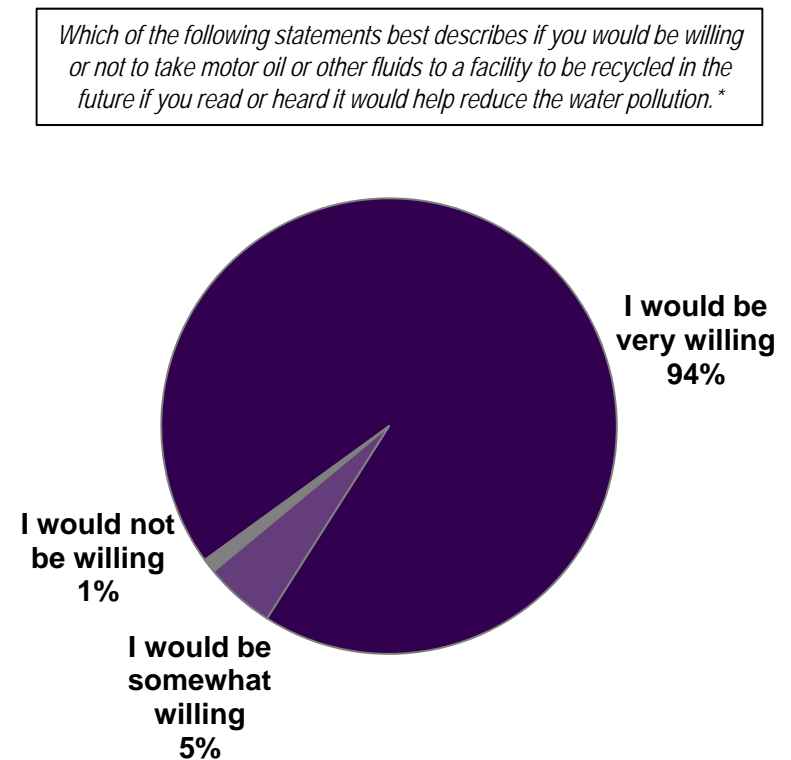
When disposing of car fluids, nine out of ten take it to a site that accepts such material. Of those who do not dispose of it properly now, almost everyone said they would be willing to change that behavior if they read or heard it would reduce water pollution.

Car Maintenance: Fluid Disposal

Present Behavior



Future Willingness



N = 71

* Among those who change oil or fluids at home.

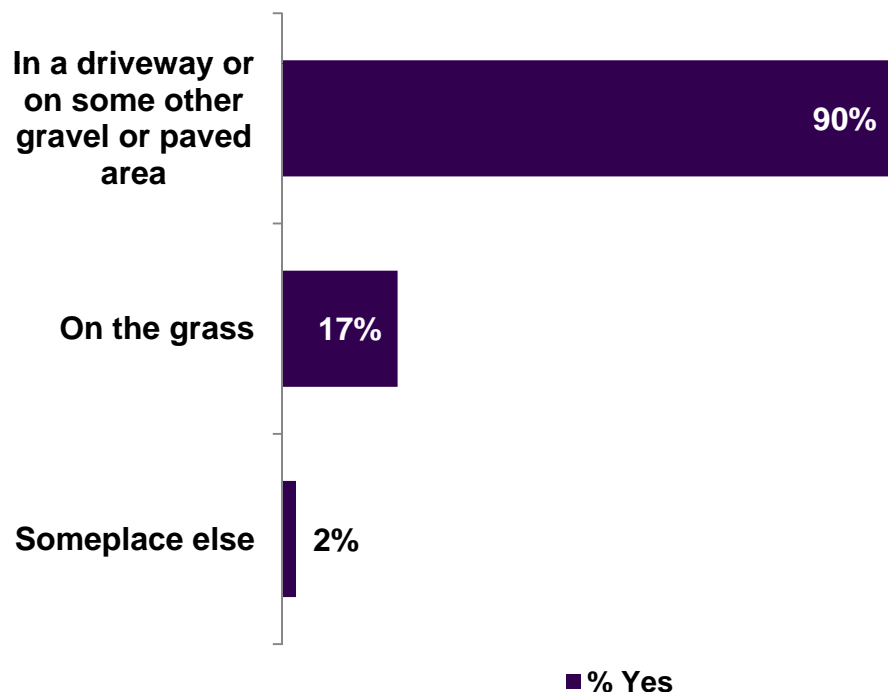
N = 71

One fourth said they wash their vehicle at home. Nine out of ten of them wash it on the driveway or some other gravel or paved area. A little less than half of those said they would change their behavior and always wash it on the grass if it would help the environment, a fourth said they would do so sometimes. The rest would not change their behavior because it would be too inconvenient or they didn't believe that it helps that much.

24% wash their vehicle at home.

Washing Your Car

When you wash your vehicles at home do you sometimes wash it:*



N = 110

* Respondents who wash their vehicles at home.

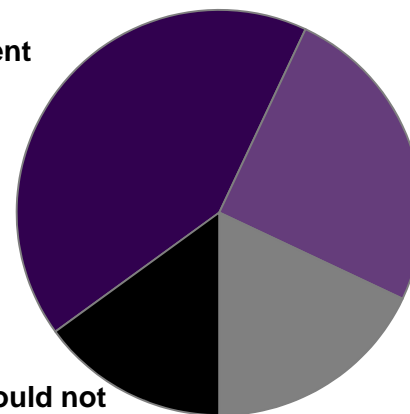
Which of the following statements best describes how much you would be willing to wash your vehicle on the grass in the future if you read or heard it would reduce water pollution?

I would always wash my vehicle on the grass if that would help the environment
42%

I would wash my vehicle sometimes on the grass
25%

I would not because it would be too inconvenient
15%

I would not because I don't think washing my vehicles on the grass really helps the environment all that much.
18%



N = 98

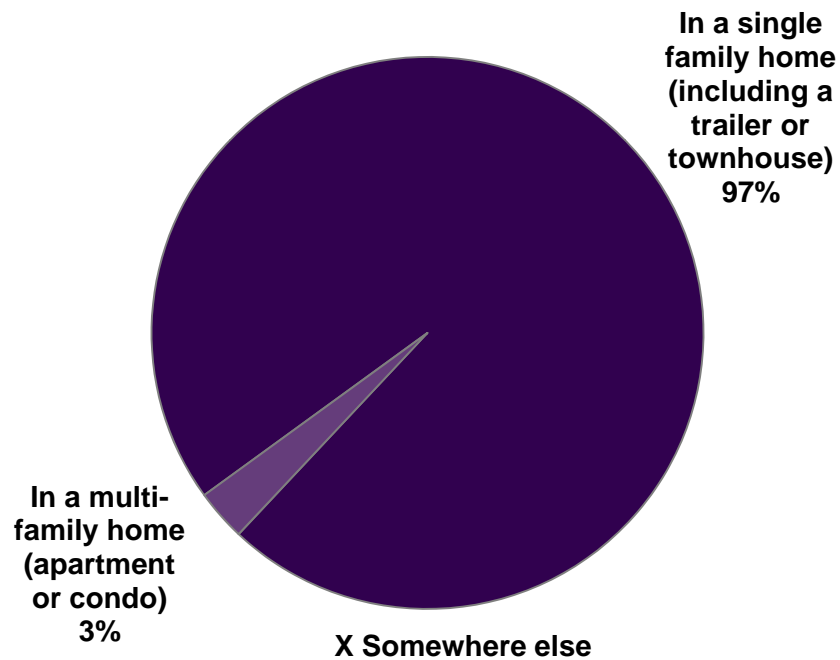
* Among those who wash their vehicles in a driveway.

Questions were included to ask about septic tank treatment. Respondents who lived in a single family home were asked if they had a septic tank. Almost everyone lived in a single family home and of those about one in six have septic tanks.

Septic Tank

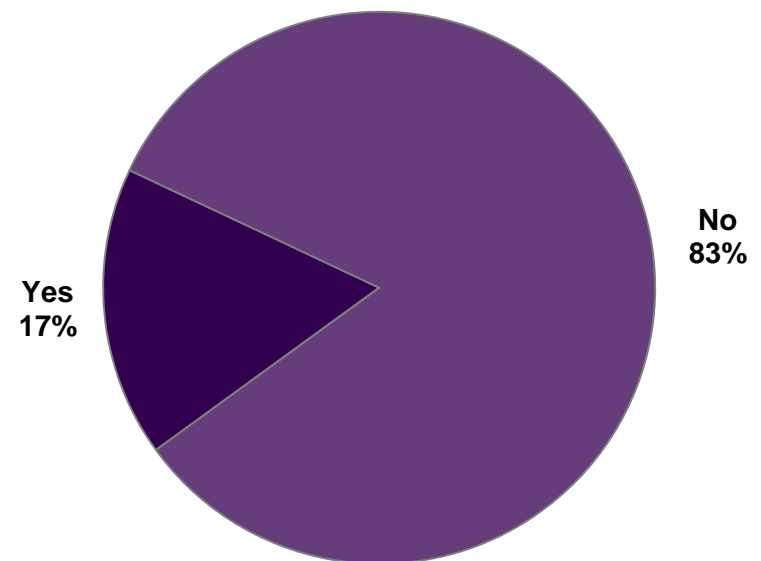
Now think about your home and maintenance there. Do you currently live...?

Does your house have a septic tank?*



N = 451

X Less than 0.5 percent.



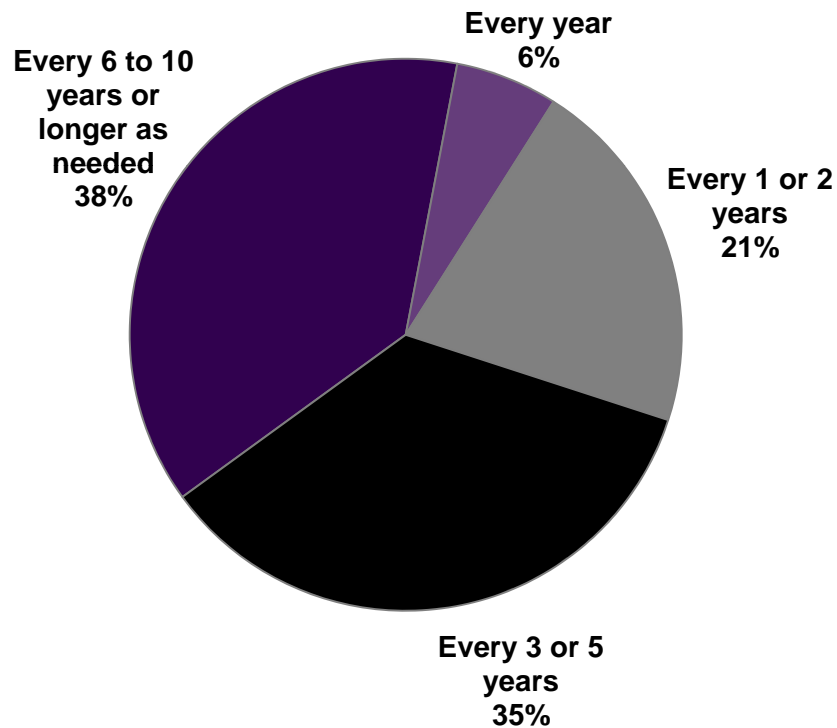
N = 438

*Among those living in a single family home with a response.

Those with septic tanks were asked how often they have it inspected or serviced. Over a third said they do it only every six to 10 years or longer as needed. The sample size was very small but that group was asked if they would be willing to have it checked at least every 3 to 5 years if it helped water pollution. A little more than half said they would be willing to do so while the rest said it would be too inconvenient and expensive.

Septic Tank

*How often do you have your septic tank inspected or serviced? Is it...**

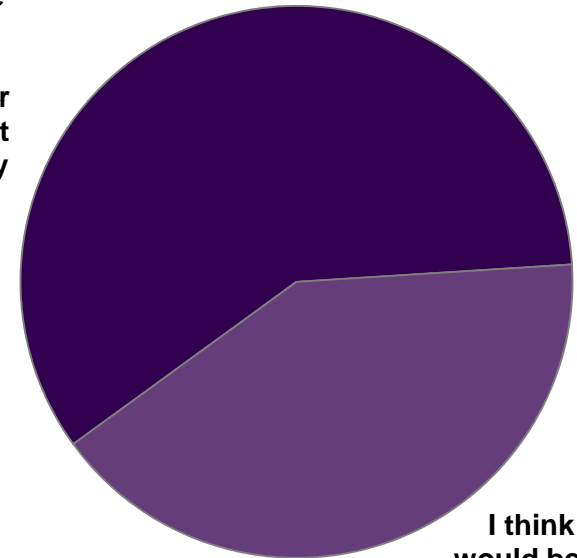


N = 68

* Among those who have a septic tank with a response.

*Which of the following statements best describes your opinion about how often you would have the septic tank checked in the future if you read or heard having it inspected more often would help water pollution?**

I would be willing to have it checked or serviced at least every 3-5 years
59%



I think it would be too inconvenient and expensive
41%

N = 22

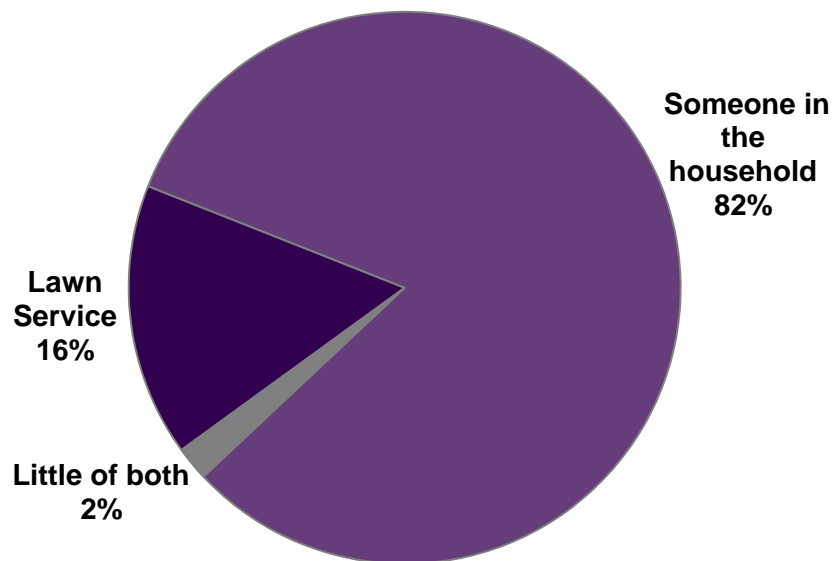
* Among those who have their septic tank inspected or serviced every 6 to 10 years or longer as needed.

Almost everyone had a lawn or grassy area that they maintained. For the great majority the lawn maintenance was done by someone in the household rather than a lawn service. Of those, most disposed of the leaves properly. The few who sweep them into the street or ditch, were asked if they would be willing to leave the grass in the yard if it would help water pollution. Six of ten said they would be willing to do so.

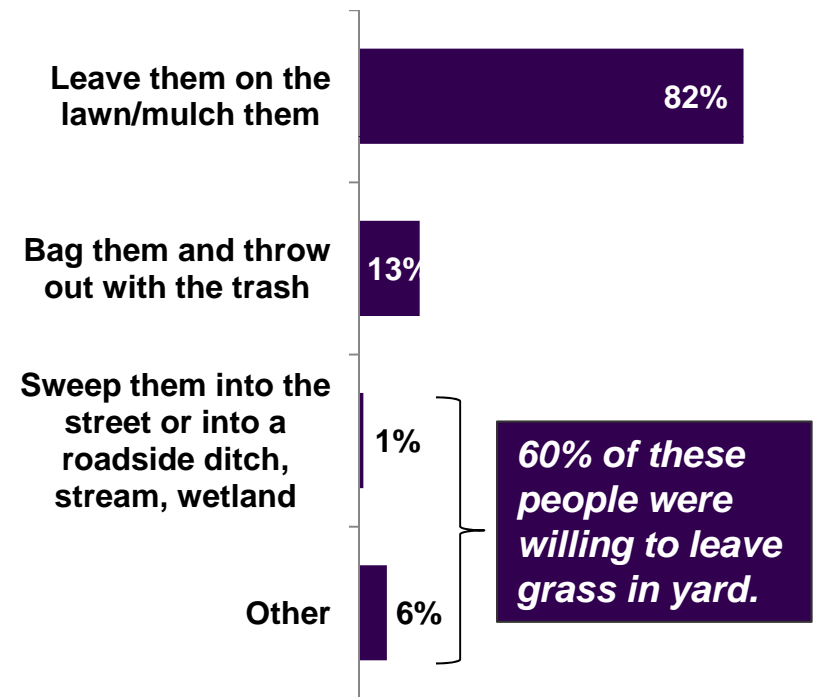
97% have a lawn or grassy area that they maintain

Lawn Maintenance

*Do you employ a lawn service to regularly cut or maintain your grass, does someone in your household take care of that – or a little of both, meaning you have lawn service for some things and others you do yourself?**



*What does your household (or your lawn service) typically do with grass clippings?**



N = 438

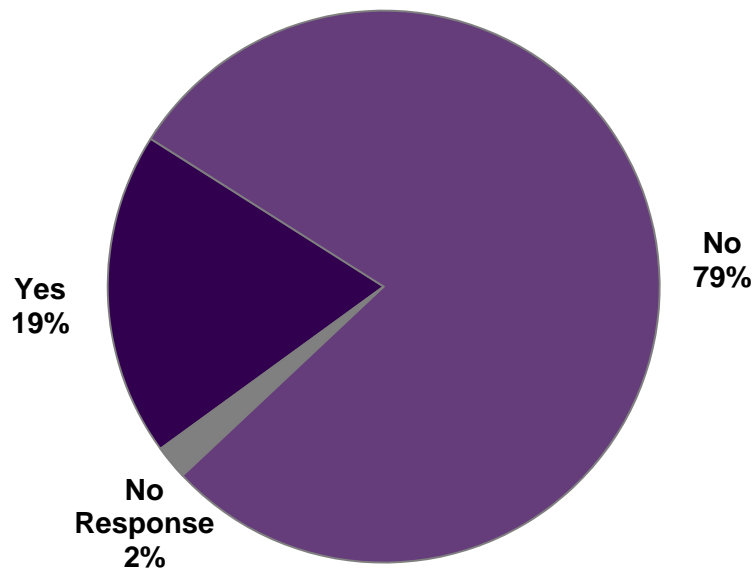
* Among those who have a lawn or grassy area near their home that they maintain.

N = 438

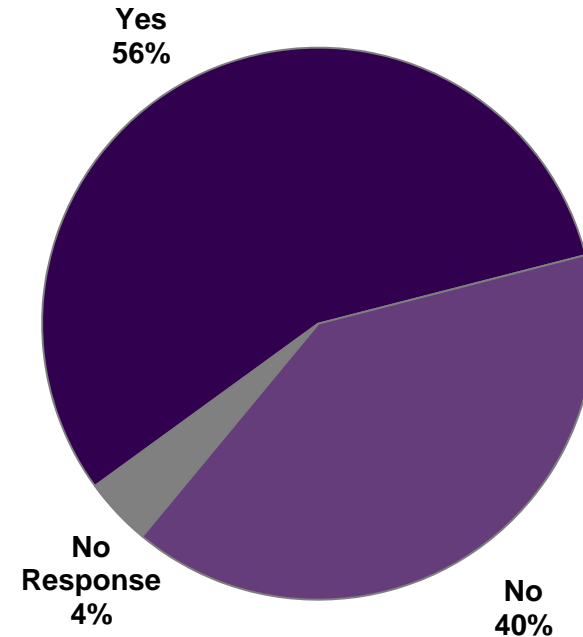
Most had never had their soil tested for how much and what kind of nutrients their grass needs. About half of those who had not, said they would be willing to get their soil tested if it would help water pollution.

Lawn Maintenance: Soil Testing

*Have you ever had your soil tested to determine how much and what kind of nutrients your grass needs?**



*Would you be willing to get your soil tested?**



N = 438

* Among those who have a lawn or grassy area near their home that they maintain.

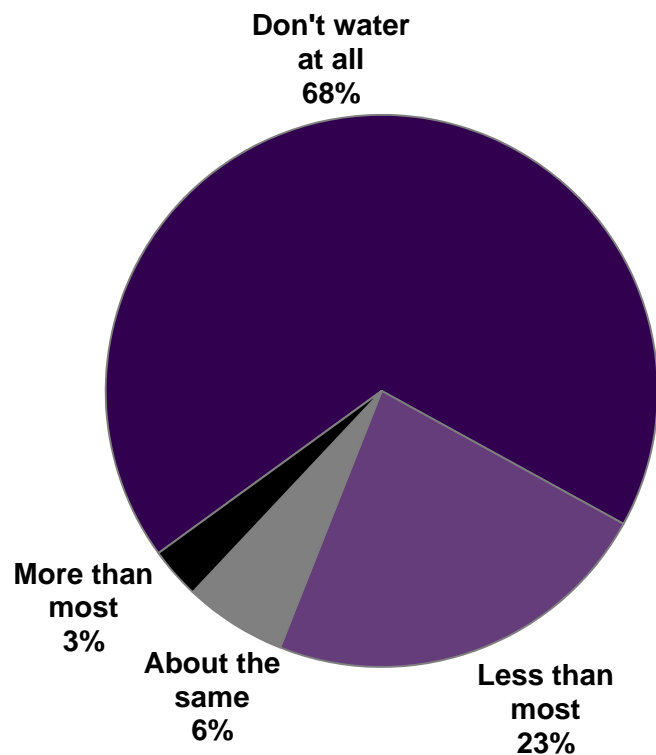
N = 356

* Among those who have never had their soil tested.

Most said they don't water their grass at all, and a third said they water it less than most. Nine percent said they washed it more or about the same as most. Those were asked if they would be willing to cut back on the amount they water if it would help with water pollution. Four out of five said they would be willing to change their behavior.

Lawn Maintenance: Watering Grass

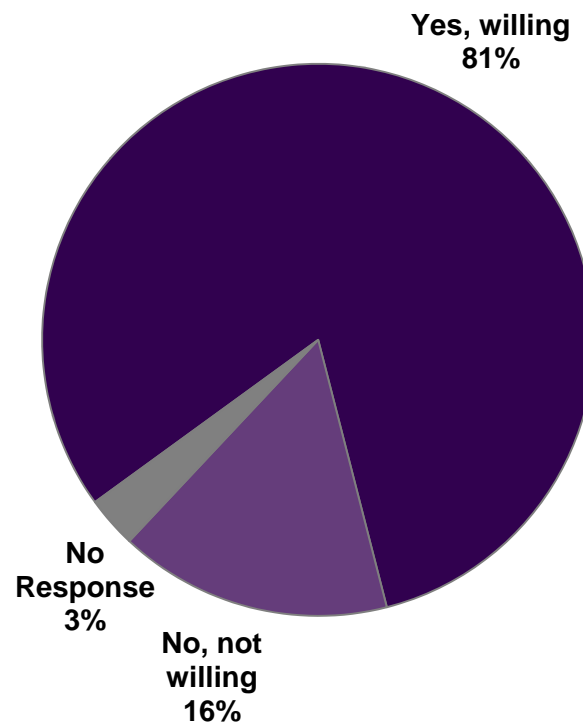
*Would you say you water your grass more, about the same or less than most others, or don't you water at all?**



N = 438

* Among those who have a lawn or grassy area near their home that they maintain.

*Would you be willing to cut back on the amount you water your lawn/grass?**



N = 40

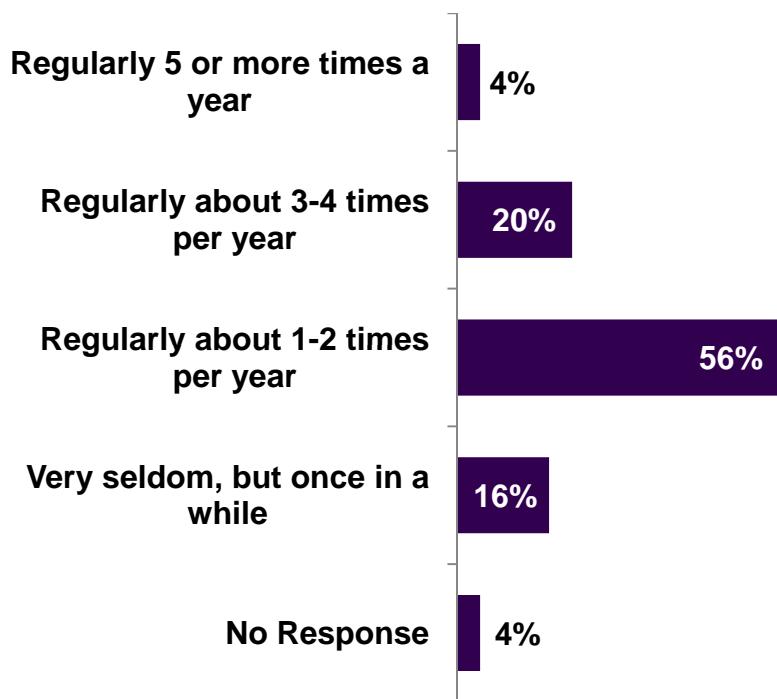
* Among those who water their grass more or about the same as most others.

They were also asked about the frequency of fertilizing. A little less than half said they fertilized from time to time. Half of those said they usually did it about one to two times a year. A fourth fertilized three or more times. They were asked if they would be willing to cut back on that schedule. About three-fourths said they would be willing to do so if it would help water pollution.

45% Fertilize from time to time.

Lawn Maintenance: Fertilizer

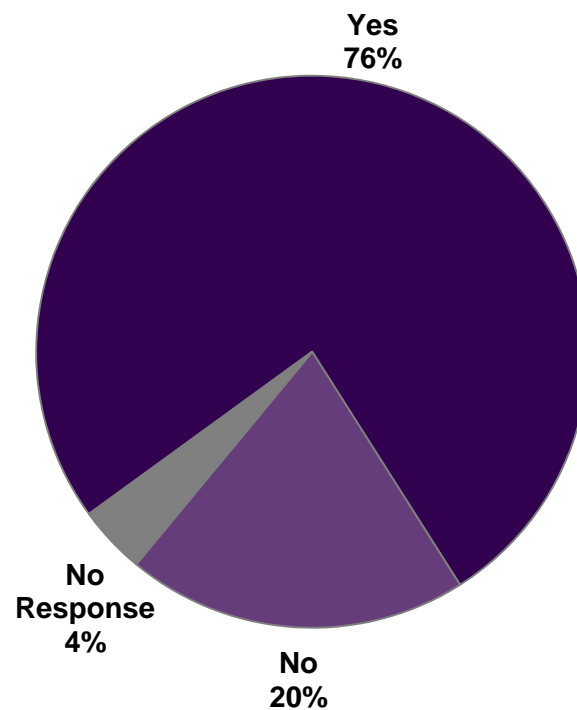
About how often do you have it fertilized?



N = 202

* Among those who have their lawn or grassy area fertilized from time to time.

Would you be willing to cut back on your fertilizer schedule?



N = 50

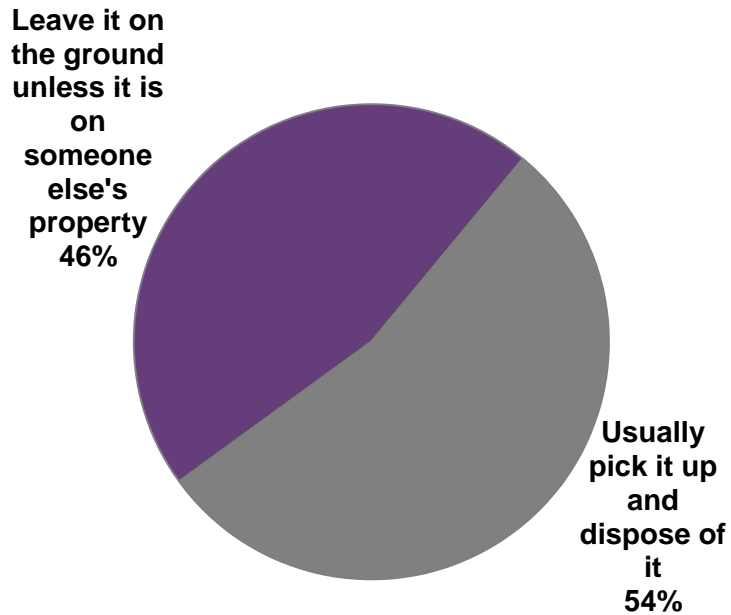
* Among those who fertilized their grass 3 or more times per year.

A little less than half had a dog that goes outdoors from time to time. Of those, just under half said they leave the dog waste on the ground unless it is on someone else's property. Those who usually pick up their dog waste were asked how they dispose of it. About 10 percent did not dispose of it properly. Of those who did not, 60% would be willing to change their behavior.

45% have a dog that goes outdoors from time to time.

Disposal of Dog Waste

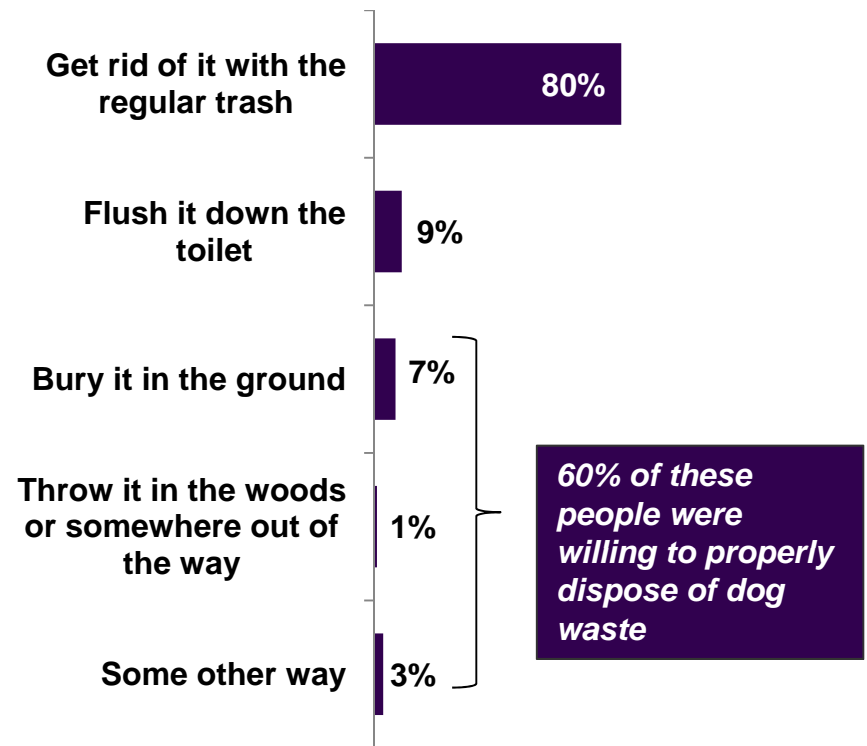
What do you usually do with the dog waste? Do you...?*



N = 198

* Among those who have a dog that goes outdoors from time to time.

How do you usually dispose of the dog waste? Do you...?*



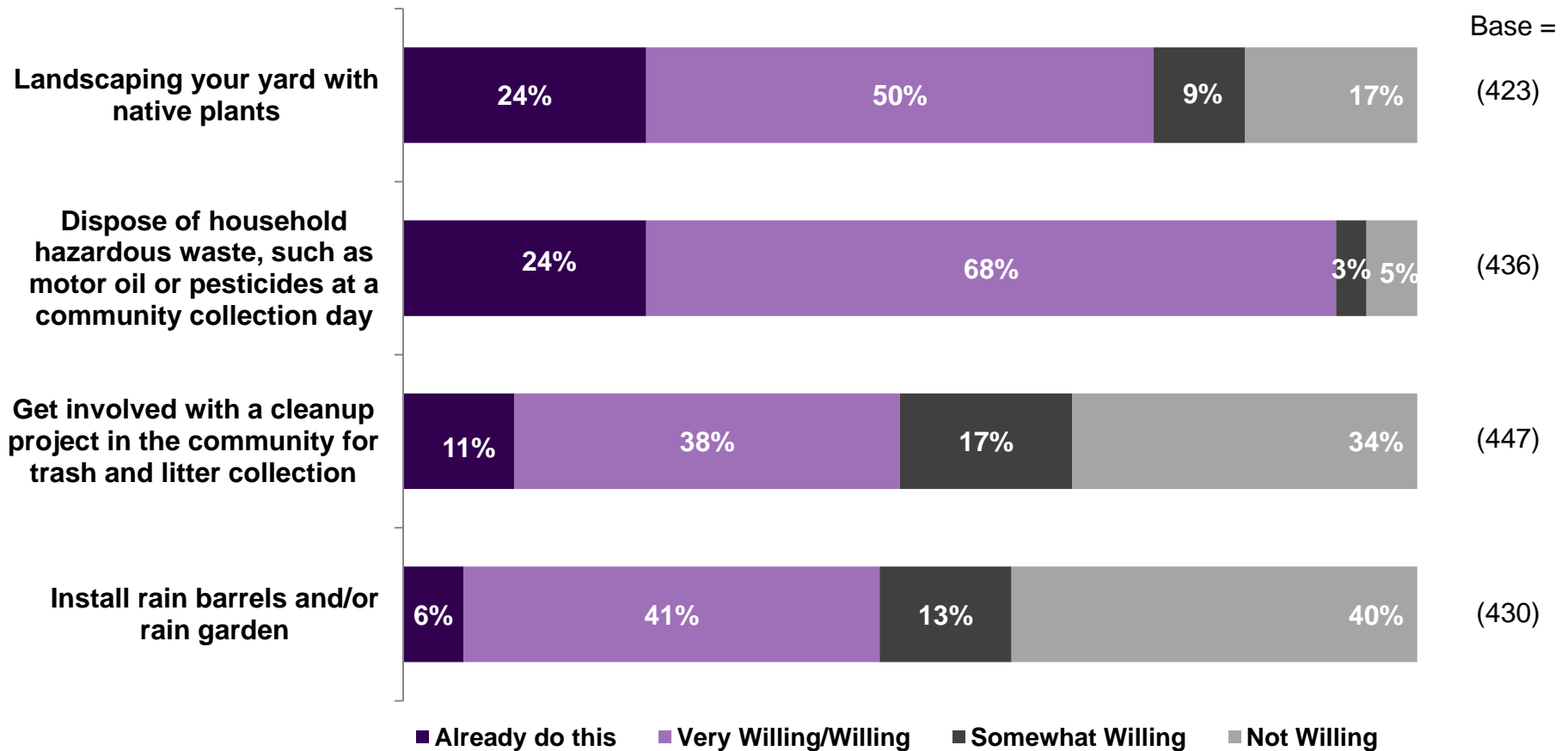
N = 107

* Among those who usually pick up dog waste and dispose of it.

There was good receptivity to some ideas of things they could do to reduce pollution. Almost seven in ten would be willing to dispose of hazardous household waste on a community collection day. A fourth say they already do that. A fourth also said they have landscaped their yard with native plants and another half would be very willing or at least willing to do so. The least attractive idea was to install rain barrels or a rain garden.

Pollution Reducing Methods

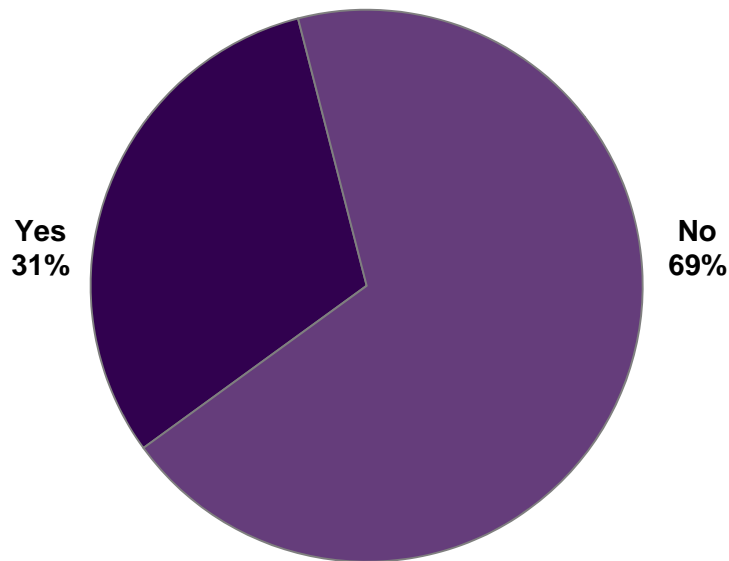
Here are a few ideas that some residents say they do to reduce pollution. Please tell me how likely you would be to do any of these things.



Almost seven in ten said they had not seen read or heard about things they could do to reduce stormwater pollution in the last year. Of those who had seen, read or heard about it, they were most likely to have seen it in the newspaper or a magazine.

Reducing Stormwater Pollution

During this past year, have you seen, read or heard about things you could do to reduce stormwater pollution?



N = 451

*Where did you see or hear about those things?**

<u>Top 5 Responses</u>	<u>%</u>
Newspapers/Magazine	47
Television stories/Ads	33
Mail/Brochures	10
Internet/Email	8
Water/Sewer insert	7

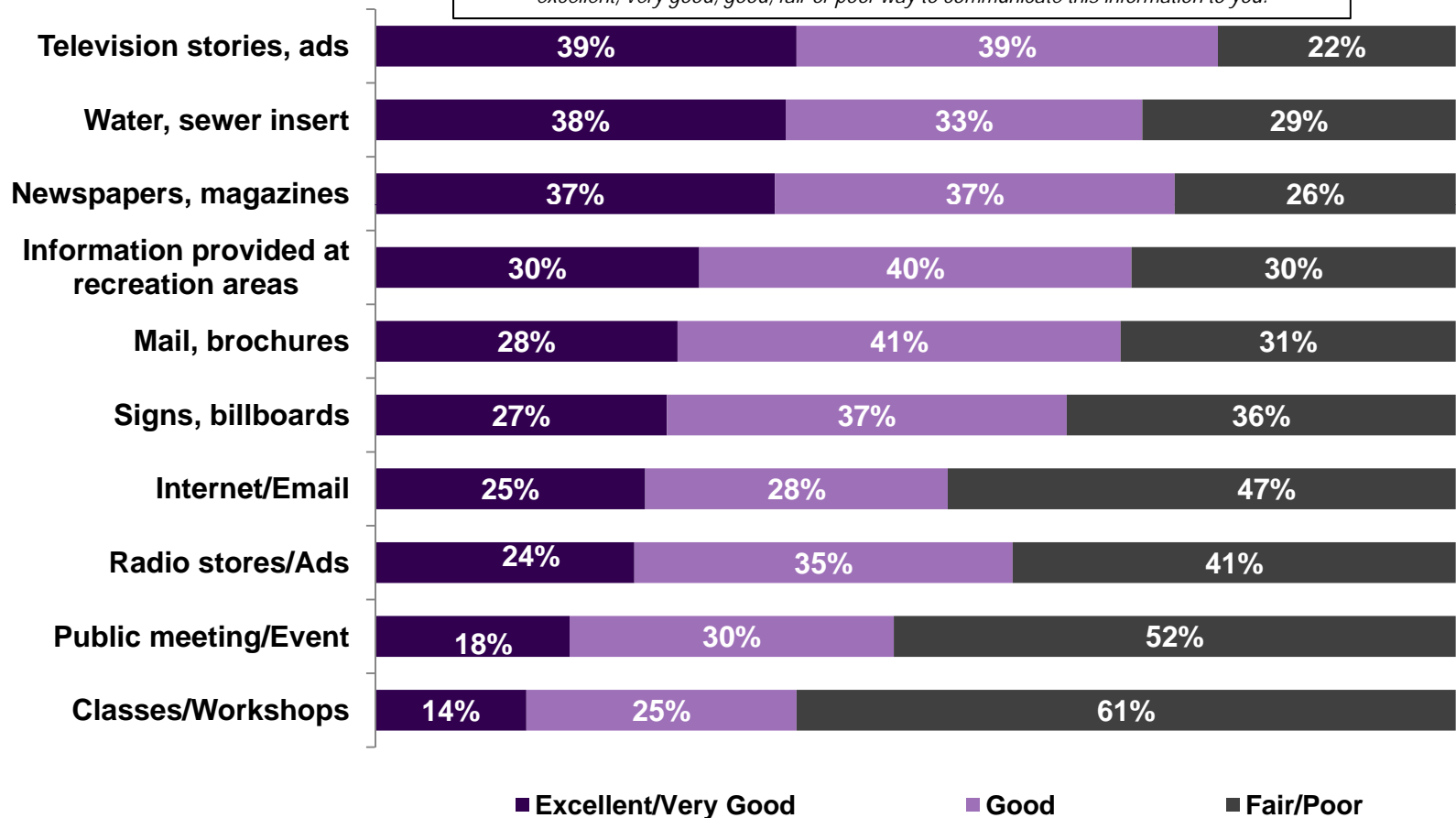
N = 145

* Among those who have seen or heard about things to do to reduce stormwater pollution in the past year.

When asked to rate different communication methods to get the word out about how they could protect lakes, streams and rivers in their community, television stories and ads were at the top. Those were closely followed by water or sewer inserts and newspapers or magazines. The least favorable were classes and workshops.

Rating Communication Methods

I'm going to read you a list of ways community leaders could provide you information about what you can do to protect lakes, streams and rivers in your community. Please tell me if this is an excellent, very good, good, fair or poor way to communicate this information to you.



N = 451

Sample Profile

Sample Profile

Demographic Profile

Gender

Male	39%
Female	61%

Age*

18 – 34	8%
35 – 44.....	12%
45 – 54	21%
55 – 64	24%
65 plus.....	35%
Mean	57.7

Household Income*

Less than \$35K.....	31%
\$35K to \$60K	32%
\$60K to \$100K.....	24%
More than \$100K	13%

Race

Caucasian	93%
African-American	4%
Other race	1%
No response	2%

Children in Household

Percent “Yes”.....	22%
--------------------	-----

Education

High school graduate or less.....	39%
Some college.....	29%
College graduate.....	19%
Post graduate degree.....	13%

Residence Description

Mostly rural.....	18%
A small town.....	62%
A large town or city.....	20%

Stormwater User Fee

Pay a fee	41%
No, do not pay a fee.....	42%
Don't know	17%

* Among those who responded.

N = 451