Dane County Community
Storm Water Awareness Assessment

Final Draft

November 2003

Prepared for the Dane County Joint Storm Water Permit Group Information and Education Plan Subcommittee by UW-Extension Environmental Resources Center.

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Appendices

Acknowledgements

This Storm Water Awareness Assessment was developed, administered, and analyzed under the direction of Dr. Kenneth Genskow, University of Wisconsin Cooperative Extension - Environmental Resources Center. The primary administrator and author was Tom Syring, with assistance from Joel Carey and Molly Lepeska. The Joint Storm Water Permit Group Information and Education Plan Subcommittee was actively involved in the design and review of the survey questionnaire.

Introduction

The Joint Storm Water Permit Group
The Joint Storm Water Permit Group consists of 19 municipalities within Dane County that have joined together in applying for a joint municipal stormwater discharge permit. Each municipality had been required to obtain storm water permits under Wisconsin Administrative Code NR 216; by applying jointly, they will be given a single permit rather than 19 individual permits. The goal of the municipal storm water discharge permit program is to reduce adverse impacts to water quality in our lakes and streams from urban sources of stormwater runoff.

As will be required by the municipal storm water permit, the Joint Storm Water Permit Group has developed a storm water information and education plan to protect the resources of the area and to meet regulatory requirements of Subchapter I of NR 216, Wisconsin Administrative Code. This survey was conducted as part of the information and education plan.

The Survey
The Joint Storm Water Permit Group Information and Education Plan Subcommittee initiated this survey to gather public input and background knowledge of storm water issues in the area of the permit group. The survey will aid in developing a program that helps to protect the water resources within the 19 municipalities of the permit group. Additionally, the information gathered provides a baseline for evaluating program effectiveness.

The questionnaire was developed with extensive input by members of the I & E Subcommittee and the 19 municipalities in the Permit Group. The questionnaire addressed questions of water quality, causes for water pollution, knowledge of storm water runoff, sources of information on storm water issues, and willingness of participants to take specific actions to reduce water pollution.

Although the sample was not directly proportional to the relative population of each community, the sampling frame was stratified to ensure at least a partial representation from each community. The survey was mailed to a stratified random selection of 562 households within the permit group area. To ensure minimum responses from each of the communities involved, the sampling frame was stratified as follows: 150 households from the City of Madison, 42 households from each of the Cities of Fitchburg, Middleton, and Sun Prairie, 22 households from each of the Cities of Monona and Verona, 22 households from each of the Villages of DeForest, Maple Bluff, McFarland, Shorewood Hills, and Waunakee, and 22 households from each of the Towns of Blooming Grove, Burke, Madison, Middleton, Westport, and Windsor. Dane County and UW-Madison are included in the storm water permit group, but were not specifically surveyed: UW-Madison has no "households," and Dane County households within the permit area were already included in the other communities. Households were selected from mailing lists provided by water utility records provided by the participating communities, or from mailing lists acquired through the Dane County Planning & Development Office. Use of water utility records allowed the survey to focus on the urbanized areas of the rural townships – and to meet the goal of targeting homeowners as decision makers that influence land use affecting storm water issues.

The survey was conducted between April and June 2003. Surveys were mailed to the sample group using a delivery process that involved as many as five contacts. All 562 members of the sample group were sent advanced letters addressed to them personally; the advance letters included information about the purpose of the survey and the importance of their participation.

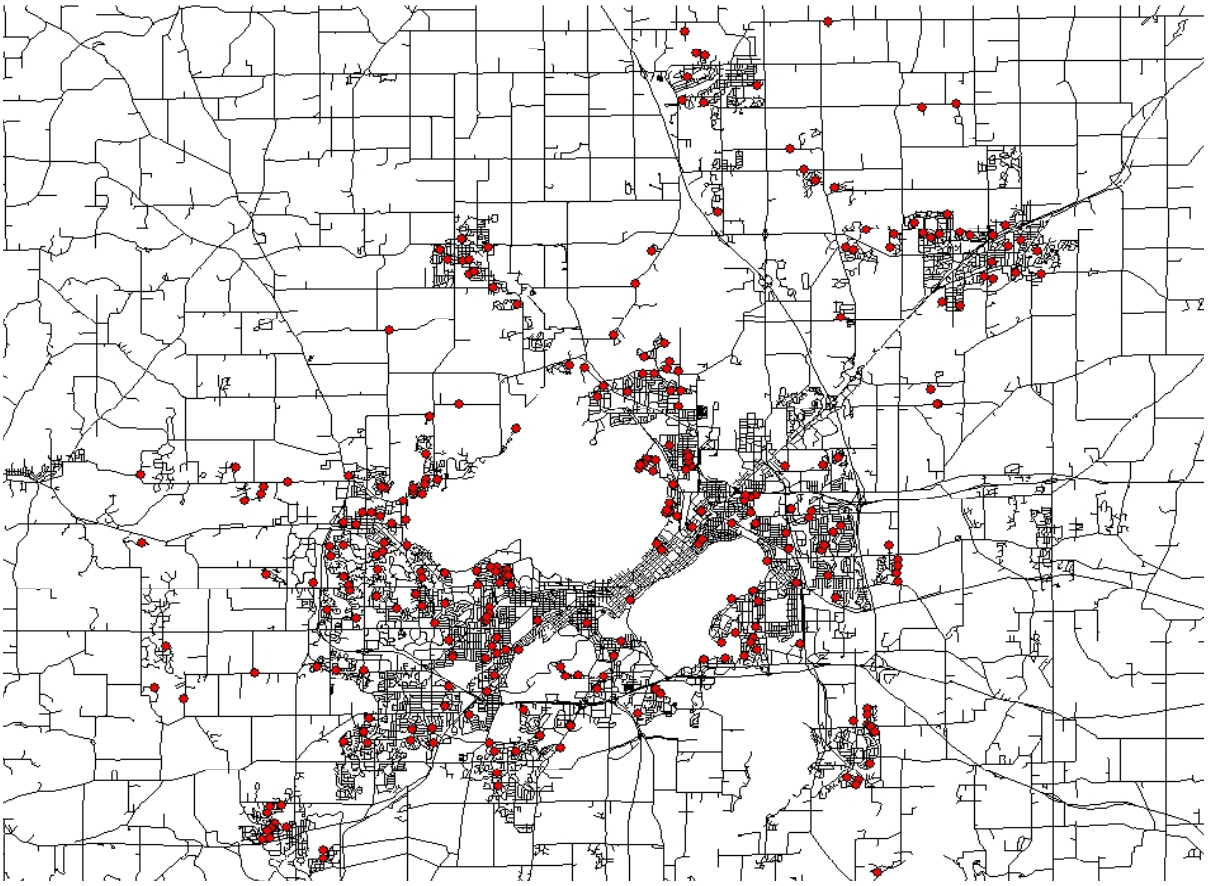
Within one week after the advance letters, all 562 households received an initial survey packet, including a copy of the questionnaire, a pre-addressed postage-paid envelope, and a cover letter describing the questionnaire and restating how the information would be used. All respondents were assured of confidentiality. Households that did not respond within ten days were sent a follow up letter reminding them of the survey and asking for their participation. Households that did not respond within 10-days of the follow up letter were sent another full survey packet, including a survey, a stamped addressed return envelope, and another cover letter. Those who had not responded two weeks after the second packet were mailed a final reminder letter.

Out of 562 surveys sent, 340 households returned surveys, 12 of those were largely incomplete or returned too late for analysis. Sixteen households were dropped because the individuals had moved or were deceased; the response rate was 62% (340/546). The final sample size of 328 yields data that has a statistical reliability of ± 5 percentage points at the 95% confidence level. This means that 95 out of 100 times, the results of this survey should differ by no more than 5 percent, in either direction, from what would have been obtained by interviewing all households in the Joint Permit Group area.

The Report

Highlights of the findings immediately follow this section, beginning on page 6. The full results are reported in the *Detailed Responses* section, beginning on page 14. Please refer to the Table of Contents on page 2 for a detailed breakdown of the entire report.

Locations of Respondents Households



Each dot on the map corresponds to the address of a survey respondent.

Highlights

Perceptions of Local Water Resources
Generally, people felt that water quality in their community is about the same as water quality in the larger permit area. Forty-nine percent of respondents rated water quality in their community as "Good" or "Very Good" while 46% of respondents rated water quality in the area on the map printed on the survey cover as "Good" or "Very Good," showing no statistically significant difference

Respondents most often identified *lawn and urban fertilizers and pesticides* as major or moderate contributors to water quality problems (83%), followed closely by *agricultural fertilizers and pesticides* (81%), and *stormwater runoff from streets and highways* (81%). In a follow up question, the same three items were identified in the same order as "contributing the most" to water quality problems in and around the community.

Of particular note for educational program development, 20% of respondents stated that they are *not sure* where storm water goes when it leaves their neighborhood, and 14% of respondents incorrectly stated that storm water goes *to a municipal sewage treatment system*. Respondents are also largely unaware of efforts by local governments to improve water quality, with 14% being *unaware of existing efforts*, and 58% *thinking that activities are taking place*, but they *don't know very much about them*.

According to respondents, stormwater runoff is a major or moderate contributor to *delivery of sediment to local lakes and streams* (73%), *weed and algae growth in lakes* (67%), *negative impacts on local swimming and beach areas* (64%).

Activities and Information Preferences
Practices that respondents "already do" most frequently to reduce water pollution are *have your oil changed at an automobile service center* (82%), *wash your car at a car wash* (81%), *direct rain downspouts to your lawn rather than your driveway* (77%). While these practices may have positive results for water quality, it is uncertain if respondents are aware of that aspect, or undertake these activities for convenience or other reasons.

The willingness of respondents to undertake pollution prevention activities reveals some complex attitudes towards fertilizer and pesticide use. The practice that respondents are most "willing to do" to reduce water pollution is *use a fertilizer with no or limited amounts of phosphorus* (44%), while the practice that respondents are least willing to do, or "not willing to do," is *stop using chemical fertilizers and weed-killers completely* (26%). This issue is analyzed in depth in Appendix C.

Practices that respondents are next most "willing to do" to reduce water pollution are *conduct soil tests to determine fertilizer application rates for your lawn* (36%), and *compost leaves and grass clippings through a community program* (36%).

Other practices that respondents have the greatest resistance to doing (are "not willing to do") are *wash your car on your lawn* (25%), and *install a rain barrel or cistern to collect rainwater from your downspouts* (23%). Several written comments cited concerns related to mosquitoes breeding in rain barrels.

Responses by Size of Community
For the most part, (82/95 questions) the size of community did not influence mean response levels. A Post Hoc Analysis of Variance showed that mean response levels were influenced by the size of respondent's community in only 13 out of 95 questions analyzed. Eight of those 13 questions related to the willingness of respondents to undertake various actions to help reduce water pollution. Complete cross tabulations of responses by size of community of appear in Appendix B.

Participant Demographics
Fifty-eight percent of respondents live within 1 mile of a lake or stream. Eighty-five percent of respondents live in single-family houses, 10% live in condominiums or townhouses, and 5% live in apartments or duplexes. Ninety-five of respondents own their residence.

Scenic appreciation is by far the most popular use of water resources, with 71% of respondents participating. Walking, jogging, birding or similar uses is the next most popular use, at 50%, followed by fishing at 25%, swimming at 24%, and motorized boating at 21%. Interestingly, 12% of all respondents felt that they did not use water resources in any of the eight ways suggested by the survey.

Respondent Demographics Compared to Dane County Demographics
A large majority of respondents (95%) owned their residence, while only 58% of county households are owner occupied. Seventy-three percent of respondents earned over $50,000, while only 49% of county households earned over $50,000 (in 1999). As seen below, the respondents were older and had achieved a higher level of education than the average residents of the county.

Demographic composition

	2003 Survey	2000 Census
AGE		
18 – 24	0	17*
25 – 44	31	42
45 – 64	51	27
65+	19	12
*Assumes census 15-19 year age group split evenly over 5 years.		
EDUCATION		
No HS Degree	0	8
High School Degree	12	22
2-year Associate Degree	6	9
Some College	23	20
4-year College Degree	35	25
Graduate/Professional Degree	25	16

Note: Demographics of Dane County as a whole are not the same as those within the permit area, and the survey specifically targeted homeowners through the use of water utility bills, when available. Thus, the demographics of respondents should be expected to differ from those of the entire county.

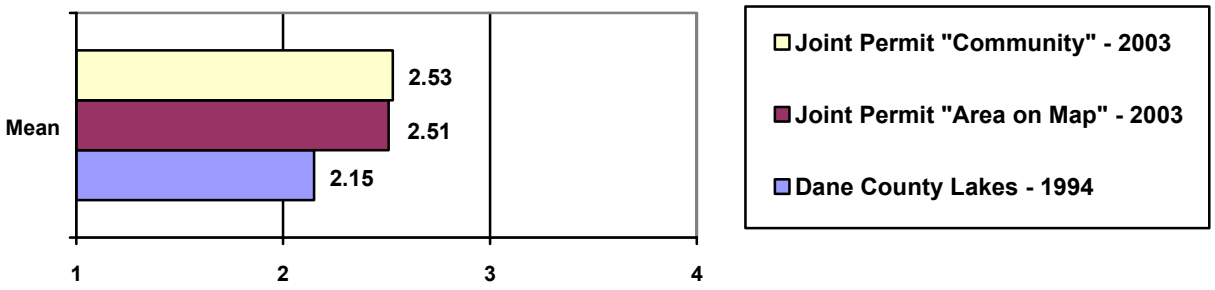
Comparison of Results with 1994 Dane County Lakes and Water Commission Study

A similar survey conducted for Dane County in 1994 provides an opportunity to compare responses on several issues. The following analysis compares responses on four issues: 1) perception of water quality; 2) awareness of where stormwater goes; 3) perceptions fo the causes of local water pollution; and 4) the relative rankings of causes of local water pollution. For all comparisons, a means test for significance of difference could not be run due to a lack of original data from the 1994 survey.

Comparison 1 –Perceived Water Pollution/Water Quality

In each question, higher means indicate perception of better water quality. The data indicates that perceptions of water quality seem to have improved in the past decade. No real difference exists between perceptions of water quality in *the area on the map* and the respondents' *community*. Generally speaking, people perceive situations in their own community as being "better" than in the greater surrounding area. Therefore, this data may indicate the perception that the area on the map is the community.

	1994 Dane County Survey	**2003 Joint Permit Group Survey**	
Question	How Polluted Do You Think Dane County Lakes Are?	In general, how would you rate the water quality… in the area on the map…?	In general, how would you rate the water quality… in and around your community?
Scale	1 = extremely polluted to 4 = not polluted	1=very poor to 4 = very good	1=very poor to 4= very good
Mean Response	2.15	2.51	2.53
Std Deviation	0.67	0.653	0.661



Comparison 2 – Where does stormwater go?

The "incorrect" responses indicated that stormwater runoff/storm sewer water goes to a municipal wastewater treatment plant. This data indicates that over one-third of respondents don't know the actual destination of storm water, pointing out an obvious target for educational outreach.

Dane County, 1994
Q2: Where does sewer water go?
A1: **38.2% Incorrect/Don't Know**

Joint Permit Group, 2003
Q5: Where does stormwater runoff go once it leaves your neighborhood?
A1: **34.1% Incorrect/Not Sure**

Comparison 3 – Rating Causes of Water Pollution

Respondents were asked to rate each potential contributor on a scale from 1 to 4, where 1 = major contributor, 2 = moderate contributor, 3 = minor contributor, and 4 = does not contribute. Average responses are listed below. Lower average response indicates a belief in high contribution to water quality problems. Responses are listed twice, first in order of severity based on 1994 survey, and second in order of severity based on 2003 survey.

Contributors to Water Quality Problems (Water Pollution) - Dane County Study 1994

		Dane County Mean	Joint Permit Group Mean
1	Lawn/urban fertilizers and pesticides	1.63	1.69
2	Agricultural fertilizers and pesticides	1.71	1.70
3	Street salt and sand	1.94	1.96
4	Stormwater runoff from streets/highways/parking lots	1.95	1.73
5	Discharges from industry	1.98	2.16
6	Manure from farm animals	2.05	2.04
7	Improper disposal of used motor oil & antifreeze	2.06	2.50
8	Air pollution from industrial activities	2.21	2.48
9	Soil erosion from farm fields	2.30	2.19
10	Discharges from sewage treatment plants	2.31	2.63
11	Soil erosion from construction sites	2.34	2.32
12	Pet waste	2.56	2.78
13	Grass clippings and leaves	2.57	2.56
	Stormwater runoff from residential rooftops and driveways	NA	2.27
	Stormwater runoff from non-residential rooftops/parking lots	NA	2.16
	Improper disposal of hazardous household wastes	NA	2.43

Contributors to Water Quality Problems (Water Pollution) - Joint Permit Group Survey 2003

		Dane County Mean	Joint Permit Group Mean
1	Lawn/urban fertilizers and pesticides	1.63	1.69
2	Agricultural fertilizers and pesticides	1.71	1.70
3	Stormwater runoff from streets & highways	1.95	1.73
4	Street salt and sand	1.94	1.96
5	Manure from farm animals	2.05	2.04
6	Discharges from industry	1.98	2.16
	Stormwater runoff from non-residential rooftops/parking lots	NA	2.16
7	Soil erosion from farm fields	2.30	2.19
	Stormwater runoff from residential rooftops and driveways	NA	2.27
8	Soil erosion from construction sites	2.34	2.32
	Improper disposal of hazardous household wastes	NA	2.43
9	Air pollution from industrial activities	2.21	2.48
10	Improper disposal of used motor oil & antifreeze	2.06	2.50
11	Grass clippings and leaves	2.57	2.56
12	Discharges from sewage treatment plants	2.31	2.63
13	Pet waste	2.56	2.78

Comments on following page.

Comparison 3 comments:

1) *Lawn/urban fertilizers and pesticides* was #1 in both surveys, and *Agricultural fertilizers and pesticides* was #2 in both surveys.
2) The top six contributors from 1994 stayed the top six in 2003, but *Stormwater runoff from streets and highways* moved from #4 in 1994, to #3 in 2003, and *Street salt and sand* moved from #3 to #4. *Manure from farm ani*mals moved from #6 in 1994 to #5 in 2003, and *Discharges from industry* moved from #5 in 1994 to #6 in 2003.
3) The largest change in perceived contributors was *Improper disposal of used motor oil and antifreeze*, which moved from #7 in 1994, to #13 in 2003.

Comparison 4 – Ranking Causes of Water Pollution

In 2003, respondents were asked to list the top *three* items contributing to water quality problems in their community: Most, 2nd Most, and 3rd Most. In 1994 respondents were asked to rank list the top *two* causes of water pollution.

		1994		
	Greatest causes of water pollution	**1st**	**2nd**	**1st+2nd**
1	Agricultural fertilizers and pesticides	22.5	16.0	38.5
2	Lawn/urban fertilizers and pesticides	18.5	16.3	34.8
3	Discharges from industry	12.8	14.3	27.1
4	Stormwater runoff from streets/highways/parking lots	10.0	9.3	19.3
5	Street salt and sand	8.5	8.0	16.5
6	Improper disposal of used motor oil & antifreeze	6.5	6.5	13.0
7	Discharges from sewage treatment plants	6.5	6.3	12.5
8	Air pollution from industrial activities	5.3	7.0	12.3
9	Manure from farm animals	4.5	5.3	9.8
10	Soil erosion from farm fields	2.3	3.5	5.8
11	Grass clippings and leaves	1.3	2.5	3.8
12	Soil erosion from construction sites	0.5	2.8	3.3
13	Pet waste	1.0	2.3	3.3
	Stormwater runoff from residential rooftops and driveways	NA	NA	NA
	Stormwater runoff from non-residential rooftops/parking lots	NA	NA	NA
	Improper disposal of hazardous household wastes	NA	NA	NA

					2003	
	Greatest contributors to water quality problems	**1st**	**2nd**	**3rd**	**1st+2nd**	**1st+2nd+3rd**
1	Lawn/urban fertilizers and pesticides	28.4	16.2	10.9	44.6	55.5
2	Agricultural fertilizers and pesticides	15.5	16.2	14.9	31.7	46.6
3	Stormwater runoff from streets & highways	15.2	14.2	10.9	29.4	40.3
	Stormwater runoff from non-residential rooftops/parking lots	5.2	10.0	10.6	15.2	25.8
4	Street salt and sand	5.8	9.4	8.6	15.2	23.8
5	Discharges from industry	6.1	8.7	5.3	14.8	20.1
6	Manure from farm animals	4.8	7.1	7.6	11.9	19.5
7	Soil erosion from construction sites	2.6	4.9	6.3	7.5	13.8
8	Discharges from sewage treatment plants	6.1	1.0	4.0	7.1	11.1
9	Soil erosion from farm fields	2.9	2.3	4.6	5.2	9.8
	Stormwater runoff from residential rooftops and driveways	1.0	2.9	5.0	3.9	8.9
10	Air pollution from industrial activities	2.6	1.6	4.0	4.2	8.2
	Improper disposal of hazardous household wastes	1.9	1.9	3.0	3.8	6.8
11	Grass clippings and leaves	1.0	1.6	3.3	2.6	5.9
12	Improper disposal of used motor oil & antifreeze	0.6	1.6	0.7	2.2	2.9
13	Pet waste	0.3	0.3	0.7	0.6	1.3

In 2003, respondents were asked to rank *top 3* contributors to water quality problems (most, 2nd most, 3rd most). In 1994, respondents were asked to rank the *top 2* causes of water pollution.

Comments on following page.

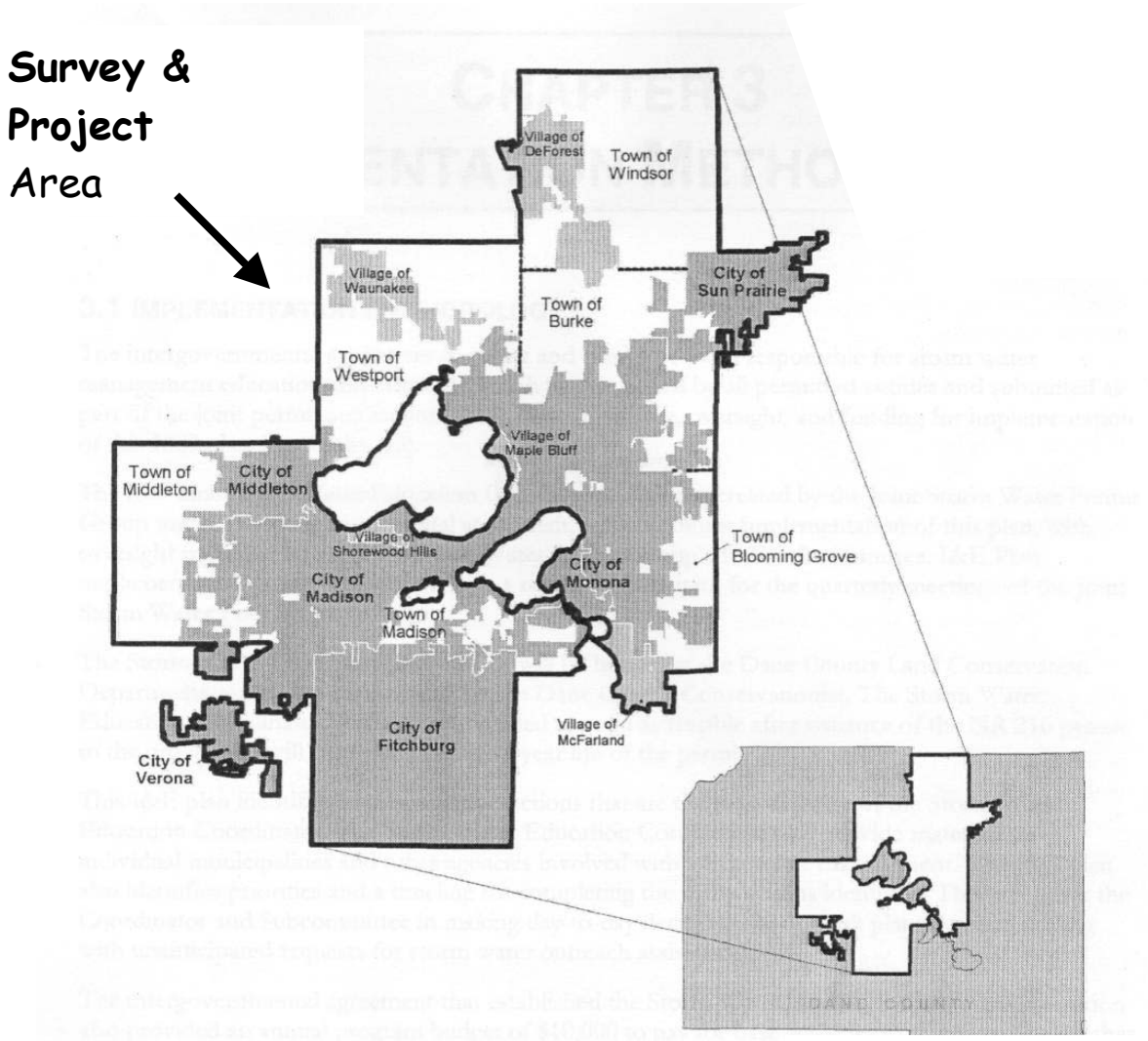
Comments on Comparison 4:

1) For this comparison, the top five causes of water pollution/contributors to water quality problems remained in the top five for both surveys. (The 2003 categories of *Stormwater runoff from street & highways* and S*tormwater runoff from non-residential rooftops/parking lots* were combined –as this combination closely matched the 1994 category of *Stormwater runoff from streets/highways/parking lots*).
2) *Lawn/urban fertilizers and pesticides* was #1 in 2003 and had been #2 in 1994. *Agricultural fertilizers and pesticides* were #2 in 2003, and had been #1 in 1994.
3) *Improper disposal of used motor oil and antifreeze* fell from #6 in 1994, to # 12 in 2003. This was by far the largest change in perceived threats to water quality between the two surveys.

Detailed Responses

The following pages contain detailed responses to the questionnaire. Throughout, the numbers indicate percent of respondents; the number of respondents for each question is indicated by "n".

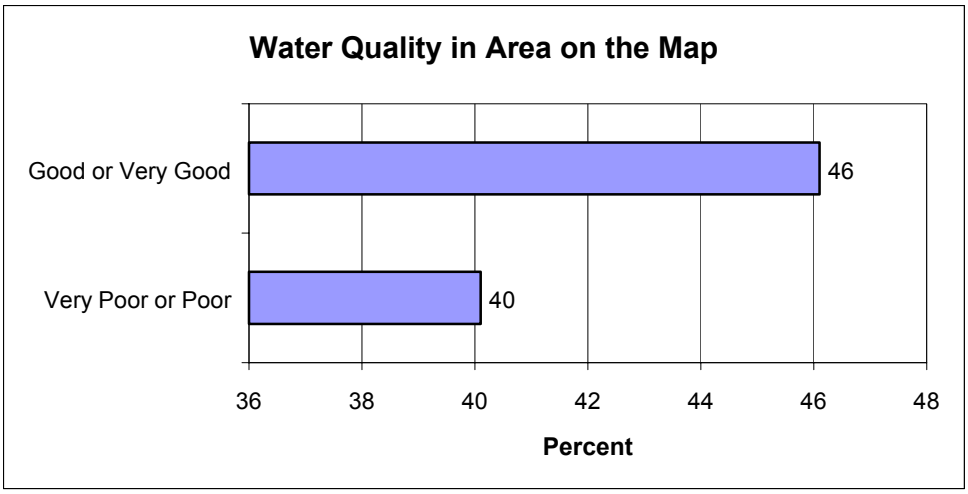
Survey Area Map
This map appears on the survey cover, and is referred to in question #1. A complete copy of the survey questionnaire is included in Appendix A.



Your Perceptions of Local Water Resources

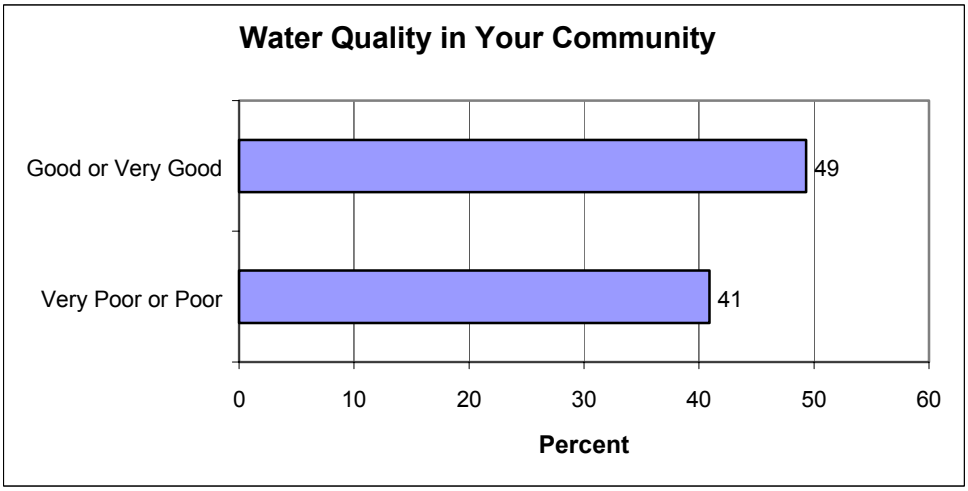
1. In general, how would you rate the water quality of the lakes, rivers, and streams located in the area on the map printed on the front cover? (results reported as percentages). n = 319.

Very Poor	Poor	Good	Very Good	Don't Know
5	35	43	3	14



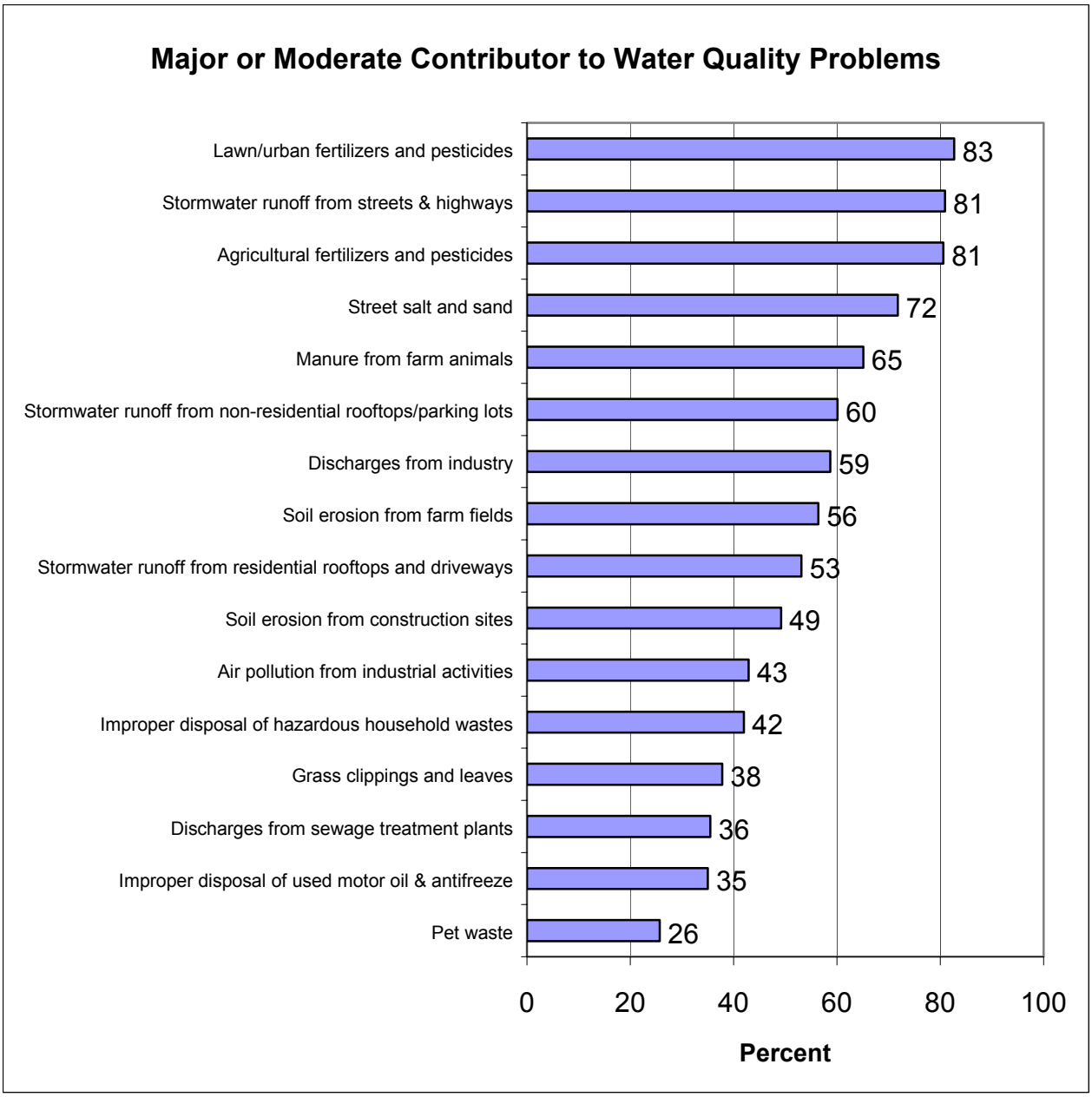
2. In general, how would you rate the water quality of the lakes, rivers, and streams located in and around your community? n = 320.

Very Poor	Poor	Good	Very Good	Don't Know
5	36	46	3	10



3a. To what extent do you believe each of the following items contributes to water quality problems for the lakes, rivers, and streams in and around your community?

	Major Contributor	Moderate Contributor	Minor Contributor	Does Not Contribute	*Don't Know/ Not Sure*
Discharges from sewage treatment plants	9	26	35	13	15
Pet waste	4	21	50	10	13
Improper disposal of used motor oil & antifreeze	10	24	40	5	19
Air pollution from industrial activities	10	32	38	7	11
Lawn/urban fertilizers and pesticides	42	38	12	1	4
Manure from farm animals	24	40	23	2	9
Stormwater runoff from streets & highways	40	39	13	1	5
Stormwater runoff from residential rooftops and driveways	17	36	37	2	7
Stormwater runoff from non-residential rooftops/parking lots	19	40	28	2	9
Grass clippings and leaves	10	27	46	7	8
Soil erosion from construction sites	17	31	38	3	8
Street salt and sand	29	42	23	1	4
Discharges from industry	18	40	24	3	13
Agricultural fertilizers and pesticides	42	37	11	2	6
Soil erosion from farm fields	18	37	30	2	10
Improper disposal of hazardous household wastes	10	32	40	3	14



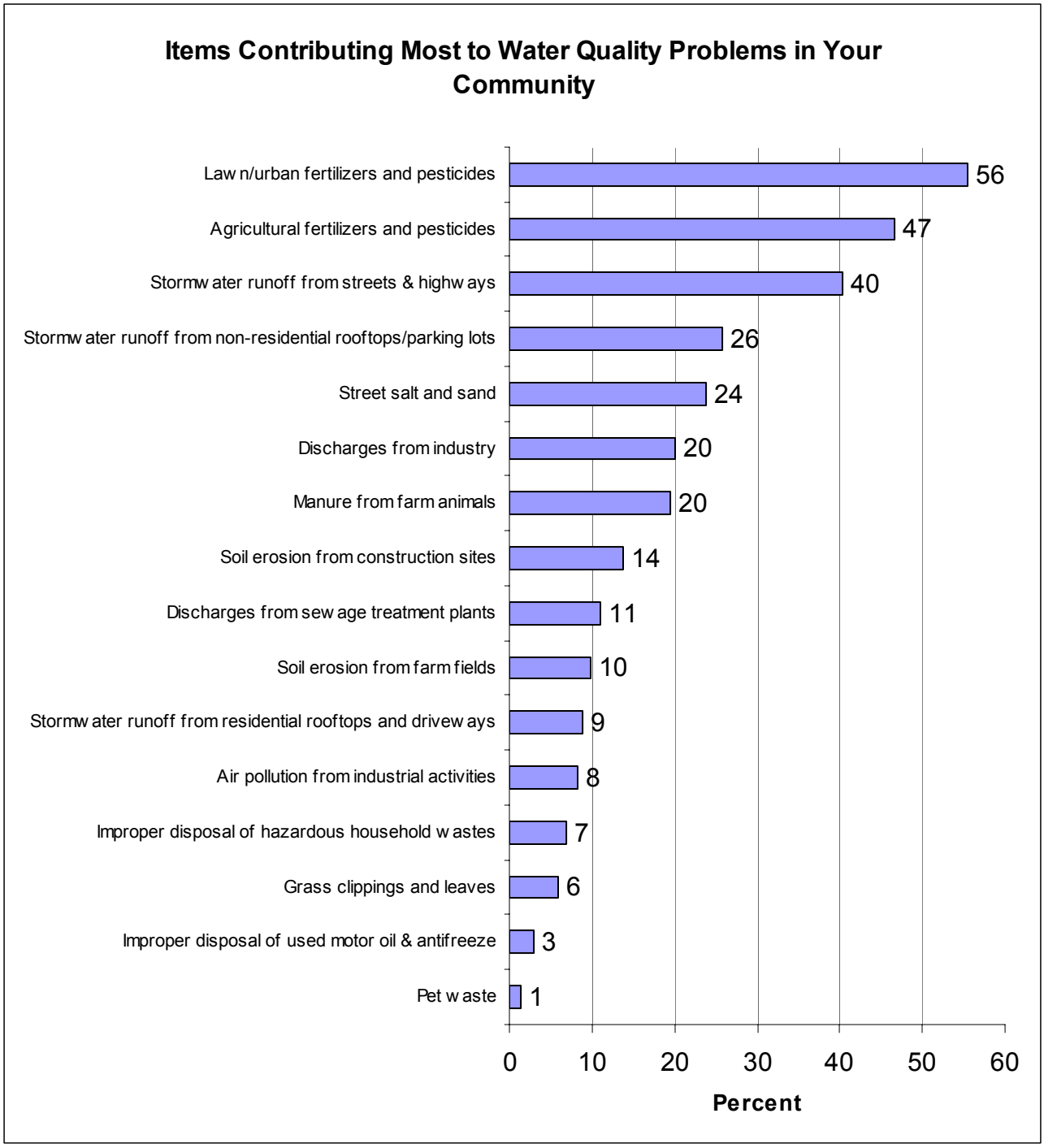
This graph reflects the combined percentages of respondents identifying the issue as either a “major contributor” or “moderate contributor” to water quality problems.

3b. From the list of items in question 3a, enter the letters of the three items you feel contribute the most to water quality problems in and around your community.

Most _____ 2nd Most _____ 3rd Most _____

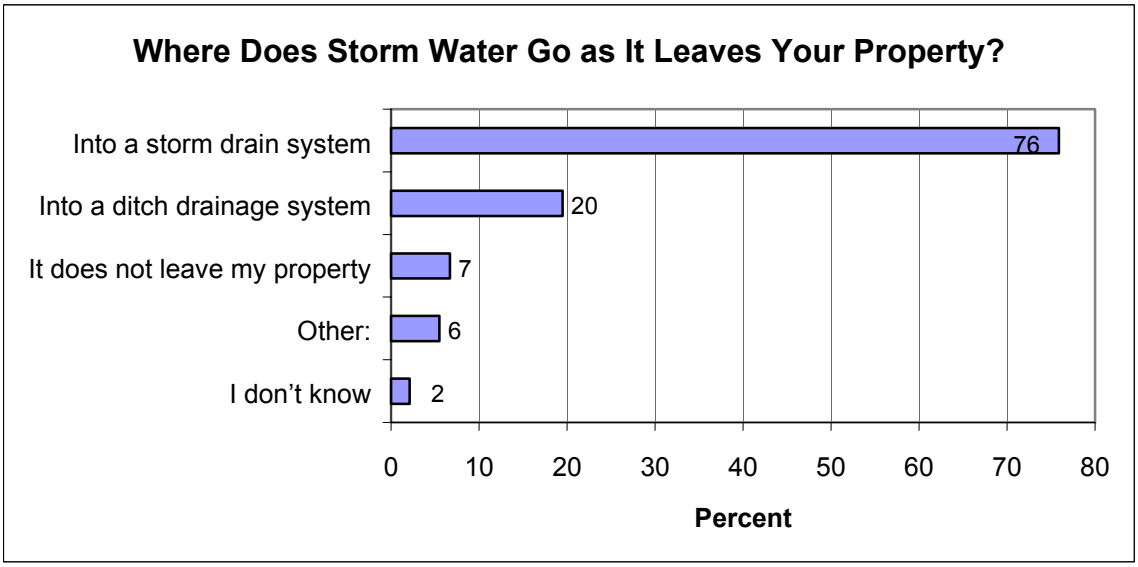
	By percent positive responses (n = 328).			
	Most	2nd Most	3rd Most	Combined Total
Lawn/urban fertilizers and pesticides	28	16	11	56
Agricultural fertilizers and pesticides	16	16	15	47
Stormwater runoff from streets & highways	15	14	11	40
Stormwater runoff from non-residential rooftops/parking lots	5	10	11	26
Street salt and sand	6	9	9	24
Discharges from industry	6	9	5	20
Manure from farm animals	5	7	8	20
Soil erosion from construction sites	3	5	6	14
Discharges from sewage treatment plants	6	1	4	11
Soil erosion from farm fields	3	2	5	10
Stormwater runoff from residential rooftops and driveways	1	3	5	9
Air pollution from industrial activities	3	2	4	8
Improper disposal of hazardous household wastes	2	2	3	7
Grass clippings and leaves	1	2	3	6
Improper disposal of used motor oil & antifreeze	1	2	1	3
Pet waste	0	0	1	1

Graphic results on following page.

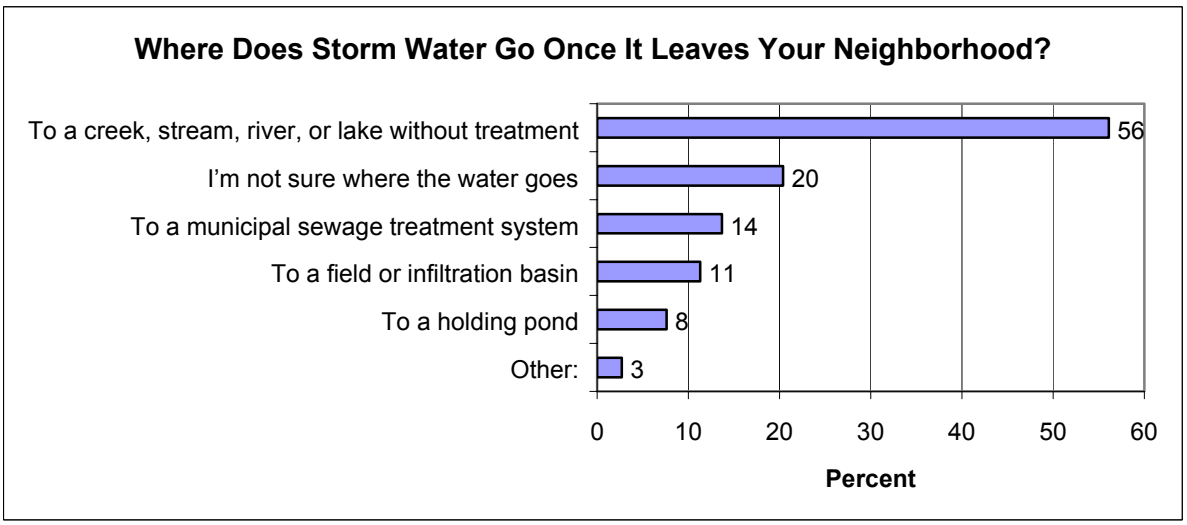


Graph created by combining percentage responses to "Most", "2nd Most" and "3rd Most" categories.

4. After it rains or when snow melts, where do you think the resulting stormwater runoff goes as it leaves your property? (Please select all that apply). n = 328.

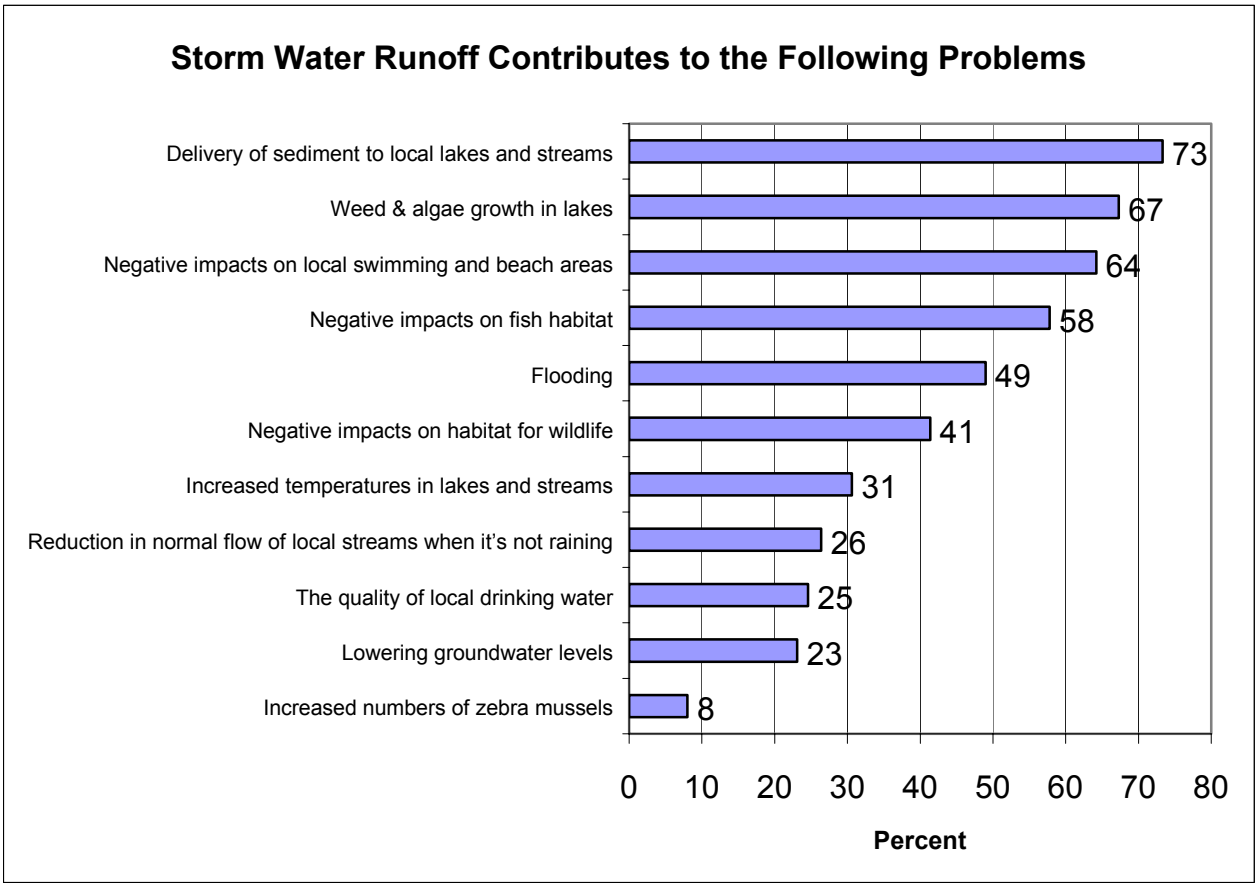


5. Where does stormwater runoff go once it leaves your neighborhood? (Please select all that apply) Percent responding positively: n = 328.



6. To the best of your knowledge, after it rains or when snow melts, to what extent does the resulting stormwater runoff contribute to the following problems in your community? n = 328.

	Major Contributor	Moderate Contributor	Minor Contributor	Does Not Contribute	*Don't Know/ Not Sure*
Flooding	20	29	32	10	9
Increased numbers of zebra mussels	1	7	12	37	43
Weed & algae growth in lakes	38	30	15	5	12
Negative impacts on fish habitat	20	38	19	5	18
Negative impacts on habitat for wildlife	10	32	33	9	17
The quality of local drinking water	7	18	34	23	18
Negative impacts on local swimming and beach areas	31	33	16	8	11
Delivery of sediment to local lakes and streams	39	35	15	3	9
Increased temperatures in lakes and streams	10	21	28	12	30
Reduction in normal flow of local streams when it's not raining	10	17	22	17	35
Lowering groundwater levels	8	15	17	24	35



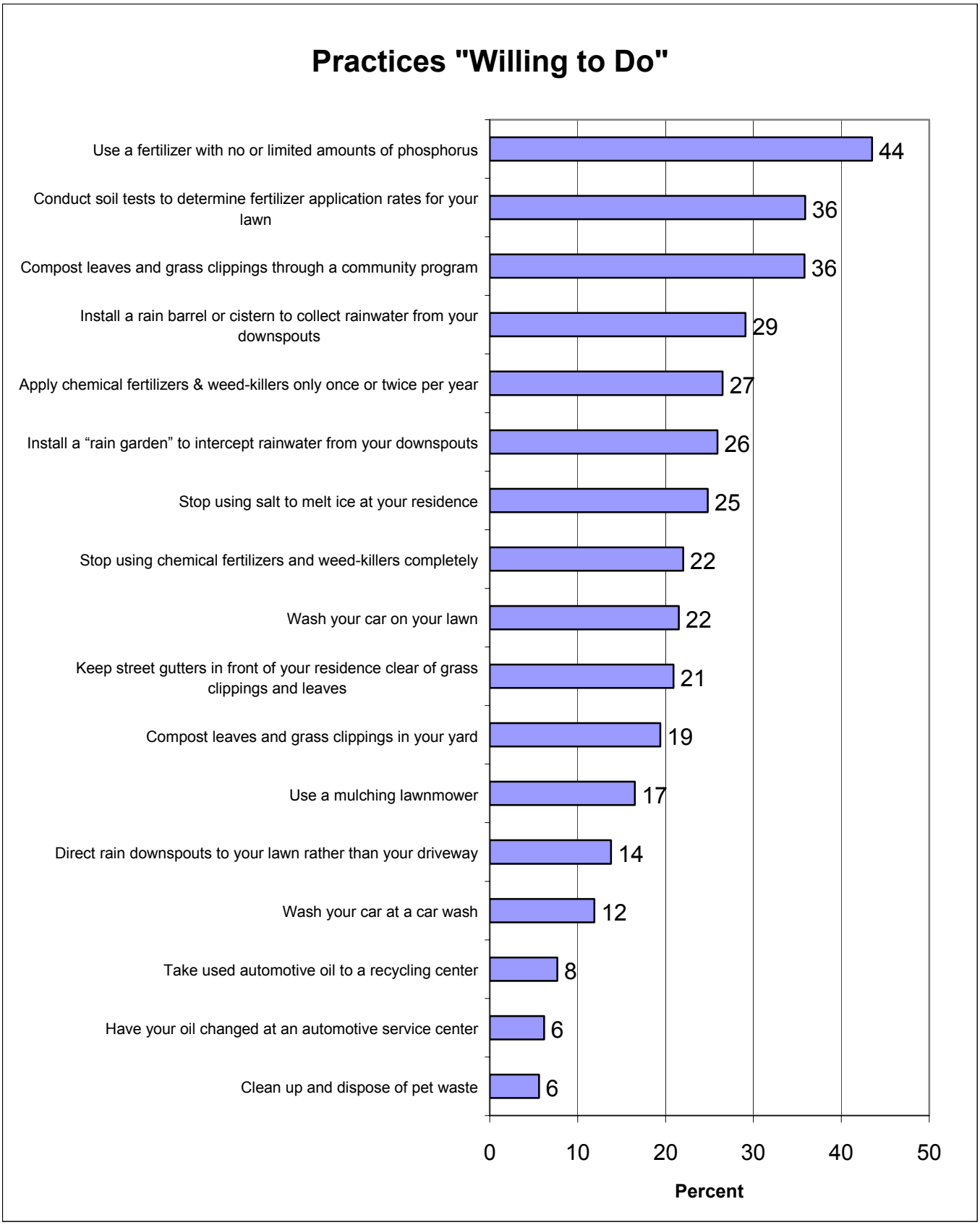
Graph represents combined percentages of "major contributor" and "moderate" contributor" responses.

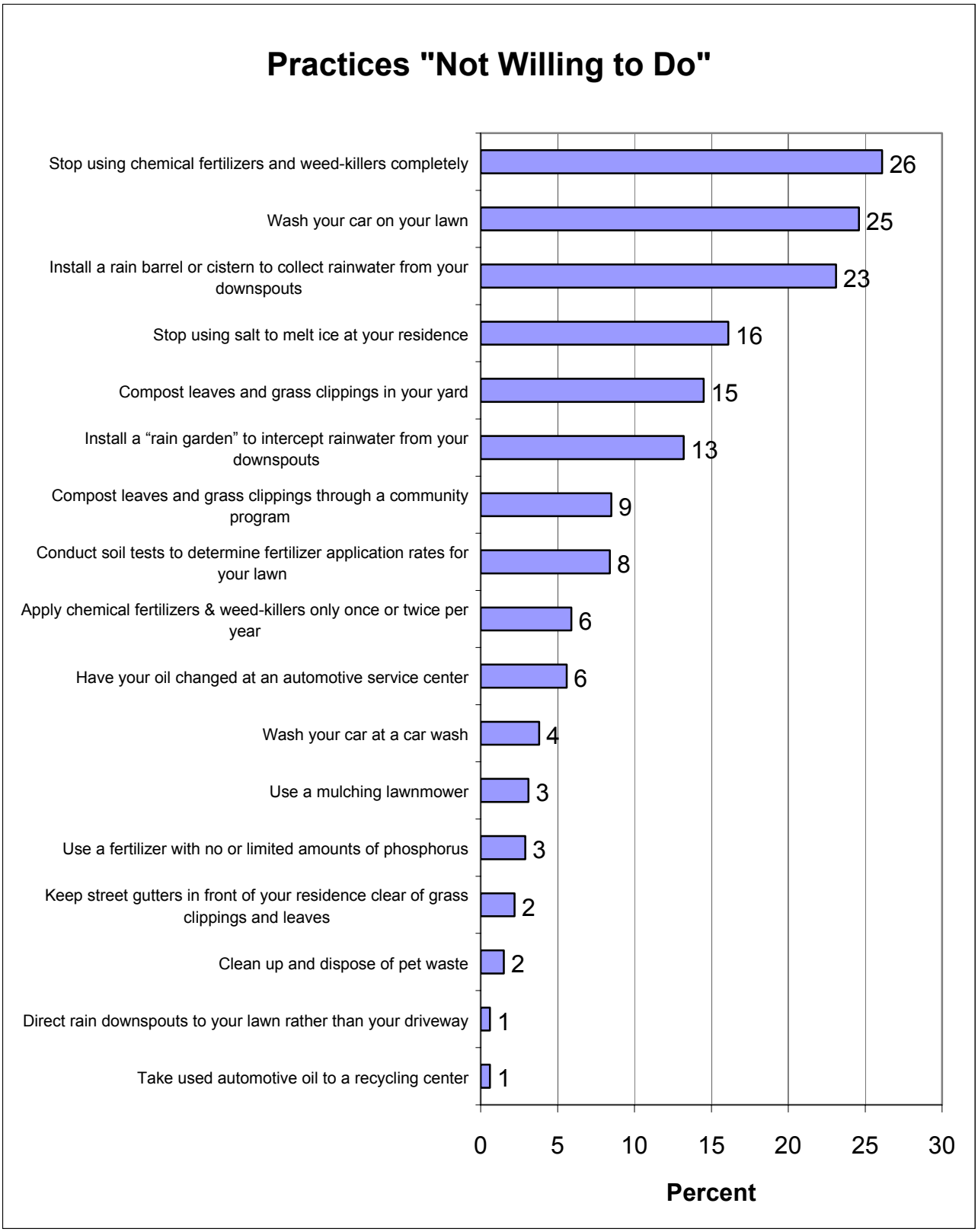
Activities and Information Preferences

7a. Which of the following practices would you do (or have done for you) on a regular basis if you knew that the action would help reduce water pollution? n = 328.

	Already do this	Willing to do	Need more Information	Not willing to do	Not Applicable
Take used automotive oil to a recycling center	62	8	1	1	28
Have your oil changed at an automotive service center	82	6	1	6	5
Conduct soil tests to determine fertilizer application rates for your lawn	10	36	24	8	21
Apply chemical fertilizers & weed-killers only once or twice per year	38	27	12	6	18
Stop using chemical fertilizers and weed-killers completely	14	22	29	26	8
Use a fertilizer with no or limited amounts of phosphorus	9	44	27	3	18
Stop using salt to melt ice at your residence	36	25	14	16	9
Compost leaves and grass clippings in your yard	44	19	10	15	12
Compost leaves and grass clippings through a community program	23	36	14	9	18
Use a mulching lawnmower	64	17	5	3	11
Direct rain downspouts to your lawn rather than your driveway	77	14	2	1	7
Install a rain barrel or cistern to collect rainwater from your downspouts	4	29	28	23	16
Install a “rain garden” to intercept rainwater from your downspouts	6	26	42	13	13
Keep street gutters in front of your residence clear of grass clippings and leaves	51	21	3	2	23
Wash your car on your lawn	14	22	4	25	35
Wash your car at a car wash	81	12	1	4	3
Clean up and dispose of pet waste	44	6	2	2	47

Note: The next few pages include additional details for question 7a.

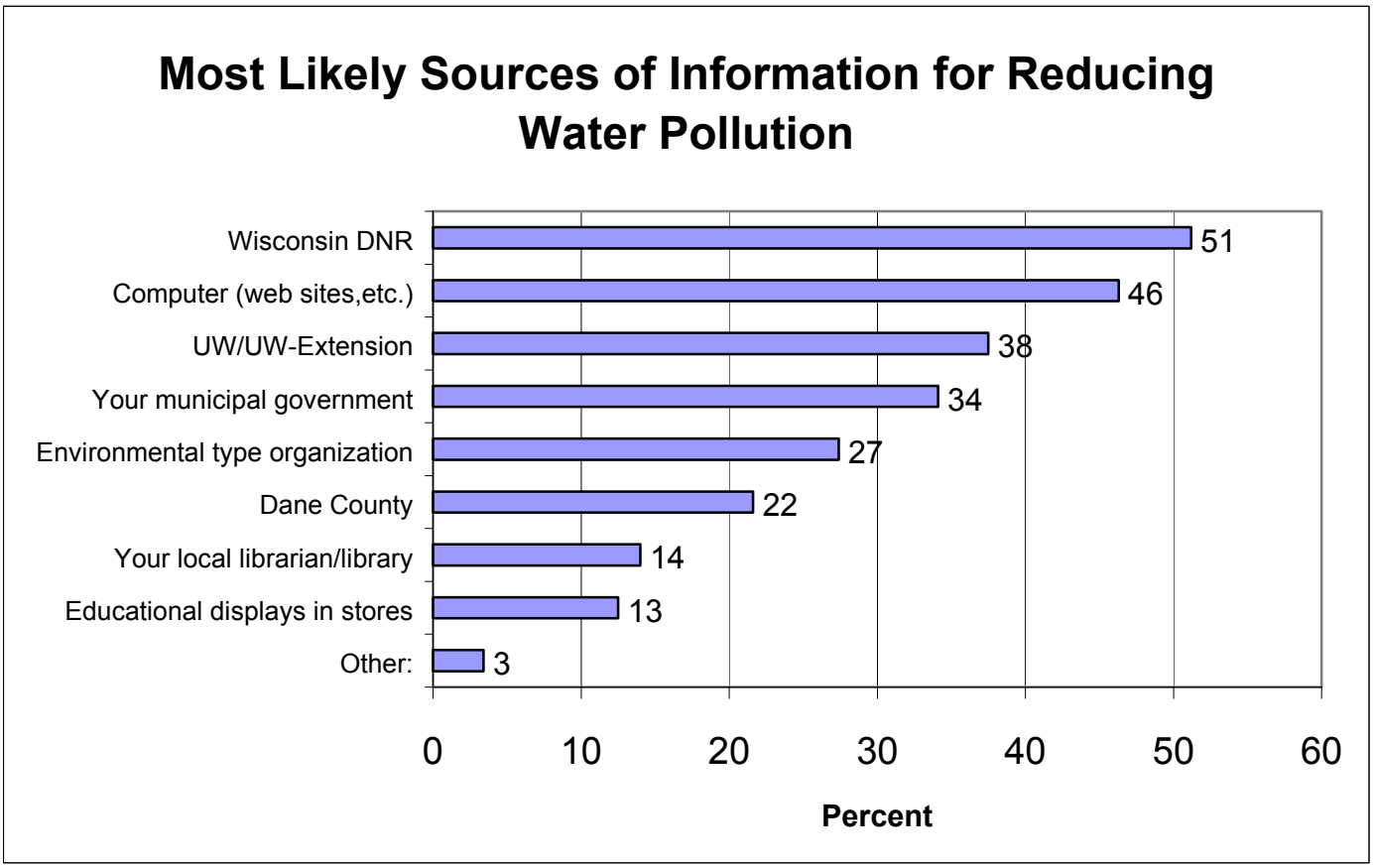

Practices "Willing to Do"
Use a fertilizer with no or limited amounts of phosphorus
44
Conduct soil tests to determine fertilizer application rates for your lawn
36
Compost leaves and grass clippings through a community program
36
Install a rain barrel or cistern to collect rainwater from your downspouts
29
Apply chemical fertilizers & weed-killers only once or twice per year
27
Install a “rain garden” to intercept rainwater from your downspouts
26
Stop using salt to melt ice at your residence
25
Stop using chemical fertilizers and weed-killers completely
22
Wash your car on your lawn
22
Keep street gutters in front of your residence clear of grass clippings and leaves
21
Compost leaves and grass clippings in your yard
19
Use a mulching lawnmower
17
Direct rain downspouts to your lawn rather than your driveway
14
Wash your car at a car wash
12
Take used automotive oil to a recycling center
8
Have your oil changed at an automotive service center
6
Clean up and dispose of pet waste
6
0
10
20
30
40
50
Percent


Practices "Not Willing to Do"
Stop using chemical fertilizers and weed-killers completely
26
Wash your car on your lawn
25
Install a rain barrel or cistern to collect rainwater from your downspouts
23
Stop using salt to melt ice at your residence
16
Compost leaves and grass clippings in your yard
15
Install a “rain garden” to intercept rainwater from your downspouts
13
Compost leaves and grass clippings through a community program
9
Conduct soil tests to determine fertilizer application rates for your lawn
8
Apply chemical fertilizers & weed-killers only once or twice per year
6
Have your oil changed at an automotive service center
6
Wash your car at a car wash
4
Use a mulching lawnmower
3
Use a fertilizer with no or limited amounts of phosphorus
3
Keep street gutters in front of your residence clear of grass clippings and leaves
2
Clean up and dispose of pet waste
2
Direct rain downspouts to your lawn rather than your driveway
1
Take used automotive oil to a recycling center
1
0
5
10
15
20
25
30
Percent

7a. Practices respondents “already do” ranked in order.

	Percent
Have your oil changed at an automotive service center	82
Wash your car at a car wash	81
Direct rain downspouts to your lawn rather than your driveway	77
Use a mulching lawnmower	64
Take used automotive oil to a recycling center	62
Keep street gutters in front of your residence clear of grass clippings and leaves	51
Clean up and dispose of pet waste	44
Compost leaves and grass clippings in your yard	44
Apply chemical fertilizers & weed-killers only once or twice per year	38
Stop using salt to melt ice at your residence	36
Compost leaves and grass clippings through a community program	23
Stop using chemical fertilizers and weed-killers completely	14
Wash your car on your lawn	14
Conduct soil tests to determine fertilizer application rates for your lawn	10
Use a fertilizer with no or limited amounts of phosphorus	9
Install a “rain garden” to intercept rainwater from your downspouts	6
Install a rain barrel or cistern to collect rainwater from your downspouts	4

8. Which of the following sources would you most likely turn to for information about the practices listed in question 7? (Please select all that apply). n = 328.



9. How would you prefer to receive information about activities you can do to improve water quality in your community? (Please select all that apply). n = 328.

	Percent
Local newspapers	56
Community newsletters	44
Television	39
Inserts in utility bills	38
Computer (web sites, e-mail, etc.)	37
Letters sent to my home	34
Radio	23
Public meetings or events	13
Displays at retail stores	12
Educational workshops	11
Through local schools	11
I am not interested in this sort of information	2
Other: _____	1

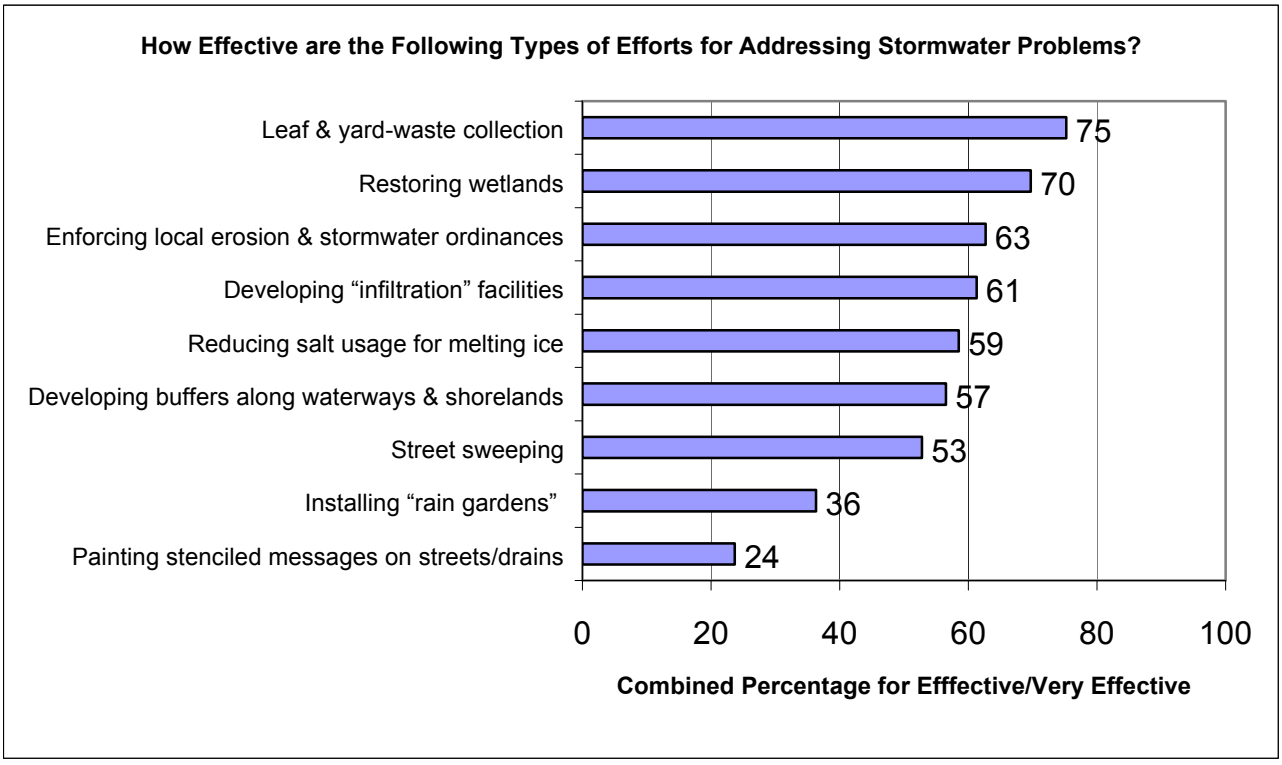
10. Which of the following statements best describes your level of awareness about current efforts by your local government to improve water quality in your community? n = 328.

	Percent
I am not aware of any existing efforts	14
I think activities are taking place, but I don't know very much about them	58
I am generally familiar with efforts to improve water quality in my community	25
I am very knowledgeable about existing efforts	3

11. In your opinion, if implemented, how effective are the following types of efforts for addressing stormwater problems in your community? n = 328.

	Very Effective	Effective	Somewhat Effective	Not Effective	Don't Know
Leaf & yard-waste collection	33	42	13	3	9
Restoring wetlands	46	24	13	2	15
Enforcing local erosion & stormwater ordinances	28	35	18	2	18
Developing "infiltration" facilities	30	31	9	2	28
Reducing salt usage for melting ice	24	34	24	4	13
Developing buffers along waterways & shorelands	28	28	13	2	29
Street sweeping	16	37	26	6	15
Installing "rain gardens"	12	25	17	4	43
Painting stenciled messages on streets/drains	7	16	25	29	22

Other: _____



Graph created by combining responses for Very Effective and Effective.

12. In your opinion, which of the following would be the most appropriate entity to contact if you became aware of a problem related to stormwater in your community (for example, a large amount of mud flowing into a storm drain)? (Please select only one). *Multiple responses per question were included.* n = 328.

	Percent
Your municipal government	49
Wisconsin Department of Natural Resources	18
Your water utility	17
I wouldn't know who to contact with information about a stormwater problem	12
Dane County government	8
An environmental, conservation, or watershed organization	6
Other: _____	1

Information About You and Your Residence

13. Which of the following best describes your current residence? n = 328.

	Percent
Single-family house	85
Condominium/Townhouse	10
Apartment	3
Duplex/Two-family house	2
Other:	1
Mobile home	0

14. What is the source of your household water supply? n = 311.

	Percent
My water comes from a municipality or water utility	81
My water comes from a private well on my property	18
I don't know	1

15. Do you own or rent your current residence? n = 320.

	Percent
Own	95
Rent	5

16. How many adults and children currently live at this residence?

n = 319.

Number of Adults (18 or older)	Percent of responses
0	0
1	21
2	67
3	10
4	3
5	0

n = 328.

Number of Children (17 or younger)	Percent of responses
0	69
1	13
2	13
3	4
4	0
5+	0

17. Are you currently a member of an environmental, conservation, or watershed organization? n = 319.

Yes 18 %

18. What is your age? n = 316.

Years	Percent
18 – 24	0
25 – 34	10
35 - 44	21
45 – 54	27
55 – 64	24
65 – 74	12
75+	7

19. What is your gender? n = 321.

	Percent
Female	37
Male	63

20. Please select the range which best describes your total annual household income. n = 289.

	Percent
Less than $20,000	4
$20,000-$49,999	24
$50,000-$79,999	30
$80,000-$119,999	25
$120,000 and over	18

21. What is the highest level of education you have completed? n = 313.

	Percent
Some High School	0
High School Degree	12
Some Vocational Training	8
2-year Associate Degree	6
Some College	15
4-year College Degree	23
Some Post-Graduate Courses	12
Graduate/Professional Degree	20
Ph.D. Degree	5

22. What is the name of the lake, stream, or river that is closest to your residence? n = 328.

Top ten responses	Percent
Lake Mendota	32
Lake Monona	14
Lake Wingra	8
Yahara River	8
Token Creek	5
Pheasant Branch Creek	3
Six Mile Creek	3
Lake Waubesa	2
Starkweather Creek	2
Sugar River	2

23. What is the approximate distance from your residence to that closest lake, stream, or river? n = 319.

	Percent
My residence is adjacent to a lake, stream, or river	8
Within ¼ mile (about 3 city blocks)	21
Between ¼ mile and 1 mile	29
More than 1 mile	36
I don't know	6

24. During the last calendar year, in which of the following ways have you used the water resources in and around your community? (Please select all that apply). n = 328.

	Percent
Scenic appreciation	71
Walking, jogging, birding, or similar uses	50
Fishing	25
Swimming	24
Motorized boating	21
Non-motorized boating or sailing	18
Ice-skating or winter sports	17
Hunting	3
None of the above	12

Hand Written Responses and Additional Comments

4.4 After it rains or when snow melts, where do you think the resulting stormwater runoff goes as it leaves your property? (Please select all that apply). "Other" responses:

- directly into our lakes
- does not leave my property
- in the ground
- into lake
- into Lake Mendota
- into normal watershed
- into the ground
- into the lake
- Lake Mendota
- low spot shared with by others farm
- onto neighbors property
- onto the street/no storm drains
- runs down street to reservoir
- soaks into the ground
- some stays on the property
- stays within the ground in various forms
- My street has no storm sewers. Seriously, the water sits there until it evaporates.

5.5 Where does stormwater runoff go once it leaves your neighborhood? (Please select all that apply). "Other" responses:

- absorbed into our land
- combination of the above
- just not something I think about
- lakes
- not in neighborhood creeks/streams
- storm sewer
- to a cistern

7b. If you have any concerns related to these practices, please describe your concerns briefly:

- enough with the composting already
- lawn to small to fit car
- pollution is a major problem facing water
- rain barrel/cistern results in mosquitoes
- recycle, recycle, recycle
- we do not have gutters or downspouts
- we have and independent living home
- People who don't drive have little option to take part in a community grass clipping and grass composting.
- I think if I drove my car onto my lawn I would get some big muddy holes in my small yard.
- I use no chemicals or fertilizers on lawn, and use miracle grow when putting in or replacing flower bulbs.
- When I go early morning garage sales on newer areas the air smells of chemicals from lawns and those people have children!

- My house is on a slope. I use sand, but sometimes salt. I try to judge because I know, can see salt run down to lake.
- I live 5 houses from Monona bay.
- Sweep/blow off sidewalks & driveway following the application of a granular fertilizer via a broadcast spreader
- If our neighbors realize we have stopped putting chemicals on our lawn, they may try to burn us at the stake. We want to get rid of our lawn mower and let nature take over. Our area of town (Monona) will be slow to change from high-maintenance, carpet-like lawns.
- Too many people, quite a few that I know, toss their oil/anti-freeze from auto's in fields and/or drain into storm sewers!!!
- City needs to ask people not to rake their leaves into the street/gutter for them to pick up.
- Washing car on lawn compresses soil, leaves marks/tracks for a long time.
- I do not have a dog, but I might as well have one for all the neighbors' dog's crap in my yard. Put in garbage.
- The use of salt or deicer is a needed because the risk of damage to humans (slipping, car accidents) is greater than the damage to the environment.
- I am not able to do things physically – but will follow any and all suggestions and instructions – use wheels chair and walker.
- I live in a condo (not next to the street). My lawn is cared for by others through the condo association.
- Only pesticide use is Roundup applied carefully. Is this a problem?
- Rain barrel = more mosquitoes. Rain barrel = health issues (Nile virus encephalitis).
- Let the public know more about where all related run-off goes, etc.
- The association in which we live is responsible for the use of salt as well as street gutter clean up. Also we're not completely informed about the proper ways to recycle/clean-up. How could we become better informed?
- I fertilize moderate size lawn located in the middle of my five acres of land. I believe the amount that leaves my property by surface run-off is very limited.
- Need specific information with regard to cost and location for items above.
- If you really want people to do what you want them to do, you should subsidize the practices. Think about it.
- Costs associated with the installation of a rain barrel or cistern.
- Most are silly and impractical.
- I would be interested in finding out about non-salt ice melting compounds.
- I would like to see businesses held to the same standard as private property owners, i.e. no special deals for commercial sources of problems.

8.9 Which of the following sources would you most likely turn to for information about the practices listed in question 7? (Please select all that apply). "Other" responses:

- I do not know who to ask
- I don't know
- lawn and garden center
- local media
- newspaper
- newspapers, tv
- send with vehicle registration notices
- township

9.12 How would you prefer to receive information about activities you can do to improve water quality in your community? (Please select all that apply). "Other" responses:

- newspaper articles
- vehicle registration notices

11.10. In your opinion, if implemented, how effective are the following types of efforts for addressing stormwater problems in your community? "Other" responses:

- buckets for animal waste and place to dump
- education – cause-effect on tv, newspaper
- holding ponds
- keeping tree lines in existing fields
- people banned from using fertilizers
- prohibit water front development
- promote natural lawns
- reduce population, immigration – esp. illegal
- regular maintenance of stormwater sewers
- regulate farming
- replacing pavement w/permeable surfaces
- shovel
- stop pesticide use
- stricter water runoff standards for new development
- the stenciled messages run off quickly.
- Think of new ways to divert city water into the local soil rather than sending it to a large river.

12.6 In your opinion, which of the following would be the most appropriate entity to contact if you become aware of a problem related to stormwater in your community? "Other" responses:

- building inspector
- not sure who else to call
- police department
- Village of Maple Bluff

13 Which of the following describes your current residence? "Other" responses:

- two-flat apartment
- farm house
- bed & breakfast inn
- independent living

Additional Comments

I wish management at my apt complex would stop using fertilizers & pest spray. I think that nature takes care of it's own problems and you can quote me on that.

Growing up as a young child in Madison, I was always bragging to outsiders that we had the best water in the world. No more! I don't know what they are now doing to our drinking water. It is still better than many other areas, but not what it used to be.

I live in a new development with a pond created by the builder. There is a tree line behind my property and just beyond that the rainwater drains into that pond. I am very concerned that once the farm owner sells the property, the tree line will come down for drainage purposes. That tree line is home to many birds. There must be something that can be done to keep the tree line and divert that water flow. Please help to keep existing trees.

Less road salt.

Live here 15-20% of the time.

Having lived in Madison all my life, it truly is a pity the lakes have gotten as bas as they have. If I could say it was one thing I would say it is the lack of the City of Madison to respond to things like run off in an expedient manner.

I think one of the main problems our lakes in the Madison area are so weed infested is because of all the fertilizers and other unneeded chemicals people and farmers apply to their lawns and fields. It all makes its way into the lakes through streams, creeks, rivers, etc. over time. Thank you for your concern over our water and waterways. David D.

I use fine sand with a small amount of salt, very effective – could the streets do this – but then have to be a clean up.

I'd caution against the information that you receive. This survey and research mechanism are very taxing and will self-select a very specific type of respondent. My two cents.

Your first two questions should have a choice between Poor & Good. As they stand, the results could be used for very biased conclusions.

I believe development of much farmland has increased water pollution and runoff without proper evaluation and how it contributes to many problems.

I would be willing to organize the re-stenciling of messages on storm drains in my neighborhood, but I don't know who to contact. We also have a quarterly neighborhood newsletter for Eastview Heights/Military Ridge in Verona that can be used to get information to a good chunk of Verona.

If Madison constructs a power plant on University of Wis Madison property, what is the effect of water level in Lake Mendota on wet years versus dry years? What will be cut back, electrical power, or water consumption?

Beaches are a good source of recreation for families who can't afford fees at public pools. They could be greatly improved in this area.

Footnote to question 10: I am aware of many methods applied to improving the water quality of our environment. I am ignorant of the effectiveness. I hope my participation has been of some benefit.

Thanks for your efforts!

A rain barrel would add to the mosquito problem.

q 24 We don't swim because of the water quality and the effects on my kids.

I look forward to learning more about how I can contribute to the solution, or at least not contribute to the problem.

Thanks for asking!

Collecting rain will surely increase the mosquito population.

I think we use too much salt on roads. They should add more sand for traction.

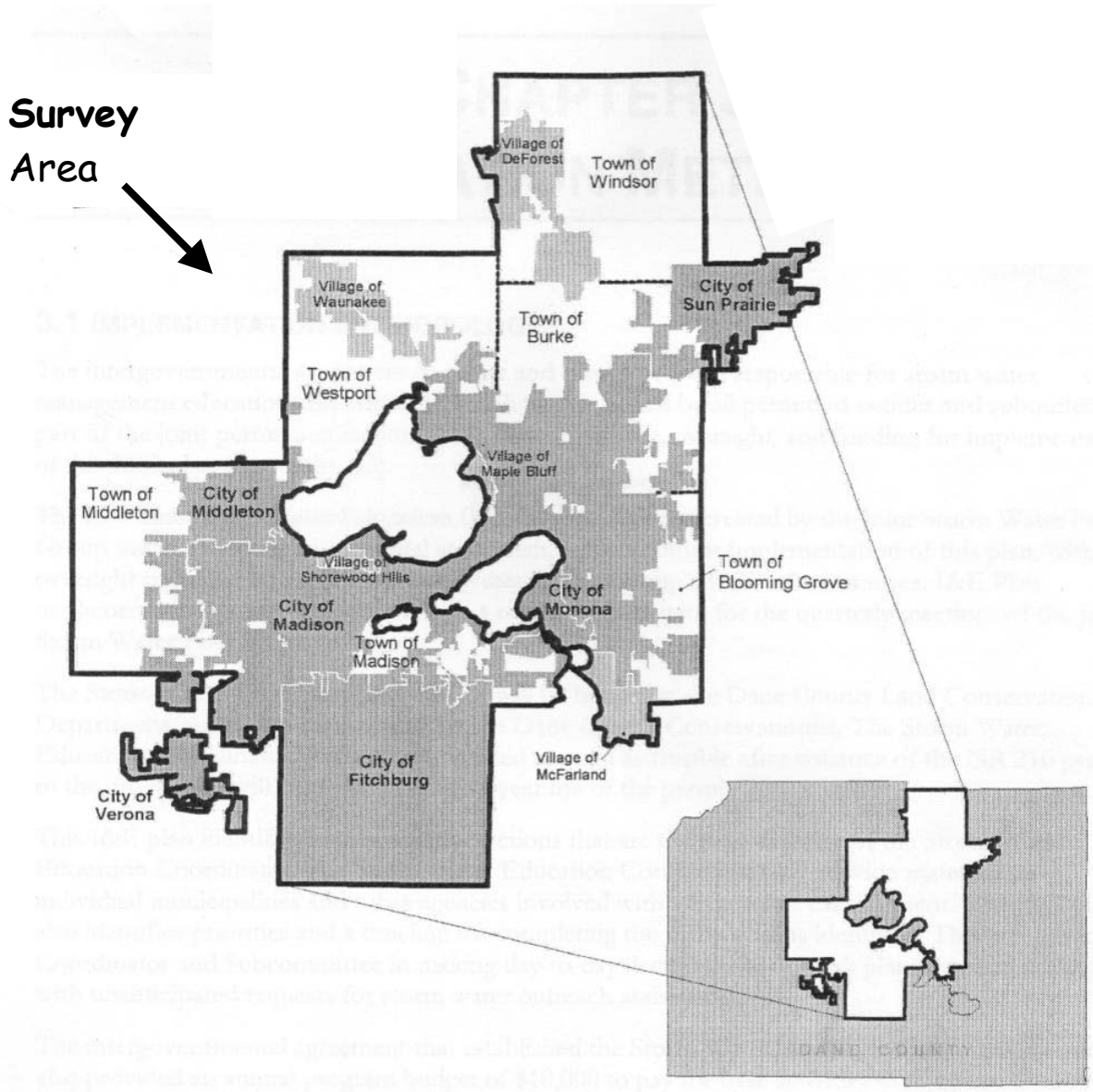
We live in a condo so much of this does not pertain to us.

I think education to the general population is the single biggest thing we can do to improve our water quality. Most people either don't know or don't care. (Local ordinances can help change that, or god forbid, the state actually stepping up). The second big thing is the installment of storm water run off facilities in all communities. I think the way in which people were told of the new stormwater facilities was not helping to educate people – via another tax to pay. And last but not least – our environmental filters (marshes) need to be restored and expanded. Without marshes, there is no clean water. They are vital to our environment. I feel absolutely embarrassed that our state has issued a state wide mercury advisory, and it shocks me that hardly anyone else feels the same. Good water = bread and butter of Wisconsin.

Do not address people by 1st names in your cover letters. I get real tired of seeing neighbors leaves in the street year after year. Enforce it or drop it already. Street sweeping? Rarely seems to occur when needed, more on a "schedule" whether needed or not. Seems a missed point that you ask on pet water but not # of pets.

Composting has no place in the city! Makes it unbearable for the neighbors and/or impossible to leave windows open on that side of the house! Compost in the country, out in the back 40, not next to my bedroom! Yuck

Your Views on Local Water Resources



Dane County

This survey is conducted by the University of Wisconsin-Extension on behalf of seventeen area communities, Dane County, and UW-Madison. Results will help programs for protecting and improving water resources in your community.

Thank you for completing this questionnaire! Please answer all questions by filling in the circle that best matches your response and writing any additional information that may be helpful. As you answer the questions, please don't worry about whether or not you're providing the "right" answer – the study is most interested in gathering information about general perceptions of water resources and water quality issues. Your participation is voluntary and your responses will remain confidential. Thanks for your help!

Your Perceptions of Local Water Resources

1. In general, how would you rate the water quality of the lakes, rivers, and streams located in the area on the map printed on the front cover?

○ Very Poor	○ Poor	○ Good	○ Very Good	○ Don't Know

2. In general, how would you rate the water quality of the lakes, rivers, and streams located in and around your community?

○ Very Poor	○ Poor	○ Good	○ Very Good	○ Don't Know

3a. To what extent do you believe each of the following items contributes to water quality problems for the lakes, rivers, and streams in and around your community?

	Major Contributor	Moderate Contributor	Minor Contributor	Does Not Contribute	Don't Know/ Not Sure
a. Discharges from sewage treatment plants	○	○	○	○	○
b. Pet waste	○	○	○	○	○
c. Improper disposal of used motor oil & antifreeze	○	○	○	○	○
d. Air pollution from industrial activities	○	○	○	○	○
e. Lawn/urban fertilizers and pesticides	○	○	○	○	○
f. Manure from farm animals	○	○	○	○	○
g. Stormwater runoff from streets & highways	○	○	○	○	○
h. Stormwater runoff from residential rooftops and driveways	○	○	○	○	○
i. Stormwater runoff from non-residential rooftops and parking lots	○	○	○	○	○
j. Grass clippings and leaves	○	○	○	○	○
k. Soil erosion from construction sites	○	○	○	○	○
l. Street salt and sand	○	○	○	○	○
m. Discharges from industry	○	○	○	○	○
n. Agricultural fertilizers and pesticides	○	○	○	○	○
o. Soil erosion from farm fields	○	○	○	○	○
p. Improper disposal of hazardous household wastes	○	○	○	○	○

3b. From the list of items in question 3a, enter the letters of the three items you feel contribute the most to water quality problems in and around your community.

Most _____ 2nd Most _____ 3rd Most _____

4. After it rains or when snow melts, where do you think the resulting stormwater runoff goes as it leaves your property? (Please select all that apply)

- ○ Into a storm drain system (curbs, street-gutters, and storm drains)
- ○ Into a ditch drainage system
- ○ It does not leave my property
- ○ Other: _____

- ○ I don't know

5. Where does stormwater runoff go once it leaves your neighborhood? (Please select all that apply)

- ○ To a creek, stream, river, or lake, without treatment
- ○ To a municipal sewage treatment system
- ○ To a holding pond
- ○ To a field or infiltration basin
- ○ Other: _____

- ○ I'm not sure where the water goes

6. To the best of your knowledge, after it rains or when snow melts, to what extent does the resulting stormwater runoff contribute to the following problems in your community?

	Major Contributor	Moderate Contributor	Minor Contributor	Does Not Contribute	Don't Know/ Not Sure
Flooding	○	○	○	○	○
Increased numbers of zebra mussels	○	○	○	○	○
Weed & algae growth in lakes	○	○	○	○	○
Negative impacts on fish habitat	○	○	○	○	○
Negative impacts on habitat for wildlife	○	○	○	○	○
The quality of local drinking water	○	○	○	○	○
Negative impacts on local swimming and beach areas	○	○	○	○	○
Delivery of sediment to local lakes and streams	○	○	○	○	○
Increased temperatures in lakes and streams	○	○	○	○	○
Reduction in normal flow of local streams when it's not raining	○	○	○	○	○
Lowering groundwater levels	○	○	○	○	○

Activities and Information Preferences

7a. Which of the following practices would you do (or have done for you) on a regular basis if you knew that the action would help reduce water pollution?

	Already do this	Willing to do	Need more Information	Not willing to do	Not Applicable
Take used automotive oil to a recycling center	○	○	○	○	○
Have your oil changed at an automotive service center	○	○	○	○	○
Conduct soil tests to determine fertilizer application rates for your lawn	○	○	○	○	○
Apply chemical fertilizers & weed-killers only once or twice per year	○	○	○	○	○
Stop using chemical fertilizers and weed-killers completely	○	○	○	○	○
Use a fertilizer with no or limited amounts of phosphorus	○	○	○	○	○
Stop using salt to melt ice at your residence	○	○	○	○	○
Compost leaves and grass clippings in your yard	○	○	○	○	○
Compost leaves and grass clippings through a community program	○	○	○	○	○
Use a mulching lawnmower	○	○	○	○	○
Direct rain downspouts to your lawn rather than your driveway	○	○	○	○	○
Install a rain barrel or cistern to collect rainwater from your downspouts	○	○	○	○	○
Install a “rain garden” to intercept rainwater from your downspouts	○	○	○	○	○
Keep street gutters in front of your residence clear of grass clippings and leaves	○	○	○	○	○
Wash your car on your lawn	○	○	○	○	○
Wash your car at a car wash	○	○	○	○	○
Clean up and dispose of pet waste	○	○	○	○	○

7b. If you have any concerns related to these practices, please describe your concerns briefly:

8. Which of the following sources would you most likely turn to for information about the practices listed in question 7? (Please select all that apply)

- ○ Wisconsin Dept. of Natural Resources
- ○ Dane County
- ○ Your municipal government
- ○ University of Wisconsin/UW-Extension
- ○ An environmental, conservation, or watershed organization
- ○ Your local librarian/library
- ○ Educational displays in retail stores
- ○ Computer (web sites, e-mail, etc.)
- ○ Other: _____

9. How would you prefer to receive information about activities you can do to improve water quality in your community? (Please select all that apply)

- ○ Local newspapers
- ○ Television
- ○ Radio
- ○ Letters sent to my home
- ○ Inserts in utility bills
- ○ Displays at retail stores
- ○ Through local schools
- ○ Community newsletters
- ○ Educational workshops
- ○ Public meetings or events
- ○ Computer (web sites, e-mail, etc.)
- ○ Other: _____
- ○ I am not interested in this sort of information

10. Which of the following statements best describes your level of awareness about current efforts by your local government to improve water quality in your community?

- ○ I am not aware of any existing efforts
- ○ I think activities are taking place, but I don't know very much about them
- ○ I am generally familiar with efforts to improve water quality in my community
- ○ I am very knowledgeable about existing efforts

11. In your opinion, if implemented, how effective are the following types of efforts for addressing stormwater problems in your community?

	Very Effective	Effective	Somewhat Effective	Not Effective	Don't Know
Street sweeping	○	○	○	○	○
Installing "rain gardens"	○	○	○	○	○
Leaf & yard-waste collection	○	○	○	○	○
Developing facilities where stormwater can seep into the ground (referred to as "infiltration" facilities)	○	○	○	○	○
Enforcing local erosion & stormwater ordinances	○	○	○	○	○
Restoring wetlands	○	○	○	○	○
Painting stenciled messages on streets/drains	○	○	○	○	○
Reducing salt usage for melting ice	○	○	○	○	○
Developing buffers along waterways & shorelands	○	○	○	○	○
Other: _____	○	○	○	○	○

12. In your opinion, which of the following would be the most appropriate entity to contact if you became aware of a problem related to stormwater in your community (for example, a large amount of mud flowing into a storm drain)? (Please select only one)

- ○ Your water utility
- ○ Your municipal government
- ○ Dane County government
- ○ Wisconsin Department of Natural Resources
- ○ An environmental, conservation, or watershed organization
- ○ Other: _____

- ○ I wouldn't know who to contact with information about a stormwater problem

Information About You and Your Residence

The remaining questions are included in order to compare the group of people participating in this survey with the general populations of the communities involved. As a reminder, all responses are voluntary and will remain confidential, and once your questionnaire is returned, your responses will not be associated with your name in any way.

13. Which of the following best describes your current residence?

- ○ Single-family house
- ○ Duplex/Two-family house
- ○ Mobile home
- ○ Apartment
- ○ Condominium/Townhouse
- ○ Other: _____

14. What is the source of your household water supply?

- ○ My water comes from a municipality or water utility
- ○ My water comes from a private well on my property
- ○ I don't know

15. Do you own or rent your current residence? ○ Own ○ Rent

16. How many adults and children currently live at this residence?

_____ Adults (18 or older) _____ Children (17 or younger)

17. Are you currently a member of an environmental, conservation, or watershed organization?

○ Yes ○ No

18 What is your age?

- ○ 18 – 24
- ○ 25 – 34
- ○ 35 – 44
- ○ 45 – 54
- ○ 55 – 64
- ○ 65 – 74
- ○ 75 years and older

19. What is your gender? ○ Male ○ Female

20. Please select the range which best describes your total annual household income:

- ○ Less than $20,000
- ○ $20,000-$49,999
- ○ $50,000-$79,999
- ○ $80,000-$119,999
- ○ $120,000 and over

21. What is the highest level of education you have completed?

- ○ Some High School
- ○ High School Degree
- ○ Some Vocational Training
- ○ 2-year Associate Degree
- ○ Some College
- ○ 4-year College Degree
- ○ Some Post-Graduate Courses
- ○ Graduate/Professional Degree
- ○ Ph.D. Degree

22. What is the name of the lake, stream, or river that is closest to your residence?

_____

23. What is the approximate distance from your residence to that closest lake, stream, or river?

- ○ My residence is adjacent to a lake, stream, or river
- ○ Within ¼ mile (about 3 city blocks)
- ○ Between ¼ mile and 1 mile
- ○ More than 1 mile
- ○ I don't know

24. During the last calendar year, in which of the following ways have you used the water resources in and around your community? (Please select all that apply)

- ○ Motorized boating
- ○ Non-motorized boating or sailing
- ○ Fishing
- ○ Hunting
- ○ Swimming
- ○ Ice-skating or winter sports
- ○ Walking, jogging, birding, or similar uses
- ○ Scenic appreciation

○ None of the above

Thank you for your time and assistance! Please return the completed questionnaire in the envelope provided and use the space on the back of this questionnaire to share additional comments about this survey and/or water resource issues in and around your community.

Additional Comments:

Technical and administrative assistance for this survey was provided by University of Wisconsin-Extension, Environmental Resources Center, under a grant from the Wisconsin Department of Natural Resources, with cooperation from the following communities: City of Fitchburg, City of Madison, City of Middleton, City of Monona, City of Sun Prairie, City of Verona, Village of DeForest, Village of Maple Bluff, Village of McFarland, Village of Shorewood Hills, Village of Waunakee, Town of Blooming Grove, Town of Burke, Town of Madison, Town of Middleton, Town of Westport, Town of Windsor, and Dane County & UW-Madison.

Appendix B

Cross tabulations by size of community

Each response was cross tabulated based on size of community.

large = City of Madison
medium = Cities of Fitchburg, Middleton, Sun Prairie
small = all other communities

If they exist, statistically significant differences in mean response by size of community are notated below the table for each question.

TOWNSIZE * Q1 rate water quality on map Crosstabulation

	Q1 rate water quality on map					
	very poor	poor	good	very good	don't know	Total
large, n = 98	6%	38%	43%	1%	12%	100.0%
medium, n = 62	3%	34%	40%	6%	16%	100.0%
small, n = 159	4%	35%	45%	3%	14%	100.0%
Total	5%	35%	43%	3%	14%	100.0%

TOWNSIZE * Q2 rate water quality in community Crosstabulation

	Q2 rate water quality in community					
	very poor	poor	good	very good	don't know	Total
large, n = 98	7.1%	39.8%	39.8%	1.0%	12.2%	100.0%
medium, n = 62	3.2%	38.7%	43.5%	6.5%	8.1%	100.0%
small, n = 160	4.4%	32.5%	50.6%	3.8%	8.8%	100.0%
Total	5.0%	35.9%	45.9%	3.4%	9.7%	100.0%

TOWNSIZE * Q3.1A sewage discharge Crosstabulation

	Q3.1A sewage discharge					
	major contributor	moderate contributor	minor contributor	does not contribute	don't know / not sure	Total
large, n = 98	8%	27%	38%	13%	14%	100%
medium, n = 61	13%	28%	33%	11%	15%	100%
small, n = 162	8%	26%	36%	14%	17%	100%
Total	9%	26%	36%	13%	16%	100%

TOWNSIZE * Q3.1B pet waste Crosstabulation

	Q3.1B pet waste					
	major contributor	moderate contributor	minor contributor	does not contribute	don't know / not sure	Total
large, n = 98	5%	24%	48%	8%	14%	100%
medium, n = 61	3%	20%	49%	16%	11%	100%
small, n = 164	4%	21%	54%	10%	12%	100%
Total	4%	22%	51%	11%	13%	100%

TOWNSIZE * Q3.1C motor oil/antifreeze Crosstabulation

	Q3.1C motor oil/antifreeze					
	major contributor	moderate contributor	minor contributor	does not contribute	don't know / not sure	Total
large, n = 97	14%	23%	40%	1%	22%	100%
medium, n = 62	10%	19%	52%	3%	16%	100%
small, n = 163	8%	28%	36%	8%	20%	100%
Total	10%	25%	40%	5%	20%	100%

TOWNSIZE * Q3.1D industrial air pollution Crosstabulation

	Q3.1D industrial air pollution					
	major contributor	moderate contributor	minor contributor	does not contribute	don't know / not sure	Total
large, n = 96	9%	38%	35%	5%	13%	100%
medium, n = 62	8%	31%	45%	6%	10%	100%
small, n = 161	11%	31%	38%	8%	12%	100%
Total	10%	33%	39%	7%	12%	100%

TOWNSIZE * Q3.1E lawn/urban fertilizers/pesticides Crosstabulation

	Q3.1E lawn/urban fertilizers/pesticides					
	major contributor	moderate contributor	minor contributor	does not contribute	don't know / not sure	Total
large, n = 95	52%	35%	8%		5%	100%
medium, n = 60	38%	45%	12%	2%	3%	100%
small, n = 163	40%	40%	15%	1%	4%	100%
Total	43%	40%	12%	1%	4%	100%

TOWNSIZE * Q3.1F manure from farm animals Crosstabulation

	Q3.1F manure from farm animals					
	major contributor	moderate contributor	minor contributor	does not contribute	don't know / not sure	Total
large, n = 97	30%	36%	20%	2%	12%	100%
medium, n = 62	15%	50%	24%	3%	8%	100%
small, n = 162	25%	40%	25%	2%	8%	100%
Total	25%	40%	23%	2%	9%	100%

TOWNSIZE * Q3.1G stormwater from roads Crosstabulation

	Q3.1G stormwater from roads					
	major contributor	moderate contributor	minor contributor	does not contribute	don't know / not sure	Total
large, n = 98	46%	34%	14%	1%	5%	100%
medium, n = 59	42%	37%	17%	2%	2%	100%
small, n = 162	38%	44%	12%	1%	6%	100%
Total	41%	40%	13%	1%	5%	100%

TOWNSIZE * Q3.1H stormwater from res rooftops/drives Crosstabulation

	Q3.1H stormwater from res rooftops/drives					
	major contributor	moderate contributor	minor contributor	does not contribute	don't know / not sure	Total
large, n = 98	17%	35%	37%	4%	7%	100%
medium, n = 62	19%	31%	45%	2%	3%	100%
small, n = 164	15%	40%	35%	1%	9%	100%
Total	17%	36%	38%	2%	7%	100%

TOWNSIZE * Q3.1I stormwater from non-res roofs/parking lots Crosstabulation

	Q3.1I stormwater from non-res roofs/parking lots					
	major contributor	moderate contributor	minor contributor	does not contribute	don't know / not sure	Total
large, n = 98	21%	36%	32%	3%	8%	100%
medium, n = 59	19%	42%	32%	3%	3%	100%
small, n = 164	18%	44%	26%	1%	11%	100%
Total	19%	41%	29%	2%	9%	100%

TOWNSIZE * Q3.1J grass clippings/leaves Crosstabulation

	Q3.1J grass clippings/leaves					
	major contributor	moderate contributor	minor contributor	does not contribute	don't know / not sure	Total
large, n = 98	17%	26%	43%	5%	9%	100%
medium, n = 62	8%	32%	48%	8%	3%	100%
small, n = 163	7%	27%	49%	9%	9%	100%
Total	10%	28%	47%	7%	8%	100%

TOWNSIZE * Q3.1K soil erosion from constr. sites Crosstabulation

	Q3.1K soil erosion from constr. sites					
	major contributor	moderate contributor	minor contributor	does not contribute	don't know / not sure	Total
large, n = 97	20%	30%	39%	2%	9%	100%
medium, n = 61	13%	31%	48%	3%	5%	100%
small, n = 161	17%	34%	35%	4%	9%	100%
Total	17%	32%	39%	3%	8%	100%

TOWNSIZE * Q3.1L street salt and sand Crosstabulation

	Q3.1L street salt and sand					
	major contributor	moderate contributor	minor contributor	does not contribute	don't know / not sure	Total
large, n = 98	35%	36%	21%	2%	6%	100%
medium, n = 62	29%	37%	31%	2%	2%	100%
small, n = 163	26%	48%	21%	1%	3%	100%
Total	29%	42%	23%	1%	4%	100%

TOWNSIZE * Q3.1M discharges from industry Crosstabulation

	Q3.1M discharges from industry					
	major contributor	moderate contributor	minor contributor	does not contribute	don't know / not sure	Total
large, n = 96	21%	45%	18%	3%	14%	100%
medium, n = 61	15%	38%	34%	3%	10%	100%
small, n = 163	18%	39%	26%	4%	13%	100%
Total	18%	41%	25%	3%	13%	100%

TOWNSIZE * Q3.1N agricultural fertilizers/pesticides Crosstabulation

	Q3.1N agricultural fertilizers/pesticides					
	major contributor	moderate contributor	minor contributor	does not contribute	don't know / not sure	Total
large, n = 97	45%	39%	8%	1%	6%	100%
medium, n = 62	37%	44%	11%	2%	6%	100%
small, n = 161	43%	35%	14%	2%	6%	100%
Total	43%	38%	12%	2%	6%	100%

TOWNSIZE * Q3.1O soil erosion from farm fields Crosstabulation

	Q3.1O soil erosion from farm fields					
	major contributor	moderate contributor	minor contributor	does not contribute	don't know / not sure	Total
large, n = 98	23%	34%	31%	2%	10%	100%
medium, n = 62	13%	47%	31%	3%	6%	100%
small, n = 161	17%	37%	31%	2%	12%	100%
Total	18%	38%	31%	2%	10%	100%

TOWNSIZE * Q3.1P improper disposal of haz household wastes Crosstabulation

	Q3.1P improper disposal of haz household wastes					
	major contributor	moderate contributor	minor contributor	does not contribute	don't know / not sure	Total
large, n = 98	11%	35%	38%	2%	14%	100%
medium, n = 62	13%	35%	34%	5%	13%	100%
small, n = 164	8%	29%	44%	4%	15%	100%
Total	10%	32%	40%	3%	15%	100%

TOWNSIZE * Q3.2A contributes most to water quality problems Crosstabulation

		TOWNSIZE			
		large, n = 95	medium, n = 56	small, n = 159	Total
Q3.2A contributes most to water quality problems	sewage discharge	5%	9%	6%	6%
	pet waste	1%			0%
	motor oil / antifreeze	1%	2%		1%
	industrial air pollution	3%	2%	3%	3%
	lawn/urban fert/pest	27%	29%	29%	28%
	farm animal manure	5%	4%	5%	5%
	street/highway stormwater	13%	11%	18%	15%
	residential stormwater			2%	1%
	non-res stormwater	11%	4%	3%	5%
	grass clippings / leaves	2%	2%		1%
	cons site soil erosion	2%	2%	3%	3%
	street salt&sand	6%	5%	6%	6%
	industry discharges	5%	9%	6%	6%
	ag fert/pest	14%	14%	17%	15%
	farm field erosion	1%	5%	3%	3%
	household haz waste	3%	4%	1%	2%
Total		100%	100%	100%	100%

TOWNSIZE * Q3.2B 2nd most Crosstabulation

		TOWNSIZE			
		large, n = 95	medium, n = 55	small, n = 159	Total
Q3.2B contributes 2nd most to water quality problems	sewage discharge	1%	2%	1%	1%
	pet waste	1%			0%
	motor oil / antifreeze	2%		2%	2%
	industrial air pollution	3%	4%		2%
	lawn/urban fert/pest	18%	20%	14%	16%
	farm animal manure	4%	5%	9%	7%
	street/highway stormwater	9%	20%	15%	14%
	residential stormwater	3%	2%	3%	3%
	non-res stormwater	12%	13%	8%	10%
	grass clippings / leaves	3%		1%	2%
	cons site soil erosion	4%	4%	6%	5%
	street salt&sand	8%	5%	11%	9%
	industry discharges	12%	4%	9%	9%
	ag fert/pest	15%	16%	17%	16%
	farm field erosion	2%		3%	2%
	household haz waste	2%	5%	1%	2%
Total		100%	100%	100%	100%

TOWNSIZE * Q3.2C 3rd most Crosstabulation

		TOWNSIZE			
		large, n = 94	medium, n = 54	small, n = 155	Total
Q3.2C contributes 3rd most to water quality problems	sewage discharge	4%	4%	4%	4%
	pet waste	1%		1%	1%
	motor oil / antifreeze	1%		1%	1%
	industrial air pollution	4%	6%	3%	4%
	lawn/urban fert/pest	5%	4%	17%	11%
	farm animal manure	9%	7%	7%	8%
	street/highway stormwater	11%	17%	9%	11%
	residential stormwater	4%	7%	5%	5%
	non-res stormwater	11%	9%	11%	11%
	grass clippings / leaves	6%	6%	1%	3%
	cons site soil erosion	6%	7%	6%	6%
	street salt&sand	5%	13%	9%	9%
	industry discharges	7%	7%	3%	5%
	ag fert/pest	16%	9%	16%	15%
	farm field erosion	5%	2%	5%	5%
	household haz waste	3%	2%	3%	3%
Total		100%	100%	100%	100%

TOWNSIZE * Q4.1 storm water goes into a storm drain system Crosstabulation

	Q4.1 storm water goes into a storm drain system		
	no	yes	Total
large, n = 100	12%	88%	100%
medium, n = 62	8%	92%	100%
small, n = 166	37%	63%	100%
Total	24%	76%	100%

TOWNSIZE * Q4.2 into a ditch drainage system Crosstabulation

	Q4.2 into a ditch drainage system		
	no	yes	Total
large, n = 100	90%	10%	100%
medium, n = 62	89%	11%	100%
small, n = 166	72%	28%	100%
Total	80%	20%	100%

TOWNSIZE * Q4.3 does not leave my property Crosstabulation

	Q4.3 does not leave my property		
	no	yes	Total
large, n = 100	96%	4%	100%
medium, n = 62	98%	2%	100%
small, n = 166	90%	10%	100%
Total	93%	7%	100%

TOWNSIZE * Q4.4 other Crosstabulation

	Q4.4 other		
	no	yes	Total
large, n = 100	96%	4%	100%
medium, n = 62	97%	3%	100%
small, n = 166	93%	7%	100%
Total	95%	5%	100%

TOWNSIZE * Q4.5 don't know Crosstabulation

	Q4.5 don't know		
	no	yes	Total
large, n = 100	100%		100%
medium, n = 62	98%	2%	100%
small, n = 166	96%	4%	100%
Total	98%	2%	100%

TOWNSIZE * Q5.1 storm water goes to a creek, river or lake Crosstabulation

	Q5.1 storm water goes to a creek, river or lake		
	no	yes	Total
large, n = 100	40%	60%	100%
medium, n = 62	48%	52%	100%
small, n = 166	45%	55%	100%
Total	44%	56%	100%

TOWNSIZE * Q5.2 to a municipal sewage treatment system Crosstabulation

	Q5.2 to a municipal sewage treatment system		
	no	yes	Total
large, n = 100	81%	19%	100%
medium, n = 62	77%	23%	100%
small, n = 166	93%	7%	100%
Total	86%	14%	100%

Significant differences exist between mean responses from small and medium communities, and between mean responses from small and large communities.

TOWNSIZE * Q5.3 to a holding pond Crosstabulation

	Q5.3 to a holding pond		
	no	yes	Total
large, n = 100	93%	7%	100%
medium, n = 62	92%	8%	100%
small, n = 166	92%	8%	100%
Total	92%	8%	100%

TOWNSIZE * Q5.4 to a field or infiltration basin Crosstabulation

	Q5.4 to a field or infiltration basin		
	no	yes	Total
large, n = 100	96%	4%	100%
medium, n = 62	95%	5%	100%
small, n = 166	82%	18%	100%
Total	89%	11%	100%

Significant differences exist between mean responses from small and medium communities, and between mean responses from small and large communities.

TOWNSIZE * Q5.5 other Crosstabulation

	Q5.5 other		
	no	yes	Total
large, n = 100	99%	1%	100%
medium, n = 62	97%	3%	100%
small, n = 166	96%	4%	100%
Total	97%	3%	100%

TOWNSIZE * Q5.6 I'm not sure where the water goes Crosstabulation

	Q5.6 I'm not sure where the water goes		
	no	yes	Total
large, n = 100	79%	21%	100%
medium, n = 62	77%	23%	100%
small, n = 166	81%	19%	100%
Total	80%	20%	100%

TOWNSIZE * Q6.1 flooding Crosstabulation

	Q6.1 flooding					
	major contributor	moderate contributor	minor contributor	does not contribute	don't know / not sure	Total
large, n = 97	16%	30%	37%	8%	8%	100%
medium, n = 58	24%	40%	14%	12%	10%	100%
small, n = 157	21%	24%	35%	11%	9%	100%
Total	20%	29%	32%	10%	9%	100%

TOWNSIZE * Q6.2 increased # of zebra mussels Crosstabulation

	Q6.2 increased # of zebra mussels					
	major contributor	moderate contributor	minor contributor	does not contribute	don't know / not sure	Total
large, n = 95	3%	6%	14%	39%	38%	100%
medium, n = 60		15%	8%	28%	48%	100%
small, n = 157	1%	4%	12%	39%	44%	100%
Total	1%	7%	12%	37%	43%	100%

TOWNSIZE * Q6.3 weed & algae growth in lakes Crosstabulation

	Q6.3 weed & algae growth in lakes					
	major contributor	moderate contributor	minor contributor	does not contribute	don't know / not sure	Total
large, n = 97	44%	30%	9%	4%	12%	100%
medium, n = 61	34%	30%	15%	8%	13%	100%
small, n = 160	35%	29%	19%	5%	12%	100%
Total	38%	30%	15%	5%	12%	100%

TOWNSIZE * Q6.4 negative impacts on fish habitat Crosstabulation

	Q6.4 negative impacts on fish habitat					
	major contributor	moderate contributor	minor contributor	does not contribute	don't know / not sure	Total
large, n = 97	25%	42%	11%	4%	18%	100%
medium, n = 60	20%	37%	18%	5%	20%	100%
small, n = 161	17%	35%	23%	6%	18%	100%
Total	20%	38%	19%	5%	18%	100%

TOWNSIZE * Q6.5 negative impacts on wildlife habitat Crosstabulation

	Q6.5 negative impacts on wildlife habitat					
	major contributor	moderate contributor	minor contributor	does not contribute	don't know / not sure	Total
large, n = 95	14%	29%	32%	7%	18%	100%
medium, n = 61	11%	30%	33%	7%	20%	100%
small, n = 160	7%	34%	33%	11%	16%	100%
Total	10%	32%	33%	9%	17%	100%

TOWNSIZE * Q6.6 quality of drinking water Crosstabulation

	Q6.6 quality of drinking water					
	major contributor	moderate contributor	minor contributor	does not contribute	don't know / not sure	Total
large, n = 96	5%	17%	35%	26%	17%	100%
medium, n = 60	8%	22%	32%	22%	17%	100%
small, n = 161	7%	17%	35%	22%	19%	100%
Total	7%	18%	34%	23%	18%	100%

TOWNSIZE * Q6.7 negative impacts on swimming & beaches Crosstabulation

	Q6.7 negative impacts on swimming & beaches					
	major contributor	moderate contributor	minor contributor	does not contribute	don't know / not sure	Total
large, n = 97	38%	34%	11%	5%	11%	100%
medium, n = 60	33%	35%	18%	8%	5%	100%
small, n = 162	27%	31%	19%	10%	14%	100%
Total	31%	33%	16%	8%	11%	100%

TOWNSIZE * Q6.8 delivery of sediment ot local lakes and streams Crosstabulation

	Q6.8 delivery of sediment ot local lakes and streams					
	major contributor	moderate contributor	minor contributor	does not contribute	don't know / not sure	Total
large, n = 98	38%	36%	15%	2%	9%	100%
medium, n = 62	37%	39%	15%	3%	6%	100%
small, n = 162	40%	32%	14%	4%	10%	100%
Total	39%	34%	15%	3%	9%	100%

TOWNSIZE * Q6.9 increased temperatures in lakes and streams Crosstabulation

	Q6.9 increased temperatures in lakes and streams					
	major contributor	moderate contributor	minor contributor	does not contribute	don't know / not sure	Total
large, n = 98	11%	21%	26%	14%	28%	100%
medium, n = 61	7%	33%	26%	11%	23%	100%
small, n = 162	10%	16%	30%	10%	35%	100%
Total	10%	21%	28%	12%	30%	100%

TOWNSIZE * Q6.10 reduction in normal flow of local streams when not raining Crosstabulation

	Q6.10 reduction in normal flow of local streams when not raining					
	major contributor	moderate contributor	minor contributor	does not contribute	don't know / not sure	Total
large, n = 98	8%	14%	20%	22%	35%	100%
medium, n = 62	8%	24%	21%	16%	31%	100%
small, n = 158	11%	15%	23%	13%	37%	100%
Total	10%	17%	22%	17%	35%	100%

TOWNSIZE * Q6.11 lowering ground water levels Crosstabulation

	Q6.11 lowering ground water levels					
	major contributor	moderate contributor	minor contributor	does not contribute	don't know / not sure	Total
large, n = 98	10%	11%	13%	32%	34%	100%
medium, n = 61	7%	28%	10%	28%	28%	100%
small, n = 161	8%	12%	22%	19%	39%	100%
Total	8%	15%	17%	24%	35%	100%

TOWNSIZE * Q7.1 take used auto oil to recycling center Crosstabulation

	Q7.1 take used auto oil to recycling center					
	already do	willing to do	need more info	not willing to do	n/a	Total
large, n = 97	63%	9%	2%		26%	100%
medium, n = 62	56%	10%		2%	32%	100%
small, n = 165	64%	6%	1%	1%	28%	100%
Total	62%	8%	1%	1%	28%	100%

TOWNSIZE * Q7.2 have oil changed at service center Crosstabulation

	Q7.2 have oil changed at service center					
	already do	willing to do	need more info	not willing to do	n/a	Total
large, n = 96	88%	5%		4%	3%	100%
medium, n = 61	82%	5%		3%	10%	100%
small, n = 164	79%	7%	2%	7%	4%	100%
Total	82%	6%	1%	6%	5%	100%

TOWNSIZE * Q7.3 conduct soil tests to determine fertilizer rates for lawn Crosstabulation

	Q7.3 conduct soil tests to determine fertilizer rates for lawn					
	already do	willing to do	need more info	not willing to do	n/a	Total
large, n = 94	6%	39%	15%	10%	30%	100%
medium, n = 61	5%	39%	31%	7%	18%	100%
small, n = 165	15%	33%	27%	8%	18%	100%
Total	10%	36%	24%	8%	21%	100%

TOWNSIZE * Q7.4 apply chemical fertilizers/weed killers only 1-2x/year Crosstabulation

	Q7.4 apply chemical fertilizers/weed killers only 1-2x/year					
	already do	willing to do	need more info	not willing to do	n/a	Total
large, n = 96	46%	21%	6%	7%	20%	100%
medium, n = 61	21%	25%	26%	3%	25%	100%
small, n = 164	40%	30%	9%	6%	14%	100%
Total	38%	26%	12%	6%	18%	100%

A significant difference exists between mean responses from small and medium communities.

TOWNSIZE * Q7.5 stop using chem fertilizers/weed killers completely Crosstabulation

	Q7.5 stop using chem fertilizers/weed killers completely					
	already do	willing to do	need more info	not willing to do	n/a	Total
large, n = 98	21%	26%	20%	23%	9%	100%
medium, n = 61	10%	16%	25%	36%	13%	100%
small, n = 163	12%	22%	36%	24%	6%	100%
Total	14%	22%	29%	26%	8%	100%

Significant differences exist between mean responses from small and medium communities, and between mean responses from medium and large communities.

TOWNSIZE * Q7.6 use fertilizers with low/no phosphorus Crosstabulation

	Q7.6 use fertilizers with low/no phosphorus					
	already do	willing to do	need more info	not willing to do	n/a	Total
large, n = 95	12%	40%	26%	3%	19%	100%
medium, n = 61	3%	43%	26%		28%	100%
small, n = 159	9%	46%	28%	4%	14%	100%
Total	9%	43%	27%	3%	18%	100%

A significant difference exists between mean responses from small and medium communities

TOWNSIZE * Q7.7 stop using salt to melt ice at your home Crosstabulation

	Q7.7 stop using salt to melt ice at your home					
	already do	willing to do	need more info	not willing to do	n/a	Total
large, n = 99	33%	31%	13%	13%	9%	100%
medium, n = 60	28%	22%	13%	22%	15%	100%
small, n = 164	41%	22%	15%	16%	6%	100%
Total	36%	25%	14%	16%	9%	100%

TOWNSIZE * Q7.8 compost leaves and grass clippings in your yard Crosstabulation

	Q7.8 compost leaves and grass clippings in your yard					
	already do	willing to do	need more info	not willing to do	n/a	Total
large, n = 98	44%	23%	7%	17%	8%	100%
medium, n = 62	32%	16%	11%	18%	23%	100%
small, n = 164	48%	18%	12%	12%	11%	100%
Total	44%	19%	10%	15%	12%	100%

Significant differences exist between mean responses from small and medium communities, and between mean responses from medium and large communities.

TOWNSIZE * Q7.9 compost leaves and grass through community program Crosstabulation

	Q7.9 compost leaves and grass through community program					
	already do	willing to do	need more info	not willing to do	n/a	Total
large, n = 96	33%	34%	9%	8%	15%	100%
medium, n = 61	16%	48%	15%	2%	20%	100%
small, n = 159	19%	32%	17%	11%	20%	100%
Total	23%	36%	14%	9%	18%	100%

A significant difference exists between mean responses from small and large communities.

TOWNSIZE * Q7.10 use a mulching mower Crosstabulation

	Q7.10 use a mulching mower					
	already do	willing to do	need more info	not willing to do	n/a	Total
large, n = 97	66%	18%	5%	2%	9%	100%
medium, n = 62	63%	15%	3%		19%	100%
small, n = 162	63%	17%	6%	5%	9%	100%
Total	64%	17%	5%	3%	11%	100%

TOWNSIZE * Q7.11 direct rain downspouts to your lawn rather than driveway Crosstabulation

	Q7.11 direct rain downspouts to your lawn rather than driveway					
	already do	willing to do	need more info	not willing to do	n/a	Total
large, n = 99	76%	15%	3%	1%	5%	100%
medium, n = 62	63%	18%	2%	2%	16%	100%
small, n = 166	82%	11%	2%		5%	100%
Total	76%	14%	2%	1%	7%	100%

Significant differences exist between mean responses from small and medium communities, and between mean responses from medium and large communities.

TOWNSIZE * Q7.12 install a rain barrel or cistern to collect rainwater Crosstabulation

	Q7.12 install a rain barrel or cistern to collect rainwater					
	already do	willing to do	need more info	not willing to do	n/a	Total
large, n = 96	4%	32%	29%	22%	13%	100%
medium, n = 61	5%	26%	21%	25%	23%	100%
small, n = 163	4%	28%	29%	23%	15%	100%
Total	4%	29%	28%	23%	16%	100%

TOWNSIZE * Q7.13 install a rain garden to intercept rainwater from downspouts Crosstabulation

	Q7.13 install a rain garden to intercept rainwater from downspouts					
	already do	willing to do	need more info	not willing to do	n/a	Total
large, n = 95	4%	31%	45%	14%	6%	100%
medium, n = 61	3%	23%	39%	11%	23%	100%
small, n = 161	7%	24%	42%	14%	13%	100%
Total	6%	26%	42%	13%	13%	100%

TOWNSIZE * Q7.14 keep street gutters in front of house clear of grass/leaves Crosstabulation

	Q7.14 keep street gutters in front of house clear of grass/leaves					
	already do	willing to do	need more info	not willing to do	n/a	Total
large, n = 99	56%	28%	1%	3%	12%	100%
medium, n = 61	49%	28%	3%	3%	16%	100%
small, n = 160	49%	14%	4%	1%	31%	100%
Total	51%	21%	3%	2%	23%	100%

A significant difference exists between mean responses from small and large communities.

TOWNSIZE * Q7.15 wash your car on your lawn Crosstabulation

	Q7.15 wash your car on your lawn					
	already do	willing to do	need more info	not willing to do	n/a	Total
large, n = 96	8%	18%	5%	27%	42%	100%
medium, n = 61	13%	18%	2%	31%	36%	100%
small, n = 160	18%	25%	5%	21%	31%	100%
Total	14%	21%	4%	25%	35%	100%

A significant difference exists between mean responses from small and large communities.

TOWNSIZE * Q7.16 wash your car at a car wash Crosstabulation

	Q7.16 wash your car at a car wash					
	already do	willing to do	need more info	not willing to do	n/a	Total
large, n = 95	82%	9%	1%	5%	2%	100%
medium, n = 60	78%	12%	2%	3%	5%	100%
small, n = 165	81%	13%		3%	3%	100%
Total	81%	12%	1%	4%	3%	100%

TOWNSIZE * Q7.17 clean up and dispose of pet waste Crosstabulation

	Q7.17 clean up and dispose of pet waste					
	already do	willing to do	need more info	not willing to do	n/a	Total
large, n = 98	51%	5%	2%	1%	41%	100%
medium, n = 61	36%	5%			59%	100%
small, n = 165	44%	6%	2%	2%	45%	100%
Total	44%	6%	2%	2%	47%	100%

TOWNSIZE * Q8.1 where would you most likely get info? Wis DNR Crosstabulation

		Q8.1 where would you most likely get info? Wis DNR		
		no	yes	Total
TOWNSIZE	large, n = 100	55%	45%	100%
	medium, n = 62	53%	47%	100%
	small, n = 166	43%	57%	100%
Total		49%	51%	100%

TOWNSIZE * Q8.2 Dane County Crosstabulation

		Q8.2 Dane County		
		no	yes	Total
TOWNSIZE	large, n = 100	83%	17%	100%
	medium, n = 62	79%	21%	100%
	small, n = 166	75%	25%	100%
Total		78%	22%	100%

TOWNSIZE * Q8.3 my local muni gov't Crosstabulation

		Q8.3 my local muni gov't		
		no	yes	Total
TOWNSIZE	large, n = 100	66%	34%	100%
	medium, n = 62	53%	47%	100%
	small, n = 166	70%	30%	100%
Total		66%	34%	100%

A significant difference exists between mean responses from small and medium communities.

TOWNSIZE * Q8.4 University of WI/UW-Extension Crosstabulation

		Q8.4 University of WI / UW-Extension		
		no	yes	Total
TOWNSIZE	large, n = 100	61%	39%	100%
	medium, n = 62	63%	37%	100%
	small, n = 166	63%	37%	100%
Total		63%	38%	100%

TOWNSIZE * Q8.5 an environmental, conservation, or watershed org Crosstabulation

		Q8.5 an environmental, conservation, or watershed org		
		no	yes	Total
TOWNSIZE	large, n = 100	68%	32%	100%
	medium, n = 62	81%	19%	100%
	small, n = 166	72%	28%	100%
Total		73%	27%	100%

TOWNSIZE * Q8.6 your local library/librarian Crosstabulation

		Q8.6 your local library/librarian		
		no	yes	Total
TOWNSIZE	large, n = 100	84%	16%	100%
	medium, n = 62	82%	18%	100%
	small, n = 166	89%	11%	100%
Total		86%	14%	100%

TOWNSIZE * Q8.7 educational displays in retail stores Crosstabulation

		Q8.7 educational displays in retail stores		
		no	yes	Total
TOWNSIZE	large, n = 100	87%	13%	100%
	medium, n = 62	85%	15%	100%
	small, n = 166	89%	11%	100%
Total		88%	13%	100%

TOWNSIZE * Q8.8 computer (web, email, etc) Crosstabulation

		Q8.8 computer (web, email, etc)		
		no	yes	Total
TOWNSIZE	large, n = 100	53%	47%	100%
	medium, n = 62	47%	53%	100%
	small, n = 166	57%	43%	100%
Total		54%	46%	100%

TOWNSIZE * Q8.9 other Crosstabulation

		Q8.9 other		
		no	yes	Total
TOWNSIZE	large, n = 100	97%	3%	100%
	medium, n = 62	94%	6%	100%
	small, n = 166	98%	2%	100%
Total		97%	3%	100%

TOWNSIZE * Q9.1 how would you prefer to receive info? local newspapers Crosstabulation

		Q9.1 how would you prefer to receive info? local newspapers		
		no	yes	Total
TOWNSIZE	large, n = 100	44%	56%	100%
	medium, n = 62	34%	66%	100%
	small, n = 166	47%	53%	100%
Total		44%	56%	100%

TOWNSIZE * Q9.2 television Crosstabulation

		Q9.2 television		
		no	yes	Total
TOWNSIZE	large, n = 100	55%	45%	100%
	medium, n = 62	61%	39%	100%
	small, n = 166	64%	36%	100%
Total		61%	39%	100%

TOWNSIZE * Q9.3 radio Crosstabulation

		Q9.3 radio		
		no	yes	Total
TOWNSIZE	large, n = 100	77%	23%	100%
	medium, n = 62	81%	19%	100%
	small, n = 166	77%	23%	100%
Total		77%	23%	100%

TOWNSIZE * Q9.4 letters sent to my home Crosstabulation

		Q9.4 letters sent to my home		
		no	yes	Total
TOWNSIZE	large, n = 100	65%	35%	100%
	medium, n = 62	69%	31%	100%
	small, n = 166	66%	34%	100%
Total		66%	34%	100%

TOWNSIZE * Q9.5 inserts in utility bills Crosstabulation

		Q9.5 inserts in utility bills		
		no	yes	Total
TOWNSIZE	large, n = 100	62%	38%	100%
	medium, n = 62	58%	42%	100%
	small, n = 166	63%	37%	100%
Total		62%	38%	100%

TOWNSIZE * Q9.6 displays at retail stores Crosstabulation

		Q9.6 displays at retail stores		
		no	yes	Total
TOWNSIZE	large, n = 100	88%	12%	100%
	medium, n = 62	90%	10%	100%
	small, n = 166	87%	13%	100%
Total		88%	12%	100%

TOWNSIZE * Q9.7 through local schools Crosstabulation

		Q9.7 through local schools		
		no	yes	Total
TOWNSIZE	large, n = 100	88%	12%	100%
	medium, n = 62	89%	11%	100%
	small, n = 166	90%	10%	100%
Total		89%	11%	100%

TOWNSIZE * Q9.8 community newsletters Crosstabulation

		Q9.8 community newsletters		
		no	yes	Total
TOWNSIZE	large, n = 100	61%	39%	100%
	medium, n = 62	52%	48%	100%
	small, n = 166	55%	45%	100%
Total		56%	44%	100%

TOWNSIZE * Q9.9 educational workshops Crosstabulation

		Q9.9 educational workshops		
		no	yes	Total
TOWNSIZE	large, n = 100	93%	7%	100%
	medium, n = 62	82%	18%	100%
	small, n = 166	89%	11%	100%
Total		89%	11%	100%

TOWNSIZE * Q9.10 public meetings or events Crosstabulation

		Q9.10 public meetings or events		
		no	yes	Total
TOWNSIZE	large, n = 100	84%	16%	100%
	medium, n = 62	85%	15%	100%
	small, n = 166	90%	10%	100%
Total		87%	13%	100%

TOWNSIZE * Q9.11 computer Crosstabulation

		Q9.11 computer		
		no	yes	Total
TOWNSIZE	large, n = 100	60%	40%	100%
	medium, n = 62	61%	39%	100%
	small, n = 166	66%	34%	100%
Total		63%	37%	100%

TOWNSIZE * Q9.12 other Crosstabulation

		Q9.12 other		
		no	yes	Total
TOWNSIZE	large, n = 100	100%		100%
	medium, n = 62	98%	2%	100%
	small, n = 166	98%	2%	100%
Total		99%	1%	100%

TOWNSIZE * Q9.13 I am not interested in this sort of information Crosstabulation

		Q9.13 I am not interested in this sort of information		
		no	yes	Total
TOWNSIZE	large, n = 100	98%	2%	100%
	medium, n = 62	98%	2%	100%
	small, n = 166	98%	2%	100%
Total		98%	2%	100%

TOWNSIZE * Q10 level of awareness about local gov't efforts to improve H2O Crosstabulation

	Q10 level of awareness about local gov't efforts to improve water quality				
	not aware	don't know much	generally familiar	very knowledgeable	Total
large, n = 99	13%	60%	26%	1%	100%
medium, n = 60	8%	60%	28%	3%	100%
small, n = 164	17%	55%	23%	5%	100%
Total	14%	58%	25%	3%	100%

TOWNSIZE * Q11.1 how effective are the following? street sweeping Crosstabulation

	Q11.1 how effective are the following? street sweeping					
	very effective	effective	somewhat effective	not effective	don't know	Total
large, n = 99	17%	41%	28%	7%	6%	100%
medium, n = 60	18%	37%	23%	3%	18%	100%
small, n = 159	14%	34%	26%	7%	19%	100%
Total	16%	37%	26%	6%	15%	100%

A significant difference exists between mean responses from small and large communities.

TOWNSIZE * Q11.2 installing rain gardens Crosstabulation

	Q11.2 installing rain gardens					
	very effective	effective	somewhat effective	not effective	don't know	Total
large, n = 98	10%	21%	18%	3%	47%	100%
medium, n = 58	10%	24%	17%	5%	43%	100%
small, n = 161	13%	27%	16%	4%	40%	100%
Total	12%	25%	17%	4%	43%	100%

TOWNSIZE * Q11.3 leaf & yard-waste collection Crosstabulation

	Q11.3 leaf & yard-waste collection					
	very effective	effective	somewhat effective	not effective	don't know	Total
large, n = 98	35%	43%	18%		4%	100%
medium, n = 59	31%	46%	7%	2%	15%	100%
small, n = 158	33%	41%	12%	6%	9%	100%
Total	33%	42%	13%	3%	9%	100%

TOWNSIZE * Q11.4 developing infiltration facilities Crosstabulation

	Q11.4 developing infiltration facilities					
	very effective	effective	somewhat effective	not effective	don't know	Total
large, n = 99	30%	32%	6%	2%	29%	100%
medium, n = 60	33%	28%	3%	3%	32%	100%
small, n = 159	28%	32%	13%	2%	25%	100%
Total	30%	31%	9%	2%	28%	100%

TOWNSIZE * Q11.5 enforcing local erosion & stormwater ordinances Crosstabulation

	Q11.5 enforcing local erosion & stormwater ordinances					
	very effective	effective	somewhat effective	not effective	don't know	Total
large, n = 98	21%	35%	23%	1%	19%	100%
medium, n = 60	33%	30%	12%	2%	23%	100%
small, n = 161	30%	36%	17%	2%	14%	100%
Total	28%	34%	18%	2%	18%	100%

TOWNSIZE * Q11.6 restoring wetlands Crosstabulation

	Q11.6 restoring wetlands					
	very effective	effective	somewhat effective	not effective	don't know	Total
large, n = 99	47%	26%	12%	2%	12%	100%
medium, n = 60	35%	20%	15%	2%	28%	100%
small, n = 161	49%	24%	12%	2%	12%	100%
Total	46%	24%	13%	2%	15%	100%

Significant differences exist between mean responses from small and medium communities, and between mean responses from medium and large communities.

TOWNSIZE * Q11.7 painting stenciled messages on streets/drains Crosstabulation

	Q11.7 painting stenciled messages on streets/drains					
	very effective	effective	somewhat effective	not effective	don't know	Total
large, n = 98	4%	16%	22%	31%	27%	100%
medium, n = 58	9%	22%	24%	26%	19%	100%
small, n = 161	9%	14%	27%	29%	21%	100%
Total	7%	16%	25%	29%	22%	100%

TOWNSIZE * Q11.8 reducing salt usage for melting ice Crosstabulation

	Q11.8 reducing salt usage for melting ice					
	very effective	effective	somewhat effective	not effective	don't know	Total
large, n = 98	27%	33%	28%	4%	9%	100%
medium, n = 60	20%	33%	28%	5%	13%	100%
small, n = 160	24%	36%	21%	4%	15%	100%
Total	24%	34%	24%	4%	13%	100%

TOWNSIZE * Q11.9 developing buffers along waterways & shorelands Crosstabulation

	Q11.9 developing buffers along waterways & shorelands					
	very effective	effective	somewhat effective	not effective	don't know	Total
large, n = 97	28%	28%	16%	1%	27%	100%
medium, n = 60	23%	27%	15%	2%	33%	100%
small, n = 163	31%	29%	9%	3%	28%	100%
Total	28%	28%	13%	2%	29%	100%

TOWNSIZE * Q12.1 appropritate entity to contact about stormwater prob? your water utility Crosstabulation

		Q12.1 appropritate entity to contact about stormwater prob? your water utility		
		no	yes	Total
TOWNSIZE	large, n = 100	86%	14%	100%
	medium, n = 62	76%	24%	100%
	small, n = 166	85%	15%	100%
Total		84%	16%	100%

TOWNSIZE * Q12.2 your municipal gov't Crosstabulation

		Q12.2 your municipal gov't		
		no	yes	Total
TOWNSIZE	large, n = 100	53%	47%	100%
	medium, n = 62	45%	55%	100%
	small, n = 166	51%	49%	100%
Total		51%	49%	100%

TOWNSIZE * Q12.3 Dane County Gov't Crosstabulation

		Q12.3 Dane County Gov't		
		no	yes	Total
TOWNSIZE	large, n = 100	94%	6%	100%
	medium, n = 62	90%	10%	100%
	small, n = 166	91%	9%	100%
Total		92%	8%	100%

TOWNSIZE * Q12.4 WI DNR Crosstabulation

		Q12.4 WI DNR		
		no	yes	Total
TOWNSIZE	large, n = 100	81%	19%	100%
	medium, n = 62	85%	15%	100%
	small, n = 166	81%	19%	100%
Total		82%	18%	100%

TOWNSIZE * Q12.5 environmental, conservation, or watershed org Crosstabulation

		Q12.5 environmental, conservation, or watershed org		
		no	yes	Total
TOWNSIZE	large, n = 100	94%	6%	100%
	medium, n = 62	97%	3%	100%
	small, n = 166	92%	8%	100%
Total		94%	6%	100%

TOWNSIZE * Q12.6 other Crosstabulation

		Q12.6 other		
		no	yes	Total
TOWNSIZE	large, n = 100	100%		100%
	medium, n = 62	100%		100%
	small, n = 166	98%	2%	100%
Total		99%	1%	100%

TOWNSIZE * Q12.7 I would not know who to contact about a stormwater problem Crosstabulation

		Q12.7 I would not know who to contact about a stormwater problem		
		no	yes	Total
TOWNSIZE	large, n = 100	84%	16%	100%
	medium, n = 62	90%	10%	100%
	small, n = 166	90%	10%	100%
Total		88%	12%	100%

TOWNSIZE * Q13 current residence: single fam house Crosstabulation

	Q13 current residence					
	single family	duplex	apartment	condo/ townhouse	other	Total
large, n = 93	87%	1%		12%		100%
medium, n = 61	72%	2%	15%	10%	2%	100%
small, n = 164	88%	2%	1%	9%	1%	100%
Total	85%	2%	3%	10%	1%	100%

TOWNSIZE * Q14 source of household water supply? Crosstabulation

	Q14 source of household water supply?			
	municipality / water utility	private well	don't know	Total
large, n = 94	98%	1%	1%	100%
medium, n = 60	95%	3%	2%	100%
small, n = 157	66%	33%	1%	100%
Total	81%	18%	1%	100%

TOWNSIZE * Q15 own or rent? Crosstabulation

		Q15 own or rent?		
		own	rent	Total
TOWNSIZE	large, n = 95	100%		100%
	medium, n = 61	84%	16%	100%
	small, n = 164	97%	3%	100%
Total		95%	5%	100%

TOWNSIZE * Q16A number of adults Crosstabulation

		Q16A number of adults					
		1	2	3	4	5	Total
TOWNSIZE	large, n = 95	28%	63%	6%	2%		100%
	medium, n = 61	18%	69%	10%	2%	2%	100%
	small, n = 163	17%	67%	12%	3%		100%
Total		21%	66%	10%	3%	0%	100%

TOWNSIZE * Q16B number of children Crosstabulation

	Q16B number of children						
	0	1	2	3	4	7	Total
large, n = 100	67%	13%	15%	3%	1%	1%	100%
medium, n = 62	69%	15%	13%	3%			100%
small, n = 166	70%	13%	11%	5%			100%
Total	69%	13%	13%	4%	0%	0%	100%

TOWNSIZE * Q17 member of environmental, conservation, or watershed org? Crosstabulation

		Q17 member of environmental, conservation, or watershed org?		
		yes	no	Total
TOWNSIZE	large, n = 94	26%	74%	100%
	medium, n = 62	10%	90%	100%
	small, n = 163	16%	84%	100%
Total		18%	82%	100%

TOWNSIZE * Q18 age Crosstabulation

		TOWNSIZE			
		large, n = 93	medium, n = 60	small, n = 163	Total
Q18 age	18-24			1%	0%
	25-34	4%	13%	11%	9%
	35-44	28%	18%	17%	21%
	45-54	30%	28%	25%	27%
	55-64	19%	23%	26%	24%
	65-74	6%	13%	15%	12%
	75+	12%	3%	6%	7%
Total		100%	100%	100%	100%

TOWNSIZE * Q19 gender Crosstabulation

		Q19 gender		
		male	female	Total
TOWNSIZE	large, n = 95	61%	39%	100%
	medium, n = 62	63%	37%	100%
	small, n = 164	64%	36%	100%
Total		63%	37%	100%

TOWNSIZE * Q20 income Crosstabulation

		TOWNSIZE			
		large, n = 92	medium, n = 55	small, n = 142	Total
Q20 income	<$20,000	4%	7%	1%	3%
	$20-49,999	29%	11%	25%	24%
	$50-79,999	33%	35%	27%	30%
	$80-119,999	17%	33%	27%	25%
	$120,000+	16%	15%	20%	18%
Total		100%	100%	100%	100%

TOWNSIZE * Q21 education Crosstabulation

		TOWNSIZE			
		large, n = 93	medium, n = 61	small, n = 159	Total
Q21 education	Some HS			1%	0%
	HS Degree	10%	7%	15%	12%
	Some Vocational	3%	11%	9%	8%
	2-year Asso	6%	10%	5%	6%
	Some College	13%	15%	16%	15%
	4-year Degree	22%	26%	23%	23%
	Some Post-Grad	14%	5%	13%	12%
	Grad/Prof Degree	27%	25%	13%	19%
	PHD	5%	2%	6%	5%
Total		100%	100%	100%	100%

TOWNSIZE * Q23 approximate distance to nearest water? Crosstabulation

	Q23 approximate distance to nearest water?					
	adjacent to lake	within 1/4 mile	1/4 to 1 mile	more than 1 mile	don't know	Total
large, n = 95	4%	20%	29%	40%	6%	100%
medium, n = 62	8%	19%	18%	48%	6%	100%
small, n = 162	10%	23%	32%	30%	5%	100%
Total	8%	21%	29%	36%	6%	100%

TOWNSIZE * Q24.1 how have you used water in the past year? motorized boating Crosstabulation

		Q24.1 how have you used water in the past year? motorized boating		
		no	yes	Total
	large, n = 100	82%	18%	100%
	medium, n = 62	74%	26%	100%
	small, n = 166	79%	21%	100%
Total		79%	21%	100%

TOWNSIZE * Q24.2 non-motorized boating / sailing Crosstabulation

		Q24.2 non-motorized boating / sailing		
		no	yes	Total
	large, n = 100	81%	19%	100%
	medium, n = 62	85%	15%	100%
	small, n = 166	81%	19%	100%
Total		82%	18%	100%

TOWNSIZE * Q24.3 fishing Crosstabulation

		Q24.3 fishing		
		no	yes	Total
	large, n = 100	83%	17%	100%
	medium, n = 62	74%	26%	100%
	small, n = 166	70%	30%	100%
Total		75%	25%	100%

TOWNSIZE * Q24.4 hunting Crosstabulation

		Q24.4 hunting		
		no	yes	Total
	large, n = 100	98%	2%	100%
	medium, n = 62	98%	2%	100%
	small, n = 166	96%	4%	100%
Total		97%	3%	100%

TOWNSIZE * Q24.5 swimming Crosstabulation

		Q24.5 swimming		
		no	yes	Total
	large, n = 100	76%	24%	100%
	medium, n = 62	73%	27%	100%
	small, n = 166	78%	22%	100%
Total		77%	23%	100%

TOWNSIZE * Q24.6 ice-skating or winter sports Crosstabulation

		Q24.6 ice-skating or winter sports		
		no	yes	Total
	large, n = 100	77%	23%	100%
	medium, n = 62	81%	19%	100%
	small, n = 166	87%	13%	100%
Total		83%	17%	100%

TOWNSIZE * Q24.7 walking, jogging, birding etc Crosstabulation

		Q24.7 walking, jogging, birding etc		
		no	yes	Total
	large, n = 100	49%	51%	100%
	medium, n = 62	47%	53%	100%
	small, n = 166	52%	48%	100%
Total		50%	50%	100%

TOWNSIZE * Q24.8 scenic appreciation Crosstabulation

		Q24.8 scenic appreciation		
		no	yes	Total
	large, n = 100	25%	75%	100%
	medium, n = 62	29%	71%	100%
	small, n = 166	32%	68%	100%
Total		29%	71%	100%

TOWNSIZE * Q24.9 none of the above Crosstabulation

		Q24.9 none of the above		
		no	yes	Total
TOWNSIZE	large, n = 100	89%	11%	100%
	medium, n = 62	87%	13%	100%
	small, n = 166	89%	11%	100%
Total		88%	12%	100%

Appendix C

Focus on Fertilizers & Pesticides

We compared information about how respondents believed lawn fertilizers and pesticides impacted local water quality versus their willingness to change their lawn fertilizer and pesticide application practices.

A number of highlights appeared:

1) Of those who believe lawn fertilizers and pesticides are major contributors to water quality problems:
    a. 43% already limit applications of chemical inputs to 1-2 times per year, and 24% are willing to do so.
    b. 26% already use no chemical inputs, and 26% are willing to do so. Notably, 17% are not willing to do so.
    c. 13% already use fertilizer with no or limited amounts of phosphorus, and 42 % are willing to do so.
2) Of those who believe lawn fertilizers and pesticides are moderate contributors to water quality problems:
    a. 35% already limit applications of chemical inputs to 1-2 times per year, and 29% are willing to do so.
    b. 6% already use no chemical inputs, and 22% are willing to do so. Notably, 38% are not willing to do so – a greater percentage than a combination of those already and those willing to use no chemical inputs..
    c. 6% already use fertilizer with no or limited amounts of phosphorus, and 48 % are willing to do so.

	Willingness to apply chemical fertilizers/weed killers only once or twice per year (Q7.4)						
		already do	willing to do	need more info	not willing to do	n/a	
Belief that Lawn/urban fertilizers & pesticides contribute to water quality problems (Q3.1E)	major contributor	43	24	5	3	25	n = 136
	moderate contributor	35	29	17	7	12	n = 123
	minor contributor	37	34	11	8	11	n = 38
	does not contribute	50		50			n = 2
	don't know / not sure	31	23	15	15	15	n = 13
	Total	38	27	11	5	18	n = 312
	All #'s except n reflect %						

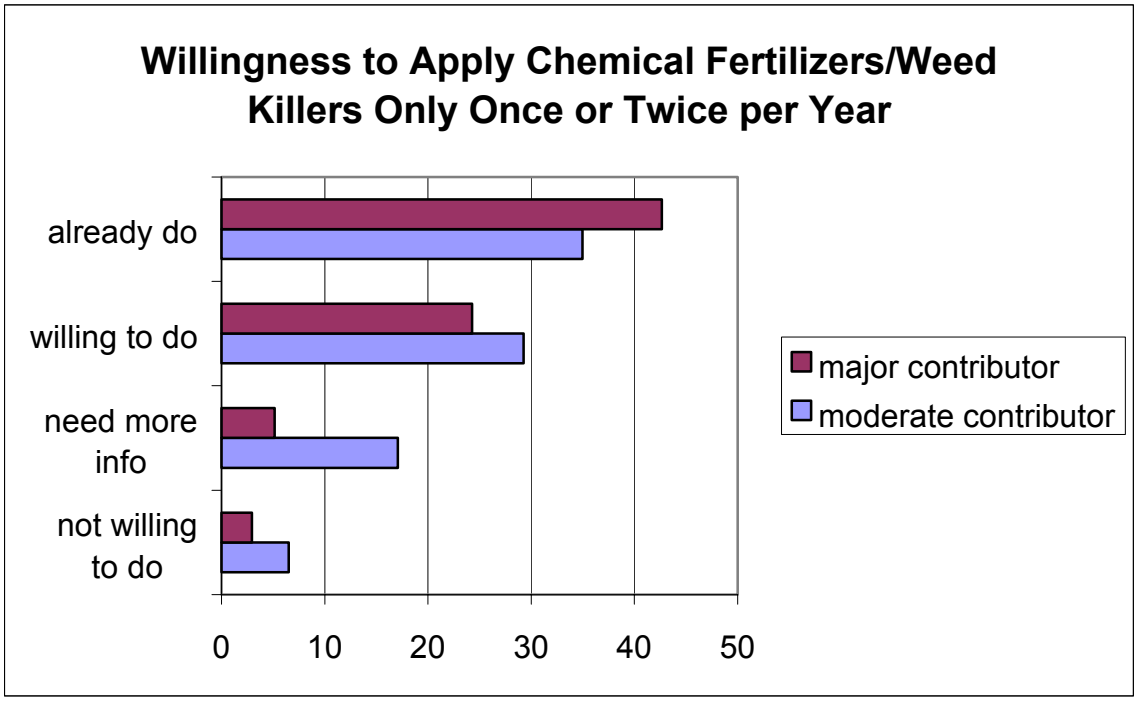


Chart includes those considering lawn/urban fertilizers & pesticides to be a major or moderate contributor to water quality problems.

	Willingness to stop using chemical fertilizers and weed-killers completely (Q7.5)						
		already do	willing to do	need more info	not willing to do	n/a	
Belief that Lawn/urban fertilizers & pesticides contribute to water quality problems (Q3.1E)	major contributor	26	26	24	17	7	n = 135
	moderate contributor	6	22	37	28	8	n = 123
	minor contributor	5	13	33	44	5	n = 39
	does not contribute		50	50			n = 2
	don't know / not sure		15	15	46	23	n = 13
	Total	14	22	30	26	8	n = 312
	All #'s except n reflect %						

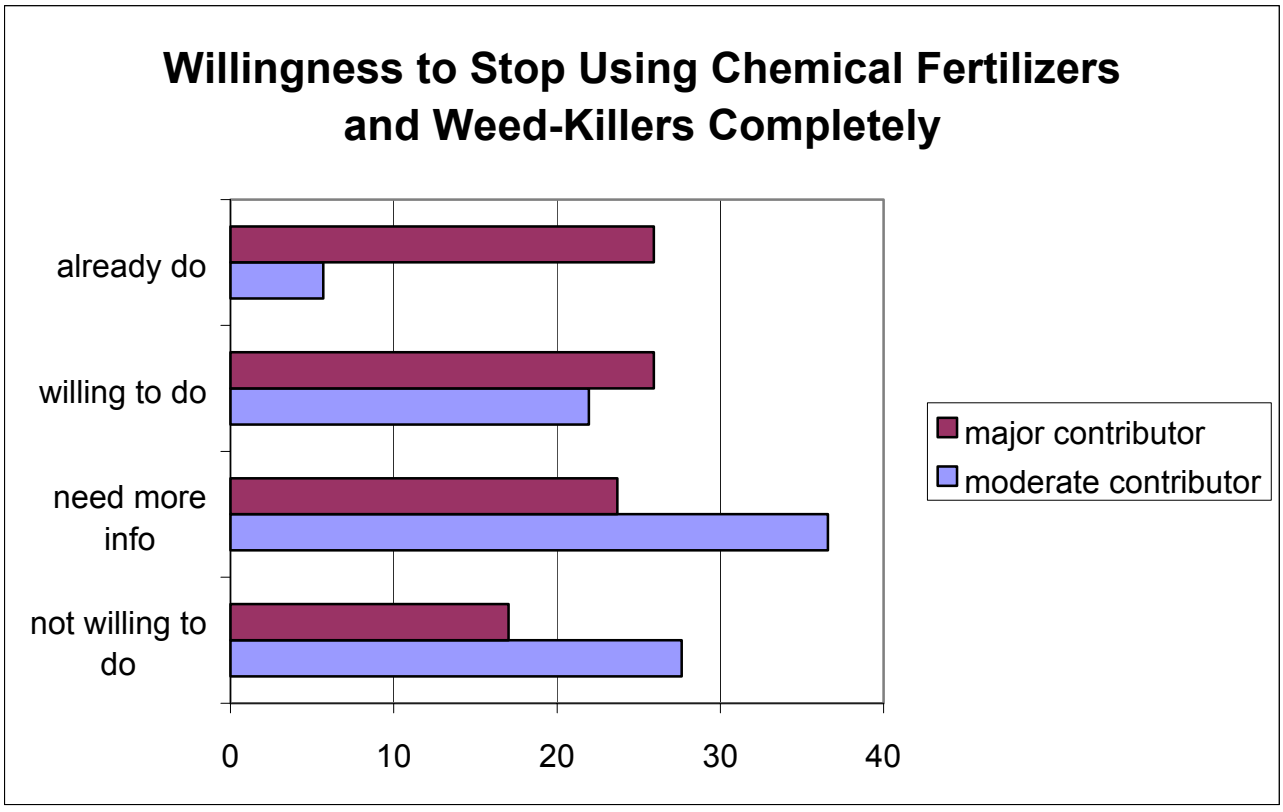


Chart includes those considering lawn/urban fertilizers & pesticides to be a major or moderate contributor to water quality problems.

	Willingness to use fertilizer with no or limited amounts of phosphorus (Q7.6)						
		already do	willing to do	need more info	not willing to do	n/a	
Belief that Lawn/urban fertilizers & pesticides contribute to water quality problems (Q3.1E)	major contributor	13	42	22	2	22	n = 130
	moderate contributor	6	48	28	2	15	n = 124
	minor contributor	5	42	37	5	11	n = 38
	does not contribute		50	50			n = 2
	don't know / not sure		17	42	8	33	n = 124
	Total	8	43	27	3	18	n = 306
	All #'s except n reflect %						

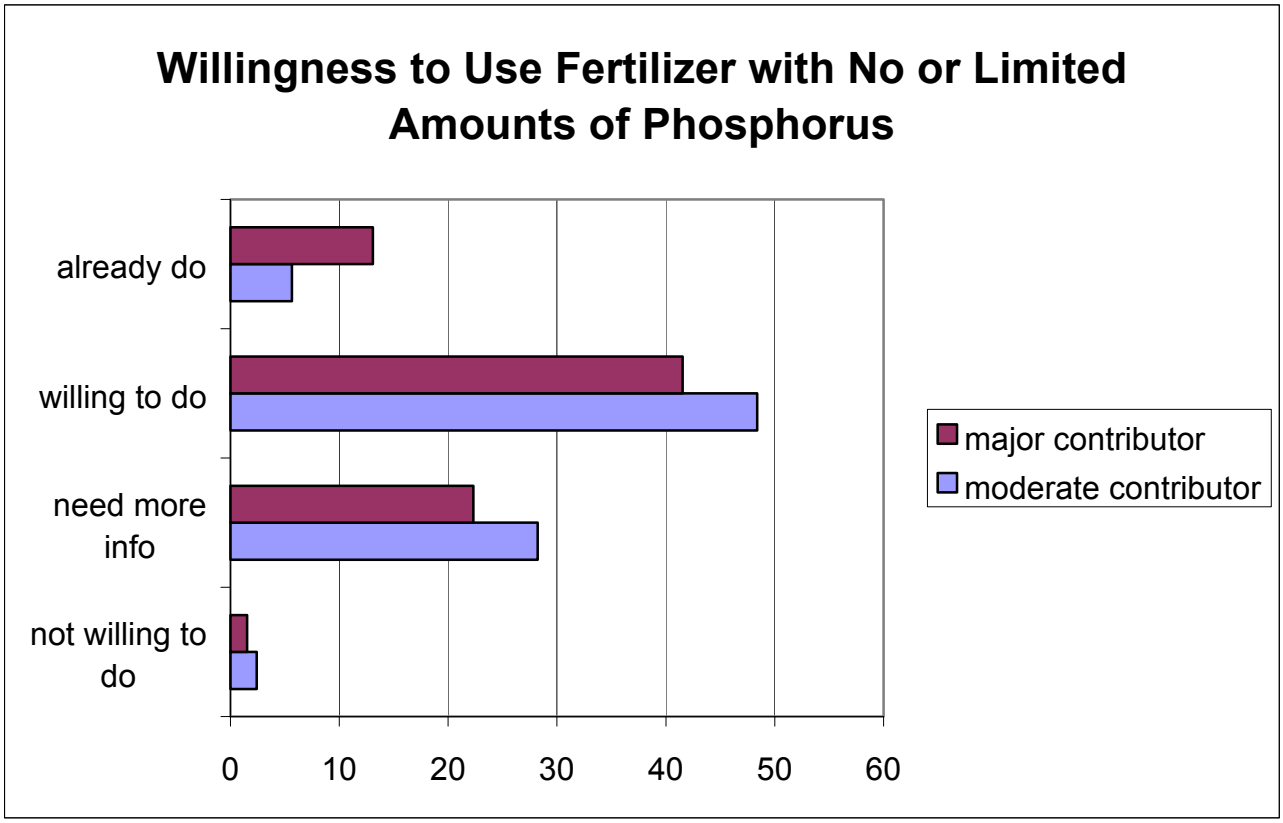


Chart includes those considering lawn/urban fertilizers & pesticides to be a major or moderate contributor to water quality problems.